

TRANSPARENT GOVERNANCE IN AN AGE OF ABUNDANCE

Experiences from the Extractive Industries
in Latin America and the Caribbean



Juan Cruz Vieyra and Malaika Masson, *Editors*



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Table of Contents

Foreword	xiii
Endorsements	xv
Overview	xix
Message from the Editors	xxiii
About the Editors	xxvii
About the Contributors	xxix
About the Authors	xxxi
Introduction	xxxix

Part I

Understanding the Governance Gap in the Extractive Industries

Chapter 1	Transparency Laws, Standards, and Benchmarks in the Extractive Industries	3
	Juan Cruz Vieyra, Malaika Masson, and Martin Walter	
Chapter 2	Measuring up to Transparency and Accountability Standards: Challenges and Opportunities for Effective Governance	39
	Juan Carlos Quiroz	
Chapter 3	From Dependency Theory to Local Governance: Evolution of the Research on Extractive Industries and Development	77
	Osmel Manzano	

Chapter 4	Conflict and Natural Resources: Is the Latin American and Caribbean Region Different from the Rest of the World?	109
	Michael Ross	

Part II

Legislation, Licensing and Contracts

Chapter 5	Implications of the Dodd-Frank Act and European Union Rules on Transparency for Extractive Industries	147
	Heather A. Lowe	
Chapter 6	The Role of Information in the Allocation of Petroleum Exploration and Production Rights	185
	Rhea Brathwaite and María José Jarquín	
Chapter 7	What Can We Learn from Oil Contracts? Clarifying the Links Between Transparency and Accountability	215
	Jordan Kyle	
Chapter 8	Finding the Balance: Transparency and Accountability versus Confidentiality in the Extractive Industries in Trinidad and Tobago	255
	Tira Greene and Mark Regis	

Part III

Public Management and Fiscal Regimes

Chapter 9	Transparency in the Management of Revenues from the Extractive Industries: The Case of Colombia	277
	Diego Arisi and Ana Carolina González Espinosa	

Chapter 10	Fiscal Windfalls, Transparency, and the Efficiency of Public Good Provision: Evidence from Brazilian Local Governments	319
	Martín Ardanaz	
Chapter 11	Transforming Oil Abundance into Sector Performance: Which Institutions Really Matter?	351
	Lenin H. Balza, Ramón Espinasa, and Raul Jimenez Mori	
Chapter 12	The Council on Ethics and the Extractive Industries	375
	Pablo Valverde Martínez	

Final Remarks

Chapter 13	Final Remarks	401
	Juan Cruz Vieyra and Malaika Masson	

List of Figures and Tables

List of Figures

1	Resource Governance Index	xli
1.1	The Relative Price Volatility of Commodities	9
1.2	GDP per Capita in Extractive Countries and Other Countries by Governance Quality Terciles (<i>in US\$</i>)	10
2.1	Relationship between the ILS Component and the WGI % Rank	53
2.2	RGI Scores and Rankings for LAC Countries (<i>out of 58 countries</i>)	62
3.1	Commodity Prices, 1870–1950	79
3.2	The Interactions of the Resource Sector	84
3.3	Room for Policy Improvement in Mining Institutions	88
3.4	Impact of Tax Systems on Oil Investment	89
3.5	Price Volatility, 1960–2013	91
4.1	Annual Conflict Rate, Oil and Non-oil States, 1960–2006	122
4.2	Ongoing Conflicts in the LAC Region, 1960–2006	125
4.3	Conflict Onsets in the LAC Region and the Rest of the World, 1960–2006	126
4.4	Ongoing Conflicts in the LAC Region and the Rest of the World 1960–2006	127
5.1	Extractive Industries Value Chain	173
7.1	Variation in Government Take Based on Field Profitability	227
7.2	Government Take	228
7.3	Government Take by Prospectivity	229
7.4	Assessing How Fiscal Systems Respond to Differences in Profitability, 1990s	235
7.5	Field Size	242

9.1	MapaRegalías: Information on Revenue Generation Focusing on Extractive Activity	297
9.2	Mapa Regalías: Information on Revenue Distribution, Focusing on Regions and Sectors	298
9.3	Mapa Regalías: Information on Revenue Administration and Project Implementation	299
10.1	Tax Collection and Disposable Revenues by Level of Government, 2010 (<i>in percent</i>)	324
10.2	Royalty Payments to Municipalities, 1999–2012	326
10.3	Royalty Payments by State in 2012 (<i>in R\$</i>)	327
10.4	Concentration of Royalty Payments Across Municipalities, 2012	328
10.5	Development and Oil Wealth at the Local Level	329
10.6	Number of Missing Fiscal Data by Year and Contribution by Royalty Recipients	332
10.7	Royalty Payments and Housing Infrastructure Outcomes: Changes 2000–10	335
A10.1	Parallel and Orthogonal Lines (<i>Rio de Janeiro coast</i>)	342
A10.2	Coastal Municipalities and Royalty Payments per Capita, 2012	343
A10.3	Efficiency Frontier	344
11.1	The Relationship Between Natural Resources and Economic Growth	353
11.2	The Relationship Between Natural Resources and Institutions	353
11.3	Resource Rents as a Percentage of GDP (<i>average 2001–11</i>)	356
11.4	Historical Oil Shocks (<i>in real 2012 prices</i>)	357
11.5	Increase in Petroleum Demand, 1987–2011	357
11.6	Increase in World Petroleum Supply, 1986–2010	358
11.7	Average Oil Production Trends by Group of Countries	367
11.8a	Marker Crude Price and Colombia Oil Production, Hodrick-Prescott Trend	368
11.8b	Colombia Oil Production and Institutional Break, Hodrick-Prescott Trend	369

List of Tables

1.1	Key Structural and Enabling Factors for Governance Initiatives	12
1.2	Types of Transparency Initiatives, Key Features, and Examples	27
2.1	Resource Governance Index Structure	45
2.2	RGI Composite and Component Scores	48
2.3	Correlation Coefficients for the RGI Components and WGI Variables (<i>percentile rank</i>)	52
2.4	RGI Average Results by Region	55
2.5	RGI Average Indicators (<i>scores by region</i>)	56
2.6	RGI Scores by Indicator for Countries in the LAC Region	64
3.1	Channels and Knowledge	100
4.1	Recent Mining-related Disputes in Latin America and the Caribbean	110
4.2	Civil War Onsets	120
4.3	Intrastate Conflicts in Latin America and the Caribbean, 1960–2011	123
4.4	Conflict Onset Rates in Oil versus Non-oil Producing Countries	124
4.5	Conflict Onset Rates by Type	128
4.6	Conflicts in Latin America and the Caribbean (<i>by type</i>)	129
4.7	Separatist Conflicts by Region, 1948–2006	130
4.8	Civil War Onsets, 1991–2006	131
4.9	Conflict Onset Rates among Oil-Producing Countries, 1991–2006	132
4.10	Separatist Conflicts in Petroleum-Producing Regions	133
5.1	Major Provisions of the Dodd-Frank Section 1504 and the EU Accounting and Transparency Directives	158
5.2	Disclosure Status of Major Mining Companies Operating in Peru	168
5.3	Disclosure Status of Companies Part of Atlantic LNG Company of Trinidad and Tobago Train 1	169
5.4	Rankings and Scores of LAC Countries in the 2013 RGI	171

6.1	Best Practices in the Petroleum Allocation Process	207
7.1	Contract Transparency Policies in Latin America	223
7.2	Contract Clauses	238
A7.1	Assumptions for Calculation of Government Take Statistics	247
A7.2	Information on Contract Availability by Country	248
8.1	Fiscal, Legislative, and Contractual Framework	257
9.1	Distribution of Oil and Coal Royalties (<i>as of 2011</i>)	281
9.2	Distribution of Royalties from 2012	282
10.1	Determinants of Fiscal Transparency in Brazilian Municipalities (<i>logistic regressions</i>)	331
10.2	The Effects of Royalty Payments on Municipal Revenues and Expenditures (<i>fixed effects</i>)	333
10.3	The Determinants of Expenditure Efficiency (<i>Tobit regressions</i>)	337
11.1	Cross-sectional Estimation Results	363
11.2	(Panel, Eq.1) Growth, Oil Performance, and Institutions	365
11.3	(Panel, Eq.2) Oil Performance and Institutions	366
12.1	Relevant Guidelines	386
12.2	Subcriteria for Investigation of Human Rights and Corruption Violations	388

FOREWORD

JULIE T. KATZMAN

During the past decade, as glittering megacities emerged across China and global middle classes consolidated in many developing economies, the global prices of nonrenewable resources soared. Aware that Latin America and the Caribbean possess some of the world's largest oil, gas, and mineral resources/deposits, extractive businesses flocked to this region.

Incoming cash flows have yielded significant benefits for the regional economy, fostering the increased collection of taxes and royalties and the creation of formal jobs and new infrastructure. Today, the extractive industries are the primary driver of economic activity in hundreds of communities in the region. It is common to see that the construction of basic community infrastructure in many of these communities is entirely funded by royalties paid by multinational or local extractive companies. Still, adequately leveraging revenues from the extractive sector for development is not without its hurdles. In many places in Latin America and the Caribbean, oil, gas, and mining industries have, or are perceived to have, engaged in practices that have led to increased corruption and to a host of negative impacts, prompting social conflicts and a legacy of environmental damage and skepticism throughout the region.

It is clear that communities do not always benefit from the presence of extractive activities. What, however, are the factors that influence whether or not they do? There is no simple answer to this question. A combination of many elements is necessary, including social and environmental responsibility, fiscal effectiveness and efficiency, and institutional capacity. Effective fiscal frameworks, for example, can facilitate the collection of taxes and royalties; however, they must be coupled with capable government agencies and mechanisms for oversight and transparency to make sure those revenues are wisely and effectively invested in projects that provide the best long-term value to citizens. The extractive industries can only operate profitably and produce benefits for communities in the long term when sound and secure institutional and regulatory environments are in place and adhered to. Once in place, these institutions can ensure compliance with labor norms, human rights, and environmental safeguards.

Transparency is a key factor in the establishment of the systemic conditions conducive to economic growth based on natural resources. It is a first step for citizens to be able to hold governments and extractive companies accountable, identify institutional and regulatory shortcomings, and enhance efficiency in the use and allocation of public resources. Transparency also fosters trust among companies, civil society actors, citizens, and governments; it is fundamental to building the consensus necessary for inclusive strategic decision making. Transparency can create the climate of openness and inclusion needed to mitigate potential conflicts and sustainably unlock the economic potential of the sector for both communities and industry. Transparency is certainly not sufficient for countries to sustainably leverage natural resource endowments for development, but it is an essential condition for catalyzing the factors needed to achieve this objective.

The Inter-American Development Bank (IDB) has placed transparency at the forefront of its development efforts. The IDB has substantially increased its efforts to develop new ways to enhance transparency and prevent and control corruption, often using technology as a major enabler. The Bank, in coordination with relevant stakeholders at the international, regional, and local levels, is providing technical assistance to most Latin American and Caribbean countries on these issues, and is continually exploring new approaches to improve the quality of governance.

In 2012, for example, the Bank began designing the MapAmericas tool, an innovative platform to allow citizens, governments, and others to track the results of IDB-funded investment projects all over the hemisphere in a geo-referenced manner. This has been crucial to holding ourselves to account and leading the agenda of accountability by example. In a demonstration of its commitment to transparency, Colombia adapted this platform to allow citizens to track not only the royalties being paid by the extractive industries but the projects those royalties are financing nationwide. Today, all of this information is available at <http://maparegalias.sgr.gov.co/>. This tool provides complete traceability throughout the royalty cycle, from the source of the revenues to the implementation of public investment projects financed by extractive revenues.

MapaRegalias and the other cases highlighted in this book are reasons for both reflection and optimism. As one looks at the cyclical nature of these extractive industries, and the innovations in information technology at our disposal, it is important to seize the moment and build the networks of trust and expertise that will enable the implementation of effective solutions for governments, communities, and industries. In this way, the IDB hopes to ensure the realization of tangible benefits for communities throughout the region from the extractive industries, now and for generations to come.

Julie T. Katzman

Executive Vice President and Chief Operating Officer
Inter-American Development Bank

ENDORSEMENTS

Peru has charted the course of a country that wants and needs to exploit its natural resources with transparency. Our experience has demonstrated that transparency is a crucial factor in reducing asymmetries among actors and improving the public sector's capacity to regulate and control. This book is a valuable contribution to the debate about the policies and mechanisms available to promote transparency in the governance of the extractive industries.

Eleodoro Mayorga Alba

Minister of Energy and Mines
Government of Peru

With this publication, the IDB makes an important and timely contribution to our understanding of how natural resource abundance can translate into sustained growth and inclusive development. Its chapters demonstrate the value of more transparent governance in the extractive sector in Latin America and the Caribbean, exploring policy innovations that help countries achieve concrete results. The Norwegian experience in managing the oil sector demonstrates that ethically driven policymaking is a key ingredient for sharing growth and reducing inequality.

Børge Brende

Minister of Foreign Affairs
Government of Norway

This book brings to the forefront the enormous importance of the practice of transparency with which all actors in the extractive industries should operate. Ensuring transparency in this sector, which is essential for the economic and social development of the countries that depend heavily on their nonrenewable natural resources, is one of the biggest challenges faced by the Latin American and Caribbean region. In Colombia, we are making important, concrete steps to improve information management and transparency in the extractive sector because we are convinced that these are the fundamental elements necessary to increase accountability, productivity, and sustainability, which in the end will benefit all of our citizens.

Amylkar Acosta Medina

Former Minister of Mines and Energy
Government of Colombia

Governance refers to decision making; it is all about power. Who decides on what? Within what institutional arrangements are decisions made? Civil society struggles to ensure good governance. By good governance we mean democratic governance, including not only appropriate checks and balances within the public sector, but also citizens' oversight and participation at all levels, all of the time. For this oversight to become a reality, citizens must have access to updated and reliable information. Congratulations to the IDB not only for supporting EITI and other transparency and accountability mechanisms, but also for contributing this comprehensive volume of work to the debate on this urgent and complex topic.

Carlos Monge

Regional Coordinator for Latin America
Natural Resource Governance Institute

The government of Trinidad and Tobago congratulates the IDB for providing an avenue to share experiences in enhancing transparency in the extractive sector. Efforts to promote transparency bring about greater levels of public engagement and discussion about the management of Trinidad and Tobago's natural resources. This book successfully captures the complexities of such policy undertakings and the need for progress on these issues at the regional level.

Kevin Ramnarine

Minister of Energy and Energy Affairs
Government of Trinidad and Tobago

The World Bank applauds the IDB for highlighting the importance of improving governance in the extractive industries—an increasingly pressing issue for countries in Latin America and the Caribbean and a core component of the World Bank’s agenda. This book is an important contribution to our understanding of the multi-faceted institutional challenges of the extractive sector and an inspiration for the international development community.

Paulo De Sa

Manager
Oil, Gas, and Mining Unit
Sustainable Energy Department
The World Bank Group

This book is an excellent source for understanding the many obstacles that must be surmounted to improve transparency in the extractive sector. Beyond that, it conveys a message that strongly resonates with the vision of the EITI Secretariat, which is that systematic information disclosure can contribute to enhancing accountability and efficiency in extractive revenue management for the benefit of all stakeholders.

Clare Short

Chairwoman
Extractive Industries Transparency Initiative (EITI)

OVERVIEW

ALEJANDRO MELANDRI AND CARLOS SANTISO

This book centers on the importance and benefits of transparency in the governance of extractive industries in the Latin American and Caribbean (LAC) region. A central message is that high-quality and well-managed information is critical to ensure the transparent and effective governance of the extractive industries. This is especially true in the management of revenues derived from these industries in a time of fluctuating commodity prices. While it is not the solution to all problems, transparency is a key component in the resolution of the fiscal, institutional, and social challenges surrounding the sector. People in the region are demanding greater openness and accountability in this critical area, which drives growth in many countries.

The editors of this book have made an effort to select experiences that are relevant to a wide spectrum of stakeholders, drawing important lessons from the management of extractive industries in LAC countries over the past decade. In order to support its case, the book introduces relevant theoretical knowledge, analyzes the role of governments in the mining sector, and presents illustrative information from contemporary examples. It highlights auspicious progress, promising innovations, and pending challenges in the efforts to strengthen transparency in the governance of the extractive industries. More fundamentally, it underscores that improving governance in this sector is a critical agenda that LAC countries have embraced and are actively pursuing. For example, many countries are committed to the Extractive Industries Transparency Initiative (EITI), a voluntary standard involving governments, civil societies, and companies. The governments of the Dominican Republic, Guyana, and Mexico have formally expressed interest in joining; Colombia, Honduras and Trinidad and Tobago are candidate countries; and Peru and Guatemala are compliant countries.

As a result, the Inter-American Development Bank (IDB) has enhanced its support of countries in the LAC region seeking to promote transparency in the extractive industries. In 2009, the IDB's Board of Directors officially endorsed the EITI, and in 2011, the Bank

approved “Strengthening Governance in the Extractive Industries in Latin America and the Caribbean,” a joint initiative of the Institutional Capacity of the State (IFD/ICS) and the Energy (INE/ENE) divisions to support LAC governments in their efforts to strengthen governance in the oil, gas, and mining industries. The initiative is funded through the Transparency Trust Fund, currently supported by the government of Norway a multi-donor facility established with the support of the government of Norway. The fund has been critical in advancing this agenda and now includes extractive industries governance as one of its core pillars.

The specific aims of the initiative include: (i) increasing transparency and access to information, (ii) strengthening legal and regulatory reform, (iii) building capacities within governments and civil societies to improve the monitoring of socioeconomic and environmental impacts, and (iv) increasing the dissemination of knowledge on extractive industries. The project has already yielded important results including, for example, increased disclosure of information through a reform in the legislation regulating the sector in Trinidad and Tobago and greater participation among stakeholders in debates on fiscal revenues from oil and gas. Moreover, the facility provided timely support to Colombia through a diagnosis of the opportunities and challenges to design and implement an information system to manage the resources from the mining industry. It also offers targeted and tailored technical assistance at critical stages in the debate on governance of the extractive industries and the design of innovative initiatives to address critical gaps in that regard. This technical assistance has accompanied broader reform and modernization in the sector through loans in Trinidad and Tobago and Colombia.

The book is structured in three parts. Part I of the book provides an overview of theories that explain the governance challenges inherent to the extractive sector, as well as key initiatives developed to address them. The first chapter begins by exploring initiatives for the promotion of transparency, which may be driven by public, market, and societal actors operating and engaging with each other according to several structural constraints and enabling factors. Transparency is a powerful and necessary tool used to ensure that natural resource endowment is more readily associated with improved human development and macroeconomic performance.

The Resource Governance Index (RGI), a benchmarking tool highlighted in Chapter 2, helps to measure the quality of governance of hydrocarbon and mineral producers around the world. The results of the index show that, although the LAC countries that were measured have adopted numerous principles of transparency and accountability, they have not realized the full benefits from them to ensure enabling environments in the sector.

The debate on the “resource curse” has evolved from general theories on the impact of the natural resource sector on economic performance to more nuanced analyses of how the extractive sector interacts with the economy, including the examination of real

sector and local impacts. Chapter 3 discusses using this new approach to develop solutions to the governance gap in the extractive industries and underlines the pivotal role of transparency.

The relationship between conflict and natural resource endowment are analyzed in Chapter 4, which finds that the LAC region is not immune to the sociopolitical challenges associated with natural resources and resource-based domestic conflicts.

Part II delves into how governments can increase revenue, improve their negotiating power, and ultimately provide better services to their citizens through improved legislation and greater transparency in licensing and contracts. It begins with an analysis of the United States' Dodd-Frank Act Section 1504 and the European Union's Accounting and Transparency Directives in Chapter 5. According to these regulations, extractive companies must publicly disclose royalties, taxes, and other payments made to governments of the countries in which they operate. However, while most renowned global extractives companies fall under the disclosure requirements of these laws, some local companies and state-owned enterprises in the region do not.

The section continues with an exploration of the role of information in leveling the playing field in the allocation of petroleum and production rights in Chapter 6. The thesis is that greater information in the allocation of these rights increases the trust and accountability of government institutions and companies and helps companies to more accurately structure their offers.

The next chapter highlights contract transparency as an increasingly important topic in the extractive industries, finding that, in the oil sector, it does not necessarily enable citizens to determine whether their governments have obtained competitive terms, but it can help them to extract information about (i) trade-offs that governments are making between conservation of resources and revenue maximization; (ii) adaptability of fiscal systems to changes in international price; and (ii) companies' social and environmental obligations.

The challenges faced in overcoming confidentiality obligations in tax legislation and extractive industries contracts, as required for the implementation of initiatives such as the Extractive Industries Transparency Initiative (EITI), are highlighted in Chapter 8. The authors point out that national-level oversight of actions at the municipal level may not be sufficient to prevent corrupt behaviors and inefficiencies in the exploitation of nonrenewable resources.

Finally, Part III focuses on how fiscal regimes and institutions can be improved by greater transparency. A key message in Chapter 9 is that distributing royalties somewhat evenly among municipalities is a good starting point for enhancing transparency, as demonstrated by the case of Colombia.

The main finding of Chapter 10 is that although it is recognized that transparency is crucial for efficient revenue management, the probability of subnational governments self-declaring public finance data can diminish as royalty payments from the extractive industries increase. As shown in the case of Brazil, targeted and adequate public interventions can mitigate risks inherent to inefficient revenue management.

The next chapter tests empirically the relationship among development, oil abundance, and institutions. The results stress the critical intermediary role of institutions in improving the capacity of the states to maximize potential benefits from the extractive sector.

As the section continues with Chapter 12, there is focus on an innovative practice to avoid unethical practices in investment decisions by sovereign wealth funds. The chapter reviews the experience of the Council on Ethics of the Norwegian Government Pension Fund Global and its recommendations. The book concludes with a discussion of the relevance of the extractive sector for the LAC region, highlighting some key challenges and ideas for paving the way forward.

This publication covers a wide spectrum of challenges and opportunities along the extractive industries value chain, from licensing to revenue management. Its individual chapters do so in a systematic fashion, presenting first the theories that explain the challenges in the sector; then exploring transparency-imbued regulatory solutions; and finally, highlighting the importance of better public management as a solution to the governance gap in the extractive industries. There are three important transversal issues apparent in all chapters: (i) transparency is a necessary component to ensure the effective management of natural resource revenues for the benefit of the people of the LAC region; (ii) efficient management of revenue extracted from the sector is a key driver of change, which has the opportunity to benefit companies, countries, and citizens; and (iii) high quality information and information management systems are pivotal to strengthen the governance and regulation of extractive industries.

Alejandro Melandri

Interim Head
Energy Division
Infrastructure and Environment Sector
Inter-American Development Bank

Carlos Santiso

Division Chief
Institutional Capacity of the State Division
Institutions for Development Sector
Inter-American Development Bank

MESSAGE FROM THE EDITORS

JUAN CRUZ VIEYRA AND MALAIKA MASSON

The origins of this book can be traced to the end of 2011. At that point in time, the Institutional Capacity of State Division (IFD/ICS) and the Energy Division (INE/ENE) at the Inter-American Development Bank (IDB) designated us, the editors of the book, as focal points for the work the IDB was carrying out through its initiative “Strengthening Governance in the Extractive Industries in Latin America and the Caribbean.” These designations had to do with the added value that each of us brings to this topic. On the side of IFD/ICS, Juan Cruz Vieyra has extensive experience and expertise in the areas of transparency and public sector management, while on the side of INE/ENE, Malaika Masson has broad technical experience and expertise on the extractive industries.

Over the past few years, our team has faced multiple challenges, and with the support of IDB’s senior management, we also achieved important victories. We have had the honor of representing the Bank in high-level forums across the world and the good fortune to establish valuable working relationships and friendships with many people throughout our journey. In this sense, we can say this book has many parents and innumerable midwives.

We would like to acknowledge the authors of the chapters with whom we have had the pleasure of working with over the past two years. We would also like to thank our leadership, Julie T. Katzman, Executive Vice President and Chief Operating Officer; Ana María Rodríguez, Manager of the Institutions for Development Sector; and Alexandre Meira da Rosa, former Manager of the Infrastructure and Environment Department and current Vice President for Countries at the IDB.

This publication would not have been possible without the encouragement and technical and strategic guidance of Carlos Santiso, Division Chief of IFD/ICS, and Alejandro Melandri and Leandro Alves, both former Division Chiefs of INE/ENE.

Likewise, we are greatly indebted to the Office of the Vice President for Sectors and Knowledge, led by Santiago Levy; Tomás Serebrisky, Sector Economic Advisor to the IDB’s Infrastructure and Environment Department; and Ana Corbacho, former Sector Economic

Advisor to the IDB's Institutions for Development Sector, for their invaluable support. We are also grateful to the members of the IDB Studies Committee, led by the Research Department in the person of Andrew Powell.

The members of the project team for this initiative—which include Elizabeth Joana Brito, Cesar M. Buenadicha, Gilberto Chona, Nicolas Dassen, Melissa Maria Laura Gonzalez, Miguel Aldaz Guallart, Dana Michael King, Ana Maria Lopez Quesada, and Bernardita Saez—also deserve special mention for their work throughout the years. In addition, Maria Bouroncle and Michelle Viegas merit credit for their work managing the relations with the donors of the Transparency Trust Fund, currently supported by the government of Norway, Canada, and the Mastercard Corporation, which have played a critical role in the success of this initiative.

This book reflects key suggestions and comments made in the context of a book review seminar and brown bag lunch held at IDB headquarters in March of 2014. Over 60 participants, including the authors of the book, top scholars, practitioners from several countries, and IDB staff and consultants attended the events and provided a platform to exchange ideas on a wide spectrum of issues to help further develop the book.

We would like to extend a special thanks to Rhea Brathwaite and Martin Walter, who have provided excellent research assistance. We are also grateful to Theodore Kahn, René Osorio, and an anonymous peer reviewer, who offered valuable contributions to early editions of the book. This publication also benefitted from the very fruitful exchanges the team had with Nils Handler, Daniel Johnston, Bryan Land, Juan Pablo Martinez, Francisco Monaldi, Robert Porter, Axel Radics, Pedro Rodriguez Sosa, and Armando Zamora. Mariano Lafuente and Francesco De Simone provided invaluable feedback on the book's final remarks. We are also grateful to Consejo para la Transparencia in Chile, in the names of Raúl Ferrada Carrasco (General Director) and Paulina Salcedo Guzmán (Head of Communications), who allowed us to include the individual artwork pieces in the book.

In addition, the editors are grateful to members of the EITI Secretariat—especially Victor Hart, Jonas Moberg, and Francisco Paris—for their enduring support during the last two years of collaboration in Colombia, Peru, and Trinidad and Tobago. We would also like to thank Javier Aguilar, Paulo de Sa, and Kristina Svensson of the World Bank Group for their extremely useful comments. Our collaboration with the World Bank Group in this initiative has led to many fruitful exchanges, bringing us closer to the shared goal of strengthening transparent governance in the extractive industries.

Through this initiative, the IDB has established strong links with civil society members, who are key actors in the promotion of transparency in the extractive industries. We would like to thank, in particular, the Natural Resource Governance Institute (formerly the

Revenue Watch Institute), including Daniel Kauffman, Carlos Monge, and Global Financial Integrity for their continued work in bringing the issue closer to the citizens.

Likewise, we would like to recognize the contribution of Sarah Schineller, who oversaw the editing and production of the book, and the support of the administrative staff of IFD/ICS and INE/ENE, as well as the contractual officers of the Institutions for Development Sector, Franz Ibanez-Carmona and Maria Laura Olave, and the Infrastructure and Environment Department, Ximena Cardenas and Maria del Pilar Rodriguez Rojas. We are also grateful to Patricia Baltar de Castro in the Office of the Executive Vice President for her invaluable coordination efforts.

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Finally, and most important, we would like to acknowledge the continued and enduring support of our families, and especially our sons, Jo-Martial Masson and Noah Inti Vieyra, in this publication's long journey to your hands. We dedicate this book to them.

Juan Cruz Vieyra

Operations Specialist
Institutional Capacity of the State Division
Institutions for Development Sector
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Dr. Malaika Masson

Energy Specialist
Energy Division
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INTRODUCTION

JUAN CRUZ VIEYRA AND MALAIKA MASSON

The Latin America and Caribbean (LAC) region is the world's leading source of metals and second most important source of oil. In the first quarter of 2014, the LAC region produced over 10 million barrels of oil daily and more than 800 million cubic meters of natural gas per day (IEA, 2014). The region holds approximately one-third of the world's mineral investment portfolio, and is the principal target for global investors in this sector (Larsson and Ericsson, 2014). The nine countries in the region that produce the most oil, gas, and minerals (i.e., Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Trinidad and Tobago, and Venezuela) account for approximately 10 percent of the world's production of oil, 5 percent of natural gas, 15 percent of gold, 45 percent of silver, and 40 percent of copper. In these same countries, fuels and minerals make up approximately 60 percent of total exports, and revenues from the extractive sector provide for almost one-third of total government income.¹ For comparison, at the global level, the extractive industries generate more than 50 percent of government revenue in petroleum-rich countries and more than 20 percent in mineral-rich countries.

Although the wealth of minerals and hydrocarbons in the LAC region has translated into substantial revenues and macroeconomic growth, operations in the extractive sector have also led to significant challenges, such as corruption, negative environmental impacts, and economic losses. Communities have expressed their concern for the lack of tangible

¹ Throughout this publication, the extractive industry is considered as encompassing the diverse private, public, and mixed companies involved with the physical extraction of metals, minerals, and aggregates from the Earth. The concept includes the host of economic actors dedicated to mining, quarrying, dredging, oil, and gas extraction. For a detailed review of the particular similarities and differences that exist between mining and petroleum companies, see Land (2007).

local development benefits, prompting heated debates about the potential of the extractive industries to effectively promote sustainable and inclusive economic growth. In spite of these challenges, however, the extractive industries provide fundamental inputs, such as basic construction materials, gas for transportation, and fertilizers for food production, which are the backbone of much of the economic growth in the region.

For decades, researchers have devoted much attention to understanding the “resource curse”—the inverse relationship between natural resource abundance and economic development. Since the 1950s, numerous theories have been put forward to explain the apparent negative effects of mineral wealth. It has been suggested, for example, that natural resource abundance leads to dependency on extractives revenues, which in turn results in vulnerability to the volatile prices of commodities, as well as to perverse rent-seeking incentives.

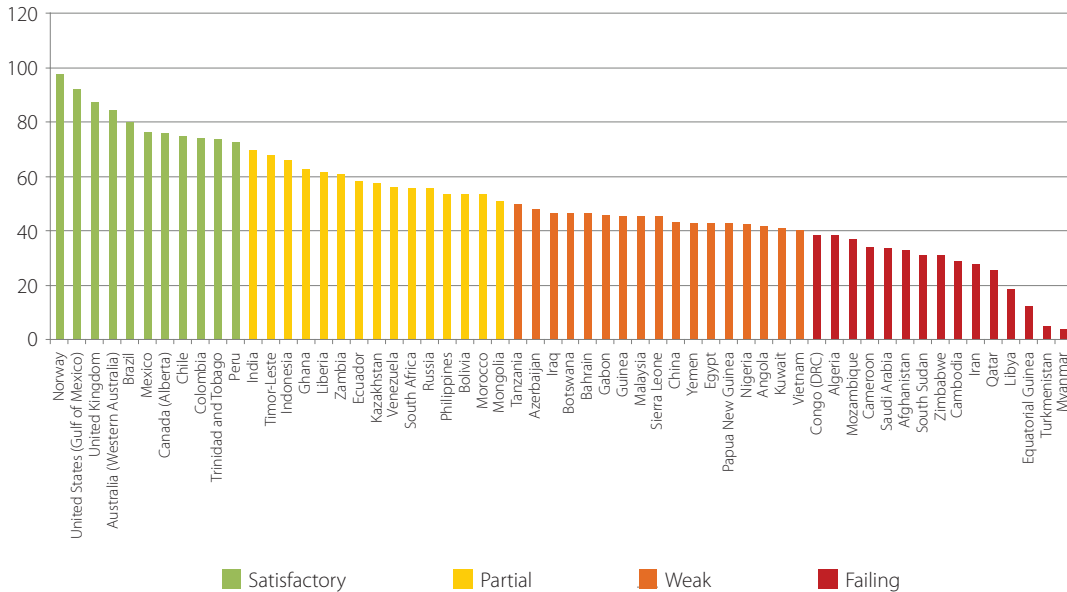
However, relatively recent empirical studies suggest that meeting development targets through the expansion of the extractive sector is possible. Drawing from the experiences of countries such as Australia, Botswana, Canada, Chile, and Norway, some scholars have argued that sustained economic growth supported by natural resources is possible. Experiences show that the extractive sector, when properly governed, can contribute to the development of infrastructure and basic services, promote technological innovation and the enhancement of the skills and knowledge of the workforce, and support the development of local businesses through the integration of supply chains. While diversification can reduce the reliance on natural resources for economic development, countries can and are leveraging their natural capital as a competitive advantage to achieve development objectives. The analysis of these experiences reveals the importance of checks and balances—that is, having effective mechanisms in place to prevent corruption and enhance transparency and accountability in the extractive sector.

How does the LAC region fare in comparison to other regions? According to the 2013 Resource Governance Index (RGI), published by the Natural Resource Governance Institute (formerly the Revenue Watch Institute), more than half of the 11 countries that score highest in terms of quality of governance in the extractive sector are located in the LAC region: Brazil, Chile, Colombia, Mexico, Peru, and Trinidad and Tobago.²

² The RGI measures the quality of governance in the oil, gas, and mining sectors of 58 countries. See Chapter 2 of this publication for further detail.

Figure 1

Resource Governance Index



Source: RWI (2013).

The RGI benchmark, however, should be interpreted with a measure of caution, as there are several governance problems within the extractive sector that continue to affect citizen welfare. For example, social conflicts related to the exploitation of mineral resources remain a sensitive issue in the LAC region, especially with regard to indigenous communities. Also, citizens are becoming increasingly concerned about the environmental impacts associated with the sector’s activities, for instance their effects on water supply, land use, and forest conservation. A closer look at the RGI provides some insights on why these problems persist. Despite encouraging results for several countries, the LAC region as a whole received very low ratings under the RGI’s Enabling Environment component, averaging 50 out of a total of 100 points, compared to the 95 point average for the Organisation for Economic Cooperation and Development (OECD) countries. These ratings are mostly due to low scores under the Rule of Law and Control of Corruption variable, suggesting that the region has a long way to go in consolidating anti-corruption controls and effectively implementing the legal framework regulating extractives.

Over the last decade, governments, industry, and civil society organizations have developed various tools for improving the quality of extractives governance. Overall, the objective has been to maximize the benefits derived from the extractive sector while minimizing potential social and environmental costs. Initiatives have included establishing stricter anti-corruption laws, creating new transparency and social accountability mechanisms, and improving planning and the predictability of extractives revenue.

Transparency initiatives have played a central role in governments' efforts to correct dysfunctional governance systems. This book provides insights into various experiences in the implementation of such initiatives throughout the LAC region. The key assumption behind these efforts is that the public sector's capacity to manage and control the activities in the extractive sector has a direct impact on the level of risk and on conflict prevention.

This book was prompted by the need to help governments and other stakeholders close the gap in technical information related to the extractive industries. Extractive operations are technically complex, risky, and conducive to both positive and perverse economic incentives. Improving transparency in these activities requires a wide range of skills and experience. It is essential to support capacity building activities among LAC government officials, particularly to help them stay abreast of the latest market and technology developments. This is especially important, since in the last decade the knowledge gap between the public and private sector has increased along every step of the value chain, with the latter having developed innovative approaches to contract negotiation, revenue management, risk mitigation, impact reduction, and public consultation.

Fortunately, there are positive signs that LAC countries are determined to close this gap and to move toward enhanced transparency frameworks. Most countries have adopted and started implementing access to information and transparency laws at the national level, while also introducing new transparency and oversight mechanisms in the extractive sector. Interest in the Extractive Industries Transparency Initiative (EITI) has also grown over the past few years. In 2012, Peru became the first country in the region to become compliant with the EITI standard. Since then, Guatemala and Trinidad and Tobago have made great strides toward compliance with the standard, paving the way for other countries, such as Colombia, Guyana, Honduras, and Mexico, which are now considering joining the initiative.³

³ Notably, large industrialized countries are also demonstrating interest in the EITI standard. In 2013, France formally declared its interest in the implementation of the initiative. In 2014, the United Kingdom and the United States became candidate countries, and are taking the first steps toward implementation.

This book provides a thorough overview of the conceptual frameworks and practical tools currently available, and is meant to help practitioners and public officials address challenges in the extractive industries. It also examines legislative issues, reform initiatives, and tools already adopted in the region. This information is presented in the context of the changing regional economic, social, and political landscape, as well as of the growing demand for accountability and transparency and the evolving relationships between governments and citizens in the LAC region.

While transparency cannot solve all problems stemming from the exploitation of natural resources, it is a powerful tool that can help ensure that the potential benefits of natural resource endowment are fully realized. Latin American and Caribbean countries are making slow but steady progress in this direction, riding the wave of policy advances and technological innovation that the extractive sector is experiencing.

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The Transparency Council (Consejo Para La Transparencia) is an autonomous public law corporation created in 2009 by Chile's Law on Transparency of Public Service and Access to Information (Ley de Transparencia de la Función Pública y de Acceso a la Información). Its main task is to incentivize and encourage the building and institutionalization of a culture of transparency that promotes, guarantees, and monitors compliance with the law and the right of access to public information.

With this goal in mind, and in search of a more integral view of what transparency means, in 2013 the Council announced a competition called TransparentARTE. The objective was to building a sustainable contemporary artwork collection that enables us to reflect on our identity, thereby visualizing, interpreting, signifying, and tabling a dialogue about the value and meaning of transparency in Chile today.

The winning entries go on to form part of the Council's collection, which is on exhibition at all its offices, as well as at the Chilean Contemporary Art Fair (Ch.ACO) (Feria Chilena de Arte Contemporáneo). The collection contains works by Beatrice Di Girolamo, Leonardo Guajardo Portus, and Rodrigo Vergara (2013 winners) and by Violeta Larraín, Paula García, and Elvira Valenzuela (2014 winners).



First place in the 2013 edition

Ilusión y Certeza

Beatrice Di Girolamo

Acrylic on assembled oak barrel staves and larch shingles, measuring 140 x 180 cm.

Understanding the Governance Gap in the Extractive Industries

- | | | |
|------------------|---|------------|
| Chapter 1 | Transparency Laws, Standards, and Benchmarks in the Extractive Industries | 3 |
| | Juan Cruz Vieyra, Malaika Masson, and Martin Walter | |
| Chapter 2 | Measuring up to Transparency and Accountability Standards: Challenges and Opportunities for Effective Governance | 39 |
| | Juan Carlos Quiroz | |
| Chapter 3 | From Dependency Theory to Local Governance: Evolution of the Research on Extractive Industries and Development | 77 |
| | Osmel Manzano | |
| Chapter 4 | Conflict and Natural Resources: Is the Latin American and Caribbean Region Different from the Rest of the World? | 109 |
| | Michael Ross | |



CHAPTER 1

Transparency Laws, Standards, and Benchmarks in the Extractive Industries

JUAN CRUZ VIEYRA, MALAIKA MASSON, AND MARTIN WALTER

This chapter provides an overview of initiatives to promote transparency, with a special focus on their influence in Latin American and Caribbean (LAC) countries. It stresses that stakeholders operating and engaging with each other in a context of both structural constraints and enabling factors drive these initiatives. It provides a simple heuristic to distinguish among myriad instruments developed and implemented to turn the curse of resource wealth (the “resource curse”) into a blessing. Exploring the differences between alternative approaches helps highlight the overall consensus on framing transparency as a necessary step toward the resolution of governance issues in the extractive industries. In light of the relative success of LAC countries in implementing transparency policies and reforms, it also stresses that improved transparency alone is not sufficient to ensure that resource endowment effectively translates into social and economic welfare.

INTRODUCTION

In the last few decades, the world has witnessed the proliferation of new laws, standards, and benchmarks aimed at improving performance in the extractive sector. Despite their diversity, a number of these initiatives support the hypothesis that more transparency is needed to enhance the quality of governance systems. This prompts several questions: What are the factors that drive the proliferation of transparency initiatives? What are their key features? And, most important, how do they contribute to the improvement of governance in the extractive industries?

Transparency occupies a special place in discussions about and decision making in the extractive sector because it can help tackle some gaps that hinder governance.

This chapter focuses on transparency, in view of its prevalence in current global debates about how to improve governance. Transparency occupies a special place in discussions about and decision making in the extractive sector¹ because it can help

¹ When referring to the extractive sector, the authors are referring to the oil, gas, and mining industries.

tackle some gaps that hinder governance,² which are often pointed to as culprits of the curse of resource wealth or the “resource curse” (Auty, 1993; Bellver and Kaufmann, 2005; Sachs and Warner, 2001; Williams, 2011). Transparency can both reveal weaknesses and dysfunction in the institutional systems that govern the extractive industries, which is necessary for their improvement, and positively change the behavior of actors in the sector (Bellver and Kaufmann, 2005; Fung, Graham, and Weil, 2007; Hale, 2008). Moreover, it can help improve processes and procedures in the extractive industries, such as policymaking and implementation, as well as the way that private institutions operate (Florini, 2007; Schiavo-Campo and Sundaram, 2000).

Interest in transparency is ultimately rooted in its functionality, from both a normative and a practical perspective. On the one hand, transparency highlights the potential for consensus rather than underlying conflicts and interests: it is applicable across

² Studies of the extractive sector generally employ the concept of “governance gaps” to refer to the legal lacunae and operational issues that hinder its social, economic, and environmental performance. This gap extends not just to overarching regulatory and legal frameworks; it also encompasses organizational deficits, such as dysfunctional resource revenue management and transfer systems, inept bureaucracies, and inadequate standards and quality control mechanisms.

institutional, organizational, and ideological contexts (Florini, 2007; Hood and Heald, 2006), and thus transcends disciplines and jurisdictional boundaries. In fact, as is often emphasized in the literature, shedding light on rules, plans, processes, and actions ensures that the behavior of actors is understandable, visible, and—where appropriate—accountable to others. This is key to making governance in the extractive industries more effective and sustainable (Søreide, 2012; TI and RWI, 2011).³ On the other, it can help ensure the overall social, environmental, and economic stability and sustainability of governance systems in the extractive industries (Kaufmann, Kraay, and Mastruzzi, 2009; Parry, 2007). Empirical research supports this notion, emphasizing, for example, that transparent governance systems foster better macroeconomic performance (Andreula, Chong, and Guillén, 2009; Hameed, 2005; Parry, 2007), and that transparency reduces corruption and increases the benefits derived from activities in the sector (Kolstad, Wiig, and Williams, 2008; Kolstad and Wiig, 2009; O’Higgins,

2006). Thus, it improves the security and stability of investment environments for private companies (Gelos and Wei, 2002; Hamilton, 2005) and reduces conflicts among stakeholders (Bebbington, 2010; Langton and Longbottom, 2012).

In line with these arguments, demands for enhanced transparency have increased significantly in the past few decades. Civil society organizations and transnational advocacy networks are requesting more participation in and information about actions in the extractive sector. They are pushing for reform of the regulatory frameworks governing the extractive industries and for a fundamental shift in the way governments and firms interact with civil society, a phenomenon that is captured in the idea that operators must earn a “social license” to operate (Esteves, 2008a; Gunningham, Kagan, and Thornton, 2004; Prno and Slocombe, 2012). Stakeholders are seeking to participate in making the rules that determine the allocation of the economic benefits derived from extractive industries, as well as in recognizing the socio-environmental risks and impacts associated with investments in the sector (Esteves, 2008b; Mares, 2010; Vivoda, 2009). They demand benefits from social transfers to local governments, appropriate compensation for property loss and environmental damage resulting from extractive activities, and direct benefits accruing from local content requirements (Hale, 2008; Culverwell, Lee, and Koziell, 2003).

³ As noted by Florini (2007), transparency denotes the availability of information to outsiders, which is instrumental to informed consent, supervision, and resistance to the decisions and activities affecting outsiders. The Working Group on Transparency and Accountability of the Group of 22 defined it as “a process by which information about existing conditions, decisions, and actions is made accessible, visible, and understandable” (IMF, 1998).

The emergence of initiatives designed to improve governance systems reflects a fundamental transformation of social relationships.

More importantly, the emergence of initiatives designed to improve governance systems reflects a fundamental transformation of social relationships. Calls for reform and improvement of governance systems at the local, national, and international levels highlight new ways of engaging stakeholders and creating norms (Alkoby, 2008; Finnemore and Sikkink, 1998; Keck and Sikkink, 1998; Price, 2003). In fact, actors that traditionally had little traction and visibility—such as the media, nongovernmental organizations (NGOs), private investment funds, and indigenous communities—now have significant influence in shaping decisions and policies.

Civil society organizations and private firms are increasingly engaging at the international level alongside governments, and they are contributing to the development of new agendas and tools for the governance of the sector. In addition to conventional domestic social and political activity, the institutional and normative frameworks governing the extractive sector, including laws, guidelines, standards, and benchmarks, are now influenced by a host of transnational advocacy networks (Cutler,

Haufler, and Porter, 1999; Haufler, 2010; Scherer and Palazzo, 2011). However, while important, these networks are not the only ones calling for governance reform in the extractive industries. Governments have implemented major reforms aimed at improving regulatory and institutional frameworks, including laws guaranteeing the freedom of information, contract transparency, and public participation in policymaking and implementation processes. Similarly, private companies have crafted new strategies for engaging with stakeholders by means of corporate social responsibility (CSR) strategies and a host of procedural reforms that will make them more accessible to stakeholders. Responding to social demands has become a core competency for all actors in the extractive industries: inaction can undermine not only the legitimacy of decisions and investments, but also their security and sustainability (Boutilier and Thomson, 2011; Gifford, Kestler, and Anand, 2010; Zamprile and Llorente, 2009).

The reform of governance systems in the extractive industries is riddled with complex choices. In reforming revenue policies and taxation systems, governments and policymakers must balance the need for stable and credible institutional frameworks, which stimulate foreign investment, with their interest in capturing a larger share of the rents from the extractive industry and in boosting their popularity (Barma et al., 2011). Private firms must balance the

pressure to go beyond legal compliance with their responsibility to shareholders (Calder and Culverwell, 2005; Gunningham, Kagan, and Thornton, 2004; Hamilton, 2005), and civil society stakeholders must properly evaluate the risks and benefits derived from extractive activities (Urkidi and Walter, 2011). This is particularly important in many countries in the Latin American and Caribbean (LAC) region, where the regulatory frameworks governing the extractive industries have either undergone or are projected to undergo major revisions. This trend can be seen in Argentina, Bolivia, Ecuador, and Venezuela, where the governments have assumed a more prominent role in the sector, as well in Chile, Colombia, Mexico, and Peru, where incentives to attract private investment appear to have prevailed over the pressure to increase state participation.

However, even in cases where governments have shown restraint, reforms have not been off the political agenda. The governments of Peru and Chile, for example, are likely to remodel the institutions that shape public and social involvement in the sector. Similarly, Colombia and Brazil are revising their mining codes, and the Central American countries and Uruguay have initiated conversations about reforming their mining laws (Superneau, 2013; Oxford Analytica, 2012) as well as legal provisions in the oil and gas sector (Cereceda, 2013; TI and RWI, 2011).

As initiatives to improve governance systems continue to multiply, it becomes increasingly critical to understand both the fundamental governance challenges faced by the extractive sector and the tools that have been developed to tackle them.

As initiatives to improve governance systems continue to multiply, it becomes increasingly critical to understand both the fundamental governance challenges faced by the extractive sector and the tools that have been developed to tackle them. This chapter provides an overview of the latest conceptual and policy developments in the sector, with a focus on the drivers and the characteristics of global transparency initiatives. Following a brief examination of the theories that connect the quality of governance in general and in the extractive sector to transparency, it describes the tools developed to promote transparency, distinguishing binding legal and regulatory frameworks from voluntary standards, protocols, guidelines, and benchmarking and reporting schemes. The chapter puts forth a simple heuristic to make sense of the myriad transparency initiatives that have proliferated in recent decades and stresses their important role in improving the quality of governance in the extractive sector.

THE GOVERNANCE GAP AND TRANSPARENCY INITIATIVES

The idea that natural resources might be more of an economic curse than a blessing describes the fact that resource-rich countries are usually unable to leverage that wealth to boost their economies and that, counterintuitively, they tend to have lower economic growth than countries without an abundance of natural resources. The resource curse thesis highlights a paradoxical link between the abundance of natural resources and poor economic and development performance. This “paradox of plenty” is hypothesized as the result of several factors, including a decline in the competitiveness of other economic sectors, volatility of revenues from the natural resource sector due to exposure to global commodity market swings, government mismanagement of resources, and weak, ineffectual, unstable, or corrupt institutions. Different aspects of this empirical observation have engendered numerous studies, which are reviewed in detail in Chapters 3 and 4 of this book.

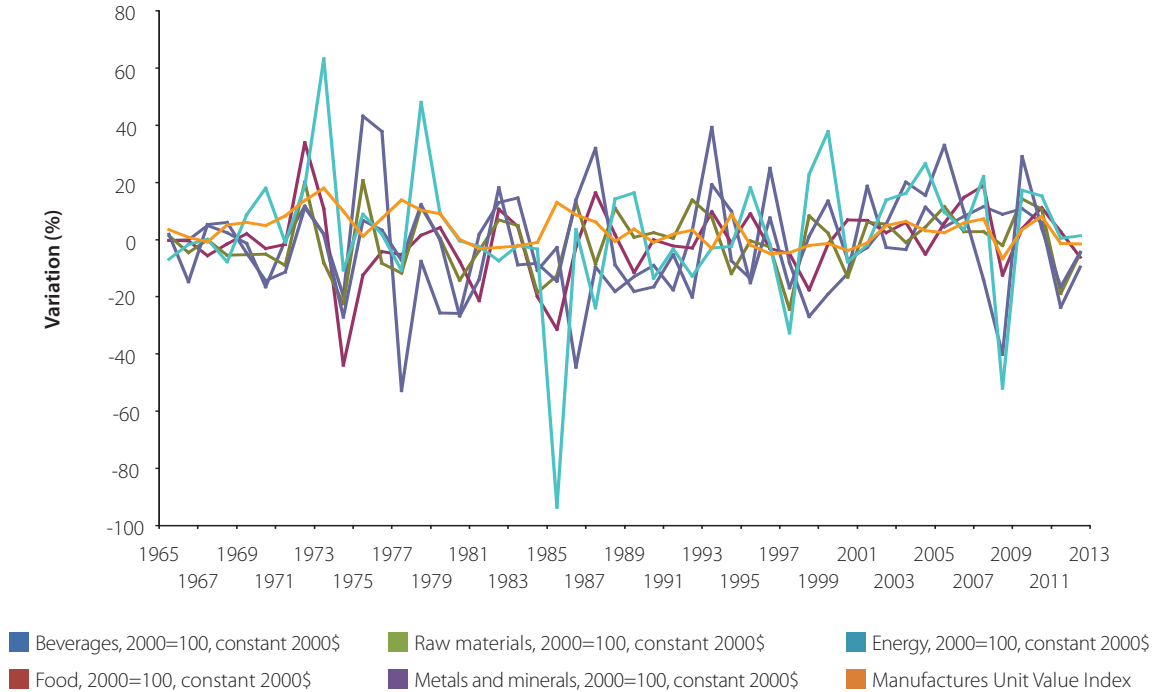
Although the specialized literature describes a dire trend in resource-rich countries, it also stresses that the resource curse is not inevitable. Experts emphasize that good governance in the extractive industries sector can turn this curse into a blessing. It is argued that if governments managed the extractive sector more transparently and effectively, the sector could be the basis for successful economic growth and poverty reduction (Pegg, 2006). For example, research

suggests that sound financial institutions that are able to cope with large and sudden fluctuations in resource income, transparency, and physical access to world trade reduce the negative externalities of the price volatility of commodities (van der Ploeg and Poelhekke, 2009), as depicted in Figure 1.1.

Fiscal and revenue management transparency can promote economic stability and lead to sovereign credit rating improvement by reducing borrowing costs for investors with loans linked to assets or activities in that country (Parry, 2007). In this regard, a study on the costs associated with lack of transparency in the extractive industries in Ecuador suggests that the costs of inadequate information could range annually from 2.87 to 18.17 percent of GDP (Donoso and Lopez, 2010). Similarly, Esanov and Heller (2011) stress that the cost of sovereign borrowing in Venezuela, which had declined from 12.5 percent in 2002 to 8 percent in 2004 but rose to 9.3 percent in 2007, can be explained by declines in the rule of law, control of corruption, political stability, voice and accountability, and government effectiveness—despite positive macroeconomic trends. They note that, in contrast, Peru’s sovereign borrowing costs declined about 6 percentage points from 2000 to 2007, while the nation’s economy grew at an average rate of 5 percent. This is because strengthening governance capacities, which are necessary to respond to external shocks, helped prevent predatory behaviors and curb corruption, and improve the overall capacity of the state to operate effectively.

Figure 1.1

The Relative Price Volatility of Commodities



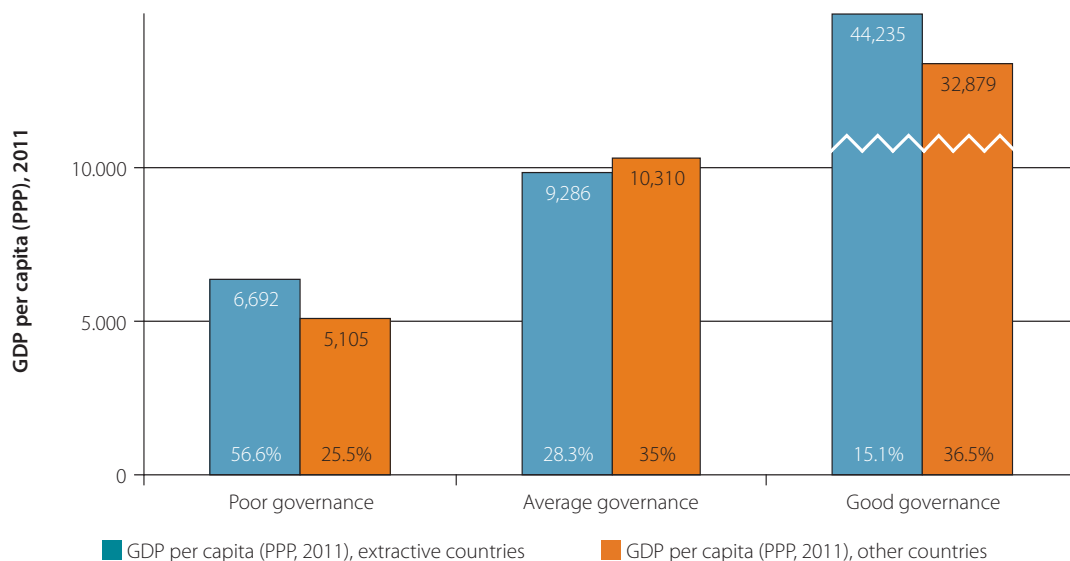
Source: Authors' elaboration with data from Global Economic Monitor (GEM) Commodities, available at <http://databank.worldbank.org/>.

Countries with satisfactory standards of governance and corruption control, complemented by good corporate governance practices, demonstrate better growth and development results; good governance tends to translate into higher income levels in most resource-rich countries.

Most of the research focusing on the institutional aspects of the resource curse finds that variations in the quality of governance are based on macro-level factors. It presents governance systems as byproducts of countries' relative natural resource endowments, GDP, and levels of foreign direct investment (Auty, 2006; Humphreys, 2012; Isham, 2005). An alternative strand of research stresses the importance of sectoral microfoundations, which consist of

Figure 1.2

GDP per Capita in Extractive Countries and Other Countries by Governance Quality Terciles (in US\$)



Source: Kaufmann and Penciakova (2012).

Note: Zig-zag line denotes change in scale.

the specific regulatory provisions and organizational factors that can undermine the capacity of a government or firm to successfully and efficiently engage in the extractive sector, react to external shocks, and respond to stakeholder demands (Bebbington, 2010; Manzano and Monaldi, 2008; Prno and Slocombe, 2012; Zamprile and Llorente, 2009). These studies generally agree that governance gaps present governments, firms, and civil society organizations with significant challenges. They call for the development of institutional

frameworks that can maximize social welfare while ensuring an environment that is attractive for investment and that facilitates commercial success (Calder and Culverwell, 2005) and stress that countries with satisfactory standards of governance and corruption control, complemented by good corporate governance practices, demonstrate better growth and development results. Good governance tends to translate into higher income in most resource-rich countries (Kaufmann and Penciakova, 2012) (see Figure 1.2).

TOOLS FOR PROMOTING TRANSPARENCY: CONDITIONS AND TYPES

Improving information disclosure is one way to promote transparency in order to enhance the quality of governance. It often requires reform of internal processes within the disclosing organizations and/or the legal and regulatory frameworks in which they operate (Culverwell, Lee, and Koziell, 2003). Promoting transparency may involve, for example, the implementation of new reporting practices through the modification of bureaucratic procedures, as well as the disclosure of payments to and transactions with governments by multinational natural resource companies, their subsidiaries, and business partners. Such reforms imply not only internal organizational transformation but also significant changes in the organizations' relationships with outside stakeholders. The reform of established legal and regulatory mechanisms governing these organizations demands a reallocation of authority and responsibilities among external stakeholders and among actors within organizations in the extractive industries. Consequently, resistance to, or support of, initiatives aimed at improving transparency, as well as the characteristics of the initiatives themselves, vary significantly, depending on where they are promoted, the scale, and the nature of the reforms needed to implement them.

What are the necessary conditions to implement reforms geared toward improving the quality of governance? What is the specific role of transparency initiatives in the larger governance picture? A recent report by the World Economic Forum (WEF, 2013) explores and specifies the key variables shaping the implementation of governance initiatives in the extractive sector (see Table 1.1). The report stresses that the governance of the sector reflects both structural and enabling factors. It defines structural factors as a country's natural resource endowment, demographic and macroeconomic variables, the pattern of socioeconomic development, and the maturity of the extractive industries. These factors delineate general conditions that shape both the incentives of the actors in the sector and a country's comparative advantages. The report emphasizes that governance systems also reflect the configuration of enabling factors, such as institutional frameworks, the interest and capacity of private actors, and the trust and engagement of local stakeholders. Together, these variables determine outcomes in the extractive industries. They help explain why countries with similar structures can have different governance performance.

Table 1.1

Key Structural and Enabling Factors for Governance Initiatives

Structural	Inherent nature of a country, its resource base, and extractive industry	• Type, location, and size of ore bodies
		• Population size, geography, and climate
		• Global commodity cycle
		• Timing of mine cycle
	Country's current stage of development and maturity of minerals industry	• Levels of skills and technology
		• Country infrastructure (soft and hard)
• Size and maturity of minerals industry		
• Diversification of economy		
Enabling	Structure and capacity of government and institutional environment	• Human and institutional capacity
		• Structure and complexity of government
		• Integration of mining into economic planning
		• Ability to monitor and enforce laws and regulations
		• Levels of accountability
		• Skill building and education
	Capacity and willingness of private sector	• Time frame of investors
		• Willingness to engage in partnership approaches
		• Commitment to responsible development
	Levels of trust, collaboration and influence of stakeholders	• Levels of social debate
		• Level of transparency
		• Consultation and collaboration
		• Country's attitude toward mining
		• Levels of influence of different stakeholder groups

Source: WEF (2013).

According to the WEF, transparency plays a twofold role in governance systems: it determines the quality of institutions and shapes the degree of trust and engagement by stakeholders. Still, transparency is only one component of the effort to improve governance. Many other factors help shape outputs from the extractive industries, and there is no single set of best practices that can address all of the challenges in the sector. The quality and outcomes of governance can and should be improved through measures appropriate to the specific context. In line with this appraisal, a host of different strategies are available to improve transparency and the quality of governance. Different transparency initiatives target different institutional and normative subsystems: fiscal institutions (i.e., confidentiality provisions, taxation revenue distribution and allocation principles), budgetary and financial management systems (i.e., auditing standards, accounting systems), and general organizational procedures (i.e., bureaucratic protocols, formalized operational standards, regulatory requirements). There are also different types of instruments that can be used to promote transparency.

According to the WEF, transparency plays a twofold role in governance systems: it determines the quality of institutions and shapes the degree of trust and engagement by stakeholders. Still, transparency is only one component of the effort to improve governance.

As a simple heuristic, this chapter distinguishes between four types of initiatives: (i) binding legal and regulatory instruments; (ii) voluntary principles, guidelines, and standards; (iii) stakeholder monitoring and targeted policies; and (iv) benchmarking and assessment tools.

Transparency initiatives can take many forms. These include declarations, treaties, conventions, charters, protocols, agreements, model laws, legislative guidelines, international law jurisprudence, accounting and banking standards, practical guidelines, and certification systems. They may prescribe behavior, declare intentions, or simply serve as diagnostic tools to appraise practices and institutions. The diversity reflects the divergent means and ends of these initiatives and the fact that initiatives tend to cross-fertilize. The boundary between transparency initiatives is rarely clear-cut. Nevertheless, the distinction between different approaches is useful for highlighting the logic behind their promotion and the way in which they operate. As a simple heuristic, this chapter distinguishes between four types of initiatives: (i) binding legal and regulatory instruments; (ii) voluntary principles, guidelines, and standards; (iii) stakeholder monitoring and targeted policies; and (iv) benchmarking and assessment tools.

Legal and regulatory frameworks—at the international, national, regional, and local levels—are the formal, normative mechanisms of governance of the extractive industries. These include ratified international agreements and conventions, domestic laws and regulations, and legally binding contracts among stakeholders. Self-imposed codes of conduct include voluntary principles, guidelines, and standards. Although they might be designed, negotiated, and audited by third parties at the international or national level, they are always self-enforced. Stakeholder monitoring initiatives target specific actors and activities at the national and local levels, prescribing behavior that leverages both legal and economic incentives. Finally, benchmarking and assessment tools to promote transparency include measurements and metrics of institutional or national performance used to assess the quality of governance. While these instruments facilitate the evaluation of transparency initiatives, they also serve as channels for the disclosure of critical information about organizations and stakeholders in the extractive industries.

Transparency initiatives are applicable to both private and public governance systems, and they are promoted by governments as well as by the private sector and civil society organizations.

Transparency initiatives are applicable to both private and public governance systems, and they are promoted by governments as well as by the private sector and civil society organizations (Bernstein and Cashore, 2007; Gunningham, Kagan, and Thornton, 2004). In some cases, they are driven by the state to shape behavior in the private sector and within the state's own institutions to improve governance in the extractive industries. They reflect processes of international policy diffusion, that is, the convergence of domestic institutional and regulatory systems with global governance paradigms (Simmons and Elkins, 2004), which can provide increased legitimacy (Hurd, 2007), electoral gains, enhanced access to international markets for domestic goods, and/or new avenues for the international financing of governments promoting reforms in the sector (Hamilton, 2005). Private firms, civil society organizations, and international organizations also promote market-driven initiatives.⁴ These reflect

⁴ Firms have started to compensate for the gaps in national governance by voluntarily contributing to self-regulation and by producing public goods that are not delivered by governments. The emergence of domestic state-driven and market-driven governance initiatives globally highlights the new role and importance of the international arena in the governance of the extractive industries. International meetings are alternative venues for cooperation between governments, firms, and civil society organizations. International initiatives have proven useful in resolving local gridlocks: leveraging demands at the local level and providing alternative frameworks for the sector's challenges and new strategies for improvement.

specific policy signals, such as new information disclosure requirements or tax incentives, as well as real or perceived threats to business sustainability (Esteves, Coyne, and Moreno, 2012; Esteves, 2008b).⁵ They highlight that transparent operational schemes can help firms better communicate their commitment to stakeholders in the localities in which they operate and contribute to securing more stable operational environments (Dashwood, 2012; Sagebien and Lindsay, 2011). Whether driven by the State or by the market, transparency initiatives may be self-enforced or enforced by third parties, leveraging legal, economic, and reputational liabilities. They may also be purely descriptive and nonenforceable.

Whether driven by the State or by the market, transparency initiatives may be self-enforced or enforced by third parties, leveraging legal, economic, and reputational liabilities. They may also be purely descriptive and nonenforceable.

In order to better understand their role and influence, as well as their respective value added, the following section describes several initiatives currently being implemented in the extractive industries.

⁵ Firms face reputational risk and brand management issues (Calder and Culverwell, 2005; Boutilier and Thomson, 2011; Scherer and Palazzo, 2011).

This section draws from extensive reviews conducted by experts focused on corporate social responsibility and governance in the extractive industries (Calder and Culverwell, 2005; Dashwood, 2012; Handelsman, 2011; Heuty, 2012; Sagebien and Lindsay, 2011; Scherer and Palazzo, 2011).⁶

BINDING LEGAL AND REGULATORY FRAMEWORKS

Binding legal and regulatory frameworks often take the form of freedom of information laws, contract transparency regulations, and financial disclosure provisions. They operate at the national and regional levels. In some cases, they are established as crosscutting legal requirements, and in others, they are introduced as stand-alone provisions in specific normative instruments. They tend to set the stage for discussions about transparency at the domestic level. While in some cases they can constrain reforms, they can also help mainstream transparency provisions subnationally across complex legal and political contexts and on particularly important issues. The most significant value added of “hard laws” is that they are authoritative and enforceable by the State: they prescribe compliance through frameworks of legal liability.

⁶ Not all transparency initiatives are captured by the four categories. Specifically, these categories fail to capture the important role of whistleblowing efforts, open dialogue forums, and other nonsystematic information disclosure initiatives.

The most significant value added of “hard laws” is that they are authoritative and enforceable by the State: they prescribe compliance through frameworks of legal liability.

Freedom of Information Laws

More than 90 countries around the world have implemented freedom of information legislation. A key principle advanced by most freedom of information legislation is that the burden of proof falls on the body from which the information is solicited, not the actor that requests it: explanations are not required for requests, and a valid reason must be given for nondisclosure. These legal provisions are fundamentally intended to regulate the way in which government institutions handle public information.

In the past decade, laws governing access to information have been implemented in a number of LAC countries. New laws have been passed in Antigua and Barbuda, Colombia, Ecuador, Honduras, Jamaica, Mexico, Panama, Peru, the Dominican Republic, Trinidad and Tobago, and, most recently, Chile, El Salvador, Guatemala, Uruguay, and Brazil. Other countries, such as Argentina and Bolivia, rely on national executive decrees, which ensure public access to information. Some countries also have subnational freedom of information legislation (Baena Olabe and Vieyra, 2011).

The recent widespread boom of legal and regulatory frameworks governing access to information indicates that access to information is increasingly understood as a fundamental right and a pivotal instrument for the democratic exercise of social, cultural, and economic rights (Jagwanth, 2002). Moreover, the implementation of generic legislation favoring access to information has been coupled with regulations intended to improve private sector disclosure.

The Dodd-Frank Act and the European Accounting and Transparency Directive

The United States Senate passed the Dodd-Frank Wall Street Reform and Consumer Protection Act in July 2010. Title XV of the Act amends the Securities Exchange Act of 1934 to require disclosure of payments relating to the acquisition of licenses for exploration, production, and other activities of the value chain: “payment” encompasses all fees, production entitlements, bonuses, and other material benefits inherent to extractive activities. Furthermore, the Act states that these documents will be made available online to the public.⁷ Chapter 5 of this book further elaborates the provisions of the Dodd-Frank Act. In addition, this regulation requires that mining companies report to the Securities and Exchange Commission

⁷ *Dodd-Frank Wall Street Reform and Consumer Protection Act*, 2010, U.S. Public Law No: 111-203, Section 1504.111th Congress.

(SEC) and to the public at large the region of origin and, where possible, the mine of origin for all raw minerals produced. This provision promotes the disclosure of the source of minerals in order to discourage the production or purchase of conflict minerals. As part of their annual filings to the SEC, extractive sector companies will be required to disclose what they pay to the U.S. government and foreign governments, and this information must be posted online. Since all oil, gas, and mining companies registered with U.S. stock exchanges will be covered by this legislation, the measure covers 90 percent of the world's largest internationally operating oil and gas companies, and 8 of the world's 10 largest mining companies (PWYP, 2010).

With similar goals, in September 2012, the European Parliament's Legal Affairs Committee voted in favor of requiring large European-registered oil, gas, and mining companies to disclose payments made to foreign governments. The rules apply to all financial transactions worth more than US\$105,000 on a country-by-country, project-by-project basis. According to the regulations, companies must also disclose the annual activities of subsidiaries, joint ventures, and any other trade agreements.⁸ These disclosure requirements for

⁸ In a similar vein, the London Stock Exchange's Alternative Investment Market and the Hong Kong Exchange already incorporate certain reporting requirements for newly listing oil, mining, and gas companies.

multinational corporations operating in the extractive sector have been described by Transparency International as a "watershed moment" and a "game-changing breakthrough" (Obi, 2013).

VOLUNTARY PRINCIPLES, GUIDELINES, AND STANDARDS

The key value added of "soft law" initiatives is that they are self-enforced, meaning that the actors themselves choose to follow the rules not because of legal liability, but because of the reputational cost and potential benefits that can be derived from compliance.

Unlike binding initiatives, voluntary principles, guidelines, and standards promote best practices. These global instruments seek to promote enhanced disclosure and multistakeholder engagement in the extractive industries. As such, they tend to specify preferred operational procedures in the extractive sector, which apply to governments and firms operating in the sector as well as to the commercial banks and international financial institutions that support them (Rustad, Lujala, and Le Billon, 2012). These instruments take the form of generic statements and specific recommendations for the development of transparent policies

and practices, and in some cases they address the unique concerns and challenges of the extractive industries. The key value added of “soft law” initiatives is that they are self-enforced, meaning that the actors themselves choose to follow the rules not because of legal liability but because of the reputational cost and the potential benefits that can be derived from compliance. These initiatives function on the basis of consensual legitimacy: they provide rational incentives for participation, such as expanded access to markets, better business reputation, and improved operational performance.

Global Information Disclosure Policies and Fiscal Transparency Programs

The United Nations (UN) and the Organisation for Economic Co-operation and Development (OECD) have developed model tax conventions for the prevention of international double taxation and the ratification of bilateral and multilateral tax treaties among countries. While these instruments are not legally binding and allow member states to freely deviate from them in bilateral arrangements, they nonetheless provide influential guidance by outlining best practices (Vega and Rudyk, 2011). The OECD’s 1963 and 1977 model conventions quickly became the worldwide standard for tax treaty negotiations (Kosters, 2004). These mechanisms generally encourage the implementation of transparent tax systems

and the free flows of information among signatories. They have prompted the emergence of multinational initiatives aimed at improving the quality of fiscal governance. Based on these guidelines, the Global Forum on Transparency and Exchange of Information (GFTE) has developed a system of peer review for national taxation systems, aimed at reducing offshore tax evasion and reforming international tax rules. The initiative evaluates the standard of “information exchange on request”, which refers to the relative availability of information from foreign tax jurisdictions in the context of relevant domestic audits. Similarly, while the International Accounting Standards Board (IASB) has decided not to establish a separate accounting standard for the extractive industries, Canadian companies were nonetheless required to adopt International Financial Reporting Standards (IFRS) in 2011.

Many other, more general programs that deal with revenue management institutions and the quality of internal procedures in organizations complement these initiatives. While governance improvement and transparency played only a marginal role in the World Bank Group’s operational work until the 1990s, attitudes have since changed significantly. President James D. Wolfensohn publicly acknowledged the impact of corruption on development in 1996, and since that time the World Bank has actively promoted a number of tools to improve governance (Caspary,

2012).⁹ The development of new social and environmental safeguard policies was accompanied by important procedural reforms relating to transparency and accountability. The Bank implemented the Inspection Panel in 1993 and established an information disclosure policy in 1994. It decided to publicly disclose project documents, including critical environmental and social information. These initiatives influenced other international financial institutions. The safeguards and transparency policies of most regional development banks, such as the Asian Development Bank (ADB), the African Development Bank (AfDB), and the Inter-American Development Bank (IDB), were implemented soon after those of the World Bank Group (Hunter, 2007; Nelson, 2003).¹⁰

⁹ Changes in the Bank Group's policy were facilitated by two major changes and a pivotal crisis, which triggered demands for a significant improvement in the quality and efficiency of the Bank's operations. The first was the end of the Cold War, which many felt reduced the geopolitical and strategic urgency of foreign aid expenditures. The second event was the increased pressure on public budgets in OECD countries, which required more efficient allocation of resources (Caspary, 2012). These contextual changes were accompanied by a social and political crisis in one of the Bank's operations: controversies surrounding the development of the Pangué Dam in Chile forced the IFC to announce publicly that it would henceforth follow the environmental and social policies of the rest of the World Bank Group (Hunter, 2007).

¹⁰ The group's current position on transparency and disclosure is outlined in a section of the IFC's Sustainability Framework, the Access to Information Policy, ratified in 2012. This policy details internal and external information disclosure obligations specifying the Corporation's commitment to information disclosure in its operations as well as the responsibilities of its clients (IFC, 2012).

In recent years, the World Bank Group's International Finance Corporation (IFC) Performance Standards have become a widely accepted framework for the assessment of environmental and social risks of projects in the developing world by international project financiers, not unlike the OECD Guidelines. More than 60 leading international institutions have committed to adhering to IFC's standards in their project-finance lending under the rubric of the Equator Principles (EPs) (Herz et al., 2008). These principles, established in June 2003, are a set of voluntary guidelines developed by leading private banks for managing social and environmental issues related to the financing of development projects (PLATFORM, 2004). However, beyond their role as governance guidelines, the EPs serve as a crucial benchmarking tool (Lawrence, 2009) for assessing the quality of governance of private companies seeking international financing.

Initiatives intended to improve information disclosure through sound institutional operations improve the organization's stakeholder relations by making decisions more accountable. In the case of influential international organizations and financial institutions, they operate as yardsticks for organizational governance domestically. Loan conditionality as well as other, "softer" means of influence, such as technical and scientific legitimacy, provides leverage for global initiatives advocating policy reform strategies. Tools specifically developed for the extractive industries complement these generic strategies.

Best Practices in the Extractive Sector

Specific global governance initiatives encompass standards and guidelines that describe and promote recognized best practices in the governance of extractive industries. There are several major best practice governance initiatives promoted by international organizations as well as by industry actors. For example, in 2010 the OECD created the Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (hereafter, the Guidance). The basic premise underlying the Guidance is that a common understanding of the roles and responsibilities of stakeholders promotes confidence and predictability (Gordon, 2001). Rooted in the 1977 Sullivan Principles (Gifford, Kestler, and Anand, 2010), the Guidance is intended for firms involved in mineral exploitation and trade and is designed to ensure that firms protect human rights and avoid contributing to conflict (Oldenziel, Wilde-Ramsing, and Feeney, 2010). The Guidance applies to all phases of the supply chain in conflict-affected or high-risk areas and specifies procedures that firms must undertake to achieve compliance. These include: (i) suspending or ceasing trade operations with dubious suppliers; (ii) taking steps to increase leverage over suppliers to bring them into conformance with the standards; (iii) developing relationships with local governing authorities who may be involved in implementing the standards; and (iv) openly reporting the findings of due diligence investigations

and the measures that have been taken to ensure compliance with the guidelines. This initiative was the first to be derived from a collaborative government-backed multi-stakeholder consultation on responsible supply-chain management of minerals from areas affected by conflict (Taylor, 2012).

The OECD guidelines coexist with several other guidelines originating from industry actors and civil society organizations. For example, the Sustainable Development Framework of the International Commission of Mining and Metals (ICMM) outlines 10 governance principles for firms operating in the extractive sector, two of which directly address transparency (ICMM, 2010). Similarly, the Voluntary Principles on Security and Human Rights are a multi-stakeholder initiative involving governments, companies, and NGOs that promotes implementation of a set of principles intended to guide gas, oil, and mining companies in providing security for their operations in a manner that respects human rights (VPCSH Secretariat, 2012). More recently, these frameworks have been joined by another initiative focused on ensuring mineral origins, known as the Kimberley Process Certification Scheme (Blore and Smillie, 2011).

Arguably the best-known transparency standard in the sector, the Extractive Industries Transparency Initiative (EITI), is a global standard for transparency of payments and revenues in the extractives sector (EITI and Diamond, 2013; EITI, 2013). The initiative promotes specific provisions to

enhance transparency and accountability in public life, government operations, and business. It advocates for the publication of reconciled payments by companies and revenues received by governments from oil, gas, and mining exploration and production operations. In order to become certified as EITI compliant, countries must engage in an extensive validation process conducted by the international EITI Board. Since its creation in 2002, 35 countries have produced EITI reports, 26 of which are fully compliant with the EITI standard. Peru was the first country to gain compliant status in Latin America. Several other countries in the region are following suit, including Guatemala, which recently became compliant, and Colombia, Guyana, Honduras, and Trinidad and Tobago, which are at different stages of EITI implementation.

STAKEHOLDER MONITORING AND TARGETED POLICIES

Legally binding mechanisms and voluntary guidelines are normally complemented by targeted transparency initiatives driven by stakeholders. They include stakeholder monitoring mechanisms and targeted policies that operate by leveraging reputational and economic incentives as well as existing legal liabilities. These initiatives disclose specific information as a way of achieving concrete public policy goals (Fung, Graham, and Weil, 2007; Gaventa and McGee, 2013; Vieyra and Dassen, 2012). The main idea

behind such schemes is that information users can be empowered to exert influence on the disclosers by helping them make more informed decisions, confronting disclosers through shareholder motions more effectively, and providing leverage for collective organization if necessary (Florini, 2007; Fung, Graham, and Weil, 2007). These mechanisms then articulate existing legal provisions and voluntary initiatives to enhance accountability, social responsibility, and operational effectiveness. This type of initiative provides a flexible approach to address sectoral and institutional idiosyncrasies, taking advantage of the converging interests of stakeholders (Baena Olabe and Vieyra, 2011). In the extractive sector, they help improve the usual poor accessibility, technical complexity, and dispersion of information (Vieyra and Dassen, 2012);¹¹ They constitute one of the most promising advances in establishing transparency as a public policy tool for achieving greater efficiency in the use and distribution of revenues from the extractive sector.

¹¹ Conceptually, these initiatives are rooted in the notion that symmetrical access to information and improved accountability are instrumental to the quality of governance in the extractive industries. This is because it can help mitigate corruption (Kolstad, Wiig, and Williams, 2008) and build a shared understanding of the role of the sector by and for all stakeholders (Yee, 1996). In holding powerful actors accountable (Dingwerth and Eichinger, 2010), stakeholder monitoring schemes foster market efficiency and improve macroeconomic performance (Aman, 2004; Auty, 2006; Blyth, 2002; Fölscher, 2010; Gifford, Kestler, and Anand, 2010; Hale, 2008; Heald, 2003; Parry, 2007).

Stakeholder monitoring mechanisms and targeted policies operate by leveraging reputational and economic incentives as well as existing legal liabilities. These initiatives disclose specific information as a way of achieving concrete public policy goals.

STAKEHOLDER-DRIVEN TARGETED INITIATIVES

The Open Budget Initiative (OBI) is a global research and advocacy program that works with civil society partners in nearly 100 countries to improve public access to government budget information and to expand accountable and inclusive budgeting practices (Fölscher, 2010). The OBI targets specific state revenue management systems combining research and advocacy and seeks to promote transparent, responsive, and accountable public finance systems.¹² The initiative is part of a global campaign to

¹² Every two years, the international secretariat carries out the Open Budget Survey, an independent, comparative global assessment of central government budget transparency. Survey findings, combined with assessments of transparency at the subnational level, drive a range of governance-related advocacy activities targeting national and international audiences to prompt action to improve budget transparency at the national and local levels.

promote improved stakeholder participation in budget decisions through enhanced transparency provisions. The OBI leverages new information technology platforms to provide new avenues for stakeholder participation in public investment decisions.

Global initiatives such as the OBI are complemented, and vastly surpassed in number, by national and subnational public initiatives for enhancing efficiency and transparency in the funding of investment projects with royalties from the extractive sector. The Government of Colombia, for example, has implemented innovative measures to prevent and eventually correct errors and deviations in the management of resources and projects funded with extractive sector revenues. In 2013, with the support of the IDB, it decided to introduce new information and communication technologies to foster interactions with civil society, not only facilitating access to public information, but also promoting citizen engagement in monitoring public investment decisions. The Government of Colombia implemented a software visualization tool (MapaRegalias, available at <http://maparegalias.sgr.gov.co>), which makes it possible to trace royalties from the source of the resources to public investment (for more information on MapaRegalias, see Chapter 9). The MapaRegalias portal includes georeferenced information on natural resource exploitation and the status of projects executed with royalties. For the first time, citizens are directly informed about what their

municipalities produce, the revenue generated by the exploitation, the budget allocated to investments, projects approved by the municipality, department, and region, and progress on these projects.¹³

In addition to the aforementioned targeted transparency initiatives, experts point to a number of initiatives spearheaded by civil society organizations, which have pressured governments and companies into disclosing information that they would not otherwise have shared with the public, and have disseminated information technically available and public but difficult to obtain in practice (Gaventa and McGee, 2013; Peruzzotti, 2012). These include initiatives such as the Royalties Investment Evaluation and Follow-Up Committees in Colombia (González Espinosa, 2009), social audits, and people's budget assessments in Asia, Africa, and Latin America.¹⁴ These initiatives are rooted in the social legitimacy of particular stakeholders in demanding specific information in the extractive sector, which is becoming increasingly important in order to obtain social licenses to operate (Gunningham, Kagan, and Thornton, 2004).

¹³ The tool is complemented by an internal portal created for use by decision makers in the government, which generates consolidated reports to support the work of monitoring and tracking. Requests can be made by projects, resources, production and audit or one can navigate the map directly to see information required by municipality, department, or region.

¹⁴ See Gaventa and McGee (2013) for a review.

BENCHMARKING AND ASSESSMENT SCHEMES

Schemes for the evaluation of governance quality complement other initiatives for the promotion of best practices, and tools to help assess the success of governance reform initiatives and the performance of governance systems.

The implementation of binding, nonbinding, and targeted stakeholder-driven initiatives is often supported by assessments metrics of transparency. Schemes for evaluating governance quality complement other initiatives that promote best practices and tools that help assess the success of governance reform initiatives and the performance of governance systems. The crucial value added of benchmarks and metrics of transparency is that they enable the evaluation of governance initiatives and practices in the sector. These mechanisms provide a general meta-framework to compare practices and institutions across countries. Benchmarking and assessment schemes are powerful tools to foster public awareness about governance challenges in the extractive sector.

Tools for Comparing Governance Quality

The Review of Standards and Codes Initiative (ROSC), developed by the International Monetary Fund (IMF), for example, examines countries' observance of internationally recognized standards and codes. This benchmark reviews a country's engagement in internationally sanctioned best practices in twelve areas: accounting, auditing, anti-money laundering and countering the financing of terrorism, banking supervision, corporate governance, data dissemination, fiscal transparency, insolvency and creditor rights, insurance supervision, monetary and financial policy transparency, payments systems, and securities regulation. The ROSC review helps conduct risk assessment analyses in target countries and supports domestic policy discussions.¹⁵ The ROSC helps identify institutional weaknesses and contributes recommendations to promote financial reform and reduce financial vulnerability domestically. It also influences IMF and World Bank financing decisions, which gives the review extra leverage and influence in decision making. Most LAC countries have prepared a fiscal transparency ROSC; results for the region generally suggest that good fiscal management and improvements in fiscal transparency have recently enhanced the prospects for fiscal performance (Parry, 2007).

¹⁵ The IMF has devised both a manual and a questionnaire on fiscal transparency, which is used to prepare the Reports on the Observance of Standards and Codes (Heald, 2003).

Standard compliance assessments, such as the ROSC, provide cursory information on governance principles in a given country. They describe compliance with formal international commitments as a means to assess general governance principles and applicable policy-frameworks shaping governance systems. Alternative tools for the assessment of governance quality draw not from the assessment of compliance with standards, but from the analysis of indicators that seek to quantitatively capture contextual features. These indices assess the laws and practices that enable comprehensive disclosure, freedom of information, and open and fair competition.

One such benchmark, the Reporting Framework of the Global Reporting Initiative (GRI), facilitates the comparison of reporting practices by private organizations on economic, environmental, and social issues. Although it is designed for use by organizations of any size, sector, or location, the framework acknowledges the practical considerations faced by particular sectors, and contains sector-specific content that has been agreed to by sectoral stakeholders. The Mining and Metals Sector Supplement provides sector-specific guidance for the extractive industries (GRI, 2011). GRI's Sustainability Disclosure Database synthesizes corporate reporting practices, providing users open access to all types of sustainability reports, whether GRI-based or otherwise, and relevant information about the reporting organizations. Users may focus on specific organizations or apply filters

and sorting options to refine search results. In addition, users may compare levels of disclosure among reports that use GRI's Framework by region and sector.

Similar benchmarking tools aggregate company-level information.¹⁶ For example, Standard & Poor's Governance Services and Transparency International's Index of Corporate Transparency are based on public disclosure of anticorruption programs and country-by-country reporting. Other indices assess governance quality by focusing on state institutions. Indices such as the World Bank's Worldwide Governance Indicators (WGI)¹⁷ and Transparency International's Corruption Perceptions Index (CPI) provide survey-based assessments of governance quality (Heuty, 2012). Accessible data sources facilitate the development of secondary platforms, which aggregate indices for their simultaneous

¹⁶ Indices provide a succinct synthesis of qualitative information and enable quick comparison of select variables. As is highlighted more extensively in Chapter 11 of this book, these measurements are particularly useful for empirical analysis and academic research. Methodological transparency is crucial to the legitimacy and validity of these indices: sources of information and methodological issues are openly disclosed to users.

¹⁷ The Worldwide Governance Indicators (WGI) are a research dataset summarizing the views on the quality of governance provided by a large number of enterprise, citizen, and expert survey respondents in industrialized and developing countries. These data are gathered from a number of survey institutes, think tanks, NGOs, international organizations, and private firms.

assessment. The IDB, for example, provides one such platform through its Governance Indicators Database, which compiles approximately 800 governance-related indicators, including the WGI and CPI. It is an open access platform for visualization and benchmarking of governance quality.¹⁸ These indices, however, are not specifically geared toward the assessment of governance quality in the extractive sector.

Resource Governance Benchmarks

Among assessments of extractive sector governance, perception surveys are the best known. They include measurements such as the Fraser University annual surveys of the mining¹⁹ and oil sector and the Behre Dolbear Group ranking.²⁰ They consider mineral endowments and conditions for investment in the sector on the basis of perceptions related to different factors, including, among others, public policy conditions, infrastructure quality, perceptions

¹⁸ DataGov is accessible at <http://www.iadb.org/datagob/>.

¹⁹ The survey compiles the opinions of executives and managers in mining and mining consulting companies operating around the world. It includes data on 112 jurisdictions worldwide, on every continent except Antarctica, including subnational jurisdictions in Argentina, Australia, Canada, and the United States.

²⁰ The Behre Dolbear Group Inc. compiles annual political risk assessments of the key players in the global mining industry. The survey reflects expert assessments, confidential sources, and public databases, but provides limited detailed information on the construction of the index.

of corruption, and political and economic stability. Although they are presented as quantitative indicators, these measurements actually allow qualitative assessments of governance quality relevant to investors and decision makers. The Natural Resource Governance Institute (NRGI) (formerly the Revenue Watch Institute, or RWI) has recently developed another index, the Resource Governance Index (RGI), which is based on a detailed questionnaire developed to assess the availability of public information from official sources on the government's management of the extractive sector and its revenues (RWI, 2013). The results reflect the relative progress of transparency standards promoted in each country surveyed. The 2013 RGI considers 58 resource-rich countries and provides detailed information about each country and its scores.

The RGI defines transparency as the disclosure of information about natural resource governance available through official sources of information, including websites. Moreover, in recognition of the fact that the legal framework and disclosure practices also affect transparency, the RGI assesses rules that facilitate disclosure, limit arbitrary decisions, curb conflicts of interest, and clarify roles and authority (RWI, 2013). The RGI organizes its indicators and questions into three components that describe processes and rules regarding access to information, revenues, and mechanisms of oversight and control. Of the nine LAC countries that the NRGI tracks, Brazil, Chile, Colombia, Ecuador,

Mexico, and Peru score in the highest category of comprehensive revenue transparency. While Bolivia, Venezuela, and Trinidad and Tobago are ranked as having only partial revenue transparency, no LAC countries are at the low end of the scale with scant revenue transparency. Chapter 2 discusses the RGI in detail.

CONCLUSIONS

As regional interest in the adoption of transparency laws, targeted policies, voluntary standards, and benchmarks increases, LAC countries are demonstrating that they recognize the importance of monitoring and enhancing governance in the extractive sector. Considering its complicated political economy (Barma et al., 2011), the region has achieved an overall positive track record of fostering transparency in the extractive industries. An assessment by Transparency International (2011) highlights, for example, that oil companies in the LAC region have good reporting practices. More than 45 percent of companies engage in corruption-reporting initiatives, which at the global level is second to Europe (81 percent) but higher than Asia (25 percent), the Middle East (17 percent) and the CIS (13 percent). Financial transparency is also improving in the region, with the result that better information is becoming available for financial decision making (Laínez, Masci, and Durante, 2004; World Bank and IMF, 2005). In this context, and considering the significant

natural resource endowments in Latin America and the Caribbean, it should come as no surprise that the region is expected to channel investments ranging between US\$200 and US\$327 billion for mining projects alone over the course of the next decade (Superneau, 2013; Guajardo, 2011). The region is expected to continue to be extremely attractive for extractive activities. If anything, attention to governance issues in the extractive industries reflects the sector's pivotal role in the economies of LAC countries, as well as growing concern about social conflicts and the environmental footprint of these activities.

This chapter stresses that there are many approaches available to close governance gaps and enhance transparency in the extractive sector (see Table 1.2). Numerous binding legal and regulatory frameworks, nonbinding principles, guidelines and standards, and benchmarking mechanisms have emerged to this effect, seeking to leverage natural resource wealth more optimally to improve social, economic, and environmental performance. The proliferation of these initiatives highlights significant transformations in the way stakeholders engage with each other, as well as unique structural challenges and enabling factors configuring the

Table 1.2

Types of Transparency Initiatives, Key Features, and Examples

Types	Binding legislation	Voluntary standards	Stakeholder monitoring and targeted policies	Benchmarking and assessment tools
Key features	Prescriptive Legal incentives Enforced by the State	Nonprescriptive Market incentives Self-enforced	Descriptive/ prescriptive Legal and/or market incentives Enforced by stakeholders (the States, IO, CSO)	Descriptive Nonvoluntary participation Nonenforceable
Examples	Freedom of Information Laws Dodd-Frank Act EU Directives	Standards of the IFC, OECD, and ICMM EITI Standards Kimberley Process Certification Scheme	Auditorias Responsables MapaRegalias Resource	Governance Index Transparency International Index

extractive sector. Regardless of the approach pursued, stakeholders supporting these initiatives in the extractive sector share a fundamental assumption, which is that they can help improve governance quality and, thus, leverage the sector for more effective, sustainable, and inclusive development.

There is empirical evidence linking greater transparency and improved performance in the sector. From a government perspective, for example, improved governance and transparency initiatives, combined with fiscal discipline and a more realistic, predictable, transparent budget process, reduce the cost of capital. From a business perspective, improved transparency and increased effectiveness of the institutions that govern the extractive sector remove uncertainties and reduce investment risk. Finally, transparency empowers civil society and helps shape expectations about the role, benefits, and risks attached to the extractive sector. This contributes to more constructive dialogue, reducing conflict and enhancing democracy in the LAC region. As the short- and long-term benefits of transparency become more broadly understood and translate into improved governance, it is expected that transparency will become an inextricable feature of good governance systems in the sector.

Still, good governance practices in the extractive industries are unlikely to become the norm anytime soon. Sectoral governance arrangements are both structural and contextual, and there are no one-size-fits-all

solutions. Improving governance in the sector with transparency will depend on a combination of stakeholder will and capacity. Global transparency initiatives may help transform good intentions into actionable strategies for the sector, providing a foundation from which stakeholders can develop a common understanding of the challenges ahead and constructively develop solutions to address local bottlenecks. International organizations are particularly well suited to support the process by promoting multistakeholder dialogues, encouraging the implementation of transparency initiatives, identifying and supporting pro-transparency reformers in the LAC region, tailoring specific agendas to particular challenges, coordinating programs that improve institutional effectiveness and regulatory and technical capacity for fiscal and revenue management, and supporting countries' efforts to develop information systems that enhance interagency coordination at both the national and subnational levels, among others. Global efforts, however, can only provide support for initiatives kick-started and supported domestically. Local stakeholders can make or break the transparency agenda, which is why being receptive to their proposals, feedback, and preferences continues to be critical. This is not just to ensure that companies secure social licenses to operate, but also to hold democratic governments accountable to their citizens.

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CHAPTER 2

Measuring up to Transparency and Accountability Standards: Challenges and Opportunities for Effective Governance

JUAN CARLOS QUIROZ

How governments manage their oil, gas, and mineral resources has a direct impact on their efforts to develop their economies and provide opportunities to their people. But, how far have countries come in adopting and implementing best practices in resource governance? The Resource Governance Index (RGI) provides the first measure of transparency and accountability mechanisms in the extractive sector in 58 hydrocarbon- and mineral-producing countries around the world. The index provides a timely assessment of how countries in the Latin American and Caribbean region compare to other regions. The RGI aims to provide comparative data, foster an informed debate about governance in the extractive industries, and contribute to empirical research on how governance affects the management of mineral resources. Elected officials, policymakers, civil society, and the media can use the information gathered in this index to identify governance challenges and promote best practices. The index intends to raise awareness about governance issues in the development community and beyond.

INTRODUCTION

In May 2013, the Natural Resource Governance Institute (NRGI) (formerly the Revenue Watch Institute, or RWI) published an index to define and measure a set of key elements of governance in the oil, gas, and mineral sectors (RWI, 2013). The Resource Governance Index (RGI) defines resource governance as the existence of rules and mechanisms to promote transparency and accountability. The RGI compares 58 countries across different regions using specific indicators to measure these rules and mechanisms. The indicators include concrete elements, such as the publication of reports about mining operations and fiscal revenue, competitive bidding for exploration and production licenses, and the existence of safeguards against arbitrary power and conflicts of interest, among others. The RGI also includes third-party indicators of corruption, budget transparency (open budget), and accountability and democracy. The set of indicators used in this index can serve as a basis for monitoring transparency and accountability mechanisms over time.

This chapter uses the RGI 2013 results to discuss the state of governance in the extractive sector, identify best practices, and highlight areas of improvement. The main objective of this chapter is to compare the results of nine Latin American and

Caribbean (LAC) countries against those of other regions of the world, focusing on best practices already adopted by countries in this area as well as on continuing challenges in the governance of mineral resources.

The chapter includes a brief discussion of why the extractive sector is important for the region and why measuring governance in the mining industries matters. This is followed by a description of the index methodology, how the index data are compiled, and potential uses of the information published by the RGI by citizens, academia, civil society, and policymakers. A summary of the index results highlights best practices around the world and compares scores at a regional level to place LAC performance in context. A final section comments on the RGI analysis.

The 58 countries included in the RGI produce 85 percent of the world's petroleum, 90 percent of its diamonds, and 80 percent of its copper. Profits from the extractive sector in these countries reached more than US\$2.6 trillion in 2010, contributing on average a third of GDP and half of total exports.

The RGI sheds light on the governance of a sector that is strategic for the economy. The extractive sector is controlled and regulated by states and is the pillar of public finances for many countries. According to data compiled by the NREGI, the 58 countries included in the RGI produce 85 percent of the world's petroleum, 90 percent of its diamonds, and 80 percent of its copper. Profits from the extractive sector in these countries reached more than US\$2.6 trillion in 2010, contributing on average a third of GDP and half of total exports (based on the World Development Indicators [WDI]).¹ To address the importance and complexity of the sector, the RGI measures four key areas of governance. First, it measures the degree of government openness regarding

¹ The figure for profits uses data for "rents," which are calculated by the WDI as: "the difference between the price of a commodity and the average cost of producing it. This is done by estimating the world price of units of specific commodities and subtracting estimates of average unit costs of extraction or harvesting costs (including a normal return on capital). These unit rents are then multiplied by the physical quantities countries extract or harvest to determine the rents for each commodity as a share of gross domestic product (GDP)." Database available at <http://data.worldbank.org/data-catalog/world-development-indicators>.

extractive sector operations and payments; second, it evaluates legislation and rules that limit discretionary power, curb conflicts of interest, and promote disclosure of periodic and timely information; third, it assesses the existence of safeguards and controls that guarantee the integrity of assets; and finally, it provides an indication of the institutional environment in which the extractive sector operates.

Transparency and accountability are crucial elements of good governance in oil, gas, and mineral-producing countries. Access to information about how public resources are managed is essential for both governments and citizens to effectively monitor and evaluate the performance of public institutions and the effectiveness of policies in every sector. Moreover, information about the extractive sector should be understood and used by civil society, and governments should make an effort to explain the technical complexities of these industries to a wide public.

The RGI is built on the recognition that resource-rich countries face unique institutional and management challenges, including the sheer amount of revenues from the extractive industries, the volatility of financial flows, and the technical complexity of

mining industries.² By providing a cross-country comparison, the RGI seeks to highlight institutions and practices that support integrity in the management of natural resources, promote disclosure of information, help reduce conflicts of interest, check discretionary power, and minimize opportunities for corruption.

²The academic literature has long recognized several challenges posed by mineral extraction. For example, the “Dutch disease” explanation posits a causal link between resource abundance and poor economic performance. The mechanism is that mineral and petroleum revenues tend to appreciate real exchange rates, making imports cheaper and raising the prices of local goods, leading to a concentration of the economy on extractive activities to the detriment of the rest of the economy (Sachs and Warner, 2001). Volatility also presents countries with the challenge of preparing budgets closely tied to wildly fluctuating commodities, whose price often crash around times of crisis, leading to revenue collapse and pushing governments into dire straits (Gelb, 1988). Finally, extractive industries are easier to tax than individual income, and they provide incentives for state capture by elites interested in siphoning away revenue. This can empower rulers who become independent from tax paying citizens, finance government largesse, create competition for access to rents, and thus foster conditions for corruption and lack of accountability (Karl, 1997). In terms of conflict, academic work has shown that natural resources play a major role in fueling civil war (Collier and Bannon, 2003; Ross, 2006). At the same time, the literature also suggests that improving the quality of institutions, enforcing the rule of law, strengthening accountability, and controlling corruption can keep the potential negative effects of the extractive industries in check. Good governance and good management practices have allowed countries such as Australia, Botswana, Canada, Chile, and Norway to benefit from resource wealth (Sala-i-Martin and Subramanian, 2003; Islam, 2003; Hameed, 2005; IMF, 2007).

Methodology of the Resource Governance Index

The RGI is the first effort to provide a comparative empirical assessment of transparency and accountability in the management of extractive resources. The aims of this index are to support the efforts of governments, international organizations, and civil society advocates—including the Extractive Industries Transparency Initiative (EITI)—and to assist countries in improving extractive sector management. The goal of the index is to provide a comparative analytic framework to assess each country’s performance against best practices, as well as against their peers.

The RGI is the first effort to provide a comparative empirical assessment of transparency and accountability in the management of extractive resources. The original contribution of the RGI is the definition of specific indicators for transparency and accountability mechanisms in the extractive sector.

The original contribution of the RGI is the definition of specific indicators to measure transparency and accountability mechanisms in the extractive sector. The RGI indicators are based on standards developed by international organizations and civil society initiatives. Their sources include the International Monetary Fund (IMF) “Guide on Resource Revenue Transparency” (IMF, 2007), the EITI, and the Organisation for

Economic Co-operation and Development (OECD) “Convention On Combating Bribery of Foreign Public Officials in International Business Transactions and Related Documents” (OECD, 2011) among others.³

Researchers collect data on the oil, gas, and mining industries in 58 countries via a questionnaire, which asks how governments manage their extractive sector—focusing on specific issues such as disclosure of information and the regulatory framework—and provides scoring criteria for the observed practices.⁴ It collects up to 173 data points on regulatory and legal arrangements, publication of information, and the existence of checks and balances in the oil, gas, and mineral sectors. The information collected is clustered along thematic lines into 45 indicators that provide a broad picture of transparency and accountability in the extractive sector. These indicators are then organized into three components representing key areas of governance in the extractive sector: Institutional and Legal Setting (ILS), Reporting Practices (RP), and Safeguards and Quality Controls (SQC). A fourth component, Enabling Environment (EE), brings into the index third-party measures about each country’s institutional

context beyond the extractive sector (see the structure of the RGI in Table 2.1 below).⁵

These four components show the extent to which a country has in place the institutions, mechanisms, and practices that are conducive to a transparent and accountable management of extractive resources. The final composite score, which is a weighted average of the RGI’s four components, can be interpreted as a snapshot of the state of governance in the extractive sector and the institutional environment in which it operates. The structure of the RGI is shown in Table 2.1 below, and its four components are defined as follows:

1. Institutional and Legal Setting

(20 percent of the composite score) evaluates the laws, regulations, and institutional arrangements that promote open and transparent management as well as competition in the extractive sector. It accounts for 20 percent of the composite score.

2. Reporting Practices

(40 percent of the composite score) assess the publication of reports, including their timeliness and comprehensiveness. Considering that publication of information is crucial for an open and accountable government.

3. Safeguards and Quality Controls

(20 percent of the composite score) measures the existence of integrity mechanisms that promote public

³ Individual sources for each of the RGI indicators are quoted in detail in RWI (2012).

⁴ Questionnaires for all the countries in the RGI, including researchers’ answers and comments, as well as peer reviewers’ contributions and discussions, are available at: <http://www.revenuewatch.org/rgi/countries>. See an example here: <https://www.indabaplatfrom.com/ids/widgets/vcardDisplay4RWI.html?horseld=2091>.

⁵ The full RGI methodology is available at: <http://www.revenuewatch.org/rgi/methodology>.

accountability, limit arbitrary decisions, and curb conflicts of interest.

4. Enabling Environment

(20 percent of the composite score) uses data from the World Governance Indicators (WGI), including variables for four of its six dimensions of governance (Voice and Accountability, Government Effectiveness, Rule of Law, and Control of Corruption),⁶ together with measurements from the Economist Democracy Index, the Open Budget Index, and the Corruption Perceptions Index. All these external sources combine into five indicators of the broader governance environment beyond the extractive sector: accountability and democracy, open budget, government effectiveness, rule of law, and corruption.

The RGI is a hybrid index. It is largely based on primary data collected by experts to assess transparency and the legal environment of the extractive sector, but it incorporates several external measures of the governance context in which oil, gas, and mineral extraction take place. It is not a representative survey. The researchers who compile the data arrive at the individual

scores, which are subject to peer review and fact checking. The RGI reports the results of the composite weighted average and the simple average scores of each of the four components.

Based on this methodology, the 2013 RGI seeks to provide robust empirical data that can be used by civil society organizations, think tanks, and parliamentarians to assess country performance and demand higher standards of transparency and accountability in the extractive sector. The NRGI includes an analysis of the aggregated results, information for each of the 58 countries included in the index, and access to all of the data collected from the questionnaires. The report provides data and explanations and is disseminated widely in order to foster an informed debate. The detailed results, disaggregated to the indicator level, provide policymakers with a tool to respond to demands from the public, enabling them to identify specific areas of weakness and make recommendations to remedy them.

The main criticisms leveled at this index are the weighting of each component and its combination of different types of indicators (direct observations generated by researchers and aggregated data from the WGI) into final composite results. These criticisms highlight the main challenge of a project whose aim is to compare very diverse countries, with different mineral endowments, levels of production, and political systems. The RGI recognizes this challenge and addresses it openly. It includes only comparable indicators in each component,

⁶ The RGI does not include two dimensions measured by the WGI: Political Stability and Absence of Violence and Regulatory Quality. The reason for this omission is not stated in the RGI report. In future iterations, these components should be incorporated or the rationale for their exclusion should be explained. The RGI uses percentage ranks to calculate scores for the indicators included in it.

gathering all the external governance measures in the EE component. Then, the RGI publishes not only aggregated (weighted) results but also unweighted scores for each component and indicator. In this way, researchers have access to all of the data used

to construct the index and can draw comparisons using results based on comparable indicators. However, the NRGI believes that aggregated results provide a useful snapshot of governance trends in the extractive sector.

Table 2.1

Resource Governance Index Structure (continued on next page)

Institutional and Legal Setting	Reporting Practices	Safeguards and Quality Controls	Enabling Environment
10 indicators; 16 questions (20 percent)	20 indicators; 122 questions (40 percent)	15 indicators; 35 questions (20 percent)	5 indicators (20 percent)
Indicators	Indicators	Indicators	Indicators
1. Freedom of information law	1. Licensing process	1. Checks on licensing process	1. Accountability and democracy
2. Comprehensive sector legislation	2. Contracts	2. Checks on budgetary process	2. Open budget
3. EITI participation	3. Environmental and social impact assessments	3. Quality of government reports	3. Government effectiveness
4. Independent licensing process	4. Exploration data	4. Government disclosure of conflicts of interest	4. Rule of law
5. Environmental and social impact assessments required	5. Production volumes	5. Quality of SOC reports	5. Corruption
6. Clarity in revenue collection	6. Production value	6. SOC reports audited	
7. Comprehensive public sector balance	7. Primary sources of revenue	7. SOC use of international accounting standards	
8. SOC financial reports required	8. Secondary sources of revenue	8. SOC disclosure of conflicts of interest	
9. Fund rules defined in law	9. Subsidies	9. Quality of fund reports	

Table 2.1**Resource Governance Index Structure (continued)**

Institutional and Legal Setting	Reporting Practices	Safeguards and Quality Controls	Enabling Environment
10 indicators; 16 questions (20 percent)	20 indicators; 122 questions (40 percent)	15 indicators; 35 questions (20 percent)	5 indicators (20 percent)
Indicators	Indicators	Indicators	Indicators
10. Subnational transfer rules defined in law	10. Operating company names	10. Fund reports audited	
	11. Comprehensive SOC reports	11. Checks on fund spending	
	12. SOC production data	12. Government follows fund rules	
	13. SOC revenue data	13. Fund disclosure of conflicts of interest	
	14. SOC quasi-fiscal activities	14. Quality of subnational transfer reports	
	15. SOC board of directors	15. Government follows subnational transfer rules	
	16. Comprehensive fund reports		
	17. Fund rules		
	18. Comprehensive subnational transfer reports		
	19. Subnational transfer rules		
	20. Subnational reporting of transfers		

Source: RWI (2013).

Notes: SOC stands for state-owned company. Each of the Enabling Environment indicators consists of dozens of questions from many sources, including: World Governance Indicators <http://info.worldbank.org/governance/wgi/index.asp>; International Budget Partnership <http://internationalbudget.org/what-we-do/open-budget-survey/>; Economist Intelligence Unit https://www.eiu.com/public/topical_report.aspx?campaignid=DemocracyIndex2011; and Transparency International <http://cpi.transparency.org/cpi2012/>

SUMMARY OF RESULTS OF THE 2013 RGI

The results of the 2013 RGI offer a snapshot of the state of transparency and accountability in the oil, gas, and mining sector in 58 countries. The best score goes to Norway (98 out of 100) and the worst to Myanmar (4 out of 100). The average score is 51, with 33 countries scoring below average. The RGI report classifies countries by dividing their scores into four groups: satisfactory (71–100), partial (51–70), weak (41–50), and failing (0–40) (see Table 2.2 for the full results of the 2013 RGI).

The results of the 2013 RGI offer a snapshot of the state of transparency and accountability in the oil, gas, and mining sector in 58 countries. The best score goes to Norway (98 out of 100) and the worst to Myanmar (4 out of 100). The average score is 51, with 33 countries scoring below average.

A comparison of countries in the top and bottom groups provides a general picture of the RGI's findings. Countries in the top group earn high scores across most of the components. However, there is diversity within them, ranging from Norway with 98 to Peru with 73. Common features include the existence of rules that support access to information and disclosure of data, as well

as separation of roles among the different agencies managing the extractive sector.⁷ Periodic reports about activities and financial results in the extractive sector, published by the ministries and agencies directly in charge of managing and regulating the extractive sector, are readily available from official sources.⁸ These reports provide detailed and timely data about extractive operations and payments received by governments. These countries also tend to have safeguards and quality control mechanisms in place, providing checks on executive power, limits on conflicts of interest, and audits to monitor the quality of data. All of the countries in the top group are defined as democracies by the EIU Democracy Index (five countries are considered full democracies and six flawed democracies), but indicators show great variance among countries regarding government effectiveness, the fight against corruption, and respect for the rule of law.

⁷ References to specific country practices are based on the RGI (2013), which includes country summaries and complete questionnaires that provide sources for each individual score, available here: <http://www.revenuewatch.org/rgi/countries>.

⁸ The RGI asks researchers to identify operations and financial reports published by the following agencies: Ministries of Finance, Ministries of Petroleum and Mines, Regulatory Agencies for Petroleum and Mines, and state-owned companies. This list aims to include all agencies responsible for managing or regulating revenue and operations in the extractive sector. In addition, researchers identify reports with relevant information published by central banks, EITI national committees, and statistics agencies.

By contrast, the 15 countries at the bottom of the ranking display the lowest levels of transparency and accountability. In this group, oil, gas, and mining industries contribute an average of 61 percent to total government revenues. Equatorial Guinea, Iran, Libya, Myanmar, Qatar, Saudi Arabia, and Turkmenistan lack a freedom of information law, have no reporting requirements from state-owned companies, and fail to integrate their public sector accounts. Having no disclosure requirements translates into very poor reporting practices. In this group, most agencies in charge of managing or regulating the extractive sector do not publish reports about the sector's operations or financial results. Cambodia, Equatorial Guinea, Myanmar, and Turkmenistan earn the worst scores with respect to publication of information. Other countries in this group publish reports that lack details about operations and payments in the mineral and hydrocarbon sector and/or are outdated (published before 2008). Countries with opaque minerals sectors also

have weak safeguards and quality controls. In Afghanistan, Democratic Republic of Congo, Cambodia, and Zimbabwe, their best indicator is the existence of a legal requirement for officials to disclose assets. The existence of such a rule, while necessary, is insufficient to prevent conflicts of interest or corruption. Equatorial Guinea, Libya, Myanmar, and Turkmenistan also lack basic controls on the executive branch. While Libya and Myanmar have recently embarked on transitions, Equatorial Guinea and Turkmenistan show no signs of reform. In this group, the average score for the EE component is significantly lower than for the other groups. Qatar and Saudi Arabia have strong controls on corruption but poor voice and accountability practices. At the bottom, Democratic Republic of Congo, Equatorial Guinea, Libya, Myanmar, South Sudan, and Turkmenistan earn the lowest scores of all the countries in the survey for government effectiveness, rule of law, voice and accountability, and control of corruption.

Table 2.2

RGI Composite and Component Scores (continued on next page)

Rank	Country	Composite	Institutional and Legal Setting	Reporting Practices	Safeguards and Quality Controls	Enabling Environment
1	Norway	98	100	97	98	98
2	United States (Gulf of Mexico)	92	88	97	89	90
3	United Kingdom	88	79	91	83	93
4	Australia (Western Australia)	85	88	87	65	96
5	Brazil	80	81	78	96	66

Table 2.2**RGI Composite and Component Scores (continued on next page)**

Rank	Country	Composite	Institutional and Legal Setting	Reporting Practices	Safeguards and Quality Controls	Enabling Environment
6	Mexico	77	84	82	81	53
7	Canada (Alberta)	76	67	72	74	96
8	Chile	75	77	74	65	87
9	Colombia	74	75	73	91	58
10	Trinidad and Tobago	74	64	83	86	52
11	Peru	73	88	83	56	55
12	India	70	60	72	83	61
13	Timor-Leste	68	77	82	70	28
14	Indonesia	66	76	66	75	46
15	Ghana	63	79	51	73	59
16	Liberia	62	83	62	71	31
17	Zambia	61	71	62	72	37
18	Ecuador	58	70	64	65	28
19	Kazakhstan	57	62	58	76	32
20	Venezuela	56	57	69	67	18
21	South Africa	56	69	31	75	72
22	Russia	56	57	60	62	39
23	Philippines	54	63	54	51	46
24	Bolivia	53	80	47	63	32
25	Morocco	53	48	60	56	42
26	Mongolia	51	80	39	49	48
27	Tanzania	50	44	48	68	42
28	Azerbaijan	48	57	54	51	24
29	Iraq	47	57	52	63	9
30	Botswana	47	55	28	53	69
31	Bahrain	47	38	40	59	58
32	Gabon	46	60	51	39	28
33	Guinea	46	86	45	43	11
34	Malaysia	46	39	45	39	60

Table 2.2
RGI Composite and Component Scores (continued)

Rank	Country	Composite	Institutional and Legal Setting	Reporting Practices	Safeguards and Quality Controls	Enabling Environment
35	Sierra Leone	46	52	47	59	24
36	China	43	43	46	46	36
37	Yemen	43	57	46	52	16
38	Egypt	43	40	44	48	40
39	Papua New Guinea	43	59	34	50	38
40	Nigeria	42	66	38	53	18
41	Angola	42	58	43	52	15
42	Kuwait	41	28	43	36	57
43	Vietnam	41	63	39	31	30
44	Congo (DRC)	39	56	45	42	6
45	Algeria	38	57	41	28	26
46	Mozambique	37	58	26	37	37
47	Cameroon	34	63	33	25	17
48	Saudi Arabia	34	30	35	31	38
49	Afghanistan	33	63	29	38	8
50	South Sudan	31	80	17	35	8
51	Zimbabwe	31	48	23	56	6
52	Cambodia	29	52	13	46	20
53	Iran	28	26	33	26	23
54	Qatar	26	15	14	20	66
55	Libya	19	11	29	15	10
56	Equatorial Guinea	13	27	14	4	4
57	Turkmenistan	5	13	4	0	3
58	Myanmar	4	8	5	2	2

Average	51	59	50	54	40
SD	20	21	22	22	24
Median	47	60	46	55	37

Source: RWI (2013).

Countries in the middle categories show a range of practices that, depending on their position on the RGI and their scores on specific components, reflect some steps to adopt legislation that includes transparency requirements. For example, Timor-Leste, Ghana, and Liberia have all adopted initiatives to improve extractive sector governance. Other countries, such as India, Indonesia, and South Africa, have set up legal requirements to disclose conflicts of interest, comply with audits, or submit to legislative reviews. However, with almost 80 percent of the countries in the sample scoring below 70 in the reporting practices component, disclosure of information is the biggest challenge for most countries. Although adopting transparency rules is a good first step, publication of relevant and timely information to enable an understanding of the activities and financial contribution of the extractive sector remains a crucial challenge to achieving transparency and accountability.

COMPARISON OF THE 2013 RGI RESULTS WITH OTHER MEASURES OF GOVERNANCE

The 2013 RGI results are largely consistent with other measures of governance. Since the RGI composite score already includes external measures in its EE component, it is not surprising to find a high correlation of

those results with the 2012 WGI (see Table 2.3). However, comparisons with the three areas that rest entirely on the RGI's own research confirm a positive correlation. It is also possible to compare the RGI results with two of the six WGI variables not included in the 2013 RGI results. One of them, Political Stability and Absence of Violence, shows the lowest correlation coefficient. This low correlation is likely due to the selection of countries covered in the RGI, several of which are emerging from civil wars or international conflict, and others are undergoing difficult political transformations. Although it has been claimed that resource-rich countries are more prone to conflict than countries without resources,⁹ the RGI sample is too small to fully support this observation.

The 2013 RGI results are largely consistent with other measures of governance.

The second WGI variable missing in the RGI is Regulatory Quality, which shows a more robust correlation with the RGI results. This variable, however, is not as strongly correlated with the ILS component, which aggregates the majority of

⁹ See, for example, Collier (2008), Collier and Bannon (2003), and Ross (2012).

indicators regarding rules and legislation. The ILS component actually has a very low correlation coefficient with all of the WGI variables. This is the area where the RGI results are also higher. One likely explanation is the fact that this component of the index identifies primarily rules and legislation that provide requirements for disclosure, set limits on arbitrary power, and prescribe

competitive processes. However, the low correlation of these results with variables such as rule of law, government effectiveness, and control of corruption highlights a gap in the implementation and enforcement of legislation that is supposed to create the framework for a transparent and accountable government.

Table 2.3

Correlation Coefficients for the RGI Components and WGI Variables (percentile rank)

	Control of Corruption	Government Effectiveness	Rule of Law	Voice and Accountability	Political Stability and Absence of Violence	Regulatory Quality	Average WGI
RGI Composite	0.66	0.68	0.62	0.84	0.32	0.70	0.71
Institutional and Legal Setting	0.33	0.30	0.24	0.66	0.12	0.36	0.37
Reporting Practices	0.53	0.56	0.50	0.71	0.20	0.57	0.57
Safeguards and Quality Control	0.47	0.51	0.43	0.72	0.16	0.53	0.52
Enabling Environment	0.94	0.95	0.96	0.85	0.65	0.95	0.98
	Included in the RGI				Not included in the RGI		

Source: Author's elaboration with data from RGI (2013).

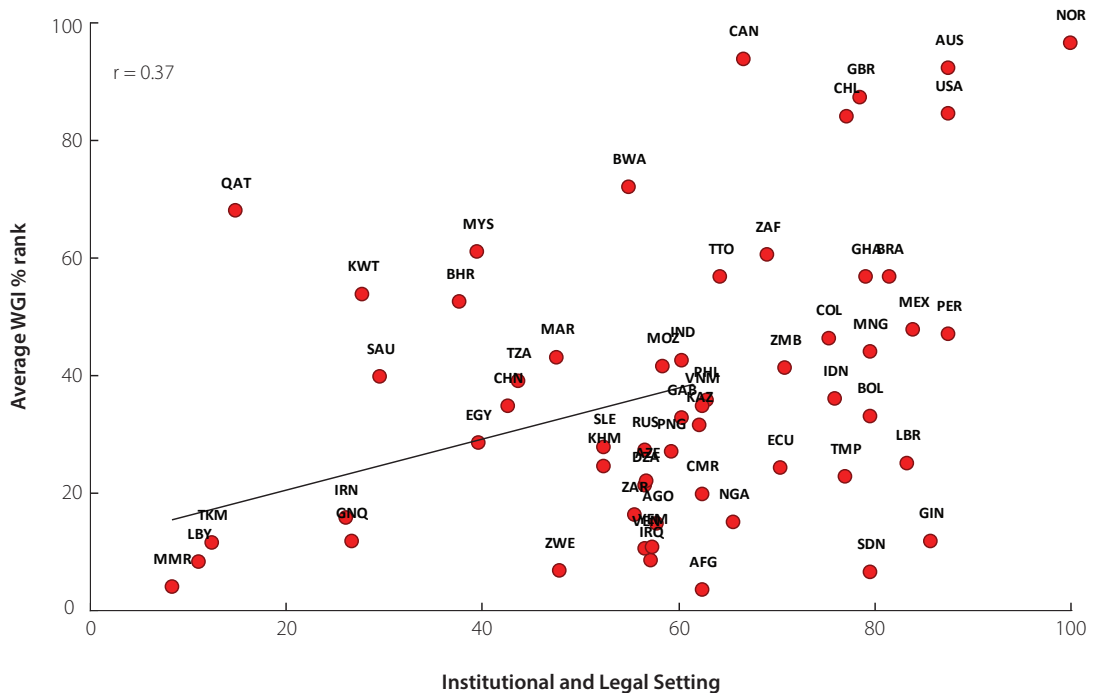
The comparison of the 2013 RGI results and 2012 WGI percentile rankings also highlights countries with higher results in the RGI than would have been expected and others with lower scores than their WGI ranking would predict. As an example, the ILS component has the lowest correlation to the WGI (see Figure 2.1). Countries such as Botswana, Malaysia, and Qatar have higher results in their 2012 WGI average percentile rankings than in the ILS component, in particular due to high marks on Control of Corruption and

Government Effectiveness. On the other hand, when countries have a higher score than expected, the RGI points to examples of good practices. For example, some countries have responded positively to new discoveries: Afghanistan's recent mining law requires competitive bidding to assign contracts and has published an EITI report, and Mozambique has complied with the EITI process.

Despite poor reporting practices in general, some countries have engaged in initiatives to publish EITI reports and contracts.

Figure 2.1

Relationship between the ILS Component and the WGI % Rank



Source: Author's elaboration with data from RGI (2013).

In Afghanistan, Cameroon, Democratic Republic of Congo, and Mozambique, the best or the only reports available come from EITI publications. In other cases, central banks sometimes publish reports with data for the extractive sector (e.g., Algeria, Cameroon, Gabon, and Saudi Arabia), which are complemented by reports issued by ministries of finance (e.g., Afghanistan), but reports from the agencies directly in charge of regulating the extractive sector are missing in a large number of countries.

COMPARISON OF RESULTS AT A REGIONAL LEVEL

The 58 countries in the 2013 RGI are diverse. The index report groups them into six regions. Within each region there is wide variation in terms of performance, but the variation is smaller within the region with the best scores (see Table 2.4). A group of OECD countries comes out at the top of the ranking, followed by Latin American and Caribbean (LAC) countries. These two groups are the only ones scoring above the global index average of 51. Eurasia and South Asia (ESA), with 7 countries, scores an average of 46; both East Asia and Pacific (EAP), with 9 countries, and Sub-Saharan Africa (SSA), with 17 countries, score an average of 44; and the Middle East and North Africa (MENA), with 11 countries, scores an average of 38.

The OECD group includes 5 of the top 10 ranked countries. In terms of individual indicators for the countries in this group,

all of them have freedom of information laws, mining laws, independent mining licensing authorities, and clear rules for management of resource revenue (indicators included in the ILS component). They all publish comprehensive information on their licensing procedures, revenue from extractive resources, and the industry's operations (RP component). In addition, these countries have checks on the authorities in charge of licensing access to resources and on their budgetary process (SQC component). Besides being democracies, these countries also have strong controls against corruption, high levels of government effectiveness, and respect for the rule of law (EE component) (see Table 2.3).

Latin America and the Caribbean has an average score of 69, which is significantly higher than the index average of 51 but well behind the average score of 88 for OECD countries.

Comparing aggregated results by region, Latin America and the Caribbean has an average score of 69, which is significantly higher than the index average of 51 but well behind the average score of 88 for OECD countries. These scores indicate, for example, that countries in the LAC region have adopted legal and institutional frameworks that promote transparency, publish regular reports on the extractive sector, and have

Table 2.4**RGI Average Results by Region**

Region code	Composite	Institutional and Legal Setting	Reporting Practices	Safeguards and Quality Controls	Enabling Environment	Number of countries
OECD	88	84	89	82	95	5
LAC	69	75	72	75	50	9
ESA	46	56	45	51	31	7
EAP	44	53	43	46	34	9
SSA	44	62	39	50	28	17
MENA	38	37	40	40	35	11
RGI average	51	59	50	54	40	

Source: Author's elaboration with data from RGI (2013).

legislatures that oversee the use of natural resources and revenues. The region's scores for reporting practices are also well above average, showing that it is possible to find more information about the LAC region's extractive industries than about those in any other region, with the exception of OECD countries.

A first look indicates that the LAC region has elements of transparency and accountability in place. However, the region also shows a significant drop in its scores on the EE component, with an average of 50 compared to the OECD region's 95, which lowers its overall composite score (see Table 2.4). Of the five EE indicators mentioned earlier, the lowest average scores are for rule of law (36), corruption (47), and government effectiveness (51), while the

best scores are just above the average: accountability and democracy (57) and open budget (58). These low scores (especially for rule of law and corruption) suggest that the region has a challenge in the implementation of legal principles. Even if legislation mandates transparency and accountability in the extractive sector, actual implementation should be reflected in the broader governance environment. In this area, LAC countries score below average and are thus closer to the rest of the regions than to the OECD group.

The scores for specific practices provide further examples of challenges and opportunities for the region. Table 2.5 below provides average scores by region for specific indicators considered in the RGI. Reviewing results by components, the first one is

Institutional and Legal Settings. The results in Table 2.5 indicate that LAC countries tend to have freedom of information laws, but their requirements to disclose information on extractive industries fall short of those in the group of OECD countries. This is compensated by the ease of accessing mineral and petroleum laws in the LAC region, which is less of a problem than for countries in, for example, the MENA region. LAC results also show that most countries in the group have a division of roles in the extractive sector and that the licensing process is independent of state-owned companies. However, in contrast to OECD countries, not all countries have adopted this practice.

One area where LAC scores are better than any other region is in the adoption of rules to concentrate all resource revenue collected in the treasury accounts. Despite this good practice, however, not all countries in the LAC region include state-owned companies and special funds in a consolidated public sector balance. The LAC region earns a particularly low score in this section because of the low level of implementation of the EITI. The region with the highest rate of participation is Sub-Saharan Africa, where half of the 17 countries in the RGI have become EITI candidates. The results show that MENA and the LAC region are the regions where the EITI has the lowest number of participants.

Table 2.5

RGI Average Indicators (scores by region) (continued on next page)

Country	OECD	Latin America and the Caribbean	Eurasia and South Asia	East Asia and Pacific	Sub-Saharan Africa	Middle East and North Africa
Composite	88	69	46	44	44	38
Institutional and Legal Setting	84	75	56	53	62	37
Freedom of information	100	70	48	22	35	3
Access to mining legislation	100	100	81	81	80	57
EITI participation	33	19	48	22	55	15
Independent licensing authority/ process	100	81	52	63	82	45
Environmental and social impact assessments requirement	80	67	50	39	62	45
Revenue collection	80	89	76	61	70	67
Public sector balance	93	62	30	57	43	48
SOC requirement to publish reports	100	88	71	86	55	18

Table 2.5
RGI Average Indicators (scores by region) (continued on next page)

Country	OECD	Latin America and the Caribbean	Eurasia and South Asia	East Asia and Pacific	Sub-Saharan Africa	Middle East and North Africa
Fund rules defined by legislation	75	88	33	100	40	29
Transfer rules defined by legislation	100	100	67	40	88	33
Reporting Practices	89	72	45	43	39	40
Licensing process	100	67	40	50	50	57
Contract transparency	100	33	14	11	10	6
Environmental and social impact assessments requirement	93	52	21	15	23	9
Exploration effort*	90	80	33	56	30	38
Production volumes*	100	96	55	50	60	64
Production value*	69	81	37	53	62	63
Primary sources of revenue*	86	71	75	50	50	38
Secondary sources of revenue*	100	40	52	30	48	28
Subsidies*	56	50	48	22	24	21
Disclosure of companies operating in country*	80	79	62	52	65	57
SOC comprehensive reports	100	71	48	55	27	48
SOC production data	90	90	44	51	19	48
SOC revenue data	100	73	38	38	14	22
SOC quasi-fiscal activities	N/A	56	43	64	10	48
SOC board of directors	100	88	58	57	45	50
Publication of fund's rules	100	100	67	50	20	43
Fund comprehensive reports	67	67	78	100	7	24
Publication of transfer rules	100	100	67	40	89	25
Transfers comprehensive reports	83	95	67	47	48	58
Subnational reporting of transfers	100	71	33	40	0	50
Safeguards and Quality Control	82	75	51	46	50	40
Checks on licensing process	87	59	48	37	42	35
Checks on budgetary process	98	64	54	60	52	52

Table 2.5
RGI Average Indicators (scores by region) (continued)

Country	OECD	Latin America and the Caribbean	Eurasia and South Asia	East Asia and Pacific	Sub-Saharan Africa	Middle East and North Africa
Quality of reports**	73	74	38	50	51	48
Disclosure of conflict of interest by ministries	60	78	86	44	82	50
SOC quality of reports	100	71	45	50	29	47
SOC audited reports	100	84	62	60	40	46
SOC international accounting standards	100	88	57	67	70	56
SOC disclosure of conflict of interest	N/A	75	50	29	55	18
Fund quality of reports	100	75	50	75	7	29
Fund audited reports	100	100	50	75	33	40
Government follows fund rules	100	67	72	67	20	21
Checks on fund's spending	100	75	33	50	0	14
Fund disclosure of conflict of interest	50	75	33	0	80	14
Transfers quality of reports	58	67	44	23	24	42
Government follows transfers rules	100	90	78	27	44	22
Enabling Environment	95	50	31	34	28	35
Accountability and democracy (WGI VA & EIU)	94	57	28	37	32	18
Corruption (TI CPI & WGI CC)	93	47	20	28	30	43
Open budget (OBI)	96	58	59	42	36	21
Government effectiveness (WGI GE)	94	51	29	39	23	41
Rule of law (WGI RL)	95	36	26	29	25	41

Source: Author's elaboration with data from the RGI (2013).

Notes: SOC stands for state-owned company. * These indicators use data from publications from up to five sources (ministries of finance, ministries of petroleum and mines, regulatory agencies, central banks and EITI reports or statistical agencies). RGI researchers evaluate all the available reports but the score takes into consideration only the best ministry or source.

** This indicator is an average of the quality and timeliness of all the available reports in each country.

Reports published in LAC countries provide more timely information than in the rest of the regions, but still fall short of data publication in OECD countries.

Looking at the RP component, the LAC region does better than most regions (except the group of OECD countries) when it comes to publication of information on the licensing process. However, most countries do not disclose their actual contracts or licensing terms. On this issue, Chapter 7 in this volume shows that contracts are not equally accessible in this region. The chapter also discusses the difficulties of translating contract transparency into improved governance and suggests strategies to achieve it. Publication of environmental or social impact assessments in LAC receives a score of 52, indicating that they are not published or only published after licenses and projects are approved in half the countries. Although most regions fall below the average on this score, this is an area where LAC countries could improve their practices. Publication of these assessments (and consultations before the approval and start of projects) could help manage the growing number of conflicts over mining projects in the region. Reports published in LAC countries provide more timely information than in the rest of the regions, but still fall short of the amount of data published in OECD countries. With respect to

state-owned companies, LAC companies publish reports that are less comprehensive than OECD companies. A particular area of opacity tends to be information about social expenditures and subsidies undertaken by state-owned companies.

The results reported in Table 2.4 are also useful in comparing regional scores on the indicators of the SQC component. Again, LAC countries receive relatively high scores in this section when compared to other regions and only below those of OECD countries. Individual scores also indicate that LAC countries have less rigorous checks for both the licensing and budgetary process, where the region's marks are closer to those of countries in Eurasia and East Asia. Requirements for government officials to disclose conflicts of interests (which includes income and asset disclosures) receive the highest scores in Sub-Saharan African countries, followed by Eurasia and the LAC region. The weakness of this indicator, however, is that this legal requirement is often perceived as being ineffectively enforced or potentially circumvented by asset transfers to family members. With respect to the management of special funds, LAC countries perform audits of these funds, adhering to a best practice, but RGI researchers give the region lower scores on government compliance with the rules on making deposits into special funds, even below Eurasian countries. Despite this, the region has stronger checks in place for special fund expenditures, but they are still far below OECD standards.

As mentioned before, the LAC region receives lower scores in the EE component of the RGI. The best scores for the LAC region in this area come from the WGI Voice and Accountability, the Economist Democracy Index, and from the Open Budget Index. However, these scores are significantly lower than those of OECD countries and closer to the rest of the regions. LAC's worst performance is in the areas of control of corruption and rule of law, which suggests a challenge for this region to implement transparency and accountability legal principles. In other regions, MENA earns the lowest scores for accountability and democracy and for open budget. The ESA region receives the lowest score on corruption, and the SSA region the lowest on government effectiveness and rule of law.

The results from the 2013 RGI report also highlight some additional challenges for the regions. For example, in the ESA group, India and Azerbaijan are the only countries with a freedom of information law. In Azerbaijan, Kazakhstan, and Russia, resource funds are subject to discretionary decisions by the executive branch. Reports found in this region by RGI researchers tend to be outdated and lack detailed information about resource revenues. Scores for legislative oversight are particularly low in Azerbaijan, Russia, and Turkmenistan. In the EAP region, Cambodia, China, Myanmar, Papua New Guinea, and Vietnam publish scant information about resource revenues. Malaysia receives the highest score, reflecting strong government effectiveness, but

it shows weak performance on democracy and freedom of expression. In the SSA region, some countries, such as Ghana, Guinea, Liberia, South Sudan, and Zambia, receive their highest scores on account of recent legal reforms that have included the insertion of principles of open government in their mining laws. However, only three out of 17 countries have freedom of information laws. Across the continent, ministries of petroleum and mines publish minimal information. In Cameroon, Democratic Republic of Congo, and Mozambique, reports published by the EITI are the best sources of information on oil, gas, and mining revenues. None of the state-owned companies publish comprehensive reports. In 11 countries, the legislature does not scrutinize resource revenues. In the MENA region, only Morocco scores slightly above average, with 53. Most countries in this region do not publish figures on key revenue streams, such as profit sharing, taxes, and royalties. Checks by the legislature are weak or nonexistent in most countries. Six countries in the region have natural resource funds estimated at over US\$1 trillion in assets,¹⁰ but all of them fail to publish reports with data about their assets or transactions. In Kuwait, for example, it is against the law to disclose information about the Investment Authority.

¹⁰ This figure is an estimate made by the Sovereign Wealth Fund Institute, based on nonpublic reports. See: <http://www.swfinstitute.org/sovereignwealth-map.html>.

Enabling Environment is the component on which all regions score particularly low. Indicators in this component help understand the context in which the extractive sector operates, pointing to the challenges in improving governance in each region. In the Eurasia group, control of corruption and rule of law receive low marks in all seven countries. Democracy and freedom of expression is another shortcoming here, with only India scoring above average in those indicators. In Sub-Saharan Africa, only Botswana and South Africa score relatively well on controls of corruption, accountability and democracy, and rule of law, while Angola, Guinea, South Sudan, Democratic Republic of Congo, Zimbabwe, and Equatorial Guinea score poorly on every indicator of government effectiveness. In MENA, Kuwait, Qatar, and Saudi Arabia have relatively high scores on control of corruption, but very low scores on democracy and accountability. Iraq, Libya, and Yemen face particular challenges in control of corruption and rule of law.

The picture from this regional comparison is sobering. It shows that most countries in the world have weak or, at best, partial practices to promote transparency and accountability in the extractive sector. The distance between the first- and the second-ranking regions is significant, but the distance between these two and the third- and lower-ranking regions is even more pronounced. This means that transparency and accountability still have to make inroads in

most of the world. Despite some regional exceptions, principles of open government still have to be adopted and implemented in the extractive sector in the vast majority of countries. Results from the LAC region imply that elements of good governance in the extractive sector are present. Although the region may fall short on some counts, progress is undeniable when compared to others. But, what is specific to the region, and what areas can be considered successes or challenges?

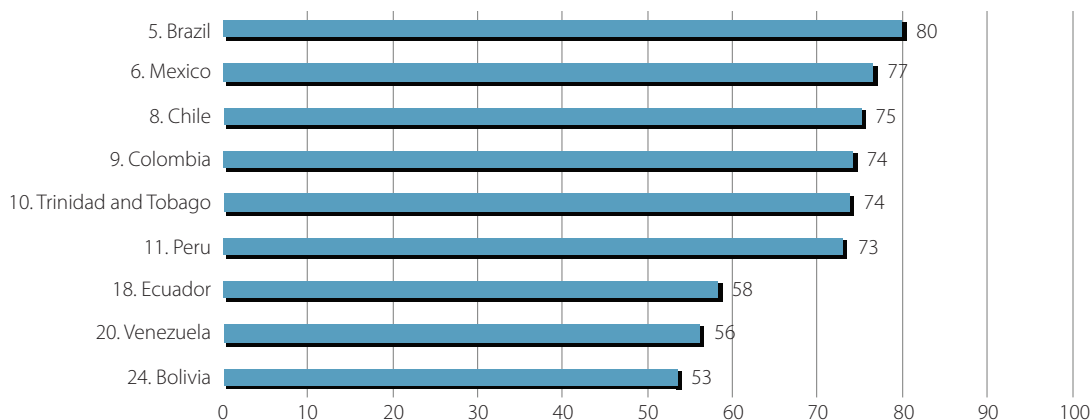
Results from the LAC region imply that elements of good governance in the extractive sector are present. Although they may fall short on some counts, progress is undeniable when compared to other regions.

ANALYSIS OF RESULTS WITHIN THE LAC REGION

All nine LAC countries included in the 2013 RGI report score above the overall average of 51. However, there are two distinct groups within this region. Brazil, Chile, Colombia, Mexico, Peru, and Trinidad and Tobago score significantly higher than average, with scores ranging from 80 to 73, while Bolivia, Ecuador, and Venezuela earn scores that are just above average, ranging from 58 to 53 (see Figure 2.2).

Figure 2.2

RGI Scores and Rankings for LAC Countries (out of 58 countries)



Source: Author's elaboration with data from RGI (2013).

The results for the 2013 RGI support the observation that legal frameworks across the region include principles of transparency and accountability. For example, all of the countries in this group, with the exception of Venezuela, have adopted a freedom of information law, and in all countries petroleum and mineral legislation is published and easily available. According to the RGI research, state-owned companies in the region are legally required to publish reports, and all countries with revenue transfers to subnational governments have rules defined by legislation to do so. Four countries deposit revenues into natural resource funds, all have rules for deposits and all, with the exception of Venezuela, have rules for disbursement. Table 2.6 below shows a breakdown of RGI scores by indicator for

countries in the LAC region. These scores reflect practices discussed throughout this section and are based on research conducted by the RGI project.

Actual disclosure of information, however, is a stronger indication of transparency than rules. In this area, there are also positive practices. The majority of LAC countries publish timely and periodic reports on production volumes, prices, exports, and the main sources of resource revenue.¹¹ However, the scores reported in the RGI show that information on costs of

¹¹ See, for example, websites of the ministries of finance, mining and petroleum, and regulatory agencies included in the RGI research and available from the country questionnaires: <http://www.revenue-watch.org/rgi/countries>.

production (included in indicator for “exploration effort”) and secondary sources of revenue, such as bonuses, dividends, and production fees, is often missing in reports from Bolivia, Colombia, Chile, Ecuador, and Venezuela. In most countries, all agencies in charge of regulating the extractive sector and collecting taxes from natural resources publish periodic reports. In Venezuela, however, the state-owned company and the Ministry of Petroleum publish identical reports, revealing the lack of autonomy and the existence of a conflict of interest in oversight mechanisms.¹²

According to the 2013 RGI report, most of the countries in this region have legislation in place that requires measures for safeguards and quality control. Legislatures in most countries are active in overseeing activities in the extractive sector and monitoring expenditures, but in Bolivia, Ecuador, and Venezuela they exert very limited oversight of resource revenues. All state-owned companies are reportedly audited, but Bolivia and Ecuador do not publish their audit reports. In Chile, Mexico, and Trinidad and Tobago, the legislature oversees the use of natural resource funds, but Venezuela lacks comprehensive fund reports, and the legislature does not review such expenditures.

¹² See comments from researchers and peer reviewers on the questionnaire for Venezuela: <https://www.indabaplatform.com/ids/widgets/vcardDisplayIndicators4RWI.html?horseld=1975&showscore=true&ubcatid=625&showscore=true#questionset628>.

Chile scores high on all five indicators of the EE component. On the accountability and democracy indicator, Brazil, Mexico, and Trinidad and Tobago score above average, but Ecuador and Venezuela score significantly below average. In terms of control of corruption, Brazil and Peru earn scores slightly above average, with Bolivia, Ecuador, and Venezuela earning below-average scores. Budget transparency is very limited in Bolivia, Ecuador, Venezuela, and Trinidad and Tobago, and government effectiveness receives low scores in Peru. Rule of law is the weakest indicator in the entire region, with the sole exception of Chile.

The 2013 RGI results (Table 2.6) support the general observation that there are two groups with different standards in the LAC region. Although it is not possible to speak of clearcut blocks (the best-performing countries in this area are very diverse), the three countries at the bottom have close ties with one another. The RGI’s objective, however, is to highlight actual evidence of disclosure of information, legislation that supports openness, and the existence of accountability mechanisms, rather than offering prescriptions about a government’s policy choices. The observed gap in the LAC region should provide evidence and opportunities for civil society activists and legislatures to compare and evaluate different cases of government management of mineral resources, which is the essence of transparency and accountability.

Table 2.6RGI Scores by Indicator for Countries in the LAC Region *(continued on next page)*

Country	Brazil	Mexico	Chile	Colombia	Trinidad and Tobago	Peru	Ecuador	Venezuela	Bolivia
Composite	80	77	75	74	74	73	58	56	53
Institutional and Legal Setting	81	84	77	75	64	88	70	57	80
Freedom of information	100	100	67	33	33	100	100	33	67
Access to mining legislation	100	100	100	100	100	100	100	100	100
EITI participation	0	0	0	33	33	100	0	0	0
Independent licensing authority/process	83	100	100	100	100	100	83	17	50
Environmental and social impact assessments requirement	50	50	50	100	50	100	50	50	100
Revenue collection	100	100	100	67	83	100	100	50	100
Public sector balance	100	89	78	44	78	0	0	67	100
SOC requirement to publish reports	100	100	100	100	0	N/A	100	100	100
Fund rules defined by legislation	N/A	100	100	N/A	100	N/A	N/A	50	N/A
Transfers rules defined by legislation	100	100	N/A	100	N/A	100	100	100	100
Reporting Practices	78	82	74	73	83	83	64	69	47
Licensing process	100	33	67	100	83	67	83	67	0
Contract transparency	0	33	0	33	0	100	67	33	33

Table 2.6
RGI Scores by Indicator for Countries in the LAC Region (continued on next page)

Country	Brazil	Mexico	Chile	Colombia	Trinidad and Tobago	Peru	Ecuador	Venezuela	Bolivia
Environmental and social impact assessments requirement	33	50	50	100	100	100	17	17	0
Exploration effort*	100	100	50	100	100	100	50	100	17
Production volumes*	100	100	100	100	100	100	100	67	100
Production value*	67	100	100	67	100	67	67	100	67
Primary sources of revenue*	100	100	67	50	100	67	33	78	44
Secondary sources of revenue*	67	67	25	33	75	40	22	27	0
Subsidies*	0	100	0	N/A	100	33	0	100	67
Disclosure of companies operating in country*	100	N/A	100	100	100	100	100	33	0
SOC comprehensive reports	100	100	100	50	100	N/A	50	50	17
SOC production data	86	100	100	100	71	N/A	95	95	76
SOC revenue data	100	83	93	38	50	N/A	60	95	67
SOC quasi fiscal activities	50	100	100	N/A	N/A	N/A	0	83	0
SOC board of directors	100	100	100	100	50	N/A	100	100	50
Publication of fund's rules	N/A	100	100	N/A	100	N/A	N/A	100	N/A
Fund comprehensive reports	N/A	33	100	N/A	100	N/A	N/A	33	N/A

Table 2.6
RGI Scores by Indicator for Countries in the LAC Region (continued on next page)

Country	Brazil	Mexico	Chile	Colombia	Trinidad and Tobago	Peru	Ecuador	Venezuela	Bolivia
Publication of transfers' rules	100	100	N/A	100	N/A	100	100	100	100
Transfers comprehensive reports	100	67	N/A	100	N/A	100	100	100	100
Subnational reporting of transfers	100	100	N/A	0	N/A	100	100	0	100
Safeguards and Quality Control	96	81	65	91	86	56	65	67	63
Checks on licensing process	89	50	67	89	50	56	56	44	33
Checks on budgetary process	100	67	56	89	100	33	44	56	33
Quality of reports**	88	87	67	67	67	67	83	61	79
Ministries disclosure of conflict of interest	100	100	0	100	100	0	100	100	100
SOC quality of reports	83	100	50	100	33	N/A	67	50	83
SOC audited reports	100	100	100	100	89	N/A	50	100	33
SOC international accounting standards	100	100	100	100	100	N/A	100	100	0
SOC disclosure of conflict of interest	100	100	0	100	100	N/A	0	100	100
Fund quality of reports	N/A	67	100	N/A	100	N/A	N/A	33	N/A
Fund audited reports	N/A	100	100	N/A	100	N/A	N/A	100	N/A

Table 2.6
RGI Scores by Indicator for Countries in the LAC Region (continued)

Country	Brazil	Mexico	Chile	Colombia	Trinidad and Tobago	Peru	Ecuador	Venezuela	Bolivia
Government follows fund rules	N/A	33	100	N/A	83	N/A	N/A	50	N/A
Checks on fund's spending	N/A	100	100	N/A	100	N/A	N/A	0	N/A
Fund disclosure of conflict of interest	N/A	100	0	N/A	100	N/A	N/A	100	N/A
Transfers quality of reports	100	50	N/A	67	N/A	83	50	50	67
Government follows transfers rules	100	67	N/A	100	N/A	100	100	67	100
Enabling Environment	66	53	87	58	52	55	28	18	32
Accountability and democracy (WGI VA & EIU)	68	61	81	54	69	57	43	33	50
Corruption (TI CPI & WGI CC)	60	45	90	50	49	54	28	7	37
Open budget (OBI)	91	61	93	80	32	85	30	34	18
Government effectiveness (WGI GE)	57	62	84	61	64	47	29	15	39
Rule of law (WGI RL)	55	34	88	45	48	32	12	1	13

Source: Author's elaboration with data from the RGI 2013.

Notes: SOC stands for state-owned company. * These indicators use data from publications from up to five sources (ministries of finance, ministries of petroleum and mines, regulatory agencies, central banks, and EITI reports or statistical agencies). RGI researchers evaluate all the available reports but the final score takes into consideration only the best ministry or source.

** This indicator is an average of the quality and timeliness of all the available reports in each country.

N/A and blank spaces indicate "not applicable." N/A scores are used when a particular aspect of the index scorecard is not applicable to the local situation, for example, when a question refers to the existence of state-owned companies but there are none in the specific country.

In addition to its aggregated scores, a significant part of the RGI report is the questionnaire used for data collection. It includes sources and evidence for each score as well as comments by researchers and peer reviewers on each topic.¹³ The 2013 RGI contains a summary of these discussions, offering suggestions to address challenges to transparency and accountability in the extractive sector. Some of these, summarized below, highlight the diversity of conditions and specific challenges in each country.

According to the RGI research, Brazil's oil concession system follows an open and competitive bidding process. The 2010 legal reform introduced a special regime for the "pre-salt" offshore oil deposits. It established a new agency to administer production, made Petrobras the sole operator in this area, and created a special fund using future oil revenues. The challenge for Brazil is to maintain practices that support transparency and accountability as the government expands its control over the sector and transitions from importer of energy to potential exporter, as well as managing the potential oil windfall.¹⁴ One aspect of this challenge is further explored in Chapter

10 of this book, which discusses Brazilian municipalities' struggle to manage public resources with transparency and efficiency when their share of oil royalties increases.

The RGI research highlights the need for competition to improve the work of regulators (i.e., the Ministry of Energy and the Hydrocarbon Commission) in Mexico. It also points out that the government's dependence on petroleum revenue creates the potential for conflict of interest in the oversight mechanisms. A constitutional reform approved in December 2013 addresses both challenges. This reform introduces competition to the state-owned company, PEMEX, and promises to strengthen regulators to enable them to oversee a sector with multiple actors.¹⁵ Addressing this task will require strict rules on disclosure of information. Regulators and auditors will need adequate resources to effectively oversee the oil sector (see IMCO, 2013). Chapter 6 of this book describes and analyzes the administrative process followed by the government to allocate oil rights to PEMEX and the more limited service contracts managed by the state-owned company before the reform. The government could also strengthen its policies to save for future generations. Between 2006 and 2012, Mexico received oil revenue windfalls (i.e., oil revenue above the estimate in the budget) of US\$60

¹³ RGI country summaries and questionnaires are available here: <http://www.revenuewatch.org/rgi/countries>.

¹⁴ For additional data on the 2010 reform see: <http://www.eia.gov/countries/cab.cfm?fips=BR> and also <http://www.bloomberg.com/news/2010-12-02/brazilian-congress-allows-petrobras-to-be-sole-operator-of-pre-salt-fields.html>.

¹⁵ See the text of the energy bill and a description of the reform here: <http://presidencia.gob.mx/reformaenergetica/#!reforma>.

billion, but the country's stabilization fund amounted to only US\$6 billion in 2013.¹⁶

According to the RGI, Chile's main challenge comes from a legal framework that encourages transparency but also protects the secrecy of many (private) mining companies. Although Chile has very high scores in all indicators (in marked contrast to the rest of the countries in the region), it could improve transparency by requiring mining companies to disclose information about their payments to the government, and it could require officials with a role overseeing the mining industry to disclose their financial interests in this sector.

In Colombia, the 2013 RGI research highlights the 2011 legal reforms on the transfer of royalties to oil-producing regions. The new laws reduce the share of resources allotted to regional and municipal governments, making royalties available to a larger number of local governments,

¹⁶ Fundar Centro de Investigación, a Mexican think tank, derives the US\$60 billion estimate from official reports on oil revenues. At the beginning of every fiscal year, Congress approves a reference price for oil to use in budget negotiations. When the actual price of oil is above the reference price, it is counted as excess oil revenue or windfall. The author converted Fundar's nominal figures in Mexican pesos to U.S. dollars at the current exchange rate (12.3 Mexican pesos to one U.S. dollar in December 2013). See Fundar's blog: <http://www.animalpolitico.com/blogueros-res-publica/2012/05/31/ingresos-petroleros-excedentes-el-gran-despilfarro-del-sexenio/#axzz2IQGZCCaw>.

and impose conditions on transfers. The RGI also suggests ways for Colombia to improve the transparency of revenue transfers and strengthen accountability in the use of these resources at the local level.¹⁷ Chapter 9 of this book illustrates these challenges with an in-depth study of several cases and suggests ways to strengthen controls in the system for the distribution of royalties.

The RGI research in Trinidad and Tobago found detailed legislation on oil and gas, together with requirements for competitive bidding rounds, but it also revealed strong protection of confidentiality on issues of concern to the public.¹⁸ Although a freedom of information law provides public access to government documents, it does not apply to state-owned companies in the hydrocarbon sector. The government could improve this situation if it included the state-owned oil and gas companies in government accounting. Trinidad and Tobago earns high scores for democracy and government effectiveness, but budget transparency remains an area of opacity, according to the Open Budget Index. Overall, a challenging issue in this country is finding a balance between transparency and accountability and

¹⁷ Colombia's RGI questionnaire is available here: <https://www.indabaplatform.com/ids/widgets/vcardDisplayIndicators4RWI.html?horseld=1684&showscore=false&subcatId=-12648&showscore=true>.

¹⁸ See Trinidad and Tobago's RGI site: <http://www.revenuewatch.org/countries/north-america/trinidad-tobago/overview>.

confidentiality. Chapter 8 of this book provides a comprehensive analysis of this tension and presents some solutions.

RGI researchers give Peru a high score on disclosure of information and highlight opportunities to strengthen government oversight of the mining industry and its revenue. For example, officials involved in the management of extractive resources could be required to disclose any financial interest in the sector and ensure that the legislature reviews audit reports on the extractive sector periodically. Peru has a transparent mechanism for transferring a percentage of royalties to local governments. This system could be improved if voluntary contributions made by mining companies to local development projects were restructured into a formal program based on clear rules.¹⁹

Recent legislative changes in the oil sector in Ecuador have created a landscape dominated by its state-owned companies. Researchers for the RGI note that production-sharing agreements used to be published in compliance with the country's freedom of information law, but these contracts were cancelled in 2008. The service agreements that replaced them had not yet been published at the time the research was conducted. Ecuador could improve transparency in the extractive industry by ensuring that contracts are made public, updating its information on reserves, ensuring that the legislature reviews oil revenue

¹⁹ See Peru's RGI site: <http://www.revenuewatch.org/countries/latin-america/peru/overview>.

reports, and publishing audited reports on state-owned companies.²⁰

In Venezuela, the RGI research highlights the lack of independence of *Petróleos de Venezuela, S.A. (PDVSA)*, the state-owned company. The same minister heads the Ministry of Petroleum and PDVSA. The National Assembly does not provide an independent, rigorous evaluation of the use of petroleum revenues. Expenditures from a fund with reported assets of US\$30 billion are entirely determined by the executive branch.²¹

²⁰ The RWI and Transparency International (2010) published a first index report in October 2010, a pilot for the 2013 RGI methodology. The report included the same nine LAC countries present in the 2013 RGI. The results from 2010 to 2013 are very similar for LAC countries, with six in the top category and three in the middle one, with only two countries changing positions: Trinidad and Tobago moved up to the top performers group and Ecuador dropped down to the middle category. Methodological changes from 2010 to 2013 explain this change to some extent. The 2010 index was based mostly on reporting practices while the 2013 RGI includes indicators for the institutional and legal setting, safeguards and quality controls, and external governance indicators. However, events in those countries also contribute to the explanation. Trinidad and Tobago's government has taken steps towards reform to advance its EITI process, something reflected in the 2013 RGI report. In contrast, Ecuador has seen a decline in publication of information, for example publication of contracts and lack of timely data about operations in the extractive sector.

²¹ See Venezuela's RGI site: <http://www.revenue-watch.org/countries/latin-america/venezuela/overview>

According to the RGI research, changes in the hydrocarbons law in Bolivia gave the state-owned company the authority to act as a regulator. Although the National Hydrocarbons Agency remains a nominal regulator, it lacks the resources to perform that role effectively. Transparency could improve if government agencies published periodic, reliable, and timely reports with comprehensive data on the extractive industries.

FINAL REMARKS

The 2013 RGI report is the first exercise to create a comparative assessment of the state of transparency and accountability in the management of extractive resources. This index is based on the premise that updated, comparable, and understandable information is essential to effectively monitor and evaluate the performance of public institutions and the effectiveness of policies in every sector. The results of this index show that a large majority of countries fall below best practices and still have to adopt and implement principles of openness, competition, limits to arbitrary powers, and other measures to improve transparency and accountability. Although the RGI shows that there are some advances in adopting legal principles to support transparency and accountability, the main challenge remains improving disclosure of information as well as strengthening control of corruption, the rule of law, and accountability and democracy.

The 2013 RGI report is the first exercise to create a comparative assessment of the state of transparency and accountability in the management of extractive resources. This index is based on the premise that updated, comparable, and easy-to-understand information is essential to effectively monitor and evaluate the performance of public institutions and the effectiveness of policies in every sector.

Results from the RGI also show that the best performance occurs in developed countries, but the LAC region comes in second in this review and scores significantly above average. This indicates that the region has been a pioneer in adopting legal principles of openness and transparency. Most countries in the region have also maintained checks and balances on executive power that were first instituted as part of the transition to democracy in several countries in the 1990s.

Although all of the LAC countries score above average, the RGI results also show that three countries (Bolivia, Ecuador, and Venezuela) are lagging in different areas of transparency and accountability when compared to the rest of the countries in this group. The six countries scoring significantly above average (Brazil, Chile, Colombia, Mexico, Trinidad and Tobago, and Peru) are

very diverse and face different challenges in specific areas. With the exception of Chile, all of the countries in this group earn low scores in areas such as control of corruption, rule of law, and government effectiveness.

The existence of transparency rules and accountability mechanisms in the LAC region is an encouraging sign, but these are a first step. Low scores in the section of the RGI that relies on external indicators highlight the challenge of fully implementing legal principles that support transparency and accountability. The wider the distance between passing laws that require disclosure of data on the extractive sector and

weak performance on control of corruption or rule of law indicators, the harder it is for countries to achieve transparency and accountability.

Latin American and Caribbean countries publish more information than most others; however, translating transparency gains into accountability remains a challenge. Although information is necessary to evaluate policies and learn lessons from a government's performance, it can be insufficient to achieve accountability. LAC countries need to improve on regulatory quality, control of corruption, and rule of law in order to unlock transparency's potential.

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CHAPTER 3

From Dependency Theory to Local Governance: Evolution of the Research on Extractive Industries and Development

OSMEL MANZANO

Throughout the extensive literature on the subject, the role of natural resources in development has been presented as either a curse or a cornerstone of development. This chapter attempts to clarify this paradox by reviewing the literature from a different perspective. General hypotheses that were not sustained by microeconomic fundamentals can no longer be used to guide policymaking in resource-rich countries. The policy debate on resource-rich countries needs to move beyond this simple dichotomy and take into account the ways in which the extractive sector interacts with the rest of the economy, particularly at the institutional and the local levels.

INTRODUCTION

For many decades, scholars and politicians warned about the potentially harmful effects of natural resources. In 1950, Raul Prebisch, an economist with the Economic Commission for Latin America and the Caribbean (ECLAC), argued that natural resource abundance could lead to resource dependence and poverty. Juan Pablo Perez Alfonso, the Venezuelan politician and founder of the Organization of Petroleum-Exporting Countries (OPEC), called oil “the devil’s excrement.” Empirical studies by Sachs and Warner (1995; 1997) popularized the idea that natural resources were a curse.

Other studies, however, stressed the important and positive role played by natural resources in the development of more industrialized areas, including Australia, Canada, Scandinavia, and the United States. For example, Finley and Lundahl (1999) found that resource-rich countries have not always performed poorly. From around 1870 to the beginning of World War I, a period that they termed as the “golden age” of resource exporters, primary exporters enjoyed exceptional economic performance.

What accounts for such widely divergent views? This chapter will attempt to explain the paradox by reviewing the literature from a different perspective.

Macroeconomic propositions that state that resources are bad for development have not been borne out by rigorous empirical research. The microeconomics of the resource sector and its interactions with the rest of the economy are just beginning to be studied.

However, more research is needed on the interaction between the resource and the nonrecourse sectors in order to better understand the impact of the resource sector and the types of interventions that will lead to growth. Therefore, research should move from analyzing general theories—such as dependency theory—to a better understanding of the impact of natural resources on governance and local development.

Research should move from analyzing general theories, such as dependency theory, to a focus on the impact of natural resources on governance and local development.

THE LITERATURE ON RESOURCE ABUNDANCE AND DEVELOPMENT

The literature on the role of natural resources in development is vast.¹ It ranges from arguments presenting natural resources as a curse to those that view them as a cornerstone of development. This poses a non-trivial challenge to policymakers who have to decide whether and how to intervene in the economy.

¹ This section presents a brief summary of the literature on the issue. For a more comprehensive review, see Frankel (2010a) and van der Ploeg (2011).

The “Old” Debate in Early Literature

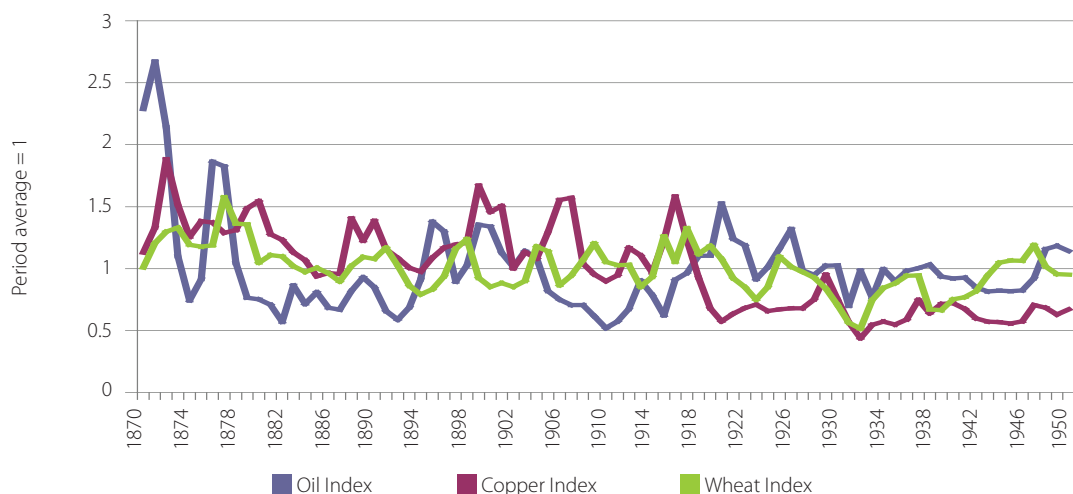
Since Raul Prebisch (1950) published his seminal work, natural resource abundance was considered detrimental to development. Prebisch argued that the relative prices of natural resources were destined to fall over time. The theoretical reasoning was that worldwide demand for primary products is inelastic with respect to worldwide income.²

Therefore, countries specializing in natural resources would likely face a structural decline in terms of trade and become poorer over time. This argument was the basis of the “dependency theory” proposition.³

H. W. Singer (1950) was the first to discuss evolution of relative prices. Figure 3.1 depicts the evolution of real prices of three representative commodities between 1870 and 1950, showing a declining trend.

Figure 3.1

Commodity Prices, 1870–1950



Source: Author’s calculation based on IMF (various years).

Note: Given the different units of prices, they are represented as index numbers where the average of the period is equal to one.

² That is, for every 1 percent increase in income, the demand for raw materials increases by less than 1 percent. Behind this argument is what is known as Engel’s Law, the proposition that households spend a lower fraction of their income on food and other basic necessities as they get richer.

³ Dependency theory proposes that resources flow from a “periphery” of poor and underdeveloped states to a “core” of wealthy states, enriching the latter at the expense of the former. It is a central contention of dependency theory that poor states are impoverished and that rich ones are enriched by the way that poor states are integrated into world trade.

In the 1970s, the literature raised questions about the possible negative impact of resource abundance. For example, when the Netherlands enjoyed a boom in gas production and exports, a concern surfaced about its impact on manufacturing and exports. This phenomenon was termed Dutch disease (“Dutch Disease”: 82–3).

Later, using the Salter (1959) model, Corden and Neary (1982) formalized this hypothesis. The basic premise was that in an economy of tradable and nontradable goods, resource booms would impact relative prices and resource allocation. Intuitively, the discovery of natural resources or an increase in the price of natural resource exports will lead to higher income in the producing country, which in turn will increase aggregate demand. Since the supply of tradable goods in small, open economies is infinite, their prices will not increase. However, the supply of nontradable goods is limited, and their prices will increase. As the price of nontradables increases relative to that of tradables—known in the literature as a real appreciation—resources will be reallocated from the tradable to the nontradable sector.

This led to a new strand of research on the topic, summarized in Gelb (1986) and Neary and van Wijnbergen (1986). Several of the cases analyzed showed that this phenomenon was occurring in commodity-exporting countries in the 1970s and 1980s, when commodity prices spiked. These countries experienced declining manufacturing exports and a reduction in the relative size of the industrial sector. However, one issue that was barely discussed were the implications for overall welfare.

Throughout the second half of the last century, the notion was that natural resources were bad for development, either because their relative prices were falling in the long run or because positive price shocks could displace productive sectors. In this literature, natural resource abundance was considered a curse, and some policy recommendations were derived from it. Notably, the argument of falling relative prices and learning-by-doing in the tradable sector was used to support import-substitution policies.

In this regard, van Wijnbergen (1986) and Krugman (1987) introduced evidence to show how resource abundance could become a disease. They proposed that factor endowments alone did not determine the comparative advantage of a country; there could also be a process of “learning by doing.” In this process, firms “learn” by producing goods and improve productivity as they produce more and more of them. In this case, an increase in wealth derived from a windfall in the resource sector will increase costs due to the higher cost of nontradable goods. These higher costs could lead some countries to stop the production of some goods in which the country is no longer competitive. Even if the increase in wealth is temporary, the loss of products is permanent, because the knowledge gained by producing the good is lost when production is stopped.

However, evidence of any negative welfare effect was not empirically proven until Sachs and Warner (1995; 1997) showed that natural resource-rich countries grow less. They measured abundance as the share of resource exports in GDP. Using their estimation, the average Latin American country will grow between 0.5 percent and 0.7 percent less per year due to the fact that its resource exports represent 7 percent of GDP.

In summary, throughout the second half of the last century, the notion was that natural resources were bad for development, either because their relative prices were falling in the long run or because positive price shocks could displace productive sectors. In this literature, natural resource abundance was considered a curse, and some policy recommendations were derived from it. Notably, the argument of falling relative prices and learning-by-doing in the tradable sector was used to support import-substitution policies.

The Recent Literature

In the early 2000s, new research began to challenge these conclusions. Cuddington, Ludema, and Jayasuriya (2002), writing on a group of commodities, and Pindyck (1999), writing on oil, did not find evidence of a declining trend in the relative prices of commodities. Furthermore, Pindyck (1999) found a positive trend in the real price of oil, more consistent with the theory of exhaustible resources, which argues that the prices

of nonrenewable resources should increase as they become scarcer.⁴

Stijns (2002) used a gravity model of trade and found evidence of Dutch disease.⁵ Nevertheless, the welfare effects were not clear. As resource-rich countries get richer, they are expected to use the wealth to purchase goods abroad that are more cheaply produced in other countries. Volatility notwithstanding, Dutch disease is an efficient market adjustment that allows the country receiving the windfall to consume more tradable and nontradable goods. Consequently, more work is needed to be done to understand why this has a negative impact on development.

A new series of studies appeared to contradict previous research. Davis (1997) found evidence that resource-rich countries had better human capital indicators, such as infant mortality, schooling, and others. Later, Davis (2009) showed that the poor in growing extractive economies are more likely to benefit from that growth than are the poor in growing non-extractive economies.

⁴ The trend found in Pindyck was lower than the real interest rate, which is what the model by Hotelling (1931) would predict. Nevertheless, as Sweeney (1993) discusses, this could be consistent with a scenario where there is a “backstop” technology that could eventually replace oil.

⁵ The gravity analogy comes from the fact that trade between two countries is modeled as a function of their GDP—that is, their economic mass—and as a measure of the distance between them. Results in this literature are systematically consistent, statistically significant, and economically meaningful. Stijns (2002) uses net energy exports as an explanatory variable and finds significant negative impact on trade of manufacturing goods.

Various case studies of Australia, the Scandinavian countries, and the United States have shown the importance of the resource sector in the development of those countries. Therefore, resource abundance may actually be beneficial for development.

Lederman and Maloney (2007) presented a collection of papers that challenged the results of Sachs and Warner (1995; 1997). Though the papers used different arguments and methodologies, the common argument was that Sachs and Warner used a cross-sectional analysis, and their result did not hold when panel data were used. This suggests that the negative effect of resource abundance on growth estimated by Sachs and Warner probably came from an unobserved characteristic that was correlated with resource abundance, but that it was not resource abundance per se that caused a negative impact on growth.

In addition, Lederman and Maloney (2007) challenged the measure of resource abundance used by Sachs and Warner (1995; 1997). They used resource exports as a share of GDP, which does not come from the standard theory of international trade on how to measure resource abundance. If more standard measures are used, such as the Leamer (1984) index of resource

abundance, the negative effect disappears.⁶ As Sachs and Warner (1995; 1997) argue, findings can be better interpreted as a measure of “GDP concentration” and therefore more of a symptom than a cause of an economic problem.

Their results are further called into question when “resource drag” is considered. Alexeev and Conrad (2009) and Davis (2011) found that large resource endowments may result in high growth rates in the early stages of extraction and slower rates when the resource deposits mature. In fact, such a growth pattern may be optimal. Therefore, growth estimations that use total GDP will include this drag from the resource sector. Van der Ploeg and Poelhekke (2010) corrected for these issues and found no evidence of the resource curse. Various case studies from Australia, the Scandinavian countries, and the United States (Lederman and Maloney, 2007) have shown the importance of the resource sector in the development of those countries. Thus, resource abundance may actually be beneficial for development.

These results are similar to those found in political economy. Parallel to the argument that resource abundance was bad for development, a similar hypothesis on “resource-fuelled authoritarian regimes” was put forth. The argument was that

⁶ The Leamer index is constructed by estimating net exports per capita. This measure can be shown to be derived from theoretical models of international trade.

resource-rich countries were more prone to authoritarian regimes, since the concentration of revenue meant that the average taxpayer relinquished more power and independence to the central authority. Haber and Menaldo (2011), however, found no evidence of the “political economy sibling” of the resource curse. As in the case of the literature regarding the resource curse, they found negative effects in the cross-sectional data but not in the panel data. Thus, another factor could be explaining this correlation.

NEW CHALLENGES IN THE EXTRACTIVE SECTOR

Given this seemingly contradictory evidence, how should policymakers view the contribution of the extractive sector to growth and development? The key lesson of recent findings is that greater understanding of the microeconomics of the sector is needed. It is clear that macroeconomic hypotheses alone, and a failure to take microeconomic fundamentals into account, could induce misguided policies.

The first step is to look at how the resource sector interacts with the rest of the economy. Figure 3.2 presents a schematic picture of the various actors with which the resource sector interacts. The interactions of the sector within a country are called channels. Since the banking system is included, these relationships are not mutually exclusive. From the picture, it is clear that the resource sector is not an enclave.

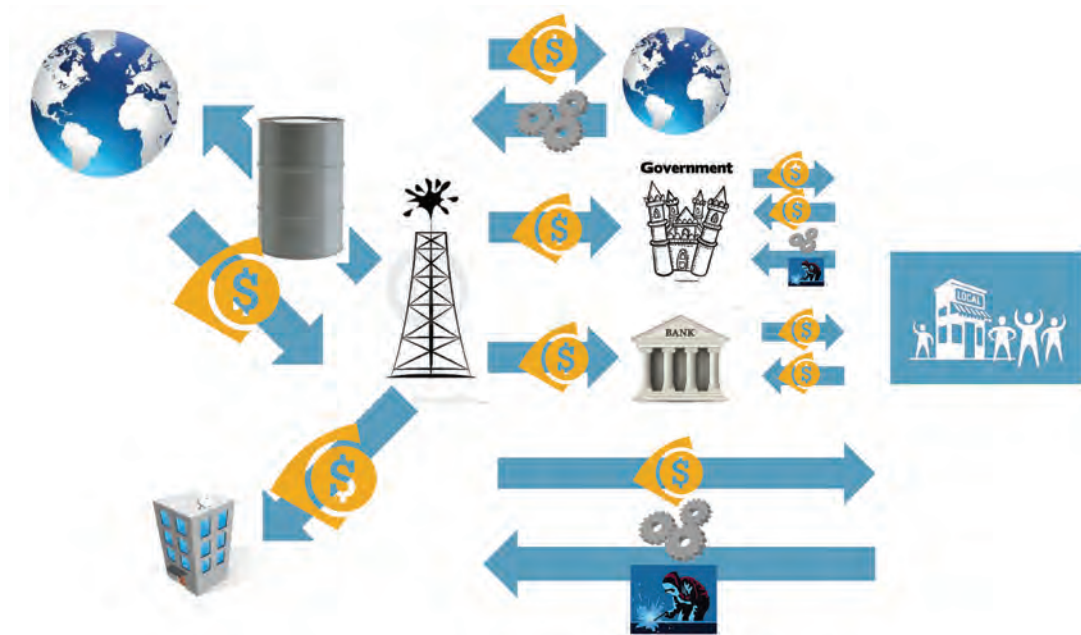
The most obvious relation, especially in resource-rich countries, is the one between the resource sector and the rest of the world. The resource sector sells its products to the rest of the world and receives payment for them. The sector uses its monetary resources to import goods and pay dividends to the producing companies, which in many cases are foreign owned.

The resource sector directly interacts with the local economy. This is a channel usually considered minor. However, it is relevant. The resource sector demand goods and services from the local economy. Therefore, it also directly affects the economic performance of other sectors.

However, in general, significant amounts of resources accrue to the host country. These are the channels that are important to understand. The first obvious actor that interacts with the sector is the government. The government receives revenues from the sector through diverse channels, such as taxes, royalties, revenue sharing, and others. The way the government collects these revenues affects the way that resource producers behave, in turn affecting the performance of the sector and the economy. Beyond collection, how the government uses the revenues, and how its behavior in taxing the local economy changes will also affect economic performance.

Figure 3.2

The Interactions of the Resource Sector



Source: Author's elaboration.

In addition, the resource sector uses the local financial system. This is not a final destination, but rather a means used to transact with the government and the local economy. In some countries, the resource sector is forced to sell all of its revenues in foreign currency to the central bank. In other cases, it might only use the local financial system for transactional purposes. Depending on the situation, the financial system will then use those deposits to intermediate. Complementing these channels, the availability of foreign financing

might be affected by the performance of the resource sector. This is another channel through which the sector affects the economy.

Finally, the resource sector directly interacts with the local economy. Although this channel is usually considered minor, it is relevant. Since the resource sector demands goods and services from the local economy, it directly affects the economic performance of other sectors.

How large are these interactions? The Organisation for Economic Co-operation

and Development (OECD) collects harmonized input-output tables for its member and some nonmember countries. For Chile, the most recent table is from 2003. There are some caveats about using 2003. First, real prices of copper in 2003 were 35 percent of prices in 2013 and 50 percent of average prices since 1960. Therefore, the weight of the copper sector in Chile will be underestimated, since input-output matrices are performed using the relative price in the year in which the table was compiled. Secondly, because 2003 was a year of low prices, it is also a year of low investment and low profits.

Despite these caveats, gross mining and quarrying production represented 9.2 percent of GDP. Seven percent of GDP went to exports and 4.4 percent to local use, and the Chilean economy also imported 2.2 percent of GDP in mining goods. In terms of local contributions, the sector bought locally 4.6 percent of GDP, imported 0.5 percent of GDP of inputs, paid 0.9 percent of GDP for local labor, and the difference was gross surplus. Of that surplus, 1.4 percent of GDP was counted as fiscal revenue, much of it as revenue from the National Copper Corporation of Chile (CODELCO). Therefore, there was no repatriation of dividends. Finally, CODELCO had short-term debt with the local banking system of 0.3 percent of GDP and deposits of 0.03 percent of GDP. Therefore, even in a down year, these channels matter, and local impacts could be high compared to the relative size of the sector.

Revenue collection affects producers' decisions and hence economic performance in the extractive sector. Recent literature has shown tax regimes that promotes efficiency and hence better performance of the sector. In addition to that, institutional arrangements matter.

Revenue Collection

Governments with extractive sectors are not only collecting regular tax revenues from the sector. The country that finds the nonrenewable resources generally owns them. Hence, rents from the sector should accrue to governments on behalf of the population. Therefore, revenue collection from the resource sector raises complex policy issues.

Empirical Evidence and Policy Recommendations

As the Inter-American Development Bank (IDB, 2013) explains, a first basic trade-off is that higher levies on the resource sector will reduce investment and production. However, within this basic trade-off, there are others that are more subtle. To a large extent, these depend on the revenue instruments employed. The more traditional instruments have been royalties on production and income taxes. Over time, dividend

taxes and so-called rent, or R-factor taxes, have been introduced. More recently, contingent royalties, royalties on profits, and some concept of net income and windfall taxes have been added to the menu.

Tordo (2007) discusses the properties of different tax systems and defines a series of desirable characteristics. Firstly, tax systems should be neutral. A system is said to be neutral if it does not affect the decisions of private agents. In addition, it should be flexible. A system is said to be flexible if it can adapt to changes in external conditions.⁷ Finally, tax systems should be stable. A system is stable if there are no large changes or if changes are predictable.

Traditional systems of royalties and income taxes score poorly on neutrality and stability (IDB, 2013). Profit or net income taxes may be more efficient and may display a greater deal of stability. In addition, these systems may be more efficient and stable and have allowed some countries to increase effective tax rates as prices have risen. However, they increase the complexity of the system and the administrative burden. Therefore, they generate a source of potential conflict between producers and governments, since they require more in terms of monitoring costs and transparency in general.

In this respect, the development of international standards on the exploitation of nonrenewable resources has been an

important innovation. The most prominent of these standards is the Extractive Industry Transparency Initiative (EITI), which provides a framework for governments, the private sector, and other stakeholders to obtain information and participate in decisions regarding natural resource extraction. If this process can also serve to enhance trust between the parties and reduce information asymmetries, then revenue systems can be designed to reduce distortions and enhance economic efficiency.

An additional issue related to the governance of revenue collection is institutional arrangements. Balza and Espinasa (forthcoming) studied the seven largest Latin American oil-producing countries based on their performance between 1995 and 2010, looking specifically at their reaction to what they considered to be a permanent leap in prices after 2002. Of this group, three countries—Brazil, Colombia, and Peru—have permanently increased activity and production. In contrast, in Argentina, Ecuador, Mexico, and Venezuela, drilling activity remained stagnant and production declined over the last decade.

Balza and Espinasa (forthcoming) argue that dissimilar performance between these two groups of countries is related to the characteristics of the institutional framework regulating investment, activity, and production. The first group of countries shows a regulatory framework with similar features: open to private investment side by side with and in competition with state-owned companies; open to public scrutiny,

⁷ Flexibility also includes progressivity, since it implies that the system can adapt to changes in resource prices.

land assignment, and operation under an independent regulatory agency; and stable distribution and operation rules. The second group also shows common institutional features: production is under direct monopoly control by a state-owned company; there are different degrees of discretionary government intervention in both the distribution of revenue and the management of the company; and the oil sector is closed to competition and public scrutiny. These features explain the dissimilar responses to market price signals and demonstrate the importance of institutional arrangements.

Evidence shows that macro policy plays an important role in macroeconomic fluctuations in emerging markets. Furthermore, the evidence seems to indicate that volatility in commodity producers is no different than in other emerging countries, further strengthening the case for better macroeconomic policy.

Implementation of Best Practices

Given this evidence, how are countries implementing best practices? It is difficult to answer this question, since most of the literature on implementation is relatively recent. Consequently, there have been few institutional changes to evaluate. Different surveys that elicit the perceptions of the private sector show different results.

Figure 3.3 presents the results of the Fraser Institute's 2002/2003 and 2011/2012 surveys on attractiveness to the mining sector of resource-rich countries ranked in its index.⁸ The survey separates natural conditions (i.e., endowment) from policy conditions (i.e., taxes and regulation). With this information, it constructs an indicator on "room for policy improvement in mining institutions": the higher the ranking, the poorer the quality of the country's institutions. There is evidence of improvement in some countries and deterioration in others. Specifically, there is a perception of deterioration in institutions in Latin American countries. Therefore, it would appear that it has been a challenge to implement the policy options outlined here.

There has been scant research on the quality of tax systems in Latin America. Fuentes, Piedrabuena, and Calani (2012) studied the Chilean tax system. Until 2005, the only tax paid by private companies was income tax. In 2006, the government levied a tax on mining activities or a royalty based on taxable operating income of the mine operator. Two important adjustments to

⁸ The determination of whether a country is resource-rich is based on World Bank indicators and the Leamer (1984) index of resource abundance. Out of 105 countries, 27 were determined to be resource rich: Algeria, Armenia, Azerbaijan, Bahrain, Bolivia, Botswana, Brazil, Bulgaria, Chile, Colombia, Cyprus, Ecuador, Georgia, Guyana, Kazakhstan, Kuwait, Malaysia, Oman, Peru, Russian Federation, Saudi Arabia, South Africa, Sudan, Trinidad and Tobago, Venezuela, and Zambia.

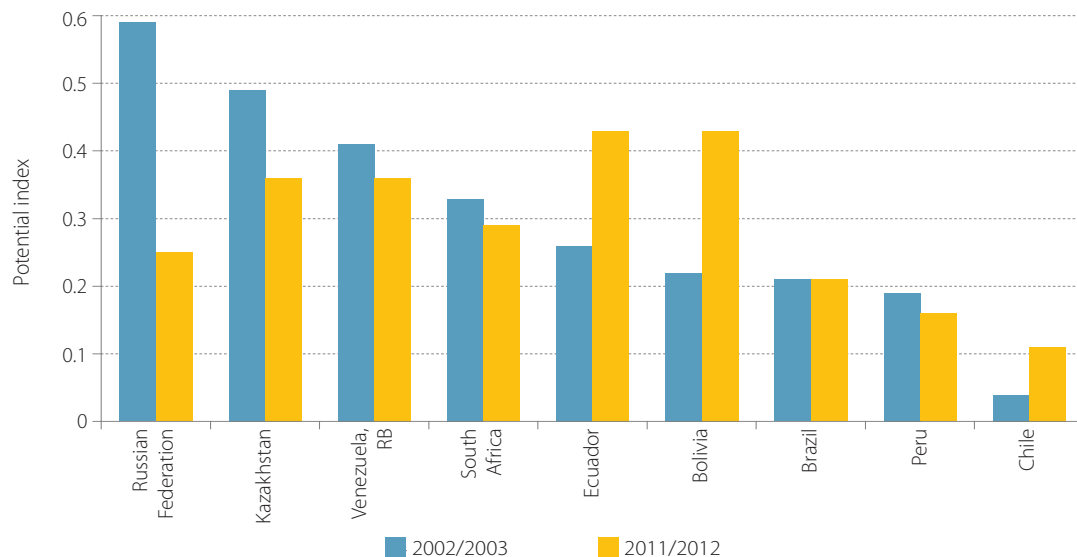
operating income are worth mentioning: (i) royalty payments were considered spending necessary to produce income, which implies that they could be subtracted from income in order to calculate the income tax; and (ii) Law 20,026 did not allow accelerated depreciation of fixed assets, accelerated amortizations of organizational and start-up costs, or losses carried from one year to the next to be deducted from operating income in order to calculate the tax base on which to apply the royalty. They found that the royalty induces a deadweight loss equivalent to 5.7 percent of tax revenues if the price of copper remains constant at US\$3 per pound over the entire program. Therefore, the change in the perception of

Chile's tax system might be due to the impact of these changes.

Cooper and Moron (2012) studied the Peruvian tax system. In Peru, a law passed in September 2011 substituted the gross sales royalty-based scheme for a new framework based on marginal rates applicable to operating margin and required that new entrants pay taxes. This reform implied a change in the tax base, from market value of production to operating profits. Tax regimes applied to profits are more efficient, since the investment and production paths are less or positively affected relative to the untaxed benchmark scenario. Again, the change in perception may be a result of the impact of new tax laws.

Figure 3.3

Room for Policy Improvement in Mining Institutions



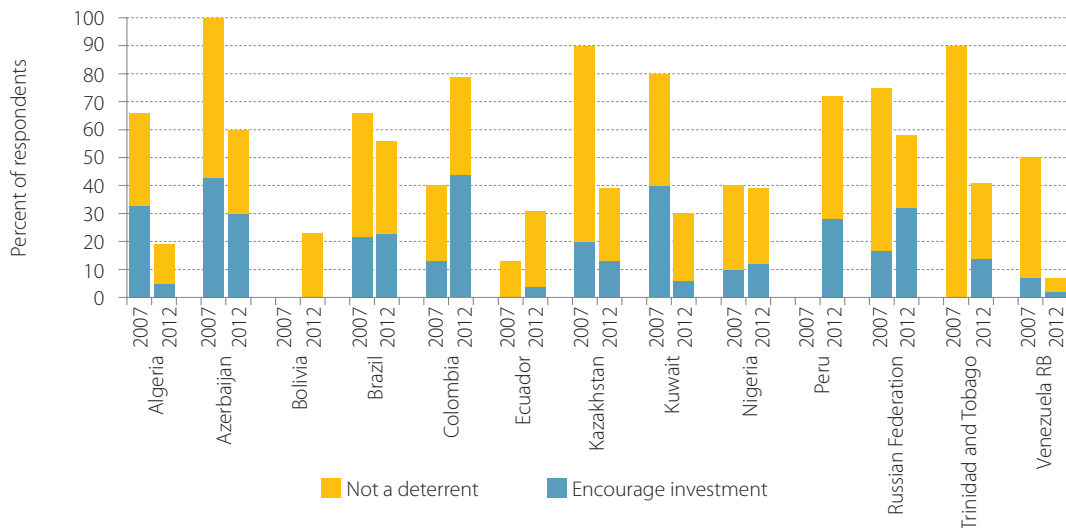
Source: Fraser Institute (various years).

With respect to oil, Figure 3.4 presents the results of surveys conducted by the Fraser Institute in 2007 and 2012 with oil companies to analyze the perceived impact of the tax system on oil investment. The figure depicts the responses of both those who contend that the system encourages investment and those who argue that it is not a deterrent. The results allude to a more negative view of the tax systems. However, among the countries where perception changed in a positive direction, Colombia and Peru implemented institutional arrangements conducive to investment in the sector (see Balza and Espinasa, forthcoming).

In summary, revenue collection affects producers' decisions and hence economic performance in the extractive sector. Recent literature has described tax regimes that promote both efficiency and better performance of the sector. In terms of implementation, however, the perception of investors is that the regulatory framework and tax systems in the region have deteriorated. Research on the specifics of some of the tax systems in the region supports this argument. However, more research is needed on the specific challenges that countries face with respect to implementation. For example, more efficient regimes could generate governance costs since they require monitoring and transparency. International

Figure 3.4

Impact of Tax Systems on Oil Investment



Source: Fraser Institute (various years).

standards currently under development on the exploitation of nonrenewable resources could help solve these issues.

Macroeconomic Channels

A second important policy tool that affects the impact of the extractive sector on the local economy is macroeconomic policy. Two of the channels through which the extractive sector interacts with the local economy are government taxation and spending and the financial sector. Therefore, fiscal and monetary/financial policies are key in this regard.

Figure 3.5 shows a measure of price volatility for a set of commodities and, for comparison, industrial goods.⁹ Commodity prices are particularly volatile.¹⁰ Therefore, they pose an important challenge for managing macroeconomic policy, especially if exports are concentrated in a few of these goods.

In this regard, Hausmann and Rigobón (2003) argue that volatility alone can explain poor economic performance. Their model predicts that in economies with high volatility in the relative price of tradable vis-à-vis nontradable goods, where there is a market imperfection that makes moving

resources from one sector to other costly—firing or bankruptcy costs, for example—the economy could inefficiently specialize in nontradable goods. The intuition behind their model is that for the local producer, nontradable goods revenues and costs are in the same currency, while in the tradable sector revenues are in foreign currency and wages are in local currency. Therefore, greater exchange-rate volatility implies higher volatility of returns in the tradable sector, in a context where resources cannot be easily reallocated to the nontradable sector. Macroeconomic policy plays an important role in avoiding the transmission of this high volatility of export revenues to the domestic economy.

Empirical Evidence and Policy Recommendations

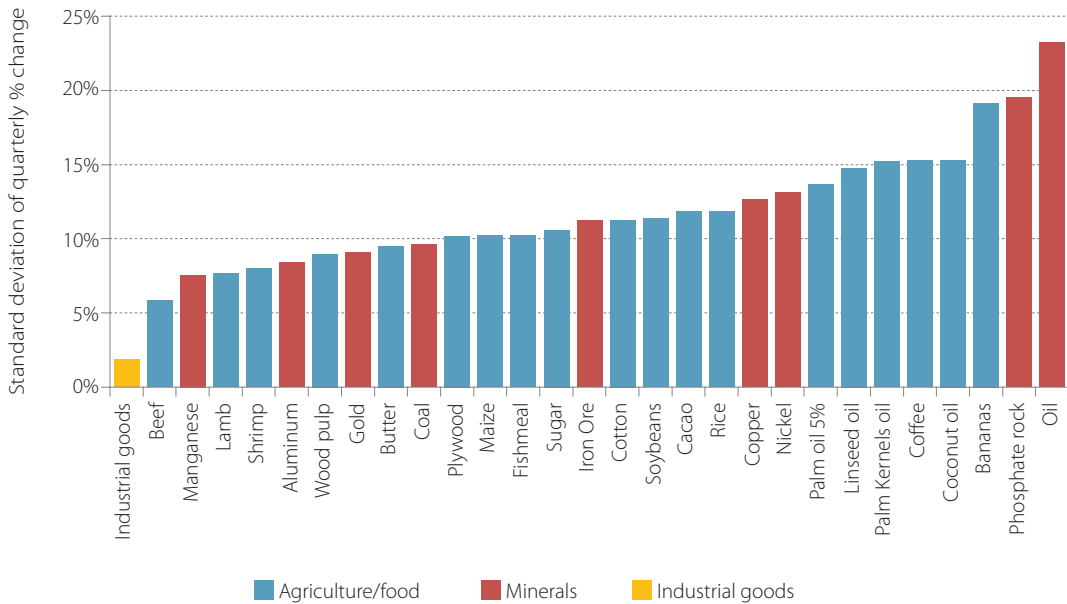
In recent literature, Raddatz (2007) argues that although external shocks have economically meaningful effects on real activity, especially when compared to the average economic performance of low-income countries, they account for only a small fraction of the volatility of these countries' real GDP. The economic instability experienced by low-income countries is therefore largely the result of internal factors. He argues that episodes of inflation, real exchange-rate overvaluation, and high levels of public deficit experienced by these countries suggest that economic management is an important part of the story. In this sense, macroeconomic policy matters more than the external shock.

⁹ This is not a fair comparison, since prices of individual goods are being compared with an average. An index of average prices of industrial goods could be less volatile than the price of each individual industrial good, since it could include prices that are negatively correlated and hence make the average index smoother.

¹⁰ On average, the volatility of mineral commodities is no different than that of non-mineral commodities.

Figure 3.5

Price Volatility, 1960–2013



Source: Author's calculation based on IMF data (various years).

Based on policy responses, Raddatz (2007) finds that government expenditure usually moves in tandem with total output. Thus, shocks that tend to increase real activity also tend to increase government expenditure. To the extent that government expenditure is used to provide valuable social services, the results suggest that negative external shocks will affect the government's ability to provide such services. Also, as long as the increase in government spending is not financed with tax revenue alone, government debt may increase as a

result of a positive shock. Therefore, fiscal policy seems to be procyclical.

How can governments avoid such problems? There is an important strand of literature on countercyclical fiscal policy and ways in which it can be implemented. Van der Ploeg and Venables (2010) present a review of the literature and a menu of policy options specifically designed for resource-rich countries. As these authors argue, optimal policy depends on the stage of development of the country and the instruments available to the government.

At earlier stages of development, a case can be made for increasing spending in the present. In this case, a combination of investment in the domestic economy and foreign debt reduction is needed, which may bring down interest rates. Moreover, spending that is complementary to private investment is particularly valuable. Finally, any policy intervention should take market failures (created, for example, by imperfect access to international capital markets) into account. This imperfection might require the use of taxes or subsidies to generate the right combination of asset versus capital holdings.

In terms of governance and implementation of these policy tools, the options compare with those discussed in the general literature on fiscal performance. For example, in the case of fiscal rules that aim for budget balance and stable expenditure, the principles are in line with those of sound fiscal policy: accurately set fiscal rules should lead to savings.

However, as argued by Sinnott, Nash, and de la Torre (2010), the decision on the optimal use of natural resource rents is quite complex, and the institutional mechanisms devised to save resources reflect this intricacy and diversity in terms of objectives. Most natural resource funds are based on both stabilization and savings methods. Nevertheless, the authors argue that a long-term savings function in fiscal policy will continue to be essential to adequately address the challenges posed by nonrenewable natural resources.

This long-term savings objective might create additional institutional challenges. Alesina et al. (1999) discuss characteristics in the budget process that are associated with better fiscal performance, specifically with how laws help maintain sustainable fiscal policy and the institutional arrangements of budget approval. These recommendations can be applied to resource-rich countries.

With regard to monetary/financial policy, Raddatz (2007) argues that the current account tends to go to surplus (deficit) as a result of a negative (positive) shock. In other words, in resource-rich countries, the current account is countercyclical: they borrow in good times and lend or are forced to repay—that is, they increase their position—in bad times. However, these countries do not seem to behave differently from other emerging markets. Hence, they face the same challenges as any country, regardless of its resource endowment.

These results support those of Braun and Hausmann (2002), who find that Latin America has a higher incidence of credit crunches. This can be accounted for by the greater importance of terms of trade shocks, capital flow reversals, and low financial depth. However, the average Latin American country has no higher volatility in terms of trade or capital flows than any other developing country.

Even though scant research has been done on the specifics of commodity producers, there seems to be consensus that countries should move toward an inflation-targeting regime. Sinnott, Nash, and de la

Torre (2010) argue that commodity producers that have flexible exchange rates and inflation targeting had less inflation during the commodity price boom years and better capacity to run countercyclical monetary policy in the downturn. However, the disadvantage of flexible regimes is their greater real exchange-rate volatility. For larger countries with more substantial non-tradable sectors, this may present a particularly thorny problem.

A second question is whether the Consumer Price Index (CPI) is the right target for commodity producers. Frankel (2010a) argues that during periods where the price shock was a supply one, it might not work properly, as witnessed in the global financial crisis of 2007–09. Inflation targeting is admittedly best suited to control inflation pressures arising from excess aggregate demand. During the crisis, the authorities in inflation-targeting LAC countries had to focus not only on the CPI but also on the exchange rate and the prices of agricultural and mineral products, as well as on their second-round effects on inflation expectations. The solution to this problem, however, is not simple, particularly for commodity-abundant countries. Frankel (2010b) argues that with this type of inflation targeting, countries would achieve lower domestic price volatility by targeting the Producer Price Index rather than the CPI, as the former better captures the most volatile prices of a country's exports or a more comprehensive group of a country's exports. Catao and Chang (2013) reach a similar conclusion.

Finally, financial policy is also relevant. Izquierdo and Talvi (2011) argue that procyclical financial flows underline the importance of providing sound financial systems. In a period of strong growth, all loans are good loans at the time they are made; it is only when growth falls that risks and vulnerabilities tend to be revealed. This suggests that banking regulation and supervision are key precisely in times of strong credit growth. In addition, macro-prudential tools, understood as policies that reduce risk while at the same time having an impact on macroeconomic management (internal or external balance), should play an important role. The experience of the recent global crisis showed that such policies might help reduce both domestic demand (reduce overheating) and the risk of future problems in the financial system.

In terms of institutions, it is widely accepted that an independent central bank is the cornerstone of sound monetary policy (Crowe and Meade, 2007).¹¹ There is less research on financial policy. The standards set by the Basel Committee for Banking Supervision gives some type of validity to policies implemented in this regard. The standards in Basel III include a countercyclical capital buffer, in line with macroprudential regulations.

¹¹ Empirical evidence found a statistically significant association between greater independence and lower inflation for industrial countries. However, this inverse relationship was less robust for developing countries.

In summary, evidence shows that macro policy plays an important role in macroeconomic fluctuations in emerging markets. Furthermore, evidence suggests that volatility in commodity-producing countries is no different than in other emerging countries, further strengthening the case for better macroeconomic policy. Therefore, there is an important set of tools available to policymakers in resource-rich countries.

Implementation

Policy options for promoting sound macroeconomic performance in commodity-exporting countries have been extensively studied (see, for example, Neary and Wijnbergen, 1986). This does not imply, however, that recent additions to this literature have been fully incorporated into the policymaking process.

With respect to fiscal policy, countries are attempting to set up the appropriate institutions. Budina et al. (2012) examined 81 countries with fiscal rules and found that higher ratio of resource-rich countries are implementing fiscal rules (12 of the 29 resource-rich countries have rules compared to 18 of the 76 non-resource-rich countries).

However, implementing rules does not imply better fiscal performance. Izquierdo and Talvi (2008) show that, in 2007, six out of seven commodity-producing Latin American countries had structural fiscal deficits as commodity prices were increasing—once the cyclical component was taken out of the calculation—including

three that had fiscal rules. As a consequence, structural debt-to-GDP ratios were increasing at the same time as commodity prices.

If there has been an area where macroeconomic policy has made progress, it is in reducing inflation. Average inflation has fallen in all of the 105 countries previously discussed between the 1990s and the first decade of this century. There are no significant differences between resource-rich and non-resource-rich countries, which is partly because many countries have moved toward more flexible exchange rates with some type of inflation-targeting mechanism. In addition, central banks have become far more independent than they were in the 1980s (Crowe and Meade, 2007). In fact, central banks in emerging-market and developing economies have seen an even more impressive shift toward independence in the past two decades than their counterparts in advanced economies. This is also true for central banks in resource-rich countries.¹²

Finally, the performance of the financial sector in emerging economies during the recent crisis suggests an improvement in macroeconomic management on this front. However, as Lane (2012) argues, it is still early. The structure of the international balance sheets of emerging economies

¹² Comparing the change in the mean index of central bank independence of the resource-rich countries to that of the non-resource-rich countries studied by Crowe and Meade (2007), the difference is not statistically significant.

has largely insulated them from the crisis. In part, this reflects the marked shift in emerging-market macroeconomic strategies in the wake of the financial crises of the 1990s. These countries reduced net external liabilities by running current account surpluses; improved liquidity by accumulating foreign-exchange reserves; and lowered debt-to-equity ratios in the composition of external liabilities.

In addition to better management of the external sector, there have been improvements in banking regulation, also as a result of the crises of the 1990s. The Basel Committee for Banking Supervision provided some standards in this regard. However, Izquierdo and Talvi (2011) argue that Latin America has been rather skeptical about Basel II, with different countries adopting very different Basel II alternatives. These developments are sacrificing homogeneity and standardization, but they may also be occurring because the various alternatives do not fit the characteristics of the region. Therefore, more research is needed in this regard.

In summary, implementation of the policy tools described in the previous section has been irregular. Monetary policy has improved as countries have absorbed the lessons from previous crises. However, on the fiscal front, the news is mixed. Even though countries are adopting some tools, such as fiscal rules, they have not performed as well as expected. More research is needed to better understand the institutional processes that lead to the effective use of fiscal tools.

Implementation of the policy tools described in the previous section has been irregular. Monetary policy has improved as countries have absorbed the lessons from previous crises. However, on the fiscal front, the news is mixed. Even though countries are adopting some tools, such as fiscal rules, they have not performed as well as expected.

Real Linkages

Another area for further research is how the resource sector interacts with the local economy through its real activity: the demand for goods and services, as well as the demand from the non-resource sector for the resource sector's products.

Activity

How does the resource sector affect the local economy through its investment and production? Herbertsson, Skuladottir, and Zoega (2000) review the impact of one non-extractive resource sector—fishing—on the Icelandic economy and find a clear effect of primary sector output and its volatility on real wages but not on the real exchange rate, defined as the ratio of the prices of traded to nontraded goods. Moreover, higher real wages impede output, investment, and employment in the secondary sector.

Marchand (2012) measures the local labor market impacts of energy booms and busts in Canada, comparing resource-rich geographic areas to areas without energy resources. The evidence shows that the direct impacts of each boom lead to substantial gains in total earnings and employment within the energy extraction industry, while the bust period is one of stagnation. There are also indirect impacts on employment and earnings in the non-energy sectors. Once these non-energy industries are disaggregated, the local construction, retail trade, and service industries all show significant gains in total employment and earnings. During the bust period, local industries experience a loss in earnings per worker. For the traded goods industry represented by manufacturing, significant gains are reported for both booms in both earnings measures, but they are smaller than the gains shown for each of the local industries. During the bust, these gains in total earnings and earnings per worker continue for manufacturing, indicating that individuals skilled in energy extraction may be finding a place in manufacturing during the bust. Finally, job creation in the energy extraction sector exhibits modest positive spillovers into local sectors, such as construction, retail, and especially services. For every 10 energy extraction jobs created, a boom period creates roughly three construction jobs, two retail trade jobs, and four and a half service jobs.

Aragon and Rud (2013) examine the local economic impact of Yanacochoa, a large

gold mine in northern Peru. Using annual household data from 1997 to 2006, they find evidence of a positive effect of the mine's demand for local inputs on real income. The effects are only present in the supply market and surrounding areas, and they reach unskilled workers in non-mining sectors. Consistent with a general equilibrium framework, they also find an increase in the local price of nontradable goods.

Looking at the long term, Michaels (2011) uses geological variation in oil abundance in the southern United States to study the performance of oil-rich counties. In 1890, oil-rich counties were mostly agricultural and similar to other nearby counties, but after oil was discovered, they began to specialize in its production. From 1940 to 1990, oil-rich counties developed a manufacturing sector that was smaller in terms of its share of employment but not in terms of its absolute size. These counties enjoyed higher per capita income and attracted people at a faster rate. By 1990, these advantages had declined, but oil-rich counties still had slightly higher per capita income without an increase in income inequality.¹³

¹³ Aadland and James (2011) find an opposite result. Using data from 3,092 counties in the United States, they estimate the impact of resource abundance—measured as the percentage of earnings from agriculture, fishing, forestry, and mining industries—on annual growth in per capita personal income between 1980 and 1995. However, the short period could be capturing the impact of the resource drag, and the variable used for resource abundance could be more related to GDP concentration than abundance.

The Economic Commission for Latin American and the Caribbean (ECLAC) has conducted research on the effects of the development of productive clusters around mining projects, specifically the development of forward and backward economic linkages, in Brazil, Chile, and Peru (Buitelaar 2001). Culverwell (2001), in examining supplier networks in Antofagasta, Chile, highlights the development of local medium- and small-scale suppliers through linkages to large-scale copper mining projects. Through his research on the contribution of the mineral resource trade in Chile, Korinek 2013 describes the process of developing the mining services industry, which began by substituting imports of intermediate goods and services. In the second half of the twentieth century, the proportion of domestic intermediate goods rose from less than 25 percent in the 1950s to around 60 percent toward the end of the century. Eventually, this process led to higher exports of supplies to the mining sector. In the last 12 years, mining provider exports grew from less than US\$5 million to almost US\$300 million.

This literature is in line with the results of research conducted using input-output matrices that find linkages between the resource sector and the local economy (Tordo et al., 2013). These results alone do not imply any welfare effect. They do show that the resource sector affects the domestic economy, but it is not known whether these effects are positive or negative.

Market Imperfections and Externalities

Market imperfections and/or externalities associated with the sector can affect the efficient allocation of resources. Hausmann and Rigobón (2003) show that volatility with general market imperfections (e.g., fixed costs of adjustment or investment, such as firing costs, bankruptcy costs, and barriers to entry) could force inefficient specialization in nontradable goods. However, little research has been done on these impacts. The sector's most obvious externality is its impact on the environment. Studies showing this impact and suggested options for policy interventions have been published both in the natural sciences and economics literature (e.g., Figueroa, 1999).

Another area that merits further research is the effect of market failures in the supply chain of the extractive sector. Tordo et al. (2013) propose three types of possible failures/externalities. The first is *lack of knowledge and expertise*. When a country is in the incipient stages of developing its oil and gas sector, it tends to lack the specialized labor required by the sector. To overcome this deficiency, oil companies may (and usually do) bring in foreign workers with the relevant skills and knowledge. However, this could lead to a decline in employment of local workers. In these cases, government intervention aimed at supporting the development of specific skills and capacities of the local labor force could be justified. A similar argument could be made to support the development of the

local productive sector. Finally, labor mobility in the oil and gas sector could generate learning externalities. Companies might offer less training than the socially optimal level if labor mobility is high. In this case there is a positive externality. This situation is likely to occur, for example, with respect to public officials working for the sector ministry or even the national oil company, where mobility toward the private sector is high because of the greater salaries and benefits it offers.

A second type of challenge could come from *productive externalities*. Policymakers and academics often argue that foreign direct investment can be a source of valuable productivity externalities for developing countries. Prominent among these mechanisms are knowledge spillovers and linkages between multinational companies (MNCs) and local firms in host countries. When local firms interact with MNCs, productivity gains occur through the transfer of technology from MNCs and the decision by local firms to invest in technology upgrades. A similar case can be made in the extractive sector. In the case of a country with a competitive metallurgical sector, the sector might be competitive at producing valves and tubes. However, requirements for the oil sector could be specific, and once the sector starts meeting those requirements it receives a productive upgrade.

Finally, there could be sector-specific *market failures*. Usually, companies that supply the oil and gas sector are large MNCs that have enough market power to displace

small local firms from the value chain of the sector. Furthermore, they tend to have well-established and long-term relationships with oil and gas companies. Therefore, suppliers of the oil and gas sector could temporarily sell at below-market prices to displace local competitors. This may create a bias against the use of local suppliers similar to the distortions generated by the practice of dumping in international trade.¹⁴ Similarly, regulation aimed at other policy objectives may foster existing market failures. For example, safety and environmental standards imposed on oil and gas companies by petroleum or environmental laws and regulations may create a barrier to the development of the local supply industry in favor of established large corporations with market power. In this case, a careful review of regulations may be necessary and would constitute a public good.

Although there has been scant research in this area, case studies point to positive externalities. Lederman and Maloney (2007), for example, present cases illustrating the role played by the resource sector in increasing the productivity of providers. When firms began interacting with the extractive sector, productivity increased

¹⁴ Dumping is bringing a product onto the market of another country at a price that is lower than the normal price of that product in the home market of the producer. The practice is condemned but not prohibited by World Trade Organization (WTO) law. The WTO allows countries to impose antidumping duties if there are “material injuries” to local producers.

following decisions by local firms to invest in technology upgrades. The authors present examples of how the government intervened to foster these gains.

Evidence is emerging on the impact of the resource sector on the local economy. However, there is less research on the welfare effects. Even less research has been done on the presence of market failures or externalities that affect the way the resource sector interacts with the economy.

Balza and Manzano (2013) use the Manufacturing Survey of Venezuela to test the presence of productivity spillover from the oil sector in Venezuela. They find that consumption of oil and its derivatives has a negative impact on productivity. However, the spillover effect is less clear. If productivity is considered to be a dynamic process, then there could be negative horizontal spillovers for oil consumption in productivity. In addition, there are negative forward spillovers—to their suppliers—of industrial firms that supply the national oil company. However, the authors could not separate the impact of policy decisions from the “pure” externality effects. Oil products in Venezuela are sold at below-market prices. In addition, the oil sector was forced to buy products from local suppliers.

Finally, changes in relative prices caused by the resource sector could have social impacts. Black, McKinnish, and Sanders (2005) study the effect of the Appalachian coal boom on high school enrollment. During the 1970s, due to a boom in the coal industry, the earnings of high school dropouts increased relative to those of graduates. During the 1980s, the boom subsided and the effect was the reverse. The authors find that high school enrollment rates in coal-producing counties in Kentucky and Pennsylvania declined considerably in the 1970s and increased in the 1980s relative to counties without coal.

On the other hand, Michaels (2011) find that oil-rich counties have a better-educated workforce. The main difference is that the previous study looked at mining in the presence of a short-term boom, while Michaels looked at the long-term impact of oil abundance. The effects may be different, but in any case, positive externalities from education (see Moretti, 2004) could provide a negative channel through which the resource sector affects the local economy.

In summary, although evidence is emerging on the impact of the resource sector on the local economy, there is less research on the welfare effects. There is even less research on the presence of market failures and/or externalities that affect the way the resource sector interacts with the economy, and thus little evidence to support the need for policy intervention.

Table 3.1

Channels and Knowledge

		Do we know the impact or mechanism through which the extractive sector affects this area?	Policy options			Has implementation worked in the LAC region?
			Do we know the policy instruments required?	Do we know the institutional setting required?	Do we know how to address governance issues?	
Fiscal impact	Revenue collection	Yes	Yes	Yes, when transparency issues are addressed	Yes, when transparency issues are addressed	Mining: implementation with partial improvement Oil: none to partial implementation
	Revenue management	Yes	Maybe	Maybe	Maybe	Apparent implementation but no improvement
Financial impact	Inflation	Yes	Yes	Yes	Yes	High implementation with good results
	Credit	Yes	Yes	Maybe	Maybe	Partial implementation
Real impacts	Factor markets	Maybe	Not enough research	Not enough research	Not enough research	Not enough research
	Productive externalities	Little formal empirical evidence	Not enough research	Not enough research	Not enough research	Not enough research

Source: Author's elaboration.

From Dependency Theory to Local Governance

Table 3.1 presents a summary of the evidence discussed in this chapter. For each channel, it indicates whether the literature has identified the impacts and mechanisms through which the sector interacts with the economy. Then, it presents the state of knowledge on policy options, focusing on possible instruments and institutions needed to address policy challenges derived for the channel, and indicating whether governance issues have been studied. Finally, it presents the current status of implementation in the LAC region.

This summary runs the risk of oversimplifying the results from the literature. For example, even if the general policy recommendations for revenue management have been provided, more research may be needed on specific countries to determine how to best implement them. However, the summary provides some idea of where the gaps of knowledge are in terms of the interactions between the resource sector and the rest of the economy.

The further down and to the right on the table, the less research there is to be able to provide an answer. Even in the case of revenue collection, profit or net income taxes may be more efficient. However, they might generate a source of potential conflict between producers and governments, since they require more in terms of monitoring costs and transparency in general.

A similar case could be made for revenue management. The low degree of implementation may be due to a lack of appropriate tools and institutions. In financial policy, the skepticism in the LAC region toward Basel II may reflect the fact that the various alternatives do not fit the characteristics of the region.

The more one moves toward governance and local issues, the greater the need for further research, particularly in developing countries.

Moving toward local impacts, there are even more unknowns. Greater clarity on impacts and incentives is needed for the successful development and implementation of policy recommendations. The more one moves toward governance and local issues, the greater the need for further research, particularly in developing countries. Various studies have highlighted the importance of the institutional context (Mehlum, Moene, and Torvik, 2006) and initial conditions in explaining the emergence of the resource curse in any given country (Gelb and Grasmann, 2008), but should governments intervene? What are the key areas that governments need to address to achieve better policy outcomes? What are the incentives of different actors, and how should policy interventions take them into consideration?

CONCLUSIONS

From the literature review presented in this chapter, it is clear that the general hypotheses that were not sustained by microeconomic fundamentals can no longer be used to guide policymaking in resource-rich countries. Therefore, the policy debate in these countries should not rely on arguments based on dependency theories or the resource curse. Instead, it should advance toward a better understanding of

how the extractive sector interacts with the rest of the economy. In terms of the key areas where the sector interacts with the economy—revenue collection, macroeconomic policy, and real impacts—less research has been done on local impacts. Moving toward governance, there is no consensus on the most effective way to implement policy options. These gaps in knowledge affect the impact of the extractive sector on economic performance and should be filled through greater analytical work.

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CHAPTER 4

Conflict and Natural Resources: Is the Latin American and Caribbean Region Different from the Rest of the World?

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Oil-rich countries have civil wars at significantly higher rates than oil-poor countries. While other studies have demonstrated this pattern at a global level, this chapter demonstrates that it is equally valid in the Latin American and Caribbean (LAC) region. It also describes one important anomaly. In the LAC region, oil is only linked to government conflicts, while in the rest of the world, oil heightens the danger of both government conflicts (in which rebels fight for control of the central government) and secessionist conflicts (in which they fight for a sovereign state). This is not because the region produces petroleum with unusual properties, but because it is uniquely “secession-proof.” Lessons about conflict prevention in oil-producing states developed at a global level are also valid for the LAC region.

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INTRODUCTION

The LAC region has a long history of violent conflict over mineral resources. The 1879–83 War of the Pacific, fought among Bolivia, Chile, and Peru, was triggered by a dispute for control of the nitrate-rich desert of Atacama. The 1932–35 Chaco War between Bolivia and Paraguay was fought over a region that was believed to have significant oil reserves. In recent decades, petroleum-rich Bolivia, Mexico, and Peru have all suffered from violent conflicts; in the Ecuadorian Amazon, oil exploitation has led to repeated clashes between lowland Indians and the government. Since the 1980s, Colombia's long-running civil war has been closely linked to the discovery and transportation of oil. The number of nonviolent conflicts over mining is also large. According to one dataset, there were close to 200 active mining-related conflicts around the region in 2013. Most were over land rights, labor practices, and environmental protection (see Table 4.1).

This chapter shows that the incidence of violent conflict in the LAC region is strongly correlated with oil wealth, a pattern that is consistent with the concept of a “resource curse,” which broadly refers to the ways that an abundance of petroleum wealth can lead to certain economic, social, and political ailments—including slow or volatile economic growth, weak and undemocratic governance, and violent insurgencies. In general, other types of resource wealth—including nonfuel mineral wealth—are

Table 4.1

Recent Mining-related Disputes in Latin America and the Caribbean

Country	Number of conflicts
Chile	33
Peru	33
Mexico	27
Argentina	26
Brazil	20
Colombia	12
Bolivia	8
Ecuador	7
Guatemala	6
Panama	6
Dominican Republic	4
Nicaragua	4
El Salvador	3
Honduras	3
Costa Rica	2
French Guiana	1
Trinidad and Tobago	1
Uruguay	1
Total	197

Source: www.conflictosmineros.net.

not associated with the same harmful outcomes (Ross, 2003 and 2004b). Since the early 2000s, the global commodity boom has led to new oil and gas discoveries in many countries, including Brazil, Ecuador,

Guyana, French Guiana, and Suriname, raising the possibility that a resource curse may spread to new countries in the near future.

The petroleum-rich countries in the LAC region have avoided many facets of the resource curse. Compared to oil exporters in the rest of the world, their economies have been relatively strong (Lederman and Maloney, 2007), and their governments have been relatively democratic (Dunning, 2008). When it comes to violent conflict, however, these countries have been less fortunate. The LAC region's oil-producing states have suffered from the same high rates of conflict as those in the rest of the world, with an important qualification. Everywhere else petroleum wealth tends to heighten the danger of two types of conflict: government conflicts (in which rebel movements attempt to win control of the central government) and secessionist conflicts (in which rebel movements seek to establish an independent, sovereign state); in the LAC region, however, oil is only linked to government conflicts. This is not because petroleum in Latin America and the Caribbean has unusual properties, but because the region is "secession-proof": no separatist conflicts have taken place there for over a century. The region's great anomaly is not the absence of oil-based secessionist conflicts, but the absence of all secessionist conflicts.¹

¹ This chapter refers interchangeably to "secessionist," "separatist" and "independence" movements, as well as to the terms "rebellion" and "insurgency."

The LAC region's oil-producing states have suffered from the same high rates of conflict as those in the rest of the world.

This chapter raises more questions than it answers. It describes, but does not seek to explain, the proliferation of lower-level conflicts around mining projects—a critical phenomenon that deserves sustained attention. Other studies have analyzed the chain of events that link resources to violent conflict (Ross, 2004b and 2006; Dube and Vargas, 2013), while this chapter touches only briefly on these causal mechanisms. It offers a perspective on the absence of separatist rebellions in the LAC region for the last century, showing that cross-national studies of secessionist conflict do a poor job of accounting for the LAC states, and suggests several factors that might make the region different. A more careful analysis of these and other issues are left for future research.

The region's great anomaly is not the absence of oil-based secessionist conflicts, but the absence of all secessionist conflicts.

THE RESOURCE CURSE

The resource curse can be defined as the perverse effects of a country's natural resource wealth on its economic, social, or political well-being. While many studies report evidence that is consistent with the idea of a resource curse, there is considerable disagreement about the mechanisms that connect resource wealth to social or political dysfunction, the conditions under which they are likely to occur, and the policy interventions that might help (see Chapter 3 of this book for more details on the resource curse).

The notion that natural resource wealth can have perverse consequences has a long and distinguished intellectual history. Early modern philosophers such as Machiavelli, Bodin, and Montesquieu argued that when countries had favorable resource endowments, their citizens became myopic and slothful. Adam Smith's *The Wealth of Nations* stressed the dangers of mineral wealth.

Of all those expensive and uncertain projects, however, which bring bankruptcy upon the greater part of the people who engage in them, there is none perhaps more ruinous than the search after new silver and gold mines (...). They are the projects, therefore, to which of all others a prudent law-giver, who desired to increase the capital of his nation, would least choose to give any extraordinary encouragement (Smith, 1776: Chapters 7 and 18).

The notion that natural resource wealth can have perverse consequences has a long and distinguished intellectual history.

Political scientists who study the resource curse draw more proximately on the work of scholars in the Middle East who, beginning in the 1970s, revived the concept of the "rentier state" to explain the peculiar qualities of the region's oil-producing governments.² Mahdavy (1970: 428) is widely credited with giving the term its contemporary meaning: a state that receives substantial rents from "foreign individuals, concerns, or governments." Beblawi (1987: 50) later developed a more precise definition, suggesting that a rentier state was one where the rents are paid by foreign actors, where they accrue directly to the state, and where "only a few are engaged in the generation of this rent (wealth), the majority being only involved in the distribution or utilization of it."

Both Mahdavy and Beblawi argued that governments funded by external rents were freed from the need to raise taxes; this made them less accountable to their citizens, and hence less likely to deploy these rents in ways that promoted economic

² The concept of a "rentier state" dates back to at least the beginning of the 20th century, when Lenin used the term to vilify European governments that earned interest on their loans to non-European governments (Lenin [1917], 1975).

development. Their argument encapsulates two of the most prominent claims in the resource curse literature: rents damage both government accountability and economic growth.

Interest in the idea of a resource curse gained further attention following Gelb's (1988) analysis of how six oil-rich states—Algeria, Ecuador, Indonesia, Nigeria, Trinidad and Tobago, and Venezuela—responded to the oil shocks of the 1970s. Overlapping studies by Auty (1990 and 1993) examined both oil and non-oil mineral exporters; a seminal working paper by Sachs and Warner (1995) reported a negative correlation between a country's dependence on natural resource exports and its subsequent economic growth; and Karl (1997) explored the disappointing political and economic outcomes in Venezuela—and, more briefly, in Algeria, Iran, Indonesia, and Nigeria—following the oil shocks of the 1970s.³

An explosion of research since 2000 has led to four distinct claims about the perverse effects of oil wealth.⁴ The first claim is that

petroleum wealth is economically harmful, particularly through its effects on growth volatility.⁵ The second is that petroleum wealth can weaken the quality of institutions—that is, the effectiveness of the government bureaucracy, the incidence of corruption, the rule of law, and more broadly, the state's capacity to promote economic development (Besley and Persson, 2010; Isham et al, 2005; Sala-i-Martin and Subramanian, 2003). The third is that oil wealth tends to make governments less democratic, by both helping autocrats entrench themselves in power and weakening checks and balances in low and middle income democracies (Jensen and Wantchekon, 2004; Ross, 2001 and 2012; Tsui, 2010).⁶ Finally, the fourth suggests that two types of natural resources—petroleum and alluvial diamonds—could likely trigger the onset of a civil war, which can be broadly defined as a violent conflict between a government and a rebel army that causes more than a certain number of battle-related deaths (Sambanis, 2004).

³ Many also drew on Corden and Neary's (1982) work on the concept of the Dutch Disease, although both researchers and journalists came to confuse the Dutch Disease with the resource curse.

⁴ Only petroleum is consistently correlated with less democracy and more corruption, but both petroleum and alluvial diamonds are statistically associated with civil wars (Fearon, 2005; Lujala, Gleditsch, and Gilmore, 2005; Ross, 2003 and 2006). Several studies suggest that other kinds of minerals have similar effects, although the issue is far from settled (see, for example, Collier, Hoeffler, and Rohner, 2009).

⁵ For more detailed reviews of recent work on the economics of the resource curse, see Frankel (2012), van der Ploeg (2011), and Wick and Bulte (2009).

⁶ Further insight on this pattern has come from a series of subnational studies in democracies, including in Argentina (Gervasoni, 2010); Brazil (Brollo et al., 2013; Monteiro and Ferraz, 2010), and the United States (Goldberg, Wibbels, and Mvukiyehe, 2009; Wolfers, 2009), all of which find that oil windfalls (and similar exogenous revenue windfalls) tend to lengthen the terms in office of elected local officials. This does not necessarily imply that oil strengthened or weakened these regimes, only that it had pro-incumbent effects.

There is no universally accepted cut-point for identifying these conflicts; different datasets employ different thresholds of battle deaths, such as 25, 100, or 1,000 in a calendar year. Analyses by Collier and Hoeffler (1998), Le Billon (2001), and Reno (1995 and 1998), among others, focus on the links between natural resource wealth and the onset, duration, and intensity of violent conflict.⁷

One of the most important findings from the last decade of research is that location matters: the likelihood that resource wealth will trigger, prolong, or intensify a conflict seems to depend on where within a country's boundaries it is found. If oil is offshore, it has no effect on a country's conflict risk; if it is onshore, it may have a large effect (Lujala, 2010; Ross 2012). Conflict is also more likely if these resources are found in regions that are poor relative to the national average and populated by marginalized ethnic groups (Østby, Nordås, and Rød, 2009; Basedau and Richter, 2011); in regions with a highly concentrated ethnic group (Morelli and Rohner, 2010); and in regions where ethnic entrepreneurs use resource wealth to promote collective resistance to the central government (Aspinall, 2007). Conflicts that take place near regions with petroleum or alluvial diamond wealth also appear to last longer (Buhaug, Gates, and Lujala, 2009; Lujala, 2010; Lujala, Gleditsch,

and Gilmore, 2005), and become more severe (De Luca et al., 2012; Lujala 2009; Weinstein 2007).⁸

The salience of location has opened the door to more fine-grained, intra-country comparisons. Dube and Vargas (2013), for example, use municipal-level data from Colombia to estimate the effects of both coffee and petroleum price shocks on rebel and paramilitary violence. They find that higher coffee prices tend to reduce violence in the coffee-producing regions (perhaps by drawing labor out of the conflict and into the coffee sector), while higher oil prices tend to boost violence in oil-rich regions (possibly by creating more lucrative opportunities for predation). Their findings closely match the predictions of a model by Dal Bó and Dal Bó (2011), in which exogenous shocks can raise or lower conflict risks, depending on whether they occur in labor-intensive or capital-intensive sectors.

OIL AND CIVIL WAR

While many studies find that oil wealth is associated with a heightened risk of civil war, there is no consensus about the mechanisms behind this pattern. One class of theories suggests that natural

⁷ For earlier surveys of this literature, see Ross (2004a and 2006). A separate body of research (e.g., Gleditsch, 2012) asks whether the scarcity of renewable resources can trigger violent conflict.

⁸ Besley and Persson (2010) develop and test a related model in which resource rents increase the likelihood of conflict, conditional on the ex ante inability of the state to facilitate peaceful transactions between groups.

resource wealth leads to violence by affecting the government—either making it administratively weaker, and hence less able to prevent rebellions, or by increasing the value of capturing the state, and hence inducing new rebellions (Besley and Persson, 2010; de Soysa, 2002; Fearon, 2005; Le Billon, 2005). An alternative view is that natural resource wealth leads to conflict by affecting insurgents, not governments. For instance, rebels from an ethnically marginalized region could be motivated by the prospect of establishing an independent state, so that locally generated resource revenues would not have to be shared with the rest of the country. They could also finance a rebellion by either looting the resource itself (if it is a “lootable” resource, such as alluvial gemstones or oil) or extorting money from companies and workers who operate in their territory (Collier, Hoeffler, and Rohner, 2009; Dal Bó and Dal Bó, 2011; Ross, 2012).

Many other conditions have also been linked to civil war. Perhaps the most robust are a country’s income and population: those that are poorer and larger have more frequent conflicts. Somewhat less robust correlates include slow or negative economic growth, political instability, disorder in the initial years of sovereign independence, ethnolinguistic fractionalization, religious fractionalization, noncontiguous territory, mountainous terrain, small military establishments, and war-prone and undemocratic neighbors. Fearon (2005),

Hegre and Sambanis (2006), and Sambanis (2004) show that many of these factors are not robust to changes in model specification, the period covered by the sample, the duration of each observation (i.e., whether country observations are grouped in one- or five-year periods), and the definition of civil war.

While many studies find that oil wealth is associated with a heightened risk of civil war, there is no consensus about the mechanisms behind this pattern.

Many of these factors can be incorporated into a theory of rebellion focusing on the viability of insurgent movements, which should be more likely to emerge when the costs of joining a rebel organization are sufficiently low, and the benefits are sufficiently high.⁹ In countries with lower incomes, the opportunity costs of joining a rebellion—represented by the prevailing wage for unskilled male laborers—will be lower. Rebel groups are also more likely to elude capture in countries with larger populations, mountainous terrain, noncontiguous

⁹ Collier and Hoeffler (2004) developed the canonical model of insurgent viability, drawing on earlier models of conflict from Hirschleifer (1991) and Skaperdas (1992). For reviews of the literature on theories of civil war, see Blattman and Miguel (2008) and Kalyvas (2007).

territories, and neighboring countries that allow them to take shelter. The benefits are represented by the rebel soldiers' wages, which usually come from funding from foreign powers, donations (including food and shelter) from locals who support the rebels' aims, and money earned by insurgents themselves through criminal activities, such as extortion, kidnapping, and the sale of contraband.

This simple cost-benefit model of insurgent viability suggests three ways that a country's oil wealth might affect the likelihood of a rebellion. It might influence the costs by affecting citizens' incomes. If one makes the simple assumption that more oil leads to higher incomes—if not through jobs, then through larger government benefits—then it should also make it harder for insurgents to recruit soldiers, thus reducing the danger of civil war.¹⁰

Oil can also raise the benefits of joining a rebel army. First, oil wealth may lead to increased donations to the rebel groups from local residents who believe they would be better off if they could form an independent state that would give each of them a larger share of the

wealth.¹¹ This does not necessarily mean that local insurgents initiate the conflict. Governments may trigger the conflict themselves by preemptively launching campaigns of repression and terror in anticipation of independence movements (Ross, 2004b). Second, oil wealth could make it easier for rebels to profit through crime, such as stealing oil, ransoming oil workers, and extorting money from oil companies that are trying to avoid conflict (such as theft, kidnapping, and sabotage). Insurgents also target other types of businesses, but oil companies are likely to be more lucrative targets for various reasons, such as: they are more willing than other large firms to work in remote and unstable regions; the contrast between their high fixed costs and small variable costs gives them a strong incentive to stand their ground to earn back their initial investments in fixed assets; and the availability of resource rents enables

¹⁰ If oil wealth instead leads to lower incomes, perhaps through calamitous mismanagement, it would boost the danger of armed conflict. But in most cases, oil wealth seems to make countries richer in the long run; see, for example, Alexeev and Conrad (2009).

¹¹ Of course, the central government should be able to anticipate this independence movement. So why would it not simply give locals a larger share of their region's petroleum revenues, to forestall a rebellion? In fact, many governments follow this strategy, allocating to local governments a disproportionate share of their region's mineral revenues (Ahmad and Mottu, 2003; Brosio, 2003). But these arrangements are not always sufficient. Unless the central government is willing to cede all of a region's petroleum revenues to the local governments, residents would still gain larger benefits if they were independent. More subtly, secessionists may distrust the government's promises of revenue sharing, fearing that if they disarm, the government will renege on its commitments (Fearon, 2004; Walter, 2002).

them to remain profitable while incurring high security costs, as well as financial losses from theft, extortion, and the payment of ransoms for kidnappings.

In short, oil wealth may either deter rebellions by raising incomes, induce them by making independence profitable in oil-producing regions, or give rebels an easy way to raise money. But the conflict-inducing effects of oil wealth should outweigh its conflict-detering effects, as long as the rise in incomes (which are diffused across the entire population) are less than the rise in benefits to locals in the oil-producing region from secession or predation.

Oil wealth may either deter rebellions by raising incomes, induce them by making independence profitable in oil-producing regions, or give them an easy way to raise money.

This simple model has three implications for analyzing the conflicts of LAC countries. First, the impact of oil should depend on a country's overall income level: since one hundred dollars per capita in oil income has a larger impact on wages in poor countries than in rich ones, a given amount of oil wealth would more likely trigger insurrections in low-income countries than in high-income ones. Second, the value of oil production should be

associated with both separatist civil wars, funded by citizens who seek independence in oil-producing regions, and governmental civil wars, funded by insurgents through petroleum-related predation. Some of the underlying conditions that cause insurgencies, according to the model, have changed over time. This points to the third implication: the incidence of petroleum-related civil wars should have grown, due to two factors. First, in the 1970's, governments began to capture a much larger share of the oil rents that formerly went to international oil companies, thanks to OPEC's growing influence, and a wave of expropriations. This has gradually raised the benefits for residents in oil-producing regions to establish their own sovereign governments. Second, due to the growing demand for oil in the 1970s and 1980s, petroleum firms moved into poorer regions of poorer countries (e.g., in Colombia, Indonesia, Nigeria, Sudan, and Yemen) where oil extraction was more likely to trigger new conflicts.¹²

A STATISTICAL ANALYSIS OF OIL AND CIVIL WAR

It is possible to illustrate the link between oil and violent conflict with logistic regressions, using civil war onsets as the dependent variable. The measure of civil war onsets

¹² From 1970 to 2006, the number of states earning at least US\$100 per capita in oil and gas income (in constant 2000 U.S. dollars) rose from 15 to 56.

is constructed from the Armed Conflict Dataset (version 4), which is the most comprehensive and transparent dataset on violent conflict.¹³ The dataset defines conflict as “a contested incompatibility that concerns government and/or territory, where the use of armed force between two parties, at least one of which is a government, results in at least 25 battle-related deaths” in a single calendar year. This is the lowest threshold in any major dataset for identifying violent rebellions. It has the advantage of capturing conflicts that are politically important but nonetheless have produced relatively few casualties, and the disadvantage of excluding the largely nonviolent struggles around mining projects that are listed in Table 4.1. Since the present analysis focuses on domestic conflicts rather than international ones, it is restricted to “Type 3” (intrastate conflict) and “Type 4” (internationalized intrastate conflict) events. Using these data, the current study uses a variable called *Domestic Conflict Onset*, which takes the value “1” during the year that a conflict begins and zero otherwise.

¹³ The Armed Conflict Dataset is maintained by the Uppsala Conflict Data Program (UCDP) at the Department of Peace and Conflict Research, Uppsala University, Sweden, and the Centre for the Study of Civil War at the Peace Research Institute Oslo (PRIO) in Oslo, Norway, and is available at: http://www.pcr.uu.se/research/ucdp/datasets/ucdp_prio_armed_conflict_dataset/. The website also has greater detail on how they define conflict and a full listing of the armed conflicts in the dataset.

To avoid double counting conflicts that restart after a brief lull, only insurrections that arise after two or more consecutive years of peace are included. Using the Armed Conflict Dataset, variables have been created to measure two subcomponents of Domestic Conflict Onset: the onset of conflicts for control of the national government (*Government Conflict Onset*) and the onset of separatist conflicts (*Separatist Conflict Onset*).

The key independent variable is *Oil Income per capita*, which is the annual value of a country’s oil and natural gas production, divided by its population. This measure was chosen over other common indicators of resource wealth because it is both implied by the model and is less likely to be influenced by other variables of interest; in particular, it should not be biased upwards in poorer countries, which have higher conflict risks. Measures that only consider a country’s petroleum exports, instead of its production, will be biased upwards in countries that are too poor to consume their production domestically. For example, on a per capita basis, the United States produces more oil than Angola or Nigeria, but both export more than the United States, which is wealthier and consumes all of its oil domestically.

Similarly, measures of a country’s dependence on oil production or exports (i.e., using GDP or total exports as the denominator) will conflate information about the size of a country’s petroleum sector with that about the size of the rest of the

economy. Even if two countries export the same quantity of oil, the poorer country will have a smaller GDP and, hence, a higher oil-exports-to-GDP ratio, making it hard to know if a given outcome has been caused by the presence of oil or the absence of other kinds of economic activity. It also opens the door to several endogeneity problems. For example, having a high oil exports-to-GDP ratio might cause civil war, but it could also be a result of civil war (or the domestic instability that often precedes civil war), which could reduce investment in sectors that can be easily relocated to other countries (e.g., manufacturing) and leave sectors that are not easily relocated or can function in enclaves (e.g., oil extraction) in a dominant position.

The present analysis begins by developing a core model that includes only the Oil Income measure and the two explanatory variables that are most robustly linked to civil war: income and population. As a robustness check, it later adds the other explanatory variables in the highly influential Fearon-Laitin model (see Fearon and Laitin, 2003).

To identify the variables that are linked to a dichotomous dependent variable, scholars typically use logistic regression. But King and Zeng (2001) have shown that logistic regression does a poor job of estimating the likelihood of rare events, and civil war onsets are quite rare (between 1960 and 2006, just 193 such conflicts began in

about 6,800 country-years). To correct this problem, the model incorporates the King-Zeng “rare events logit” estimator.

To address the problem of temporal dependence, the present analysis follows Beck et al. (1998) by adding three cubic splines to each model, and controlling for the number of years since the end of the previous conflict in the same country.¹⁴ It lags all explanatory variables by a single period (to help mitigate endogeneity) and clusters standard errors by country. The natural log (plus one) of each of the right-hand side variables (*Gross National Income per capita*, *Population* and *Oil Income per capita*) is used to mitigate their non-normal distributions.

Table 4.2 displays the results of these reduced-form estimations. The first column shows that the two control variables—*Income* and *Population*—are each significantly correlated with *Domestic Conflict Onset* in the expected direction: states with lower incomes and larger populations are more prone to civil war. The *Oil Income* variable is added in column 2; it is positively correlated with *Domestic Conflict Onset* and statistically significant at the $p=.01$ level. This is consistent with the model’s first implication, that *Oil Income* is associated with a heightened likelihood of civil war.

¹⁴ An earlier set of estimations (Ross, 2006) shows that an alternative method of addressing temporal dependence, adopted by Fearon and Laitin (2003), produced virtually identical results.

Table 4.2
Civil War Onsets

	(1) All countries	(2) All countries	(3) High- income countries	(4) Low- income countries	(5) All countries	(6) Separatist conflicts	(7) Government conflicts	(8) 1960– 1990	(9) 1991– 2006	(10) All countries
Income (log)	-0.311 (5.06)***	-0.437 (6.27)***	-0.490 (2.66)***	-0.280 (2.81)***	-0.410 (6.25)***	-0.457 (2.56)***	-0.411 (5.48)***	-0.329 (4.46)***	-0.587 (4.81)***	-0.320 (3.59)***
Population (log)	0.314 (4.35)***	0.258 (3.35)***	0.452 (4.1)***	0.255 (2.92)***	0.247 (3.19)***	0.532 (4.90)***	0.051 (0.93)	0.275 (3.11)***	0.231 (2.89)***	0.220 (3.39)***
Oil Income (log)		0.131 (3.44)***	0.115 (1.33)	0.124 (2.92)***		0.139 (2.05)**	0.132 (3.09)***	0.074 (1.65)*	0.194 (3.34)***	0.104 (2.80)***
Oil Income*					0.109 (3.45)***					
Polity										
Polity²										
Ethnic Fractionalization										0.438 (2.94)***
Religious Fractionalization										-0.040 (3.01)***
Mountains (log)										1.260 (3.32)***
Noncontiguous										-0.766 (2.12)**
New State										0.093 (1.68)*
Instability										0.589 (2.47)**
Countries	169	169	169	140	169	169	169	156	169	154
Observations	6382	6382	1831	4551	6382	6382	6382	3747	2635	5507

Source: Author's elaboration.

Notes: * significant at 10%; ** significant at 5%; *** significant at 1%. Robust z statistics in parentheses. "High-income" is defined as above \$5,000 (constant 2000 dollars), and "low income" as below \$5,000. Each estimation includes a constant, a variable measuring years since the previous conflict, and three cubic splines to correct for temporal dependence. Standard errors are clustered by country, and the explanatory variables are lagged for one year. Estimations are carried out with Stata 10.1, using rare-event logistic regression.

Columns 3 and 4 show the sample according to income: the model in column 3 includes only states with high incomes (above \$5,000 in constant 2000 U.S. dollars) and the model in column 4 only includes states with low or middle incomes (below \$5,000). Oil Income is significantly linked to *Domestic Conflict Onset* only among low- and middle-income states. The model in column 5 shows that an interaction term, *Oil Income* Income (log)*, is strongly linked to conflict onsets, consistent with the second implication, that oil will have a larger effect in low-income countries.¹⁵

Columns 6 and 7 show that Oil Income is associated with both *Separatist Conflict Onset* and *Government Conflict Onset*, respectively. This is consistent with the third implication, that oil is linked to both separatist and government conflicts.

Columns 8 and 9 illustrate the sample according to time periods: the 1960–1990 “Cold War” era and the 1991–2006 “post-Cold War” era. The *Oil Income* variable is significantly linked to *Domestic Conflict Onset* in both periods, but its statistical and substantive significance is much greater in the latter period, consistent with the fourth implication, that the conflict-inducing qualities of oil have risen over time.

¹⁵ For ease of interpretation, the Income variable in the interaction term is a one-to-five cardinal variable indicating a country’s income quintile, with “5” indicating the lowest quintile and “1” the highest. This means that a larger interaction term—indicating more oil, lower incomes, or both—should be associated with a higher civil war risk.

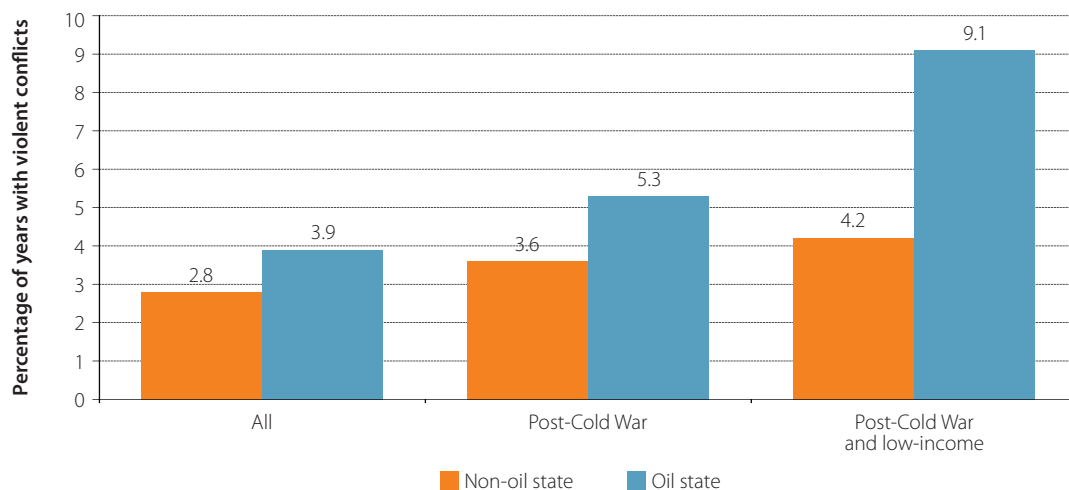
Finally, as a robustness test, all of the right-hand side variables in the Fearon-Laitin civil war model (Fearon and Laitin, 2003) that had not already been accounted for are added to the model. The *Oil Income* variable remains highly significant.

How large is oil’s impact on the threat of civil war? One simple way to address this question is to compare the conflict rate—that is, the number of conflicts per 100 country-years—of oil and non-oil states under different conditions. As Figure 4.1 shows, between 1960 and 2006, the conflict rate in the oil states for countries at all income levels was more than 35 percent higher than in non-oil states—even though the oil states were on average more than twice as rich as the non-oil states which, in theory, should have made them more peaceful.¹⁶ In the post-Cold War era, the conflict rate in the oil states has been about 50 percent higher than the rate in non-oil states. Among low and middle-income states since 1960, the oil states had conflict rates about 75 percent higher, while among low and middle-income countries in the post-Cold War period conflict, rates were more than twice as high in the oil states as the non-oil states.

¹⁶ Herein, countries are classified as “oil-producing” if they generate at least US\$100 per capita from oil or natural gas in a calendar year (using constant 2000 U. S. dollars). From 1960 to 2006, the mean income of the non-oil states was US\$3,962 per capita, versus US\$8,738 per capita for the oil states, in constant 2000 U.S. dollars. The average populations of the two groups were almost identical.

Figure 4.1

Annual Conflict Rate, Oil and Non-oil States, 1960–2006



Source: Author's elaboration.

PATTERNS OF OIL AND CONFLICT IN THE LAC REGION

From 1960 to 2011, there were 24 intrastate conflicts in the region, in 18 different countries, according to the Armed Conflict Dataset (ACD) (see Table 4.3). The ACD classified nine of them as major conflicts (i.e., they caused at least 1,000 battle-related deaths in a single year). Seven of the 24 conflicts—including two major ones—began in countries that were generating at least US\$100 dollars per capita in oil and gas, and an eighth conflict broke out in a state that subsequently became a major oil producer (Colombia). Other datasets, using different definitions of civil war, identify either nine or ten major conflicts during this period, although they do not code minor ones.

In Table 4.3, the countries classified as “oil-producing” (i.e., those that generated at least US\$100 per capita in oil revenues in the year the conflict began) are in italics. Colombia became an oil-producing country in 1974, after its conflict began. The years listed for the onset of conflict are from the ACD; the other datasets are less complete, and may also identify different years as the onset. Some datasets treat long-running conflicts as two or three consecutive conflicts. Cells with a single asterisk indicate that a given dataset counts this as a conflict; when a dataset treats this event as two or three consecutive but independent conflicts, the cells are marked with two or three asterisks.

Table 4.3
Intrastate Conflicts in Latin America and the Caribbean, 1960–2011

Country	Year	ACD (all)	ACD (major)	Fearon-Laitin	Sambanis	Wimmer-Min
Cuba	1961	*				
<i>Venezuela</i>	1962	*				
Argentina	1963	*				
Dom. Rep.	1965	*		*	*	*
Guatemala	1965	*	*	*	**	***
Peru	1965	*				
Colombia	1966	*	**	*	*	*
Bolivia	1967	*				
El Salvador	1972	*				
Uruguay	1972	*				
<i>Argentina</i>	1973	*	*	*	*	
Chile	1973	*				*
Nicaragua	1978	*	**	**	**	**
El Salvador	1979	*	*	*	*	*
<i>Peru</i>	1981	*	**	*	*	*
Suriname	1986	*				
Haiti	1989	*		*	*	
Panama	1989	*				
Paraguay	1989	*				
<i>Trinidad</i>	1990	*				
<i>Venezuela</i>	1992	*				
<i>Mexico</i>	1994	*				
Haiti	2004	*				
<i>Peru</i>	2007	*				
Total		24	9	9	10	10

Source: Author's elaboration

Notes: The ACD runs through 2006, the Wimmer-Min data through 2001, and the Fearon-Laitin and Sambanis datasets through 1999.

From 1960 to 2011, there were 24 intrastate conflicts in the region, seven of which began in countries that were generating at least US\$100 dollars per capita in oil and gas.

Table 4.4 offers a first assessment of the figures in Table 4.3, showing the conflict rates of both oil- and non-oil producing countries in the LAC region and the rest of the world. Differences that are statistically significant (using either a Chi-square test or—when expected frequencies fall below five—a Fisher’s exact test) are marked with asterisks.

Table 4.4 indicates three patterns. First, during the Cold War, the LAC region had civil wars at the same rate as the rest of the world, a pattern that held for both oil- and non-oil producing countries. Second, since 1990, the LAC region has become much more peaceful than the rest of the world, partly because the rate of new conflicts rose in the rest of the world, and partly because it fell in the LAC region. Third, since 1990, oil-producing countries in both the LAC region and the rest of the world had higher conflict rates than non-oil producing countries. In Latin America and the Caribbean, the difference between the oil and non-oil states falls short of statistical significance ($p=.172$) in Fisher’s exact test, provided the

Table 4.4

Conflict Onset Rates in Oil versus Non-oil Producing Countries

	Rest of the world	LAC region
1960–1990		
Oil-producing countries	2.70	2.44
Non-oil producing countries	2.32	2.38
1991–2006		
Oil-producing countries	5.76*	1.75*
Non-oil producing countries	4.06***	0.31***
Overall		
All states and periods	3.27**	1.81**

Source: Author’s elaboration.

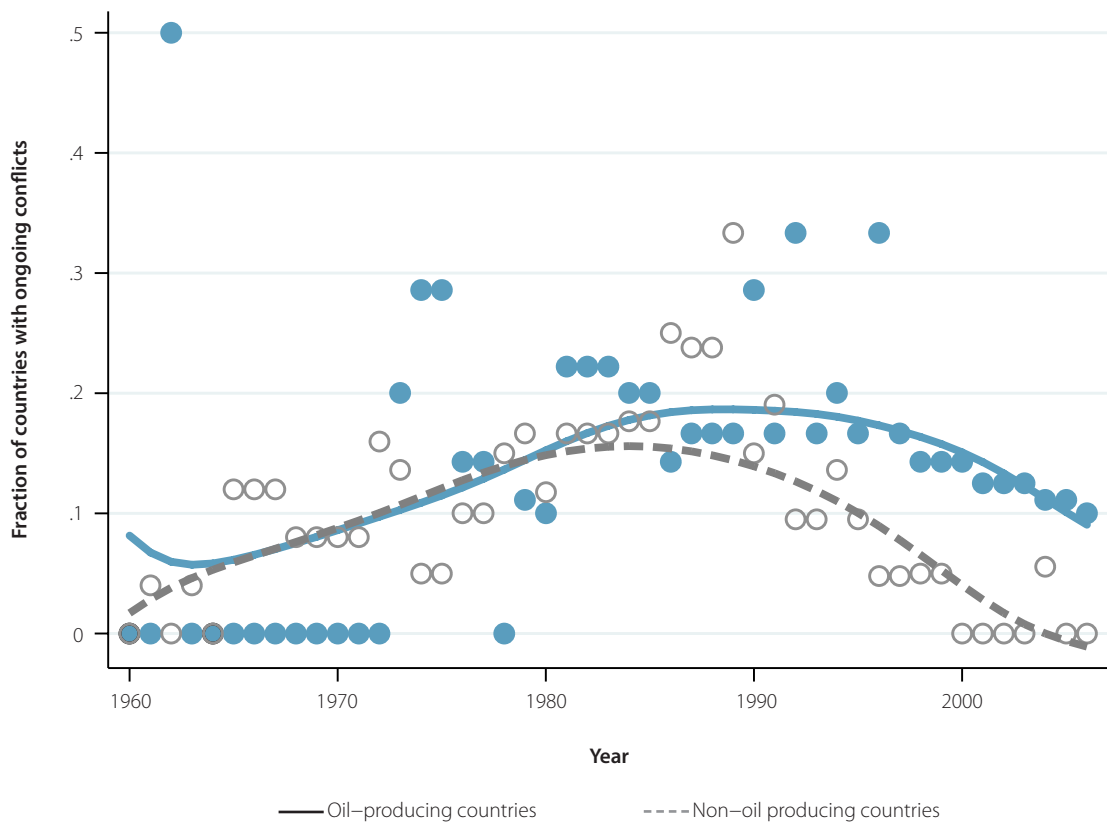
Notes: *** $p < .01$, ** $p < .05$ level, * $p < .10$ in Pearson’s χ^2 test (rows two, four, and five) or a one-sided Fisher’s Exact Test (rows one and three). Tests are for values in rows (i.e., the rest of world versus the LAC region).

post-Cold War era is treated as 1991–2006. If 1990 is included in the period, the difference between the oil and non-oil states becomes statistically significant at the .10 level ($p=.058$). Looking at conflict rates over time, the region's oil-producing countries have had notably more ongoing conflicts since about 1980 (Figure 4.2).

Since 1990, the LAC region has become much more peaceful than the rest of the world, partly because the rate of new conflicts rose in the rest of the world, and partly because it fell in the LAC region.

Figure 4.2

Ongoing Conflicts in the LAC Region, 1960–2006



Source: Author's elaboration.

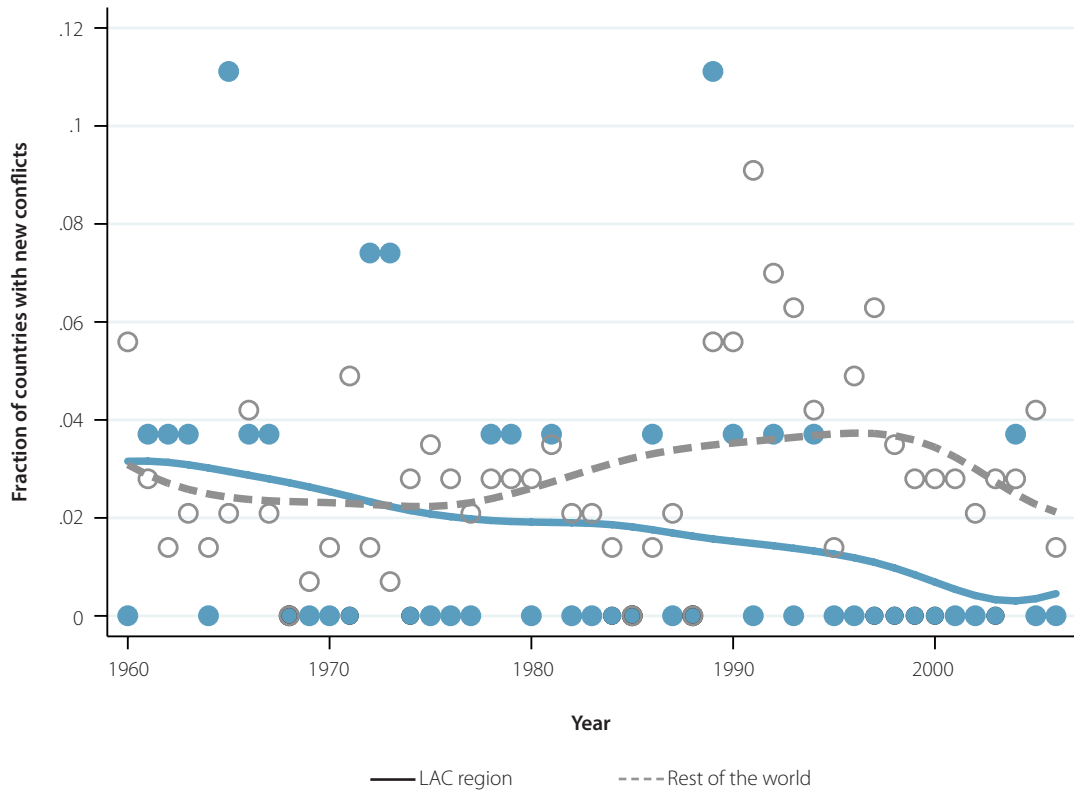
Figure 4.3 shows how conflict rates in the LAC region have diverged from the rest of the world since 1960. In the 1960s and 1970s, the region had new civil wars at the same rate as the rest of the world; but since the 1980s, the rate of new conflicts there has fallen sharply relative to the rest of the world.

It is possible to observe a similar pattern when looking at ongoing conflicts, instead of only new ones, although now the LAC region diverges from the rest of the world a few years later, around 1990 (Figure 4.4).

Perhaps the most striking anomaly in the LAC region is the kind of civil wars it

Figure 4.3

Conflict Onsets in the LAC Region and the Rest of the World, 1960–2006



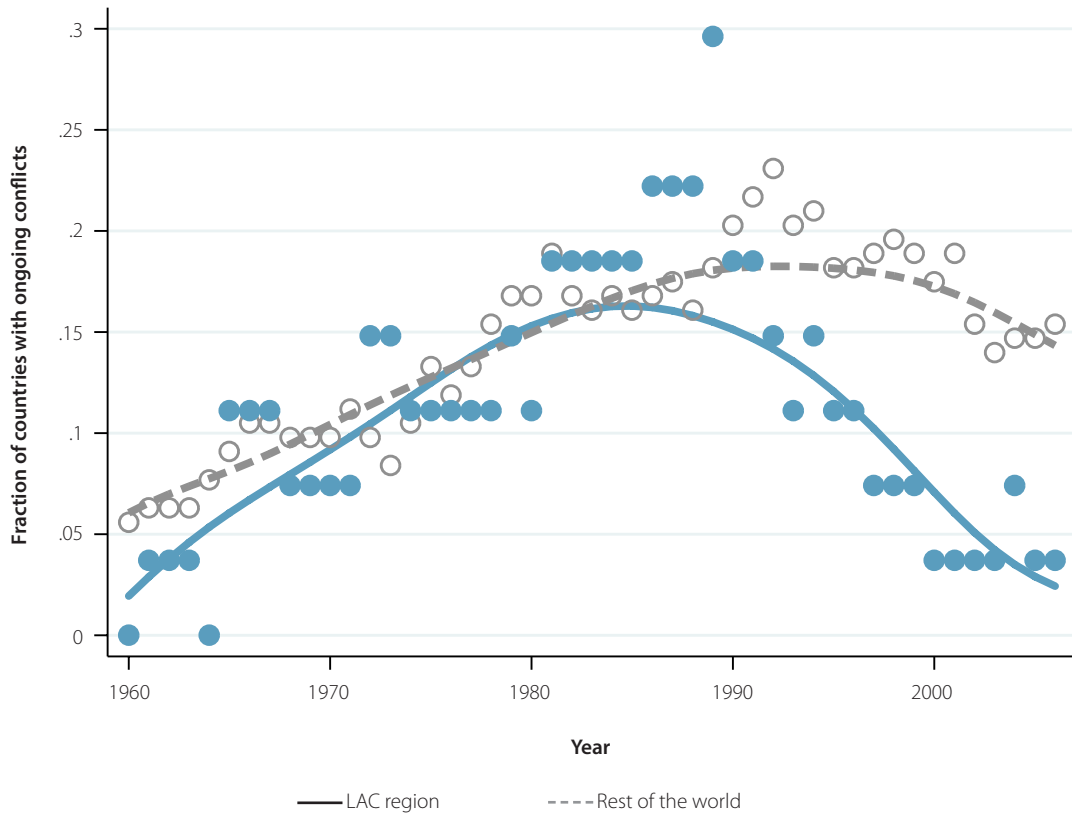
Source: Author's elaboration.

has had (Table 4.5). During the Cold War (1960–1990), the region suffered from civil war onsets at about the same rate as the rest of the world, but it had a significantly higher rate of government wars and a much lower rate of separatist wars (in fact, there were none at all). In the post-Cold

War era (1991–2006), the rate of both government and separatist conflicts in the rest of the world rose; most notably, the rate of separatist conflicts doubled. In the LAC region, however, the rate of government conflicts fell sharply, while the number of separatist wars remained at zero.

Figure 4.4

Ongoing Conflicts in the LAC Region and the Rest of the World 1960–2006



Source: Author's elaboration.

Table 4.5

Conflict Onset Rates by Type

	Rest of the world	LAC Region
1960–1990		
Government conflicts	1.49*	2.39*
Separatist conflicts	1.15***	0.00***
All conflicts	2.64	2.39
1991–2006		
Government conflicts	1.97**	0.69**
Separatist conflicts	2.53***	0.00***
All conflicts	4.5***	0.69***

Source: Author's elaboration.

Notes: ***p<.01, ** p<.05 level, * p<.10 in Pearson's Chi² test (rows one and three) or a one-sided Fisher's Exact Test (rows two, four, five and six). Tests are for values in rows (i.e., the rest of world versus the LAC region).

Since the 1980s, the rate of government conflicts in the LAC region has gone from atypically large to atypically small. Since 1990, its oil producing countries have had a higher conflict rate than its non-oil producing countries.

In short, the LAC region differs from the rest of the world in two broad ways: it had no separatist conflicts—either during the Cold War or since—and since the 1980s, its rate of government conflicts has gone from atypically large to atypically small. The region is similar to the rest of the world in one important way: since 1990, its oil-producing

countries have had a higher conflict rate than its non-oil producing countries. The absence of separatist conflicts in the LAC region is especially striking, and remains true even going back further in time. According to the ACD, from 1948 to 2011, the region had 36 major conflicts in 19 different countries, yet none of them involved a separatist movement.

Other civil war datasets, which use narrower definitions of civil war, show the same absence of separatist conflict (Table 4.6). The Correlates of War dataset, which contains information on civil wars in all countries since 1816, identifies three types of civil wars: intercommunal conflicts, which most scholars do not treat as civil wars since the government is not a party to the conflict; conflicts

Table 4.6**Conflicts in Latin America and the Caribbean (by type)**

Dataset	Government conflicts	Separatist conflicts	Last separatist conflict
UCPD/PRIO (1946–2011)	36	0	-
Correlates of War (1900–2001)	27	1	1932: Brazil versus the Paulistas
Wimmer-Min (1900–2001)	30	1	1918: Haiti versus the United States

Source: Author's elaboration.

Note: The Correlates of War dataset does not identify separatist conflicts, but rather “local” conflicts, a category that includes both separatist and regional conflicts.

over control of the central government; and conflicts over local issues, a category that is somewhat broader than, and includes, all secessionist conflicts. Between 1900 and 2001, the dataset recorded 27 conflicts in the region over control of the central government, but just one local conflict—Brazil's Paulista War (also known as the Constitutional Revolution of 1932).

The Correlates of War dataset has been criticized on a number of grounds, including the consistency of its definitions of conflict (see, for example, Sambanis, 2004). Recently, Wimmer and Min (2009) have compiled a more comprehensive list of conflicts between 1816 and 2001 that includes 64 wars left out of the Correlates of War data and develops a new typology of conflicts by their purpose. They identify the most recent secessionist war in the Americas as the 1918 Caco War in Haiti—a revolt against the United States occupation—and the one

before that, the Spanish-Cuban War of 1895. On the Latin American continent in particular, Wimmer and Min identify the most recent separatist conflict as the 1859 Battle of Cepeda between the Argentine government and the provincial government of Buenos Aires (they classify the Paulista War in Brazil as non-secessionist).

Table 4.7 compares the LAC region to others, providing both the total number of separatist conflicts in each region since 1948 and the rate of separatist conflicts (i.e., the number of separatist conflicts divided by the number of sovereign country-years). South Asia had the highest rate of separatist conflicts, followed by the former Soviet Union, East and Southeast Asia, the Middle East and North Africa, Sub-Saharan Africa, Central and Eastern Europe, and Western Europe. The LAC region is the only one that had no wars of secession.

Table 4.7

Separatist Conflicts by Region, 1948–2006

Region	Separatist conflicts	Sovereign country-years	Separatist conflict rate
South Asia	20	346	5.78
Former Soviet Union	11	257	4.28
East and Southeast Asia	27	674	4.01
Middle East	11	775	1.42
Sub-Saharan Africa	26	1903	1.37
Central and Eastern Europe	7	538	1.30
Western Europe	5	893	0.56
LAC region	0	1197	0.00

Source: Author's elaboration.

Note: Data on separatist conflicts are from the ACD.

The estimations in Table 4.8 tell the same story as the cross-tabs in Tables 4.4 and 4.5. The data for each model are now restricted to the post-Cold War period, when differences have emerged between the LAC region and the rest of the world. The first column shows once again the core model displayed in Table 4.2, column 9. Column 2 includes a dummy variable for the LAC region, which is negatively associated with civil war onsets.¹⁷

Column 3 includes both the *Latin America and Caribbean* dummy, and a variable interacting *Oil Income* and *Latin America and the Caribbean*, to see if oil has

a distinctive effect on conflict in the LAC region; it is far from statistical significance and its inclusion has little impact on the *Oil Income* variable. This implies that oil does not have a distinctive impact on conflict in the region—in other words, oil is linked to higher conflict rates in the LAC region, just as it is in the rest of the world.

Stata cannot estimate a model of separatist conflicts that includes the *Latin America and Caribbean* dummy, since the region has had no separatist conflicts. But in a model of government conflicts, shown in column 4, the *Latin America and Caribbean* dummy loses statistical significance at conventional levels, which may suggest that the negative effect of *Latin America and the Caribbean* on all domestic conflicts, displayed in column 2, is largely caused by the absence of separatist conflicts.

¹⁷ In these estimations the dummy variable marks the countries of both Latin America and the Caribbean; a dummy variable covering only Latin America produces similar results.

Table 4.8
Civil War Onsets, 1991–2006

	(1) All conflicts	(2) All conflicts	(3) All conflicts	(4) Government conflicts only
Income (log)	-0.587 (4.81)***	-0.520 (4.46)***	-0.517 (4.42)***	-0.598 (3.60)***
Population (log)	0.231 (2.89)***	0.224 (2.86)***	0.222 (2.85)***	0.015 (0.14)
Oil Income (log)	0.194 (3.34)***	0.185 (3.35)***	0.182 (3.21)***	0.214 (2.75)***
Latin America and the Caribbean		-1.009 (1.96)**	-1.012 (0.75)	-0.508 (0.89)
Latin America and the Caribbean* Oil Income			0.043 (0.16)	
Countries	169	169	169	169
Observations	2,635	2,635	2,635	2,635

Source: Author's elaboration.

Notes: * significant at 10%, ** significant at 5%, *** significant at 1%. Robust z statistics in parentheses. Each estimation includes a constant, a variable measuring the number of years since the previous conflict, and three cubic splines to correct for temporal dependence. Standard errors are clustered by country, and the explanatory variables are lagged for one year. Estimations are carried out with Stata 10.1, using rare-event logistic regression.

The absence of secessionist wars explains why oil states in the LAC region had fewer conflicts than oil states in the rest of the world. Table 4.9 displays the rate of both separatist and government conflicts in the oil states since 1990. While LAC oil states have had slightly fewer government conflicts than oil states elsewhere,

the difference is not statistically significant; but oil-producing countries in the LAC region have had significantly fewer separatist conflicts, and consequently fewer total conflicts. Outside of the region, oil states had separatist and government conflicts at identical rates; in the region, oil states only suffered from government conflicts.

Table 4.9**Conflict Onset Rates among Oil-Producing Countries, 1991–2006**

	Rest of the world	LAC region
Government conflicts	2.88	1.75
Separatist conflicts	2.88*	0.00*
All conflicts	5.76*	1.75*

Source: Author's elaboration.

Notes: * $p < .10$ in a one-sided Fisher's Exact Test. Tests are for values in rows (i.e., rest of the world versus the LAC region).

Separatist conflicts make up a large fraction of the oil-related conflicts outside of the LAC region. As illustrated in Table 4.10, from 1960 to 2006, eight separatist conflicts broke out in states that were generating at least US\$100 per capita in oil income, and where petroleum extraction was either under way in the secessionist region (Angola, Iran-Arabistan, Iran-Kurdistan, Iraq, Nigeria-Niger Delta, and Russia) or about to begin (Indonesia and Yemen).¹⁸ Eight additional conflicts began in petroleum-rich regions of countries that did not cross the US\$100 per capita threshold—either because oil had been discovered but not yet extracted (Pakistan-Bangladesh,

Bangladesh-Chittagong Hills, Nigeria-Biafra, and Sudan) or because oil was relatively scarce at the national level, even though it was abundant in the secessionist region (China, India, Pakistan-Baluchistan, and Turkey).

Outside of the LAC region, separatist conflicts between 1960 and 2006 were widely distributed among petroleum-producing regions: five were in the Middle East, four in Africa, four in South Asia, two in East or Southeast Asia, and one in Russia. Clearly petroleum wealth was not wholly responsible for any of these conflicts, as all of them took place in regions whose populations had strong historical or political grievances that long predated petroleum extraction. However, case studies suggest that oil played a role in the motivations of separatist groups in many of the conflicts.¹⁹

In Latin America and the Caribbean, petroleum has sometimes been extracted from regions populated by marginalized ethnic communities, such as those listed in Table 4.10, but without triggering separatist insurgencies. For example, the exploitation of oil in the Ecuadorian Amazon since the 1970s has led to widespread soil and water contamination, conflicts over land rights, and organized protests and marches in support of indigenous rights (Sawyer, 1997). Also, Mexico's oil-rich Chiapas State

¹⁸ Three of these eight conflicts (in Indonesia, Iran, and Iraq) waxed and waned over time, and hence are counted by the ACD as multiple independent conflicts.

¹⁹ See, for example, Ross (2005) on Aceh; Said (2007) on Chechnya; International Crisis Group (2006a, 2006b) on the Niger Delta; and Anderson (1999) on Sudan.

Table 4.10

Separatist Conflicts in Petroleum-Producing Regions

Country	Conflict years	Country income (in real 2000 U.S. dollars per capita)	Region
Angola	1975–2007	\$861	Cabinda
Bangladesh	1974–92	\$243	Chittagong Hill Tracts
China	1991–	\$422	Xinjiang
India	1990–	\$317	Assam
Indonesia	1975–2005	\$303	Aceh
Iran	1966–	\$1053	Kurdistan
Iran	1979–80	\$1747	Arabistan
Iraq	1961–	\$1100	Kurdistan
Nigeria	1967–1970	\$267	Biafra
Nigeria	2004–	\$438	Niger Delta
Pakistan	1971	\$275	Bangladesh
Pakistan	1974–77	\$280	Baluchistan
Russia	1999–2001	\$1613	Chechnya
Sudan	1983–2005	\$293	South
Turkey	1984–	\$2091	Kurdistan
Yemen	1994	\$443	South

Source: Author's elaboration.

Notes: Country income is for the year the conflict began, or the closest year for which data are available.

has been home to an armed rebellion led by the Ejército Zapatista de Liberación Nacional (EZLN) since 1994. The group's first "Declaration from the Lacandon Jungle" demanded that the government suspend the robbery of natural resources. Later, declarations blamed the government's intransigence on its desire to retain control of

Chiapas's oil wealth. In both cases, groups from these regions pushed for changes in government policies, not independence.

What explains the absence of separatist conflicts in the LAC region? For some historians in the region, the absence of separatist conflicts in the last century, and ethnically based separatist movements

for even longer, may be self-evident and unremarkable.²⁰ While several studies explore the scarcity of interstate wars in the region (Centeno, 2003; Kacowicz, 1998; Dominguez, 2003), none try to explain the absence of separatist wars.

The social and economic marginalization of the region's indigenous populations may have deprived them of the resources they would need to mobilize independently, sending them into alliances of convenience with better-endowed but more ideologically oriented rebel groups.

Although a full analysis of these “missing” separatist conflicts is beyond the scope of this paper,²¹ two explanations seem promising. First, most LAC states are relatively old, having gained independence in the early 19th century; this could explain the absence of separatism, either due to causation (as national boundaries became more widely accepted over time) or selection (as less cohesive states fell apart, while more cohesive states endured). This argument seems consistent with the history of conflict in the LAC region; one database

identifies 13 secessionist wars in the region between 1816 and 1900 (Wimmer and Min, 2009). The second factor is the pattern of mobilization of the region's indigenous communities. In the 20th century, these populations tended to mobilize for conflict along class lines, rather than ethnic ones. Instead of seeking their own sovereign states, they fought to overthrow incumbent governments and the economic and military elites they typically represented. According to Cleary (2000: 1133), indigenous people have often taken part in the region's insurgencies, but they have done so “as peasants or workers and not as indigenous people.” Crawford Young (1975: 428) observed that:

Indians qua Indians are not collective actors in the national political arena. They are actors on occasion as peasants (...) more often they are acted upon by parties of populist ideology led by elites of middle class origin.

Perhaps the region's indigenous groups mobilized along class lines because they lacked the requisite financial and human resources to organize along ethnic ones. According to resource mobilization theory, disaffected groups need access to a variety of resources in order to develop into a social movement (McCarthy and Zald, 1977; Tilly, 1978). The social and economic marginalization of the region's indigenous populations may have deprived them of the resources they would need to mobilize

²⁰ See, for example, Centeno (2003) and Van Cott (2005).

²¹ For a closer look at this problem, see Ross (2010).

independently, sending them into alliances of convenience with better-endowed, but more ideologically oriented rebel groups (e.g., Sendero Luminoso in Peru, the Ejército Zapatista de Liberación Nacional in Mexico, and a series of leftist movements in Guatemala).²²

CONCLUSIONS

At a global level, oil-producing countries are more likely to have civil wars than non-oil producing ones—especially in the post-Cold War era, and particularly among low- and middle-income countries. This chapter suggests that the LAC region's oil-producing countries partially fit the worldwide pattern. Compared to other countries in the region, they have had government conflicts at a higher rate, but separatist conflicts at the same rate. Yet the real anomaly is not oil's inability to induce secessionist rebellions, but the complete absence of them in the region for the last century. This implies that the conflict-inducing qualities of the oil industry are no different in Latin America and the Caribbean than anywhere else. Petroleum extraction seems to touch off the same kind of frustrations and protests, trigger the same demands for distributive

justice, and contribute to the same kinds of sabotage and extortion in the region—most visibly in Colombia, Bolivia, Ecuador, and Mexico—as it does in the rest of the world. Yet, neither mineral wealth nor any other set of circumstances has caused marginalized ethnic communities in the region to fight for independence.

Perhaps the dearth of violent ethnic separatism offers a clue to an even larger puzzle, which Miguel Centeno (2008: 160) articulates in a review of recent scholarship on Latin American history:

It is remarkable how a relatively small minority was able to retain power, even after the (temporary) arming of subalterns. The independence wars (of the nineteenth century) and the subsequent caudillo states did open up opportunities for those without Spanish blood. Why did control over power and arms not translate into a racial revolution? The relative continuity of racial hierarchy after independence seems to be one of the paradoxes of the nineteenth century.

Observers have offered many plausible ideas for reducing conflict risk in resource-rich countries, such as the direct distribution of resource revenues to citizens; the decentralization of resource revenues to local governments; greater transparency in revenue flows between companies and governments, including project-level reporting; better techniques for revenue smoothing

²² Although most of these alliances were with leftist groups, some were not. For example, Nicaragua's Miskito Indians received covert military assistance from the United States in their conflict with the Nicaraguan government in the early 1980s.

to reduce the boom-and-bust pattern that is characteristic of mineral-based economies; and improved efforts to change the relationships between extractive companies and local communities, by reducing negative externalities and generating positive ones, including better jobs and development opportunities (Ross, 2013).

This chapter raises more questions than it can answer. Further research is needed in many of the areas it touches upon, including the causal mechanisms that connect oil

wealth to violent conflict in specific cases; why secessionist conflicts have virtually disappeared in the region, even as they persist everywhere else; and how lower-level conflagrations develop and persist around mine sites. Most urgently, it is important to carefully consider the policy implications and identify interventions that can help end persistent resource-based conflicts and, more importantly, prevent new ones from breaking out.

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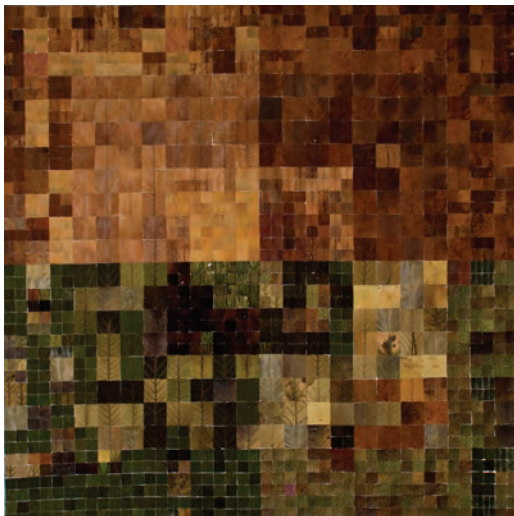
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First place in the 2014 edition

Varias especies I

Violeta Larraín Mac-Clure

Mixed media. Collage constructed with the leaves from different species of trees found in the south of Chile that, after being pressed, trimmed, and joined together, build up a visual grid that displays the diverse colors of trees such as the ginkgo, beech, chestnut, hydrangea, orange ball buddleja, elm, and hazel, among others.

Legislation, Licensing and Contracts

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|------------------|--|------------|
| Chapter 5 | Implications of the Dodd-Frank Act and European Union Rules on Transparency for Extractive Industries | 147 |
| | Heather A. Lowe | |
| Chapter 6 | The Role of Information in the Allocation of Petroleum Exploration and Production Rights | 185 |
| | Rhea Brathwaite and María José Jarquín | |
| Chapter 7 | What Can We Learn from Oil Contracts? Clarifying the Links Between Transparency and Accountability | 215 |
| | Jordan Kyle | |
| Chapter 8 | Finding the Balance: Transparency and Accountability versus Confidentiality in the Extractive Industries in Trinidad and Tobago | 255 |
| | Tira Greene and Mark Regis | |



CHAPTER 5

Implications of the Dodd-Frank Act and European Union Rules on Transparency for Extractive Industries

HEATHER A. LOWE

This chapter reviews recent legal and regulatory initiatives toward transparency in government revenues from natural resource concessions and extraction, and analyzes the impact such initiatives could have in resource-rich Latin American and Caribbean (LAC) countries. Under the United States' Dodd-Frank Act Section 1504 and the European Union's Accounting and Transparency Directives, oil, gas, mining, and (in the EU) logging companies, must publicly disclose royalties, taxes, and other payments made to the governments of countries in which they operate. Once fully implemented, these initiatives will produce a wealth of data for governments and civil society that can be used to hold these companies accountable and ensure that their countries' natural resource wealth is effectively utilized. In analyzing the applicability of these requirements in several LAC countries, many, but not all, of the companies active in extracting resources file reports under one or both of these regimes. While most well-known global extractive companies fall under these laws' disclosure requirements, some local companies and state-owned enterprises in the LAC region do not. This lacuna suggests that to ensure that a complete and robust data set for extractive projects taking place within their boundaries will be generated, LAC

countries that have not already done so should consider joining the Extractive Industries Transparency Initiative (EITI) and implement similar reporting requirements of their own. The chapter concludes by discussing the multifaceted utility of information disclosed under these regimes to the governments of resource-rich LAC countries, ultimately finding that these regimes are not sufficient to surmount the resource curse facing many of these countries but that resource transparency is a crucial and necessary step along the path to effective resource deployment for poverty alleviation.

*The G8 will take action to raise global standards for extractives transparency and make progress towards common global reporting standards, both for countries with significant domestic extractive industries and the home countries of large multinational extractives corporations. Under such common standards companies would be required to report on extractives payments, governments would take steps to ensure disclosure compliance, and those governments that wish to move towards the Extractive Industries Transparency Initiative (EITI) standard will voluntarily report their revenues. **This would reduce reporting burdens on businesses, help to fight corruption, and encourage more effective and efficient investment, including in developing countries.***

G8 Leaders, Lough Erne Communiqué, June 2013

INTRODUCTION

Many Latin America and Caribbean (LAC) countries are rich in natural resources, with deposits of oil, natural gas, precious metals and minerals, and timber in significant amounts across the region and with more being discovered as investment increases and technology improves. As in many areas around the globe that are resource-rich, however, the management of these resources and the profits derived from them have not benefited the general population to the extent that might be expected given their market value and the significant international trade that usually accompanies these limited, highly sought-after resources. This phenomenon, often referred to as the resource curse, has been a topic of great interest to economists and academics. Various approaches to identifying its underlying causes have been proffered (Barma et al., 2012; Humphreys, Sachs, and Stiglitz, 2007; Ross, 1999).

The United States and the European Union (EU) have adopted new laws to counteract at least two of these underlying causes. First, some resource-rich countries suffer from endemic corruption, where the political elite view natural resource revenue as a personal bank account as opposed to a public good, enriching themselves by controlling resources and revenues, leaving their nations impoverished (Firger, 2010). Second, the governments of some resource-rich countries make political decisions to use the funds in a way that benefits

special interests rather than the economy as a whole (Sinnott, Nash, and de la Torre, 2010). In either case, transparency in the revenue stream from extractive industries is necessary to hold governments accountable if extractive revenues are to make it to a country's coffers in the first place, and then if they are to be used to benefit the country's people. These new laws were adopted primarily because of campaigning by member organizations from the Publish What You Pay (PWYP) global network. The international umbrella for the PWYP coalition was established in 2002 in the wake of a high profile scandal involving the oil giant BP, the state-owned oil company of Angola, Sonangol, and alleged embezzlement of Angolan state funds by the country's elite. Global Witness (1999) published a report based on their work in Angola that was the catalyst for early organizing by civil society organizations (e.g., those in the PWYP network) concerned with corruption and mismanagement of natural resources and resource revenues in developing countries (van Oranje and Parham, 2009).

Publish What You Pay's original campaign platform called for oil, gas, and mining companies to publish what they paid to governments. The coalition identified three means of achieving this goal, recommending changes to (i) national and international accounting standards, (ii) stock exchange disclosure rules, and (iii) conditions required by financial entities as a prerequisite for

financing or insuring oil, gas, and mining projects (van Oranje and Parham, 2009).

While PWYP's campaign advocated for mandatory reporting requirements as one prong of its three-pronged approach, then-UK Prime Minister Tony Blair announced the creation of an initiative to establish an international, voluntary reporting regime, the Extractive Industries Transparency Initiative (EITI), in September of 2002 at the World Summit on Sustainable Development in Johannesburg. Publish What You Pay engaged in the EITI process as the civil society arm of the multistakeholder group, and it continues to do so today. The coalition simultaneously advocated for binding regulations establishing mandatory reporting requirements for extractive companies, especially in the United States and Europe, where the majority of internationally operating oil, gas, and mining companies were registered on stock exchanges (van Oranje and Parham, 2009).

The new U.S. and EU laws developed simultaneously, with progress in each forum coming at different times but bringing advocates increasingly closer to their goals. The EU adopted nonbinding recommendations by its member states that encouraged disclosure of payments to governments by listed extractive companies as early as 2004 as part of the Transparency Obligations Directive (van Oranje and Parham, 2009). In 2006, London's Alternative Investment Market (AIM), part of the London Stock Exchange, introduced a voluntary measure encouraging extractive companies to

disclose payments greater than GBP 10,000 made to governments (van Oranje and Parham, 2009). Movement toward binding legislation for mandatory reporting in the EU slowed, however, until 2010, when the European Commission (EC, 2010) launched a public consultation on the wider issue of all multinational companies reporting their main financial indicators on a country-by-country basis. One of the questions in that consultation was whether there was a special need for country-by-country financial reporting by companies operating in the extractive industries. This led to the introduction in 2011 of proposed directives by the EC that would amend the existing Transparency Directive,¹ which covers companies listed on EU exchanges, and the Accounting Directive,² which applies to companies registered in the EU, to require

¹ The full title is Directive 2013/50/EU of the European Parliament and of the Council of 22 October 2013 amending Directive 2004/109/EC of the European Parliament and of the Council on the harmonisation of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market, Directive 2003/71/EC of the European Parliament and of the Council on the prospectus to be published when securities are offered to the public or admitted to trading and Commission Directive 2007/14/EC, laying down detailed rules for the implementation of certain provisions of Directive 2004/109/EC, 2013 O.J. (L 294/13).

² The full title is Directive 2013/34/EU of the European Parliament and of the Council on the annual financial statements, consolidated financial statements, and related reports of certain types of undertakings, 2013 O.J. (L 182/19).

listed and large extractive industries and logging companies to publicly disclose payments made to governments on a country-by-country basis. These proposed directives were adopted in June 2013, amending the Accounting Directive, and October 2013, amending the Transparency Directive, but they still must be implemented by each EU Member State.

Advocacy for mandatory reporting in the United States began later than similar efforts in Europe, as the organizing body of PWYP USA was not founded until September 2004 in Washington, DC. The first legislative expression of intent on the subject in the United States was advanced in 2006 in the bipartisan House Resolution 995 (H.R. 995, 109th Cong. [2006]). The Resolution called for the U.S. Government to require natural resource extraction companies to disclose natural resource revenue payments on a country-by-country basis, but it never moved beyond the early stage of consideration within a committee. The following congressional session saw the introduction in both the House and the Senate of the first bills requiring mandatory, country-by-country disclosure by U.S.-listed extractive companies of their payments to governments, known as the Extractive Industries Transparency Disclosure Act, H.R. 6066, 110th Cong. (2008) and S. 3389, 110th Cong. (2008), introduced in May and July of 2008. The Chairman of the House Financial Services Committee, Representative Barney Frank, introduced the House bill. The bills

failed to move beyond the committee stage and were terminated at the end of the congressional session of 2008. Nonetheless, several congressional hearings were held in 2007 and 2008 that raised awareness of the movement toward payment transparency in the extractive industries and that put evidence on the record that could be quoted and cited both in support of and against adoption of mandatory reporting requirements (PWYP, undated).

The June 2008 hearing on H.R. 6066 in the House, led by Chairman Frank, highlighted some of the major criticisms that are still leveled against Section 1504. Issues such as whether the disclosure act put U.S. companies at a competitive disadvantage, whether it undermined EITI, and whether the financial burden of the additional reporting regime outweighed any benefit that might be gained by investors from this level of transparency were raised and answered. A former vice president for Royal Dutch Shell, Alan Detheridge, and a former chairman of both the Investment Management Association of the United Kingdom and of F&C Asset Management plc, Robert Jenkins, made strong cases in favor of H.R. 6066 on grounds of corporate benefit and the importance of transparency for investors, while suggesting that competitiveness was not really an issue given the number and types of companies that would have to disclose under the proposed legislation. Detheridge testified that when oil companies and the Nigerian

government began publishing the revenue that federal, state, and local governments in Nigeria were receiving from oil production, it led to questioning of officials at the state and local level about what was being done with those revenues, and trials and prison sentences for corruption resulted. He also pointed out that it was disingenuous for extractive companies to complain about the cost of implementing and reporting under H.R. 6066 when the same companies had agreed to such reporting when they supported the EITI, which all major American and European oil companies had done.³ Jenkins focused on the impact of transparency on investors' abilities to judge risk and expected return, stating that, "action to curb corruption will bring real benefits to overall investment performance by stripping out inefficiency, reducing the risk of conflict, and improving the investment climate."⁴

The final, successful push for binding legislation in the United States came in September 2009 with Senators Benjamin Cardin and Richard Lugar's introduction of a legislative proposal entitled the Energy Security through Transparency Act, S. 1700,

111th Cong. (2009) before the EC launched its public consultation on country-by-country reporting. S. 1700 mandated not only country-level disclosure of payments to governments, but also a more granular project-level disclosure, and did so by adding a new section, Section 13(q), to the Securities and Exchange Act of 1934, which is codified in U.S. law as 15 U.S.C. 78(m). Not long thereafter, Chairman Frank introduced the bill that would become the Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Cong. (2010), an omnibus bill responsive to the 2008 financial crisis that reformed a wide range of U.S. financial regulations. Senators Cardin and Lugar offered their proposed bill on financial transparency in the extractive industries (S. 1700), a subject with which Chairman Frank was familiar given his introduction of a similar bill in 2008, as an amendment to the proposed Dodd-Frank Act. The members of Congress responsible for finalizing amendments to the proposed Dodd-Frank Act accepted the inclusion of the content of S. 1700 into the Dodd-Frank Act, designating it as Section 1504, and the Dodd-Frank Act, with that amendment and others, was signed into law on July 21, 2010. Despite that fact that this new transparency provision amended the Securities and Exchange Act and is codified in Section 13 of the Securities Exchange Act of 1934, it continues to be referred to in general discussion as Section 1504 of the Dodd-Frank

³ Statement by Alan Detheridge to the House Committee on Financial Services. *H.R. 6066, The Extractive Industries Disclosure Act*, Hearing, June 26, 2008.

⁴ Statement by Robert Jenkins to the House Committee on Financial Services. *H.R. 6066, The Extractive Industries Disclosure Act*, Hearing, June 26, 2008.

Act. Regardless of whether the provision is referred to as Section 1504 or as Section 13(g) of the Securities and Exchange Act of 1934, it did not become effective until the U.S. Securities and Exchange Commission (SEC) published implementing regulations.

LAWS IN PLACE, BUT SUPPORTING REGULATIONS STILL IN FLUX

As of the date of this publication, the European Union and the United States are tied in what has become the legislative equivalent of the Tour de France, with both jurisdictions undertaking the final leg of the race: implementation. The EU Directives must be transposed into the legal systems of each EU Member State before they become effective; this must be completed by July 20, 2015 (Williams and Litvinoff, 2013). It will then take the companies one to two years to publish their annual disclosure reports, depending on the company's financial year. Underscoring the UK's support for these new mandatory reporting requirements, British Prime Minister David Cameron pledged at the 2013 Open Government Partnership Summit that the UK would implement the Directives by the end of 2014, well ahead of the implementation deadline. France, Germany, and Italy have also committed to early implementation of the Accounting Directive (Cameron, 2013; PwC, 2013).

The U.S. law briefly came into effect in September 2012 after the SEC published the implementing regulations, but a partially successful legal challenge by powerful industry trade associations, such as the American Petroleum Institute and the U.S. Chamber of Commerce, resulted in a suspension of that implementation in June 2013 pending the SEC's revision of the regulations.

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This meant that the SEC clearly indicated the extent of the reporting it meant to require of extractive companies, but it also signified that a U.S. court order could require adjustments to that reporting standard. The court did not review some of the legal challenges, and the SEC may make adjustments to the standards it previously drafted and published based on those legal challenges. It is difficult to predict what information will have to be publicly reported under Section 1504. This chapter describes the reporting requirements the SEC intended to implement based on regulations it initially released, and notes where legal challenges to those standards exist and where they are in flux.

Each EU Member State is required to use the Directives as a minimum standard for implementation. They may, however, augment, supplement, or provide a specific interpretation of parts of the Directives in the implementation process, but they may not weaken it. The details of how the EU Directives will be applied are therefore not entirely certain. This chapter reflects the terms of the EU Directives, assuming no changes will be made in the implementation process.

Because the implementation and interpretation process is not complete for either law, little research has been conducted or published about their potential impact on specific countries, regions, or companies. Based on the lack of critical analysis, and the

uncertainty of any legislative changes that may occur, this chapter should only be read as a forecast of the expectation for the new laws in the LAC region, and not as a definitive analysis with categorical conclusions.

OVERVIEW OF NATURAL RESOURCE EXTRACTION IN THE LAC REGION

Many LAC economies are heavily dependent upon natural resource revenues. Seven LAC countries make up approximately 85 percent of regional GDP, six of which have a substantial commodity revenue share, including Argentina, which has agricultural export commodities; Chile, which has copper; Colombia, oil; Mexico, hydrocarbons; Peru, mining; and Venezuela, hydrocarbons. Sinnott, Nash, and de la Torre (2010) note that in addition to the LAC-7 countries, some smaller economies in the region are highly dependent on commodity revenues, particularly hydrocarbon producers such as Bolivia, with natural gas; Ecuador, with petroleum; and Trinidad and Tobago, with hydrocarbons.

The region exported 11.8 percent of the world's minerals between 2000 and 2009. South America has the second largest oil reserves of any region, with 20 percent of the world's total. Gas reserves have declined over recent years, however, to approximately 3 percent of global reserves (ECLAC, 2013).

Commodities such as oil and minerals already account for a high percentage of LAC exports. Government revenues from those natural resources account for a significant percentage of national revenues in several countries. Despite the problems associated with the resource curse, many LAC budgets are disproportionately dependent upon natural resource revenues. The LAC region needs a continued, consistent, or increased extractive output and a stable or increasing market for that output, until its economies can more fully diversify, which may take years. With respect to hydrocarbons, the Economic Commission for Latin America and the Caribbean (ECLAC) is concerned that countries in the Union of South American Nations (UNASUR) must increase exploration and production to improve their reserve positions. In the mineral sector, however, ECLAC found that a rise in exploration activities has created an increase in proven reserves. Four LAC countries were among the top 10 destinations for mining investments in 2011: Brazil, Chile, Mexico, and Peru (ECLAC, 2013).

A report by the United Nations Conference on Trade and Development (UNCTAD, 2013) highlights the increasingly dominant roles that foreign companies play in mineral-rich LAC countries apart from Brazil. For example, foreign firms accounted for at least 75 percent of all mining investments in Peru in 2011–2012,

and 62 percent of all large-scale gold and copper mining in Chile in 2012. UNCTAD (2013) found that investment in extractive industries in LAC countries as a share of foreign direct investment (FDI) was on the rise, from 26 percent in 2002 to 53 percent of total FDI flows between 2003 and 2011. Only Argentina's extractive industry share of its total FDI decreased between 2005 and 2012.

The United States is a major destination for LAC commodities, but the U.S. share decreased from 44 percent in 1990 to 37 percent in 2008. At the same time, China's share of LAC commodity exports increased from 0.8 percent to 10 percent (Sinnott, Nash, and de la Torre, 2010). China's reliance on minerals from the region is significant, with Peru being one of China's top suppliers of lead, copper, and zinc; Chile serving as China's top supplier of copper and molybdenum; and Brazil being China's second largest supplier of iron (Kotschwar, Moran, and Muir, 2012). China's demand for natural resources is expected to continue to increase, and therefore Chinese investment in LAC countries will likely do the same if some of the challenges associated with doing business with Chinese companies and cultural dissonance can be overcome (Bethel, 2011).

With this clear increase in FDI targeted toward natural resources in the LAC region, how foreign companies operate and how effectively their investments benefit LAC

governments and people are likely to be of increasing interest to the communities impacted by resource extraction projects. It will therefore be important to understand which of these foreign companies will have to report their payments under the new U.S. and EU laws.

Over the past several years, civil society has been increasingly focused on financial transparency at the corporate level and by national and regional governments, the effects of speculative trading, and the negative implications of trade liberalization. Activism on these more global financial issues by LAC civil society organizations has also been growing, and has been drawing links between on-the-ground operations of extractive companies, their impact on local and regional communities, and the opacity of extractive companies' financial structures and operations. In its recent report, the Red Latinoamericana sobre Deuda, Desarrollo y Derechos (LATINDADD, 2013)—the Latin American network on debt, development, and rights—tied the concepts of social uprising at mining sites with prior consultation, access to information, and the new EU and U.S. extractive industries disclosure laws. While the network supports the new disclosure initiatives, the report points out that the initiatives are only one part of addressing the issues of resource and fiscal management and inclusive governance in LAC countries.

PAYMENT TRANSPARENCY LAWS IN THE UNITED STATES AND THE EUROPEAN UNION

Beyond the new U.S. and EU laws there may be many other measures that could positively impact resource and fiscal management in LAC countries, but to understand their potential impact, one must understand what information the laws will require companies to disclose and which companies the laws will require to make those disclosures. Both sets of laws are not fully implemented. In the United States it is possible that the SEC's rewriting of the regulations it originally published in 2012 will result in substantive changes to the regulations. In the EU, each member state must transpose the EU Directives into their national legal system, a process that takes the basic provisions in the Directives and allows the member states to supplement them, adopt national implementing laws that may define undefined terms, or strengthen the baseline provisions set out in the Directives.

The descriptions of the laws and their applications presented in this chapter are based on the greatest amount of information currently available. In the United States, that is Dodd-Frank Section 1504 and the SEC's now-vacated implementing regulations published in August 2012. In the EU, that means the Transparency and Accounting Directives as adopted by the EU

prior to member state implementation. The laws are not settled, and thus little has been written about their application in practice. It is with this caveat that this chapter delves into the details of the world's newest, and most far-reaching transparency laws focusing on the extractive industries.

Beyond the new U.S. and EU laws there may be many measures that could positively impact resource and fiscal management in LAC countries, but in order to understand their potential impact one must first understand what information those laws will require companies to disclose and which companies the law will require to make those disclosures.

The new U.S. and EU transparency laws were enacted to generate information about payments made to governments by companies active in the extractive and logging industries. These laws require disclosure of payments made to almost any government, including the U.S. and EU member state governments. Neither provides an exception to the reporting requirement where the government in which a company is operating, or in which a contract a company has signed, prohibits publication of the subject information. Table 5.1 summarizes and compares the main elements of the U.S. and EU laws.

Information that Companies Will be Required to Disclose

Under U.S. law, payments that must be disclosed are those that are made to further the commercial development of oil, natural gas, or minerals, that are not *de minimis*, and that include taxes, royalties, fees, including license fees, production entitlements, bonuses, and other material benefits that the SEC determines are part of the commonly recognized revenue stream for the commercial development of oil, natural gas, or minerals (15 U.S.C. 78m(q)(1)(C)).

The SEC's regulations fill in the details of Section 1504's mandate. *De minimis* signifies a dollar amount, with the regulations requiring disclosure where a single payment or series of related payments are equal or exceed \$US100,000 during the fiscal year. Payments to governments below that amount, or not totaling that amount within a fiscal year, need not be disclosed (Disclosure, 2012).⁵

In the implementing regulations, the SEC stayed close to the list of the types of payments that Section 1504 required. It added dividends and payments for infrastructure improvements to the list of payments that furthered the commercial development of oil, natural gas, or minerals, and that should be disclosed. The SEC's

⁵ The full title of this disclosure is "Disclosure of Payments by Resource Extraction Issuers, Exchange Act Release No. 34-67717, File No. S7-42-10," available at <http://www.sec.gov/rules/final/2012/34-67717.pdf>.

Table 5.1
Major Provisions of the Dodd-Frank Section 1504 and the EU Accounting and Transparency Directives

	Dodd-Frank Section 1504 and SEC Implementing Regulations ^a	EU Accounting and Transparency Directive ^b
Applies to oil and gas extracting companies	✓	✓
Applies to mineral extracting companies	✓	✓
Applies to logging companies		✓
Applies to publicly traded companies	✓	✓
Applies to private companies		✓ (Above a certain size)
Applies to state-owned entities	✓	✓
Payment amount disclosure threshold	✓ (US\$100,000)	✓ (€100,000)
Payments to subnational governments	✓ (Only of foreign governments)	✓
Requires country-level reporting	✓	✓
Requires project-level reporting	✓	✓
Requires reporting of payments for:		
• Taxes	✓	✓
• Royalties	✓	✓
• Production entitlements	✓	✓
• Fees	✓	✓
• Bonuses	✓	✓
• Dividends	✓	✓
• Infrastructure improvements	✓	✓

Source: Author's elaboration.

^a As described in vacated SEC regulations, new regulations yet to be issued.

^b Subject to transposition by EU Member States.

Final Rule defined these additional payment types through descriptive examples. In this case, “dividends” did not mean dividends that a company may pay to a government on the same terms that it pays its other shareholders, rather the SEC was referring to those that may be paid to a government “in lieu of production entitlements or royalties.” The distinction between ordinary dividends and these dividends in lieu of production entitlements or royalties, the SEC reasoned, is that the former are not part of the commonly recognized revenue stream identified in Section 1504 (Disclosure, 2012).

The SEC was more explicit about the meaning of payments for infrastructure improvements, after a debate raged between transparency advocates and extractive companies as to whether social payments, such as payments to a subnational government or community to build a hospital or a school, should be included in the required disclosures. The SEC determined that social payments such as these, whether made in cash or in kind, should not have to be disclosed because they are not part of the commonly recognized revenue stream—a consistent application of Section 1504’s plain meaning. Payments for infrastructure such as roads, bridges, and other projects, however, that may benefit the community but are primarily created to further the commercial development of oil, gas, and minerals, must be disclosed. This distinction is consistent with the EITI requirements, under which companies are encouraged to disclose the types of social payments

described above, but are only required to disclose payments related to necessary infrastructure developments (Disclosure, 2012). The SEC was clear that in kind payments—that is, payments made in goods rather than a transfer of currency, such as a percentage of the raw commodities being produced from extractive activities, the building of a bridge, and others—must also be disclosed. A company has to arrive at a monetary value for the in kind payment, based on its cost or, if cost is not determinable, at fair market value, and include it as a payment in the company’s annual disclosure if it has a value of US\$100,000 or more (Disclosure, 2012).

The SEC expounded on the types of fees, bonuses, and taxes that a company must include in its disclosure. License, rental, entry, and other fees paid for concessions must be included, as is true of accounting for signature bonuses, discovery, and production bonuses. The SEC determined that none of these fees or bonuses presents an exhaustive list. A company must determine if other payments it has made should be considered a fee or bonus within the meaning of Section 1504 and the regulations. All taxes levied on income, production, or profits must be disclosed. Disclosure is not required for consumption taxes such as value-added taxes, personal taxes, or sales taxes (Disclosure, 2012).

The categories of payments that must be disclosed in the EU mirror the requirements imposed in the United States, down to the level of detail provided above (EU

Directives). The SEC commented that the standards adopted in the United States were in line with the EITI minimum disclosure requirements (Disclosure, 2012).

To the extent that companies reporting to the SEC determine that what is meant by “project” under U.S. law differs from the European definition, two forms of reporting may emerge and it could be more difficult to analyze the data produced from the reports.

One potentially significant difference, however, may be the way in which the information is presented. Section 1504 and the EU Directives both require companies to provide the information broken down by payment type and reported on by country and project level. The SEC chose not to define the term “project.” This was an issue of great debate among those who provided comments to the SEC during the rulemaking process. The EU Directives do define the term, as “the operational activities that are governed by a single contract, license, lease, concession or similar legal agreements and form the basis for payment liabilities with a government.” Where multiple agreements are “substantially interconnected,” they will be considered a single project. The EU considers agreements to be substantially interconnected when they refer to “a set of operationally and geographically integrated

contracts, licenses, leases, or concessions, or related agreements with substantially similar terms that are signed with the government,” and “give rise to payment liabilities;” (Williams and Litvinoff, 2013: 4). To the extent that companies reporting to the SEC determine that what is meant by “project” under U.S. law differs from the European definition, two forms of reporting may emerge. This could create difficulties in analyzing data produced from the reports.

Many extractive companies went on record with their concerns about Section 1504 during the public comment periods that were held to inform the SEC’s drafting of Section 1504’s implementing regulations. Most companies that submitted comments noted their support for EITI, but drew the line at the type of public disclosures mandated by U.S. and EU laws. For the most part, they believed that the granularity of the public reporting required under the new laws would expose commercially sensitive information and make it more difficult for them to operate competitively. Their main objections were to the requirements to provide project-level reporting, and to break down their payment information by payment type as opposed to providing it in aggregated form. Extractive companies also indicated that the definition of what constitutes a project for reporting purposes would be difficult to determine. Finally, they showed significant interest in the possibility that a country’s laws, or the contracts already in place with a foreign government, might prohibit the type of disclosures

mandated by Section 1504 (ten Brink, 2011; Mulva, 2011; Foehr, 2011; Mathews, 2011; Isakower and Mulva, 2011). The SEC made a few adjustments to the published drafts of its implementing regulations to account for these industry concerns, arguing that such disclosures were mandated by the statute and were not within the SEC's power to alter (Disclosure, 2012).

These business and compliance-driven arguments for adjustment to the laws and implementing regulations, and the lawsuit brought by the American Petroleum Institute and others, challenged the constitutionality of Section 1504 as a whole, and the SEC's interpretation of the statute upon which it premised its decisions to draft rules that failed to adjust for industry concerns. These legal arguments are still live issues. How they are addressed—whether by the SEC or the judicial system—will have significant implications for the type of information available to the public under Section 1504. The following issues are still open for judicial consideration (Gerber, 2013) and could have an effect on Section 1504 and/or the SEC's implementing regulations. These legal challenges include:

1. Whether the regulations will cause significant monetary loss to affected companies as a result of lost business opportunities and disclosure of trade secret information, which derives from the question of whether the companies' concerns should have been reflected in the regulations;
2. Whether the regulations violated the reporting companies' rights to free speech in that they forced the companies to provide information they did not wish to provide, which could lead to nullification of Section 1504;
3. Whether the statute forces the affected companies to violate their contractual and legal commitments by disclosing information contractually prohibited from being disclosed or prohibited under the local laws of the foreign governments with whom they were interacting, which would result in certain exceptions to the reporting requirements being added to the regulations; and
4. Whether the SEC's adoption of the regulations was in violation of the U.S. Administrative Procedure Act in that it:
 - Failed to allow public companies to submit the detailed payment information confidentially, as they argued the statute permitted, which could undermine some of the public disclosure objectives of the statute;
 - Failed to adequately define the term "project", which was the basis on which payments were to be reported, which could result in the addition of a definition;
 - Provided no exemption to companies in cases where foreign law prohibits disclosure; and
 - Did not include an adequate cost-benefit evaluation, a required part of U.S. rulemaking, and, until completed adequately, the regulations may not be implemented.

Mining companies and their association representatives did not object to the adoption of Section 1504 and the EU Directives as vociferously as their oil and gas counterparts. This perception was confirmed when the main trade association for the U.S. mining industry, the National Mining Association, did not join the American Petroleum Institute (API) in its legal challenge to Section 1504. More recently, the Mining Association of Canada and the Prospectors and Developers Association of Canada have joined with PWYP Canada and drafted a model law based on Section 1504 and the EU Directives. They have recommended that it be adopted by each of the Canadian provincial governments for swift implementation. Although Canadian oil and gas companies were invited to join the working group to draft the Canadian laws, they declined.

While it appears that oil and gas companies are committed to opposing these transparency initiatives, with a few notable exceptions,⁶ mining companies have been progressively more supportive of the reporting requirements. Paul Bugala,

⁶ Although a member of the American Petroleum Institute, Norwegian oil and gas company Statoil publicly disassociated itself from the lawsuit against Section 1504 in February of 2013 (DiPietro and Rubenfeld, 2013). Tullow Oil, an oil and gas company operating in Africa, voluntarily began reporting payments to governments at the project and country levels in line with the European Directives in March of 2014, well before the European Directives, to which Tullow will be subject, were transposed into national laws and became effective (Burgis, 2014).

Senior Sustainability Analyst for Extractive Industries at Calvert Investments, identifies a few possible reasons for this difference in approach. First, mining companies have relatively fewer projects than oil and gas companies, so that their joint ventures and other arrangements tend to be less complicated. Compliance with transparency initiatives is thus easier for the mining industry. Second, API is a more powerful lobby, and “API has made deep inroads into the right policy circles and weaves its messages into what are perceived as broader U.S. economic and political interests to great effect,” suggesting that API may be more confident that its lobbying efforts will be fruitful. Bugala also posits “the largest diversified mining companies are based in Europe and Australia where the policy environment is more dynamic, and it may be in the industry’s interest to cooperate more often.”⁷

This latter view is echoed by Amir Shafaie, Legal Analyst at the Natural Resource Governance Institute (NRGI) (formerly the Revenue Watch Institute, or RWI). Shafaie believes that “part of the issue may be that mining companies have more experience with the social issues, and associated criticism and pressure that their work raises in host countries. This may be just a product of the different nature of the work, with mining more likely to be close to communities, and have potentially devastating impacts on local communities and the

⁷ Information quoted from Paul Bugala is based on in-person communication on March 20, 2014.

environment, whereas at least a significant portion of oil operations are offshore or in sparsely populated areas.” He believes that mining companies have had to communicate more with local communities and officials, and be more transparent with them as a result.⁸ Claire Woodside, Director of PWYP-Canada, has found that while the oil and gas sector has not been involved in drafting the model disclosure laws in Canada the way that the mining associations have, their involvement in the issue has changed over time in response to competing pressures from their Canadian-based membership and their multinational members, who have had a more active role in initiating the API-led litigation in the United States. But even that fissure may be closing, she observes, as “more recently [the oil and gas companies] have demonstrated a willingness and interest in engaging with Canadian CSOs on mandatory payment reporting and expressed overarching support for the issue.”⁹

What Constitutes a Government?

Both the EU and U.S. laws require disclosure of payments made to governments. Section 1504 refers to payments made to “any foreign government or the Federal Government,” and further defines the term “foreign government” as “a department, agency, or instrumentality of a foreign government, or a

⁸ Information quoted from Amir Shafaie is based on in-person communication on March 19, 2014.

⁹ Information quoted from Claire Woodside is based on in-person communication on March 21, 2014.

company owned by a foreign government, as determined by the SEC,” (Dodd-Frank, 2010). In the United States, this definition excludes disclosure of payments made to a state or other U.S. subnational government. With respect to foreign governments, the SEC was definite that any payment made to a subnational foreign government or a company in which a government owns a majority share should be disclosed, which has significant reporting implications for companies in joint ventures or other contractual arrangements with state-owned companies. This also includes companies in which the state may not have a majority share, but demonstrates control by other means. According to a client brief by Baker & McKenzie (2012: 4), “a 50-50 joint venture may not be considered to be a foreign government entity unless the government has a golden share or other tie-breaking vote or is entitled to a special dividend disproportionate to its common equity ownership.”

Companies Required to Disclose Payments to Governments

A wide variety of companies will have to disclose payment data as a result of the new extractive industries transparency laws. Under U.S. law and regulations, companies that “engage in the commercial development of oil, natural gas, or minerals,” known as “resource extraction issuers,” that file an annual report with the SEC must make the required disclosures (Disclosure, 2012). These annual reports will include

the 10-K, filed by all U.S. companies listed on U.S. stock exchanges; the 20-F, filed by foreign companies that have equity offerings on U.S. exchanges; and the 40-F, filed by Canadian companies offering equities in U.S. markets. State-owned enterprises required to report to the SEC must make the disclosures as well, and there are no modifications in the law for small or medium-sized enterprises. The law is applied evenly to all companies that are required to file annual reports with the SEC.

According to the SEC, approximately 1,101 companies will be covered by the new U.S. reporting requirement.

The U.S. statute digs deeper into a company's payments, however, by also requiring that the reporting entity disclose payments made by a subsidiary or other company within its control if that company makes payments to governments to further the commercial development of oil, natural gas, or minerals (Disclosure, 2012). Whether a company is within the reporting company's control is a factual determination made on a facts and circumstances review, as mandated by the Exchange Act (Baker & McKenzie, 2012). According to the SEC, the new U.S. reporting requirement (Walter, 2012) will cover approximately 1,101 companies.

The EU has taken an even broader view of both the industries and types of companies to be covered under its Directives.

The EU includes, in addition to oil, gas, and mining companies, companies involved in logging of primary forests. Taken together, the EU Directives require payment disclosures by (a) all large oil, gas, mining, and logging companies registered in the European Economic Area (EEA), whether privately or publicly held, and (b) all oil, gas, mining, and logging companies listed on an EU-regulated stock market. According to the Accounting Directive, a large company is one that exceeds at least two of the following three criteria: (i) it has a balance sheet total of €20 million, (ii) a net turnover of €40 million, and/or (iii) an average of 250 or more employees per year. EU-regulated stock markets include all major EU markets such as the London Stock Exchange's Main Market, Deutsche Börse Frankfurt, and Euronext Paris. The European Directives also require companies to report information about payments by their subsidiaries where: such subsidiaries are included in their consolidated financial statements, are active in the extractive or logging industries, and are defined as large, or where any member of the group is EU listed (Williams and Litvinoff, 2013).

Under EU law, directives must be transposed into the laws of each EU Member State, and, in this case, the non-EU European Economic Area (EEA) states of Iceland, Liechtenstein, and Norway. That transposition provides an opening for differences to arise in the legal requirements emanating from country to country. For example, the form and manner in which disclosure

is made is up to the member states. The Directives, however, are clear that disclosure must be by means of an annual report of some sort and that further work must establish a common data standard for such reporting. The Directives are considered the absolute minimum standards that an EU Member State must incorporate into its laws, although a Member State may strengthen the requirements in its transposition.

Looking at how the rules work in practice, consider Royal Dutch Shell plc, a firm incorporated in England and Wales. Royal Dutch Shell will have to make payment disclosures under the EU Directives because it is listed on London's Main Market and on Euronext Amsterdam. Had it not been, it would qualify as a large extractive industries company registered in the EU/EEA. It may or may not have to make disclosures in the EU for its financing arm, Shell International Finance, depending on whether or not that entity is considered active in the extractive industries or logging. Royal Dutch Shell will have to consider that question based on a factual analysis of the finance company's activities.

Royal Dutch Shell also files a form 20-F annual report with the SEC because it has listed American depository receipts on the New York Stock Exchange and must also comply with the reporting obligations under Dodd-Frank Section 1504. Its subsidiary, Shell International Finance, files a form 20-F with the SEC and will be required to make payment disclosures to the SEC if it engages in the commercial development of oil, natural gas, or minerals.

Although not entirely without error, the SEC's EDGAR database¹⁰ and the European Securities Market Association's (ESMA) MiFID database of shares that were admitted to trading on EU-regulated markets¹¹ are a good place to begin to determine if a company is a public company and whether it meets the criteria for required reporting. It is a good idea to research general information about the subject company, because it may reveal that the subject company is a subsidiary of a company that is public and meets the criteria for required reporting, so that the company that was the subject of research would be required to report as well.

Reporting Here, There, and Everywhere

This dual reporting requirement may seem burdensome, but the EU, as the second jurisdiction to adopt mandatory disclosure laws, has made an effort to address this concern. The Directives include a provision stating that if another country has disclosure laws equivalent to the EU's disclosure laws, and a company is required to make disclosures under both legal regimes, then the disclosure report prepared for the other country may be used to satisfy EU reporting requirements. What is not known, however,

¹⁰ Available at <http://www.sec.gov/edgar/searchedgar/companysearch.html>

¹¹ Available at http://mifiddatabase.esma.europa.eu/Index.aspx?sectionlinks_id=14&language=0&pageName=MifIDLiquidSearch

is whether any other country has equivalent disclosure laws. The United States is the only candidate at this time, although the Canadian provinces may not be too far behind. The EC has been charged with leading the drafting of criteria to assess equivalence, and, after those criteria have been established, the EC will have the power to determine which disclosure regimes are equivalent to those of the EU. Whatever criteria the EC develops, however, it is likely that they will consider Section 1504 to be the equivalent of the EU laws given the substantive similarities between them.

The Directives include a provision stating that if another country has disclosure laws equivalent to the EU's disclosure laws, and a company is required to make disclosures under both legal regimes, then the disclosure report prepared for the other country may be used to satisfy the EU reporting requirements.

Confidentiality and Mandatory Disclosure Regimes

Neither the U.S. nor EU mandatory disclosure regimes allow for situations in which either the country where an extractive company is operating prohibits disclosure of payments made to the government, or where the contracts between parties to the transaction, including the government,

require confidentiality. The reasons why no exceptions have been made have also been discussed.

Issues surrounding confidentiality were major obstacles in the implementation of the EITI in Trinidad and Tobago, where the confidentiality issues were whether the Trinidadian tax authority could make their receipt of information publicly available to reconcile the information with that reported by the companies, as the EITI process requires. Conversely, there was no Trinidadian law in place preventing companies from disclosing the payments that they made to the government. While information relating to payments made by extractive industry companies to governments is only one type of transparency necessary to gain a holistic picture of extractive industry operations, it is the only type of transparency that the U.S. and EU laws require. As a result, companies operating in Trinidad and Tobago required to disclose payments under the U.S. and EU laws should not have to be in violation of Trinidadian law in doing so.

The confidentiality clauses in extractive industry production contracts were also raised as a barrier to EITI implementation by Trinidad and Tobago, which found that such clauses contained exceptions to the confidentiality provision regarding information disclosure. Each country implementing the EITI, such as Trinidad and Tobago, would have to find a way to ensure that EITI disclosures were in fact disclosed by the regulators. According to the U.S. and EU laws, however, the information must

be disclosed regardless of which country a covered extractive company is operating in. The mandatory disclosure laws may make it easier, politically, to ensure that a country's EITI disclosure rules are seen as superseding confidentiality clauses in contracts.

Reporting Requirements for Projects in the LAC Region

There are a large number of active companies in the extractive and logging industries in the LAC region, some of which will be required to disclose payments they make to LAC governments and to state-owned entities, which are included within the scope of the term "government" in both the EU and U.S. legislation. That means that some state-owned entities will have to report their payments to governments and to other state-owned entities, while private enterprises will be reporting the payments they make to the same state-owned entities. Ecopetrol in Colombia and Petrobras in Brazil will fall into both categories. Both companies file a form 20-F with the SEC, and will therefore be required to file an additional annual report with the SEC with respect to their payments to governments. At the same time, other companies that are engaged in joint ventures or other contractual arrangements with Ecopetrol or Petrobras will be disclosing their payments to these state-owned entities.

Many of the larger mineral and hydrocarbon projects in LAC countries will have at least one partner company required to

report its payments to governments. For example, the 2013 United States Geological Survey (USGS) for Peru (using 2011 data) states that:

The major mining companies active in Peru were, in terms of amount invested in new mine projects, Newmont Mining Corp. of the United States in partnership with Compañía Minera de Minas Buenaventura S.A.A.; Freeport-McMoran Copper and Gold Inc. of the United States in partnership with Sociedad Minera Cerro Verde S.A.A. and Compañía Minera de Minas Buenaventura S.A.A.; Anglo American Quellaveco S.A. (a subsidiary of Anglo American plc. of the United Kingdom); Southern Peru Copper Corp. (a subsidiary of Grupo Mexico, S.A. de C.V.); and HudBay Minerals Inc. of Canada, among others (USGS, 2013a).

Of those companies, Newmont Mining Corp., Freeport-McMoran Copper and Gold, Inc., Southern Peru Copper Corp., and HudBay Minerals Inc. all file annual reports with the SEC (see Table 5.2), and will be required to report their subsidiaries' payments to the Peruvian government, Peruvian sub-national government entities, and Peruvian state-owned entities, along with any payments they make to any other government should that become relevant. Anglo-American plc is EU-listed, and it will have to report under the EU regime.

Table 5.2**Disclosure Status of Major Mining Companies Operating in Peru**

Company	Report in the United States?	Report in the EU?
Newmont Mining Corp.	Yes	No
Freeport-McMoran Copper and Gold, Inc.	Yes	No
Southern Copper Corp (fka Southern Peru Copper Corp.)	Yes	No
HudBay Minerals, Inc.	Yes	No
Anglo American, plc	No	Yes

Source: Author's elaboration.

For an example in the Caribbean, according to BP, its subsidiary BP Trinidad and Tobago is the largest producer of hydrocarbons in the country, accounting for more than half of the country's total hydrocarbon production (BP, 2013). They are partners in the joint venture Atlantic LNG Company of Trinidad and Tobago Train 1 with BG Trinidad and Tobago Ltd., Repsol YPF, S.A., Tractobel Trinidad LNG Corp.,¹² and the National Gas Company of Trinidad and Tobago (USGS, 2013b). BP plc files a form 20-F with the SEC and

¹² Atlantic LNG, on their website, states that its five partners are BP, BG, and Repsol, and Summer Soca LNG Liquefaction S.A., a subsidiary of the China Investment Corporation, as well as the National Gas Company of Trinidad and Tobago (see <http://www.atlanticlng.com/our-business>). Neither Summer Soca nor the China Investment Corp. file annual reports with the SEC or are listed on the Euronext exchanges.

will have to report under Section 1504 its payments to governments by its relevant subsidiaries, which will include BP Trinidad and Tobago. BP plc, Repsol, S.A. (formerly Repsol YPF, S.A.), and BG Trinidad and Tobago, a subsidiary of BG Group plc, will have to report under the EU laws because they or their parent companies are listed on EU-regulated exchanges (see Table 5.3). They will be reporting the payments they make to the Trinidadian government and payments they make to their state-owned partner, the National Gas Company of Trinidad and Tobago.

While U.S. and European extractive companies have operated in LAC countries for a long time, Chinese companies are increasingly investing in the region in recent years. China has a burgeoning economy and comparatively few natural resources to support its growth. It must garner those natural resources abroad, and the LAC region has

Table 5.3**Disclosure Status of Companies Part of Atlantic LNG Company of Trinidad and Tobago Train 1**

Company	Report in the United States?	Report in the EU?
BP Trinidad and Tobago (as a subsidiary of BP plc)	Yes	Yes
BG Trinidad and Tobago Ltd. (as a subsidiary of BG Group plc)	No	Yes
Repsol YPF, S.A. (now Repsol S.A.)	No	Yes
Tractobel Trinidad LNG Corp.	No	No
National Gas Company of Trinidad and Tobago (state owned)	No	No

Source: Author's elaboration.

become a prime target for that investment. Through both “loan for oil” arrangements in Ecuador and Brazil, and more traditional equity/joint venture arrangements elsewhere, China was identified in 2011 as the region’s third largest investor (Bethel, 2011). One might assume that China’s increasing presence in the region would undermine transparency efforts, but that may not be the case. Some of the major Chinese overseas operators will be required to publicly disclose their payments to governments to the SEC under Section 1504. The China National Petroleum Company (CNPC) and CNPC Exploration and Development Company are subsidiaries of Petrochina Company Ltd., a company required to file annual reports with the SEC. Likewise, the Chinese National Offshore Oil Company Ltd. (CNOOC) and China Petroleum & Chemical Corporation (Sinopec) are also required to report under Section 1504 (Munilla, undated). None of

these Chinese entities are currently listed on EU exchanges, however, and therefore they are not required to report under the EU laws.

IMPLICATIONS FOR RESOURCE GOVERNANCE AND POVERTY ALLEVIATION IN THE LAC REGION

Disclosure of information pursuant to the EITI, Section 1504, or the EU Directives will not solve the resource curse in the LAC region on its own, but it will be a crucial component of any plan to do so. Many scholars have identified the need for an integrated approach to combating the resource curse that adds measures alongside increased transparency of production and revenue information, such as political inclusiveness, breaking down informational and

decision-making silos within governments that prevent the creation of cohesive extractive industries revenue policy, and encouragement of a free press (Barma et al., 2012; Kolstad and Wiig, 2009; Mejía Acosta, 2010). As Barma et al. (2012: 218) note, “The stark political reality is that resource rents in developing economies are most often generated and distributed in the context of highly imbalanced and noninclusive power structures that privilege short-term private enrichment over longer-term collective welfare enhancement.” Disclosure of the payments made by extractive companies to LAC governments will not rebalance imbalanced power structures or focus the minds of decision makers on long-term, collective welfare enhancement, but it is one powerful tool for those who seek to improve these conditions—to readjust perspectives of how the benefits of extractive resources are distributed. In reality, it will be impossible to overcome the resource curse without political will, but information fuels the public demand for increased political will.

The disclosure of information pursuant to the EITI, Section 1504, or the EU Directives will not solve the resource curse in Latin America and the Caribbean on its own, but it will be a crucial component of any plan to do so.

All societies can benefit from greater degrees of transparency, including countries seen as generally open and transparent already, such as the United States and the United Kingdom (Stiglitz, 2003). The NRGi’s Resource Governance Index (RGI) measures the quality of governance in the oil, gas, and mining sectors of 58 resource-rich countries. In 2013, all nine of the LAC countries included ranked in the top half; six achieved “satisfactory” ratings (Brazil, Mexico, Chile, Colombia, Peru, and Trinidad and Tobago), while three achieved “partial,” one level below satisfactory (Bolivia, Ecuador, and Venezuela) (see Table 5.4). The results show that the LAC countries do not have the most open governments in the resource-rich world, but they do not have the least open either. The component where seven of the nine countries reviewed consistently fell short was in what the NRGi has termed the “Enabling Environment” (see Table 5.4). Suboptimal results in this component reflect higher levels of corruption, limitations on effective governance, budget opacity, and lack of democratic institutions and/or rule of law. While only Ecuador and Venezuela were considered “failing” with respect to the reporting of information, five of the nine countries scored less than satisfactory in the component of Safeguards and Quality Controls, meaning that while they may be reporting information, they are not adequately ensuring that the information is accurate, that conflicts of interest are avoided, and/or that discretionary powers are limited (RWI, 2013).

Table 5.4**Rankings and Scores of LAC Countries in the 2013 RGI**

Country	Composite ranking (of 58)	Composite score (of 100)	Composite performance range ^a	Enabling Environment score (of 100)	Enabling Environment performance range ^b
Brazil	5	80	Satisfactory	66	Partial
Mexico	6	77	Satisfactory	53	Partial
Chile	8	75	Satisfactory	87	Satisfactory
Colombia	9	74	Satisfactory	58	Partial
Trinidad and Tobago	10	74	Satisfactory	52	Partial
Peru	11	73	Satisfactory	55	Partial
Ecuador	18	58	Partial	28	Failing
Venezuela	20	56	Partial	18	Failing
Bolivia	24	53	Partial	32	Failing

Source: Author's elaboration based on data contained in RWI (2013).

^a Countries in the RGI are sorted into four performance ranges on a composite basis and for each individual category: satisfactory, partial, weak, and failing.

^b Guyana was not included in the RGI analysis.

On the whole, these results are positive. Relatively higher scores in the RGI suggest that there is still at least some political will to overcome the resource curse, and the LAC governments may be more willing to embrace the opportunities that the disclosure of information from the new regimes presents. What are those opportunities?

The value of transparency and the information disclosed is less about the disclosure itself and more about what is done

with the information disclosed. As stated by Daniel Firger (2010: 1077) in his critique of the legislation underlying Section 1504, "the strength of disclosure-based regulations (...) depends on properly incentivized stakeholders who can make use of disclosed information to police misconduct." The value and use of this information for the stakeholders in LAC countries: the governments, the companies, and the citizens must be considered.

IMPLICATIONS FOR GOVERNMENTS

Although Section 1504 was drafted as an amendment to the U.S. Securities Exchange Act, identifying its central purpose as providing material information to investors, it is commonly understood that the primary intent of the legislation was to root out corruption and deter it in the future by creating a mechanism for revenue accountability. The premise of the European Directives is much the same. Whether a government uses the information in a manner that helps root out corruption depends on how entrenched corruption is within the government departments responsible for receiving funds identified in the public disclosures and at what level within the government that corruption exists. If a government wants to ensure accountability for extractive industry revenues, then Section 1504 and the EU Directives will provide some of the information necessary to do so. If they do not want to ensure accountability, their use of the information will be limited.

If a government wants to ensure accountability for extractive industry revenues, then Section 1504 and the EU Directives will provide some of the information necessary to do so. If they do not want to ensure such accountability, then their use of the information will be limited.

It can be expected that countries such as Colombia, Guatemala, Honduras, Peru, and Trinidad and Tobago, as EITI compliant or candidate countries, will be more willing to productively use the provided data. Other countries may be able to benefit from some ideas about how the information can be utilized.

One of the most obvious uses for the company payment data that will be generated under Section 1504 and the EU Directives is payment reconciliation, or compliance checks. It is not uncommon for payments by extractive companies to be divided among more than one government ministry, agency, department, or, in some cases, subnational government. Having all payments by a given company for the year provided in a single accounting, and specifying to which arm of government the payments were made, can assist governments in determining whether extractive companies are making all required payments under their contracts. It can also decrease the opportunity for corruption by decreasing information asymmetry. As Kolstad and Wiig (2009: 524) explain, “public officials have an incentive to increase information asymmetries to increase their information rents,” creating the space for corruption.

Ideally, the government would be able to see all payments going to each governmental arm for each oil, gas, mining, or logging project within the country. Seeing this bigger picture will not be possible unless the country subscribes to the EITI, or otherwise decides to require similar disclosures from all companies operating within

the country. For example, where small-scale mining and/or production by state-owned companies is a significant part of the mining sector, such as in Bolivia, fewer companies are likely to be required to report their payments under either the EU or U.S. laws, and subsequently less information about the contribution of the sector to the national and subnational budgets will be available. Adopting equivalent reporting requirements is a logical, proactive measure that countries may wish to undertake to supplement the reporting required under Section 1504 and the EU Directives to make it more useful for governments. For countries such as Ecuador, however, that have not yet committed to join EITI, that do not have companies operating in the country required to report under the U.S. or EU laws, and that scored poorly on the RGI, the momentum for positive change may be slow to develop.

One frequent criticism of the revenue transparency sought under Section 1504 and the EU Directives is that they focus on only one section of the extractive industries

value chain—the collection of taxes and royalties. It is possible, however, to use the data produced in such a way that it informs the government's approach to at least two other sections of the value chain: monitoring of operations and distribution of revenue (see Figure 5.1).

The information provided by companies under Section 1504 and the EU Directives can help a country monitor projects within its borders. Where payments are linked to production, for example, a decrease in the amount reported as a payment to the government would indicate a decline in production. Production at an extraction site may decrease for several reasons, but data reported at regular intervals, as required by U.S. and EU laws, will make it easier to identify a problem that requires government investigation, such as community protest, waning supply, or less investment than had been expected from the company.

A second significant use for the data that will be produced from these initiatives is revenue management, both at the national and subnational levels. In the extractive

Figure 5.1

Extractive Industries Value Chain



Source: Kolstad and Wiig (2009).

value chain, this is part of the distribution of revenues. Before a government can appropriately allocate its future resources, it must have a picture of how its resources are currently allocated. Part of that picture is how much extraction revenue is being directed to specific sections of the government, and how those funds are accounted for and used on an ongoing basis.

Many LAC countries are fiscally decentralized in some way, with a portion of revenues received at the national level being sent down to the subnational level. Those transferred funds can comprise the majority of a local municipality's budget. Bauer (2013: 5) provides an example for Peru:

Echarate (population 42,000) received \$257 million from central government gas revenue sharing in 2012, constituting 96 percent of its \$268 million municipal budget. Ilabaya (population 4,000) received \$56 million from copper revenues in 2012, representing 94 percent of its annual budget.

Yet subnational governments have little opportunity to see what the national government is actually receiving in total revenues from an extractive project within the municipality's boundaries. The disaggregated, project-level reporting will make it much easier to see what revenues are being generated and what the subnational government should be able to expect as income.

For subnational governments, this is merely the tip of the iceberg, because without information about the terms of the contract

for the project in its entirety, it will be difficult for a subnational government to create the kind of longer-term fiscal plan necessary to overcome the resource curse. That is why the PWYP coalition and other transparency campaigners have been advocating for full disclosure of extractive industry contracts and payment information (PWYP, 2011). There is recognition that both contracts and revenue transparency are necessary for a subnational government to fully understand its current and future financial position. A few LAC countries are embracing this aspect of transparency. Peru currently publishes all of its oil, gas, and mining contracts. Ecuador had published some contracts, but does not appear to have published contracts dated after November, 2010 (PWYP, 2011). Colombia has published almost all federal government contracts for several years. In 2008, the Colombian Government's online system for contract access was receiving approximately a half million visitors per month (Kenny and Karver, 2012).

Governments may also be able to use the data generated by Section 1504 and the EU Directives to assuage the conflicts that often surround extractive projects. While data about the extent to which a local community budget benefits from an extraction project is unlikely to answer concerns about labor conditions, it may be able to placate feelings of disenfranchisement, which can be a catalyst for individual or community action against extractive companies. Where the national government actively assists local authorities in connecting

payments between oil, gas, and mining companies to the national government, and links those payments directly to payments made to subnational authorities, it will be easier to understand how the project benefits the local community. An EITI case study demonstrates how publishing information about multinational mining company ArcelorMittal's payments to the government changed the way in which the community viewed and interacted with the company. Discrepancies between the company's reports and the Liberian government's accounting, and the reason for certain payments, were discussed in open meetings. ArcelorMittal's CEO was quoted as saying that "the EITI is playing a key role in our relations with stakeholders, helping us to connect with the communities where we operate and with the government" (EITI, Undated: 2). This is an important consideration as reports of conflicts at mining and oil extraction sites in the LAC region are on the increase.

Implications for LAC Citizens

The global financial transparency movement has begun to increase citizen demand for financial information from extractive companies, as can be seen in a recent report by LATINDADD (2013) on the financial structure of Latin American economies and the impact of the extractive industries. Citizens use data on extractive companies in three main ways. First, citizens can use the data to demand accountability from the

government on how revenues are used, although information on the other side of the government's ledger is also necessary in order to do so. Second, the data can be analyzed, compared, and otherwise reviewed to help determine whether corruption has infiltrated the projects or revenue streams, whether on the company side or by government officials. Finally, residents living proximate to planned, or planned expansions of, extractive projects can use information about similar projects and payment structures to better judge the potential revenue that may be expected to flow from the project to the community. This latter use implicates the concept of informed consent, one of the key tenets of indigenous advocacy in Latin America (Shilling-Vacaflor, 2012).

In any case, the data are unlikely to have an effect on LAC citizens unless they understand how to process and use it and have the technical capacity to do so. For inhabitants of rural communities in which extraction projects often take place, that is a tall order. Compared with Africa, for example, awareness about Section 1504 and the EU Directives in the LAC region is, in the author's experience, low. There are very few PWYP member organizations in the region, which indicates a lack of awareness of the potential use of extractive industries payment data in governance and accountability work. It may also be that LAC countries are not perceived as being the worst actors in terms of corruption and misuse of revenue from extractive industries compared with, for example, Equatorial Guinea.

Implications for Companies/Investors

Creating more stable operating environments for companies, with less community discord, associated violence, and resulting loss of production, is considered positive for attracting new investment. Governments actively involved in ensuring transparency of revenue streams, including the distribution of revenue, in a way that is accessible to local communities, can demonstrate their commitment to companies to try to ensure a stable operating environment for them. Companies must do their part to engage with communities, as demonstrated in the Liberia example, but the process begins with transparency about the money involved.

The other type of investment impacted by increased financial disclosure is shareholder investment. The greater the amount of capital a company can raise in order to invest in new projects in regions like Latin America and the Caribbean, the greater the prosperity that can come from the industry in the region. One of the main justifications for requiring companies that report to the SEC to publicly disclose the payments they make to governments around the world is that it is useful for investors. The data can be used to inform their risk assessments and better determine whether a potential investment is worth the asking price. As Calvert Asset Management and the Social Investment Forum (SIF) pointed out in their comment letter to the SEC regarding proposed regulations for Section 1504:

The world's exploitable conventional energy sources are receding further into areas where large-scale resource extraction has not taken place recently or in a comparable manner. Unfortunately, many of these resource-producing operating environments pose regulatory, taxation, political, and reputational risks that current reporting required of resource extraction issuers does not address adequately (Freeman and Bugala, 2011: 10).

The Calvert/SIF letter goes on to explain how the type of data that will be provided by mandatory reporting under Section 1504 is used in the investors' risk analysis.

Putting a much sharper focus on the issue, investor Robert Jenkins stated in his testimony before the House of Representatives in 2008 that investors support transparency "wherever possible—not out of moral goodness but in hard-nosed pursuit of better risk-adjusted returns." He explained his support for H.R. 6066, a predecessor to Section 1504, with this capitalist logic, stating that:

Before investing, every professional weighs (...) his potential risk versus his potential reward. The greater the uncertainty of risk, the greater the reward required. Information and transparency shape this calculation. The more transparent the information the easier to quantify the downside. The more understandable the downside,

*the more confident one can be in pursuing the upside. Thus can transparency breed confidence, confidence reputation and reputation a lower cost of capital.*¹³

While there is little utility in LAC governments engaging in the type of risk analysis engaged in by investors like Calvert and SIF, there is utility in LAC governments ensuring that such data are as freely available for investors as possible to demonstrate that their stable operating environment is based on openness and transparency. This is an argument for LAC governments to embrace the new reporting requirements and to take steps to extend the requirements to all companies operating within their countries, further highlighting the roles of Section 1504, the EU Directives, and the EITI as the first significant moves toward ensuring the extractive industries are stable, the success of which benefits all stakeholders.

While some extractive companies have expressed their support for EITI and transparency generally, few have identified the manner in which transparency benefits their companies, as ArcelorMittal did with respect to Liberia. Accounting firm KPMG, which provides accounting and advisory services for many extractive companies, believes that companies can improve

¹³ Statement by Robert Jenkins to the House Committee on Financial Services. H.R. 6066, The Extractive Industries Disclosure Act, Hearing, June 26, 2008.

efficiency through a more granular understanding of their payments to governments and supply chain operations. KPMG (2012) recommends that even though the regulations are not finalized, companies should begin pilot programs to put in place the mechanisms necessary to track the payments that will need to be disclosed. Tullow Oil plc, which operates in Africa, now reports its payments to governments on a country-by-country basis and a project-by-project basis, and has stated that “increased transparency is a vital first step to enable the citizens of our host countries to hold both us and their governments to account” (Tullow Oil plc, 2012: 9).

CONCLUSIONS

Global interest in overcoming the resource curse is becoming an increasing priority as known reserves and deposits of natural resources decrease and global demand for those resources increases. Growing acceptance of the EITI process; movement toward mandatory reporting regimes in Canada, the EU, Hong Kong, and the United States; and intergovernmental support through the G8 and G20 for financial transparency regimes in the extractive industries demonstrate that mandatory, public reporting of payments to governments by extractive companies has become internationally accepted as a crucial component of efforts to address the resource curse.

Section 1504 of the Dodd-Frank Financial Wall Street Reform and Consumer Protection Act, along with its currently-suspended implementing regulations, and the European Union Transparency and Accounting Directives, are substantially similar pieces of legislation setting out public financial reporting requirements for many extractive companies. The laws are complementary to the EITI Standards, but they create a more dependable and uniform reporting regime that allows for easier analysis of data across borders. Many extractive companies operating in the LAC region, including some significant Chinese operators, will be required to make public disclosures under the U.S. and EU laws, as will a few LAC state-owned entities. The data will not be available for a few years, however, providing time for industry, governments, investors, civil society organizations, and other stakeholders to develop the capacity to analyze the information and potential use scenarios.

The LAC region's significant reliance on revenues from extractive industries to fund national and subnational budgets; its undiscovered deposits of minerals; and, in some countries, increasingly stable operating environments for international extractive companies combine to make the region a fertile testing ground for whether the data that

will be disclosed under the new initiatives can be used by governments to overcome the resource curse. While transparency of resource revenues is not in itself a solution to the resource curse, transparency, coupled with political will and supplemental transparency and corporate and community engagement initiatives, could ensure that LAC countries reach their potential growth and reduce their levels of poverty.

There is no doubt that there has been a great deal of movement with respect to transparency initiatives in the extractive industries in the last several years. The data needed to assess the impact of these measures are not yet available. Opportunities for further research and analysis abound. Now is the time to develop plans for case studies that follow the production of data, the political responsiveness to that data, and the impact on corporate behavior, investment activity, poverty alleviation, and good governance indicators. Future studies could consider the minimum and optimal types of additional transparency initiatives required to generate desired socioeconomic improvement. Given the varying forms of government present in LAC countries, studies might also consider analyzing differing data-use decisions at multiple levels of government and the outcomes of those combinations.

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CHAPTER 6

The Role of Information in the Allocation of Petroleum Exploration and Production Rights

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When allocating petroleum exploration and production rights, policymakers must make balanced decisions that maximize returns while taking the political, economic, and legal/institutional landscape into account. Despite the inherent challenges involved, certain practices, such as the dissemination of information, are universally beneficial. Examining the discretionary and the auction methods based on eight practices that improve access and dissemination of information gleaned from a literature review, and drawing from experiences in Brazil, Colombia, Norway, and the United States, this chapter explores the role of information in leveling the playing field in the allocation of petroleum exploration and production rights.

INTRODUCTION

Natural resources can be a driver of development when managed optimally. This is particularly true in the case of petroleum exploration and production, given the large amount of financial resources mobilized and the social and environmental impacts. Information plays a role in enhancing transparency and efficiency, which are key characteristics of good governance and management of the extractive industries sector.

Most petroleum-endowed countries hold the rights to their natural resources, and the law vests all rights in their governments. In order to find and make optimal use of these resources, governments conduct exploration and production. Exploration is the first phase of the search for new hydrocarbons, which typically includes conducting seismic surveys and drilling to investigate hydrocarbon potential (Wood Mackenzie, 2013). Petroleum production refers to the process of extracting a hydrocarbon reserve from an economically viable subsurface discovery (New Zealand Petroleum and Minerals, 2011).

To maximize the net present value of the economic rent from petroleum exploration and production, governments may either seek to invest directly or allow private investors to invest in resources. Governments may not possess the required funds or the technical capability to optimally and sustainably conduct petroleum

exploration and production. In such cases, they may grant rights to search, extract, and commercialize petroleum to private companies, public companies, or public companies in partnership with private companies. Governments may allocate rights or licenses to the private sector as a way to leverage their own investment in the sector. A license is a long-term arrangement, contractual in character, which temporarily transfers rights to explore for, and perhaps to exploit, petroleum to third parties. In return, those third parties agree to some financial remuneration and an undertaking to perform certain obligations (Cameron, 1984). If the license is restricted to exploration, it is called a permit, and if it is restricted to exploitation, it is called a lease. Although there are some differences in the definitions, the word license will be used for the purposes of this chapter.

In granting rights, policymakers must make a balanced decision in order to maximize returns while taking the political, economic, social, and legal/institutional landscape into account. Regardless of the allocation method, information plays a vital role in helping governments, companies, and citizens, as the main stakeholders, to prevent and control corruption and increase trust in government institutions and companies (Baena and Vieyra, 2011). In places where citizens have easy access to information, corruption is generally lower

than in places where information is limited (Adserà, Boix, and Payne 2003; Brunetti and Weder 2003; Reinikka and Svensson 2005; Pande 2011).

The type, amount, and quality of information made available before, during, and after a licensing process directly influences its outcome. For example, information plays a fundamental role in assessing the area to be leased. If information is available to all companies, there is symmetry among competitors. However, some companies that are already performing exploration and production in adjacent areas may have more information than what is available from the government or to the public. This gives rise to information asymmetries in the selection of the area to be leased and the lack of a level playing field. It could negatively impact allocation, because governments could lease the area at less than its true value (Rodriguez and Suslick, 2008). Information about the acreage on offer should be disseminated, as it increases companies' knowledge of the area's geological potential and allows them to make more informed decisions, such as whether to participate in the bidding process. Information has the potential to attract companies and more competitive offers. The quality and availability of seismic and well data, for example, is important (Hodgshon and Land, 2000). Moreover, governments should disclose more information on the licensing and tendering processes because disclosure raises public confidence in the system and improves the

financial benefit to the producing country (Marcel, 2013).

Both Norway and the United States have recognized that information contributes to the effective allocation of petroleum rights, and thus have put mechanisms in place to increase the availability of information, benefiting governments, companies, and citizens alike. There is less knowledge about the efforts made by Latin American and Caribbean (LAC) countries in this respect. This chapter shows how disseminating information is beneficial regardless of the method chosen. It analyzes the role of information and the various practices which improve access and dissemination of information in the allocation of petroleum and production rights in LAC countries and elsewhere.

To overcome the gap in the literature, the chapter identifies and applies a set of best practices. The use of these practices is analyzed in two LAC countries and in two non-LAC countries. The LAC countries are Brazil, which utilizes the auction method, and Colombia, which practices a mix of the discretionary and auction methods. The two non-LAC countries are the United States, which utilizes the auction method, and Norway, which utilizes the discretionary method. These countries were chosen due to their strong legacy of practices which improve access and dissemination of information and as examples of the fact that, regardless of the allocation method, dissemination of information plays a key

role in leveling the playing field and obtaining effective results. The use of practices which improve access and dissemination of information on a global level is promoted by the multistakeholder initiative known as the Extractive Industries Transparency Initiative (EITI), which uses information on revenues in the extractive sector to increase transparency and improve governance of natural resources. In 2013, the EITI published the “EITI Standard,” which includes contract and licensing transparency and is a guide on international best practices in this area (EITI, 2013).¹

¹ Requirement 3.10 of Allocation of Licenses states that (a) implementing countries are required to disclose information related to the award or transfer of licenses pertaining to the companies covered in the EITI Report, including: a description of the process for transferring or awarding the license; the technical and financial criteria used; information about the recipient(s) of the license that has been transferred or awarded, including consortium members where applicable; and any nontrivial deviations from the applicable legal and regulatory framework governing license transfers and awards; (b) where licenses are awarded through a bidding process during the accounting period covered by the EITI Report, the government is required to disclose the list of applicants and the bid criteria; (c) where the requisite information set out in 3.10(a) and 3.10(b) above is already publicly available, it is sufficient to include a reference or link in the EITI Report; and (d) the multistakeholder group may wish to include additional information on the allocation of licenses in the EITI Report, including commentary on the efficiency and effectiveness of these systems (EITI, 2013).

COUNTRY APPROACHES TO THE ALLOCATION OF PETROLEUM EXPLORATION AND PRODUCTION RIGHTS

Methods of allocation of petroleum exploration and production rights vary from country to country. Auctions and discretionary methods are the two most common methods used. In discretionary methods, licenses are directly allocated according to administratively or politically created criteria. In auctions, rights are allocated to the highest bidder (Cameron, 1984).

Discretionary Methods

The two most commonly used discretionary methods are the open door policy and administrative procedures.² In open door

² Some authors, such as Bunter (2002), consider an open door policy not to be a discretionary method, but rather a separate category called “the informal category” in which a country does not deliberately seek applications from international oil companies but will entertain applications at any time. The categorization used here is that of Cameron (1984), who considers both administrative procedures and open door policies to be discretionary methods. In discretionary methods of award, licenses are allocated by government officials according to administratively or politically created criteria. Regarding open door policies in particular, Cameron considers that a government may or may not issue general invitation to companies to apply for licenses by a particular date. It may choose to consider applications by a company or consortium at any time for certain types of licenses. In other words, discretionary methods of award need not imply awards in rounds (Cameron, 1984).

policies, exploration and production rights are allocated as a result of direct negotiation between the government and one or more interested investors through solicited or unsolicited expressions of interest. This method is based on criteria that are often not predefined or known to market participants. In administrative procedures, rights are allocated through an administrative adjudication process based on a set of criteria defined by the government but not always publicly stated, or about which participants may be only vaguely informed. Administrative procedures are also allocated via licensing rounds.³

Under both modalities, the government retains considerable discretion in awarding exploration and production rights (Tordo, Johnston, and Johnston, 2010). Rodriguez and Suslick (2008) point out that more informal methods are more likely to invite corruption. For example, governments may extend licenses to favored companies. However, the allocation system may be designed in such a way as to reduce this risk by using mechanisms to enhance information, such as defining clear criteria for the award and publishing the outcome of negotiations (Tordo, Johnston, and Johnston, 2010).

³ A licensing round is a discrete act or acts of licensing, several of which probably take place on a regular, sequential basis separated by year or a number of years, and in each of which certain defined acreage is offered for licensing by a host government (Bunter, 2002).

Auction

In the auction method, rights are allocated to those applicants prepared to pay the largest sum of money (Cameron, 1984). Although bonus bidding is the parameter commonly used, there may be single or multiple bidding parameters, including royalties. A bonus is a sum paid outright by companies to acquire a license. Royalties are fees that companies agree to pay for the ongoing right to petroleum exploration and/or production, typically defined as a percentage of gross or net revenues derived from the use of a licensed area.

Auctions have the advantage of transparency. It is relatively easy for the government to set up a system that would make it difficult to unfairly favor any specific group (Frewer, 2000). Auctions also have the advantage of bringing forward revenues. However, discretionary methods may be easier for governments to control and may facilitate the achievement of specific objectives.

GOVERNMENT DECISION MAKING

When deciding on an allocation method, governments must consider the economic, political, and institutional landscape as well as the policy objectives. Economic factors include alignment with the government's petroleum sector policy, selection of the most efficient operator, compliance and administrative costs, and minimization of distortionary effects and market deficiencies (Tordo,

Johnston, and Johnston, 2010). The economic aim of the government of Uganda, for example, is “to ensure efficiency in licensing areas with the potential for oil and gas production in the country” (Republic of Uganda Ministry of Energy and Mineral Development, 2002). Yemen opts to “promote exploration and local content, to increase proven reserves to balance the decline in existing fields, and to encourage private sector investment” (Tordo, Johnston, and Johnston, 2010: 21).

The United Kingdom’s main political aim is free and fair competition, with the corresponding policy objective of encouraging the exploration and promotion of the country’s petroleum resources “under conditions that encourage competition and non-discriminatory access to the resource, taking into consideration the protection of the environment and the interests of other users of the sea” (Tordo, Johnston, and Johnston, 2010: 21). Brazil has prioritized independence and local development by choosing a method aimed at encouraging the exploration and production of the country’s petroleum resources “in order to maintain self-sufficiency with respect to oil production, (...) reduce natural gas imports, and increase the contribution of the sector to local economic development” (Tordo, Johnston, and Johnston, 2010: 21). The United States emphasizes environmental concerns, stating its desire that “the expeditious and orderly development of oil and gas resources [be] subject to environmental

safeguards in a manner consistent with the maintenance of competition and other national needs” (Tordo, Johnston, and Johnston, 2010: 21). These considerations may be in addition to the general objective of maximizing rents from natural resources.

Some of the factors that governments weigh when deciding the allocation method include:

- **Characteristics of the area to be licensed, such as geology, exploration risk, location, and distance to market.** For example, knowledge of geological potential allows the government to design appropriate strategies for the promotion and licensing of rights, such as licensing procedures, licensing terms that reflect the risk profile of the specific areas, and the delineation of blocks to be licensed.
- **Structure and behavior of the market, including competition, market segmentation, size and strength of the players, role of the domestic market, and projected trends in future oil and gas prices.** For example, governments may attempt to attract smaller domestic players and thus may opt for the discretionary system, which provides more leeway in choosing the companies that will undertake exploration and production. In one licensing round, Brazil attempted to increase the participation of smaller players.

- **Robustness of regulatory and institutional frameworks.** For example, where governments have capacity constraints, including inadequate capacity to evaluate bids, administrative complexity should be avoided and simple bidding parameters and clear and transparent award criteria should be used (Tordo, Johnston, and Johnston, 2010).

In recent years, licensing has tended toward more market-based instruments, especially in countries that are opening up their markets to international competition. Auctions are considered market-based mechanisms, while discretionary systems are viewed as being more directly under government control. Theoretically, where there is more private sector participation, there is improved efficiency, alleviation of investment constraints, and acceleration of development. Thus, auctions are more often linked to these goals (Frewer, 2000). However, discretionary methods may be designed to ensure maximum participation of the private sector.

Ultimately, there is no model allocation policy or system appropriate for all governments and all circumstances. Governments must weigh the economic, social, and political objectives they are attempting to achieve. Some factors, such as geological potential and market pricing, are beyond the government's control. Others over which it has more control include awarding acreage based on announced rules and adhering to contract terms.

INFORMATION AS A TOOL FOR EFFICIENCY AND TRANSPARENCY

Whichever method the government decides to use, it should be imbued with certain practices that benefit both the country and the companies, and should also contribute to the success of the petroleum allocation process. Such is the case with the generation, use, and dissemination of information.

The more open and transparent the licensing regime, the more highly it will be regarded by industry, and interest will be enhanced (Brooks, 2009).

Information disclosure is an important element of transparency. How does transparency lead to efficiency in the allocation process? Governments need accurate information on the technical and financial profiles and the performance records of interested companies, as well as the acreage on offer, to increase trust in companies. Companies require as much information as possible on acreage and on the allocation process to calculate their costs and benefits and weigh their risks. Citizens expect to receive accurate information to hold governments and companies accountable for the management and use of natural resources.

Nigeria has experienced challenges in introducing transparency to improve the efficiency of its licensing process. In 2005,

the government introduced transparency and oversight mechanisms to improve licensing rounds, including the unprecedented step of inviting international observers (Olsen, 2005). However, the 2005 licensing round still had considerable irregularities. For example, guidelines for bidders (including formal bidding parameters) and information regarding local partner requirements were released late (Olsen, 2005). The National Stakeholder Working Group for the Nigerian Extractive Industries Transparency Initiative (NEITI) indicated that the guidance notes were lacking in sufficient detail and were unnecessarily complex, and that the criteria were too numerous and complicated (NEITI, 2006). The stakeholder group also called for improvements in data quality and management capabilities. Although at first, observers found the process to be reasonably transparent, a subsequent evaluation revealed irregularities in fulfilling the conditions of the award, particularly due to confusion about the bidding terms and the ambitious local content requirement (Tordo, Johnston, and Johnston, 2010).

The quality of the information disclosed in the licensing process matters. First generation transparency policies, which broadly inform citizens about public affairs, may not be sufficient. Second generation, or targeted, transparency policies (i.e., those that tailor the disclosure of information to achieve a specific aim) could be more effective. Targeted transparency “attempts to translate the purpose of public policy into the realities of specific user groups, bearing in

mind the target population’s needs, incentives, and capacity to understand the information, by using simple and efficient mechanisms that facilitate access to and use of the information” (Dassen and Vieyra, 2012: 3).

Targeted transparency policies may help change the behavior of actors (the government and companies) in the petroleum licensing sector. Thus, the institutions responsible for the governance of the sector should seek to target transparency policies by paying close attention to the dynamics of the sector as a whole and building on the motives and incentives of these stakeholders (Dassen and Vieyra, 2012).

The case of Gabon, a country which is currently reforming its licensing procedures, illustrates the importance of understanding the dynamics of the sector and the important role of information in facilitating or hindering an allocation process. By early 2013, there was unprecedented potential in offshore exploration in Gabon. The potential for exploiting deep-water and sub-salt acreage was hampered by disputes in the oil sector that had not been properly, openly, and opportunely disclosed to the public during the planned licensing round. In a context of endemic corruption, the lack of information may have eventually led to decreased interest on the part of companies (Business Monitor International, 2013).

The incentives for stakeholders of petroleum licensing processes are multiple, and information plays a key role in leveraging them. Governments welcome information from companies to (i) build knowledge

about viable prospective acreage, since they may have insufficient or poor-quality information; (ii) accurately gauge the value of the acreage on offer; and (iii) leverage their negotiating position. Governments should publish guidelines, including the criteria for judging offers, regardless of the method selected. If little or no information is disclosed, companies may become suspicious and may consider the risk too high when estimating their bids or may even abstain from participating in a given process. The allocation process may then have undesirable results which could jeopardize the process in the short term and the sector's potential development in the long term (Bunter, 2002).

Companies are drawn to invest in the development of the petroleum sector by the estimated financial returns based on information available on the value of the acreage. Citizens are mobilized by their desire to make governments and companies accountable. In countries where the petroleum sector is an important contributor to GDP, such as Venezuela and Ecuador, the general public may also be incentivized by the end-use benefits they may receive from the enhanced competitiveness of the sector, the consequent increases in revenues, and the increased socioeconomic benefits which should follow.

In other words, information asymmetries could jeopardize the process and final outcomes in the short term and the sector's potential development in the long term due to poor governance and trust in the country's system. Lack of transparency does not only hinder governance; it might also result in

losses to GDP. The costs of the lack of transparency are considerable. A project supported by the Inter-American Development Bank found that the total cost of the lack of transparency in the complete value chain was estimated to be between 2.87 and 18.17 percent of Ecuador's GDP, while greater transparency in the petroleum license allocation process resulted in an average annual net gain of 0.10 to 1.03 percent per year in Ecuador's GDP (Donoso, 2010).

Dassen and Vieyra (2012) raise two challenges identified in LAC countries in ensuring the effectiveness of targeted transparency policies: first, the prevalence of a short-term view in applying policies that require long-term investments from disclosers, and second, limited feedback on lessons learned in public policymaking.

According to the Resource Governance Index (RGI), published by the Natural Resource Governance Institute (NRGI)—formerly the Revenue Watch Institute (RWI)—LAC countries are doing relatively well in ensuring the quality of governance in the oil, gas, and mining sectors overall; all nine LAC countries included in the index scored above the RGI average of 51 (RWI, 2013).⁴ Scores are significantly above average on the Institutional and Legal Setting component in most cases, and the majority received satisfactory scores above 70. This could partially be explained by the fact that seven of these countries have access to information laws.

⁴ Detailed information on methodology and scores can be found in Chapter 2 of this book.

Ensuring the quality of governance remains a challenge for the LAC region's public management agenda, as suggested by the lower scores received on the RGI's Reporting Practices and Safeguards and Quality Controls component. Indicators on disclosure of information before and after licensing processes report failing scores in two countries, and only three countries score satisfactorily above 70. However, the region reports greater margins for improvement in the Enabling Environment component, with three countries receiving failing scores under 40, and only one country receiving a satisfactory score. This is mainly explained by the perception of high levels of corruption, ineffective control, and weaknesses in the rule of law.

Countries outside of the LAC region, which have similar overall scores on the RGI, also report lower scores on the Enabling Environment component. This suggests that the problem is not unique to LAC countries. It is a bigger problem elsewhere, as other regions score about 20 points lower on average than non-LAC countries with similar overall scores.

Practices which Improve Access and Dissemination of Information

Leveraging information could be an effective public policy tool to drive the development of the petroleum licensing process. However, targeted transparency requires that the information released be well defined. The following eight practices that

enhance user-specific information production and dissemination have been derived from work on the allocation of petroleum rights by Brooks (2009), Bunter (2002), Hodgshon and Land (2000), the IMF (2007), Lahn et al. (2006), Marcel (2013), the RWI (2013), and Tordo, Johnston and Johnston (2010).

1. Nomination System in Frontier Areas

To overcome the lack of information on potential acreage, Hodgshon and Land (2000) suggest that governments can either gain access to data from current petroleum rights holders with adjacent acreage, which requires suitable regulatory powers, or use the data available from sources such as the World Bank or programs that countries such as Norway are currently supporting. Otherwise, they can implement a publicly available nomination system, a public policy tool that helps countries to adequately plan the allocation of their resources based on the attractiveness of the acreage on offer, the capabilities of companies to explore and produce petroleum, and the ability of the government to manage the allocation process (Johnston, 2013). In this type of system, companies are periodically invited to nominate open areas or "blocks" that they would like to see in a bid round. This allows the companies to provide information on the potential of a particular block. A bid round is likely to be successful if the blocks offered are in demand by the industry (Hodgshon and

Land, 2000). Implementing a nomination system allows for the identification of areas of interest, especially in frontier areas where there is less information about the prospectivity of the acreage on offer. However, although this kind of system is desirable, governments should be aware of the risk of lack of interest. The world's geological basins have matured to the point that expectations of significant new discoveries are lower than before. Thus, international companies may be unwilling to release information about prospectivity to licensing authorities or other companies (IMF, 2007). Implementing a nomination system may be difficult, but it has worked in countries such as Brazil, Colombia, Norway, and the United States.

2. Licensing Process Specified in Legislation in Advance

The RWI (2013) considers publication in advance of the licensing process by the government or through legislation as a best practice. Bunter (2002) considers that the Ministry of Energy or the equivalent authority should review all of the legislation to ensure that it conforms to best licensing practices and if not, the licensing process should be delayed to ensure that improvements can be made. Governments can deliver information about the legal and institutional framework of the allocation process to companies, providing an opportunity to showcase the predictability and impartiality of the bidding round to investors.

Governments should increase the public disclosure of information related to the licensing and tendering processes. This will raise public confidence in the system and improve the financial benefit for the producing country (Marcel, 2013).

3. Marketing

Governments can conduct an international promotional campaign to advertise the acreage on offer. This may occur in addition to or in combination with advertisements in the press, mailings, information posted on a website, and promotional meetings. All of these measures are methods of ensuring the proper marketing of the licensing process. Brochures mailed to international oil companies convey information required for them to quickly assess the prospectivity of the investment opportunity. The website is a complementary marketing tool that should be comprehensive, informative, and of the highest quality (Bunter, 2002). Hiring a petroleum geologist to help with public relations, advise on exhibiting at conferences, and put together documents (Brooks, 2009) is another best practice. Disseminating information to targeted audiences through proper marketing efforts leads to higher participation in the licensing process, as it allows companies to better assess the acreage on offer. In Egypt, no real effort was made to market

the acreage outside the national territory in the late 1980s. The acreage was effectively open only to those countries already doing business with the host country. As a result, Egypt obtained few offers (Bunter, 2002).

4. Availability of Data on Geographic Blocks

Governments can also provide data on geographic blocks to attract the appropriate companies. This should include geological, geophysical, and engineering data, and it could be made available in a data room or sold at promotional meetings or through a sales campaign. It should be high quality, technically sound, and professionally maintained.⁵ Governments may require companies to purchase data, as it is an accepted practice to use this opportunity to raise money. However, it should be sold at the appropriate price.⁶ It is also important to have “maximum disclosure,” as

⁵ High-priced but poor-quality data will give the impression that the government wants to gouge international oil companies (Bunter, 2002).

⁶ There is no standard international price for data, but there are few considerations when setting the price for data on geographic blocks: (i) data pricing is useful in deterring inadequately financed oil companies from applying for acreage; however, small international oil companies may be useful in areas of relatively low perceived prospectivity. Thus, data package prices need to be structured accordingly. (ii) Too high a price will deter licensing, except for the most attractive acreage, where there is no limit to pricing. (iii) Governments should decide whether they are more interested in licensing acreage or selling data (Bunter, 2002)

companies will be suspicious of data that does not contain all the information they need (Bunter, 2002).

5. Prior Disclosure of Contractual and/or Fiscal Terms

A best practice identified by the NRGI is the release of information on the contract terms for licenses before the negotiations, specifically, the duration of the contract and tax and royalty obligations (although in cases of royalty bidding, this is a parameter and would not be fixed) (RWI, 2013). Similarly, Lahn et al. (2006) mention the release of model license or production-sharing agreements as a best practice. Marcel (2013) goes further, advocating for producers to move as many fiscal elements as possible into laws and regulations that apply across licenses in order to simplify administrative functions and minimize the number of fiscal matters that need to be negotiated with each company. The release of this kind of information enhances the perceived integrity of the process and allows for better planning of the offer.

6. Publication of Prior Disclosure of Rules for the Auction/Discretionary Method

Information on the licensing process is important as it enables applicants to understand the licensing process (Bunter, 2002). The NRGI considers that a complete description of the licensing process should be provided, which should include bidder qualification procedures, auction rules in the case of an auction, or rules

for contacting the licensing authority in the case of discretionary methods. The IMF (2007) and Lahn et al. (2006) consider public notice of a clearly defined process as an essential requirement. The release of this information ensures that applicants understand the process, which will in turn increase participation and help to hold the government accountable.

7. Publication of Criteria

Whichever allocation method governments choose, objective and transparent selection criteria should apply (Marcel, 2013). Lahn et al. (2006) consider public and well-defined criteria to be best practices. Publishing selection criteria requires the government to disclose the basis for allocating petroleum exploration and production rights. Clear criteria improve the transparency and objectivity of the award (Tordo, Johnston, and Johnston, 2010). Although the criteria should be published, a certain degree of flexibility may be necessary to achieve a given policy objective. For example, in work program bidding, an efficient allocation system is needed to ensure that blocks are awarded to companies that submit the most appropriate work program bids, not necessarily the most optimistic ones (Tordo, Johnston, and Johnston, 2010). Some of the benefits associated with clarity of award criteria are (i) it improves the efficiency of the bidding process, especially where multiple policy objectives are pursued by the government; and (ii) it allows bidders to structure

appropriate bids, which in turn reduces the administrative time required to review proposals and improves confidence in the fairness of the allocation system (Tordo, Johnston, and Johnston, 2010).

Transparency with respect to the evaluation criteria that will be applied by the government in selecting the winning bids will ultimately improve the efficiency of the bidding process (Tordo, Johnston, and Johnston, 2010).

8. Publication of the Results of the Allocation

Publication of the results of the allocation should include information on the winning bid (RWI, 2013). The IMF (2007) considers that ex post publication of contract awards and terms constitutes best practice in the case of both discretionary and auction methods, while Lahn et al. (2006) go further, calling for public disclosure of the reasons why the winning bid was chosen. The purpose of disclosing information after the allocation process is to increase trust in the process in the long term. The identification of the users and disclosers of information is an important element of implementing targeted transparency policies. The users of information vary depending on the practice. In a nomination system, the target of the information is the government. The other users— companies

and the general public—receive information through marketing, prior disclosure of contractual and fiscal terms, prior disclosure of the rules for the auction and discretionary method, publication of criteria, and publication of the results of the allocation. Data provided outside of data rooms or data packages is available to the general public and companies, while data provided in data rooms or packages is only available to companies.

Governments may have certain concerns when implementing the eight practices that improve access and dissemination of information. For example, publishing model contracts prior to negotiations may reduce flexibility, and publishing contracts after negotiations may both reduce the government's competitive advantage and release sensitive information to the public. Although some fear that publishing selection criteria reduces a government's flexibility to decide the winning offer, this concern is misplaced. Publishing contractual terms before negotiation allows companies to structure their bids to take the government's requirements into account, resulting in more accurate bids. Contract transparency may strengthen the government's hand in negotiations due to the increased pressure generated from the general public and the legislature (IMF, 2007). In addition, contract transparency can help reduce information asymmetries in negotiations between foreign oil companies and emerging producers. It levels the playing field by allowing governments to see details about the agreements in other countries (Marcel, 2013). The publishing

of criteria need not diminish the flexibility that governments need to further their policy objectives, since the criteria can be devised to take flexibility into account.

This list is not exhaustive. There may be other practices that improve access and dissemination of information that could be used to implement a targeted transparency initiative. However, the eight practices described above provide a lens through which one can examine more closely how some countries have been able to ensure the availability of information in their licensing processes despite their allocation method. The use of practices that improve access and dissemination of information could serve as a model for other countries wishing to enhance their licensing processes.

THE ROLE OF INFORMATION IN THE PETROLEUM ALLOCATION SYSTEM: COUNTRY ANALYSIS

Countries have many options when licensing acreage. They can use the discretionary method, the auction method, or a hybrid. Whatever their allocation methods, many countries have been able to imbue practices which improve access and dissemination of information in their licensing processes. This section analyzes two LAC countries and two countries outside of the region as examples of how governments implement practices which improve access and dissemination of information.

Brazil

Self-sufficiency has been one of the main policy objectives of Brazil's petroleum policy. By 2005, Brazil had achieved this goal (Rodriguez and Suslick, 2008). Recent discoveries of offshore pre-salt oil resources may position Brazil as the world's fifth largest producer by 2020 ("Brazil's Oil Boom: Filling up the Future," 2011). However, Brazil's economy does not depend on this sector; it is well diversified, with oil rents representing 3 percent of GDP in 2011 (World Bank, 2013).

Brazil allocates awards based on the auction method via cash-bonus bidding. The Brazilian Constitution (Articles 20 and 177)⁷ establishes that Brazil owns its natural resources and that the Union has the monopoly to exploit natural resources, but it can contract with the state-owned oil companies, including the half-national oil company Petrobras and the fully state-owned Pre-sal Corporation, or private companies to carry out activities through concession agreements.⁸ In 1997, Brazil created the

⁷ See <http://www.loc.gov/law/help/guide/nations/brazil.php#constitution>.

⁸ For 40 years, Petrobras held the rights and obligations to conduct petroleum exploration and marketing. (Rodriguez and Suslick, 2008) until a constitutional amendment in 1995 ended Petrobras' monopoly. Until 1997, Petrobras, 100 percent state-owned, was the only company exploiting oil and gas in Brazil. In 1997, Petrobras was partially privatized, and the market was opened to private companies (see <http://www.loc.gov/law/help/guide/nations/brazil.php#constitution>).

National Agency of Petroleum, Natural Gas, and Biofuels (Agência Nacional do Petróleo, Gás Natural e Biocombustíveis, or ANP), an independent, technical agency responsible for regulating the oil sector, granting hydrocarbon rights, and monitoring the activities of oil corporations. The result was the emergence of a competitive market that has benefited the country's economic development. The country also established the National Council for Energy Policy (Conselho Nacional de Política Energetica, or CNPE), an advisory body to the president, which formulates policies and guidelines, as well as a new national energy policy (Law 9.478/97).

The principles and norms established in the national energy policy guide the licensing process. The ANP is responsible for developing all rules, contracts, and procedures that companies wishing to participate in the licensing of petroleum should follow (Rodriguez and Suslick, 2008). The ANP chose the auction process and designed a model to enhance domestic oil and gas reserves and attract national and international oil companies (Rodriguez and Suslick, 2008). To date, 13 licensing rounds have been conducted and another is under way. Rodriguez and Suslick (2008) consider the Brazilian experience a success since, at the time, 3.84 billion reais were recovered for eight licensing rounds, in which 141 oil companies were awarded contracts and 443,840 km² of exploration area were allotted.

Brazil generally uses a multi-object sealed bid auction process. To prequalify, applicants

must meet the technical, economic, and legal requirements defined by the ANP. In case of a tie, ANP allocates the relevant block to Petrobras, as long as it is not bidding as part of a consortium with other companies. The bidding criteria used by ANP are cash bonus, local content, and the minimum exploration work program. The current weighting of bidding parameters is as follows: cash bonus, 40 percent; minimum work program, 40 percent; and local content, 20 percent. However, this weighting has changed over time, in line with Brazil's policy objectives (Rodriguez and Suslick, 2008).⁹

The creation of clear rules and the high level of confidence among the players in the process are aspects that have led to an open scenario to attract new players (Rodriguez and Suslick, 2008).

The ANP defines a minimum bonus value, and companies may bid as much as they wish. In general, the respective literature says that they bid around 30 percent of the expected monetary value estimated for the area, although the amount may

⁹ In the seventh licensing round, the objective was to attract small and medium enterprises interested in acquiring low-risk acreage; this led to a change in the bidding parameters (Tordo, Johnston, and Johnston, 2009).

reach 100 percent or more. Work program means the amount of exploration activities that companies carry out in the area. Local content is a percentage of both the exploration phase and development and production phase. Companies commit to using national services and equipment, which stimulates the growth of Brazilian industry (Rodriguez and Suslick, 2008; Tordo, Johnston, and Johnston, 2010). Although an auction is most often used, in areas of strategic importance the CNPE may determine that Petrobras will exploit a whole oil or gas block without a bidding process, or it may determine that up to 70 percent of the block will be open for bidding for production-sharing agreements, while Petrobras will operate 30 percent of each block (RWI, 2013).

Brazil has established a legal framework that ensures transparency in its licensing process, mandating the principle of transparency in public administration, and thus requires the publication of relevant information on licensing processes (Law 8666/93). Tordo, Johnston, and Johnston (2010) find that prior publication of regulations and procedures ensures objectivity in bid evaluations. The licensing process is described in advance in resolutions. During the allocation process, Brazil also announces the licensing round and releases the areas to be offered via a road show performed worldwide to attract companies' interest. It offers data packages, distributed during rounds and purchased by companies, which include

geological and geophysical data from the sedimentary basins on offer (Rodriguez and Suslick, 2008).¹⁰ Successful marketing campaigns describing the prospective acreage have resulted in high participation at bidding rounds. The Brazilian licensing process includes prior disclosure of the rules and procedures of the licensing process, the contractual and fiscal terms, the criteria to be followed to determine the technical and financial capacity and the legal status of bidders, and the criteria for bid evaluation (Tordo, Johnston, and Johnston, 2010).

Brazil has also taken steps that make collecting information easier, such as the submission of bids online, which reduces the ANP's administrative workload and errors (Tordo, Johnston, and Johnston, 2010). Additionally, the ANP obtains companies' feedback through public hearings, so that the concession contract and regulations reflect the companies' experience and expectations. This strengthens feedback mechanisms, which are often lacking in LAC countries (Rodriguez and Suslick, 2008).

After completing the licensing process and in accordance with Law 8666/93, Brazil publishes information on the licensing rounds on the ANP website and in the national newspapers. This includes the

¹⁰ The data packages in Brazilian licensing round include 2D and 3D seismic data, well logging registers, geochemical analyses, aeromagnetic and aerogravimetric measurements, cuttings, maps, petrophysical analyses, thin section petrography, and other information (Rodriguez and Suslick, 2008).

number of bids received, the winning bids, the final contract awards, the blocks that were licensed, the duration of the bids, royalties, and other tax measures.¹¹ In general, the information that Brazil releases on its licensing process is considered adequate.¹² Although Brazil has not joined the EITI, its legal and institutional framework and practices to date embrace transparency and, as a result, may be more efficient and effective than processes in other countries. Brazil's regime for handling petroleum resources is rapidly evolving due to new oil discoveries. The possibility of a direct award to Petrobras in cases of national interest is a considerable change from the previous manner in which licenses were allocated. It remains to be seen whether transparency will be introduced in the new licensing regime for the pre-salt discoveries and what priority will be accorded to information dissemination.

Colombia

Colombia is now the third-largest crude oil producer in South America, after Venezuela and Brazil. In 2011, oil investments accounted for 65 percent of all foreign direct investment in the country. Oil rents represented about 8.8 percent of GDP in 2011 (World Bank, 2013). Colombia's licensing model is considered successful, and to

¹¹ See Agência Nacional do Petróleo, Gás Natural e Biocombustíveis at <http://www.anp.gov.br/>.

¹² Brazil received a score of 100/100 on access to information on the licensing process (RWI, 2013).

date over 400 contracts have been signed. Colombia is currently self-sufficient in oil supply, and its policy goal is to maximize the value of its oil reserves (Zamora, 2013).

Colombia uses both the discretionary method and the auction method. The Colombian Constitution (Article 332) establishes that the State is the owner of the subsoil and nonrenewable resources. The Ministry of Mines and Energy (MME) is responsible for the overall regulation of the energy sector, the adoption of the Colombian government's policies, and the technical regulation and oversight of upstream activities. The National Hydrocarbons Agency (Agencia Nacional de Hidrocarburos, or ANH) is in charge of granting hydrocarbon rights. Before 2003, Ecopetrol, the state-owned oil company, had a monopoly on exploration and production. Since then, the market has been open to private companies, and Ecopetrol participates on an even footing with the licensing companies as an independent company (Herrera and Sánchez, 2013; Zamora, 2013).

Hydrocarbon exploration and production in Colombia is carried out under two types of contracts: technical evaluation agreements (TEA) and exploration and production agreements (E&P) awarded by the ANH. Under TEAs, the contractor has the right to conduct a technical evaluation of the awarded block and may convert the TEA into an E&P contract. Under an E&P contract, the contractor (single party or consortium) has the exclusive right to explore and

produce. However, third parties may offer to enter into an E&P contract over all or part of the block, and the holder of the TEA has the right to match the exploration program offered by the third party.

Colombia uses an array of allocation methods. It allocates rights through direct contracting via an open-door policy (first-come, first-served) where an applicant applies for a license and must meet certain legal, technical, and operational requirements. It distributes rights via the auction method in areas designated by the ANH as special areas, or areas returned to the ANH upon termination of TEAs or E&Ps. Selection criteria may include a share of royalties or the highest production share given to the government. An award may also be made in response to a request for proposals, where companies participate by invitation only in special areas.

As part of the licensing round, Colombia has a nomination system in place that allows the nominator to select allocation areas for exploration and exploitation. Agreement 008 of 2004 describes the three modalities used by the ANH for public works and lists the criteria and their weightings in the case of an auction (ANH, 2009). International road shows are conducted as part of its marketing efforts.

During the licensing round, additional information is made available. Terms of reference including the rules for the allocation process, prequalification procedures, and information about the criteria used are made

available (ANH, 2012a). The country ensures access to data by giving companies access to the data room and information packets (data packages) at accessible prices. There are question-and-answer sessions during bidding processes, and the information imparted in these sessions is published on the ANH website (ANH, 2012b). The offers are opened and published on the same day.

The entire licensing process takes a few months. Once completed, Colombia publishes information about the companies that were successful, as well as the contracts themselves.¹³

Colombia has not joined the EITI, but the government has made a formal declaration of its intent to do so. Before the 2003 reform of the sector, information was restricted. Now, information is readily available from the ANH (Zamora, 2013). The NRGI considers access to information during and after the licensing process in Colombia to be excellent.¹⁴

¹³ The contracts from the most recent licensing round were published in 2012, while those from previous rounds are not readily available. Based on Agreement 04 2012, although the contractual performance of ANH will be public and the records containing the contract data will be open, some details will remain confidential (e.g., those aspects protected by the law or contractually subject to confidentiality) (RWI, 2013).

¹⁴ Colombia received a score of 100/100 on access to information on the licensing process (RWI, 2013).

Beyond the LAC Region

Outside of the LAC region, the United States is a good example of a country that uses the auction method, in particular with regard to offshore resources in the Gulf of Mexico. The Bureau of Ocean Energy Management (BOEM), an agency of the U.S. Department of the Interior (DOI), is responsible for managing the development of the nation's offshore resources in an environmentally and economically responsible way (Tordo, Johnston, and Johnston, 2010). The United States does not have a state-owned oil company (RWI, 2013).

The United States uses a multi-object, sealed-bid auction process. Applicants must meet threshold standards on financial capability and environmental management and demonstrate technical competence through their geological interpretation of the area applied for and their plans for further exploration and appraisal. The method of licensing is clearly defined in the Outer Continental Shelf Lands Act. Before the licensing round, the DOI creates a five-year plan. It specifies the size, timing, and location of areas to be assessed for the licensing process (Tordo, Johnston, and Johnston, 2010). According to the NRGI, bids are examined for technical and legal adequacy and each valid high bid is analyzed from a fair market value perspective, a methodology determined by regulation.

The first step in the licensing process is the call for information, which serves several purposes: (i) it informs the public of the

area under consideration for oil and natural gas leasing; (ii) it solicits comments from all interested parties on areas or subjects that should receive special attention and analysis; (iii) it invites potential bidders to indicate areas and levels of interest; and (iv) it invites public input regarding possible advantages and disadvantages of potential oil and natural gas leasing, exploration, and development in the region and the nation (Tordo, Johnston, and Johnston, 2010). As part of the call for information, scoping meetings are conducted in the vicinity of the area proposed for leasing consideration in order to receive public comments (BOEM, 2013). After nomination has occurred, public hearings are also conducted. These measures serve as feedback mechanisms.

During the licensing round, a proposed notice of sale is published, which gives information about the terms and conditions of the licensing process. A standard form contract with fiscal information is also available on the BOEM's website. Data on the tracts for sale are available on the website and include information on whether oil and gas production occurred before the end of the exploration period (Tordo, Johnston, and Johnston, 2010). At the end of the licensing round, sealed bids submitted by qualified bidders are publicly opened at the place, date, and hour specified in the notice of sale, read, and publicly announced and recorded. They are accepted or rejected within 90 days, although the time may be

extended if necessary (RWI, 2013).¹⁵ A detailed database of lease sales is available on the BOEM's website. The United States has been admitted to the EITI as a candidate country. The NRGJ considers that adequate information is released during and after the licensing process.¹⁶

Norway is an example of a country that uses the discretionary method of allocation, under the modality of an administrative procedure. According to the Petroleum Act, the Norwegian government has the proprietary rights to subsea petroleum deposits and the exclusive rights to manage these resources.¹⁷ The Ministry of Petroleum and Energy has the authority to grant to a corporation or a physical person domiciled in the European Economic Area a license to explore for petroleum within limited areas of the seabed or its subsoil (RWI, 2013). The Norwegian Petroleum Directorate is the regulatory authority. There are currently two systems that award licenses: the annual awards in predefined areas (APA) system in mature areas and an ordinary concession rounds system linked to frontier areas (Norwegian Petroleum Directorate, 2012).

¹⁵ If a bid is rejected, any money deposited with the bid plus any interest accrued is refunded.

¹⁶ The United States received a score of 100/100 on access to information on the licensing process (RWI, 2013).

¹⁷ Act 29 November 1996 No. 72, amended by Act 24 June 2011 No. 38.

The ministry takes the following factors into account when making its award: (i) technical expertise; (ii) understanding of geology; (iii) financial strength; and (iv) experience in the Norwegian shelf or other locations and activities (Norwegian Petroleum Directorate, 2008). Before making an award, proposals are subjected to a prequalification procedure, taking into account: (i) the competence and capacity of the company with respect to the subsurface; (ii) the production and development technologies proposed; and (iii) health, environment, and safety issues (NEITI, 2006).

In Norway, the legal framework enhances transparency. The Petroleum Act states that “the granting of a production license shall be done on the basis of factual and objective criteria, and the requirements and conditions stated in the notification.” The licensing round begins with an invitation by the Ministry of Petroleum and Energy to participants to nominate blocks when licensing is done in frontier areas (NEITI, 2006). In mature areas, the announcement specifies which blocks are included and the terms and conditions on which awards will be granted, which are published on the websites of the ministry and the Petroleum Directorate, in the European Journal, and in letters to all licensees and prequalified companies (NEITI, 2006).

During the licensing round, access to relevant data and information is facilitated. Seismic data are publicly available to members of the Diskos database, while non-members can purchase data. According to

NEITI, all data can be easily retrieved, and the amount of time spent on finding data is considered to be significantly less than for other petroleum-producing countries. The stated policy of the Norwegian authorities is to award licenses based on objective, nondiscriminatory, and published criteria. Before a production license is awarded, a letter is sent to companies giving details of the interests offered, the terms which will apply, and the possibility of engaging in joint operations (NEITI, 2006). The agreement is available in a standardized form on the website of the Ministry of Petroleum and Energy. Detailed information on individual licenses (operators, ownership interests, work obligations, and status) is also published. However, the licenses themselves are not published. Norway is a part of the EITI and regularly reports revenues from the extractive industries. The NRGJ considers the amount of information Norway releases during and after the allocation process to be adequate.¹⁸

COUNTRY PERFORMANCE IN IMPLEMENTING PRACTICES WHICH IMPROVE ACCESS AND DISSEMINATION OF INFORMATION

The four countries reviewed herein are identified as good performers in managing information for improved efficiency and

¹⁸ Norway received a score of 100/100 on access to information on the licensing process (RWI, 2013).

transparency in the petroleum allocation process, which can be appreciated when they are analyzed from the standpoint of the eight practices which improve access and dissemination of information described above. Table 6.1 summarizes the best practices adopted in the four countries.

All four countries have nomination systems in place. The licensing process is specifically integrated into the regulations of Colombia, Brazil, and the United States. Brazil operates by releasing resolutions on a case-by-case basis, while the laws of Colombia and the United States have pre-defined the process. Norway could improve its licensing process by legislating it in order to enhance predictability and certainty.

Each country uses distinct marketing techniques. Although all four disseminate information online, Norway communicates with companies directly, while the United States uses calls for information to inform the public about the areas to be leased. Brazil and Colombia undertake international road shows, and Brazil also holds public hearings to relay the information.

Prior disclosure of contractual and fiscal terms occurs in all four countries. In Norway, this information is standardized in laws and regulations. Data on geographic blocks are also readily available in each country.

All four countries disclose rules. In Brazil, regulations and procedures are predetermined, and in the United States, the proposed notice of sale details the terms and conditions of the licensing process. In Norway, there is also prior disclosure of the requirements and conditions. The terms of reference detail the rules in Colombia. All countries publish selection criteria.

Each country provides information on the outcomes of the allocation process. Norway releases detailed information—such as blocks awarded, winning bids, and work obligations—and publishes information on the licenses, but not the licenses themselves. Both Brazil and Colombia publish extensive information on the results of the allocation. Contracts are also released in Colombia, although some information may be restricted. The United States releases the outcomes of the process and publishes the leases on the Internet. What emerges from this exercise is that whichever allocation method is used, the dissemination and use of information can be assured, and the best practices among the four countries could provide guidelines for other LAC countries endowed with petroleum wealth.

Table 6.1

Best Practices in the Petroleum Allocation Process (continued on next page)

Allocation methods/countries				
	Discretionary	Hybrid	Auction	
Practices	Norway	Colombia	Brazil	United States
1. Nomination system in frontier areas	A nomination system is in place.	A nomination system is in place.	A nomination system is in place.	A nomination system is in place.
2. Licensing process specified in legislation in advance	Not specified.	Agreement 008 of 2004 lists the three different allocation methods, the criteria, and the weight of the criteria.	Resolution 27, June 2nd, 2011 describes the licensing process.	The OCS Lands Act describes the licensing process and the criteria to be used.
3. Marketing	The announcement is published on the websites of the Ministry and the Petroleum Directorate, and in letters to licensees and prequalified companies.	The announcement is published on the website of the ANH, and international roadshows are conducted as part of the marketing efforts.	The announcement is published on the website of the ANP; a public hearing is held; and international roadshows are conducted as part of the marketing efforts.	Calls for information inform the public about the area to be leased, and information is published on the website. Public hearings are also held.
4. Prior disclosure of contractual and/or fiscal terms	The laws and regulations include fiscal terms and other obligations.	There is prior disclosure of fiscal terms.	There is prior disclosure of contractual/fiscal terms.	There is prior disclosure of contractual/fiscal terms.
5. Availability of data on geographic blocks	Data is available on the Diskos database.	Data packages are available.	Data packages are available.	Data are available on the website.

Table 6.1

Best Practices in the Petroleum Allocation Process (continued on next page)

Allocation methods/countries				
	Discretionary	Hybrid	Auction	
Practices	Norway	Colombia	Brazil	United States
6. Prior disclosure of rules for the auction/ discretionary method published	The requirements and conditions are published in the notification.	The terms of reference include the rules for the allocation process, prequalification procedures, and information about criteria used.	Regulations and procedures are predetermined in resolutions.	The proposed notice of sale details the terms and conditions of the licensing process.
7. Criteria published	The criteria taken into account are: technical expertise, understanding of geology, financial strength, experience in the Norwegian shelf, and other locations and activities.	Criteria are detailed in the terms of reference and in Agreement 008 of 2004. Criteria vary according to the allocation method.	The ANP publishes the criteria which are 40 percent minimum work program, 40 percent cash bonus, and 20 percent local content.	Criteria are published in the OCS Lands Act.

Table 6.1

Best Practices in the Petroleum Allocation Process (continued)

Allocation methods/countries				
	Discretionary	Hybrid	Auction	
Practices	Norway	Colombia	Brazil	United States
8. Publication of the results of the allocation	Information published on the website includes the blocks awarded, winning bids, and work obligations. Most contract terms are not published in the contracts, as the key terms (including fiscal terms) are standardized in laws and regulations rather than in contracts. Information on the licenses such as operators, ownership interests, and work obligations are published, but the licenses themselves are not published.	Information published on the website includes the blocks awarded, number of bids received, winning bids, and final contract awards. Contracts are also published.	Information published on the website includes the number of bids received, winning bids, final contract awards, the blocks which were licensed, and contract terms such as duration, royalties, and other tax measures.	Information published on the website includes the number of bids received, winning bids, final contract awards, and blocks licensed. Leases that meet all obligations are readily available on the website.

Source: Authors' elaboration.

CONCLUDING REMARKS

Information is important for the effective allocation of petroleum exploration and production rights, but specific, purpose-driven, targeted information is even more important. Targeting information increases its effectiveness because it addresses the incentives of the disclosers. A government's incentives for using this information in the allocation of petroleum exploration and production rights include being perceived as an honest broker, enhancing its reputation, and improving the investment climate, which translate into more and better bids in future licensing opportunities. For companies, the incentives include an enhanced reputation, which could influence allocation decisions in future licensing opportunities.

The second conclusion is that it is necessary to adapt the practices which improve access and dissemination of information to the landscape of each country. Despite differences in allocation methods and

political, economic, social, and legal /institutional landscapes, the best practices adopted in Brazil, Colombia, Norway, and the United States can be used as guidelines for LAC countries endowed with petroleum wealth that are at different stages of economic, social, and institutional development.

The third and most important conclusion is that whatever the allocation method chosen to grant exploration and production rights, the production and dissemination of information plays a key role in increasing transparency and efficiency and leveling the playing field. Transparency enhances trust in governments and companies, promotes goal-oriented decision making, and empowers citizens to hold governments to account. It also gives rise to more efficient processes by reducing both transaction costs and the possibility of fraud and corruption. The entire LAC region could benefit from applying targeted transparency to its licensing practices.

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CHAPTER 7

What Can We Learn from Oil Contracts? Clarifying the Links Between Transparency and Accountability

JORDAN KYLE*

Releasing historically confidential oil contracts into the public sphere is becoming a key part of the global transparency movement, but there has been little explanation of *how* contract transparency can improve resource governance. To fill this gap, this chapter addresses how accountability can develop over both fiscal and nonfiscal contractual clauses. Using data from over one hundred real oil contracts signed in eight Latin American countries between 1955 and 2002, this chapter shows that citizens need supplementary contextual information to evaluate and interpret fiscal clauses, such as the government's share of profits. Social and environmental clauses are more easily interpreted, but they are often too vague to immediately enhance accountability through transparency. Moreover, for

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both fiscal and nonfiscal clauses, optimal design is not always obvious, and citizens need to weigh complex trade-offs. The link between transparency and accountability, therefore, will likely only develop over time, as information about the resource sector and resource governance increases, and as countries develop robust mechanisms for incorporating citizens' feedback into contractual negotiations. Whereas much of the existing literature posits that contract transparency will promote accountability, this chapter builds on that concept by illustrating how to use specific clauses to promote different aspects of accountability and information from real contracts to support these claims.

INTRODUCTION

Almost every country in Latin America—even those with poor geological conditions for oil discovery—has attempted to attract investment in oil exploration at some point in its history.¹ Those countries fortunate enough to find large stocks, however, confront challenges associated with the rewards of resource wealth. These challenges surface even before revenues from oil development begin to flow. While a country's petroleum stocks may be a gift of nature, "translating this resource into saleable crude requires investment and effort" (Tordo et al., 2010: ix). Governments need to find ways to engage the capital and expertise of oil companies while still getting a fair deal for their citizens.

The terms of these deals have historically been set through confidential contracts, making oil revenues comparatively easy for governments to hide (Ross, 2012). Secrecy gives government officials opportunities to make deals that facilitate private rather than public gain. Thus, vast oil

revenues can fuel corruption, undermining accountability.² Transparency is increasingly viewed as an effective tool for improving governance and reducing corruption in resource-rich countries. Global initiatives promoting increased transparency, such as the Kimberley Process Certification Scheme (KPCS), the Publish What You Pay Coalition (PWYP), and the Extractive Industries Transparency Initiative (EITI), have thus gained widespread support. To date, transparency initiatives have primarily focused on revenue transparency, that is, information on companies' payments to governments.

The problem is that revenue transparency alone does not allow citizens to assess, for example, the return that governments are receiving for the extraction of public natural resources or how payments are structured over time. Did their government collect a large signatory bonus, which the private company will later recover through the sale of oil, effectively

¹ Even countries that are not typically thought of as oil producers have signed exploration and production agreements with private oil companies in the hopes of discovering oil. For example, Belize, Costa Rica, El Salvador, Guatemala, Honduras, and Paraguay have all initiated exploration efforts.

² The academic literature contests whether access to resource rents erodes the quality of institutions or whether countries with weak institutions are more likely to seek resource rents. Ross (2012) argues that, after the wave of nationalizations in the 1970s, the size, volatility, and secrecy of oil revenues reduces accountability in oil-producing countries. Menaldo (2013), on the other hand, argues that cash-strapped countries with weak institutions are more likely to initiate oil exploration efforts.

lowering future tax obligations?³ Or, are payments low initially but expected to rise over time? Who will be liable in the case of environmental damage caused by resource production? Answering these questions is crucial for citizens to determine whether government-reported payments represent a fair value for the extraction of their resources. In theory, oil contracts and the laws and regulations that govern them can answer these questions. For these reasons, transparency advocates are beginning to include contract transparency as a key tenet in good resource governance.

Accountability requires both that citizens can access and understand disclosed information and that there are robust mechanisms for incorporating their preferences into contractual design.

³ Signatory bonuses act as a loan from the oil company to the government. The current government receives revenues up front, and companies typically recover this money through later sales of oil (Stiglitz, 2007). Even if bonuses are not tax deductible, governments would sacrifice later revenues in exchange for up-front revenues for the net present value of the negotiated contract to remain constant. This is not necessarily a poor decision if governments are investing revenues with a high rate of return.

This chapter illustrates both the limitations and the opportunities of contract transparency as a means of improving resource governance in Latin America. Despite the growing popularity of contract transparency as a tool to improve resource governance, *how* contract transparency can improve accountability is poorly understood. This chapter separately considers fiscal and nonfiscal clauses and how transparency over existing fiscal and nonfiscal clauses could enhance accountability. Using information from historical oil contracts, this chapter shows that contract transparency is unlikely to immediately improve accountability. Interpreting information from contracts, especially fiscal clauses, requires supplementary information about project economics (e.g., field size, extraction costs, capital costs). Further, both fiscal and nonfiscal clauses involve making complex trade-offs, and optimal design depends on citizens' preferences regarding the trade-offs. Accountability requires both that citizens can access and understand disclosed information and that there are robust mechanisms for incorporating their preferences into contractual design. By illustrating *how* contract transparency can improve different dimensions of accountability, this chapter bolsters calls for contract transparency policies and points to how such policies can be effective.

CONTRACT TRANSPARENCY AS THE NEXT STEP IN THE GLOBAL TRANSPARENCY MOVEMENT

The idea that transparency can improve governance is not a recent one, nor is it specific to the resource sector. Louis D. Brandeis (1914: 26), a United States Supreme Court Justice, argued that “sunlight (...) is the best of disinfectants” in his support of financial disclosure laws. Woodrow Wilson (1884: 26) similarly avowed that “light is the only thing that can sweeten our political atmosphere—light thrown upon every detail of administration in the departments; light diffused through every passage of policy.” Despite the long-standing notion that information is essential to good governance, transparency initiatives only recently took hold in the resource sector. Skyrocketing commodity prices in the mid-2000s highlighted deficiencies in national and international frameworks to adequately address the economic and governance challenges that accompanied the wealth influx. Transparency and accountability initiatives like EITI sought to improve governance by empowering civil society actors with more information.

Transparency and accountability initiatives began by following the money, tracking how much revenue flowed from companies to governments. As revenue transparency gained strength, it became clear that many other links in the resource extraction value chain remained opaque.

Governments must first decide if and when to begin extracting resources. License areas used for resource extraction, particularly during exploration phases, can be quite large, and governments need to carefully weigh the costs and benefits of resource production in each license area, which will vary based on local environmental conditions. Without transparency, citizens lack the opportunity to weigh in on the fundamental decision about whether and when to convert assets in the ground into monetary benefits. Once the government has decided to extract resources from a given area, it must define the legal and financial terms governing extraction. Then, it must award the right to extract. Without transparency over the licensing and allocation process, citizens cannot know whether the allocation process was competitive or whether it was designed to ensure the best deal for the government. Chapter 6 of this publication discusses transparency in the licensing and allocation process in depth.

Without contract transparency, “citizens have no way of knowing whether they are getting a fair deal for their resources and no means of finding out where the money goes” (PWYP, 2013).

After the licensing and allocation process is complete, a written contract is signed. Along with national laws and regulations, this written contract defines the obligations of the resource extractor to the government and vice versa. Without contract transparency, “citizens have no way of knowing whether they are getting a fair deal for their resources and no means of finding out where the money goes” (PWYP, 2013). Thus, contract transparency is becoming an increasingly important component of the agenda for greater transparency in natural resource governance. The IMF included contract disclosure as one of the best practices of budget-making in its 2007 Code of Good Practices on Fiscal Transparency. In July 2013, EITI added contract disclosure to its list of suggested transparency policies (EITI, 2013). In one of the strongest endorsements of contract transparency, the European Bank for Reconstruction and Development (EBRD) will require all recipients of extractive sector loans to disclose terms and conditions of contracts governing resource extraction by the end of 2014 (EBRD, 2013).

This chapter focuses exclusively on the role of contract transparency in improving resource governance. In doing so, it sets aside discussions of how and whether particular contracts can legally be made transparent, a process that can be technically challenging, as illustrated in Chapter 8 of this book in the case of Trinidad and Tobago. Proponents of contract transparency cite two main arguments in support

of contract disclosure. The first argument is based on citizens’ democratic right to access contracts. In a typical contract, each party is a commercial entity answerable to shareholders. In this context, contract confidentiality can protect proprietary information. However, in the case of oil contracts, one of the signatories is a government or state-owned oil company, which signs contracts as a representative of citizens. Governments owe citizens more than mere profit maximization: citizens may value environmental conservation and local employment, for example, in addition to profits. Citizens have a right to see whether their governments are serving their interests in contract negotiations (Rosenblum and Maples, 2009).

Not only do citizens have a democratic right to access contracts, but keeping contracts confidential may erode trust between citizens and their governments, undermining democratic institutions. When contracts are confidential, citizens may assume that contracts contain evidence of corruption and bad deals. For example, Argentine citizens are currently demanding contract disclosure of the recent deal struck with Chevron for US\$1.24 billion in investments in shale gas, investments that could reach US\$15 billion over the next 17 years (Romero and Krauss, 2013a). Over 5,000 residents of the resource-producing province protested the deal. Many believe that this investment was secured by offering Chevron overly generous terms, including an alleged “secret clause” in the contract that would extend Chevron special

coverage for losses (Romero and Krauss, 2013b). It is possible that there is no such clause within the contract or that there is a commercial logic behind special provisions for losses. For example, fields with exceptionally high up-front capital costs and risky geology often allow more generous terms for writing down capital expenditures. The actual terms of the deal remain opaque, so it is impossible to know at this juncture whether or not citizens are correct in their assessment that the terms of the deal were overly generous. However, confidentiality may make citizens more prone to distrust governments and oil companies, and governments do not have the opportunity to explain terms to the public. By disclosing contracts, governments and companies could increase citizens' confidence in negotiated deals. Anticipating disclosure, governments would be prevented *ex ante* from negotiating contracts unpalatable to citizens (Radon, 2007). Indeed, building trust that the state is pursuing the public interest is the first reason cited by a group of NGOs—including PWYP, the Natural Resource Governance Institution (formerly the Revenue Watch Institute, or RWI), and Grupo Propuesta Ciudadana in Peru, among others—in a position paper leading up to the 2013 EITI Global Conference, which supported adding contract disclosure as a mandatory component of EITI (EITI International Board, 2012).

The second argument supports contract disclosure as an accountability mechanism. Corruption can occur at every stage

of the transaction between governments or state-owned oil companies and private resource developers, from the allocation of contracts, to the negotiation of fiscal terms, to the enforcement of fiscal terms. During each of these stages, various agents have incentives to divert resources for private gain. Citizens (principals) cannot induce agents (government officials) to serve their interests without information on what agents are doing.⁴ Secrecy makes it more difficult and costly for citizens to obtain that information. More information in the public sphere should enable citizens to punish governments for failing to respond to their interests in contract negotiations.

Notwithstanding the growing popularity of contract transparency arguments within the overall agenda for transparent management of natural resource revenues, many actors oppose contract transparency. Opposition typically comes from actors that benefit from secrecy. For example, when British Petroleum (BP) famously published details about the US\$111 million signatory bonus that they paid to the government of Angola to operate an offshore well, the Angolan government threatened BP with contract termination and expulsion (McMillan, 2005). Resistance can also have a commercial logic. Private oil companies often resist contract transparency because of proprietary information that may be contained within contracts, such as seismic

⁴ See Stiglitz (2007) for a discussion of agency problems in resource governance.

data on field geology. Proponents of contract transparency argue that concerns about proprietary information can be addressed while still achieving transparency over the contractual clauses relevant to the public by redacting sensitive information (Rosenblum and Maples, 2009). Whether or not contract transparency policies can simultaneously release sufficient information to the public to promote accountability and protect commercial interests remains to be tested empirically. Even if all parties theoretically agree to transparency, there can be legal and technical hurdles to overcome before information can actually be made public (see Chapter 8 of this publication).

Some oil-producing countries have already pioneered contract transparency policies. At least five countries in Latin America (Bolivia, Colombia, Ecuador, Mexico, and Peru) already disclose oil contracts. However, contracts are not equally accessible across cases. Table 7.1 outlines key differences among Latin American countries in contract accessibility. In Mexico, for example, citizens file freedom of information claims to request the disclosure of specific contracts (Andrade et al., 2010–11). In Peru, by contrast, the state-owned oil company, Petroperu, operates an online database of oil contracts searchable by block. The fact that these countries are still releasing contracts and securing private investments in the oil sector suggests that it is possible to pursue the goals of transparency and protection of commercial interests simultaneously.

For Latin America then, arguments about how transparency policies can be most effective are as important as arguments about why contracts should be made transparent. This chapter focuses on the accountability mechanism, asking how contract transparency could improve resource governance.

WHAT INFORMATION CAN BE FOUND WITHIN OIL CONTRACTS?

Data

In order to illustrate how information can be extracted from contracts, this chapter relies on a dataset of historical oil contracts and legislation (Kyle, 2014). These contracts were obtained from the Barrows Company, an international reference library for oil, gas, and mineral laws and contracts. Specifically, the chapter uses information from 103 oil contracts signed between 1955 and 2002 by eight Latin American countries: Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, and Venezuela. These countries were selected to represent a broad range of geological and market conditions, including major global producers (Venezuela), net exporters of oil (Argentina, Colombia, and Ecuador), net importers of oil (Bolivia,⁵ Chile, Peru), and countries that initiated exploration efforts that never yielded major discoveries (Paraguay).⁶

⁵ Bolivia is a net exporter of natural gas but not of oil.

⁶ Detailed information on contracts and sources can be found in Table A7.1 on page 247.

Table 7.1

Contract Transparency Policies in Latin America

Country	Method of contract disclosure	Ease of access	Notes
Bolivia	Contracts must be individually authorized and approved by the legislature.	Low	Operation contracts were reviewed and approved by the Chamber of Deputies and the Senate and subsequently posted on Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) and Ministry of Hydrocarbons websites. However, these contracts are difficult to find now.
Colombia	Contracts are published on the Ministry of Hydrocarbons (ANH) website. ^a	Medium	Contracts are easy to locate, but disclosures are incomplete. Full contracts are available for 2012 bidding round but only model contracts are available for earlier rounds.
Ecuador	Contracts are published on Petroecuador's website. ^b	Medium	Contracts are easy to locate, but disclosures do not give full information about fiscal terms.
Mexico	Some Pemex contracts have been released through freedom of information claims.	Low	Contracts have ultimately been disclosed through freedom of information claims, but the process is lengthy.
Peru	Contracts are published on Petroperu's website. ^c	High	Contracts are easy to locate and disclosure is comprehensive. Contracts are searchable by block.

Source: Author's elaboration based on Andrade et al. (2010); RWI (2013a and 2013b).

^a Available at <http://www.anh.gov.co/Seguimiento-a-contratos/Paginas/default.aspx>.

^b Available at http://www4.eppetroecuador.ec/lotaip/lotaip_contratospec.cfm.

^c Available at <http://www.perupetro.com.pe/relaciondecontratos/>.

While the data are useful in illustrating how to extract and interpret information from oil contracts, they are limited in several ways. First, all contracts used in this chapter are historical and do not represent current conditions in the oil sector for these countries. Second, the contracts presented here may not fully depict the conditions

in the oil sector for the country during the time period in question. In some countries, each contract signed during an exploration effort or bidding round contains similar fiscal terms; in other countries, terms vary within the same round. The author gathered as many contracts as could be located for each bidding round for each country;

however, not all contracts signed during the time period were available. Therefore, the information depicted here cannot be interpreted either as a representation of current fiscal conditions within the resource sector nor can they be interpreted as a full representation of historical fiscal conditions. Third, in order to extract information from oil contracts—such as the expected “government take” from the project, discussed further below—the author had to make assumptions about project economics. Actual government take for the contracts modeled in this chapter depended on real project economics and enforcement of contractual terms. Despite these limitations, the data are useful in illustrating how to extract and interpret information from oil contracts that were negotiated across a wide range of geological and market conditions.

Resource exploration and production is supported by tens (if not hundreds) of contracts between contractors and subcontractors, between contractors and financing institutions, and between contractors and governments and/or state-owned oil companies. When transparency advocates call for contract transparency, however, they are typically referring to a primary contract that governs the exploration and exploitation of the resource which defines the main obligations of the state and the companies involved in extraction (Rosenblum and Maples, 2009). Primary contracts can vary from a 10-page agreement that defines obligations by referencing existing laws to a 150-page agreement in which every term

is specified within the contract. These contracts can comprehensively cover most of the issues that may arise with oil exploration and production, or can remain silent on key issues such as whether governments are committing to tax stabilization over the life of the contract, how the oil price will be calculated to determine a company’s taxable income, and who is liable for environmental cleanups.

Contracts define the rights and obligations of governments and/or state-owned oil companies and private oil companies.

Contracts define the rights and obligations of governments and/or state-owned oil companies and private oil companies. These rights and obligations span several major areas, such as licensing, contract duration, fiscal obligations, environmental liabilities, and local employment and service requirements. Contracts vary widely as to whether they cover each of these issues and as to how these issues are addressed (see Table 7.2 on page 238). The chapter proceeds by evaluating the two major groups of clauses—fiscal terms and social/environmental terms—and how contract transparency can and cannot enhance accountability.

ACCOUNTABILITY OVER FISCAL TERMS

When discussing accountability over fiscal terms in oil contracts, two primary issues are of concern. First, and most prominently, contracts define the overall share of profits that governments can expect to receive over the life of a field. Second, different methods of securing that share—such as royalties, income taxes, and production-sharing—respond differently to changing market conditions. This section addresses the difficulties of calculating and interpreting governments' expected share of profits, which requires detailed information on project economics. By contrast, it is simpler to assess how the share of profits will respond to changes in international prices. However, different forms of tax collection have different advantages and disadvantages and optimal design can vary across contexts.

Government Take

A primary motivation for disclosing oil contracts is assessing the division of profits from oil field development between the government and private oil companies (e.g., EITI International Board, 2012; Gary and Karl, 2003; Rosenblum and Maples, 2009; RWI, 2012). However, there is no single clause within a contract that tells the public whether governments or private companies were more successful in securing their interests. Most commonly, analysts use the government take statistic to

evaluate oil contracts. Government take is “the government’s share of economic profits from almost all income sources, including bonuses, royalties, profit oil, taxes, and government working interest” (Johnston, 2007: 36).⁷ It represents the division of undiscounted profits over the full life of an oil field.

There is no single clause within a contract that tells the public whether governments or private companies were more successful in securing their interests.

There are three main problems with evaluating government take and asking whether the government has secured competitive terms. First, government take varies with project economics, and this information is needed to assess whether government take is competitive. Second, fiscal

⁷ When national oil companies (NOCs) have an equity stake in projects, this calculation of government take includes the NOCs' share of profits as a part of government take. Thus, it does not make a distinction between revenues accruing to the central government versus to the NOCs. Whether or not national governments have access to profits collected by NOCs varies across countries (Victor, Hults, and Thurber, 2012). For countries where national governments have little access to NOC revenues, this calculation may overestimate the take of the national government; in that scenario, take would be more appropriately divided between governments, NOCs, and private companies.

terms on paper may diverge from fiscal terms in practice (i.e., contracts may not be enforced). Third, nonfiscal terms also contribute value to a contract but are not incorporated into the government take statistic.⁸

Using contractual terms to calculate government take is a complicated exercise and is both “art” and “science” (Johnston, 2003). The “art” of contractual analysis involves selecting appropriate input parameters, while the “science” involves selecting appropriate modeling methods. Government take calculations presented here utilize cash flow analysis for a base-case scenario that makes assumptions about field reserve size, decline rate, oil prices, project costs, and field life.⁹ Government take calculations are sensitive to modeling assumptions. Figure 7.1 shows how government take varies with project economics. For example, in the contract shown for Ecuador in 1995, government take is secured through income

tax and production-sharing arrangements, which do not vary based on field profitability; thus, government take is independent of field profitability.¹⁰ In each of the other three contracts shown, however, government take is additionally secured through a royalty. Because royalties are collected based on production and not on profits, royalties are regressive with respect to field profitability. Thus, the value calculated for government take will increase as costs as a share of gross revenues increase.

This chapter plots government take across countries, so it is useful to hold project economics constant and vary only the fiscal terms within contracts. When the objective is to analyze a single contract, it would be more appropriate to subject the contractual terms to a wide range of potential scenarios and calculate a range of potential government take statistics. For the base-case assumptions used here, see Table A7.1 on page 247.

Figure 7.2 shows government take calculations for 103 contracts from Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, and Venezuela signed between 1955 and 2002 for the base-case scenario.¹¹ Each government take statistic is calculated using the same price, production, and cost

⁸ There are other potential weaknesses of the government take statistic not addressed here. One major issue is that the statistic is undiscounted and does not incorporate information about the timing of expected payments (Johnston, 2007).

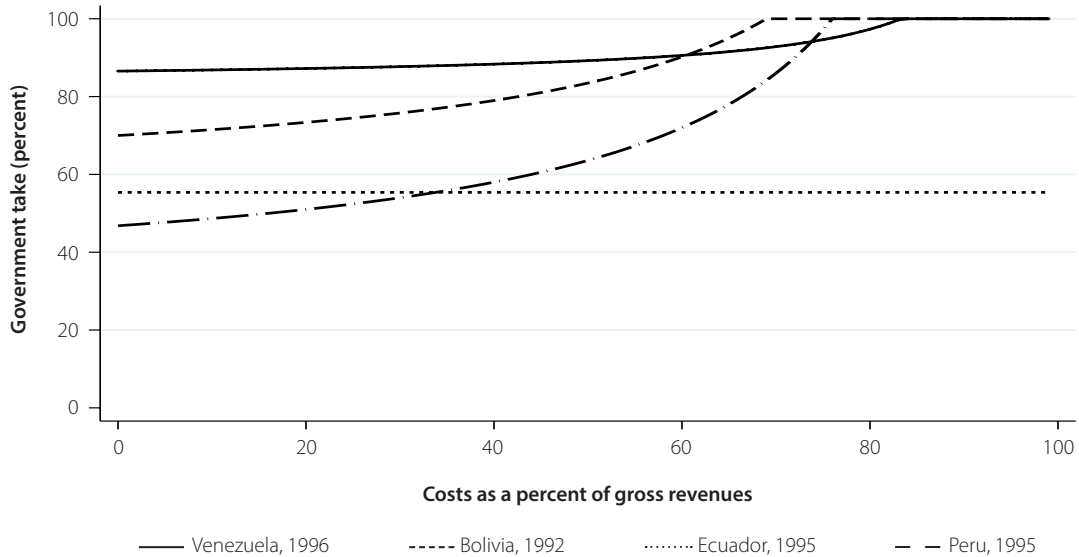
⁹ Other types of analysis can be performed. Companies often use decision analysis to evaluate projects, which focuses on the impact of managerial decisions (e.g., whether to drill additional wells). They incorporate uncertainty but typically by specifying probabilities attached to different prespecified scenarios (e.g., the probability that the discovered field size will be large, small, or zero). Decision trees are designed to guide companies through project decision making (see Galli et al., 1999 for a discussion of different methods of oil field evaluation).

¹⁰ The profit oil split does vary based on field size, which can be an imperfect proxy for field profitability.

¹¹ See Table A7.2 on page 248 for contract availability by country and year. Note that not all countries are covered for the entire time period. Data for Argentina, for example, end in 1989.

Figure 7.1

Variation in Government Take Based on Field Profitability



Source: Author's elaboration (see Table A7.1 on page 247 for source information on contracts).

Notes: Each line plots government take calculated from the fiscal terms within a single oil contract using different assumptions about field profitability.

scenario using (undiscounted) cash flow analysis.¹² In other words, the analysis is performed as if the same oil field—with the same size and extraction costs—were discovered as a result of each contract.

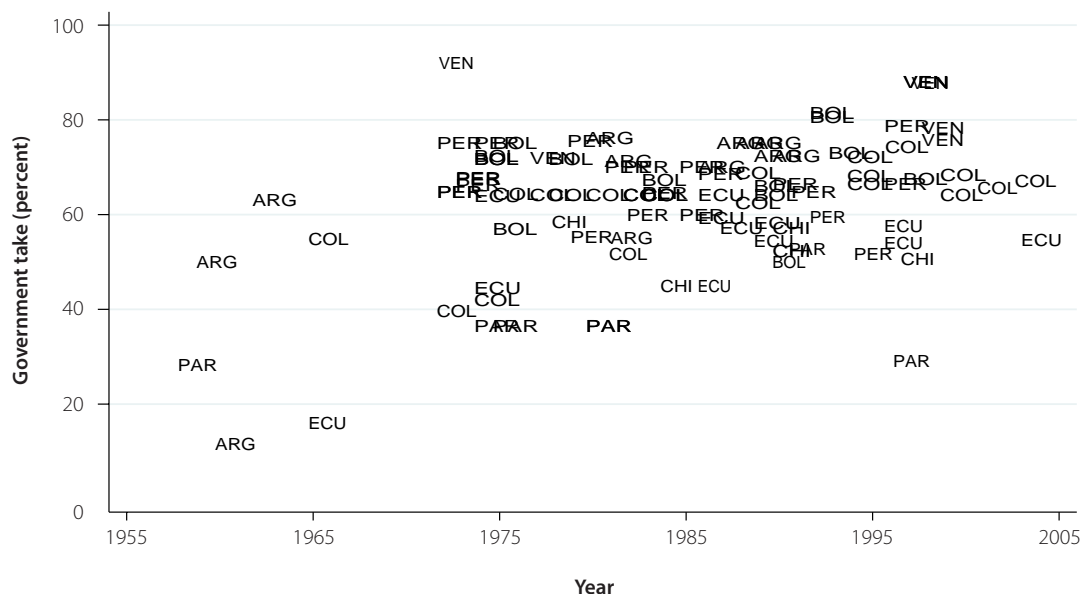
Differences in take statistics in Figure 7.2, therefore, are attributable *only* to differences in fiscal terms. Government take varies widely across countries and over time within the same countries.

¹² One could discount the cash flow to calculate government take, but this is typically not done (Johnston, 2003). Discounting the cash flow would increase calculated government take if the contract secures early revenues for the government (in the form of bonuses or royalties). It is more complicated to compare discounted statistics across countries however because countries may not use the same discount rate.

The logical question from an accountability perspective is the following: do these data points represent the most competitive deal that the government could have secured at the time?

Figure 7.2

Government Take



Source: Author's elaboration. Data on contracts comes from PL (1967).

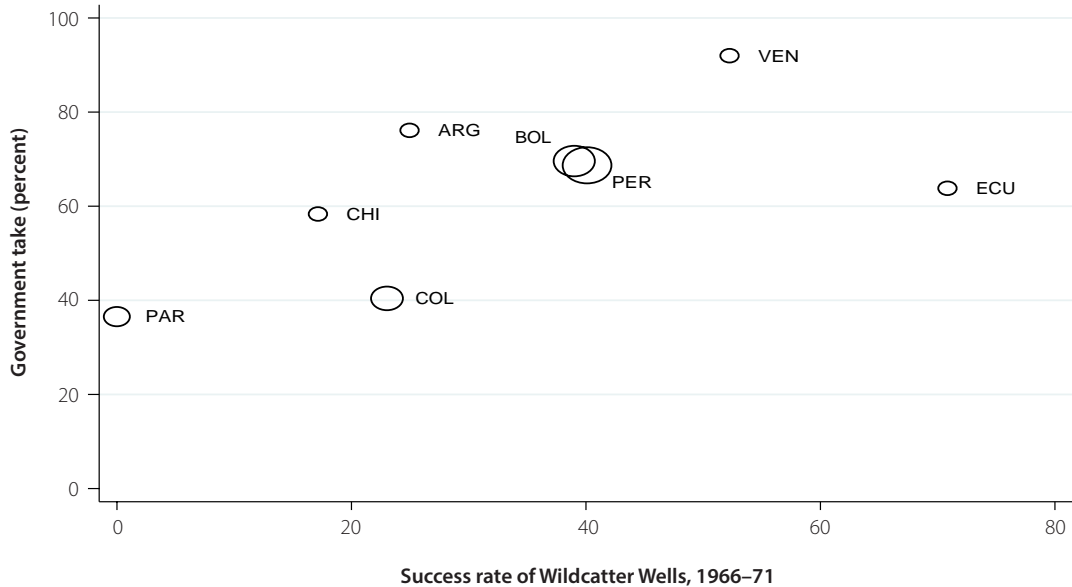
Notes: Each point represents a contract signed during a given year between a government or state-owned oil company and private resource developer. Government take is calculated using cash flow analysis based on the assumptions in Table A7.1 on page 247. See Table A7.2 on page 248 for information on data availability by country.

The logical question from an accountability perspective is the following: do these data points represent the most competitive deal that the government could have secured at the time? For example, why did Bolivia and Peru secure government take near 80 percent in the late 1970s while Colombia's take (for this hypothetical scenario) was closer to 40 percent? However, this question is flawed for at least three

reasons. First, government take varies based on geological risk, which varies across countries and over time. Figure 7.3 illustrates the relationship among prospectivity, the likelihood that a given field contains oil, and government take during the 1970s. This analysis plots values for only eight countries during a single time period, so it should be seen as an anecdotal example of fiscal clauses varying with geological conditions

Figure 7.3

Government Take by Prospectivity



Source: Data on contracts comes from PL (1967). Data on wildcatter drilling comes from AAPG Bulletins (1967, 1968, 1969, 1970, 1971, and 1972).

Notes: The y-axis represents government take calculated for the base scenario summarized in Table A7.2 on page 248. The x-axis represents the percentage of wildcatter wells that hit oil between 1966 and 1971. The size of the circle indicates the level of confidence over fiscal terms in the country at the time; larger circles indicate that more contracts are available for the time period. See Table A7.2 on page 248 for information on data availability by country.

and not a formal test of the relationship. The y-axis represents government take calculated for the first exploration effort conducted by each of the eight countries since 1971. Along the x-axis is the success rate for wildcatter wells drilled between 1966 and 1971. Wildcatter wells are those drilled outside of known oil fields—and not those drilled on existing, known oilfields—and therefore face uncertainty of finding oil. The

size of the circle is weighted by the number of contracts used to create the government take estimates, so larger points should indicate more precision.¹³

¹³ Larger circles do not necessarily indicate more precision over the economic modeling of the contracts but rather more precision over the fiscal terms at the time (larger circles indicate more contracts are available for the bidding round).

Examining Figure 7.3, the difference between Bolivia and Colombia in fiscal terms no longer presents a puzzle: between 1966 and 1971, Bolivia had a wildcatter success rate of 39 percent while Colombia faced a 23 percent success rate (with 100 and 126 total wildcatter wells drilled respectively). Indeed, looking at the data this way, Ecuador now looks like the outlier, with a wildcatter success rate of 71 percent but a government take of only 62 percent.¹⁴ However, this point is estimated with less precision than others since fewer contracts were available for Ecuador for the period.

These differences in prospectivity make it complicated to benchmark deals across countries. Imagine two fields with the same costs of extraction, field size, and technical probability of drilling success. The fiscal terms, among other factors, will determine whether or not the field can be commercially developed. In other words, a field under a fiscal system with harsher terms may not be considered a commercial discovery, while the same field under easier terms could be commercially developed. To put this another way, if the field size and costs of extraction were the same but the probability of drilling success varied, then government take would have to vary in order for the field to remain valuable enough to justify commercial development. Thus, information on project

¹⁴ All drilling information comes from the American Association of Petroleum Geologists.

economics and prospectivity is crucial to contextualize cross-country comparisons on government take.¹⁵

Even with full information on prospectivity, comparing government take across countries and time periods is a complicated exercise. Expectations about the future price of oil at the time of contract negotiation shape investors' attitudes toward risk (Tordo, 2010). Thus, two fields with similar levels of geological risk and costs of extraction may vary in their attractiveness to investors based on *when* they are put up for auction (and differences across time periods in expectations about future oil prices). Fields also vary by the level of technical expertise and up-front capital required for development. In practice, there may only be a small handful of companies globally that have the particular type of expertise required or that can raise a sufficient level of investment capital to develop the field. In these cases, governments may need to allow investors to write down investment costs before collecting tax revenues, effectively limiting government take in early years of the contract. Without these provisions, investors may not be willing to risk the level of capital required to develop

¹⁵ There still may be room for governments to capture more take even in low prospectivity environments. In other words, just because it is important to take geological risk into account when benchmarking government take across countries does not mean that differences in geological risk fully explain differences in government take.

the field. Many more complications with benchmarking exercises could be imagined. This chapter cautions against drawing conclusions about the “fairness” of particular deals without a deep understanding of geological risk, project economics, and market conditions.

This chapter cautions against drawing conclusions about the “fairness” of particular deals without a deep understanding of geological risk, project economics, and market conditions.

Further, focusing only on government take calculations in transparency policies without also examining accompanying contextual information could have deleterious effects on the government’s ability to implement natural resource policy. Because of differences in project economics and prospectivity within the same country, governments often assign different fiscal terms to different field areas. For example, governments often have different fiscal regimes for onshore versus offshore investments or for areas with proven reserves versus exploration areas. The ability to vary terms can be beneficial for countries because it enables them to encourage investments in high risk areas by assigning lower take while still securing high take on low-risk areas. Without technical knowledge of field differences, it could be difficult for the public to

understand differences in terms. Thus, information on government take could generate focal points that limit the government’s options to release future fields under different terms, even if prospectivity would call for it.

The importance of contextual information for citizens to assess resource governance is highlighted in the new 2013 EITI Standard. Going forward, EITI-compliant countries need to disclose information on production; ownership of licenses; descriptions of how revenues are allocated between national, state, and local governments; and descriptions of fiscal regimes (EITI, 2013). While transparency along these dimensions is crucial to understanding overall resource governance, this information is not sufficient to fully contextualize and benchmark government take.

Second, it is difficult to compare governments’ rate of return across countries because enforcement of contractual terms varies. A country that negotiates lower government take on paper, and successfully enforces contractual terms, may get a higher take in practice than one that negotiates higher terms on paper but struggles to enforce them. Nonenforcement could be caused by several factors. Companies could over-report costs in order to reduce their tax burden, which happens even in the United States. In Alaska in the 1980s, several prominent global oil companies settled with the state on charges that they over-reported production costs and under-reported price by selling oil below market prices to

their own subsidiaries (Stiglitz, 2007). More recently, the Office of Natural Resource Revenue in the United States charged a company operating in the Gulf of Mexico with improperly deducting transportation costs from royalty payments (ONRR, 2014). If these types of violations can happen in the United States, they undoubtedly occur in countries with weaker tax administrations.¹⁶

A country that negotiates lower government take on paper, and successfully enforces contractual terms, may get a higher take in practice than one that negotiates higher terms on paper but struggles to enforce them.

Countries and companies could also mutually agree not to enforce fiscal terms laid out in contracts or to amend them. When there are conflicts between national law and contractual terms, there can be legitimate confusion over tax burdens. For

¹⁶ The point made here refers to incentives to over-report true project costs and not to concerns about “gold-plating,” or, incentives for oil companies to spend more than they otherwise would in order to reduce their tax burden. As long as companies collect some share of the profits, there should always be an incentive for companies to keep true costs down, especially when the time value of money is taken into consideration (Mian, 2010; Johnston, Johnston, and Rogers, 2008).

example, in the 1990s, Argentina signed some contracts with a royalty rate of 8 percent rather than the 12 percent set in national law. Oil-producing provinces brought claims against the companies to demand that companies pay the legally higher royalty rather than the contractually agreed upon lower royalty. The Argentine Supreme Court eventually ruled in the provinces’ favor, but until then the real obligation was not clear (Attwood, 2000). For a variety of reasons, government take on paper and in practice can diverge.

Third, it is also difficult to compare government take across countries because contracts contain nonfiscal clauses that affect the overall value of the contract. How do you value a contract that may rank lower than a neighbor on government take but contains stricter measures for environmental protection, a concept that is more difficult to quantify? What about contracts that place more emphasis on local content provisions and training of local technical professionals? Technological and skill transfers are not captured within government take statistics. Table 7.2 outlines a range of clauses that may be contained within a primary contract. As seen here, contracts vary in whether or not they address environmental and social issues. Eighty percent of contracts reviewed for this chapter fail to assign liability for environmental damages. This is perhaps not surprising given the historical time period examined here; environmental clauses become more prevalent and more stringent

over time. Nevertheless, it is difficult to compare contracts that vary so dramatically in how they secure a country's interests beyond division of profits.

This is not to say that oil contracts should not be disclosed or that fiscal terms within them should be ignored. Instead, this chapter argues that the interpretation of this information can be misleading when taken out of context of other information on project economics and nonfiscal clauses. In order for the accountability mechanism to work, many oil-producing countries need to release contracts into the public domain along with other contextual information. The new 2013 EITI Standards represent an important step forward on these issues. As more and more countries do this, international benchmarks can be created that allow countries to assess whether, given their geological conditions, they can secure higher take. This is not likely to occur over the short term, however, and does not offer much to citizens who wish to immediately use their own country's contracts for accountability.

It is difficult to compare government take across countries because contracts contain nonfiscal clauses that affect the overall value of the contract.

Flexibility of Fiscal Regime to Changing Market Conditions

A second dimension of accountability that could be enabled through oil contract transparency is to assess whether governments have anticipated and planned for changes in the international oil market. Although this information is comparatively simple to obtain and interpret from contracts, optimal fiscal design depends on the political economy context (Barma et al., 2012). In taxing resource extraction, countries balance competing objectives of simplicity, neutrality, and flexibility. In order for citizens to hold governments accountable, they need to develop preferences over these trade-offs, and governments need to develop mechanisms for incorporating these preferences into contract design.

Oil price volatility makes designing fiscal systems challenging. If fiscal systems are regressive, then higher oil prices are associated with greater profit shares for companies but not for governments, who may see their share of profits *fall* as prices rise.¹⁷ On the other hand, countries also have incentives to smooth revenues across market conditions. By claiming larger shares of revenues in low price environments and allowing companies to claim larger shares in high price environments, governments can reduce their exposure to price volatility. This

¹⁷ Even if government take is regressive, level of revenues to the government still increase as prices increase.

structure would theoretically be valuable to countries with low administrative capacity and low ability to credibly commit to revenue-smoothing through other mechanisms (for example, by making contributions to natural resource funds).¹⁸ However, governments are also more likely to expropriate resources and renege on existing contracts during oil price booms (Guriev et al., 2010; Manzano and Monaldi, 2008 and 2010). Based on this logic, in their study of oil contract design, Stroebe and van Benthem (forthcoming) argue that, when countries cannot credibly commit to uphold contracts, oil contracts should secure greater shares of revenues when oil prices are high and lower shares when prices are low; in other words, fiscal systems should be progressive.

Different fiscal systems respond differently to changes in oil price. Royalties, for example, are simple to administer (requiring the government to collect a flat or variable percentage of production without regard to project economics), and they also guarantee income to the government over the short term. Royalties are collected as soon as field production begins, so governments do not have to wait until capital costs have been recovered to collect revenues, as they do with a profit-based tax. However, royalties distort investment. Because they are collected even when exploration projects are operating at a loss, they incentivize

¹⁸ On the political economy of natural resource funds, see Humphreys and Sandbu (2007).

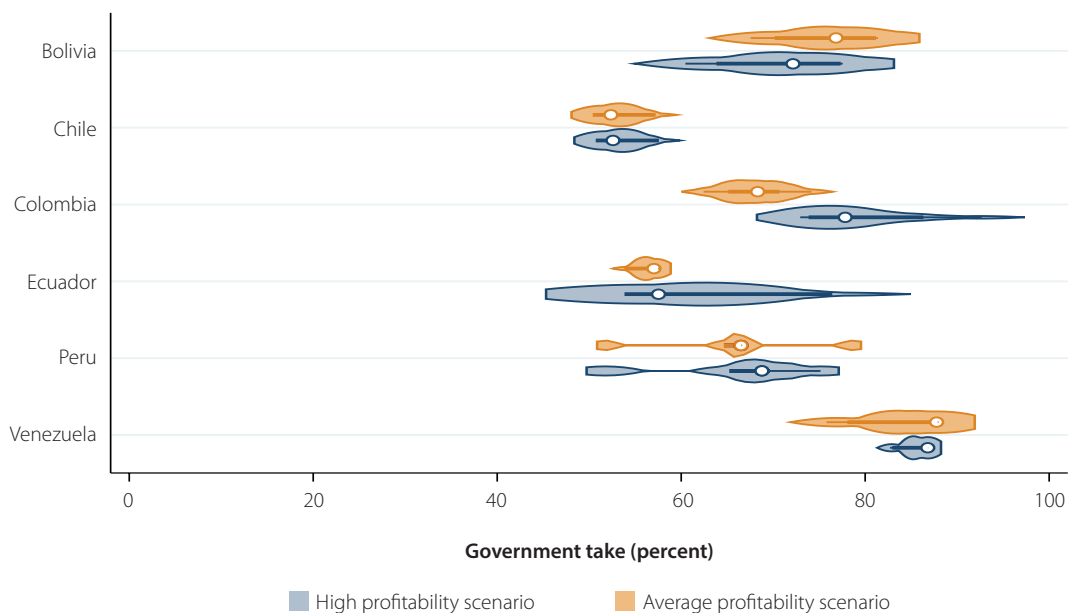
delays in capital investments and reduce total investments in the field compared to a nontax or neutral tax scenario (Smith, 2012). They are also regressive.¹⁹

Income taxes, on the other hand, are virtually neutral to investment (Smith, 2012), yet are more difficult to administer. They are also neutral (neither progressive nor regressive) with respect to rising prices. To collect income taxes, it is necessary to calculate revenues and costs. Whereas assessing production levels to calculate royalties is relatively simple, governments need resources and technical capacity to audit costs, making calculation of taxable income comparatively complex. Taxes based on rates of return—such as sliding scale royalties, income taxes, or profit oil splits based on rates of return—offer countries the ability to design progressive fiscal systems, yet are similarly difficult to administer. Governments may also have to wait years before collecting taxes under more progressive systems, since it can take years for companies to fully recover costs.

¹⁹ Recent work questions the notion that royalties are always regressive with respect to price. The intuition is that at higher prices, the oil company produces more barrels from more expensive-to-produce fields, and the fixed-rate royalty represents a higher share of profits from these high cost barrels. In other words, if costs are rising along with prices, then a fixed royalty does not necessarily drive down government take as oil prices go up (Smith, 2012). However, royalties are always regressive with respect to rising profits.

Figure 7.4

Assessing How Fiscal Systems Respond to Differences in Profitability, 1990s



Source: Data on contracts comes from PL (1967).

Note: See Table A7.2 on page 248 for information on data availability by country.

Figure 7.4 illustrates this point. The figure shows government take for contracts signed in the 1990s. For each country, the orange-shaded region indicates government take when costs represent 30 percent of gross revenue (an average profitability scenario). Wider regions indicate more variation in contractual terms within the country, while narrower bars indicate more standardization in terms over the time period. The white circle in the middle of the shaded region represents the median take across all contracts in the dataset for the period, and

the lines represent the interquartile range. Meanwhile, the blue-shaded regions reflect government take for the same set of contracts and the same production scenario if costs represent only 15 percent of gross revenue (a high profitability scenario). For some countries, the blue-shaded regions are to the right of the red regions, indicating fiscal systems that are, on average, progressive.²⁰

²⁰ Individual contracts could behave differently than the country median for the time period if there is large variance in fiscal terms.

For other countries, blue regions are to the left of red regions, indicating fiscal systems that are, on average, regressive.

Although it is illustrative to model differences in take across scenarios, information about how (if not by how much) fiscal systems will respond to changes in price is relatively simple to assess. One need only consider the tax mix employed by the country to get a basic intuition for how it will respond to changes in prices (see Figure 7.4). For example, Bolivia during the 1990s implemented a royalty-tax system, collecting revenues primarily through royalties and income taxes. Because royalties are based on field production and not profitability, the share collected by the government does not change as profits rise, making royalty-based systems regressive. During the same period, Colombia, on the other hand, collected revenues through royalties, income taxes, and equity participation through its state-owned oil company Ecopetrol. In Colombia, Ecopetrol's share of production through its equity stake was linked directly to field profitability, causing the fiscal system to be progressive overall. In Chile, however, government take is virtually neutral with respect to changes in prices. During the period, resource revenues were collected through income taxes and production sharing; although the production-sharing arrangements contained production contingencies (with government take rising as production increases), they did not contain contingencies based on field profitability.

Increasing transparency about the fiscal instruments utilized for tax collections—and making transparent the advantages and disadvantages of each—can be the starting point of a national dialogue on what types of tax instruments are ideal given the country's policy goals.

Through contract transparency, citizens can assess whether fiscal systems are flexible to changes in oil prices. Some fiscal systems are better at securing income during low price environments, while others are better at securing income in high price environments. However, optimal mixes depend on political economy conditions within countries, including the administrative capacity required to administer and enforce more complex progressive tax structures. Increasing transparency about the fiscal instruments utilized for tax collections—and making transparent the advantages and disadvantages of each—can be the starting point of a national dialogue on what types of tax instruments are ideal given the country's policy goals. This type of accountability can develop over the long term, but only if policies are in place to facilitate national dialogue on ways to balance the goals of neutrality, simplicity, and flexibility.

ACCOUNTABILITY OVER SOCIAL AND ENVIRONMENTAL TERMS

Disclosing oil contracts' social and environmental clauses—or lack thereof—is the component of contract transparency most immediately valuable to citizens in resource-producing regions. Social and environmental clauses in oil contracts define companies' obligations with regard to local employment and training, utilization of local materials and services, contributions to infrastructure development and social projects, responsibility for environmental impact studies, and liabilities in the event of environmental damages. However, these clauses are often omitted or are so vague that citizens could not effectively use them to monitor companies' compliance. Instead, disclosing social and environmental clauses is more useful as a means of holding governments accountable for negotiating adequate protections. In addition to social and environmental clauses, contracts define how the government is prioritizing environmental conservation by defining the amount of land devoted to resource extraction and any land use restrictions. Governments need to develop means of effectively sharing this vital information with citizens, especially those in resource-producing areas.

Social and Environmental Clauses

In theory, citizens in resource-producing regions are in the best position to monitor compliance with social and environmental obligations. In practice, however, these clauses are often vague or omitted altogether from contracts (see Table 7.2). In some cases, this is because obligations are defined within national law rather than within contracts. For example, Colombia and Ecuador have passed extensive national legislation on environmental obligations; companies are required to conduct environmental impact studies prior to exploration and justify drilling programs with respect to projected environmental effects. In these cases, contracts merely point to the national laws that must be obeyed and do not specify obligations in detail. In the 1980s, Argentina often attached international treaties on environmental protection to contracts as a reference to environmental obligations in the absence of national legislation.²¹

²¹ Defining social and environmental obligations within national laws rather than contracts may be preferable. When social and environmental obligations are set within contracts, this could encourage horse-trading during contractual negotiations (e.g., offsetting higher environmental obligations with lower government take) (Radon, 2007). Discussing the best method of governing these sectors is beyond the scope of this chapter.

Table 7.2
Contract Clauses (continued on next page)

	Description	Clause prevalence	Mean (SD)	Minimum	Maximum
General terms					
Area	Size of the area in hectares during the exploration period of the license boundaries. Area may diminish over the duration of the contract if there are relinquishment clauses.		785,694 (996,994)	50	6,000,000
Contract duration	Length of the contract in years.		31 (7.4)	15	58
Fiscal terms					
Bonuses	Paid at the time of signing a contract (signatory bonuses), during a prespecified contract-year (annual bonuses), or based on hitting particular production targets (production bonuses).	12%	--	--	--
Land rental tax	Flat or variable fees paid based on a per-hectare basis of the total contract area.	18%	US\$169 (US\$558)	\$0.008	\$3,409
Royalties	Taxes paid based on a set percentage of gross revenues, irrespective of profits. Royalty rates can be flat or variable. Variable rates may depend, for example, on production levels, contract-year, distance from field to port, oil quality, etc.	62%	20% (7.5%)	1%	48%

Table 7.2

Contract Clauses (continued on next page)

	Description	Clause prevalence	Mean (SD)	Minimum	Maximum
Income taxes	Function the same as corporate income taxes (typically, they are the same rate as normal corporate income taxes) and can be a flat or variable share of profits.	89%	43% (13%)	22%	84%
Profit oil split	The government's share of profit oil (after paying royalties and deducting costs and depreciation). (Subtracting this value from 100 would yield the share of profit oil to the contractor.)	59%	52% (15%)	18%	87%
Service payment	A flat or variable fee paid for services rendered by the contractor for exploration and development of the license area.	33%	--	--	--
Environmental clauses					
Environmental clause	Indicates whether protection of the environment is mentioned at all within contracts (at a minimum, whether contractors are asked to prevent pollution).	80%	--	--	--
Liability for damages	Indicates whether the contract has any clauses about liabilities for environmental damages. For example, are contractors required to take out insurance against environmental damage or to deposit an amount that could be drawn from in the event of damages?	20%	--	--	--

Table 7.2

Contract Clauses (continued)

	Description	Clause prevalence	Mean (SD)	Minimum	Maximum
Training provisions	Indicates whether the contract specifies that contractors must conduct training of local employees.	72%	--	--	--
Local employment	Indicates whether the contract specifies that the contractor must hire locals to fill at least part of its employment needs.	82%	--	--	--
Local content	Indicates whether the contract specifies that local content and services should be used when possible, through either setting minimum percentages of materials that must be purchased locally or setting preferential tax rates on goods purchased domestically.	48%	--	--	--

Source: Author's elaboration. Data on contracts comes from PL (1967).

Note: See Table A7.2 on page 248 for information on data availability by country.

Environmental obligations beyond a reference that companies should “prevent pollution” or “protect flora and fauna” are frequently omitted from contracts, leaving it unclear which party will bear liability for damages. Of the contracts examined here, only 80 percent even reference the environment and only 20 percent specify that companies can be held liable for environmental damages. Although social and environmental clauses are becoming more prevalent in contemporary contracts compared to

historical ones, the reality is that many oil contracts will not give citizens useful information on companies’ real obligations. These obligations may not even become clear to the contracting parties until environmental damage is incurred and contractual obligations are disputed in courts.

Social obligations can also be vague. Seventy-two percent of reviewed contracts require companies to run training programs for citizens of host countries, yet only 27 percent of these contracts give any details

beyond “training of local employees is required.” By contrast, contracts with more detail may specify how much money should be invested annually in training programs, how many employees should be trained, the types of training required (e.g., geology, engineering), and collaborations with local universities. As noted above, more contemporary contracts may contain more stringent social and environmental clauses. However, the main point is that citizens may not be able to monitor compliance with existing social and environmental obligations, even the citizens most proximate to resource production.

It is precisely for this reason that these clauses should be released to the public. Citizens in resource-producing areas can monitor compliance with easily observable obligations, but, more importantly, they can hold their governments accountable for negotiating social and environmental clauses and enacting legislation that meets public demand.²² Contract transparency could prevent “government officials from agreeing to terms that the citizenry cannot politically accept and will be wont to criticize, if not attack” (Radon 2007: 97). In order for an accountability mechanism to develop over companies’ social and environmental obligations, it is crucial to release contracts to the public and to develop mechanisms for incorporating citizens’ input into contractual negotiations.

²² Radon (2007) argues that social projects should not be negotiated within contracts since these can become distractions from securing adequate shares of economic profits for the government.

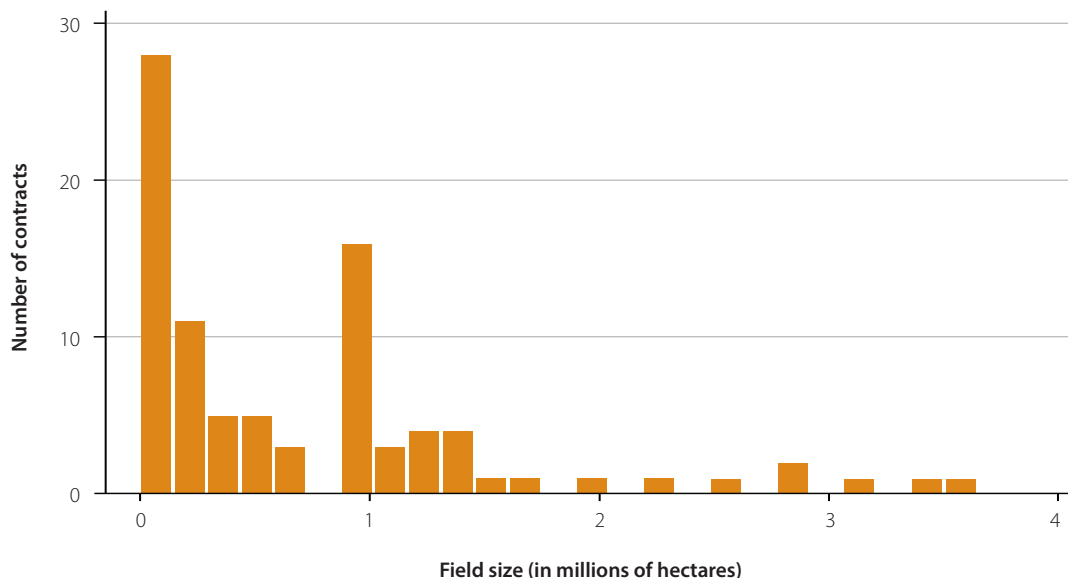
Citizens in resource-producing areas can monitor compliance with easily observable obligations, but, more importantly, they can hold their governments accountable for negotiating social and environmental clauses and enacting legislation that meets public demand.

Trade-offs between Conservation and Revenue Maximization

Beyond the exact contractual terms for environmental protection, contracts can inform citizens about the overall balance that the government is striking between conservation and revenue maximization. Every time a government decides whether to launch an oil exploration effort, politicians are making a trade-off between conservation and revenue maximization. Land used for resource extraction could have been used for other economic purposes. Resource extraction also carries environmental risks. Oil spills are the most obvious risk, but resource extraction can also mean building roads in the Amazon, diversion of water from farmers, and infringement of the lands of indigenous populations. Oil contracts contain information on land use restrictions (if there are any) and on the size and location of the field under development. On the other hand, deciding not to develop resource endowments means foregoing revenues in the present.

Figure 7.5

Field Size



Source: Data on contracts comes from PL (1967).

Note: See Table A7.2 on page 248 for information on data availability by country.

Figure 7.5 shows the distribution of field sizes across the contracts examined here. Field size varies dramatically: from fields of 50 hectares (roughly the size of Vatican City) to vast expanses of over 3 million hectares (roughly the size of Belgium).²³ It is worth noting that these are field sizes at

the beginning of a contract. Many contracts set relinquishment terms, forcing licensors to release unused land as fields move into the production stages. Typically, countries delineate larger initial contract areas under conditions of greater geological uncertainty because more area is needed to explore for oil when parties do not know where oil is located. Longer exploration periods are also set for areas with greater geological uncertainty, allowing licensors to hold land for longer periods. While these policies have commercial logic, countries are often

²³ For at least one of the field sizes above 3 million hectares, the contract covered several different blocks across a single basin. It is unclear whether these areas bordered each other or were merely in the same vicinity.

surrendering the most land precisely when they are least likely to receive high levels of compensation. Indeed, the largest contract areas in Figure 7.5 are all for unexplored areas.

When governments are collecting oil income, they are making trade-offs between savings in the ground, revenues in the present, and environmental conservation for future generations of local and global citizens.

The extent of the trade-off between environmental conservation and oil revenues depends on the value of the land if it were used for alternate purposes. The tradeoff, for example, is steeper in Ecuador, where oil stocks lie in some of the richest biodiversity areas in the world, compared to countries where deposits lie in comparatively unpopulated and less biodiverse regions. Acutely aware of the challenge in balancing environmental conservation with the need for government revenues, President Correa of Ecuador innovated an interesting way to bypass this trade-off through the Yasuní project. Through this initiative, the government of Ecuador promised to refrain from drilling for oil in the Ishpingo, Tambococho, and Tiputini (ITT) oil fields, located in the Yasuní National Park in the Ecuadorean Amazon, if international donors agreed to give the

Ecuadorian government half the foregone income of oil exploitation (Escribano, 2013). Notably, the ITT fields represent around 20 percent of Ecuador's remaining reserves—846 million barrels of oil—and the government was asking for US\$3.6 billion over the course of 13 years from the international community to forego drilling (“Ecuador approves Yasuní,” 2013).

President Correa argues that environmental conservation of this park—one of the most biodiverse areas in the world—constitutes a global public good. While Ecuador may not be able to afford to forego income, wealthy donor countries should be willing to contribute to the protection of the global public good. However, by August 2013, three years after the initiative was launched, the ITT fund had attracted only US\$13 million in donations (“Ecuador approves Yasuní,” 2013), roughly 1.5 percent of the requested amount through 2013. Therefore, President Correa called off the initiative, announcing that he would begin exploration efforts in the Yasuní Park. Although this particular initiative did not succeed, it is a promising idea as a means to enable countries that need oil income to fund government expenditures to simultaneously pursue environmental conservation.

Notwithstanding the Yasuní initiative example, when governments are collecting oil income, they are making tradeoffs between savings in the ground, revenues in the present, and environmental conservation for future generations of local and

global citizens. Making contracts transparent would enable citizens to assess *when* and *where* governments are initiating exploration efforts and how much of their country's land is devoted to resource production.

ENABLING ENVIRONMENTS FOR CONTRACT TRANSPARENCY

Several Latin American countries now routinely disclose oil contracts. This is a significant achievement for transparency. For these countries, the relevant question is not *whether* contracts should be disclosed, but *how* contract disclosure can facilitate better governance. As noted in this chapter, the link between contract transparency and accountability will not develop automatically. Strengthening this link requires disclosing contextual information to support the interpretation of oil contracts and creating mechanisms for citizens to incorporate feedback into contractual negotiations.

As the global transparency movement reaches beyond revenue transparency into contract transparency, many argue that contract transparency can give context to revenue transparency (e.g., PWYP, 2013; RWI, 2012). Citizens may require information from contracts so that they can interpret whether reported revenues represent a fair deal. However, as this chapter argues, interpreting the information disclosed through contract transparency also necessitates contextual information. For citizens to evaluate whether the fiscal terms within

contracts represent a fair deal, they need to be able to benchmark deals across countries. This means that many oil-producing countries need to disclose contracts, and that these contracts need to be considered in light of differing project economics across countries. This type of accountability is only likely to develop over a long-term horizon, as contract transparency increasingly becomes a global norm.

Further, for some contractual terms, it is not obvious even with full information what constitutes a fair deal. Different countries may want to strike different balances among investment neutrality, administrative simplicity, and progressivity in tax collection and also between environmental conservation and revenue maximization. For countries to optimally manage these trade-offs, they need to develop the capacity of civil society groups to engage in dialogue over these trade-offs and to develop mechanisms for incorporating citizens' preferences into contractual negotiations. Along both of these dimensions, Latin American countries are experimenting with innovative policies.

Andean oil producers, including Bolivia, Colombia, Ecuador, and Peru have all initiated consultations with citizens over resource extraction to varying extents. The focus of these policies so far has been on consultations with indigenous communities over the use of land, and implementation has been spotty. Ecuador's 1998 and 2008 constitutions guarantee indigenous peoples the right to prior consultation on

any planned development projects for nonrenewable resources on their lands. Controversy has arisen as activists within Ecuador point to the distinction between prior consultation and prior consent: they claimed that prior consultations often constituted informing a few key representatives of the community about the government's plans for natural resource development in the area rather than involving the entire community in a dialogue and requiring their support to move forward with development projects (Saavedra, 2011). Failure to fully implement prior consultation has resulted in many latent and active social conflicts surrounding resource extraction in Ecuador (DPLF and Oxfam, 2011).

Peru's Law on Prior Consultation, passed in 2011, guarantees similar rights. The first round of prior consultations in Peru (over Lot 1-AB in the northeastern province of Loreto) was scheduled to begin in April 2013, but has been delayed due to disputes between indigenous communities and the national government over cleanup from past oil production. Indeed, Lot 1-AB was ultimately declared a "Zone of Environmental Emergency" ("Peru Pushes for Amazon Cleanup at Pluspetrol Oil Block," 2013). The Due Process of Law Foundation (DPLF) and Oxfam (2011: 13) claim that 44 percent of social conflicts in Peru "stem from the lack of a prior consultation process."

Fully implementing existing consultation policies in conjunction with contract transparency could as easily increase as decrease social conflicts in the short run.

Citizens may disagree over acceptable contractual terms and protest existing terms. These disagreements may stymie resource development in the near term (with citizens blocking resource extraction until agreeable terms have been reached). However, these conflicts could also strengthen governments' negotiating power over the long term. Governments could no longer accept terms that would be unacceptable to their citizens without facing punishment (Radon, 2007). Gaining up-front buy-in from the population could also mitigate political risks faced by companies; contracts with public buy-in may be less likely to be renegotiated (Rosenblum and Maples, 2009). These claims merit empirical testing as countries experiment with national dialogue on resource extraction.

Prior consultations with indigenous communities over specific resource development projects are only one component of incorporating citizen preferences into contract design. Inclusive, national dialogue on overall policy objectives regarding resource production is also important. As citizens become more involved in decisions about resource extraction, the capacity of civil society groups to interpret and disseminate complex information about resource governance becomes increasingly important. Fundación Jubileo in Bolivia and Grupo Propuesta Ciudadana in Peru, for example, publish high-quality reports on resource governance, often utilizing information obtained from oil contracts to inform analysis. Training civil society organizations

in implementing transparency policies is now a key pillar of EITI. Going forward, industry organizations and private companies could also play a role in building technical capacity. In the long run, they may face less political risk over investments if public support can be gained *ex ante*.

Implementing meaningful national dialogue over resource governance will be no simple feat. Yet, this is an essential step in developing the transparency-accountability mechanism. Contract transparency can support better resource governance when accompanied by other contextual information on project economics and by robust national dialogues on resource governance supported by capable civil society organizations.

Contract transparency can support better resource governance when accompanied by other contextual information on project economics and by robust national dialogues on resource governance supported by capable civil society organizations.

CONCLUSIONS

Releasing historically confidential oil contracts into the public sphere is becoming a key part of the global transparency movement, but there has been little explanation of *how* contract transparency can improve resource governance. This chapter argues that contract transparency is unlikely to yield greater accountability over certain fiscal terms, such as the government's rate of return and the tax system's progressivity in the short run, because they are difficult to measure and interpret. Accountability over fiscal terms is more likely to develop only over the long run when many oil-producing countries have released contracts and when countries have developed mechanisms for incorporating citizens' feedback into contract design. By contrast, disclosing social and environmental clauses in contracts—or the lack thereof—can more immediately enhance accountability. However, contrary to arguments among advocates for contract transparency, social and environmental terms are unlikely to help citizens hold companies accountable for compliance with contracts, since these terms are often vague and poorly defined. Instead, citizens can use social and environmental clauses to hold governments accountable for negotiating adequate protections.

Several Latin American countries, to varying extents, have already enacted many of the policies discussed herein, but implementation has been spotty. At least five countries have made contracts transparent,

and Andean countries have promulgated laws promoting prior consultations on resource extraction projects. These countries can continue to lead the way in transparency of natural resource governance by improving the implementation of existing policies. It is also possible to make progress by detailing how more transparency can yield more accountability. Specifying what information from contracts can be used to promote different types of accountability, how

that information can be interpreted, and the types of policies required to support and enable accountability to develop along with transparency is an important exercise in moving forward with the global contract transparency agenda. Ultimately, in order for citizens to hold governments accountable, they need to develop preferences over these trade-offs, and governments need to develop mechanisms for incorporating these preferences into contract design.

APPENDIX

Table A7.1

Assumptions for Calculation of Government Take Statistics

	Model assumptions
Field and production assumptions	
Field discovery size	100MMBBL
Peak production rate	12% of field size, in year 6
Decline rate	12.5%
Field life	20 years
Price and cost assumptions—base scenario	
Capital costs as a percent of gross revenue	18%
Operating costs as a percent of gross revenue	12%
Total costs as a percent of gross revenue	30%
Price and cost assumptions—high profitability scenario	
Capital costs as a percent of gross revenue	9%
Operating costs as a percent of gross revenue	6%
Total costs as a percent of gross revenue	15%

Source: These assumptions are drawn from Johnston (2003) on contract cash flow analysis.

Table A7.2

Information on Contract Availability by Country

Argentina
1958 , 1959, 1961 , 1967, 1968, 1979, 1980 , 1985, 1986, 1987, 1988 , 1989
Bolivia
1973 , 1974 , 1977, 1982, 1985, 1988 , 1989, 1991 , 1992, 1996
Chile
1977, 1989 , 1996
Colombia
1955, 1964, 1971 , 1973, 1974, 1976, 1977, 1979, 1980, 1981 , 1982, 1987, 1995, 1998, 2000, 2002
Ecuador
1964, 1973 , 1985 , 1986, 1988 , 1995 , 2002
Paraguay
1957, 1973, 1974, 1979 , 1990, 1995
Peru
1957, 1971 , 1972 , 1973, 1978 , 1980 , 1981 , 1982, 1984 , 1989, 1990, 1991, 1992, 1993, 1995 , 1996
Venezuela
1971 , 1996 , 1997

Source: PL (1967).

Note: Bolded years contain more than one contract.

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CHAPTER 8

Finding the Balance: Transparency and Accountability versus Confidentiality in the Extractive Industries in Trinidad and Tobago

TIRA GREENE AND MARK REGIS

Trinidad and Tobago, a mature hydrocarbon-producing country, encounters difficulty in meeting the confidentiality obligations in legislation and extractive industries contracts required by the Extractive Industries Transparency Initiative (EITI). This chapter examines the challenges it faces in surmounting confidentiality and secrecy obligations in tax legislation and extractive industries contracts. It recommends creating guidance notes for use in discussions with tax authorities and company officials as they try to strike a balance between confidentiality obligations and the public's right to know about information in contracts and legislation.

INTRODUCTION

Finding a balance among transparency, accountability, and confidentiality obligations in law and contracts is an area of tension in countries that abide by the Extractive Industries Transparency Initiative (EITI). This chapter examines Trinidad and Tobago's three-year experience applying the EITI, as well as the obstacles the country has encountered in surmounting taxpayer confidentiality in the context of petroleum and tax legislation and petroleum rights contracts. Further, it analyzes the need to engage companies and tax authorities in a discussion about balancing confidentiality obligations with growing public interest in transparency and accountability concerning extractive industry revenues.

Located off the coast of Venezuela, the Republic of Trinidad and Tobago is a small twin-island Caribbean state with a population of 1.4 million. It has a long history with the extractive sectors. Commercial oil production began in 1908, and downstream petrochemical development started in 1959. Since its political independence in 1962, Trinidad and Tobago, with less than 1 percent of the world's oil and natural gas reserves (Furlonge, 2011), has become one of the world's most effective hydrocarbon monetization locations. It has globally significant positions in the petrochemical and liquefied natural gas (LNG) industries. In 2012, the oil, natural gas, and petrochemical sectors represented approximately 43 percent of the country's GDP, 50 percent

of government revenue, and 81 percent of its merchandise exports (Central Bank of Trinidad and Tobago, 2012). A few global oil and gas companies, including BP Trinidad and Tobago (bpTT), BG Trinidad and Tobago (BG T&T), Chevron, BHP Billiton, and Repsol, dominate the upstream extractive industries sector. The extractive industries sector contributed on average 85 percent of the foreign direct investment the country attracted from 1999 to 2010 (Taylor et al., 2012).

EXAMINING THE TRINIDAD AND TOBAGO MODEL OF HYDROCARBON MONETIZATION

Trinidad and Tobago's success in monetizing its hydrocarbon resources is predicated on a combination of its political stability, proximity to important markets, and consistently investor-friendly fiscal, legislative, and contractual framework (see Table 8.1).

Trinidad and Tobago's success in monetizing its hydrocarbon resources is predicated on a mix of its political stability; proximity to key markets; and a consistently investor-friendly fiscal, legislative, and contractual framework.

Table 8.1**Fiscal, Legislative, and Contractual Framework**

Contractual framework	Legislative regime	Fiscal framework
Exploration and production licenses	Local content policies	Petroleum Taxes Act
Production sharing contracts (1974, 1995, and 2000 models)	Petroleum Act and Regulations	Petroleum Profits Tax
Farmout agreements	Environmental Management Act	Supplemental Petroleum Tax
Lease operating agreements	Occupational Health and Safety Act	Income Tax (in Aid of Industry) Act
	Petroleum Production Levy and Subsidy Act	Unemployment Levy Act
		Income Tax Act
		Green Fund Levy
		Foreign Investment Act

Source: Ministry of Energy and Energy Affairs, Republic of Trinidad and Tobago.

Successive governments have adhered to the principle of the sanctity of contracts. The country's first exploration and production licenses were issued in the 1960s and the first production sharing contracts (PSCs) in the mid-1970s. The main petroleum sector legislation dates back to the late 1960s, with amendments being made during the intervening period. The winners of competitive bidding rounds were announced publicly, and the PSCs were also signed in public. The government conveyed the results of the independent annual audit of hydrocarbon reserves and the aggregate revenue earned from the extractive sector to the population through the annual national budget and other public

announcements. In September 2013, the Trinidad and Tobago Extractive Industries Transparency Initiative (TTEITI) published the country's first EITI report (TTEITI, 2013b), which made public the disaggregated information on individual payments that the country's major extractive industry companies made to the government—a significant advance in increasing transparency in the sector. Several of Africa's new oil and gas-producing countries have studied and emulated the Trinidad and Tobago model while developing their own extractive industries sectors.

These positive events contributed to Trinidad and Tobago's high ranking of 10th out of 58 natural resource-rich countries

included in the Resource Governance Index (RGI), which is published by the Natural Resource Governance Institute (NRGI), formerly the Revenue Watch Institute (RWI, 2013). A closer examination of the country's performance on selected indicators within the RGI's components of Institutional and Legal Settings, (i.e., laws and systems that encourage integrity and openness, including basic transparency guidelines) and Enabling Environment (i.e., control of corruption and opaqueness of budget data) show, however, that the country requires significant improvements with respect to transparency and accountability around its natural resource revenues.

While aggregate information on the revenue earned from the sector can be obtained from local and international public documents, confidentiality requirements in domestic legislation have long been a hindrance for those who want to understand individual project and company benefits.

Trinidad and Tobago energy analyst Anthony Paul has questioned whether the country's tradition of maintaining the sanctity of contracts has rendered research of the economic benefit of individual extractive industry projects and investments impossible. While aggregate information on the revenue earned from the sector can

be obtained from local and international public documents, confidentiality requirements in domestic legislation have long been a hindrance for those who want to understand individual project and company benefits. Paul (2012) questions the robustness of the country's extractive industries revenue collection systems. He claims that incalculable revenue may have been lost to the extractive industries companies' reduction of their profit margin and tax liability in Trinidad and Tobago through a process called transfer pricing, the method used to sell a product from one subsidiary to another within a company. This, Paul argues, is because of the failure of successive governments over long periods of time to appoint a permanent petroleum pricing committee to compute petroleum prices as required by the Petroleum Taxes Act. The knock-on effect of this failure could, Paul suggests, negatively impact the ability of the Board of Inland Revenue (BIR), the tax authority, to properly compute, reconcile, and collect taxes and royalties from extractive industries companies.

EITI IMPLEMENTATION AS A POLICY TOOL

From a policy perspective, the government of Trinidad and Tobago has identified transparency, accountability, public participation, and effective representation as essential elements of good governance. It is committed to reducing corruption by

encouraging state systems to promote good governance. Application of the EITI is one of the government's commitments to improve good governance. Execution of the EITI is governed by the EITI standard and typically involves five stages: sign-up, preparation, disclosure, dissemination, and external validation.

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Established in 2003, the EITI is a global coalition comprised of governments, extractive companies, and civil society. Its objective is to foster transparency and accountability by companies and governments involved in extractive industries such as oil, gas, and mining by publicly disclosing payments that companies make to governments, reconciled with the government's declared receipts. The EITI's checks and balances are essential tools for reducing the corruption that generates wealth and acts as a magnet for the unscrupulous.

All resource-rich countries have been encouraged to enforce the EITI. The

International Monetary Fund (IMF) defines a resource-rich country as one in which the total average fiscal revenues or the total average export proceeds from the oil, gas, and/or mining sectors have been at least 25 percent over the previous three years (IMF, 2007). The IMF recognizes that such countries, heavily reliant on exports of and revenues from a small number of concentrated, volatile, and nonrenewable revenue streams, need to manage those revenues more carefully to avoid the economic, social, and government distortions that have occurred in many resource-rich countries.

Trinidad and Tobago first affirmed its commitment to the EITI in 2003. It was among a pilot group of implementing countries that brought about the current EITI implementation framework during the period of 2003–07. After failing to complete the minimum requirements of the pilot phase, Trinidad and Tobago was struck from the EITI's roll of member countries in 2007.

Little is known outside government circles about the true reason for the government's reticence to proceed with EITI implementation. What has been gleaned from insiders is that somewhere around 2006, the government reviewed its policy in support of the EITI, compared it to those of the other countries in the pilot group, and determined that the EITI was not helpful to the country from an investment point of view. Evidence supporting this view can be found in a June 2009 parliamentary debate, initiated by a then-opposition member of the Senate, in which Conrad Enil, former

Minister of Energy and Energy Affairs, argued that the information required by the EITI process to ensure transparency was already being supplied by the government (Enil, 2009).

In September 2010, after a change in administration, Trinidad and Tobago's government reaffirmed its allegiance to the EITI, and assigned dual responsibility for its advancement to the TTEITI Steering Committee, a cabinet-appointed, multi-stakeholder committee supported by the Ministry of Energy and Energy Affairs (MEEA). The TTEITI Steering Committee, comprised of government, industry, and civil society representatives, was charged with the responsibility of preparing Trinidad and Tobago's candidacy for membership in the EITI, which was achieved in March 2011. The TTEITI Steering Committee was also directed to develop and put in place a work plan that would steer Trinidad and Tobago through the status of candidate member country to EITI-compliant country. The Steering Committee was supported by the TTEITI Secretariat, established in September 2011, which was given the responsibility of delivering the work plan in accordance with EITI rules and practices. This committee undertook its role independent of government influence or the influence of either of the other two stakeholder groups—companies and civil society. The MEEA's role in EITI implementation was limited to provision of administrative support to the TTEITI Steering Committee and Secretariat. The MEEA provides the

formal connection between the Steering Committee and Secretariat and the bureaucracy, and it provides financial, administrative, and human resource support for the Steering Committee's execution of process.

Multilateral and regional development organizations such as the World Bank and the Inter-American Development Bank (IDB) financially support the EITI implementing countries. In June 2012, the government of Trinidad and Tobago formally signed on to the IDB's Regional Technical Facility, entitled "Strengthening Governance in the Extractive Industries." The main objectives of this facility were to assist all resource-rich countries in the Latin American and Caribbean (LAC) region in promoting greater access to information, transparency, implementation of the EITI, reviews of the legal and regulatory framework, and strengthened capacity to monitor socioeconomic and environmental impacts. The facility focuses on the provision of diagnostic studies, implementation plans, and a preliminary stage of nonrefundable technical assistance. The value of the facility extended to Trinidad and Tobago is US\$180,000.

The main deliverable of the EITI implementation process is the production of an annual, independently audited report by an EITI administrator about revenues paid by extractive industries companies to government. The purpose of the report is to remove legal and administrative barriers to revenue transparency and accountability within the implementing country's regulatory and legislative landscape. As mentioned above,

Trinidad and Tobago published its first EITI report in September 2013 (TTEITI, 2013b).

In its paper on the EITI, the MEEA (2012) articulates the multiple benefits derived from the EITI's systematic reporting, including an improved investment climate; a framework for collaboration among government, extractive companies, and civil society; overall fiscal strengthening; and a general strengthening of the country's budgetary and auditing oversight mechanisms.

Legislative Obstacles to EITI Implementation

The heart of the EITI initiative is the disclosure of public information held by companies and the government. The EITI Rules 2011, now the EITI Standard 2013, require the disclosure of all material payments by companies and all material revenues by government agencies. To effectuate the EITI Rules 2011 reporting requirements, the TTEITI Steering Committee tried to overcome the confidentiality obligations in the law and in contractual arrangements with companies.

Overcoming Confidentiality Obligations in the Law

The Board of Inland Revenue is the authority responsible for computation and collection of oil and gas taxes. Such revenues are determined under the provision of the Petroleum Taxes Act. However, disaggregation or disclosure of the details of petroleum

companies' accounts with respect to revenues and taxes are guided by section 4 of the Income Tax Act (...). It is clear, therefore, that the law does not contemplate public disclosure of individual companies' oil and gas payments made to the Government. It is in the law! (Enil, 2009: 773).

In keeping with EITI best practices, the TTEITI Steering Committee first commissioned a review of the legislative and regulatory framework to determine the impediments to EITI implementation. The review, conducted by State Counsel Arlene Lawrence of the MEEA, found that while there were some confidentiality obligations under the Petroleum Act, the confidentiality obligations under the Income Tax Act of Trinidad and Tobago were the principal obstacle to EITI implementation. The Income Tax Act has as its foundation the maintenance of taxpayer confidentiality. This principle is established in Section 4 of the Act, which makes it an offense for any official of the BIR to disclose any taxpayer's information to an unauthorized person:

1. Every person having any official duty or being employed in the administration of this Act shall regard and deal with all documents, information, returns, assessment lists, and copies of such lists relating to the income or items of the income of any person, as secret and confidential, and shall make and subscribe a declaration in the form prescribed to that effect before a Magistrate.

2. Any person having possession of or control over any document, information, returns, or assessment lists or copies of such lists relating to the income or items of income of any person who at any time communicates or attempts to communicate such information or anything contained in such documents, returns, lists, or copies to any person
- other than a person to whom he [or she] is authorized by the President to communicate it; or
 - otherwise than for the purposes of this Act or any other written law administered by the Board, is guilty of an offence.

In her review, Lawrence cited the strictures of Section 4 as the main obstacle to EITI implementation, namely, the disclosure and publication of tax revenue information. Lawrence observed that officials of the BIR would be prevented by the confidentiality provision of the Income Tax Act from sharing tax receipt information with the EITI's independent administrator unless permitted to do so by way of a waiver issued by the country's president. Even if the information were released in this special way, Lawrence's view is that the provisions of the same section do not sufficiently address whether the administrator would be permitted to publish the information received given that it is secret and confidential. Bearing in mind that the EITI's ultimate intent is broad publication of revenue information

obtained from government and company sources, Lawrence recommended that "Parliament amend the Income Tax Act, Chap. 75:01 and/or enact an Extractive Industries Transparency Initiative Act that will contain express provisions authorizing the EITI Independent Administrator to both receive and publish secret and confidential information concerning oil, gas, and mining companies from the Board of Inland Revenue" (Lawrence, 2011).

THE SEARCH FOR LEGISLATIVE AND NONLEGISLATIVE SOLUTIONS

Following this advice, between January and October 2012, the TTEITI Steering Committee examined three potential solutions to the confidentiality barriers to the EITI's lawful implementation, namely (i) the passage of EITI-specific legislation, (ii) using Freedom of Information Act (FOIA) legislation to access the confidential tax information, and (iii) using a never-before invoked presidential waiver mechanism provided for in the Income Tax Act.

The Steering Committee first sought the attorney general's legal opinion on the steps needed to facilitate implementation of the EITI in Trinidad and Tobago within the restrictions of the Income Tax Act. In a legal opinion issued in February 2012, the attorney general advised the Steering Committee that the sharing and publication of confidential tax information requirement

would be problematic, as Section 4 of the Income Tax Act makes it an offense to divulge a person or company's tax information to a third party even with that person or company's consent. Thus, the opinion recommended that the EITI legislation be drafted as a matter of urgency to deal with the legal, regulatory, and administrative obstacles confronting the receipt and publication of a taxpayer's confidential information.

Mindful of the lengthy process that enactment of legislation takes, particularly due to the constitutional rights implications, the Steering Committee sought advice from the IDB and the World Bank to identify non-legislative solutions to its EITI implementation challenge. With their help, the Steering Committee searched for examples of how other EITI-implementing countries had overcome similar legal hurdles. An important part of the search was to find a solution within existing law that allowed sharing of confidential payment information that the tax authority had with a third party, such as the administrator, with the consent, or at the request of, the disclosing party or the company.

During their search, the Steering Committee found that Peru, an EITI-compliant country, had similar concerns about EITI implementation, namely that:

- confidentiality requirements prevented the Peruvian tax authority, SUNAT, from revealing data submitted by companies engaged in the extractive industries; and

- the proposed disclosure of extractive industry data had to be limited to EITI purposes to prevent misuse and material alteration of such data.

The Steering Committee was advised that to enable reporting under the EITI process, Peru addressed each of these issues, using separate measures, to ensure that the EITI reporting process fit into the country's existing legal system. To satisfy the confidentiality requirements, Peru required the extractive industries companies to request that SUNAT disclose their tax payment data to a specific list of persons who constituted their EITI administrative team, through information request letters. The disclosing parties then entered into a confidentiality agreement with the administrator to ensure that the data disclosed to them by the recipient individuals who received it in the letter were used only for EITI implementation.

The TTEITI Steering Committee held discussions with tax officials in Peru in June 2012 on the solution they used to implement the EITI. During these discussions the committee found that under Peru's taxpayers' charter, the SUNAT is allowed to provide information on the details of their receipt of revenue to a third party, upon receipt of a request by a taxpayer to provide such information to a named agent. In the Peruvian case, for the purposes of EITI reporting, this agent was the administrator.

The BIR studied the "Peruvian solution" and deemed it unworkable for Trinidad and Tobago. This was because, unlike

the Peruvian legislation, the Trinidad and Tobago legislation did not provide the tax authority official an exemption for the offense of disclosure of taxpayer information to a third party.

Public Interest Versus Confidentiality/ Secrecy Provision in the Law

The issue of taxpayer confidentiality presents the most vexing problem when balancing the need for public confidence in the tax collection process against the requirements of operational efficiency. If you have taxpayer confidentiality, it's very difficult to have complete transparency (Parillo 2012: 132).

The attorney general was asked to explore whether the public interest provisions of the FOIA could be used to access the confidential tax information from the BIR, and to determine whether that information could be published. Section 35 of the Freedom of Information Act (FOIA) states as follows:

Notwithstanding any law to the contrary a public authority shall give access to an exempt document where there is reasonable evidence that (...) in the circumstances giving access to the document is justified in the public interest having regard both to any benefit and to any damage that may arise from doing so.

On closer examination, however, Section 34 of the FOIA takes precedence over the public interest provisions of Section 35 by stating:

A document is an exempt document if there is in force a written law applying specifically to information of a kind contained in the document and prohibiting persons referred to in the written law from disclosing information of that kind, whether the prohibition is absolute or is subject to exceptions or qualifications.

It appears that the intent of Section 34 was to prevent use of the FOIA to circumvent the confidentiality and secrecy provisions of legislation that preceded it, such as the Income Tax Act. Given that the Income Tax Act predated the FOIA, this transparency tool could not be used as the means to affect the exchange of confidential information between the BIR and the EITI administrator.

In November 2012, the Attorney General provided definitive advice that discounted the use of the FOIA but recommended the use of the Income Tax Act Section 4 (2), which allows the president to grant immunity from prosecution to BIR officials for sharing confidential tax information with the EITI administrator.

In November 2012, the attorney general provided definitive advice that discounted the use of the FOIA but recommended use of the Income Tax Act Section 4 (2), which allows the president to grant immunity from prosecution to BIR officials for sharing confidential tax information with the EITI administrator. In providing this advice, the attorney general gave significant consideration to the public interest benefits of EITI implementation. The attorney general also introduced the safeguard that information given to the administrator in the absence of supporting legislation should only be given to companies voluntarily agreeing to participate in the EITI reporting process.

Defining the Parameters of the Presidential Waiver

Once it was determined that the presidential waiver provisions of Section 4 (2) (a) of the Income Tax Act could be employed to achieve EITI implementation absent EITI implementing legislation, a decision had to be made about what would be sufficient cover for triggering these never before employed mechanisms and, second, what would be their reach. Following extensive discussions on these two matters, the consensus was that, absent mandatory legislation, the companies would have to show their voluntary consent to release of their payment information—particularly their tax payment information—for the EITI reporting process by (i) signing a memorandum of understanding (MOU) on the implementation of

the EITI and (ii) issuing individual letters of consent to the BIR for the release of their tax receipts information to the EITI administrator. The proposed procedures to achieve these objectives would be through the preparation of the following specific waivers of confidentiality:

- A waiver in favor of the chairman of the BIR allowing him/her to prepare and provide to the contracted administrator information concerning the total tax payments made to the state by each of the reporting companies that voluntarily agreed to participate in the EITI reporting process by the MOU.
- A waiver in favor of the administrator to receive the tax payments information and to prepare an EITI report comparing the payments information received from the participating companies with the tax receipts information provided by the chairman of the BIR.
- A waiver in favor of the permanent secretary, MEEA, as contractor of the services of the administrator, to receive and publish the EITI report.

The Conundrum of Publication

Having determined the method for sharing confidential tax information for EITI reconciliation purposes, concerns still surrounded whether the report produced from this exercise could be published both nationally

and internationally. At the heart of the issue was the notion that the EITI lacked any basis in the tax law. The question then arose whether a taxpayer's information could be disclosed to any person or persons inside or outside the jurisdiction of Trinidad and Tobago for any purpose such as EITI reporting unrelated to taxation or tax relief, or to any other matter that would cause countries to disclose tax information.

With the issue of publication still unclear, the attorney general was asked to give a legal opinion on whether the tax law prohibited publication of the disclosed tax information. In two landmark opinions delivered in May and August of 2013, the attorney general revisited the issue of confidentiality in Section 4 of the Income Tax Act in terms of the disclosure of information in the BIR's possession. The attorney general distinguished between information exchanged between the taxpayer and the tax authority during assessment of tax liability, and information possessed by the state in the form of receipts, after payment of assessed tax liability.

Finding that assessment and payment of tax liability is a private matter between the taxpayer and the state in which the public claims no justifiable interest, the attorney general decided that, after liability has been discharged, liability payment information on the receipt becomes the property of the state. The attorney general pronounced that on occasion the state would, in the public or national interest, want to disclose information under its control, so that the

law did not constrain the state from making disclosures to the public from information in its possession, so long as it would be in the public interest to do so, as in the case of complying with the state's obligations under the EITI. In this way, the attorney general noted, the information in the EITI report could become available after the company's liability has been assessed.

With the legal questions of receipt of tax information by the EITI administrator and the publication of the EITI report out of the way, the path became clear for the government to issue an administrative instruction to the BIR to release the required information to the EITI administrator and to publish the country's first EITI report.

Overcoming Confidentiality Obstacles in Contracts

The primary challenge of EITI implementation has been obtaining voluntary participation of companies in the process. For companies operating in Trinidad and Tobago, as with most EITI implementing countries, the companies' major concerns center on the need for clarity in their contractual obligations, and on the form in which their payment data will be reported and published.

The primary challenge of EITI implementation has been obtaining voluntary participation of companies in the process.

Given the annual disclosure of the aggregate extractive industries revenue earnings in the national budget, the Steering Committee made an early decision to prepare a fully disaggregated EITI report. The report would show the payments made by each participating company based on each type of payment made to the government.

For the companies, participation required them to review not only their own policies on information disclosure but also their contractual obligations to keep information confidential. Trinidad and Tobago's extractive industries landscape is characterized by contracts of varying types and ages. As a consequence, varying confidentiality obligations exist. For companies operating under exploration and production (E&P) licenses production sharing contracts (PSC) issued in the 1960s and 1970s, issues such as confidentiality of information were not part of their contractual obligations.

As the contract environment evolved from the 1980s to the 2000s, confidentiality obligations progressed with differing E&P and PSC models issued, and contracts having differing time frames and responsibilities for the obligations of companies, or both government and companies, to keep information confidential. Due to the varying confidentiality requirements, a standard waiver of confidentiality rights, or letter of consent, waiving the confidentiality obligations for the companies or the government or both was drafted for signature by the companies and the MEEA, where relevant, to provide the administrator with

the companies' payment information and to provide for publication in the administrator's final report. Similarly, a standard letter of consent was drafted for issuance to the chairman of the BIR granting the board permission to provide its tax information to the administrator.

Having dealt with the machinery for the release of information, the companies then requested that a clear process for collection, preparation, and public dissemination of the information be spelled out. The procedure the Steering Committee used to achieve this objective was an MOU on the implementation of the EITI.¹ The MOU, signed by each of the companies agreeing to participate in the EITI reporting process, the MEEA on behalf of the government and the supporting civil society organizations, sets out the

- government policy position on the EITI and the promotion of transparency, good governance, and accountability in the oil, gas, and mineral sectors;
- framework within which companies and government would voluntarily submit for independent assessment by the EITI administrator payments and receipt information, respectively, in accordance with the EITI rules; and

¹ See the full MOU at <http://www.tteiti.org.tt/about-tteiti/final-executed-memorandum-of-understanding-on-the-implementation-of-eiti-in-trinidad-and-tobago/>.

- delineation of the process and form that reconciliation of the information by the EITI administrator would take and how the subsequent publication of the reconciled information would occur.

The MOU also established the authority of the Steering Committee to prepare annual EITI reports, requiring the reconciliation of receipts of state authorities with the revenues of state and private extractive industries' companies and other state-owned entities.

After one year of negotiating its terms, the MOU on the implementation of the EITI in Trinidad and Tobago was signed on June 7, 2013, by 17 of the 20 companies² approached to voluntarily participate in the EITI reporting process, the government, by the MEEA, and the eight supporting civil society organizations.

² Signatories to the MOU include: the government, MEEA; companies, BP, BG, BHP Billiton, Bayfield Energy, Chaoyang Petroleum, Chevron, Centrica, ENI, EOG Resources, Lease Operators Ltd., National Gas Co., Niko Resources, Petroleum Co. of T&T, Primera Oil and Gas, Repsol, Total, Ten Degrees North Operating Co.; and civil society organizations, Trinidad and Tobago Transparency Institute, Energy Chamber of Trinidad and Tobago, Trinidad and Tobago Chamber of Commerce, National Youth Council, Fishermen and Friends of the Sea, Oilfields Workers Trade Union, the Cropper Foundation, and the Network of NGOs for the Advancement of Women.

Achieving Sustainability: the Legislative Solution

Heeding the attorney general's legal advice that legislation be drafted as a matter of urgency, and utilizing its IDB technical assistance facility, the TTEITI Steering Committee contracted the services of a legislative drafting consultant to review existing local legislative frameworks to determine areas that would require amendment to make it consistent with EITI implementation. The consultant was also tasked to review and assess extractive industry legislative frameworks in other countries, particularly countries with similar common law legal traditions, to determine how the EITI's principles of transparency and accountability were introduced. The objective of this consultancy was the development of TTEITI draft legislation which would benefit from a review of existing domestic as well as international best practices relating to EITI implementation.

The proposed legislation that emerged provides for the establishment of the TTEITI Agency. This organization has responsibility for, among other things, development of a framework for transparency and accountability in reporting and disclosure of revenue due to, or paid to, the government by participating extractive industries companies. The proposed EITI legislation further establishes the TTEITI Steering Committee.

The TTEITI Agency is designed to bring together the government, extractive industries companies, and civil society

organizations. This collaboration promotes the effective implementation of the principles and criteria of the EITI. Its aims are to promote good resource governance within the extractive industries; to coordinate the monitoring of revenue accruing to, paid to, and received by the government and any other statutory recipients from extractive industries companies; and to enhance public financial management, transparency, and accountability. These goals can be achieved by (i) conducting, through independent persons, a reconciliation of all payment data disclosed by extractive industries companies and all revenues data disclosed by the government, and (ii) publishing EITI reports and disseminating them through widely accessible media and other means.

The TTEITI Agency is designed to bring together the government, extractive industries companies, and civil society organizations. This collaboration promotes the effective implementation of the principles and criteria of the EITI.

The proposed legislation also provides for the appointment and qualification of an independent administrator. The administrator shall be appointed in accordance with the EITI Standards, which may from time to time be issued by the International EITI Board.

The proposed legislation also requires a penalty where an extractive industry company knowingly discloses false information about its obligations under the legislation. A penalty also applies where a member of the TTEITI Steering Committee or TTEITI Agency reveals any information or matter related to agency functions to an unauthorized person.

Under the proposed legislation, the Steering Committee must circulate a copy of the EITI report received from the administrator to all stakeholders, the auditor general, and the minister. The minister must table the EITI report in the House of Parliament. The Steering Committee must publish the EITI report in such a manner so as to allow the public access to it. After submission of the EITI report to Parliament by the minister, the auditor general shall publish comments or actions taken by the government on the EITI report.

Within nine months, the Steering Committee, the companies involved, and the tax authority provided feedback on the draft legislation and refinements were made. In dealing with the challenges of Section 4 of the Income Tax Act, the stakeholders took cognizance of Section 7 of the Tax Information Exchange Agreements Act, which states:

(1) Nothing in Section 4 of the Income Tax Act, or any other law to a like effect, prevents the disclosure of information where that disclosure is in accordance with, and for the purpose of giving effect to, a declared agreement.

(2) Where information has been obtained or received by the Board under this Act or a declared agreement, a person who uses or discloses the information other than for the purposes for which it was obtained or received is liable to the same penalty as that to which he would be liable if he had committed an offence under Section 4(2) of the Income Tax Act.

Given the precedent for disclosure of tax information set in the Tax Information Exchange Act, the inclusion of similar clauses were proposed and approved by the TTEITI Steering Committee for the EITI bill. These provisions were considered enough to protect the overall integrity of the tax system and resulted in a final agreement on how to address the challenges of Section 4 of the Income Tax Act.

CONCLUSIONS

Striking a fine balance among transparency, accountability, and the public's right to information with the maintenance of confidentiality obligations in tax legislation and extractive industries contracts remains an ongoing challenge for countries seeking to implement revenue transparency initiatives, such as the EITI. This chapter has shown the experience of Trinidad and Tobago, a country with a relatively well-defined fiscal, contractual, and legislative framework, in its attempts to introduce systems of greater

transparency and accountability to its extractive industries revenue. This chapter has also examined the country's attempt to find non-legislative as well as legislative solutions to overcome the confidentiality barriers existent in its income tax legislation and in its extractive industries contracts.

Striking the fine balance between transparency, accountability, and the public's right to information with the maintenance of confidentiality obligations in tax legislation and extractive industries contracts remains an ongoing challenge for countries seeking to implement revenue transparency initiatives, such as the EITI.

A number of important lessons have been learned from this experience that can guide other countries seeking to enhance revenue transparency. First, in terms of peer-to-peer learning and experience sharing, while the current thrust by the NRGI has addressed in some way the engagement with companies and civil society on removal of confidential obligations in contracts, comparatively little has been done—other than the documentation of EITI-implementing country experience—with respect to the engagement of tax authority officials on the issue of tax transparency.

In the Trinidad and Tobago case, significant progress was made in effecting a change in the position of the BIR on the matter of the disclosure of company payments after a similar precedent and experience was identified in a fellow EITI implementing country, Peru. The face-to-face exchange of concerns and thoughts between tax officials from the BIR and their Peruvian counterpart, SUNAT, provided assurance that the process could be brought about in a manner that would not compromise the tax system. Similarly, participation of the BIR involved multiple assurances on the part of the companies, as well as political leaders, against prosecution for breach of the law. This experience shows that the process of engagement with tax authorities is a lengthy one and, as such, it should begin early in the EITI implementation process.

Another central lesson learned was the need for effective scoping of the extractive industry landscape prior to the EITI implementation process. While a legal scoping study was commissioned after Trinidad and Tobago was granted candidate country status, an effective scoping of the legislative and contractual landscape prior to implementation would have flagged potentially challenging issues such as tax confidentiality.

With respect to long-term institutional support for overcoming confidentiality constraints in extractive industries data reporting, the need for more case studies and guidance on issues such as tax confidentiality cannot be overemphasized. In late 2013, the EITI International Secretariat provided advice in the form of a “guidance note” on addressing taxpayer confidentiality in EITI reporting (EITI, 2013). While this guidance note is a good start, the EITI’s international secretariat should take a leadership role with respect to the engagement of tax authorities and companies on overcoming confidentiality constraints. In doing so, the EITI would provide a platform for dialogue between multi-stakeholder groups and tax officials, helping them to talk through the critical issues involved in developing a “fit for country” solution for the removal of barriers to tax revenue transparency.

Finally, there is a case to be made for regional development institutions such as the IDB to build into their programs of support for transparency implementation initiatives, such as EITI, study tours and exchanges between key stakeholders from government and companies, with a special emphasis on tax officials. Such programs would assist with achieving earlier buy-in from the stakeholder groups in the area of removing confidentiality barriers to transparency in the extractive sector.

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Public Management and Fiscal Regimes

- | | | |
|-------------------|--|------------|
| Chapter 9 | Transparency in the Management of Revenues from the Extractive Industries: The Case of Colombia | 277 |
| | Diego Arisi and Ana Carolina González Espinosa | |
| Chapter 10 | Fiscal Windfalls, Transparency, and the Efficiency of Public Good Provision: Evidence from Brazilian Local Government | 319 |
| | Martín Ardanaz | |
| Chapter 11 | Transforming Oil Abundance into Sector Performance: Which Institutions Really Matter? | 351 |
| | Lenin H. Balza, Ramón Espinasa, and Raul Jimenez Mori | |
| Chapter 12 | The Council on Ethics and the Extractive Industries | 375 |
| | Pablo Valverde Martínez | |

CHAPTER 9

Transparency in the Management of Revenues from the Extractive Industries: The Case of Colombia

DIEGO ARISI AND ANA CAROLINA GONZÁLEZ ESPINOSA

The receipt of substantial amounts of oil and mining royalties by oil and mineral-producing departments and municipalities has not translated into the expected results in terms of poverty alleviation and human development at the local level. It has even generated some distortions to political and economic life in these territories. Corruption and inefficiency in resource management are some of the reasons given to explain this paradox. Therefore, the proposed policy solutions have focused on strengthening external controls at the national level over local authorities' management. Given the inadequacy and ineffectiveness of such controls, new transparency, accountability, and institutional strengthening initiatives, as well as reforms of the resource allocation system, have emerged. This chapter explores the challenges faced by local governments in the management of royalties derived from nonrenewable natural resource exploitation, as well as the results of transparency initiatives aimed at improving local revenue administration.

INTRODUCTION

Financing development with revenues from the extraction of natural resources is fraught with challenges. Most of these challenges relate to the environmental and socio-economic impacts of the activity on those who live where these operations take place. Indeed, some events or scandals involving companies and governments raised red flags with regard to how socio-environmental issues are handled by these actors (i.e., ELF corruption scandals in Africa or oil revenues corruption in Angola). Other challenges emerge from frustrated expectations. The extraction of natural resources should generate the revenues that countries need to increase growth and improve access to education, health, employment, and other basic services (Ross, 1999). However, many resource-rich economies have lower growth rates, poorer institutions, higher levels of corruption, and a greater propensity for conflict than resource-poor countries. Thus, instead of greater economic benefit and improved quality of life, citizens are subject to a paradox known as the “resource curse,” which is particularly evident at the local level. In contrast to high growth rates at the national and regional levels, which would seem to signify a trend toward economic development, people living in areas where extraction takes place suffer from lower human development indicators and a poor quality of life (Bjorvatn, et al., 2012; Mehlum, Moene, and Torvik, 2005; Robinson, Torvik, and Verdier, 2005; Ross, 2001; Sachs and Warner, 1995; Sánchez Torres, Mejía

Mantilla and Herrera Araujo, 2005; Svampa and Antonelli, 2009; Viale and Monge, 2012).

In response, policy options have ranged from the promotion of anticyclical policies, savings strategies (e.g., pensions),¹ and incentives for the productive sector, to improving institutions and transparency in countries that want to avoid the resource curse (Arezki and Van Der Ploeg, 2007; Elbadawi and Soto, 2013).² In line with these policy recommendations, global efforts to promote transparency and accountability in the extractive industries have been multiplying.³ Examples include the initial demands of the NGO Global Witness in Angola that gave rise to the birth of the Publish What You Pay (PWYP) Coalition (Klein, 2010) and to the Extractive Industries Transparency Initiative (EITI) (Aaronson, 2008).⁴ Although these initiatives have placed the need for scrutiny in the mining and oil sector

¹ Chapter 12 of this book explains the rationale behind the Council on Ethics of the Norwegian Government Pension Fund Global, which is an interesting policy option aimed at saving the surplus of extractive industries for the pension of future generations.

² See Chapter 2 of this book for greater detail on the resource curse.

³ Accountability is understood in this book as a notion in which A is obliged to explain and justify actions to B, and A is subject to sanctions from B for conduct or explanation. In the public sector (public accountability), this notion describes the duty of officials to report their actions to citizens and citizens' right to punish those officials whose conduct is considered unsatisfactory. It is therefore a crucial element of democracy (Goetz and Jenkins, 2002).

⁴ See Chapter 1 of this book.

on the international agenda and have promoted state–company–civil society dialogue, their initial scope was limited (Aaronson, 2011; González Espinosa, and Klein, 2013).

Policy options to fight the paradox of plenty have ranged from the promotion of anticyclical policies, saving strategies, and incentives to the productive sector, to the accepted idea of institutions and transparency as essential elements in countries that want to avoid the “curse.”

One of the main limitations of the strategies aimed at fighting the resource curse is that they focus almost exclusively on the national level. Yet, those who bear the brunt of extraction and have higher expectations for improved living conditions are usually concentrated in certain regions or municipalities.⁵ Positive externalities of the extractive industry, such as employment linkages and infrastructure, and negative impacts, including environmental degradation, inflation, uncontrolled migration and conflict, primarily materialize at the local level (Campodónico, 2005; Libman, 2010, 2013; Paler, 2011). Consequently, many countries have opted to allocate a percentage of oil or mining revenues to local governments, such as Brazil, Bolivia, Colombia, and Peru within the Latin American and Caribbean

(LAC) region; and Indonesia, Nigeria, and Papua New Guinea outside the region (Morgandi, 2008; Viale and Cruzado, 2012).

However, the redistribution of extractive revenues has not guaranteed either a better allocation of resources, higher levels of human development, or reduced social conflict around activities in the sector. The analysis of Peruvian mining regions shows that the progressive increase in the amount of extractive revenues received by local governments has been simultaneous with the multiplication of social conflicts (Arellano Yanguas, 2011). It does not indicate a causal relationship necessarily; however, it shows at least that the arrival of revenues has not neutralized tensions. In Colombia, some authors indicate that locally distributed royalties have been subjected to the pressure of illegal armed groups (Barberena, 2010; Peñate, 1991; Sánchez and Chacón, 2005). The biggest issues regarding the management of extractive revenues arise at the local level. These include the misuse of resources arising from the inflow of large sums that exceed the absorptive capacity of the regional economy, lack of expertise of local governments to ensure that they are invested efficiently, and failures of transparency—specifically, the absence of proper accounting practices or qualified and independent audits, according to a 2005 study (Campodónico, 2005).⁶

In this scenario, it is not surprising that initiatives that promote improved institutional

⁵ See Chapters 2, 9, and 10 in this book.

⁶ See also Arezki and Gylfason (2013); Busse and Gröning (2013); and Ross (2013).

frameworks and systems for transparency and accountability have multiplied on the local, national, and international levels. An example is the adaptation of EITI in some countries, which has included monitoring the amount and use of extractive revenues received by local governments. There are also other projects monitoring the use of local extractive revenues, led by organizations such as Grupo Propuesta Ciudadana or the program Mejorando la Inversión Municipal in Perú, and Fundar in Mexico, Grupo Faro in Ecuador, and Jubileo in Bolivia.

BACKGROUND

In Colombia, the debate around the participation of the subnational level in the income generated by natural resource extraction has been on the agenda for a long time, but discussions about local management of these resources is a more recent phenomenon. The Constitution of 1863 established a federal system, with the regions playing a prominent role in the management of resource revenue. The country's first mining code was adopted in the Sovereign State of Antioquia, now one of Colombia's 32 departments, where mineral extraction played a major role in the economy. Although the 1886 Constitution centralized the government and reduced the regions' discretion in these matters, claims in the second half of the 20th century led to regional involvement in the receipt and management of royalties. Since the late 1970s, large contracts between public mining and oil companies and other

private enterprises included the allocation of a portion of royalties to territories. For example, the contract between Ecopetrol and Occidental de Colombia, which formed the Cravo Norte Association in the 1980s for oil exploitation in Caño Limón, allocated a portion of royalties to the Arauca Department where the site was located. By the end of the 1970s, the agreement between the state company Carbones de Colombia (Carbocol) and Intercor (a subsidiary of Exxon) to exploit the coal mines of Cerrejón included allocation of royalties to the La Guajira Department.

This scheme was consolidated in the 1991 Constitution, which in Article 332 establishes that the state owns the subsoil and nonrenewable natural resources. It also declares that the State will benefit from royalties as compensation for the exploitation of nonrenewable resources once extracted. Article 360 states that the territorial entities where resources are produced, as well as maritime or inland port municipalities through which they are transported, are to be direct beneficiaries of such royalties. In 1994, Law 141 regulated these provisions and defined the criteria for the settlement, distribution, and execution of resource revenues. Royalties paid by the operator were allocated based on the type of mineral and, in some cases, the volume extracted. Their distribution among departments and municipalities where resources were extracted (direct royalties) and to the National Royalties Fund that was available for use by other territorial entities (indirect royalties) was also determined (see Table 9.1 for examples of oil and coal).

Table 9.1**Distribution of Oil and Coal Royalties (as of 2011)**

Oil							
	Municipal production in barrels – monthly daily average (BPMD)					Production of a department in BPMD	
	Up to 50,000			More than 50,000		Between 180,000 and 600,000	More than 600,000
Beneficiary	Up to 10,000	Between 10,000 and 20,000	Between 20,000 and 30,000	Between 0 and 100,000	More than 100,000		
Producing department	52%	47.5%	47.5%	47.5%	47.5%	4.8%	2.4%
Producing municipality	32%	25%	12.5%	12.5%	1.3%	1.3%	1.3%
National Royalties Fund	8%	19.5%	32%	32%	36.5%	64.5%	65.8%
Nonproducing departments (belonging to the same region as producing department)						15%	15.8%
Nonproducing municipalities (belonging to the producing department)					6.8%	6.8%	6.8%
Municipalities with ports	8%	8%	8%	8%	8%	8%	8%
TOTAL	100%	100%	100%	100%	100%	100%	100%

Coal		
	Exploitation of less than 3 million tons per year	Exploitation of more than 3 million tons per year
Producing departments	45%	42%
Producing municipalities	45%	32%
National Royalties Fund		16%
Municipalities with ports	10%	10%
TOTAL	100%	100%

Source: DNP (2009).

Although the purpose of this configuration was to promote regional development, the scant impact of royalties on the quality of life of the population and irregularities in the management of resources led the national government to reassess royalty distribution and allocation in 2010. The Legislative Act 05 of 2011 that established the reform modified the Constitution. It maintained the right of municipalities and departments that produce and transport the resources to receive a portion of royalties, but reduced their participation. The newly named General Revenue System

(Sistema General de Regalías, or SGR) consists of five funds: the Science, Technology and Innovation Fund, which receives 10 percent of the total royalties obtained by the Colombian government; the Territorial Pension Fund, which receives another 10 percent; and the Savings and Stabilization Fund, which receives up to 30 percent of the resources. The remaining revenues are distributed among local producing authorities (20 percent) and two regional funds: the Regional Compensation Fund and the Regional Development Fund (80 percent) (Table 9.2).

Table 9.2

Distribution of Royalties from 2012

Hydrocarbons and mining	
	Percentage
Oversight of minerals and cartography	2.5%
Administration of the GRS (General Royalties System)	2.5%
Territorial Pension Savings Fund	10%
Science, Technology, and Innovation Fund	10%
Regional Savings and Stabilization Fund	25%
Investment resources	<p>50% → Producing regions: 20% → Investment funds: 80% • Regional Compensation Fund – 60% • Regional Development Fund – 40%</p>
TOTAL	100%

Source: DNP (2009).

Distribution of resource revenue in Colombia was aimed at promoting regional development. However, the poor impact of royalties on improving the quality of life of the population and irregularities in the management of resources led the national government in 2010 to reassess the distribution and allocation of royalties.

The system is managed by the National Planning Department (Departamento de Planeación Nacional, or DNP), a technical body of the executive branch. The DNP is also part of the governing committee, whose function is to define policy, create the system's regulations, and evaluate its overall performance. The minister of mines and energy minister, the finance minister, two governors (main authorities of departments), two mayors (main authorities of municipalities), a senator, and a representative of the Chamber comprise the Committee. The DNP hosts the Secretariat. This institution coordinates the monitoring, follow-up, control, and evaluation of the royalties system (Sistema de Monitoreo, Seguimiento, Control y Evaluación, or SMSCE).

National, departmental, and local government delegates review and approve requests for financing. They participate in specific decision-making bodies (Órganos Colegiados de Administración y Decisión, or OCAD), conceived as a triangle of good

governance whose purpose is to prevent fraud and improve efficiency and effectiveness in the use of resources.⁷ OCAD meetings are convened with the participation of other stakeholders, such as members of Congress, representatives of indigenous and Afro-Colombian communities, and other civil society organizations.

This chapter sets forth the problems in local management of royalties in Colombia that led to transparency and accountability initiatives as well as major institutional reforms. It focuses on transparency initiatives implemented in some regions and on some

⁷ The OCADs for the Regional Compensation Fund and the Regional Development Fund are structured around regions defined by the Governing Committee and are composed of the following members: the environment and sustainable development minister, three ministers, the director of the DNP, the governors of the departments that make up the Regional OCAD, two mayors from each of the departments that make up the Regional OCAD, and a mayor elected by all the mayors of the capital cities of the departments that make up the Regional OCAD. The Departmental OCAD, where projects are financed by direct allocations to producing departments, is composed of two ministers, the governor of the department receiving the direct allocations, and 10 percent of the mayors of the department. In the case of municipalities or districts, the OCADs are made up of a delegate of the national government, the governor of the department where the municipality or district is located, and the mayor of the municipality or district receiving direct assignments. Finally, the National OCAD of the Fund for Science, Technology and Innovation is composed of three ministers, the director of DNP, the director of Colciencias, the main science promotion institution, four public universities, two private universities, and a governor from each regional entity.

of the preliminary results of the new royalty system. It shows that although the distribution of extractive revenues has been touted as an alternative for regional development, the lack of results in improving the quality of life for residents and increasing irregularities in the use of resources have led to a dual phenomenon. First, although transparency and accountability initiatives have placed royalties at the center of the local public agenda and created opportunities for interaction between governments and citizens, they have had limited effects on modifying the institutional capacity and local political dynamics in the short term, both of which are necessary if extractive industry revenue is to have a positive impact on local development. The second phenomenon is the trend toward centralization not only of decision making about resource allocation, but also of monitoring execution.

THE IMPACT OF ROYALTIES AT THE SUBNATIONAL LEVEL

The inflow of massive mining and oil revenues has not produced the expected surge in development of Colombia's mining and oil-producing departments and municipalities. Although under the previous royalty distribution scheme local governments received almost 80 percent of the royalties generated by extractive industry activity, since the 1990s, the distortions created in public finances at the local level and the absence of social benefits raised concerns among various institutional and social stakeholders. This paradox of natural

resource abundance and scant local development also occurred in other Latin American countries, such as Peru, Bolivia, and Brazil, where resource revenue is allocated to producing regions (Viale and Cruzado, 2012). In Peru, the transfer of a significant amount of resources (*canon minero*) to provinces and municipalities that lacked the technical and administrative experience to manage them resulted in poor execution and unsatisfied expectations (González Espinosa, 2013a). In Colombia, devolution of resource revenue to the local level has been associated with corruption, inefficiency, and deficient control mechanisms (Hernandez Leal, 2004; "La cruda historia de las regalías I," 1997; "La cruda historia de las regalías petroleras II," 1997; "Regalías siguen siendo botín," 2008; Vilorio de la Hoz, 2002).

The Local Paradox of Plenty

In the 1980s, shortly after oil royalties began to flow into the Arauca Department on the eastern plains of Colombia, various stakeholders drew attention to the drawbacks associated with the volatility of these resources, deficiencies in the control systems, and the weak capacity of the officials who were administering them (Peñate, 1991). At that time, Arauca was a territorial entity with less autonomy than a department (i.e., *intendencia*) and was not accustomed to handling the volume of revenues that began to flow in. Execution was poor, and some local players and the main oil company in the area worried that the central government was not providing enough support to local governments (González Espinosa,

2013b). This was compounded by the presence of illegal armed actors, who used royalties as patronage (Peñate, 1991). A 1988 study of the northern La Guajira Department found that despite the department's receiving royalties from coal mining, the level of unmet needs decreased at a slower pace than in the rest of the country (Viloria De la Hoz, 1998: 19). Newly created municipalities had to manage large budgets, and their budget allocations did not follow the rules (Benavides, et al., 2000). Localities that received more royalties tended to have more difficulty managing public finances and achieving social impact and/or economic value than those that did not receive them, which was consistent with Karl's (1997) thesis on the "paradox of plenty," also known as the resource curse.

Distortions in Public Finances

There were two types of economic distortions related to royalty management at the local level in Colombia. The first was associated with the high concentration of these resources in a few subnational governments, and the second arose from the improper use of these resources. Between 1994 and 2009, royalties were estimated at approximately US\$22 billion, nearly 79 percent of which were direct royalties allocated to resource-producing or transporting departments and municipalities.⁸ Since

⁸ Based on Act 141 of 1994. Available at http://www.secretariasenado.gov.co/senado/basedoc_ant/ley_0141_1994.htm.

resource allocation was based on production, royalties were concentrated in a few territorial entities. In 2009, nearly 60 percent of royalties were distributed to only five of the country's 32 departments—21.5 percent in Casanare, 10.9 percent in Arauca, 9 percent in Meta, 7.7 percent in Huila and 7.3 percent in La Guajira. It was estimated that 16 percent of the country's population received 83 percent of oil royalties between 1994 and 2005 (Barberena, 2010).

The inflow of large amounts of public resources to departmental and municipal coffers in short periods of time without a corresponding process to strengthen local administrative capacity may result in poor budget execution, difficulties in planning, and inefficient resource allocation. This was the case in Arauca in the 1990s. Between 1997 and 2003, the royalties received by Cesar increased by 250 percent (Sánchez Torres, Mejía Mantilla and Herrera Araujo, 2005), while in Casanare public resources increased by 700 percent (Zapata, 2010). A high concentration of revenues also produced a growing dependence on this income at the expense of tax collection, especially in departments where economic development was precarious before the exploitation of minerals or hydrocarbons began (Benavides et al., 2000; Perry and Olivera, 2010). In 2009, the municipal budget of La Jagua de Ibirico (in the Cesar Department) was 91 percent financed by coal royalties (DNP, 2009).

The second type of distortion was related to revenue management. In addition to operating expenses, the increase in investment was accompanied by a considerable increase in indebtedness of the municipalities receiving royalties (Benavides et al., 2000; Perry and Olivera, 2010). Indeed, large public works projects were funded not only with royalties but also with debt. Since there was a considerable expectation that municipalities would receive royalties, banks were eager to lend to local governments. However, there was an absence of adequate savings mechanisms. The creation of the Oil Savings and Stabilization Fund (Fondo de Ahorro y Estabilización Petrolera, or FAEP) aroused great interest, but the use of these resources to pay the debts of municipalities and various other national executive orders to make its use more flexible have distorted its initial intent (CGR, 2012; Zapata, 2010). Law 781, 2002 authorized local governments to use funds from the FAEP to pay debts incurred for services such as electricity, street lighting, health, education, and water and sanitation.

Economic distortions emerged with royalty allocation at the local level associated with the high concentration of these resources in a few subnational governments and the improper use of these resources.

Limited Impact on Human Development

According to a 2010 study, oil and coal production led to growth in the GDP of municipalities where natural resources are extracted (Perry and Olivera, 2010). However, early in the 2000s, other econometric estimates showed that royalties had no influence on investment and regional economic growth in Colombia, at least in the short term (Benavides et al., 2000). The findings are not conclusive, and some argue that rather than looking at the contribution of royalties or production to total local GDP, the more relevant figure is the impact of royalties or extractive production on non-mining production.

Although oil extraction and coal mining activities can have an invigorating effect on local economies, royalties seem to have relatively little impact on the quality of life of the population.

It is undeniable, however, that both oil extraction in Arauca and coal mining activities in La Guajira have invigorated the local economy. Nevertheless, even when there is evidence of economic growth and dynamism from an extraction project in the local

economy, royalties are often considered to have relatively little impact on the quality of life of the population. Some indicators reveal low levels of education, health, water, and sewage in resource-producing areas. Between 1993 and 2005, in five departments with budgets primarily funded by royalties, the number of people with unmet basic needs was almost one and a half times greater than the national average (Candelo et al., 2008). In 2006, of the 710 municipalities that received royalties, only seven had met basic social service requirements; 550 had higher infant mortality rates than the national average, and 26 municipalities had twice this average (Zapata, 2010). A recent study also indicated that the more royalties received by oil-producing municipalities, the higher the inefficiency in basic social service provision (Armenta, Vergara, Barreto Nieto, and Prieto Bustos, 2012). The Meta Department is an example of this: although departmental GDP increased between 1994 and 2001, growth in health, basic education, clean water, basic sanitation, and reductions in infant mortality were not as significant as expected. Poverty decreased in relation to the poverty levels perceived before (from 29.5 percent in 1997 to 26.2 percent in 2000); however, it only decreased to the level of the national average, despite the additional revenues received (Hernandez, 2004).

Corruption and Irregularities: Variables that Explain the Problems in the Management of Royalties

In 1997, a major newspaper in Colombia published a series of articles entitled “The Harsh Reality of Royalties,” which exposed the administrative inefficiency of oil-producing municipalities. They revealed that local leaders had allocated resources to lavish or unnecessary projects while conditions on the ground demanded investment in basic social services (“La cruda historia de las regalías I,” 1997; “La cruda historia de las regalías petroleras II,” 1997). Ten years later, the same newspaper published another article entitled “Royalties are Still Being Looted.” In addition to describing how the local authorities of the Casanare Department diverted royalties through trusts, the article noted the delays in project implementation and the ineffectiveness of external controls over revenue administration (“Regalías siguen siendo botín,” 2008). Indeed, the predominant revelations regarding royalties have been about wasteful expenditures and private appropriation of public resources. Although media coverage of these issues has focused on specific scandals, there is a perception of widespread corruption not only in national public institutions but also among local actors and civil society organizations.⁹

⁹ Interviews conducted with public officials and social leaders in Arauca, Sucre, Córdoba, Cesar, and Guajira by Ana Carolina González between 2008 and 2010.

In 2002, a paper on the regional economy produced by the central bank affirmed:

When these resources (royalties) and local governments are captured by a group of corrupt leaders, positive multiplier effects and linkages with the departmental and municipal economy are reduced or disappear. The misuse of royalties can generate tragedies that threaten the well-being and even the lives of people residing in resource-abundant territorial entities (Viloria de la Hoz, 2002: 51).

The paper reported that between 1997 and 2000, two mayors, three members of the city council, and other people involved in royalty management were murdered in Tolú, in the Sucre Department (Viloria de la Hoz, 2002: 52). The paper also pointed to the disorganized solicitation of bids for public works and advisory services without a planning process, which led to duplication of projects, cancellation of contracts, unfinished projects, and unreasonable demands from contractors, who began to embezzle from the municipal coffers (Viloria de la Hoz, 2002).

The DNP has identified a large number of anomalies in the execution of royalties by departments and municipalities. In 2007, it found 45,033 alleged irregularities in direct royalty management: 39 percent of these findings were related to allocation other than that prescribed by law, and 61 percent were linked to budgetary or procurement errors (Rentería Rodríguez, 2008: 118). Some of these irregularities

have been submitted to the fiscal and disciplinary control bodies (the National Audit Office and the Attorney General's Office) for review. The majority have been problems in procurement processes.¹⁰

The main national fiscal oversight institution, the National Audit Office, had also detected malfeasance in extractive revenue management for the period 1999–2001. Examples include the splitting of large contracts that require public competitive bidding into smaller ones in order to favor a direct procurement process, a procedure that is allowed only when the total amount of contracts is small; the concentration of procurement processes in the final month of the fiscal year, normally to increase annual budget execution rates without adequate procedures and planning; the lack of clarity in contracts goals; cost overruns; payment

¹⁰ Fiscal control consists of monitoring the administration of state funds or property by public or private entities. Disciplinary control examines behavior (actions and omissions) of public officials. According to the Constitution of Colombia, the inspection bodies are the National Audit Office, the highest authority of fiscal control, and the Attorney General's Office responsible for disciplinary control of public officials and the protection of human rights. The latter prosecutes, in conjunction with the Office of the Ombudsman (Articles 267 and 277 of the Constitution). At the local level there is the comptroller, district and municipal district departmental managers, and the National Audit Office. The prosecution is represented by regional prosecutors' offices, the municipal or local ombudsmen, and ombudsmen at the regional level.

of items not allowed by law; deficiencies in project planning; and others (Hernandez Leal, 2004). The National Audit Office found administrative, disciplinary, and even criminal problems in several contracts signed in the Meta Department between 2001 and 2002. For some of them there was evidence of embezzlement of funds (Hernandez Leal, 2004: 54). Local development plans which do not specify the projects to be financed; development of contracts based on non-existent projects; deviation to unauthorized funds, debt repayment, or expenses; and inadequate technical controls of projects; among other problems, were repeated during the 1990s and the 2000s (CGR, 2002, 2006; Hernández Leal, 2004). In this context, it is easy to understand why social and institutional actors perceive mismanagement and corruption as a central element in explaining the poor impact of royalties on local development (“Los escándalos mantienen la percepción de la corrupción en el país,” 2011).

According to a participatory assessment conducted in 2005 by a presidential anticorruption program (Programa Presidencial de Modernización, Eficiencia, Transparencia y Lucha Contra la Corrupción, or PPLCC), extractive revenue management was identified as one of the four priority areas for anticorruption efforts. The Local Transparency Index also indicated that for the period 2008–09, less than half of the government authorities from the main royalty-receiving departments released information on the use of these revenues (Transparencia por Colombia,

2010: 19). According to the director of this organization, the scandals associated with the misappropriation of royalties are one of the causes of the high perception of corruption in the country and the correspondingly low scores on the Corruption Perceptions Index released annually by Transparency International—3.4 out of 10 in 2011 (“Los escándalos mantienen la percepción de la corrupción en el país,” 2011).

For social as well as for institutional actors, corruption is a central element in explaining the poor impact of royalties over local development.

The assessment differs depending on the actors involved, and some national institutions and officials view high levels of corruption as the problem. However, for local officials, other explanations besides corruption account for the low scores. First, local leaders highlight the excessive detail of the former royalty regime, which set the parameters for resource investments and gave local authorities little leeway to fund the projects they considered most urgent. For example, one mayor interviewed indicated that during the rainy season the authorities needed to confront emergencies, such as providing food and shelter after the floods, but the royalty regulation stipulated that these revenues could only be used in the sectors or priority projects indicated in the

local development plan. Even if the revenues were spent in accordance with the law and for the purpose of, for example, building and equipping a school, it was impossible for the municipality to pay the salaries of teachers or security guards because these expenses could not be funded with royalty revenues. In the quest to find short-term fixes to these problems, irregularities may have been committed (e.g., making informal agreements with contractors to obtain these extra goods or services without including them in the receipts), leading to less control and high discretionary spending.¹¹

A second problem identified by local actors centered on deficiencies in the certification process for minimum health coverage, education, sanitation, and water supply undertaken by different national public entities. This certification process was important because the law indicated that unless the departments and municipalities achieved specific levels of social service coverage, they could only invest a small portion of the revenues received in other development projects. The requirement, aimed at guaranteeing funding for social projects, faced difficulties. Some mayors denounced the inadequate certification process at the national level, noting that it did not use updated information or take the local context into account. For example, a municipality may need to spend considerable

amounts of their royalties on education coverage when the coverage target was already met, either because the number of students reported was inaccurate or because some children attend school in other municipalities closer to their homes and are therefore not covered by the educational allocation within their own municipality.¹²

At the national level, other types of irregularities besides local mismanagement of direct royalties have been identified. The main fiscal oversight institution identified failures in the administration of indirect royalties, which were subjected to additional controls by the DNP in project approval and administrative and financial auditing (CGR, 2008). A researcher at the central bank had found previously that the dynamics of the National Royalties Fund had led to a dispersion of investment in small projects of limited regional impact (Viloria de la Hoz, 2002). Deficiencies in external controls were found in a number of analyses "*Regalías siguen siendo botín*," 2008; Salazar López, 2004). Lack of knowledge and capacity of local officials, as well as political distortions, lack of meritocracy, patronage, cronyism, and even pressure from armed groups, are all part of the problem (Viloria de la Hoz, 2002). Despite these factors, the idea that local politicians are corrupt has been the most frequent reason given to explain the problems in royalty management at the local level (Caracol Radio, 2006).

¹¹ Information is based on statements made by mayors of oil-producing municipalities at the forum on petroleum royalties and local development held on June 25, 2010 in Bogota, Colombia.

¹² Ibid.

PROMOTING TRANSPARENCY AND ACCOUNTABILITY FOR EFFICIENT AND EFFECTIVE MANAGEMENT OF EXTRACTIVE INDUSTRY REVENUES

The prevailing institutional solution to these problems in Colombia has been strengthening external controls and accountability. Promoting transparency and access to information are fundamental objectives of this policy. First, the autonomy of local government and inter-institutional control mechanisms were strengthened, followed by a proliferation of citizen oversight mechanisms and projects to strengthen the capacity of local authorities. It is important to examine the impact of these initiatives and the challenges and opportunities that have emerged from them.¹³

From Horizontal Accountability to Citizen Oversight and Local Capacity Building

Inter-institutional Controls

During the 1990s, the distortions identified in the use of royalties led to restrictions on the autonomy of local governments to manage them. The first restriction limited bureaucratic and other operating expenses.

¹³ Interviews conducted in 2008, 2010, and 2011 are part of the research by the author for a political science thesis at the Institute of Political Studies in Paris in September 2013 (González Espinosa, 2013b).

Strict procedures were instituted for local authorities to incur debt. Act 141 of 1994 established that royalties could only be used to fund priority investments included in local development plans. But if the department or the municipality had gaps in health coverage for the poor, or did not reach its targets for reducing infant mortality and providing water and sewage, and basic education, then the income was reallocated to finance projects that achieved the targets. This law was repeatedly amended to further specify the types of expenses that could be paid for with royalties.¹⁴

In addition to the provisions governing the allocation of resources, Act 141 established a National Royalties Commission (Comisión Nacional de Regalías, or CNR) with a mandate to monitor and control the management of direct royalties allocated to oil- and mineral-producing departments and municipalities as well as those associated with the National Royalties Fund, which the remaining departments could access. The Commission, which consists of four national delegates, five departmental governors, and two mayors, exercised this function directly and through administrative and financial auditing firms. The United Nations Development Programme (UNDP) signed an agreement with the Commission to hire these firms.¹⁵

¹⁴ For example, Law 756 of 2002, decrees 3229 of 2003, 1572 of 2006, and 416 of 2007.

¹⁵ Convention UNDP/COL/99/030.

In 2004, the government decided to disband the CNR because of irregularities in financial management and accounting, internal controls, project management, and tracking of royalties. By Decree 149 of 2004, the government assigned its functions to the DNP, which acted as an administrative and financial comptroller through auditing processes and took corrective and preventive measures, such as suspending bank drafts to local governments when irregularities were found.

The prevailing institutional solution in Colombia has been to strengthen external controls and accountability.

Fiscal and disciplinary controls were also tightened. Royalty management should have been the purview of decentralized fiscal oversight institutions (*contralorías territoriales*), but because of their poor accountability, the Constitutional Court declared in 1999 that the National Audit Office would have primary responsibility for supervising royalty expenditures at the local level and not just concurrent jurisdiction with territorial comptrollers (Case C-403, June 2, 1999). This was a departure from the principles of coordination by public oversight institutions and noninterference by the central authorities in local oversight. Resource monitoring activities also increased. In 2003, the

Attorney General's Office (disciplinary institution) and the National Audit Office signed an agreement to act in concert against corruption. One of the main tasks was ensuring that royalties were used appropriately. The National Audit Office created a task force to oversee royalty management (CGR, 2008).

"Royalties are the most heavily controlled resources," stated a contractor of the Attorney General's Office in 2010.¹⁶ And yet, the results were nonetheless worse than expected in terms of satisfaction of basic needs and coverage of social services. Scandals and irregularities persisted despite auditing, DNP monitoring, and the presence of oversight bodies. Tensions began to mount among institutions over the determination of responsibility for the lack of positive results, but they have all begun to recognize the limitations of their actions. The administrative and financial control of the DNP was geared primarily toward the legality of royalty allocation and paid little attention to performance, effectiveness or efficiency in the use of resources, compliance with development plans, or impact of the programs. The supervision carried out by the fiscal oversight institutions was selective and subsequent to the procurement and execution processes, and thus was not equipped to identify anomalies in time and

¹⁶ Personal interview with academic and consultant for the Attorney General's Office, Bogotá, April 20, 2010.

had little capacity to monitor the many projects and contracts funded with royalties. Moreover, other types of external controls were neglected, including local oversight institutions and political oversight by local representatives and citizens. Even internal controls or self-monitoring carried out within the local government that was managing resources was neglected (see Law 87, 1993). The model that is normally used to promote this type of control (Modelo Estándar de Control Interno, or MECI) had limited application at the local level.

Citizen Oversight Initiatives and Local Institutional Strengthening Projects

Deficiencies in checks and balances, inter-institutional control systems, and horizontal accountability characterize Latin American democracies (O'Donnell, 2003). In response, civil society initiatives requiring politicians and public servants to comply with the law or social objectives have multiplied in the region in recent decades. These are social accountability processes in which citizen participation is essential (Isunza Vera, 2005; Peruzzotti and Smulovitz, 2006). In Colombia, the emergence of citizen monitoring experiences dates back to the late 1980s, but they were strengthened in the 1991 Constitution, which made citizen participation a principle of the State's functioning and established rights and mechanisms to make it possible, including the right of access to information, the right to citizen oversight over public management, and various

legal procedures designed to protect rights. Since that time, participation and public resource monitoring initiatives have increased (Transparencia por Colombia, 2004; Velásquez, 1998).

The perception of corruption, scandals, and irregularities associated with local management of royalties, in addition to the control and oversight limitations, led to greater involvement of citizens in royalty monitoring as a policy option for several public and private institutions.

Consequently, scandals and irregularities associated with local management of royalties, in addition to the control and oversight limitations, led to greater involvement of citizens in royalty monitoring as a policy option for several public and private institutions. Thus, civil society oversight initiatives and many other initiatives were promoted by the State and even by some companies.

In 2003, the National Audit Office and the Attorney General's Office decided to launch a citizens' committee (the Comité de Seguimiento a la Inversión de las Regalías or CSIR) to monitor the investment of royalties in the Cesar Department. This committee brings together representatives of local civil society, such as the chamber of commerce,

unions, and citizen oversight bodies, with the support and financing of coal companies operating in the area. The CSIR required information on how the departments and municipalities that were receiving royalties were using their resources and started disseminating these data to the general public. Later, under the leadership of the fiscal oversight institutions and other mining and oil companies, the initiative was replicated in several regions (five departments in 2010, seven departments in 2013), establishing a new experience of collaboration among public officials, businesses, and social organizations (González Espinosa, 2009). The focus of all CSIRs has been the collection and dissemination of information on the amounts that local authorities receive in the form of royalties and how they are allocated, as well as training activities to inform citizens about royalty management and oversight mechanisms. They have also organized public accountability hearings where local governments are asked to communicate their actions and citizens are given the opportunity to ask questions (González Espinosa, 2013a).

In 2007, the PPLCC, in partnership with the National Hydrocarbons Agency, the Colombian Petroleum Association, and some mining companies, launched a program called Auditorías Visibles (Citizen Visible Audit, or CVA), which provides beneficiaries of projects funded with royalties with access to information about the nature of the work, deadlines, budgets, and the

origin of the resources, and a space to interact among each other. It was hoped that through the organization of forums of beneficiaries, local government officials, DNP auditing units, the contractor, its auditors, and all the institutions associated with the project, that corruption and inefficiency could be prevented, and completion of the work could be guaranteed. These audits were a major focus of the strategy of the royalty management department at DNP that later took over the management of the program.

From another perspective, some initiatives have sought to promote a better use of royalties through the strengthening of local government institutional capacity. Indeed, accountability can be understood as a concept that includes the right and the exercise of control by citizens over public administration, as well as the obligation of politicians and officials to provide information, to justify their actions, and be sanctioned by the citizens (Schedler, 1999, 2004). In this sense, besides the efforts to help citizens and social organizations demand adequate services, there have been initiatives to support local governments to improve their responsiveness. A program funded by the U.S. Agency for International Development (USAID) and developed in partnership with the Attorney General's Office (Programa Cimientos de Consolidación de la Gobernabilidad) designed a critical path of steps to follow to properly invest direct royalties and to improve their impact on the satisfaction of basic needs. USAID and the Attorney General's

Office helped some local authorities, especially in the Cesar Department, to apply this path, which included instructions to follow from the planning phase to execution of resources, recruitment, verification of resource use, and evaluation by local officials (Programa Cimientos, 2010).

Along these same lines, one coal company, Cerrejón, through its foundation, has conducted several institutional capacity-strengthening exercises with the Secretary for Planning of La Guajira and other municipalities in this department. Between 2010 and 2011, the municipality of Hatonuevo received training, support, and tools for planning, risk management, budget management, accountability, public procurement, and internal audit and control (FCFI, 2012). In 2008, Ecopetrol signed an agreement with the International Finance Corporation (IFC) and DNP to provide various municipalities with technical assistance in the management of royalties. The goals were to incorporate modern tools for public administration and institutional organization and to strengthen governance and transparency with better information systems and processes (“Brazo financiero del Banco Mundial busca blindar regalías por \$112.000 millones,” 2010).

The agenda of transparency, accountability, and institutional strengthening was thus integrated into efforts to counter the deficiencies and limitations of the inter-agency controls and the mismanagement of royalties in order to ensure that revenues translated into local development.

The New Royalty System as a Good Governance Tool

Although social accountability and institutional strengthening initiatives achieved important results in terms of the transparency agenda at the local level, challenges in terms of inefficient and ineffective management of extractive industry revenues remained. Consequently, by the end of the 2000s, given the expectations of growth in mining and oil extraction projects and the high prices of commodities, the national government proposed a new royalty distribution system in order to take better advantage of the expected boom. The new system went into effect in 2012 with reform legislation leading to the establishment of the General Royalty System (Sistema General de Regalías, or SGR) passed in 2011. Thus, an assessment of its impact is premature. However, some conclusions can be drawn from its implementation between 2012 and 2013.

The SGR seeks to solve the problem of concentration of income in a few territorial entities, increase the level of savings of royalties, and fight corruption in its management using good governance mechanisms. In terms of transparency, the SGR is built around two pillars. First, it strengthens the technical requirements for project approval and the role of the national technical authority, the DNP, in decision-making processes and as a coordinator of the system. Together with the collective decision-making bodies (OCAD), it should ensure pertinent and adequate revenue management. The

inclusion of national, departmental, and municipal delegates should reduce discretion and increase control over the projects to be funded and the amount of information associated with the projects. That is the reason why the OCADs are understood as triangles of good governance. Consultation committees, including civil society representatives, are associated with these bodies, broadening participation and control.

By the end of the 2000s, given the expectations of growth in mining and oil extraction projects and the high prices of commodities, a new royalty distribution system was proposed by the national government in order to take better advantage of the expected boom.

Besides this element of good governance, a second pillar for transparency in the SGR is the implementation of a monitoring, follow-up, evaluation, and control system undertaken by the DNP. Within this framework and with the support of the Inter-American Development Bank (IDB), a tool has been developed to geo-reference the investment of royalties. Based on an existing IDB tool that tracked the results of projects funded by the Bank in the various countries of the region (MapaAmericas),¹⁷

¹⁷ Available at <http://www.iadb.org/en/mapamericas/mapping-results-for-latin-america-and-the-caribbean,5786.html>.

MapaRegalías' aim is to provide complete traceability throughout the royalty cycle, from the source of the resources to the implementation of public investment projects financed by extractive revenues. The objective is to use information and communication technologies as a means of government–citizen interaction, not only to facilitate access to public information and promote transparency but also to foster citizen participation and raise awareness around the processes of monitoring public investment. It is a way to integrate institutional and citizen oversight.

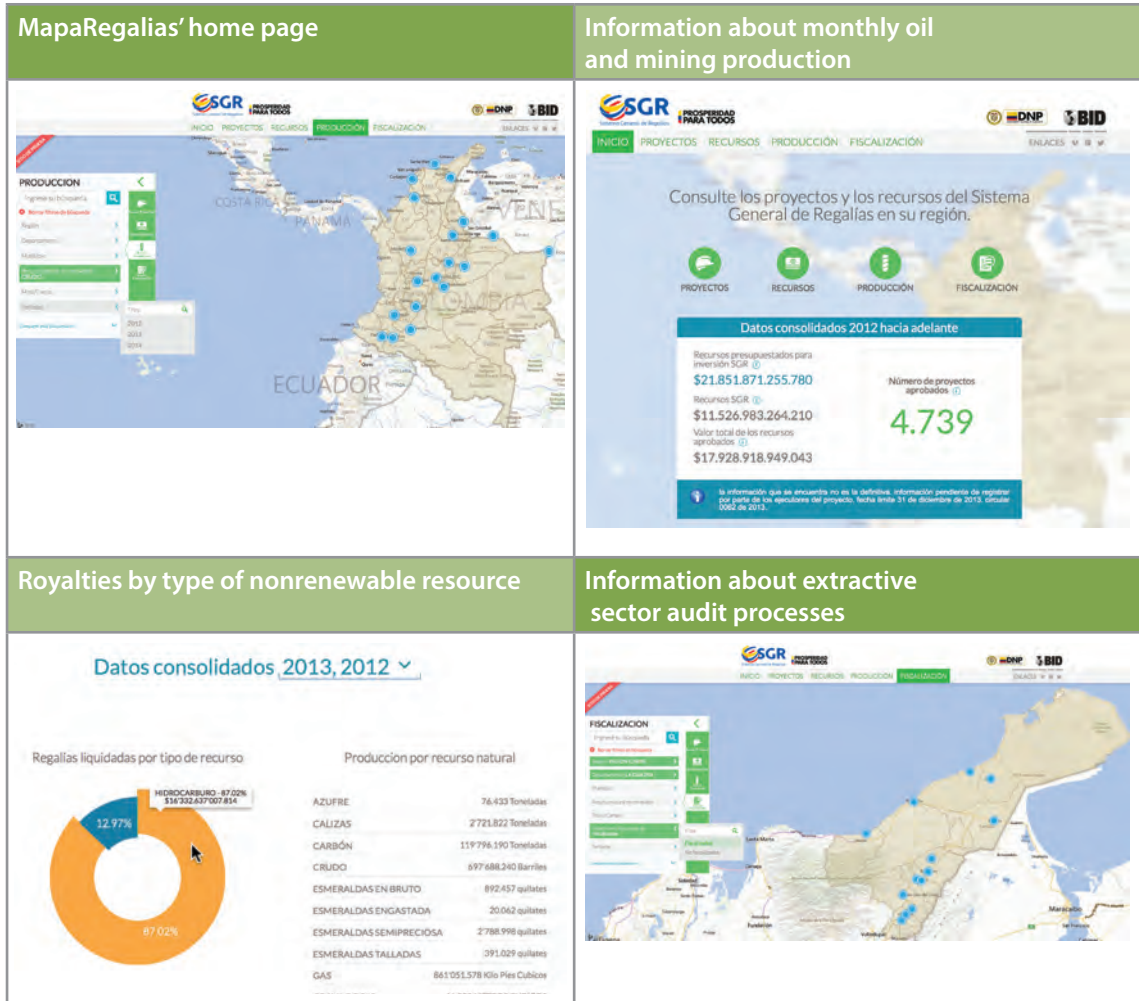
Designed as a web portal, MapaRegalías (<http://maparegalias.sgr.gov.co>) provides information in a simple and intuitive way. It gathers information such as production values and quantities of natural resources exploited in a geographic area, providing access to information on the results of the comprehensive audit processes¹⁸ conducted by the National Mining Agency and the National Hydrocarbons Agency. The system also provides data about royalties generated by each type of nonrenewable resource. MapaRegalías shows that 81.18 percent of the royalties received by the country came from oil and gas production for 2012–13 (see Figure 9.1).

In addition to revenue generation and extractive activity, MapaRegalías is structured to provide citizens accessing the

¹⁸ The audit process seeks to ensure that natural resources are exploited in accordance with legal requirements and that taxes are collected appropriately.

Figure 9.1

MapaRegalías: Information on Revenue Generation Focusing on Extractive Activity

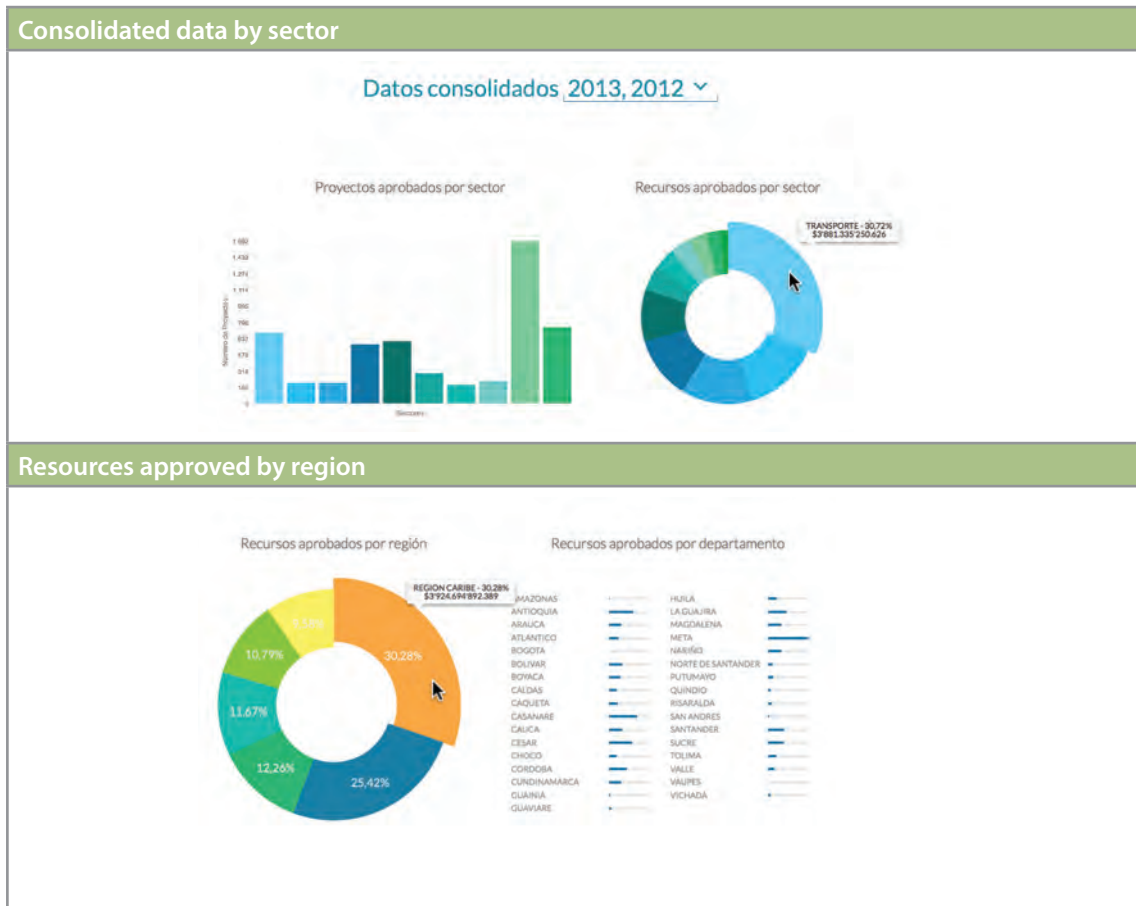


portal with accurate and timely information about royalty distribution both regionally and by sector. For example, the platform informs citizens that 31 percent of the projects approved in 2012 and 2013 were in the transport sector. It also lets citizens know

that Colombia’s Caribbean region has received the biggest share of resources (29 percent), although at the department level, Meta has received the largest allocation (see Figure 9.2).

Figure 9.2

Mapa Regalías: Information on Revenue Distribution, Focusing on Regions and Sectors



*MapaRegalías
(<http://maparegalias.sgr.gov.co>)
provides information to citizens in a
simple and intuitive way.*

Finally, MapaRegalías seeks to inform citizens from specific departments and/or municipalities about the total revenues of the SGR assigned to their territories, the number

of projects approved, and their execution status, including detailed information on project implementation. The new tool, replacing a system that the public could not access (Banco de Proyectos de Regalías), provides information on the budget allocated and the progress made by each project. It also includes a photo gallery of the results of these investment projects so that citizens can easily monitor and verify the information on the platform (see Figure 9.3).

Figure 9.3

Mapa Regalías: Information on Revenue Administration and Project Implementation

Visualization of a specific project at the subnational level



FROM TRANSPARENCY TO ENHANCED LOCAL DEVELOPMENT: ACHIEVEMENTS, CHALLENGES AND POLICY RECOMMENDATION FOR EXTRACTIVE INDUSTRIES LOCAL REVENUE MANAGEMENT

Determining the results of reforms and citizen monitoring experiences is a complex task. If the question is to what extent corruption has been reduced, this assessment faces the same dilemmas involved in measuring corruption in general (González Espinosa and Boehm, 2013). Since it concerns behaviors linked to crimes, one can only have information on the crimes that the authorities have been able to detect and process. There is also a drawback: with the rise in mechanisms to combat corruption, there might be a corresponding increase in the identification and reporting of corruption, creating a perception of an increase in corruption, when in fact the escalation is due to greater reporting and processing of the phenomenon and not necessarily to more corruption. In this scenario, better institutional controls and the emergence of citizens' monitoring initiatives can contribute to disclose the corruption that was previously hidden.

In general, both the transparency efforts of the new royalties system and the social accountability initiatives developed in Colombia suffer from these difficulties in assessing their impacts. The effects they

generate in terms of more democracy or development will only materialize in the long run (timing problem), and a verification method is lacking to determine whether those impacts are derived from these initiatives (attribution problem) (McGee and Gaventa, 2010). However, from the interviews conducted in Colombia with public officials, social leaders, and company employees about citizen monitoring initiatives, as well as from a preliminary assessment of the new royalty system, some intermediate results in terms of policies, practices, behaviors, and power relations can be mentioned (Rocha Menocal and Sharma, 2008).

STEPS TOWARD TRANSPARENCY AND ACCOUNTABILITY

Although important challenges remain, it is necessary to identify initial achievements of the reforms and citizen oversight initiatives, especially in terms of progress toward accountability. The scope of each experience is different, but their complementarity can be seen as an opportunity. While the CVA program focuses on the supervision of specific aspects of a project and involves specific population groups, CSIR tries to provide a global perspective on public management, distributing periodic revenue management reports or discussing local governments' development plans. This approach, which combines short-term needs with a structural analysis, balances a relevant and up-to-date exercise that tracks specific investments

with a search for a more long-term analysis of the impact of royalties on development. The ability to sanction is limited in both cases, but could be enhanced by the MapaRegalías platform, where citizens can upload their comments and photographs. It is expected that public officials in charge of monitoring and control of royalties will also use this information. Thus, social accountability could activate and strengthen inter-institutional controls and sanctions. To the extent that these experiences could coexist with other local government strengthening efforts, this could create a virtuous circle. Until now, three main achievements can be highlighted: greater accessibility of information, the empowerment possibilities that it represents, and the opportunities to demand greater accountability.

Important progress has been made toward accountability: the accessibility of information, the empowerment possibilities that this information represents, and the spaces it opens to greater accountability demands.

Information as an Input to Raise Awareness and Promote Citizen Control

The disclosure of relevant information was the first result of efforts by institutions and citizens to promote revenue transparency. In a context where citizens are not aware of

the importance of using such information to inform their decision making, transparency is a tool to raise awareness. For citizens who encountered difficulties in accessing data on royalties, it is an input for social accountability. These efforts also reduce the reluctance of public officials to inform and disclose.

At the regional level, some CSIRs managed to put the royalty debate on the local public agenda. This topic had often been considered taboo by the population, either because of the fear of reprisal from political groups and their allies or because of the lack of information. The fear of social stigma, of being seen as a complainant, of job loss, or loss of the benefits of government programs, and even of being threatened by illegal armed groups in places where they are thought to be involved in the administration of mining or oil income, have often led to acquiescence in the face of abuses and irregularities. Despite initial difficulties in obtaining the necessary information from the local authorities, some public officials gradually became more open to these demands (González Espinosa, 2013b).

Despite the increased access to information, its quality was often considered a major challenge. In this regard, the potential contribution of MapaRegalías is considerable. Not only does the tool encourage public officials to disclose revenue management and present it in a user-friendly and understandable format, but it also replaces outdated information systems. The

webpage received 87,000 visits between September 2013 and February 2014.¹⁹ This initiative is a step in the direction of achieving the goal of quality information that is relevant to the citizens as an input for social accountability. In the case of the CVA program, evidence showed that if citizens perceived the quality of information on projects as adequate, they were more prone to invest their time in the monitoring process (Molina, 2013: 52).

In addition, MapaRegalías is an important step toward broadening the agenda of transparency in the extractive sector, which was previously confined to revenue administration. In addition to information on royalty management, data on the monthly production of each mineral and the liquidation of royalties is provided to citizens at no additional cost. The tool provides consolidated information useful in performing regional or sectoral analyses, which contribute to an understanding of the global impact of resource revenue. It is expected that this type of information system will be replicated for all public investment.²⁰

¹⁹ This has occurred despite the fact the website has not been officially launched.

²⁰ The credit operation "*Programa para el Fortalecimiento del Sistema de Inversión Pública*," signed by the IDB and the Colombian government, foresees the expansion of the MapaRegalías platform to include all sources of public investment in the country.

Technical Approach to Civil Society Empowerment and Strengthening of the State

A second achievement worth mentioning is the empowerment of a variety of actors. Technical information and rigorous data processing derived from information increase citizens' and organizations' capacity for political dialogue. At the local level, monitoring activities are often perceived as being conducted by individuals with little training and resources, opportunists, or allies of political opponents motivated by personal gain. Instead, one of the members of CSIR Sucre indicated that political attacks and threats to the oversight exercise were less frequent because of the collective character of the initiative and the support of reputed civil society organizations such as the chamber of commerce and universities.²¹

This also applies to institutional strengthening programs. Despite high staff turnover in local institutions, the increase in management skills among staff enables capacity-building processes and procedures to be established. An employee of the Cerrejón Foundation in La Guajira noted that trained personnel often stay in the public sector and within the region, sometimes going from one municipality to another or from one institution to another. Thus, the training provided is not totally lost. He added that capacity-building programs often focus on redesigning internal processes and procedures, so

²¹ Interview with CSIR Sucre member, Sincelejo, 2008.

that when new officials arrive they can shift priorities while following the processes already in place. These institutional strengthening programs also support the role of the national oversight bodies. One result is that local authorities who participate in these initiatives are beginning to regularly submit information requested by the national authorities, improving their performance scores and thereby enhancing the legitimacy of state institutions at both levels.²²

MapaRegalías also provides essential information that strengthens inter-institutional accountability. An internal portal with consolidated reports was created to support monitoring and tracking by government decision makers. Together with the resources allocated by the new royalty system to the DNP monitoring scheme and the fiscal oversight institutions' real-time fiscal control on projects, it enhances the comprehensiveness of control. Furthermore, it enables oversight of mining and oil production, as well as of extractive companies' compliance because it provides production and audit information.²³

²² Changes in the level of reporting of Hatonuevo before and during the program demonstrate this reality. Hatonuevo Township in the La Guajira Department moved up on the municipal performance index after the implementation of the Municipal Modernization Program (FCFI, 2012).

²³ An IDB project (the Program for Institutional Strengthening of the Mines and Energy Sector) will be conducted to strengthen the oversight and information management capacity of oil and mining authorities.

A Discourse that Opens Windows of Opportunity

Through these initiatives, national and local authorities are able to communicate their commitment to transparency and accountability. Despite the many differences that may exist between words and deeds, this explicit engagement opens up windows of opportunity for civil society and other political actors to demand implementation. As a result of the communication strategy, important spaces for citizen–state interaction are created.

Although accountability hearings promoted by CSIR are often considered “ap-
plause committees,” more focused on political communication of the actions of local leaders than on critical monitoring on behalf of the population, their impact cannot be overstated. Their existence per se is an innovation. During an accountability hearing in Arauca, a youth organization promoted by CSIR debated regional youth policies with the governor of the department.²⁴ During a hearing of the auditing program in Hatonuevo (La Guajira), a public official declared that the administration was committed to a program of institutional modernization that included an improvement of the internal information system on projects. He was asked to bring additional information to the next hearing on the project.

²⁴ Accountability hearing for the Department authorities, Arauca, April 23, 2010.

The Path Forward to an Efficient and Effective Management of Extractive Revenues

Despite these preliminary results, transparency and accountability initiatives face major challenges in translating more information or capacity into efficient and effective management of extractive revenues. Their implementation rests on several assumptions. Better information and training of citizens creates greater demand and surveillance of public officials. Facing these demands with greater institutional capacity means that public officials have more incentives to respond and fewer incentives to engage in corrupt behavior. This strengthens democracy and leads local governments to manage public resources more efficiently and effectively, with greater impact on social and economic indicators (McGee and Gaventa, 2010). However, the causal relationship that links these assumptions is not always clear and does not always materialize in practice (Fox, 2007; Mejía Acosta, 2010). Colombia faces three main challenges in implementing effective reforms and initiatives: to provide accurate, relevant, and clear information; to transform information into an advocacy tool; and to ensure that the use of information involves a positive change in the behavior of local actors, social organizations, and public officials.

Consolidating Transparency

The first challenge is to provide accurate, relevant, and clear information. Access to public information is a constitutional right

in Colombia, but there is persistent reluctance by public servants to facilitate dissemination for fear that it may be used against them by political opponents, due to their lack of knowledge of the rules, or simply in order to avoid revealing irregularities. In many cases, this resistance comes from local governments that do not have the information demanded because they do not always have adequate information systems or the staff to handle the multiple requests of this nature coming from different institutions, with different formats and requirements.

While initiatives like CSIR and CVA are based on collaboration with local governments, public officials are not always willing to provide the requested information. In these cases, the evidence shows that resistance is mainly reduced to the extent that the citizen control mechanisms are equipped with sanctions against those who do not provide the required response (González Espinosa, 2013b). Project visibility, for instance, induces change in politicians' behavior in the CVA (Molina, 2013: 78). However, in their quest to maintain harmonious relations with local governments, some citizen monitoring initiatives forego the opportunity to exercise social sanctions, which in turn reduces their effectiveness. For instance, most CSIRs in the country decided not to confront or denounce local public officials. Against the opinion of some of its members, CSIR Arauca has maintained a low profile during public hearings and has avoided claims through institutional control

channels (i.e., the Attorney General's Office) when local governments are reluctant to deliver information.²⁵

A new law provides citizens the right to access all public information without boundaries.²⁶ However, consolidating accurate and timely information also implies engaging the public servants in charge of providing it. Those responsible for reporting information on the progress of the projects in the case of the MapaRegalías platform are the executors. However, as in the case of citizen oversight initiatives, there is a problem with the delivery of information by local authorities. Until February 2014, about 2000 projects were in execution, and information on many of them is lacking. Guaranteeing that the executors of projects (territorial entities) constantly report their progress is a challenge for the new royalties system. Sanctions are envisaged for public officials who do not report.

Lack of information is not always related to political reluctance or apathy. In addition to inadequate information systems and insufficient human resources, there are regional disparities that need to be taken into account. Inability to formulate projects has already presented an obstacle for some regions or municipalities in obtaining the revenues allocated to them. Weak institutional

capacity affects local public officials' capacity to provide data on projects. Consequently, a major challenge of these initiatives and reforms is building or strengthening capacity.

Finally, there are still some challenges in terms of the relevance of the information. Although the number of approved projects is reported in MapaRegalías, the expected impacts of these investments are not (Maldonado, 2013). Important efforts are being made to upload details on implementation in a timely fashion. However, citizen follow-up will continue to be project-based. Thus, the impacts of projects and extractive revenue investments in social services or human development in a region will remain difficult to measure and monitor.

From Transparency to Real Accountability

Once information is available, the second challenge is to transform it into an advocacy tool so that it may be used effectively by citizens and public officials to demand accountability and make decisions. The use of information is also linked to the design of institutional checks and balances.

The first element involves both wide dissemination of information and the existence of incentives and resources that allow and encourage its use. Citizens Visible Audit and CSIR limit the scope of the dissemination of information. Although CSIR in the Arauca Department has made use of billboards on some major roads of the capital to report the amounts received by local governments and some radio stations support

²⁵ Interviews conducted with various members of CSIR Arauca, April 2010.

²⁶ Regulation Law 1712 of 2014 (see <http://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=56882>).

the dissemination of reports, these initiatives have failed to disseminate accurate information about the general allocation of resources and its impacts. Information in rural areas is scarce and limited to some social leaders. Moreover, the focus of CVA on specific projects limits the public's interest in its public hearings. A broad transmission of information therefore requires alliances with the media as well as the use of understandable, relevant, and timely information. Moreover, the technical, neutral, and nonpolitical approach of citizen monitoring initiatives can also limit the ability of these mechanisms to strengthen horizontal accountability and to affect local political dynamics if it implies reducing complaints before supervisory bodies or prevents the nurturing of election debates. The decision of some CSIRs to keep a low profile at election time reduces the chances that the information may be used to influence voting decisions. This is also one of the main challenges for institutional strengthening programs that focus primarily on processes and procedures: they run the risk of being innocuous if they do not imply real changes in corrupt public procurement practices or in patronage governing the allocation of royalties.

MapaRegalías reaches a wider audience geographically, but strategies to disseminate information and to encourage citizens and public institutions to use it have yet to be implemented. Given that the platform delivers relevant information to citizens, private companies, and public decision

makers, it would be important to create a mechanism whereby users could make comments and upload information. Inter-institutional coordination would need to be reinforced to guarantee that all the concerned public institutions provide information but also use it for their own purposes.

The second element refers to the design of good governance, anti-corruption, and transparency strategies. In many cases, increased controls and procedures can have unintended effects. Thus, instead of increasing accountability, they may lead to malfeasance or new corruption risks. In the case of the new royalty system, the required meeting of various actors in more than 1,000 OCADs—regional, departmental, and local—to approve projects can reduce the system's capacity to process investments. The multiplication of decision scenarios, along with the transition to a new system, has already reduced the level of revenue execution. In 2012, the level of project implementation was 5 percent, which generated sharp criticism from local leaders. This difficulty is also related to a lack of projects formulated according to the complex technical terms defined by the DNP. For some actors, transparency seems to mean more requirements, documents, and signatures, which has slowed the speed of investments.

Because of these obstacles, in oil and mining regions, the perception that revenues have been considerably reduced has increased tensions between citizens, extractive companies, and local governments. This perception is reinforced by the fact

that responsibilities in the triangle of good governance are not clear. If a project is approved and it does not meet the technical criteria or if it does not meet development needs, there is no clarity about which institution—the DNP, a ministry, departmental authorities or the municipality—is accountable for its results.

In general, the system appears to assume that centralizing approval and control procedures will reduce corruption and inefficiency. Law 1606 of 2012, which gives veto power to the national government over a large percentage of investment projects, was passed under this premise. However, there are two elements that could neutralize such an argument. First, the law does not take into account the irregularities due to inefficiency and corruption that occurred in the allocation of resources and implementation of the National Royalties Fund. “The tentacles of corruption that suck all the finances of the State do not disappear by turning the administration of these resources over to the national government” (De la Torre, 2010). Second, the pressure to improve performance brings additional risks to the system, since the national institutions that are represented on many committees and review multiple projects may relax their criteria in order to accelerate the execution of resources, reducing the effectiveness of the governance triangle. The focus on external control and on the national level neglects the importance of the territorial level, which is where companies operate and produce royalties. Although

there have been some efforts to train local officials in the preparation and presentation of projects, a more systematic process of strengthening municipal capacity for internal audits or territorial controls has not been implemented.

From Accountability to Performance

The third challenge is to ensure that the use of information involves a positive change in the behavior of local actors, social organizations, and public officials.

The impact of transparency and accountability on power relations is related to the effectiveness of sanctions and incentives. Yet, some officials or politicians may pay no attention to social sanctions or even fiscal or disciplinary measures affecting them, since there are no negative consequences for the way they interact with other local players, nor is their income affected. It is thus necessary to determine how these initiatives increase the deterrent effect of sanctions or affect political incentives. For those who engage in public management for personal gain, it is important to impose fines, reduce impunity, and foster a political culture of rejection of corruption that excludes those who have been punished from holding public office. There are also perverse political incentives in royalty management that need to be addressed. Since a politician’s goal is to stay in power, local governments seek to spend resources quickly in order to show results. This leads to prioritization of spending on physical infrastructure and/or distribution of income

to constituents. If citizen monitoring initiatives do not affect the electoral dynamics and citizens' voting decisions continue to be associated with gifts, the provision of local government employment, and the buying of votes or political loyalties, it will be difficult for such incentives to be changed. The economic dependence of local governments and the lack of diversification of the economy in many mining and oil regions feed this logic. This concern is not addressed in the initiatives analyzed.

Furthermore, even if there are positive changes in local resource administration, compliance with the law, and transparency and efficiency, they need to result in improved living conditions. Efficient, transparent, and well-intentioned public programs can also fail. Good results are not automatic, nor are they visible in the short term. However, to the extent that transparency, accountability, and institutional strengthening initiatives go beyond procedural changes and encourage a debate on how best to use public resources in substantive programmatic terms, their ability to affect local development will increase. In order for this to happen, these initiatives must take into account other aspects of local development. Determining that corruption is the main problem may help to express many actors' concerns, but this explanation oversimplifies the analysis of the reasons behind the limited impact of extractive revenues on local development.

So far, the initiatives studied—CSIR, CVA, and institutional strengthening programs—have focused exclusively on the uses of revenue by local governments. Less attention has been paid to other levels of government or institutions or to other aspects of territorial development in extraction zones. A member of CSIR Arauca considered corruption to be the main cause of unmet basic needs within the department,²⁷ and a similar approach was adopted by consultants in charge of institutional strengthening in La Guajira (FCFI, 2010). Neither of these initiatives includes a discussion on the general environmental, social, and economic impacts of extractive activity or extractive companies. For institutional strengthening, they concentrate on local government administrative capacities but fail to include other types of institutions (i.e., oversight bodies, the DNP, mining and oil authorities) and the regulatory function of the State. This narrow understanding of corruption and local problems in general undermine the scope of transparency and accountability initiatives. As Søreide (2012: 1) indicates, corruption in grand as well as petty forms affects the sector at multiple levels of governance, including being “tied to development aid, macroeconomic loans, party contributions, various political and diplomatic quid pro quos, intricate arrangements

²⁷ Interview with CSIR Arauca member, Arauca, April 22th 2010.

to increase revenues controlled by incumbents, or support of industries where politicians have personal stakes.”

CONCLUSIONS

The exploitation of nonrenewable natural resources generates high expectations for the development of resource-rich departments and municipalities. Fostering the progress of these regions has been the aim of allocating an important part of extractive income to the local level in Colombia. However, the distortion of municipal finances and the poor impact on the quality of life of the population have led to major reforms in recent years. In response to this situation, external controls at the national level have been increased, and citizen transparency and accountability initiatives and new information systems are being developed.

These initiatives are creating important opportunities. The MapaRegalías platform offers a possibility for both citizens and public institutions to have user-friendly and direct access to information to make better decisions about royalty management. Citizen oversight initiatives, such as CSIR and CVA, foster co-responsibility of citizens in ensuring that resource wealth is well spent. Given that resource revenues finance 30 percent of national public investment, such measures facilitate higher levels of regional and local development. Indeed, it is expected that greater transparency could promote active citizen participation,

strengthening citizen–state interaction and increasing institutional legitimacy.

Nevertheless, for transparency to translate into accountability and achievement of development goals, a number of challenges must be overcome. First, the quality of information and the accuracy of controls must be improved. The Colombian government has assumed important commitments in this regard, such as attempts to comply with the EITI and other steps to improve extractive sector governance. Their results need to be further evaluated. In terms of control, it will be crucial to have adequate policies and oversight models that, taking risks into account, could enrich decision making with accurate information. Because more controls are not always tantamount to more effective and efficient control, appropriate monitoring of extractive activity and revenue management will be required.

Beyond increasing controls, technical capacity at the local level for project formulation, implementation, and reporting needs to be strengthened without delay. Designing institutional arrangements at the national level to foster control and increasing the number of requirements for revenue management will not translate into the expected results of poverty alleviation and human development if local public officials are not adequately trained. Moreover, if local politics are not taken into account to establish effective incentives for local actors, transparency initiatives and institutional reforms will always be insufficient.

In conclusion, the objective of translating extractive activity into development could require increased monitoring and control of the entire value chain, as well as a better quality of control with more accurate information, which involves citizens. Institutional strengthening processes need to be developed, including not only technical

capacity building but political education and political incentives. The challenge is to adapt these tools and reforms to the needs and political dynamics of local jurisdictions while increasing capacity for oversight and advocacy and creating the appropriate incentives for local actors.

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CHAPTER 10

Fiscal Windfalls, Transparency, and the Efficiency of Public Good Provision: Evidence from Brazilian Local Governments

MARTÍN ARDANAZ*

This chapter explores the impact of fiscal windfalls (e.g., oil royalties) on the public finances of Brazilian local governments during the recent commodity price cycle. Given that an important share of oil royalty payments are distributed to municipalities based on geographic criteria, it estimates the effects of receiving additional revenue windfalls on three outcomes of interest: levels of fiscal transparency, budgetary allocations, and the efficiency of local public good provision in the urban infrastructure and housing sector. Based on a dataset comprising more than 5000 municipalities between 2000 and 2011, this chapter finds that the probability of declaring public finance data (a proxy for fiscal transparency) is reduced when a municipality receives royalty payments and, while fiscal windfalls are accompanied by expenditure increases across all types of sectors (education, health, and especially, infrastructure), the efficiency of public spending at the local level decreases with the size of the windfall shock.

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INTRODUCTION

The coastal municipality of Campos dos Goytacazes is located in the north of Rio de Janeiro state. In 2012, it received R\$1.4 billion (US\$667 million) in the form of royalty payments, or 20 percent of total oil rents distributed to local governments in Brazil in that year. The municipality of São Francisco de Itabapoana, Campos' neighboring and also coastal local government, received the equivalent of R\$8.2 million (US\$4.1 million) in royalty payments, or 0.2 percent of total oil rents in the same year. Why such a disparity in royalty benefits despite the *geographic* contiguity?

While various rules govern the allocation of oil rents to the different levels of government in Brazil, the bulk of royalty payments are distributed across municipalities according to a *geographic* criterion: a local government is entitled to royalty payments if its coast happens to face an oil well located kilometers away in the ocean, according to orthogonal and parallel projections. Thanks to the shape of its coast, Campos faces the lion's share of the country's most productive offshore oilfields, but São Francisco's coast does not. This is why the former municipality receives 164 times more royalty revenue than the latter.

In addition to being the single largest recipient of windfall wealth, the municipality of Campos is also (in)famous for the way in which it manages its public accounts. Public finances in Campos are characterized by opacity: between 2001 and 2009,

the municipality reported local expenditures and revenues to the federal government, an obligation under the current Fiscal Responsibility Law (2000), only once in four years. In contrast, its neighbor, São Francisco, has sent its fiscal information to the central government every year.

While oil production is followed by significant increases in municipal revenues and spending levels across oil benefited municipalities, such fiscal expansions have not been, in general, accompanied by corresponding improvements in local public good provision.

This story goes beyond a tale of two cities. Based on a sample of more than 5000 municipalities observed between 2000 and 2011, this paper first explores the connection between oil wealth and fiscal transparency at the subnational level in Brazil and shows that oil-benefited municipalities have a higher probability of not disclosing their public accounts, a finding that is consistent with the cross-national evidence linking oil dependence to fiscal opacity (Ardanaz, 2012; Ross, 2011; RWI, 2013).

Based on available fiscal information, the chapter then explores the connection between windfall revenue, expenditure

behavior, and local public good provision. Both anecdotal and empirical evidence suggest that while oil production is followed by significant increases in municipal revenues and spending levels across oil-benefited municipalities, such fiscal expansions have not been in general accompanied by corresponding improvements in local public good provision, signifying that a large fraction of spending funded by windfall wealth is not being devoted to genuinely useful public projects (Caselli and Michaels, 2013; Ferraz and Monteiro, 2012). In other words, the combination of high government expenditures and lack of improvement in service delivery suggests that a non-negligible amount of public revenues are being wasted.¹ By combining information on inputs (public spending) and outcomes in the urban infrastructure and housing sector, this chapter finds that the efficiency of government expenditures decreases with additional windfall revenue.

Why are oil-rich municipalities less transparent and relatively inefficient in the use of public expenditures? The main argument presented in this paper builds on a long tradition of scholarship suggesting that *how*

¹ In fact, outright diversion of funds is common practice in some of these settings: oil-rich municipalities are frequently involved in corruption scandals, with incumbents being accused (and ousted from office) for misuse of public funds (irregularities in public procurement, illegal hiring, etc.) See Caselli and Michaels (2013) and Ferraz and Monteiro (2012) for further details.

governments are financed (whether through general or domestic taxation as opposed to revenue windfalls such as natural resource rents or transfers) affects policy and governance outcomes more generally.² In particular, access to large amounts of windfall revenue affects information flows between politicians and voters and, as a consequence, governments' incentives to provide public services efficiently.³

Regarding the revenue-information link, note first that fiscal windfalls accrue directly to government coffers, without any need for private collection from citizens. Given this unmediated revenue collection technology, voters lack a precise estimate of the windfall shock (the shocks

² Schumpeter (1918) is a classic reference in fiscal sociology, on which the recent literature on the determinants of fiscal capacity often builds (see Besley and Persson, 2011). On the connection between different types of fiscal revenues and governance outcomes, see Brautigam, Fjeldstad, and Moore (2008), Levi (1988), and Moore (2004). The importance of the structure of public finance is also highlighted in the fiscal federalism literature that explores how different tax-transfer arrangements shape fiscal incentives and thus, the behavior of political officials in choosing different types of policies (see Weingast [2009] and references therein for a review).

³ The term fiscal windfall is used as shorthand for any type of revenue that does not require the collection of private income from citizens. More formally, revenue windfalls are defined by their disproportionate revenue-to-cost ratio compared to the standard production of goods and services in the economy (Dalgard and Olsson, 2006).

are less visible than general taxes), making it harder for voters to infer how much total revenue is available. In addition, incumbents have incentives not to produce the most transparent budget procedures, since the information asymmetry can be used to their advantage by, for example, providing a minimum level of public goods that would satisfy rational but uninformed voters while at the same allocating the rest of the budget to private rents. Given these conditions, and in the absence of media campaigns or higher levels of government interested in making this type of information public, it is plausible to observe low levels of fiscal transparency in local settings where revenue windfalls make up a large share of the total budget.

Finally, with respect to the information-expenditure link, the limited visibility surrounding windfall revenue reduces incentives for politicians to be responsive to voters' demands when making public spending decisions, tilting the allocation of public revenues toward goods that benefit the incumbent (perks, rents) at the expense of voters. Thus, comparing two municipalities with similar budgets but with a different revenue composition, the mayor of the city where windfall revenue dominates will have more incentives to divert or waste a higher share of total fiscal revenues. Since more resources are spent on rents or wasted, less public goods are provided, and as a consequence, the extent of "slack" or inefficiency in government spending should increase with the size of the fiscal windfall shock.

In analyzing the impact of windfall revenue on local public finance, this chapter speaks to a recent literature on the political and economic effects of different government revenue sources (e.g., taxes, intergovernmental transfers, and royalty payments) at the municipal level in Brazil and elsewhere. Some studies focus on the role of intergovernmental transfers in shaping candidate quality and the incidence of corruption (Brollo et al., 2010) or public spending and electoral outcomes (Litschig and Morrison, 2010). Others contrast the effects of transfers vis-à-vis own tax collection efforts on the allocation of government expenditures, providing empirical evidence that transfers are more prone to be spent on goods not as valued by voters and that an increase in taxes leads to higher-quality public spending (Gadenne, 2011; Mendes, 2005). More closely related to the topics covered in this chapter are several recent studies exploring the impact of the recent oil shock and the corresponding royalty flows to municipal governments on a number of different outcomes, such as local public good provision and measures of living standards (Caselli and Michaels, 2013), growth rates (Postali, 2009), tax effort (Alves de Queiroz and Postali, 2010), and dynamics of political competition and patronage (Ferraz and Monteiro, 2012).

BACKGROUND

Fiscal Federalism and Local Public Finance

Brazil is a federal and presidential republic, composed of 27 states (including the Federal District) and 5,564 municipalities. The states and municipalities together account for more than one-third of national tax revenue collection, and two-fifths of total government spending; that is, figures that represent levels of fiscal decentralization not only comparable to OECD federations (Afonso and Mello, 2000), but that also make Brazil one of the most decentralized developing countries in the world (Bardhan and Mookherjee, 2006). Municipal or local governments undertake an important share of total spending in Brazil (6.5 percent of GDP), yet they collect only a small fraction of total taxes (2 percent of GDP). Local spending accounts for 15 percent of consolidated public sector expenditures, and municipalities have played an increasingly important role in the provision of social services such as (preventive) health care and (primary) education, which together make up almost half of total municipal outlays. Mayors are also in charge of providing local public goods to the municipalities, which explains why housing and urbanization is the third largest category of expenditures, and it typically includes local services such as trash collection, public street lighting, and maintenance of urban roadways. Finally, public transportation is under the

exclusive jurisdiction of local governments (Afonso and Araujo, 2006).

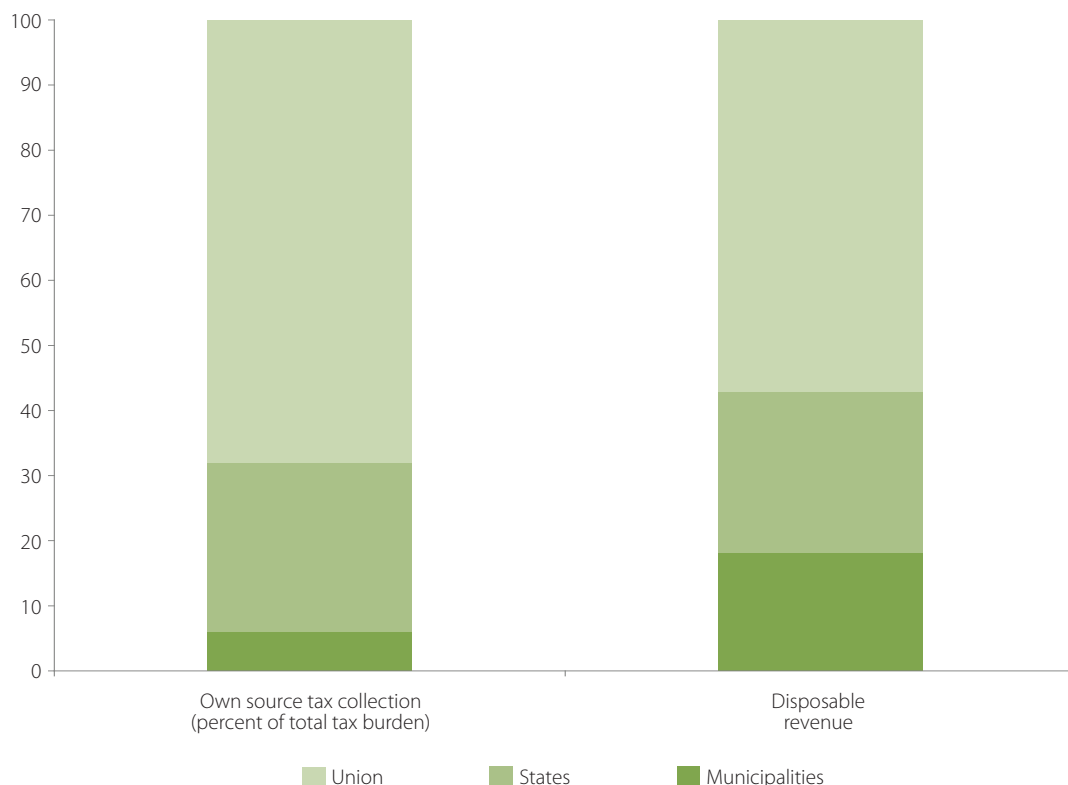
In terms of revenue mobilization, while the Constitution allows substantial room for municipalities to collect their own taxes, there is divergence between municipalities' de jure tax capacity and their de facto levels of tax collection (Gadenne, 2011). During 2011, local governments financed on average only 7 percent of municipal budgets with their own tax revenues (*receitas tributarias*), although there is great variation around this figure: in the relatively poor municipalities of states like Maranhão, local taxes make up less than 1 percent of fiscal revenues, while in the richer municipalities of São Paulo, local tax collection accounts for more than 60 percent of total revenues.

To address such large vertical fiscal asymmetries, the bulk of municipal spending is supported by a complex system of revenue sharing and intergovernmental fiscal grants, enshrined in the Constitution of 1988, whereby both the Union and State governments redistribute fiscal resources toward the lower tiers under different revenue schemes and funds.⁴ As shown in Figure 10.1, municipalities are the main beneficiaries of such a system, as their share of disposable revenue (that is, revenue available after intergovernmental transfers have taken place) is three times as large as their contribution to the total tax burden.

⁴ See Rezende and Afonso (2006) and Serra (2007) for details on fiscal federal arrangements in Brazil.

Figure 10.1

Tax Collection and Disposable Revenues by Level of Government, 2010 (in percent)



Source: Afonso and Castro (2011).

The most important federal equalization transfer scheme for the municipalities is the *Fundo de Participação dos Municípios* (FPM), a constitutionally mandated transfer that redistributes resources according to population criteria, which in 2011 represented 40 percent of local government revenues on average and is responsible for achieving relatively high levels of inter-regional

redistribution (Arretche, 2010).⁵ In sum, municipal politicians enjoy a large share of the political benefit of spending, yet pay only a small fraction of the political cost of taxation.

⁵ Transfers received under the revenue sharing of the tax on service and goods circulation (ICMS) are transfers originated from tax collected by the states and represent the second largest source of transfers for municipalities.

How are they elected? As in other presidential systems, the electoral calendar in Brazil is fixed. Local elections for mayor and municipal council are held every four years on a different cycle than presidential and gubernatorial elections.⁶ Thanks to a constitutional reform in 1997 relaxing term limits at all levels of government, mayors can be reelected once, with the possibility of returning after a one-term hiatus. Thus, the 2000 elections marked the introduction of a second consecutive term possibility for local incumbents.

The Oil Boom, Brazilian Style

Against this background of large fiscal imbalances, some municipalities were benefited with additional revenue stemming from natural resource rents since the early 2000s. This was a result of increased oil production and new legislation governing the exploitation, regulation of the oil industry, and distribution of oil revenue between different levels of government (Law 9478/97).⁷ Oil rents in Brazil are extracted through two main tax instruments: royalties—a 10 percent ad valorem tax on the gross revenue

of oil production—and the special participation tax—a tax levied on the income of highly productive projects.⁸ While in 1998 these two sources of revenue accounted for only 0.03 percent of GDP, this figure rose to R\$21.6 billion (US\$10.8 billion), or 1 percent of GDP in 2011 (Valente Serra, 2011).⁹

High levels of vertical decentralization characterize the distribution of oil revenue in Brazil: around 60 to 65 percent of total royalty payments are transferred to the states and municipalities through a combination of different rules applying to onshore and offshore production (Afonso and Castro, 2010). Rules regarding the distribution of rents from offshore production make municipalities the largest single recipients of rent revenue, and since the recent increase in oil production has been largely an offshore phenomenon (90 percent of total production), municipalities have been one of the key beneficiaries of the system during the last boom (Ferraz and Monteiro, 2012; Gobetti, 2011). Figure 10.2 shows the evolution of royalty payments to municipalities during the latest commodity price cycle.

⁶ Municipal elections are held countrywide at the end of the year. The new administration begins in January of the following year.

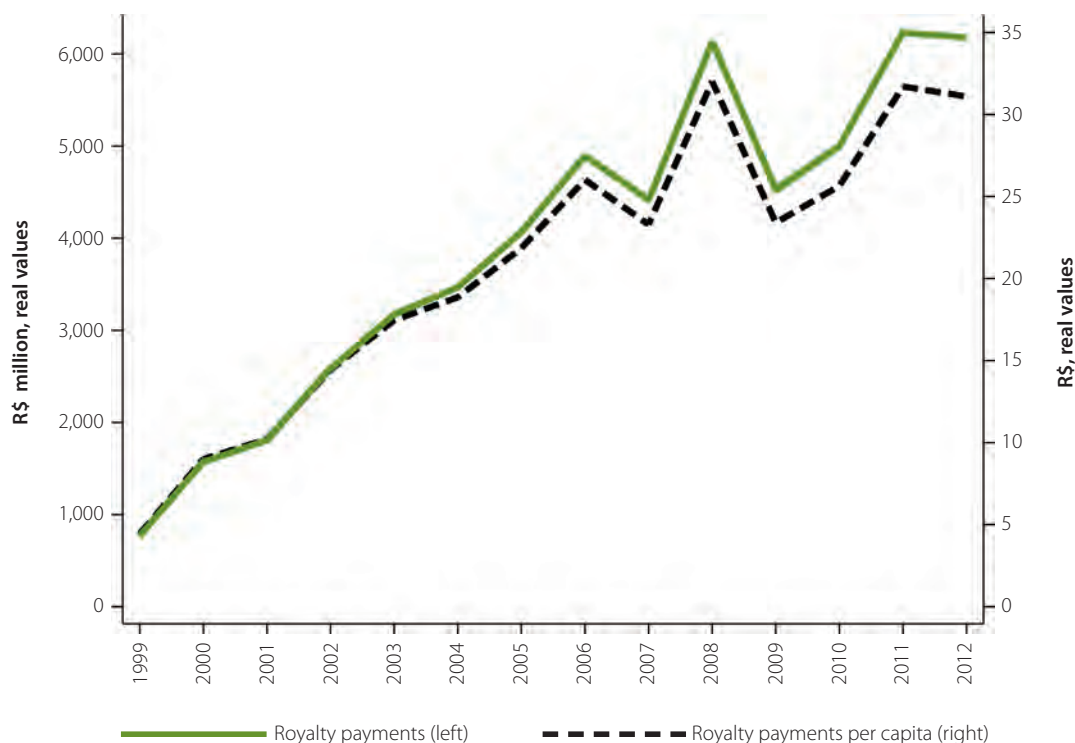
⁷ Production growth has been accompanied by increases in proven reserves, which are likely to increase even more in the medium run with full exploitation of the “pre-sal” (below the salt) oilfields that lie below 2 km of water, and 3 km of salt in the Santos Basin.

⁸ For simplicity, both concepts will be referred to as royalty payments.

⁹ This upward trajectory is the result of a combination of factors. In addition to the market incentives provided by the new regulatory framework, the volume of royalty payments increased for two more reasons: the rise in oil prices after 2000 and the currency devaluation in 1999, since royalties are priced in dollars (Postali, 2009).

Figure 10.2

Royalty Payments to Municipalities, 1999–2012



Source: Inforoyalties and Brazilian Institute of Geography and Statistics (IBGE).

High levels of vertical decentralization characterize the distribution of oil revenue in Brazil: around 60 to 65 percent of total royalty payments are transferred to the states and municipalities through a combination of different rules applying to onshore and offshore production (Afonso and Castro 2008)

Two main rules define whether a municipality is entitled to receive royalties: (1) the municipality must be considered a “producer locality,” and (2) the municipality must be directly or indirectly impacted by oil and gas production.¹⁰ In the case of offshore production, eligibility as producer is driven by a geographic

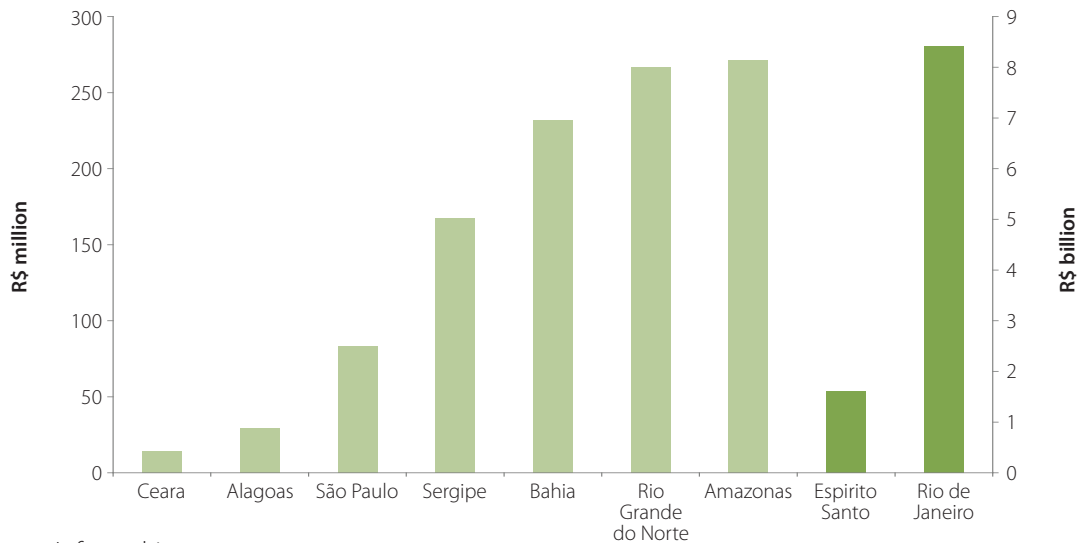
¹⁰ See Afonso and Castro (2010) and Afonso and Gobetti (2008) for excellent overviews of the governance structure of the oil sector in Brazil.

criterion: a municipality is considered a “bordering” (*confrontante*) municipality if it happens to face an oil well located kilometers away in the ocean, according to orthogonal and parallel projections of the Brazilian coast extracted from nautical letters, as shown in Figure A10.1 (Appendix). Thus, depending on the shape of its coast, the municipality includes more or fewer wells in its area, receiving royalty payments accordingly.¹¹ Regarding the second rule, all activities of embarkation and disembarkation (including transportation by pipelines) are included in the criteria of eligibility (Postali, 2009).

As a result of these criteria, royalty payments are largely concentrated in some coastal states and municipalities in Brazil (see Figure A10.2 in the Appendix). Figure 10.3 shows the distribution of royalty payments among the main producing states in Brazil for 2012. The state of Rio de Janeiro alone concentrates 83 percent of total royalty payments at the state level, since the major oil basins—Campos Basin and Santos Basin—are located along this state’s coast, making it the major oil producer in the country (followed by the state of Espirito Santo).¹²

Figure 10.3

Royalty Payments by State in 2012 (in R\$)



Source: Inforoyalities.

¹¹ A decomposition of variance exercise shows that more than 85 percent of the variation in royalty payments per capita is explained by geographic factors (being a coastal municipality and state dummies).

¹² In 2011, the states of Rio de Janeiro and Espirito Santo accounted for 90 percent of total oil production, and 97 percent of offshore production (ANP 2011).

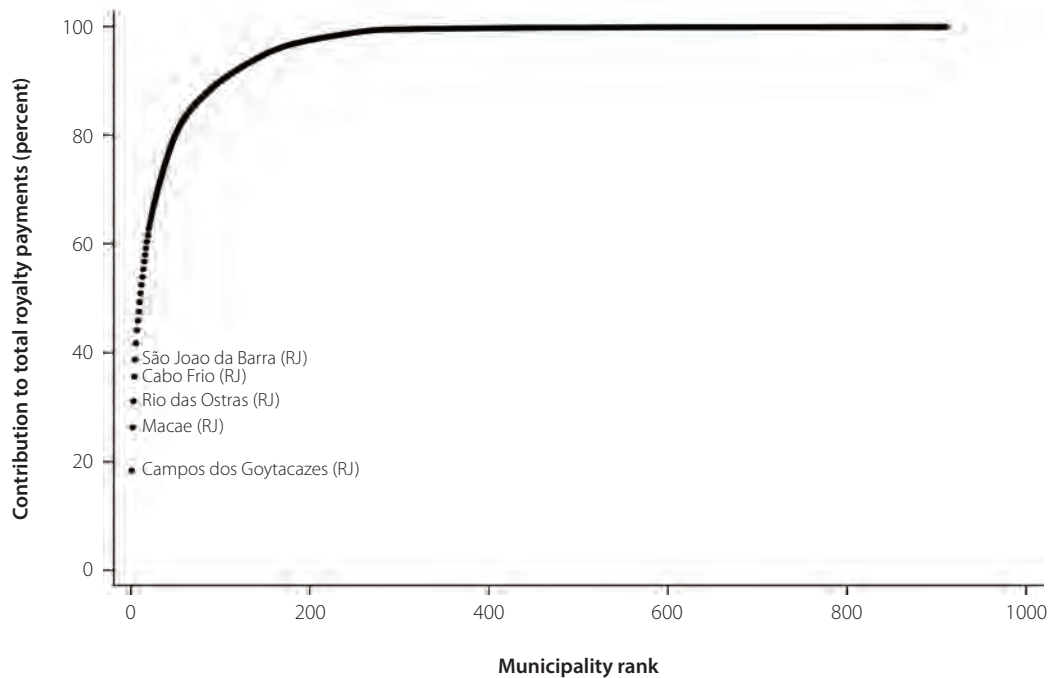
Figure 10.4 depicts the distribution of royalty payments across municipalities: it plots each municipality, ranked based on the size of royalty payments received in 2012 (horizontal axis) against its share of total royalty payments (vertical axis).

As with the states, a similar picture of highly unequal distribution among municipalities is apparent (Gobetti, Pinto, and

Sardinha, 2010).¹³ Only five municipalities account for almost 40 percent of total royalty payments, and the top 1 percent for more than 70 percent. These municipalities tend to be the relatively richer municipalities belonging to South East Brazil, which is the most developed region of the Federation (Serra, 2007). As shown in Figure 10.5, there is a clear positive relationship between levels

Figure 10.4

Concentration of Royalty Payments Across Municipalities, 2012



Source: Inforoyalties.

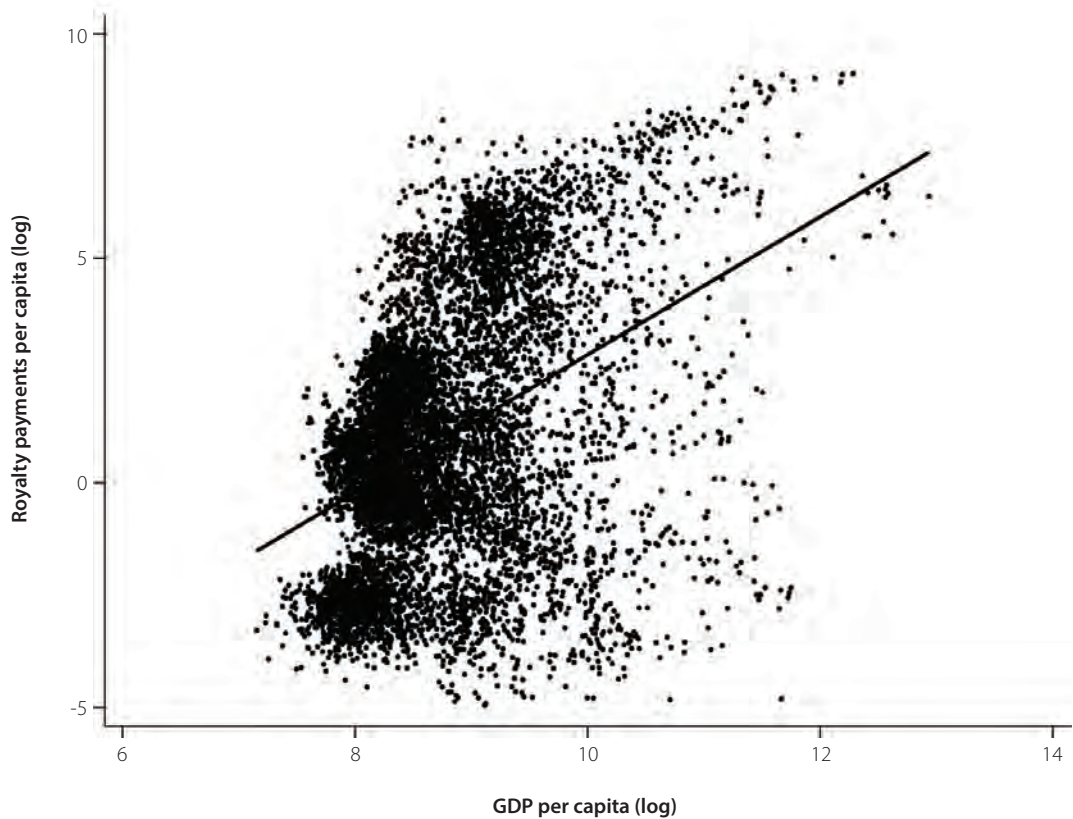
¹³ The Gini coefficient, a common measure of income or wealth inequality, is 95 percent when applied to this data.

of local GDP and royalty payments per capita, which tends to accentuate already high levels of regional disparities and to offset the relatively progressive characteristics of some federal intergovernmental transfer schemes, such as FPM (Afonso and Castro, 2010; Gobetti, Pinto, and Sardinha, 2010).

Only five municipalities account for almost 40 percent of total royalty payments, and the top 1 percent for more than 70 percent.

Figure 10.5

Development and Oil Wealth at the Local Level



Source: Inforoyalties and IBGE.

Based on normative grounds, such as inter-regional and generational justice principles, the current criterion linking geography to oil rents has raised important criticisms in the specialized literature (Gobetti, Pinto, and Sardinha, 2010; Serra, 2007). The creation of a non-producer states coalition in Congress with reform proposals that attempt to universalize the distribution of royalties has also led to debate.¹⁴ However, from a research design perspective, the fact that an important share of total royalty distribution follows a geographic criterion provides the researcher with an important source of exogeneity to study the effects of fiscal windfalls on local public finance.

Data

To study the effects of revenue windfalls on local public finance outcomes, three key data sources were employed. First, annual variation in royalty payments received by all levels of government including municipalities between 1999 and 2012 is provided by the Inforoyalties website (<http://inforoyalties.ucam-campos.br>), created by a local research center (Universidade Candido Mendes—UCAM).¹⁵ Second, data on public finance, including detailed information on levels and

sources (own tax, transfers, type of transfers, etc.) of local government revenues as well as size and composition of government expenditures are available from the National Treasury from 2000 to 2011, through the Finanças do Brasil (FINBRA) database.¹⁶ It is important to note that these data are self-declared by municipalities and that local governments are required to report this information to the federal government, but not all of them do so every year. Finally, information was collected on access to public goods in the urban infrastructure and housing sector using data from the last two censuses (2000 and 2010). In particular, three outcome measures are used in the expenditure efficiency analysis: the proportion of households with access to: (i) piped water, (ii) trash collection services, and (iii) connection to sewerage networks.

Evidence

This section contains three different empirical exercises: it first tests the hypothesis that fiscal windfalls, in the form of royalty payments, are associated with lower transparency in the budget process, as measured by the probability of a municipality disclosing its public accounts to the federal government in a given year. With the available fiscal information, it then looks at how windfall revenue impacts a range of budgetary items. Finally, an analysis of the effects of royalty payments on the efficiency of government spending is included.

¹⁴ For example, a bill introducing a change to the current scheme in favor of allocating royalty payments to all municipalities according to FPM criteria was passed by Congress but was vetoed by President Lula in 2010. A similar bill was passed by Congress in late 2012, but President Dilma Rousseff vetoed key parts of the legislation.

¹⁵ Programa de Mestrado em Planejamento Regional e Gestão de Cidades, da Universidade Candido Mendes-Campos dos Goytacazes (RJ).

¹⁶ All fiscal variables in the FINBRA database were expressed in real per capita terms, in Brazilian currency units (*real*—R\$) of 2011.

Do royalty payments reduce fiscal transparency?

Given that municipalities self-report public finance data to the National Treasury, and that royalty payment data is collected independently from this source, the first exercise tests whether being a royalty recipient impacts the probability of under-reporting budgets, or, in other words, if oil wealth is associated with lower levels of fiscal transparency. Thus, the dependent variable in this first empirical exercise is a dummy indicating whether municipality j in time t declares its yearly executed budget (equal to 1), and 0 if data for that particular municipality/year is missing.

The main independent variable is a dummy that equals 1 if the municipality received royalty payments at time t , and 0 otherwise (ROYALTY). Additional controls include size of local population (in logs), levels of local economic development (also in logs), and a measure of electoral competition: the margin of victory, that is, the difference in vote shares between the winner and runner-up in first-round elections in municipality j during elections under the period of analysis.¹⁷

Table 10.1 presents results from a logistic regression in a panel of yearly data (2000–11m), pooling all municipalities ($n=5593$) together. With the exception

Table 10.1

Determinants of Fiscal Transparency in Brazilian Municipalities (*logistic regressions*)

	Pooled logit		Fixed effects (FE)			
	(1)	(2)	(3)	(4)	(5)	(6)
Royalty	-0.187** (0.076)	-0.687*** (0.164)	-0.306* (0.175)	-0.532** (0.214)	-0.512** (0.214)	-0.433* (0.225)
GDP				0.220 (0.160)	0.357** (0.172)	0.388** (0.181)
Population					0.636** (0.298)	0.694** (0.315)
Margin of victory						0.004** (0.002)
Year FE?	No	No	Yes	Yes	Yes	Yes
Municipal FE?	No	Yes	Yes	Yes	Yes	Yes
Observations	67,107	19,824	19,824	12,880	12,880	11,760
Number of municipalities	5,593	1,652	1,652	1,289	1,289	1,200

Source: Author's elaboration.

Notes: Standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

¹⁷ Since the period of analysis (2000–11) covers three elections (2000, 2004, and 2008), levels of political competition are assigned to each year in the following way: 2000 levels for years 2000–03, 2004 levels for years 2004–07, and 2008 levels for 2008–11.

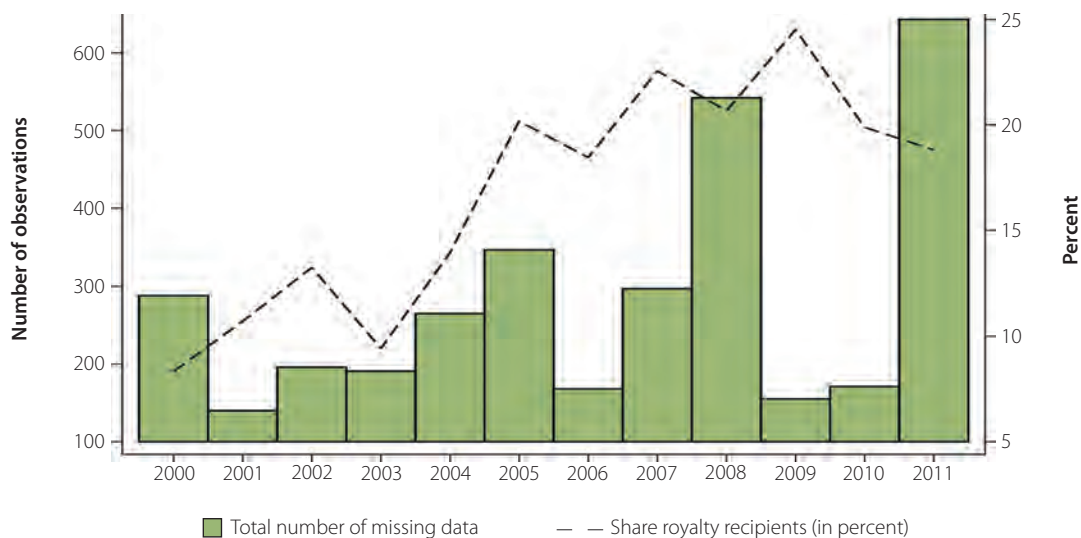
of column 1 (pooled logit), municipal *fixed effects* are included in all specifications, so estimates only reflect within-municipality variation. In other words, this empirical exercise asks: are levels of transparency lower when a municipality receives royalty payments?

Levels of fiscal transparency are systematically lower in municipalities and years when municipalities received royalty payments.

Levels of fiscal transparency are systematically lower in municipalities (column 1) and years (columns 2–6) when municipalities received royalty payments.¹⁸ This effect contrasts with variables such as the level of economic development or the size of the population, which push municipalities toward greater fiscal transparency. To capture the negative effects of windfalls on transparency graphically, Figure 10.6 plots the total number of missing fiscal data observations (in bars) and the contribution of royalty recipients to that total (dashed line) by year.

Figure 10.6

Number of Missing Fiscal Data by Year and Contribution by Royalty Recipients



Source: Inforoyalties and FINBRA.

¹⁸ Municipalities that received royalty payments have a 1 percentage point lower probability of disclosing their public accounts. For similar findings, see De Oliveira (2011).

While in 2000 royalty recipients accounted for less than 10 percent of total fiscal missing data, toward the end of the period this number jumped to over 20 percent. Clearly, the distribution of missing fiscal data is not random at the local level in Brazil.

In sum, exploiting the fact that municipalities self-declare fiscal accounts and that not all municipalities report them every year, fiscal transparency tends to be significantly lower in local governments that receive royalty payments, a finding that is consistent with the cross-country evidence linking nonrenewable resources to fiscal opacity (Ardanaz, 2012; Ross, 2011; RWI, 2013).

The Impact of Fiscal Windfalls on Municipal Budgets

What is the impact of royalty revenue on municipal budgets? More specifically, do royalty payments affect incentives to tax? How do municipalities allocate royalty revenue? To answer these questions, Table 10.2 presents results from panel models in which different revenue and expenditure components are regressed on royalty payments per capita, including municipal and year fixed effects as controls covering the 2000–11 period.

Table 10.2

The Effects of Royalty Payments on Municipal Revenues and Expenditures (*fixed effects*)

	Revenues				Expenditures				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Total fiscal revenues pc	Total tax revenues pc	Total expenditures pc	Current expenditures pc	Capital expenditures pc	Education pc	Health pc	Current expenditures pc	Transport pc
Royalty payments pc	1.063*** (0.045)	0.039*** (0.015)	0.852*** (0.097)	0.631*** (0.040)	0.221*** (0.073)	0.145*** (0.014)	0.102*** (0.019)	0.143** (0.071)	0.009 (0.008)
Percent increase	13.7	9.4	11.2	9.6	21.2	6.8	6.7	20.3	2.1
Observations	63,700	63,700	63,700	63,700	63,700	63,451	63,451	63,451	63,451
Number of municipalities	5,562	5,562	5,562	5,562	5,562	5,561	5,561	5,561	5,561

Source: Author's elaboration.

Notes: Robust standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Columns (1) and (2) show that each *real* per capita received as royalty payment generates 1.06 *reais* in total fiscal revenues per capita, and 40 cents in *tax* revenues, suggesting that tax and windfall revenue are not functioning as *substitute* revenue in this particular context.¹⁹ Looking at the expenditure side of the budget, columns (4) and (5) show that for every *real* received, 63 cents are allocated in current expenses, while 22 cents are used for investments. In terms of relative increase, royalty payments mainly boost capital expenditures: a 21 percent increase for each standard deviation increase in royalty revenue. Columns (6) to (9) show that with the exception of transportation, windfall revenue is associated with expenditure increases in all key sectors of the municipal budget, with housing and urbanization leading the way in terms of relative increase: a 20 percent increase for each standard deviation change in royalty payments.

Windfall revenue is associated with expenditure increases in all key sectors of the municipal budget, with housing and urbanization leading the way in terms of relative increase.

¹⁹ On the negative impact of access to natural resource revenue on domestic tax effort at the national level, see Bornhorst, Gupta, and Thornton (2009); Jensen (2011); and Perry and Bustos (2011).

Efficiency of Local Public Good Provision

The previous section shows that oil-related revenues are associated with expenditure increases in general, and in the urban infrastructure and housing sector in particular. Yet, there are a number of reasons why more public spending may not necessarily translate into better service provision, which highlights the challenge of spending fiscal revenues wisely or efficiently (Devarajan and Reinikka, 2002). While efficiency of public spending is often evaluated from two perspectives—allocative and technical—this section focuses on the latter dimension by studying whether or not public resources are used in a cost-effective manner (the production of more or better public goods for a given set of inputs). In this respect, there is great variation in the way governments efficiently spend public revenues, and *how* governments are financed (whether through general taxation or windfall revenue) could be one important determinant of such variation. To test this hypothesis, this section provides a preliminary analysis of public spending efficiency, by combining information on inputs and outcomes in the urban infrastructure and housing sector.

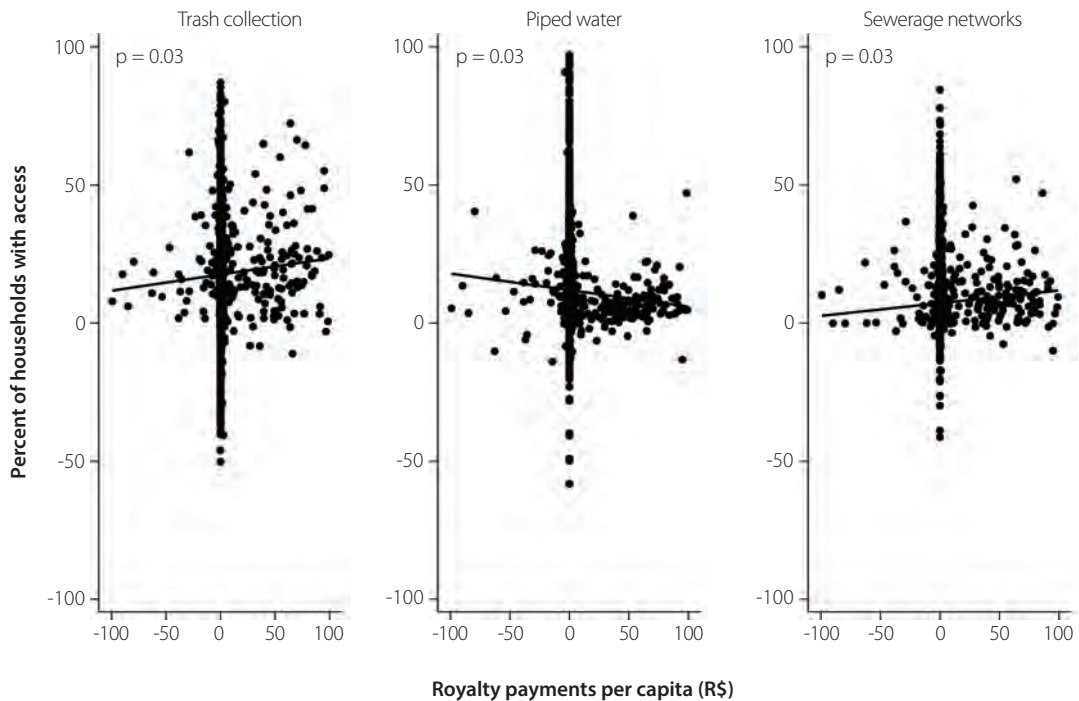
One way of empirically approaching the issue is to compare changes in public goods or service provision and access to windfall revenue over time. If municipalities were allocating windfall revenue to the most productive uses, one would

expect a positive relationship between the two variables. However, as shown in Figure 10.7, there is a very weak relationship (as indicated by Pearson's ρ coefficient) between the change in per capita royalty payments and the variation in the fraction of households with access to garbage collection services, piped water, and connection to sewage networks from 2000 to 2010.

While useful as a first cut, this approach uses no information about government expenditures. Therefore, frontier analysis is used to compare municipal spending on housing and urban development with three local housing infrastructure outcomes: the percentage of households living in housing with piped water, with access to garbage collection, and with connection to sewage networks.

Figure 10.7

Royalty Payments and Housing Infrastructure Outcomes: Changes 2000–10



Source: Inforoyalties and IBGE (census).

To measure the efficiency of local public spending, a common non-parametric methodology is used: Free Disposable Hull.²⁰ This technique constructs production possibilities frontiers, relating the total amounts of public spending in a sector (e.g., infrastructure) to the outcomes of interest (e.g., percentage of households with access to a certain public service). Efficiency is thus measured as the distance between a municipality's actual public spending-outcome combination and the efficiency "frontier," representing a combination of best-observed producers within the sample. The distance to the frontier can be measured both in terms of the amount of inputs used to generate a particular output (input-oriented efficiency), or in terms of the output generated for a particular level of public spending (output-oriented efficiency).²¹ In both cases, the index measuring efficiency is constructed in such a way that municipalities on the frontier exhibit an index of 1 and less efficient governments exhibit an index that is between 0 and 1.²²

²⁰ Similar results are obtained using another common approach: Data Envelopment Analysis (DEA). See Herrera and Pang (2005) and Gupta, Keiko, and Verhoeven (1997) for an introduction to the measurement of public spending efficiency.

²¹ As expenditure allocations (rather than outputs) are under the control of policymakers, a focus on input efficiency scores seems more meaningful. Thus, results are focused on input efficiency scores.

²² Figure A10.3 (Appendix) presents an example of an efficiency frontier, showing great variation in efficiency scores across Brazilian municipalities.

Table 10.3 presents preliminary results from Tobit models, in which the efficiency scores are regressed on a (limited) number of covariates: levels of per capita income (GDP), size of population (POP), total government expenditures per capita (EXP), intergovernmental transfers per capita (FPM), and state fixed effects.²³ To measure the size of fiscal windfalls accruing to a municipality, we use the yearly amount of royalty payments per capita (ROY), in logs.²⁴ To account for the possibility that the benefits of public spending take time to build (accruing only with some lag), the efficiency scores are computed using average public expenditure data on housing (*Habitao e Urbanismo*) from 2003 to 2010, combined with infrastructure outcome measures from the 2010 Census. All explanatory variables are averages for 2003–10.

Across all specifications, the impact of fiscal windfalls on the efficiency of public expenditures on housing and urban infrastructure is negative and statistically significant at conventional levels. In terms of quantitative importance, and depending on the outcome of choice, a standard deviation increase in royalty payments per capita is associated with up to a 25 percent decrease in the efficiency of infrastructure

²³ The variables GDP, POP, and FPM enter the regression models in logarithms.

²⁴ In particular, to prevent extreme values from driving the results and avoid dropping observations with zero royalty payments, the $\log_{10}(x+1)$ transformation is used.

Table 10.3

The Determinants of Expenditure Efficiency (Tobit regressions)

	Efficiency scores: piped water			Efficiency scores: trash collection			Efficiency scores: sewage											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
ROY	-0.025***	-0.024***	-0.031***	-0.023***	-0.026***	-0.020***	-0.021***	-0.021***	-0.030***	-0.025***	-0.029***	-0.018***	-0.029***	-0.028***	-0.035***	-0.024***	-0.027***	-0.025***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
GDP	-0.023***	-0.024***	-0.004	-0.010***	-0.022***		-0.013***	-0.015***	0.000	0.000	-0.008**	-0.031***		-0.015***	-0.017***	0.013***	0.007*	0.000
	(0.002)	(0.002)	(0.003)	(0.004)	(0.004)		(0.003)	(0.002)	(0.004)	(0.004)	(0.004)	(0.005)		(0.002)	(0.002)	(0.003)	(0.003)	(0.004)
POP			0.019***	0.006*	-0.011**	0.002			0.026***	0.016***	-0.008	0.009*			0.020**	0.001	-0.015***	-0.006
			(0.002)	(0.003)	(0.005)	(0.005)			(0.002)	(0.003)	(0.005)	(0.005)			(0.001)	(0.002)	(0.004)	(0.004)
EXP			-0.062***	-0.040***	-0.037***				-0.047***	-0.016	-0.009				-0.090***	-0.069***	-0.083***	
			(0.010)	(0.011)	(0.012)				(0.010)	(0.011)	(0.012)				(0.008)	(0.009)	(0.010)	
FPM			-0.044***	-0.024**					-0.062***	-0.042**						-0.043***	-0.020**	
			(0.009)	(0.010)					(0.010)	(0.011)						(0.008)	(0.008)	
State FE?	N	N	N	N	Y	N	N	N	N	N	Y	N	N	N	N	N	N	Y
Observations	5,445	5,445	5,445	5,445	5,445	5,445	5,444	5,444	5,444	5,444	5,444	5,444	5,447	5,447	5,447	5,447	5,447	5,447

Source: Author's elaboration.

Notes: Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

spending.²⁵ Interestingly, a similar (though quantitatively smaller) negative effect is produced by the amount of transfers per capita received by the municipality from the federal government: a standard deviation increase in FPM transfers is associated with up to a 9 percent decrease in efficiency. Finally, the models suggest that some of the variables that have been traditionally underscored by the cross-country literature to account for inefficiencies in public spending (e.g., size of government) can also explain part of the variation across Brazilian municipalities. In future work, this analysis will be expanded by incorporating possible sources of heterogeneity that may mediate the relationship between revenue windfalls and expenditure efficiency, such as levels of political competition or other institutional variables shaping the incentives of local governments.

Conclusions

Taking advantage of a dramatic increase in royalty payments transferred to some Brazilian municipalities during the 2000s and using disaggregated local finance data, this chapter looks at the impact of revenue windfalls on levels of fiscal transparency, size and composition of local budgets, and the efficiency of public good provision. Several findings of interest are obtained, including:

- Levels of fiscal transparency are systematically lower in municipalities that benefit from oil: the probability of not declaring public finance data is reduced when a municipality receives royalty payments in a given year.
- Fiscal windfalls boost government expenditures across the board, but do little to improve public service provision: thus, the efficiency of public spending at the local level decreases with the size of the windfall shock.

These findings speak directly to ongoing debates about the new governance structure for the sharing of royalty payments across Brazil and elsewhere.²⁶ The political and legislative debate has focused so far on the distributive aspects of the new legislation: that is, whether royalties should be redistributed amongst all states and municipalities to replace the current system where only producing states and municipalities take a bite. Yet, there has been much less attention paid to the actual outcomes that result from the current system at this level.²⁷ This

²⁵ Since the mean level of (input) efficiency in the sample is only 0.12, the size of the coefficient is not negligible.

²⁶ See, for example, the discussion of the Colombian case and its recent institutional reform in Chapter 9 of this publication.

²⁷ Nevertheless, the fact that President Rouseff has called for the earmarking of oil rents in the new legislation (that is, that all future royalty payments should be spent on the education sector) reflects some concern on behalf of the federal government about the actual use of the windfall at the subnational level.

fact is striking given the consensus in the literature regarding the effects of revenue windfalls at the local level: previous studies have shown their association with low tax effort (Alves de Queiroz and Postali, 2010), bloated public sectors (Ferraz and Monteiro, 2012), and relatively few improvements in living standards (Caselli and Michaels, 2013). This chapter adds to the number of perverse outcomes generated by windfall wealth those of low levels of fiscal transparency and inefficient government spending. Taken together, these findings suggest that regardless of whether royalty payments are universalized or remain targeted, a governance structure based on an audit system that reports how fiscal windfalls are being spent by incumbent politicians should be in place. Back in the early 2000s, the federal government launched an anticorruption program based on the random auditing of local government expenditures that are financed by federal fiscal transfers. The program was relatively successful at exposing opportunistic behavior. (Ferraz and Finan, 2008, 2011). An extension of such a program that includes the auditing of fiscal windfalls seems warranted in light of the facts presented herein and other pieces of evidence from the specialized literature.

Finally, this chapter highlights the need to advance the research agenda on several fronts. First, it would be useful to expand the number of countries and expenditure areas under analysis. Fiscal revenues from nonrenewable resources are critically important for many subnational governments

across Latin America, especially across the Andean region (Brosio and Jimenez, 2012). The favorable commodity price cycle during the last decade, coupled with the decentralization of government functions in areas such as health, education, and public investment, provide an excellent opportunity to study how well or efficiently fiscal windfalls are delivering the types of social services that are critical for fostering local development.²⁸

Regardless of whether royalty payments are universalized or remain targeted, a governance structure based on an audit system that reports how fiscal windfalls are being spent by incumbent politicians should be in place.

For example, paralleling some of the findings across Brazil, recent research suggests that in Peru, fiscal windfalls (in the form of “mining canon”) exacerbate inter-regional inequalities (Loayza, Mier y Teran, and Rigolini, 2013; Sanguinetti, 2010), have weak or no effect on either public good provision (Arreaza and Reuter, 2012) or poverty alleviation (Loayza, Mier y Teran, and Rigolini, 2013), but a positive impact on the probability of citizens being involved in bribery episodes with local officials (Maldonado,

²⁸ This is part of an ongoing agenda at the Fiscal and Municipal Management Division of the IDB.

2011). As a result of these dynamics, windfalls have encouraged the spread of (often violent) conflicts between citizens and local authorities (Arellano Yanguas, 2011).²⁹

At the same time, the patterns of high regional concentration of royalty payments in a few districts and inefficient allocation highlighted throughout this chapter were also common in the case of Colombia, providing the basis for an overhaul of the royalty (oil and mining) distribution scheme in 2011–12, when the General System of Royalties (*Sistema General de Regalías*, or SGR) was launched.³⁰ The new governance structure redistributes royalty transfers among a wider set of subnational governments, addresses territorial equity concerns by allocating the SGR budget based on criteria such as population and relative poverty, and puts in place institutional mechanisms that are intended to enhance the quality of public investments funded through the SGR at the subnational level (for details, see Chapter 9 of this publication).³¹

²⁹ In Ardanaz and Maldonado (2014), possible non-monotonic relationships between windfalls and expenditure outcomes in the Peruvian case are explored.

³⁰ In 2002–11, only seven (out of 33) departments, accounting for 15 percent of the population, received 70 percent of total royalty payments (Bonet and Urrego, 2014). For evidence on the inefficient use of windfall revenue under this regime, see DNP (2012). More generally, see Perry and Olivera (2009) on the fiscal and economic consequences of windfall revenue across departments and municipalities.

³¹ See Bonet and Urrego (2014) for an early assessment of the SGR.

Overall, this partial overview of cross-country experiences suggests that despite differences in initial conditions and resource type (whether oil or mineral), similar challenges are present at the local level: in particular, channeling fiscal windfalls in an efficient manner cannot be taken for granted. Thus, a second area for further research includes a more detailed analysis of the impact of resource booms on local government behavior and its implications in terms of service delivery and the quality of public spending. In particular, it would be useful to consider the effects of revenue windfall shocks on reelection outcomes, political competition/selection, and the instruments politicians use to affect these outcomes, such as service delivery and the provision of public (vs. particularistic/clientelistic) goods.³² Along these lines, it remains crucial to uncover particular conditions under which politicians will have incentives to use windfall revenues efficiently, such as levels of electoral competition, or the presence of institutional constraints that limit executive discretion over its use. The identification of these conditional relationships or mechanisms is a necessary first step to understand variation in outcomes, detect differential behavior, and thus, provide sound policy advice.

Finally, in light of the transparency findings, work on how information can enhance voter awareness about the total size and use

³² Recent analysis along these lines includes Ferraz and Monteiro (2012) and Maldonado (2013).

of windfall revenue becomes particularly salient.³³ Indeed, surveys conducted during 2003 and 2004 in Campos dos Goytacazes, the municipality mentioned in the introduction as being one of the largest royalty recipients, suggests that voter awareness about the availability and nature of royalty payments was relatively low. While a majority of voters could tell that Campos was a resource-rich municipality, very few knew about royalty payments specifically, and a substantial majority tended to underestimate the size of the fiscal windfall available to the local government.³⁴ In this context of large information asymmetries, opportunities for rent-seeking tend to expand. It is thus not surprising to find that

among those local governments that were extremely favored by the oil boom, events such as corruption scandals or incumbents being accused and ousted from office for misuse of public funds are a recurrent feature of their political landscape (Caselli and Michaels, 2013; Ferraz and Monteiro, 2012). At the same time, recent evidence based on natural (Ferraz and Finan, 2008) and survey (Winters and Weitz-Shapiro, 2010) experiments suggests that the impact of disclosing information on electoral behavior, voting attitudes, and electoral outcomes is significant both at the municipality and the individual level, respectively. Thus, future work could explore the effects on electoral behavior of offering more information to voters about windfall revenue and its use by incumbent politicians. Does providing additional information about how governments spend resources affect voter choices, by, for example, leading to the punishment of corrupt mayors at the polls? These are questions where further research is needed.

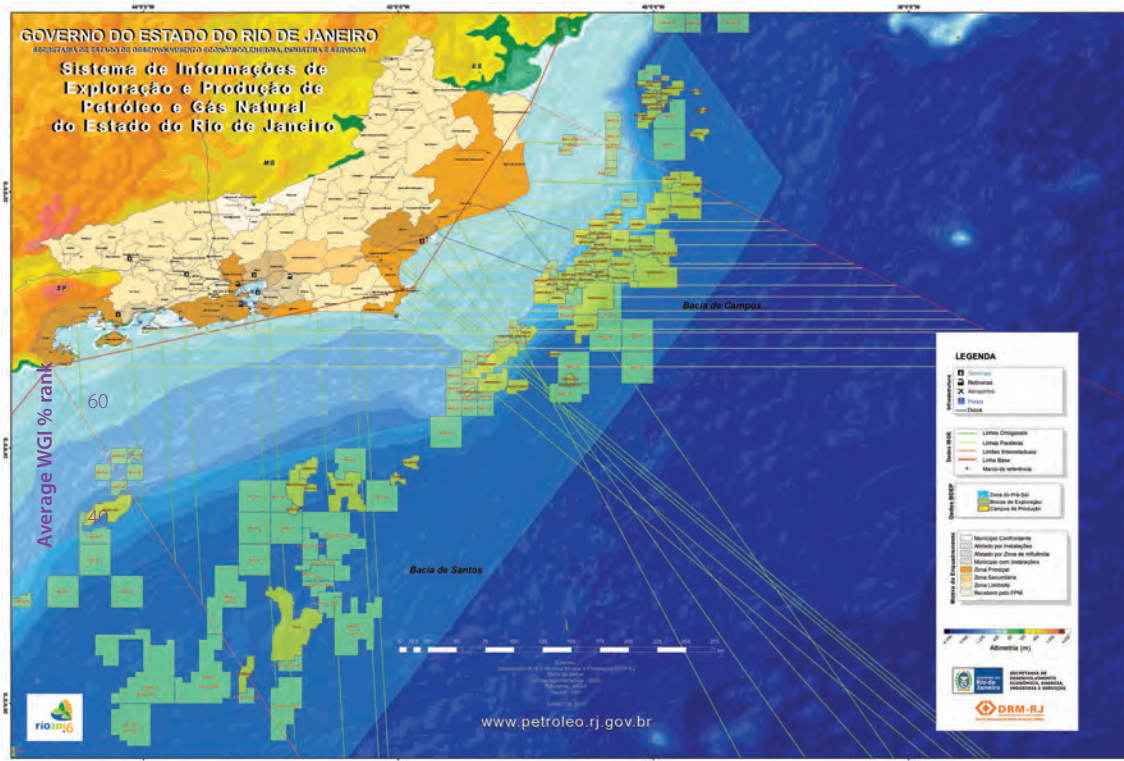
³³ For an account of transparency initiatives in Colombia in the oil and mining sector, see Chapter 9 in this volume. One example includes efforts to prevent corruption in the use of royalty revenue. The Colombian Anti-Corruption Presidential Commission launched the Citizen Visible Audit (CVA) program in 2008 to promote transparency and citizen participation in the execution of public investments (a social audit intervention). Molina (2013) uses matching techniques and survey instruments to evaluate the effects of the CVA program on citizens' satisfaction with infrastructure projects as well as subjective measures of the efficiency of the investment execution process. Overall, the CVA program resulted in an increase of 19 percentage points in terms of citizens who report being satisfied with the projects, as well as a 15 percentage point increase in citizens reporting that the project used adequate inputs.

³⁴ See "Boletim Petróleo, Royalties e Região," June 2004. Available at <http://www.royaltiesdopetroleo.ucam-campos.br/index.php?cod=1>.

APPENDIX

Figure A10.1

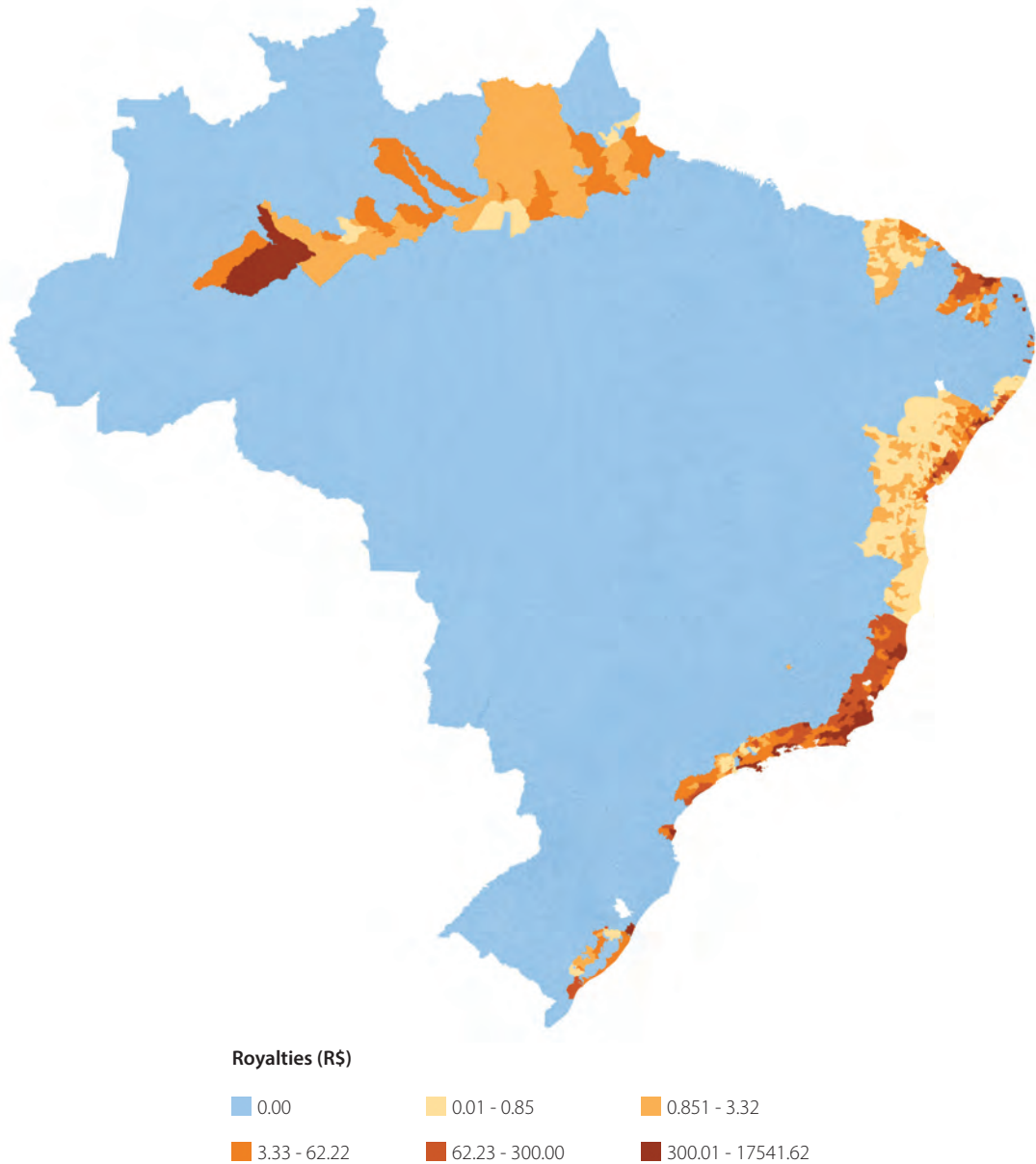
Parallel and Orthogonal Lines (Rio de Janeiro coast)



Source: <http://www.petroleo.rj.gov.br>.

Figure A10.2

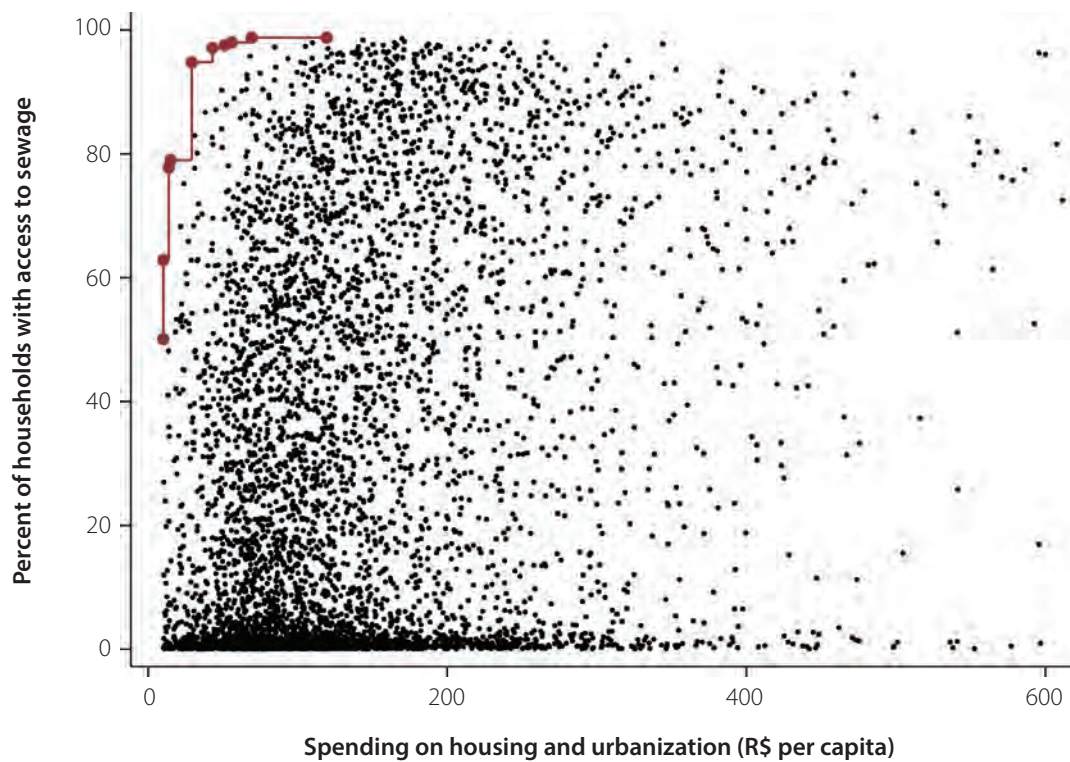
Coastal Municipalities and Royalty Payments per Capita, 2012



Source: Ardanaz and Nunes (forthcoming).

Figure A10.3

Efficiency Frontier



Source: Author's elaboration.

Notes: Each black dot represents a municipality, and municipalities on the frontier (most efficient producers) are in red. Input efficiency scores for the rest are constructed using horizontal distance to the frontier as proxy.

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CHAPTER 11

Transforming Oil Abundance into Sector Performance: Which Institutions Really Matter?

LENIN H. BALZA, RAMÓN ESPINASA, AND RAUL JIMENEZ MORI*

What determines if natural resource abundance is a blessing or a curse? This chapter explores the interaction between an economy's oil sector, economic growth, and its overall institutional framework. It shows that oil abundance has had a positive influence on economic growth, conditioned on the country's institutional quality. Regardless of a country's institutional environment, oil abundance positively influences its national income. This chapter challenges the usefulness of broad institutional quality indicators in assessing oil sector performance, suggesting the need for a comprehensive assessment of governance specific to the oil industry. It argues that sector performance depends primarily on sector-specific institutions and, to a lesser extent, national institutions. Furthermore, it suggests that transparency is an important feature that shapes the relative quality of these sector-specific institutions.

* The authors are grateful to Osmel Manzano, Malaika Masson, Carlos Sucre, Juan Cruz Vieyra, and Martin Walter for their helpful comments.

INTRODUCTION

The existence of the resource curse is still an open debate. Despite extensive research on the effects of natural resource abundance on development, its existence can lead to both economic successes and debacles.¹ Many economists still express concern about Dutch disease and the association between resource abundance, low growth, and scant industrialization.² Too often, the abundance of natural resources has inhibited rather than fostered development. Recent researchers have reviewed this relationship and found different results.³

The role that natural resources play in development has been fiercely debated. There is little consensus as to their relationship. Early cross-country evidence shows a negative link between resources and growth. Sachs and Warner (1995, 2001) conducted the best-known exercises to test the resource curse hypothesis. Their papers empirically estimated the relationship between natural resources and domestic output. Their results suggested that resource abundance is negatively correlated with growth in GDP. On average,

resource-rich countries grew more slowly than their resource-scarce counterparts, even after controlling for other growth determinants.

Although the negative association is not strong, on average, natural resources tend to be negatively associated with overall country performance. Figure 11.1 shows the negative correlation between natural resources, measured as exports of fuels, ores, and metals as a fraction of total exports and economic growth.

Figure 11.2 shows evidence of the negative relationship between natural resource abundance and institutional growth over the last two decades. Sala-i-Martin and Subramanian (2003) suggest that there is a causal relationship between natural resources and institutional weakness. They suggest that natural resources have a negative impact on institutional growth and assert that resources have a beneficial effect on overall growth once institutions are controlled for. Seeking to identify the factors behind the negative association of resource abundance and a country's overall performance, the literature suggests that some of the more important channels of causation that explain the natural resource curse include economic volatility, long-term trends in world commodity prices, trade structure, rent-seeking behaviors, weak institutions, and Dutch disease.⁴

¹ Pritchett (1998) shows that most resource-rich countries have experienced a growth trajectory resembling a mountain, that is, good performance and a period of rapid growth followed by a sharp drop.

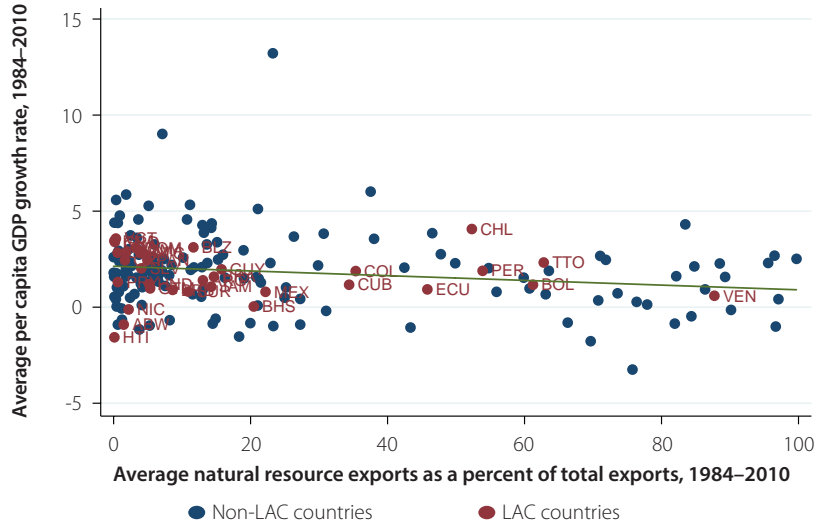
² The term "Dutch disease" was initially coined to describe the collapse of the Dutch manufacturing industry after the discovery of natural gas in 1959 ("The Dutch Disease," 1977).

³ For more information on the resource curse, see Chapter 3 in this book.

⁴ Frankel (2012) examines the channel of causation on how natural resource abundance could lead to substandard economic performance.

Figure 11.1

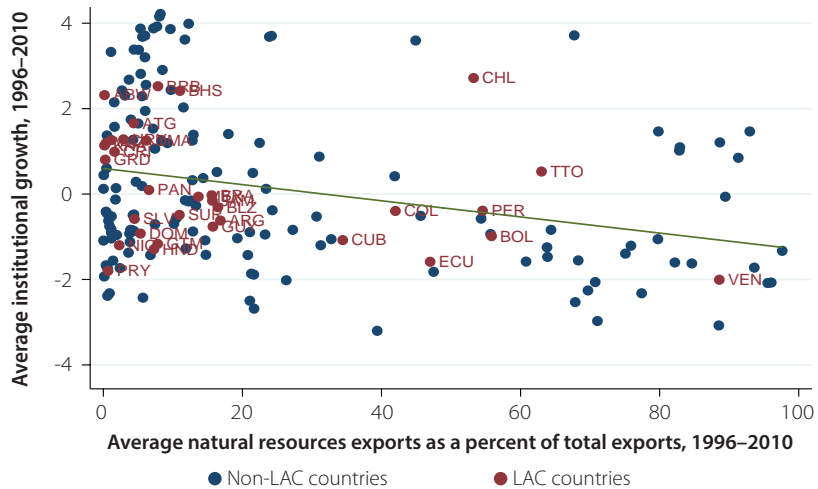
The Relationship Between Natural Resources and Economic Growth



Source: Authors' elaboration based on WDI.

Figure 11.2

The Relationship Between Natural Resources and Institutions



Source: Authors' elaboration based on WDI.

Manzano and Rigobón (2001) show that the resource curse may be caused by debt overhang rather than natural resource abundance. They argue that in the 1970s, when commodity prices were high, resource-rich countries used their commodity endowments as collateral for debt. The 1980s saw a significant drop in the prices of those commodities, which in turn drove the countries into debt crises. Taking these facts into account, they find that the effect of resource abundance disappeared.

Local-level evidence yields mixed results. Caselli and Michaels (2009) review the variability in oil abundance of Brazilian municipalities and show that oil windfalls have modest to no social benefits. They argue that this is the result of corruption and inefficient distribution, concluding that oil royalties received by resource-rich municipalities go missing. Monteiro (2009), using royalty payment variation across Brazilian municipalities, finds that municipalities were using royalty rents to hire more public employees, pay higher wages, and generate some improvements in education. Aragon and Rud (2013) analyze resource exploitation at the local level. Their results highlight the positive impacts of Yanacocha, a Peruvian gold mine, on local income and living standards. They rule out fiscal revenue windfalls as the driving force behind these results. Instead, they argue that the effects were the result of the mine's demand for local inputs and the expansion of local procurement.

The literature makes plain that many factors shape positive development experiences for countries well-endowed with natural resources. One element often emerges as the critical factor for resource-rich countries to avoid falling behind: appropriate institutional framework design.

Pineda and Rodríguez (2010) point out that improvements in the Human Development Index (HDI) in certain countries between 1970 and 2005 are positively and significantly correlated with natural resource abundance. Further, they show that natural resources are good for the non-income components of the HDI, such as literacy and life expectancy.

The literature makes plain that many factors shape positive development experiences for countries well-endowed with natural resources. One element often emerges as the critical factor for resource-rich countries to avoid falling behind: appropriate institutional framework design.

How can weak institutional capacity be overcome to achieve sustainable growth and social inclusion? It is no easy feat to create credible institutions that attract investment and manage the peculiar features of investment in the extractive industries. Extractive industries are susceptible to contract and/or concession renegotiations

and to expropriation by the state acting as owner of the resources. These renegotiations or expropriations happen more frequently in high-profit periods. They occur in response to incentives generated by the unique characteristics of resource extraction and the lack of effective institutional frameworks for capturing rents.⁵

Venezuela provides an example of this sort of perverse incentive structure. Manzano and Monaldi (2010) suggest that the lack of an effective tax system in Venezuela created significant incentives to expropriate in the extractive sector. They suggest that a progressive tax system, designed before contracts are signed, may help to avoid cumbersome contract renegotiations. This situation has also occurred elsewhere. Bolivia, Ecuador, and Argentina have cancelled contracts and directly engaged with the oil sector. Canada, Norway, the United Kingdom, and the United States—countries with strong institutions—have also renegotiated contracts or changed the rules of oil exploitation. Nevertheless, contract renegotiation and concerted expropriation should not be equated with a unilateral change in distribution, operation, or forceful expropriation. Renegotiation is possible in a strong state with solid institutions, while expropriation is characteristic of states with weak institutions.

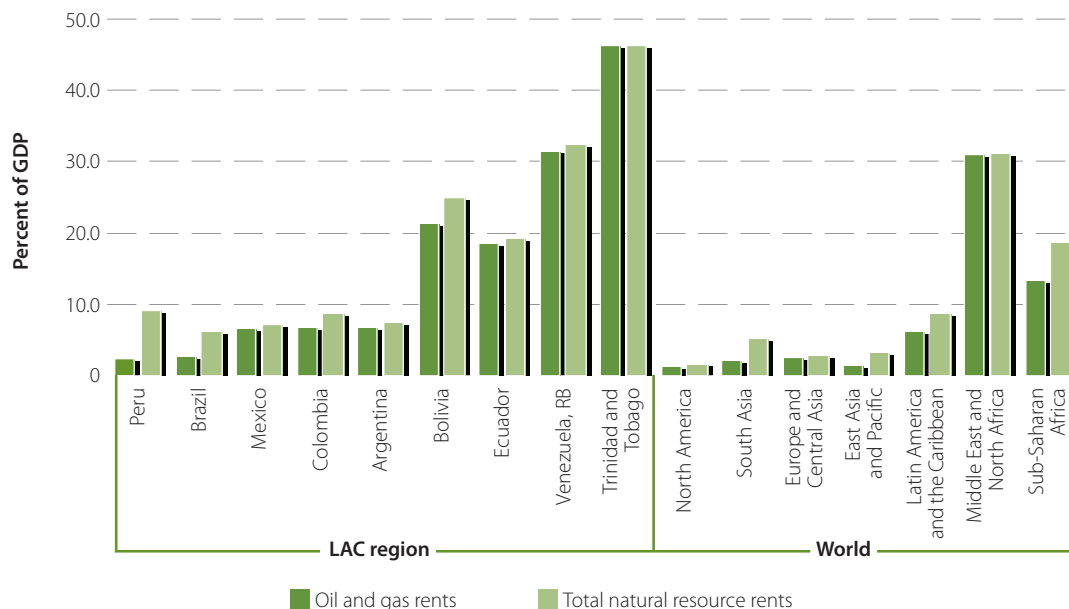
⁵ Balza and Espinasa (forthcoming) contains a comprehensive list of the idiosyncratic features of the resource sector.

New discoveries of natural resources in low-income countries have underscored extractive industries' potential for meeting economic and social development goals. The importance of resource extraction in Latin American countries cannot be overstated. It represents a major share of export earnings and overall national income. Over the past decade, natural resource rents accounted for 16 percent of GDP in the Latin America and the Caribbean (LAC) region. For Bolivia, Ecuador, Venezuela, and Trinidad and Tobago, resource rents accounted, on average, for more than 21, 21, 32, and 45 percent of GDP, respectively (Figure 11.3).

Rising prices of oil and other commodities have underpinned the outstanding economic performance of the LAC region over the past decade, and there are no indications that demand for these resources will decline in the near future. Demands for energy and other resources are likely to increase more rapidly with the emergence of middle-class consumers throughout the world. According to the Organisation for Economic Co-operation and Development (OECD), by 2030 the global middle class will more than double in size (from two billion to five billion), with most of the growth coming from developing countries. The additional middle-class consumers will continue to stimulate demand for natural resources in the LAC region. Since the mid-1990s, the world has entered a new industrial era, which has sustained the increase in oil prices (Hamilton, 2013). Contrary to previous periods when oil prices have spiked, oligopolistic practices, political instability, and wars

Figure 11.3

Resource Rents as a Percentage of GDP (average 2001–11)



Source: Authors' elaboration.

are not influencing today's prices. Rather, they are influenced by a genuine demand for fuel due to growing economic activity, particularly in non-OECD countries. The last big drop in oil prices occurred during the financial crisis of 2009 (see Figure 11.4).

The evolution of oil prices reveals the significance of institutional changes for oil markets. Prices have been very sensitive to events on the supply side.⁶ The world

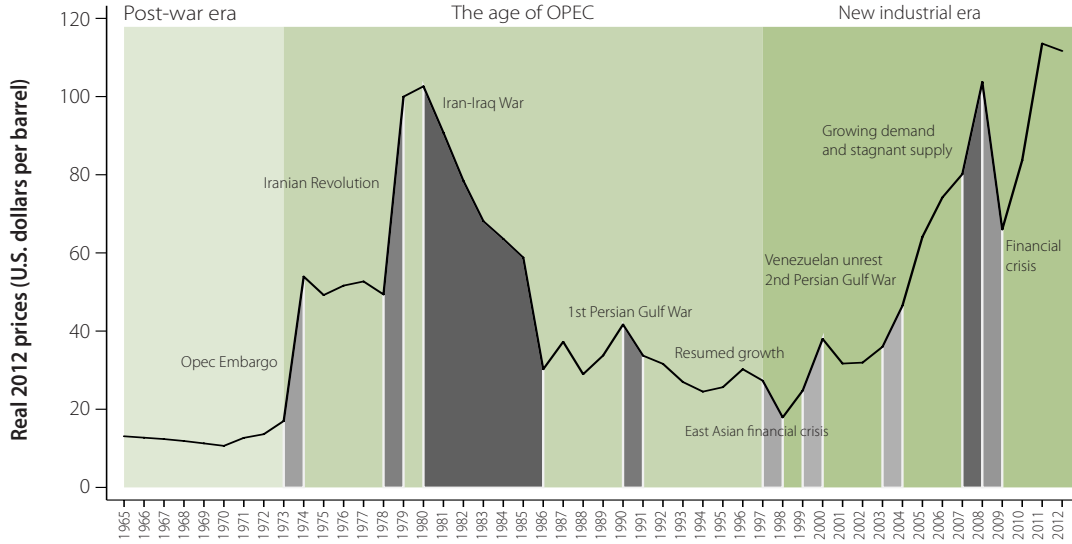
petroleum market has undergone structural changes on the demand and the supply sides, as both are becoming ever more concentrated in the developing countries (see Figures 11.5 and 11.6).

The 30-year trend in developing countries and the constant supply and demand in the OECD area suggest that the incremental supply of crude oil and raw materials is likely to come from non-OECD countries. The lack of productive and overall infrastructure will require large investments in these countries, which paradoxically also happen to have less than ideal conditions for attracting capital.

⁶ The long-term dynamic effects of institutional changes on the performance of the oil and gas sector remain an issue of academic contention. Similarly, there is no agreement on the influence of the institutional environment on the observed relationship between oil abundance and economic growth.

Figure 11.4

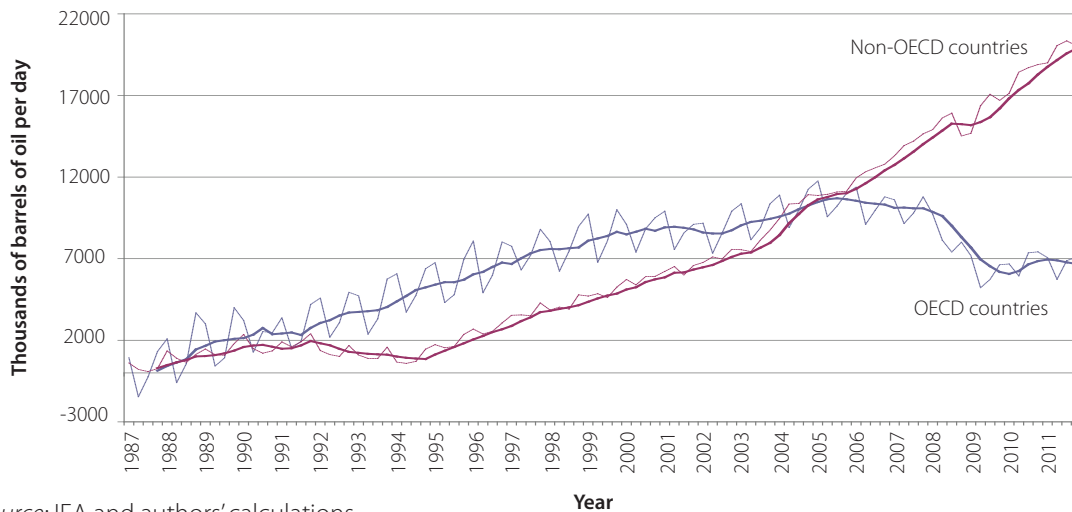
Historical Oil Shocks (in real 2012 prices)



Source: Authors' elaboration based on Hamilton (2013).

Figure 11.5

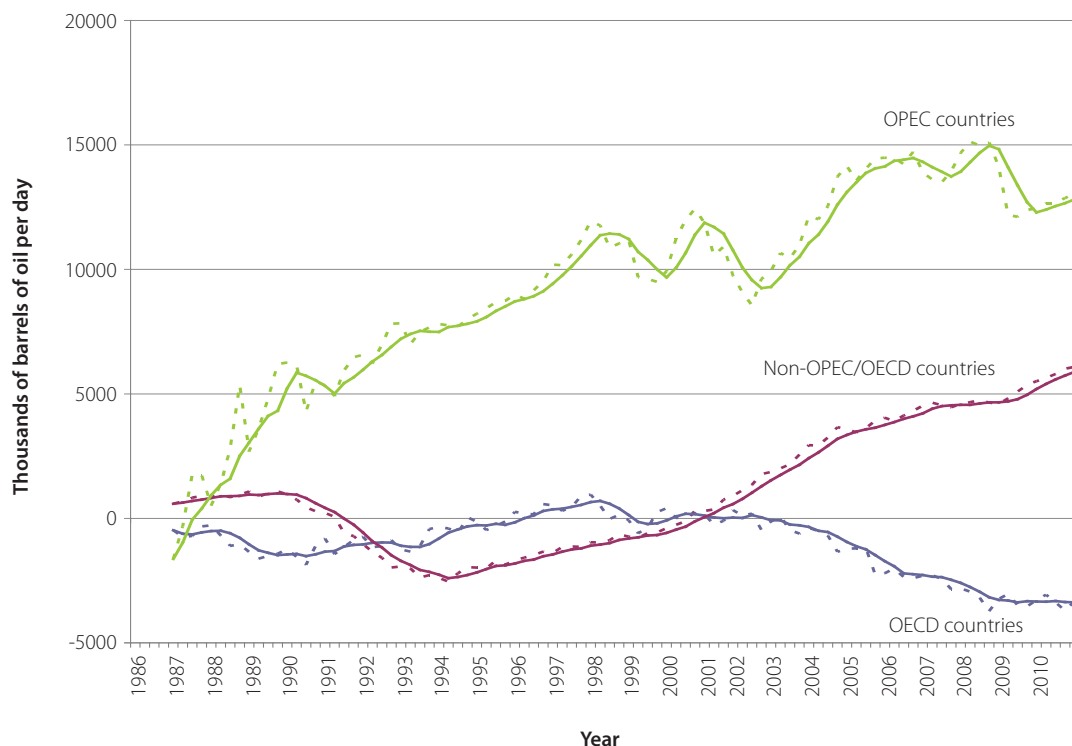
Increase in Petroleum Demand, 1987–2011



Source: IEA and authors' calculations.

Figure 11.6

Increase in World Petroleum Supply, 1986–2010



Source: IEA and authors' calculations.

The growth of extractive industries in developing countries requires (1) large, asset-specific up-front investments; (2) sophisticated technologies; and (3) complex large engineering capacity. Private investment is paramount for developing natural resource endowments in developing countries so that they can supply growing world demand. The role of sector-specific and credible institutions is critical in securing the required amount of private investment. At the sectoral level, private companies require (1)

clear, stable distributional and operational guidelines; (2) sufficiently long concessions and/or operating licenses; and (3) peripheral infrastructure. At the national level, the minimal conditions for private investment to materialize include credible institutions to secure property rights and prevent forceful expropriation, and a credible legal system.

The performance of the extractive industries is inseparable from the national institutions governing the sector. The state is responsible for the performance of the

extractive industries because it has the capacity to design, implement, and manage the institutions that govern the development of the specific sectors. What do available indicators say about the relationship between oil abundance, institutions, and performance?

The performance of the extractive industries is inseparable from the national institutions governing the sector. The state is responsible for the performance of the extractive industries because it has the capacity to design, implement, and manage the institutions that govern the development of the specific sectors. What do available indicators say about the relationship between oil abundance, institutions, and performance?

This study finds that empirical analysis of the association between these factors—employing some of the most widely used indicators of institutional quality—may fail to adequately capture the fundamental role played by institutions. This finding has important implications for the debate about the sources of information needed to study the resource curse, for it highlights the need to identify them more precisely and to quantitatively assess the specific institutions that shape sector performance. In light of recent research on the relationship

between the quality of institutions and sector performance, it suggests that transparency and information disclosure mechanisms may provide a useful entry point for assessing the quality of sectoral institutions and for a better understanding of these complex linkages.

EMPIRICAL STRATEGY

To analyze the relationship between institutions, oil performance, and economic growth, the task was divided into two equations: one aimed at analyzing the relationship between oil abundance and economic growth, and the other at investigating the link between institutional quality and oil-sector performance. The sample was restricted to oil-producing countries.

From Oil Abundance to Economic Growth

To study the relationship between oil abundance and economic growth, a steady-state long-run relationship was proposed. To this end, equation 1 expresses the log of per capita GDP in purchasing power parity — $\ln y_{it}$ — as a function of investment share of GDP — $\ln(I/Y)$ —, real oil rent per capita — $\ln o_{it}$ —⁷ and broad institutional quality — $\ln ST_{it}$ —. In

⁷ Real oil rent per capita is defined as $\ln o_{it} = \frac{P_t^* O_{it}}{pop}$

where P_t^* represents the real oil prices, O_{it} the supply of oil in thousands of barrels per day, and pop the population. This is similar to the definition used by Cavalcanti et al. (2011).

addition, specification 1 includes country-specific trends $-t_i-$ and intercepts $-\beta_{i0}-$, which are expected to capture omitted variables (constant or time variant) and, at the same time, avoid dealing with identifying appropriate and credible proxies.

$$\ln y_{it} = \beta_{i0} + \beta_{i1} t_i + \beta_{i2} \ln(I/Y)_{it} + \beta_{i3} \ln o_{it} + \beta_{i4} \ln(INST)_{it} + \mu_{it} \text{ (eq.1)}$$

INST represents the first principal component of the six indicators comprising the World Governance Indicators (WGI). They are: the prevalence of political stability, rule of law, regulatory quality, voice and accountability, government effectiveness, and control of corruption. The factor score or principal component was calculated for each country. Following the Kaiser criterion (Kaiser, 1960), factors were chosen for which the eigenvalue is greater than 1, so that each principal component explains at least as much variance as one observed variable. This resulted in choosing one factor which captures almost 90 percent of the variance. Even when this method is difficult to interpret, it allows the information provided by the six main governance indicators to be taken into account. Given that the factor of WGI take values from -2.5 to 2.5, and it enters into the equation in log, this component was first converted to the scale 1-11 as

$$1 + \frac{INST_i - INST_{\min}}{INST_{\max} - INST_{\min}} * 10$$

(Shih, Zhang, and Liu [2007] perform a similar standardization).

This panel model is applied to a sample of oil-producing countries (i), both net exporters and importers, with periods (t) of analysis depending on data availability, mainly subject to the variable *INST* for which data only existed for 1996–2010.

A contribution of this exercise is the addition of the institutional dimension, making explicit the relationship between oil abundance and economic growth, given institutional quality.

Ex ante, it is expected that the slope of the coefficients is directly related to the shares of capital and oil in output. Moreover, β_{i2} is a function of the weight of capital, while β_{i3} represents the weight of the real value of oil supply adjusted by the weight of capital investment. As this specification came from a steady-state long-run relationship, β_{i3} will reflect the structural association between oil abundance and economic growth.⁸

A contribution of this exercise is the addition of the institutional dimension, making explicit the relationship between oil abundance and economic growth, given institutional quality. However, a limitation in eq.1 is that it does not answer whether

⁸ Further details can be found in Cavalcanti et al. (2011).

However, two potential problems may arise. First, $INST_{it}^*$ are at least partly endogenous. Second, given the nature of the oil sector, it may not respond directly and strongly to the broad institutional framework, but instead to sector-specific institutions. As before, this led to a performance of the following separate exercise:

$$\left\{ \begin{array}{l} \ln O_{it}^a = a_{i0}^a + a_2^a \ln P_t + a_4^a \ln Q_{it} + a_5^a \ln R_{it} + \\ e_{it}^a, \overline{INST}_{it}^* > \vartheta \\ \ln O_{it}^b = a_{i0}^b + a_2^b \ln P_t + a_4^b \ln Q_{it} + a_5^b \ln R_{it} + \\ e_{it}^b, \overline{INST}_{it}^* \leq \vartheta \end{array} \right.$$

In this context, it is expected that in the presence of better institutions, the market signals ($\ln P$) are correlated to a greater extent with the oil supply than in the presence of worse institutions. That is, we will evaluate if $a_2^a > a_2^b$ sustain statistically. As in the previous case, the cutoff (ϑ) is also defined as the median of \overline{INST}_i^* . In order to take advantage of all data available, the estimation procedure relies on the fixed effect estimator, accounting for country-specific trends.¹⁰

¹⁰ The variables $\ln y$, $\ln O$, and $\ln P$ are I (1). The estimator assumes homogeneity of regression slopes, which could lead to bias if this is not the case. On the other hand, this estimator does not account for potential cross-sectional dependence, which could lead to potential incorrect estimation of the standard error, leading to incorrect test results. However, given the unbalanced panel, it is preferable to perform a fixed effect estimator. For example, the short time period for some countries could lead to biased parameter estimations.

EMPIRICAL RESULTS

The period of analysis includes 1984–2010 and 1996–2010 (for which there is information on institutional quality). The data set is constructed with data from the World Development Indicators (I/Y , *population*, $INST$), the Penn World Tables (y), the International Energy Agency (O), International Monetary Fund (P), and Baker-Hughes (R). The final data set is unbalanced due mainly to missing values in the data of reserves of oil and gas (R).

Cross-country Estimations

Before estimating eq.1 and eq.2, a standard cross-sectional equation employed by Sachs and Warner (1995) was estimated. Table 11.1 shows the results for different periods of time and different samples of countries. Column (1) reproduces the same (statistical) results obtained by Sachs and Warner for 85 countries. Following these authors, a variable of resource abundance was constructed, and their results were replicated in column (2), confirming that resource abundance seems to negatively influence economic growth.¹¹

¹¹ The estimate of resource abundance is defined as in Sachs and Warner; it denotes the percentage of primary exports/GDP in $t=0$, where 0 represent 1970, 1984, or 1996 depending on the period analyzed. For 1970, the variable is highly correlated with the one calculated by Sachs and Warner. Some discrepancies were found for the cases of Trinidad and Tobago and Singapore, for which there was a higher ratio of primary exports/GDP than in Sachs and Warner. Those countries were dropped in the exercise reported in Table 1.

Columns (3), (4), and (5) report results of the cross-country estimation for the same sample of countries but for different periods. Even when the magnitude of the estimated coefficients is smaller, these estimates are not statistically different from each other. Moreover, they continue

to support the hypothesis that resource abundance is negatively correlated with economic growth.

Columns (6), (7), and (8) report the results of the same exercise for a different sample of countries. This sample is composed of oil-producing countries

Table 11.1

Cross-sectional Estimation Results

Country sample Period	Dependent variable: average per capita GDP growth rate								
	Sachs and Warner					This sample			
	1970– 1990	1970– 1990	1970– 2010	1984– 2010	1996– 2010	1970– 2010	1984– 2010	1996– 2010	
GDP per capita in t=0	-0.800*** (-3.94)	-0.763*** (-3.80)	-0.420** (-2.32)	-0.0671 (-0.59)	-0.163 (-1.28)	-0.445*** (-3.22)	-0.445*** (-3.20)	-0.237 (-1.07)	
Resource abundance	-8.295*** (-5.09)	-7.297*** (-5.20)	-4.928*** (-3.92)	-4.999*** (-3.08)	-4.884*** (-2.74)	-2.775*** (-2.92)	-3.960*** (-4.10)	-0.784 (-0.55)	
Investment/GDP	1.596*** (6.04)	1.628*** (6.19)	0.137*** (3.93)	0.215*** (6.53)	0.198*** (5.08)	0.113*** (2.97)	0.148*** (3.87)	0.311*** (5.60)	
Constant	4.592*** (3.14)	3.952*** (2.81)	2.038 (1.46)	-1.590 (-1.58)	-0.197 (-0.16)	3.538** (2.25)	3.219** (2.07)	-1.833 (-0.71)	
Observations	83	83	83	82	81	43	59	58	
Adjusted R-squared	0.422	0.428	0.392	0.367	0.254	0.454	0.478	0.381	

Source: Authors' elaboration.

Notes: t statistics in parentheses.

* p<0.1 ** p<0.05 *** p<0.01

These last two countries were dropped because the estimated SXP was different from the SXP from Sachs and Warner.

(1): Reproduce Sachs and Warner with 85 countries of their sample. Includes the 87 non-outliers of the Sachs and Warner sample minus Taiwan, Ivory Coast, Trinidad and Tobago, and Singapore.

(2): Reproduce Sachs and Warner estimates with the variable of resource abundance.

(3), (4) and (5): Reproduce Sachs and Warner estimates with the variable of resource abundance for the period 1970–2010, 1984–2010, and 1996–2010, respectively.

(6), (7), and (8): Reproduce the Sachs and Warner results for the sample of countries.

(net importers or exporters), which will be analyzed below.¹² The estimated coefficients are smaller than previous estimations, which is a direct result of the different sample analyzed. Here the sample has been restricted to 59 oil-abundant countries, which reduces cross-country variability. Cross-sectional specification continues to yield essentially the same results, except for the period 1996–2010, in which resource abundance was not statistically associated with economic growth. This period also coincides with the structural change in international oil prices. Oil prices have been growing continuously since the mid-1990s, with the exception of the 2009 financial crisis.

As emphasized by Manzano and Rigobón (2001), the cross-sectional setup does not account for individual effects, potentially leading to biased estimations, as those effects could be related to other covariates. Moreover, they present evidence that including omitted variables could change the estimated correlation between growth and resource abundance. The panel data specification seeks to overcome these problems.

¹² This is the sample of countries to be used in the following analysis. This set of countries is on average more resource-rich than the sample used by Sachs and Warner, measured by the following variables: the ratios of rents from natural resources to GDP, oil rent to GDP, and primary exports to GDP.

Panel Estimations

Contrary to the cross-sectional result but in line with the panel data literature, the estimation finds a strong positive correlation between oil abundance and economic growth. Table 11.2 presents the results of eq.1. Column (1) shows that the real per capita value of oil is statistically significant, contributing to economic growth in the long run. This result is maintained in column (2), in the sense that oil abundance is still significantly correlated with economic growth, conditioned on the institutional quality of the country. That is, regardless of the institutional environment, oil abundance seems to influence income positively. Columns (3) and (4) highlight the correlation between oil abundance and economic growth under “good” and “bad” institutional environments. Bad institutions might be associated with the failure to develop sectors beyond resources, and thus the economy may become more dependent on the resource sector.

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Table 11.2 (Panel, Eq.1)

Growth, Oil Performance, and Institutions

	Dependent variable: ln(GDP per capita)			
	(1) All Sample	(2)	(3) INST> δ	(4) INST< δ
ln(investment)	0.134** (0.0116)	0.118** (0.0137)	0.120** (0.0156)	0.127** (0.0167)
ln(real value oil supply per capita)	0.0668** (0.00516)	0.0523** (0.00708)	0.0306** (0.00556)	0.103** (0.00871)
ln(INST, factor)		0.0448** (0.0112)		
Constant	-28.72** (0.776)	-35.88** (1.881)	-35.40** (0.745)	-19.53** (1.481)
Number of countries	59	59	31	28
Average obs. per country	24	14	24	24
Adjusted R-squared	0.865	0.871	0.895	0.854

Source: Authors' elaboration.

Notes: Standard errors in parentheses.

* p<0.10 ** p<0.05

Table 11.3 presents the estimations of eq.2, taking as dependent variables the oil supply and the average number of oil rigs per year, both at the country level. In all cases, oil price and market share play a statistically significant role in influencing oil performance. Most surprisingly, the indicators of institutional quality—the most widely employed indicators for assessing broad institutional quality—have no effect on either of the two measures of oil performance analyzed here. This could be a result of bi-directionality between income level and institutional quality, leading to biased

estimation. It could also be indicating that the broad institutional variable is not associated with performance in the oil sector.

Most surprisingly, the indicators of institutional quality—the most widely employed indicators for assessing broad institutional quality—have no effect on either of the two measures of oil performance analyzed here.

Table 11.3 (Panel, Eq.2)

Oil Performance and Institutions

	ln(oil supply)			ln(rig)		
	(1) All sample	(3) INST> ϑ	(4) INST< ϑ	(2) All sample	(5) INST> ϑ	(6) INST< ϑ
ln(real oil price)	0.0972*** (0.00166)	0.109*** (0.0180)	0.0792*** (0.0157)	0.310*** (0.0655)	0.327*** (0.0752)	0.425*** (0.0970)
ln(INST, factor)	-0.00329 (0.00492)			0.0401 (0.0749)		
ln(oil reserves)	0.00983 (0.00600)	0.149** (0.0678)	0.0412 (0.0550)	-0.240* (0.141)	-0.190 (0.263)	-0.275 (0.200)
ln(gas reserves)	0.00498 (0.00680)	0.0657 (0.0593)	0.214*** (0.0525)	0.223 (0.163)	0.364* (0.203)	0.124 (0.105)
ln(market share)	0.991*** (0.00899)	0.892*** (0.0938)	0.952*** (0.0439)	0.156 (0.176)	0.429** (0.167)	0.438 (0.252)
Constant	-2.861*** (0.0826)	-2.330** (0.858)	-2.651*** (0.428)	0.775 (1.606)	-1.948 (1.379)	-2.108 (2.258)
Observations	526	486	489	443	450	394
Number of countries	38	18	20	32	17	16
Average obs. per country	14	27	24	14	27	25
Adjusted R-squared	0.984	0.827	0.871	0.211	0.242	0.187

Source: Authors' elaboration.

Notes: Standard errors in parentheses.

* p<0.10 ** p<0.05 *** p<0.01

The separate regression shown in columns (3), (4), (5), and (6) intend to test $a_2 > a_1^b$. In line with previous results, the price parameter is not statistically different under different institutional quality scenarios, either for oil supply or rigs, the two measures of oil performance used in this study. These results must be viewed with caution, given the imperfect proxy of institutional quality for the oil sector.

Assessing the Role of Institutional Quality in the Performance of the Oil Sector

Given that the indicator of institutional quality provides limited information about its effect on the performance of the oil sector, how should its role be assessed? Balza and Espinasa (forthcoming), using a different approach, find encouraging results. They classified large Latin American oil and gas

producers into two groups according to their sector governance structure. Group 1 includes countries such as Argentina, Ecuador, Mexico, and Venezuela, where the government exercises a high degree of discretionary influence in the management of the oil industry, while Group 2 features countries with minimal direct government interference and private participation in competition with the state-owned companies under a regulatory agency, that is, countries with pro-market institutions. This second group includes Colombia, Brazil, and Peru.¹³

Balza and Espinasa (forthcoming) construct average indices representing the trends in oil production to test the relationship between institutional reforms and oil sector performance (see Figure 11.7). They show how oil production trends in both types of countries are related to the institutional framework governing the sector. The oil production trend in Group 1 decreases after the reforms. Conversely, in Group 2, production increases. They find similar results for average drilling rig trends, the other proxy for oil performance.

Figure 11.7

Average Oil Production Trends by Group of Countries



Source: Balza and Espinasa (forthcoming).

¹³ According to the indicators employed in the tests above, Peru and Colombia are ranked below Mexico in terms of institutional quality in the oil sector. This only reinforces the idea that the overall institutional quality indicator is not strongly associated with the institutional framework in the oil and gas sector.

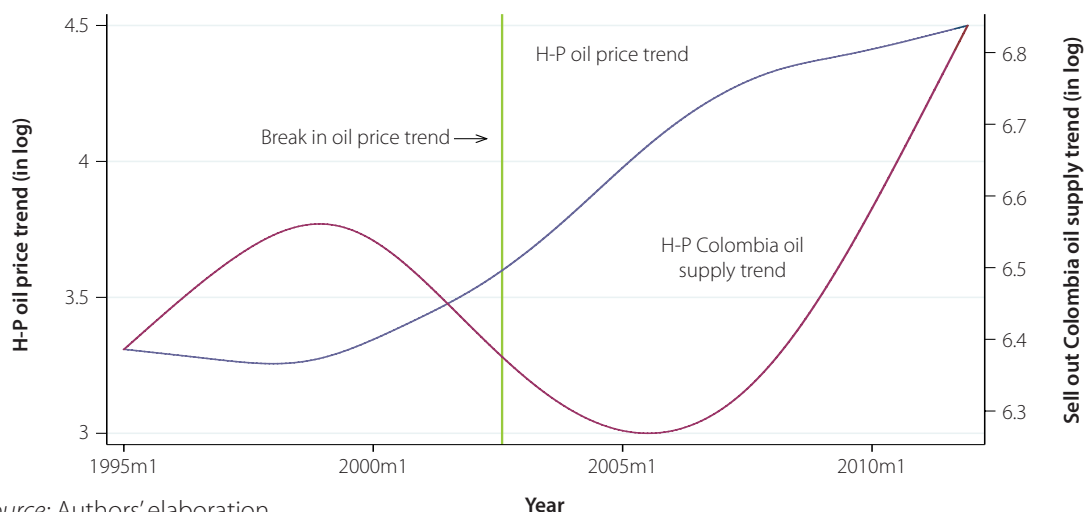
Colombia is perhaps the most revealing recent example of the correlation between institutional quality and oil sector performance. After the rise and fall in production in the two large fields of Caño Limón and Cusiana Cupiagua in the 1980s and 1990s, oil production in Colombia sharply declined. By the early 2010s, it seemed inevitable that Colombia would become a net petroleum importer, with oil production reaching close to 500,000 barrels per day (mb/d) in 2003, down from 850 mb/d in 1999.

Following in the footsteps of the successful 1997 Brazilian reform, Colombia, in 2003, modified its legal framework governing hydrocarbons. The reform had three basic pillars: (i) remove the natural resource regulatory function from the

state-owned company Ecopetrol, so that it could focus exclusively on its operations as an oil company; (ii) create the national regulatory agency (Agencia Nacional de Hidrocarburos, or ANH), which would have as its sole purpose the management of the national reserves on behalf of the owner state; and (iii) open the prospective oil-bearing lands for competition among private and state-owned companies under the supervision of the ANH. The results of the reform were starkly revealing (see Figures 11.8a and 11.8b). Crude oil production has almost doubled since 2005, to up to one million barrels per day. This is due to a huge increase in investment as measured by the number of active drilling rigs, which have increased sevenfold in the period, from 10 to 70 active rigs per month.

Figure 11.8a

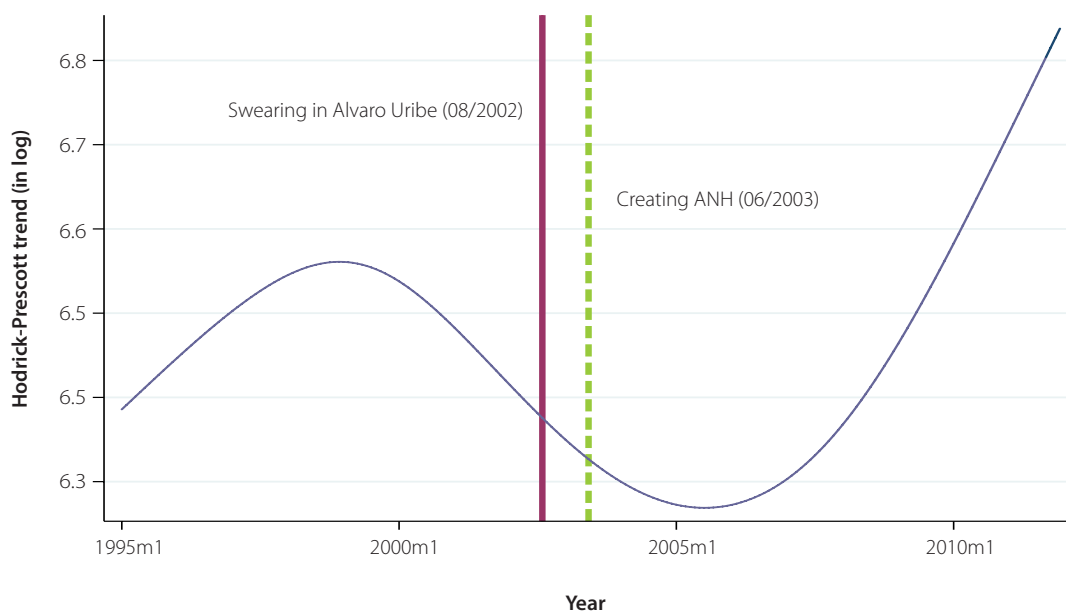
Marker Crude Price and Colombia Oil Production, Hodrick-Prescott Trend



Source: Authors' elaboration.

Figure 11.8b

Colombia Oil Production and Institutional Break, Hodrick-Prescott Trend



Source: Authors' calculations based on IEA, US BLS.

With regard to transparency, the Colombian reform—with the creation of the ANH as its cornerstone—represents a quantum leap. The bidding process for awarding the oil-bearing lands is public and transparent. The contracts elaborated by the agency are public with set times and conditions for the concessions, as well as operational and distributional rules. The existence of the contracts enforced by the ANH prevents discretionary and unilateral

governmental action. Finally, the agency creates a space for settlement of tensions between the government and companies.

With regard to transparency, the Colombian reform—with the creation of the ANH as its cornerstone—represents a quantum leap. The bidding process for awarding the oil-bearing lands is public and transparent.

The main beneficiary of the reform in terms of performance and transparency is the state-owned company (SOC) itself. First, as it has been divested of its role as administrator/regulator of the natural resource, it can now focus exclusively on its role as a commercial company. Second, once it gives up control over national oil resources, and the ownership of reserves is not in jeopardy, the SOC can be partially privatized without putting the reserves at stake. Once the SOC goes partially public, it becomes fully accountable to the stakeholders, making it fully transparent. Third, opening up the oil sector to private investment under a transparent contractual and legal framework benefits the SOC in that once it is under the same framework as the private companies, it will automatically be protected from the discretionary actions of the government. These are the main reasons that explain the successful performance of Ecopetrol and Petrobras after the reforms that opened Colombia and Brazil to private investment under their respective regulatory agencies, ANH and ANP.

CONCLUDING REMARKS AND POLICY RECOMMENDATIONS

New discoveries of natural resources in low-income countries highlight the potential for extractive industries to achieve economic and social development goals. The importance of resource extraction in African and Latin American countries cannot be

overstated, as it represents the major share of export earnings and national income. Despite the many and large policy challenges these countries face, the design of good institutions to govern the extraction of natural resources must be prioritized. These institutions often lay the foundation for the entire economic and social edifice of resource-rich countries.

The importance of resource extraction in African and Latin American countries cannot be overstated, as it represents the major share of export earnings and national income. Despite the many and large policy challenges these countries face, the design of good institutions to govern the extraction of natural resources must be a priority.

The main objective of this chapter was to analyze the relationship between institutions, oil performance, and economic growth. The analysis found a strong positive correlation between oil abundance and economic growth, which seems to positively influence income. Moreover, oil abundance is significantly associated with economic growth, conditioned on the institutional quality of the country, regardless of the country's institutional environment. Another goal of this chapter was to analyze the relationship between institutional

quality and oil sector performance. The key finding is that indicators of institutional quality have little effect on performance of the oil sector. This is because broad institutional quality indicators do not accurately capture the specific institutions relevant to the performance of the oil sector, as they do not encompass individual characteristics of regulatory frameworks and sectoral policies. Global national institutional indices can be inadequate proxies for the quantitative assessment of specific sectoral institutions, particularly in the area of oil production. In this regard, Balza and Espinasa (forthcoming) show that dissimilar performance among the seven largest Latin American oil-producing countries is strongly associated with the characteristics of the institutional frameworks regulating investment and production in their oil sectors.

More detailed quantitative assessments of the specific governance mechanisms that shape the oil sector are needed. More precise understanding of the complex relationship between resource abundance, institutions, and growth will require the development of indices sensitive to specific sectoral institutions. The identification of these institutions can result from promising new methodologies such as the one suggested by Balza and Espinasa (forthcoming). The next step in the development of an encompassing database for empirical analysis will be to assess the features that determine the quality of these mechanisms. In line with other chapters in this book and the experience of countries like Colombia, transparency is a critical feature, and one that can help trace the institutional pillars of the extractive sector's performance.

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CHAPTER 12

The Council on Ethics and the Extractive Industries

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This chapter discusses the Council on Ethics (hereafter, the Council) of the Norwegian Government Pension Fund Global (GPF), which assesses companies in the Fund's portfolio and recommends whether they should be excluded from the Fund or placed under observation. The Council's work is unique among institutional investors in that it is site-specific and in that it serves a specific purpose: finding and assessing companies for exclusion. The existence of the Council and its influence on other funds can play an important role in how companies and investors approach controversial extractive projects.

*The views in this chapter are those of the author and do not represent the views of the Council on Ethics or the Norwegian Government Pension Fund Global.

INTRODUCTION

The Norwegian Government Pension Fund Global (GPF Global) invests the state's revenues from the petroleum industry in equities, obligations, and real estate in international markets. Its market value was approximately US\$840 million as of December 31, 2013, making it one of the world's largest sovereign wealth funds.

The Council assesses and recommends the exclusion or observation of companies in the Fund guided by criteria known as the Ethical Guidelines (Council on Ethics, 2013a). The Guidelines provide that the fund's assets may not be invested in companies that produce certain products or that act in ways considered unacceptable to Norwegian society. The criteria include serious or systematic human rights violations, severe environmental damage, and gross corruption. As prescribed in the Guidelines' preparatory works, Norway's obligations under international law and the overlapping consensus in Norwegian society were instrumental in deciding what the unacceptable products and behaviors should be (Norwegian Ministry of Finance, 2003).

According to the preparatory works, the Council may only interpret existing international standards; it cannot create its own. During its decade in existence, the Council may nevertheless have garnered an influence beyond what its limited mandate suggests. Apart from the Fund's size and reputation, the Council provides transparent examples of how international norms

can be implemented to hold corporations accountable for their actions. As a result, published recommendations are increasingly treated as normative instruments by businesses and investors alike (KLP Kapitalforvaltning, 2014).

The publication of the Council's recommendations makes it possible for other funds to use them as points of departure in their dialogues with other companies. The recommendations also motivate other funds to look more closely at a particular company or industry, which may not have previously been on their radar. The possibility of being excluded has led some companies to contact the Council directly to ask for guidance before embarking on a course of action that in the past led to the exclusion of other companies from the Fund.

The GPF Global's portfolio includes approximately 8,500 companies headquartered in more than 80 countries, operating across most industries and regions.¹ Extractive companies account for less than 10 percent of these.² In comparison, extractive companies account for roughly 40 percent of all companies excluded because of their conduct (Norwegian Ministry of Finance,

¹ The Government Pension Fund Global does not invest in the domestic market.

² Author's assessment based on the Fund's portfolio as of December 31, 2013. Available at http://www.nbim.no/globalassets/reports/2013/annual-report/eq_holdings_spu.pdf.

2014b). Because of the challenges germane to the industry, extractive companies make up a disproportionately large percentage of the companies marked for exclusion by the Council.

Unlike manufacturing and other, more mobile industries, extractive companies cannot pack up and move their operations elsewhere. In the extractives, goes the quip, geology trumps geography any day of the week. This may mean operating an open-pit mine in the middle of a regional capital, or building pipelines through a country that is notorious for its violations of human rights. Going where the resources are located may mean that an extractive company may be the only corporate presence in a particularly challenging region or environment.

Because of the challenges germane to the industry, extractive companies make up a disproportionately large percentage of the companies marked for exclusion by the Council.

The result is that the question of whether to conform to prevailing conditions, or whether to operate according to internationally accepted minimum standards, becomes particularly relevant for extractive companies. Regulatory frameworks vary significantly from country to country, as does their application. Many projects brought to the Council occur in areas where weak governance, or the absence of a regulatory

framework that meets minimum international standards, ineffective execution, and the absence of mechanisms to ensure political and corporate accountability, is the hallmark of the operating environment. The Council must assess how companies confront this reality in the course of their operations.

Another reason why extractive industries may be overrepresented in the Council's work is that they literally leave a mark on the geographies and societies in which they operate. All mining operations eventually include sticking a shovel into the ground. Mining companies usually also process ores, store minerals in stockpiles, dispose of waste-rock and slurries, treat surface runoff, and otherwise undertake myriad other processes, the results of which will have a measurable impact on the environment and the affected population. The proper disposal of mining waste products is thus one of the common denominators in much of the Council's work with mining companies. Similar problems exist when it comes to oil and gas operations. There, too, extractive companies leave their mark, whether it is in the form of pipelines, refineries, spills, or social conflict.

A final reason why extractive industries may be overrepresented is that they have the potential to breach all five of the criteria for exclusion from the GPF. The Council has considered extractive companies for exclusion for human rights violations, environmental damage, gross corruption, violations of the rights of individuals during war

and conflict, and other violations of fundamental ethical norms. Often, however, not all assessments actually result in a recommendation to exclude the company in question from the Fund.

The Council on Ethics in Context

The Government Pension Fund Act of 2005 designates the task of managing the GPF to the Ministry of Finance (Government.no, 2012). The Fund's operational management, however, is delegated to the central bank and its asset management unit, Norges Bank Investment Management (NBIM), which invests the Fund's capital according to guidelines issued by the Ministry of Finance. The Fund is managed with the aim of achieving a good long-term return with moderate risk and only invests in international markets (Nystuen, Follesdal, and Mestad, 2011).

The Graver Commission's main argument was that the Fund has an ethical obligation to generate wealth for future generations without doing so at the expense of fundamental rights of individuals.

In 2004, the Ministry established ethical guidelines for the GPF based on the recommendations of the Graver Commission (Norwegian Ministry of Finance, 2003). The Graver Commission's main argument was that the Fund has an ethical obligation to

generate wealth for future generations without doing so at the expense of the fundamental rights of individuals. This is in line with the Fund's interests, as the Ministry believes the Fund's financial return over time depends on sustainable economic, environmental, and social development. The ethical guidelines are comprised of two main strategies: active ownership to increase the Fund's financial returns, and exclusion of companies from the Fund. The latter is the focus of this chapter. In order to ensure that ethical assessments were kept separate from financial considerations, the Ministry created an advisory body called the Council on Ethics, tasked with advising the Ministry of Finance on the exclusion of companies from the GPF.

In 2009, the Ministry of Finance announced a more comprehensive strategy for responsible investment practice for the GPF. The strategy introduced several new measures and a new set of guidelines for responsible investment that replaced the ethical guidelines of 2004 (Norwegian Ministry of Finance, 2009).

These measures reflect the Fund's commitment as a signatory to the UN Principles for Responsible Investment, specifically to continue to integrate environmental, social, and governance (ESG) considerations into its management and investment strategies. The GPF uses the tools at its disposal as a financial investor to contribute to this end. The Fund aims to: (i) promote good corporate governance and greater awareness of social and environmental issues; (ii) help companies

in its portfolio to respect fundamental ethical norms; (iii) encourage development that is economically, socially, and environmentally sustainable; (iv) promote good corporate governance and the efficient organization of financial markets; (v) ensure that its investments do not conflict with Norway's obligations under international law; and (vi) avoid investing in companies that engage in grossly unethical activities.

To meet these goals, the Fund's current strategy for responsible investment uses a number of approaches, including: (i) international collaboration and contribution to the development of best practices, (ii) targeted investment programs, (iii) research and investigation; (iv) active ownership, (v) exclusion of companies

The institutions involved in the management of the GPF, that is, the Ministry, NBIM, and the Council, play different roles in carrying out these approaches. As the owner of the GPF, the Ministry establishes the framework for the Fund's responsible investment practices. It also decides on the exclusion or observation of companies from the Fund based on recommendations of the Council. As the Fund's operational manager, NBIM is responsible for exercising the Fund's ownership rights. This includes explaining the Fund's expectations to companies, engaging directly with them, and voting in shareholder meetings (Norwegian Ministry of Finance, undated).

The Council assesses companies in the Fund's portfolio according to the Guidelines for the Exclusion and Observation of

Companies from the GPF (Government, no, 2013a). These guidelines state that the Fund's assets shall not be invested in companies that produce tobacco, certain weapons, and military material for sale to certain states. They also state that the Ministry may decide to exclude companies if there is an unacceptable risk that a company contributes to or is responsible for, the following: serious or systematic human rights violations, such as murder, torture, deprivation of liberty, forced labor, the worst forms of child labor, and other child exploitation; grave violations of the rights of individuals in situations of war or conflict; severe environmental damage; gross corruption; or other particular violations of fundamental ethical norms.

In the event of doubt about whether conditions for exclusion have been fulfilled, or uncertainty about how the situation will develop, or if it is considered appropriate for other reasons, a company may instead be placed under observation.

Identifying and evaluating companies that may be in breach of the guidelines, and recommending their exclusion or observation, constitutes the entire mandate of the Council (Government, no, 2011). The current division of labor between the three entities is undergoing a transformation to the effect that the Ministry will no longer be making the decisions on the exclusion, observation, or re-inclusion of specific companies. Instead, the Central Bank will make these decisions based on the Council's recommendations (Norwegian Parliament, 2014).

Identifying Companies for Further Assessment

When carrying out its mandate, the Council's first step is identifying which companies should be assessed for possible exclusion. Two strategies are employed for this purpose.³

First, the Council uses external consultants to carry out daily Internet searches for news items about companies in the portfolio. These searches are performed in several languages, including English, Spanish, Russian, and Mandarin. The Council receives quarterly reports about companies accused of collaborating in human rights violations, causing corruption, generating severe environmental damage, or of violating other ethical guidelines. The Council selects the cases that appear to be the most serious for further assessment.

This process is highly selective; of the 40 to 60 allegations that may be brought to the Council's attention in any given report, only about 10 percent will ever make it past the first review. Approximately 10 percent of these will remain following a more thorough analysis of the facts of each case. Discarded cases will often be revisited however, either as a result of later developments or as part of a subsequent sector study.

³ The Council on Ethics' annual report generally includes a brief explanation of how the Council identifies companies for future work with updated information about numbers of companies evaluated and sectors under study (Government.no, 2014).

Sector studies constitute the second strategy. This approach recognizes that any monitoring system dependent on allegations being published online will always suffer from a degree of information bias. To make up for this, the Council identifies sectors where the risk of companies in the Fund violating the ethical guidelines is considered to be high and looks for individual companies for further analysis. In 2010 for example, the Council announced that it would assess certain sectors and types of activities where the risk of severe environmental damage was considered particularly high. A non-exclusive list of nine such sectors was published in 2011, including three that concerned extractive industries directly: (i) some forms of oil production that caused major local pollution problems, (ii) certain types of mining activities where waste disposal entailed particular risks, and (iii) activities with severe impacts on particularly valuable conservation areas, such as World Heritage Sites (Council on Ethics, 2012a).

Other sectors have also been the subject of studies under the human rights criterion. As with the first strategy, most of the companies initially identified for further assessment during a sector study are subsequently discarded; in many cases sector studies do not lead to any exclusion. For example, the Council announced in its 2009 annual report that it would look more closely at the Fund's investments in coal mines because of the many accidents in that industry (Council on Ethics, 2010). In the course of its assessment, the Council found

that Chinese and Russian coal producers in the Fund generally performed better than the average of these countries. It concluded in its 2011 annual report that it had been unable to find any clear pattern indicating that one or more of the companies had a systematically higher number of fatalities in accidents or particularly hazardous working conditions (Council on Ethics, 2012a).

The criteria for selecting individual companies for further assessment depends in part on the criterion in the guidelines against which the company is being assessed. The Council's practice has led to the establishment of a set of subcriteria under each criterion. Broadly speaking, however, allegations are more likely to be examined further if they meet the criteria of severity, proximity, and future risk.

As concerns severity, the use of modifiers in the ethical guidelines, such as, serious and gross, shows that only the most serious and/or systematic cases should lead to exclusion from the Fund. Many relatively serious incidents could indicate a pattern of conduct that would satisfy the criterion, as could a small number of exceptionally serious allegations. In either case, the consequences of the company's actions, or its failure to act, will be taken into account in the initial assessment.

With respect to proximity, the guidelines state that companies should be responsible for the violations leading to their exclusion. The link between the violation and the company will thus lead to further investigation. What the company has done

to prevent the violation from taking place and what it has done to remedy the damage are both part of the initial assessment.

Finally, the guidelines are forward-looking and only the risk of current or future violations can lead to exclusion. Past actions may be indicative of future conduct; part of the preliminary assessment is to determine whether an incident may be a one-time accident or whether there exists some unacceptable risk that the company's practice is likely to continue in the future.

Severity, proximity, and future risk are not intended as objective binary criteria; with few exceptions, the idiosyncrasies of each particular case make company assessments a study of nuances and risks, rather than certitudes. These criteria should be understood as a subjective conceptual framework used by the Council to frame its discussions.⁴

Gathering Information

Once a company has been identified for further assessment, the Council gathers as much relevant information as possible on the company, the allegations, and their background.

⁴ The Council on Ethics seeks to explain its reasoning in each of the recommendations it issues. Consequently, the recommendations constitute the best insight into the Council's thought processes. The first recommendation issued on any given criterion is especially useful in order to understand how the Council will assess subsequent cases under that criterion (Council on Ethics, undated [b]).

The Council's aim is to issue recommendations based upon an in-depth analysis of specific operations or corporate conduct, rather than on corporate systems or strategies. This requires reliable information. One of the first steps in any assessment, therefore, is approaching the company directly and asking for the necessary information.

The Council requests technical, site-specific information. In researching environmental damage, for example, the Council will often request environmental and social impact assessments, discharge-monitoring reports, and others. The Council always seeks information from a number of different sources to gain as clear a picture of the situation as possible. Often this includes commissioning studies to access documentary evidence and contacting experts in the field.

If the picture remains unclear or the accounts are conflicting about what is taking place, the Council will also consider making a field visit to get a clearer picture of what is going on. One such visit was undertaken in February 2011 to the Niger Delta, where the Council was assessing environmental damage related to the operations of oil companies in the Fund. During the visit, Council members met and had discussions with the companies' operations personnel, local organizations, affected individuals, government officials, and other actors. The visit helped to put the available information in context, and it provided a clearer understanding of the possibilities and limitations inherent in the region (see Box 12.1).

In a few cases, the lack of information is a real and insurmountable challenge. This is

Box 12.1

Oil Companies in the Niger Delta

In 2012, the Council recommended placing Royal Dutch Shell plc. and Eni Sp.A under observation because of the environmental damage resulting from oil extraction in the Niger Delta, Nigeria. Pollution in the area was extensive, but the Council's assessment showed that the companies' room for action was too limited to conclude that the primary reason for the pollution was a lack of action by the companies. The Council found that the majority of the pollution was due to sabotage by third parties. The Council also found that the ownership arrangement—a joint venture in which the Nigerian state oil company is the majority owner—could be hindering optimal follow-up of problems at the local level. Following the Council's decision, the Ministry of Finance decided that Norges Bank should monitor oil production in the Niger Delta through its exercise of ownership. In its Annual Report for 2013, the Council announced that it would consequently not look into this topic any further (Council on Ethics, 2013b and 2013c).

particularly the case when companies operate or are headquartered in countries without a tradition of openness. In these cases, the company may not wish to respond to the Council's request for information. It may be impossible to approach government authorities to fill in the gaps. In some cases it may be illegal, dangerous, or otherwise impossible for the Council to commission an independent study.

Under these conditions, the Council has to carry out a risk assessment based on available information. Zijin Mining Company (see Box 12.2) was one such case. According to the available information, Zijin had experienced serious, large-scale breaches to its tailings dams in different mining operations in China. In its recommendations to exclude

the company, the Council argued among other things that the lack of information available on the company's operations, including what, if any, measures it had taken to prevent further accidents of this kind, contributed to an increase in the future risk of severe environmental damage (Council on Ethics, 2011).

Not surprisingly then, the availability of accurate information allows the Council to carry out a thorough, inclusive assessment, whereas a lack of information means that the Council has to depend on risk assessments. In some cases, a company's decision to engage with the Council and provide the required information has led to an assessment being dropped or changed from exclusion to observation (Council on Ethics, 2012b).

Box 12.2

Zijin Mining

On June 18, 2011, the Council recommended the exclusion of Zijin Mining Group Co. Ltd. The Council's decision followed a number of serious incidents at the company's facilities over the previous decade, where tailings dams storing waste from mining and mineral processing had collapsed. Despite a lack of publicly available information, it was clear that the incidents had led to extensive environmental damage and loss of life. The Council requested information from the company, including on measures it had taken to reduce the risk of such incidents taking place again. The company did not respond, nor did it comment on the Council's draft recommendation on exclusion.

Based on the scope and severity of previous accidents in combination with the company's unwillingness to provide information, the Council found that there was an unacceptable risk of equivalent incidents taking place in the future and recommended that the company be excluded from the Fund. The company was subsequently excluded on October 14, 2013.

Assessing Companies

The information gathered is used to assess whether or not companies should be recommended for exclusion from the Fund. Although the methodology followed by the Council is roughly the same whether a company is being assessed for complicity in human rights violations or environmental damage, each of the five criteria for exclusion mentioned in the ethical guidelines calls for different considerations (Mestad, 2011).

The Council has established a set of subcriteria to use when assessing companies for exclusion due to severe environmental damage. When assessing a company under this criterion, the Council puts particular emphasis on whether the damage is significant, causes irreversible or long-term effects, or has considerable negative impacts on human life and health; the company has neglected to act to prevent the damage; the damage is a result of violations of national laws or international norms; the company has implemented adequate measures to rectify the damage; and the company's practice is likely to continue.

These subcriteria were first employed in the recommendation concerning the exclusion of Freeport McMoRan Copper and Gold in 2006. The Council carries out an assessment of the overall situation in each case; the decision to recommend exclusion or observation is not dependent on a company meeting each of the listed subcriteria.

With respect to the significance of the damage and its impact (subcriteria 1–3), the Council's recommendations show that each assessment calls for a different approach—

even within the same industry. Companies are different, and in each case the Council bases its assessment on the challenges that the company faces. For the Peruvian mining company, Volcan Compañía Minera SAA, the Council focused primarily on the possible effects ongoing operations were having on the blood lead levels of children who lived in and around the company's operations (see Box 12.3) (Council on Ethics, 2012c). In the case of mining operations taking place in World Heritage sites, the direct effect of the mining operation on human life and health may be less pressing, but the systemic effect on biodiversity may be no less significant.

Terms such as "significant," "irreversible or long-term effects," and "considerable negative impact" are therefore subjectively interpreted by the Council based on the case at hand. The sectors that the Council targets and the rationale underlying their selection nevertheless give an indication of the threshold that the Council envisions (Council on Ethics, 2012c). Although each case is unique, some common denominators exist. For example, the disposal of tailings and the management of acid rock drainage are problems common to all of the mining operations used as examples of environmental assessments in this chapter.⁵

In the Council's experience, companies generally make use of the regulatory leeway that they are given. As a result, certain

⁵ Tailings are the materials left over after the process of separating the valuable fraction from the worthless fraction of an ore (SRK Consulting, 2010).

Box 12.3

Volcan Compañía Minera SAA

On June 21, 2012, the Council recommended the exclusion of the mining company Volcan Compañía Minera SAA due to an unacceptable risk that the company contributed to severe environmental damage.

Volcan operates a lead mine in the Peruvian highlands. The mine is located in the middle of a town that has developed around the existing mining operation. The Council considered that the company's contribution to the extensive lead pollution was causing significant damage to the inhabitants' health, particularly that of children. Even though the damage was also due to historic pollution from the mine's previous owners, the Council found that the company currently operating the mine also bore responsibility for old tailings which it now owned and which continued to release lead pollution into the environment. The Council also found it likely that the current mining operation was increasing the previously existing health burden. In its assessment, the Council emphasized that companies must take particular care in such situations so as to prevent causing further harm to an already challenged population.

activities that are allowed in some countries are considered irresponsible elsewhere. As the fourth subcriterion states, the Council does not apply Norwegian standards when assessing operations abroad but instead looks to national laws and international norms.⁶

⁶ Section 7.2 in the preparatory work for the Ethical Guidelines (Norwegian Ministry of Finance, 2003: 22): "Norwegian environmental, corporate, and occupational safety regulations are more far-reaching than that which could be reasonable, desirable or practical to expect of all companies in [the Fund's] investment universe. Guidelines based on Norwegian regulations would therefore have to be based on a selection of laws seen to reflect particularly fundamental values considered relevant in accordance with the committee's mandate. Using Norwegian regulations as the point of departure can be perceived as an attempt to make our own values become universally applicable."

The Council draws especially on guidelines promulgated by international normative organizations such as the World Bank, the International Finance Corporation (IFC) and the World Health Organization (WHO). Other multinational organizations of this kind include the Organization for Economic Cooperation and Development (OECD), and the UN Human Rights Commission. Table 12.1 summarizes some important guidelines that the Council follows.

Riverine tailings disposal—the use of rivers to permanently dispose of waste rock and overburden from a mine—is one example of how the Council uses international guidelines to establish thresholds for companies in the Fund regardless of national legislation.

Table 12.1**Relevant Guidelines**

Guidelines	Organization
UN Guiding Principles for Businesses and Human Rights	UN Human Rights Commission
Guidelines for Multinational Enterprises	OECD
Environmental Health and Safety Guidelines	World Bank
Performance Standards on Environmental and Social Sustainability	IFC
Sector-specific guidelines, principles, and thresholds	International Labour Organization, International Commission on Mining and Metals, UNESCO, WHO, etc.

Riverine tailings disposal is not illegal in Indonesia, where Freeport McMoRan operates the Grasberg open pit mine. In most other countries, the practice has been phased out due to the severe environmental damage that it entails. In its decision to recommend exclusion of the company, the Council referred to this global development. The Council mentioned the fact that neither the World Bank nor the IFC consider riverine tailings disposal an acceptable practice today. The likely environmental damage of the operation itself was also taken into consideration.

The three final subcriteria concern companies' steps to prevent or repair the damage they have caused. What the company does and does not do forms a central element in the Council's assessment of whether the risk of environmental damage will continue in the future. Among other things the Council considers whether there are clear signs that the company has implemented the necessary changes to avoid

further damage, whether it has plans to improve measures for mitigation of damage, and whether resources have been set aside for remediating existing damage.

The Council's assessment of AngloGold Ashanti's operations in Ghana illustrates these subcriteria. The Council recommended exclusion of this company because of the massive environmental degradation that followed more than 100 years of gold mining (see Box 12.4). Although the company announced several measures that could reduce the environmental impact, the Council did not think it would be possible to bring the damage down to an acceptable level in the foreseeable future. The Ministry of Finance meanwhile decided not to follow the Council's recommendation and to wait and see whether NBIM's ongoing dialogue with the company bore fruit (Government.no, 2013b).

As with the environmental criterion, subcriteria have been established for companies accused of contributing to violations

of human rights and gross corruption (see Table 12.2). *Mutatis mutandis*, the severity of the allegations, the responsibility of the company, and the future risk continue to be basic components in each case.

With regard to human rights, an important development during the last few years has been the increasing acceptance of the United Nation's Guiding Principles for Businesses and Human Rights. The Guiding Principles assert the state's duty to protect human rights and to ensure effective remedies when these are violated. The Guiding Principles also establish that companies have a responsibility to respect human rights, meaning that they should avoid infringing on the rights of others and address adverse impacts with which they are

involved. Among other things, the corporate responsibility to respect human rights implies that companies should identify, prevent, mitigate, and account for adverse human rights impacts and perform human rights due diligence. The process should be ongoing, it should draw on adequate expertise, and it should involve meaningful consultation with stakeholders. Although dependent on the specific risks and nature of the operation, an adequate human rights due diligence process should identify and assess impacts, integrate findings across the company's processes, lead to direct action, monitor the effectiveness of the response, and communicate externally how the business has addressed the impacts (UN Office of the High Commissioner, 2011).

Box 12.4

AngloGold Ashanti Ltd

On June 27, 2012, the Council recommended the exclusion of Anglo Gold Ashanti Ltd. due to extensive arsenic pollution from the company's goldmines in Ghana.

AngloGold Ashanti was established through a merger of several companies in 2004, and it continued the mining operation of one of the merger partners in Ghana. The mining operation had long been the cause of extensive arsenic pollution. The company had plans for several measures to improve conditions over time, but the Council took the view that the damage was so extensive that it was improbable that the suggested measures could sufficiently reduce the risk of severe environmental damage. The Council also believed that the environmental damage could potentially infringe the right to health of the local population.

On October 14, 2013, the Ministry of Finance announced that it would not exclude the company but instead would ask NBIM to engage with the company. The Ministry also decided that it would ask the Council and NBIM to reassess the situation and the company in five years' time (Council on Ethics, 2012d).

Table 12.2**Subcriteria for Investigation of Human Rights and Corruption Violations**

	Human rights	Corruption
Subcriteria	Is there an actual connection between the company's activities and the violations?	Is it probable that the company has carried out activities that may be categorized as gross corruption?
	Are the violations ongoing, or is it likely that rights will be violated in the future?	Is there an unacceptable risk that the corruption will continue in the future?
	Have the company's activities led to extensive and negative consequences for those affected? Are particularly vulnerable groups involved?	Emphasized here are the company's earlier involvement in corruption, its reaction to accusations of corruption, its compliance system, and ongoing investigations.
	What has the company done to improve the situation?	

These principles were later incorporated into the OECD's Guidelines for Multinational Corporations and the IFC Performance Standards, among others. Multinational corporations thus face a set of universally agreed-upon norms. The Council looks to these norms to assess whether companies have done what they can reasonably be expected to do to map the consequences of their operations on human rights and to mitigate the adverse effects they create (Council on Ethics, 2012d).

Closely related to the human rights criterion, the Council assesses companies' responsibility for severe violations of the rights of individuals in situations of war or conflict. Although many of the assessment processes are similar to those already discussed, it could be argued that companies assessed under this criterion may be subject to a different burden of proof for two reasons. First, this criterion comes from international

humanitarian law. Accordingly, there are well-established definitions and case law from which the Council can draw to assess a company's actions. It could also be argued that violations of international humanitarian law are sufficient to qualify for the severity criterion, given the importance attached to them in international society (Council on Ethics, 2009). Second, the Council has sometimes used this criterion when assessing companies operating in regions where ongoing conflict creates unstable and potentially dangerous situations. An example is the Council's assessment of mining companies operating in the Democratic Republic of the Congo. Mineral extraction can sometimes fuel conflict, and the Council considered the extent to which the heightened risk of violence in the region increased the risk of companies being responsible for violating the rights of individuals in and around their area of operations (Council on Ethics, 2010).

The final criterion under which companies can be excluded from the Fund is intentionally worded vaguely in order to apply to other, equally severe cases of corporate irresponsibility. Companies in the Fund may be excluded for “other particularly serious violations of fundamental ethical norms.” Extractive companies excluded from the Fund under this criterion have been excluded because the Council considered that their operations might have been contrary to international law. In the case of Kerr McGee Corporation, for example, the company was excluded because of its activities offshore in Western Sahara, a non-self-governing territory. Morocco exerts *de facto* sovereignty over the territory, but the international community has never recognized this. Thus, the Council found that surveying for the purpose of extracting the territory’s natural resources under Moroccan authority posed an unacceptable risk of violating fundamental ethical norms.

In the same way, the Potash Corporation of Saskatchewan was recommended for exclusion because it was buying phosphates from the Western Sahara on long-term contracts through the Moroccan state-owned company Office Cherifien des Phosphates (OCP). The OCP was extracting the natural resource, but the Council attached particular importance to the fact that the company explicitly requested that the potash be from this particular source—despite the detrimental impact that its extraction has on the interests of the local population (Council on Ethics, undated [a]).

Although it did not lead to any recommendation, the Council used this criterion to assess the activities of oil and gas producers operating in Equatorial Guinea (see Box 12.5). The Council assessed whether companies could be held accountable for extracting the country’s most important natural resources despite being aware of the facts that (i) the president was appropriating the proceeds and (ii) the population’s living conditions were among the worst in the world. In the end, the Council determined that the companies’ responsibility for the situation was not sufficient to warrant exclusion from the Fund.

In summary, the processes followed by the Council when assessing companies under the Fund’s criteria for exclusion are specific to each criterion yet roughly share three things in common: the violations must be severe; the company’s responsibility or complicity, either through action or inaction, must be present; and there must be an unacceptable risk that future violations will occur.

On this last point, it is important to stress that the Council’s recommendations are not intended to punish past behavior. For example, in its 2005 assessment of the French company Total, the Council determined that it was likely that violations of human rights had been committed in the construction of an overland pipeline through Burma and that Total had contributed to the violations through its actions or inactions. The Council also determined that it was likely that companies undertaking large infrastructure projects in the country would contribute

to violations of human rights. In this specific case, however, the Council found that the company had implemented a series of changes to prevent future violations and was not planning to undertake any further

infrastructure developments. Consequently, the Council found that the risk of future violations of human rights was not sufficient to recommend the company's exclusion (Council on Ethics, 2005).

Box 12.5

Oil Companies Operating in Equatorial Guinea

In 2012, the Council decided to assess whether companies producing oil and gas in Equatorial Guinea could be said to have breached basic ethical standards given that the exploitation of natural resources was not benefiting the population at large. The small, oil-rich state has a gross national product comparable to an average European country, yet four-fifths of its 700,000 inhabitants live on less than US\$1 a day.

The Council first assessed allegations of corruption that had been brought against the companies following a 2004 investigation by the United States Senate, but found that the companies had since implemented the necessary measures to limit their exposure to this risk. The Council then considered whether companies could be said to breach the Fund's guidelines by extracting the country's most important natural resource, despite being aware of the fact that (i) the president was appropriating the proceeds and (ii) the population's living conditions were among the worst in the world. The possibility that this could lead to exclusion was assessed under two separate criteria under the guidelines: Contribution to the government's violations of the population's economic and social rights (2.3[a]) and "other particularly serious violations of fundamental ethical norms" (2.3[e]).

The Council concluded that the companies under assessment could not be said to have a significant degree of control over the situation in Equatorial Guinea; their possible contribution to the elite's misappropriation or to the State's breach of norms was therefore deemed insufficient to satisfy the guideline's high threshold for exclusion. Insofar as the companies seemed to have implemented measures to confront the allegations for which they could be held directly responsible, namely corruption, the Council decided not to recommend their exclusion.

The Council nevertheless underlined that companies operating in resource-rich countries with weak governance should have robust systems in place to prevent corruption; publish payments made to authorities, persons, and companies closely connected to the governing elite; and comply with the UN Guiding Principles (Council on Ethics, 2014).

Recommending Exclusion or Observation

Once the Council considers recommending exclusion or observation, a draft recommendation is sent to the company under assessment for comments. In some cases, the company does not wish to submit any comments; a recommendation is then issued to the Ministry of Finance.

In other cases, however, companies decide to engage actively with the Council and a series of exchanges and meetings can ensue. These exchanges can be protracted and may lead to a new round of information gathering and assessments. If there are substantial changes to the recommendation as a result of this process, a new draft recommendation may be sent to the company for comments. If new information indicates that there are no reasons to exclude the company, the Council will not issue a recommendation to the Ministry. As a consequence, information about these cases is not in the public domain.

If and when a recommendation is issued, it is the Ministry of Finance that makes the final decision on whether or not to exclude a company or place it under observation. Although the Ministry generally follows the Council's recommendations, this is not always the case.⁷ Either way, the

⁷ See, for example, the Council's recommendation on PetroChina and the Ministry of Finance's decision not to exclude the company (Council on Ethics, 2012f).

Council's recommendations are generally made public once the Ministry makes a decision.⁸

Companies are excluded from the Fund because there is an unacceptable risk of their violating the Fund's investment criteria. Once the Council determines that this risk is no longer present, it will recommend that a company again be accepted in the Fund. For example, once it became clear that Kerr McGee did not intend to continue its operations in the Western Sahara, the Council recommended that the company be reinstated in the Fund's investment universe. This was also the case when FMC Corporation informed the Council that it would no longer purchase phosphates from the Western Sahara. A corollary to this principle is that companies will not be reinstated as long as the practice for which they were excluded continues. Thus, a company like Rio Tinto, generally considered to be a mining company that takes its environmental and social responsibilities seriously, should not expect to be reinstated as long as it continues to employ riverine tailings disposal in its operations in Indonesia.

⁸ The only exception to this rule entertained by the ethical guidelines is if the Ministry of Finance decides to place a company under observation and "special circumstances warrant that the decision be known only to Norges Bank and the Council on Ethics" (Section 3(2) in the Ethical Guidelines) (Government.no, 2013a).

How Does the Threat of Exclusion Affect Company Behavior?

It is generally accepted that there is a need for more research on the effect of exclusion on company behavior.⁹ Anecdotal evidence from the Council's activities shows that there may be some effects on individual companies, but more research is needed before any authoritative conclusions may be drawn on the subject.

The Council's primary goal when engaging in a dialogue with a company is ensuring that it has accurate and up-to-date information to use to draw a conclusion on whether or not to recommend exclusion or observation. Exercising active ownership strategies is NBIM's responsibility—not the Council's.

Notwithstanding this strict interpretation of the mandate, the forward-looking nature of the guidelines means that the Council can decide to stay a recommendation if the company under assessment implements sufficient measures to offset or limit the future risk of violating them. This gives companies under assessment an incentive to change their conduct and implement measures to reduce their chances of being excluded. For example, during the course of the assessment of oil companies

operating in Equatorial Guinea, one of the companies under assessment informed the Council that—as a direct result of its dialogue with the Council—it had decided to carry out a social due diligence process of its operations in the country in line with the UN's Guiding Principles. Even though the final decision was based on other considerations, the Council favorably received this decision by the company in question (Council on Ethics, 2014).

Another way in which the threat of exclusion can be said to affect corporate behavior is the decision by some companies to approach the Council ahead of embarking on an operation that has previously led to exclusion of companies from the Fund. Thus, a number of companies have requested meetings with members of the Council or the Secretariat in order to better understand the reasons why companies operating in certain countries or regions, such as Western Sahara, Myanmar, Equatorial Guinea, and others, have been under assessment by the Council. In these cases, the Council explains the elements underlying the Council's assessment and its reasons for exclusion or otherwise. Companies can then use this information to assess the conditions under which they would be willing to approach an operation, and the measures they would have to implement to reduce the risk of exclusion.

A third way that the threat of exclusion can change corporate action is the decision to place a company under observation. The Council does not undertake an assessment with the aim of recommending observation,

⁹ This was one of the conclusions of the Strategy Council, which assessed the Government Pension Fund Global's work with Responsible Investment and presented its conclusions on November 11, 2013. The vast majority of the organizations that participated in the ensuing hearing agreed on the importance of promoting additional research on the subject (Strategy Council, 2013).

choosing instead to focus its efforts on excluding companies that meet the Fund's criteria for exclusion. Nevertheless, in some cases the Council has recommended the observation of companies, especially if future development is difficult to ascertain.¹⁰ In other cases, on the basis of a recommendation by the Council, the Ministry of Finance has decided to instruct NBIM to focus its engagement efforts on a particular company or problem and asked the Council on Ethics to revisit the problem in question after a given amount of time. The goal of this exercise is to use NBIM's engagement and the threat of future exclusion to encourage the company to implement the necessary changes or remedies (Government.no, 2013b).

A final way in which the threat of exclusion can change corporate action is the decision by some companies to cease the activity that led to their exclusion in the first place.¹¹ The Council on Ethics reassesses excluded companies on a yearly basis to

determine whether the reasons for exclusion remain. If they no longer exist, the Council will recommend repealing the exclusion of the company in question.

Lessons Learned

After a decade of assessments, what lessons can be drawn from the experience of the Council on Ethics? One thing that has come into focus is that each company under assessment is a universe unto itself. Concentrating on developments on the ground rather than on company policies more broadly means that the Council's methodology must be flexible enough to allow it to form an opinion on everything from lead poisoning among children in the Peruvian highlands to indigenous peoples' rights in India. The fact that the Council on Ethics is an expert council is definitely a strength in this regard. The Council's members are appointed based on their individual qualities and currently include a freshwater biologist, a corporate lawyer, and an expert in corporate social responsibility. Moreover, the Council receives help from a secretariat of nine employees with diverse backgrounds who conduct much of the research and analysis on the Council's behalf. The Council is also relatively well funded, with an annual budget of approximately NOK 13 million. In short, exclusion, if it is to be based on an evaluation of a company's actual conduct, requires a heavy investment in expertise, time, and resources. Funds considering similar systems would do well to take this into account.

¹⁰ See, for example, the aforementioned decision to recommend the observation of Shell and Eni in 2012.

¹¹ See, for example, the article published on March 13, 2014, on the decision by Repsol to sell its stake in a territory in the Peruvian Amazon where there are thought to be indigenous people living. According to the article's author, the Council on Ethics issued two recommendations to the Ministry of Finance excluding the company on the grounds that it contributed to human rights violations through its activities in the area. According to the article's author, this may have encouraged the company to sell its stake in the lot in question. It is worth stressing that no recommendation has been made public on the subject as of the date of the writing of this chapter (Hill, 2014).

Expertise notwithstanding, an assessment will always be constrained by the amount of information available. Access to information largely determines whether the Council's decisions are the result of a fact-based decision-making process or a risk assessment. Although the Council strives to be equally thorough and rigorous in both cases, it is clearly in the best interest of responsible companies to ensure that information is readily available and engage with the Council to provide this information when requested to do so. Companies should keep in mind that most of the cases assessed by the Council do not result in exclusion.

A third, rather unfortunate lesson learned over the last ten years is that although most companies talk the talk, when it comes down to making the difficult decisions companies prove less willing to walk the walk. One of the advantages of carrying out in-depth, site-specific analysis is that the Council can look beyond the glossy corporate reports to see what effects companies' activities are actually having on the ground. Often, what a company fails to communicate or fails to do is more important than what it claims to be doing. For policymakers, the implication may be that voluntary reporting will not always be an adequate substitute for rigorous third-party monitoring systems. For their part, companies should take note of this, and implement their commitments and policies in their day-to-day decisions.

A corollary of this lesson is that companies generally operate within the regulatory

space that they are allotted. Violations of the Fund's ethical guidelines are generally a result of a company taking advantage of existing governance gaps or even implementation of government policy. Although this is not unique to the extractive industries, the fact that they are more likely to be present in regions of weak governance brings the problem to the forefront. With only a few exceptions, the Council's assessments generally concern companies that follow the minimum requirements of the law in the country or region in which they operate or, alternatively, are given exemptions from the law in order to carry out their business. With companies that are accused of complicity in human rights violations, the government's responsibility is more pronounced, since governments, rather than corporations, are responsible under international law for safeguarding the rights of individuals.

WHAT IMPLICATIONS SHOULD THIS HAVE FOR COMPANIES, POLICYMAKERS, INVESTORS, AND OTHER STAKEHOLDERS?

Policymakers wishing to provide a stable environment for extractive industries should not equate "business friendly" with slack regulations or the disenfranchisement of noncorporate stakeholders. In the Council's experience, the roots of the many social conflicts associated with mining projects

in much of Latin America may in large part be traced to these two attitudes. Requiring thorough, rigorous impact assessments; engaging local stakeholders; ensuring the accountability of local politicians; putting in place a coherent, robust regulatory framework that adequately takes into account the specific social and environmental risks of a given project—these are but some of the elements that, in the Council’s experience, may help to ensure sustainable extractive industries.

Wherever governments are unwilling or unable to provide the necessary conditions for responsible business practices in extractive industries, investors and other stakeholders have an important role to play in setting distinct, minimum standards of conduct. Initiatives such as the Extractive Industries Transparency Initiative (EITI) can help reduce the risk for individual companies operating in corruption-prone regimes. Strong position statements by industry bodies, like the International Council on Mining and Metals’ (ICMM) decision to stay

away from World Heritage sites, set a precedent that investors can look to in evaluating corporate practices against minimum industry standards.

Finally, the Council’s experience during the last decade should convince responsible companies to look beyond the law’s minimum requirements in the jurisdictions in which they operate. The globalization of information makes it possible for the Council and other bodies to scrutinize company operations in the most recondite corners of the world, from the Amazonian rainforest to a remote island in the Pacific Ocean. Complying with internationally accepted norms, actively engaging with stakeholders in a meaningful manner, carrying out thorough environmental and social impact assessments—even when not required to do so—and confronting challenges in an open, proactive manner, are all measures which companies can carry out to reduce the risk of operating in an irresponsible manner.

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CHAPTER 13

Final Remarks

JUAN CRUZ VIEYRA AND MALAIKA MASSON

This book illustrates how transparency can help realize the benefits of the extractive industries and reduce negative externalities in the Latin American and Caribbean (LAC) region. The insights from experiences in the region can help policymakers as they consider how to design and implement effective regulatory reforms and adopt international standards that contribute to this goal. This is particularly important at a time when the recent boom experienced by the extractive sector in the region may be coming to an end.

One of the main conclusions is that extractive revenues can help countries foster inclusive economic development, provided that checks and balances are implemented and that political economy factors and the needs of local communities are taken into account. Any substantial progress in the area of transparency in the extractive industries requires strong political will and unrelenting efforts by multiple stakeholders, as well as adaptation to constantly changing circumstances. The individual chapters show that, to realize the benefits of extractives, persistence, openness, and flexibility are required from all actors.

Effective governance of the extractive industries requires tackling complex policy design and implementation challenges across multiple sectors, such as water and sanitation, infrastructure, environment, and social protection. The ability of the governments to efficiently manage the sector depends on the institutional capacity of public sector institutions. The cases presented in this book focus on policy innovations (Chapter 5), contracts and licensing (Chapters 6 and 7), regulatory oversight (Chapter 8), fiscal policy and institutions (Chapters 10 and 11), and ethical investment (Chapter 12).

At the heart of good governance is the fundamental question of how to address capacity constraints. Shortfalls and gaps in financial, human, and technical resources hinder governments' ability to adequately enforce regulation. A key task for multi-lateral development organizations, such as the Inter-American Development Bank (IDB), is to tailor technical assistance to its member countries and to continue exploring new approaches to improve the quality of governance in the region.

Subnational governments are especially vulnerable to capacity challenges. While their institutional capacity, including revenue management, is often lower than the capacity at the national level, subnational governments have the primary responsibility for handling social and environmental conflicts. These are numerous and costly. In late 2013, the Latin American Observatory of Mining Conflicts (OCMAL), a network of civil society organizations that records large-scale metal mining conflicts, reported that there were at least 198 active conflicts affecting 297 communities throughout the LAC region. A study published in the Proceedings of the National Academy of Sciences (PNAS) found that delays caused by these conflicts can result in costs of around US\$20 million per week for mining projects valued at between US\$3 and US\$5 billion (Franks et al., 2014). Perhaps more importantly, these conflicts signal the profound and negative impacts that the extractive sector can have on the environment, cultural practices, and established

local economic activities. They demonstrate that the failure to live up to citizens' expectations is proving increasingly costly both in economic and political terms for investors and governments.

The low capacity of subnational governments also affects the efficiency of planning and spending revenues. In Peru, for example, the Minister of Finance estimated that, in 2012, local governments had access to approximately US\$3.5 billion in unspent natural resource revenues ("Regiones de Perú," 2012). Those funds could help finance, for example, the construction of more than a hundred water treatment plants for mid-sized cities.

The experiences presented in this book suggest that transparency can help address some of the problems stemming from low capacity. Transparency can increase government efficiency, prevent corruption, and contribute to transforming the relationship between governments and citizens. By imposing deadlines and quality standards for information disclosure, transparency policies help foster an open government environment. As stakeholders are provided with new channels to provide input and help shape public decisions, they can more easily access information to analyze government operations and, more importantly, do something about what they learn. Transparency policies and processes also contribute to better inter-agency coordination and improved investment plans. In turn, these can improve revenue management. Finally, transparency initiatives can

enable investment, catalyze the emergence and consolidation of better institutions, and build trust among stakeholders. In other words, transparency can support all the strategic pillars of the extractive sector.

As efforts to strengthen transparency and information management increase in the LAC region, three challenges emerge. First, new transparency tools put to the test the ability of the public sector to make data accessible in a timely fashion and in a user-friendly format. To be actionable and thus to contribute to enhanced governance, information must be produced in a machine-readable format that can be adapted to and fed into a wide variety of current and future analytical tools. The second challenge is related to access. The platforms used for the dissemination of information are just as important as the information itself, and must be easily accessible. The last challenge is related to governments' ability to be creative in soliciting feedback from citizens on the available data.

The LAC region has already witnessed the transformative power of transparency and improved information disclosure in the governance of the extractive industries. Targeted transparency policies and new technologies are improving government efficiency in the region; they are empowering stakeholders in the extractive sector and making those in government more accountable. In Colombia, for example, the IDB has backed the government's implementation of a software visualization tool called MapaRegalías (see Chapter 9), which

makes it possible to trace royalties from the source to the outcome. This tool directly informs citizens about natural resources revenue; the budget allocated to investments; the projects approved by the municipality, department, and region; and the progress of these projects. The result is an innovative interaction between the government and civil society, easier access to public information, and greater citizen participation in monitoring public investment decisions. Another example is found in Trinidad and Tobago, where confidentiality regulations have been overcome, resulting in meaningful progress toward the adoption of the EITI.

The book also suggests that not all transparency initiatives are equally effective in improving governance. While transparency plays a pivotal role in shaping economic, social, and environmental performance in the extractive sector, it is important to stress that there is not one particular formula that can be applied to all cases, and that transparency initiatives need to take into account local conditions.

THE WAY FORWARD

Following a decade of abundance, the LAC region is now at a crossroads. The favorable conditions that propelled growth in the extractive sector during the past decade seem to be deteriorating. The slower pace of the Chinese economy and market concerns in Europe, Japan, and the United States are negatively affecting commodity prices. The

cost of doing business in the extractive sector is increasing, mainly due to the social license to operate near local communities, the declining quality of mineral ores, higher energy prices, and the need to explore remote areas lacking adequate infrastructure and skilled workforce. A 2012 mining industry study by SNL Financial (2012) signals that the average capital costs for copper production capacity in new mines increased an average of 15 percent per year over the past 20 years—capital costs for copper mining are 16 times what they were two decades ago.

At the same time, the discovery of sizable reserves of unconventional oil and gas resources suggest that the region may be on the verge of another boom in the extractive sector. The U.S. Energy Information Agency (2013) estimates that technically recoverable reserves in South American countries exceed 700 trillion cubic feet. The same agency reports that, in Argentina, the Vaca Muerta field in the province of Neuquén holds an estimated 16.2 billion barrels of shale oil and 308 trillion cubic feet of shale gas. According to *The Economist* (“Dead-cow Bounce,” 2014), that is enough to satisfy Argentina’s current energy demand for over 150 years. For these resources to be exploited, governments will have to attract sufficient capital to scale up the industry and transfer necessary technical knowledge

to the local workforce. Exploiting shale resources will likely require price incentives and new policy and institutional frameworks, as well as obtaining new SLOs.

In this environment of new challenges and opportunities, countries are actively looking for promising approaches and innovations. Several LAC countries are currently considering policy shifts and major reforms to oil, gas, and mining regulatory frameworks. The governments of Brazil, Chile, Colombia, and Peru, for example, are working toward reforming the extractives institutions. Brazil and Colombia are also revising their mining codes, and the Central American countries and Uruguay have started reforming their mining, oil, and gas laws (Cereceda, 2013; Oxford Analytica, 2012; Superneau, 2013; TI and RWI, 2011).

Transparency is expected to play an even more pivotal role over the next few decades. As evidenced in this book, an array of financial, technological, and institutional frameworks and tools are available for policymakers as they work toward strengthening the quality of governance in the extractive sector. These instruments can help establish a stable investment climate, sound legal and regulatory conditions, and effective frameworks for the extraction and investment of taxes and royalties. They can also mitigate social conflict and ensure that extractive revenues are used in a way that benefits all citizens.

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During the last decade, the Latin American and Caribbean region has experienced unprecedented natural resources abundance. This book highlights how transparency can help realize the benefits and reduce negative externalities associated with the extractive industries in the region. A central message is that high-quality and well-managed information is critical to ensure the transparent and effective governance of the sector. The insights from experiences in the region can help policymakers design and implement effective regulatory reforms and adopt international standards that contribute to this goal. This is particularly important at a time when the recent boom experienced by extractives in the region may be coming to an end.

This book is a valuable contribution to the debate about the policies and mechanisms that are available to promote transparency in the governance of the extractive industries.

Eleodoro Mayorga Alba

*Minister of Energy and Mines
Government of Peru*

This book makes an important and timely contribution to our understanding of how natural resource abundance can translate into sustained growth and inclusive development.

Børge Brende

*Minister of Foreign Affairs
Government of Norway*

In this valuable publication, the IDB brings to the forefront the enormous importance of the transparency with which all actors in the extractive industries should operate.

Amylkar Acosta Medina

*Former Minister of Mines and Energy
Government of Colombia*

Civil society struggles to ensure good governance, including appropriate checks and balances and citizen participation at all levels. For this, citizens must have access to updated and reliable information. This volume contributes to the debate on this urgent and complex topic.

Carlos Monge

*Regional Coordinator for Latin America
Natural Resource Governance Institute*

The Government of Trinidad and Tobago congratulates the IDB for providing an avenue to share experiences in enhancing transparency in the extractive sector.

Kevin Ramnarine

*Minister of Energy and Energy Affairs
Government of Trinidad and Tobago*

The World Bank applauds the IDB for highlighting the importance of improving the quality of extractive governance — an increasingly pressing issue for countries in Latin America and the Caribbean, and a core component of our agenda.

Paulo De Sa

*Manager
Oil, Gas, and Mining Unit
Sustainable Energy Department
The World Bank Group*

This book conveys a message that strongly resonates with the vision of the EITI Secretariat, which is that systematic information disclosure can contribute to enhancing accountability and efficiency in extractive revenue management for the benefit of all stakeholders.

Clare Short

*Chairwoman
Extractive Industries Transparency Initiative (EITI)*

