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ECUADOR: FISCAL STABILIZATION FUNDS AND PROSPECTS

BY

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Abstract

Amongst a favorable economic environment, Ecuador's exceptional oil revenues have bolstered fiscal accounts. Several legal changes have created or modified funds or accounts aimed at saving, earmarking, or using oil-related revenues. This paper discusses oil-related fiscal policies, stabilization funds, and options in Ecuador. It reviews existing schemes, describes fiscal trends and underlying vulnerabilities, and offers trends and prospects for the oil-related funds and fiscal accounts. Assessing the weaknesses of the fiscal stabilization framework, it offers suggestions for improving efficiency in the use of exceptional fiscal revenues. It calls for enforceable fiscal responsibility rules, an enhanced accountability for oil revenues and the budget process, market mechanisms to hedge against oil price volatility, and a strengthened planning and prioritization of public investment.

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ECUADOR: FISCAL STABILIZATION FUNDS AND PROSPECTS¹

I. INTRODUCTION

Ecuador has benefited in recent years from exceptional revenues arising from high oil prices and a favorable economic environment. This has allowed the country to post better than usual fiscal results, reduce public debt as a percentage of gross domestic product (GDP), and boost public spending. Meanwhile, Ecuador adopted a formal dollarization scheme in January 2000. In this context, as argued by Rigobón (2006), fiscal policy as an economic stabilization instrument has become even more critical in a country that has lost most margins of maneuver regarding monetary policy.

Over the past five years, several funds or accounts have been created with the aim of saving, earmarking, or using oil-related and exceptional fiscal revenues for specific purposes. Several legal reforms have subsequently modified some of such funds or created new ones. Furthermore, the legal framework is rather cumbersome regarding the distribution and earmarking of oil and tax revenues, creating large rigidities in fiscal management.

This paper discusses oil-related fiscal policies, stabilization funds, and options in Ecuador. Section II summarizes the current fiscal stabilization funds or schemes and their development and legal framework. Section III describes the fiscal trends in the country, the underlying vulnerabilities in connection with oil-related revenues, and trends and prospects for the oil-related funds and fiscal accounts. Finally, Section IV discusses the weaknesses of the current fiscal stabilization framework and oil-related funds. It offers some suggestions for improving efficiency in the use of exceptional fiscal revenues, in light of existing schemes in other countries and considerations of Ecuador's political economy.

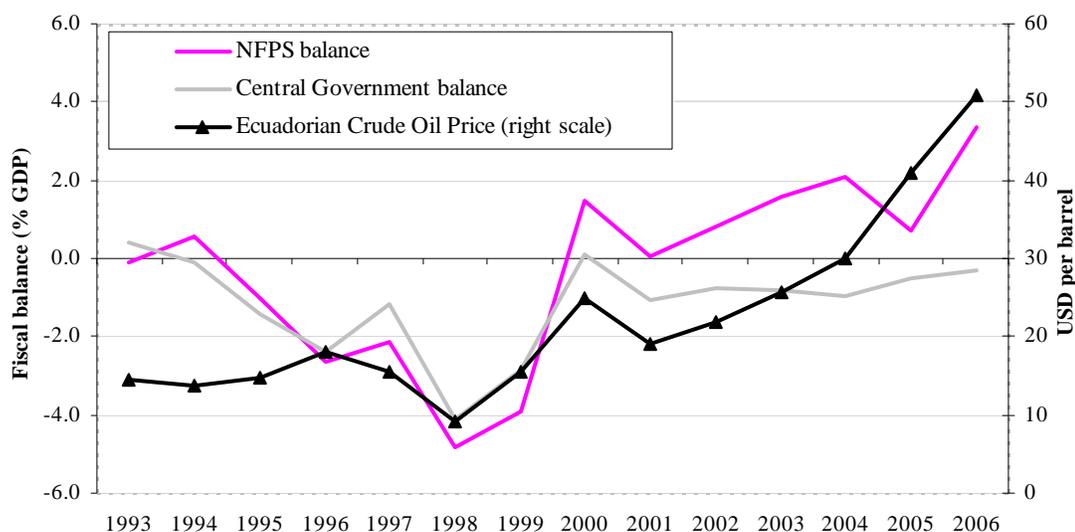
¹ This paper summarizes the situation as of March 2007, when it was prepared. Subsequently, on April 2, 2008, Ecuador's Constituent Assembly approved a law, called *Ley Orgánica para la Recuperación del uso de los Recursos Petroleros del Estado y Racionalización Administrativa de los Procesos de Endeudamiento*. The approved bill transfers all current and future resources from the oil funds discussed below (FEP and CEREPS) to the General Budget. The law also replaces the existing fiscal rules with the sole rule that current spending cannot be financed with revenues arising from public debt operations or oil exports.

II. FISCAL STABILIZATION FUNDS

Ecuador faced a severe macroeconomic and financial crisis in the late 1990s. Among several other causes, low international oil prices were an important factor behind the worsening of the fiscal accounts. Ecuadorian crude oil prices reached their lowest level in 1998 (US\$9.2 per barrel annual average) and only recovered significantly in 2000. Following a decline in 2001, oil prices have since markedly recovered, reaching US\$50.7 per barrel on average in 2006 (see Figure 1).

The recovery of oil prices, combined with a favorable international environment and growth results, have helped to boost the fiscal accounts. The non-financial public sector (NFPS) balance, which posted large deficits in 1998 and 1999 (at 4.8 and 3.9 percent of GDP, respectively), has been in surplus for seven years in a row since 2000. Meanwhile, the central government balance has also posted improved balances since 2000, with moderate deficits in the range of 0 to 1 percent of GDP.

Figure 1. Ecuador – Oil Prices and Fiscal Balance



Source: Petroecuador and Central Bank of Ecuador.

The improved fiscal conditions, combined with some enhanced awareness of the importance of fiscal stability following the 1998-99 crisis, have led to the creation of several oil-related fiscal funds since 2000.

These funds include the Oil Stabilization Fund (*Fondo de Estabilización Petrolera*, FEP); the Stabilization Fund for Investment and Debt Reduction (*Fondo de Estabilización, Inversión Social y Productiva y Reducción del Endeudamiento Público*, FEIREP), subsequently replaced by the Special Account for Economic Reactivation (*Cuenta Especial de la Reactivación Productiva y Social, del Desarrollo Científico-Tecnológico y de la Estabilización Fiscal*, CEREPS); the Savings and Contingency Fund (*Fondo de Ahorro y Contingencias*, FAC); and the Energy and Hydrocarbon Investment Fund (*Fondo Ecuatoriano de Inversión en los Sectores Energéticos e Hidrocarburíferos*, FEISEH). This section reviews several aspects of the different funds, including legal issues, interrelations, and changes since their creation, as well as the legal framework for the distribution, earmarking, and accounting of oil-related revenues in Ecuador.

II.1. The Oil Stabilization Fund

The Oil Stabilization Fund (FEP) was created through an omnibus bill on economic issues,² which was approved in March 2000. The bill was intended to boost the prospects for successful implementation of dollarization, which had been adopted two months earlier. The bill earmarks oil revenues above those initially included in the annual general budget for several purposes: (i) 45 percent goes to FEP; (ii) 35 percent for a special fund to build and maintain a road in the Amazonian oil-producing areas (the *Troncal Amazónica*), including through domestic and foreign credits to be collateralized with such fund; (iii) 10 percent to finance the national counterpart for development projects for the border provinces of Esmeraldas, Loja, Carchi, El Oro, and Galápagos; and (iv) 10 percent for capital spending for the police, to be used for equipment and institutional strengthening (of which at least half should be spent in the oil-producing regions) for five years through 2005. After that date, half of the corresponding funds were to be used for FEP and the other half for the *Troncal Amazónica*.

² The bill, called *Ley para la Transformación Económica del Ecuador*, was published in the Ecuadorian Official Registry on March 13, 2000. Regarding oil revenues, the law, in turn, modifies another law, the *Ley Para la Reforma de las Finanzas Publicas*, published in the Ecuadorian Official Registry on April 30, 1999.

In addition, non-oil revenues in excess of the budgeted levels also go to FEP. FEP can be used for liability-management operations and, for amounts up to half its stock, for spending related to emergency situations.

Initially, the earmarking system involved a formal transfer throughout the year of the funds related to the *Troncal Amazónica* to a special account. The other two uses of the funds (border provinces and police) were channeled through the budget. Subsequently, the legal reforms creating FEIREP and then CEREPS (see below), as well as a legal opinion issued by the General Prosecutor in 2002, have modified the way in which FEP operates. Under these new procedures, a “FEP to be liquidated” account is provisioned throughout the year, and funds can be withdrawn by the Treasury as advances over the end-year liquidation.³ Once the fiscal year is closed, the account is liquidated—taking into consideration actual oil revenues, including oil exports and domestic sales of oil derivatives—among its beneficiaries, with the same shares explained below, except that the 45 percent now funds CEREPS (see below).

An important consideration regarding the functioning of FEP is related to the large subsidies for oil derivative products in Ecuador. Consumer prices for most oil derivative products (including regular gasoline, diesel, and liquefied petroleum gas (LPG) cooking gas) have been frozen since January 2003 at prices well below international market levels. As a result, these subsidies have represented a growing cost for the state, through booming oil derivative import costs. Thus, the budget revenues expected from the sale of oil derivative products have not materialized. Instead, in 2006, Petroecuador incurred import costs larger than the expected revenues, thus implying the need for the Treasury to repay such costs. The related expenditures can be imputed to FEP (because they represent a reduction in oil revenues, thus reducing the amount of FEP’s liquidation) or to FAC (see below). In 2006, for example, although the liquidation process was still ongoing, it seemed highly probable that the total amount of FEP income from other sources would not be enough to compensate for the costs of subsidies, which led to the need to use part of FAC for that purpose.

³ Specifically, the FEP-to-be-liquidated account receives the equivalent of the number of oil barrels produced multiplied by the difference between the actual oil prices minus the budgeted oil prices as a provision. Depending on several factors—including the volume and price of oil and related products, the domestic demand for oil derivatives, and accrued obligations between Petroecuador and other institutions regarding oil-related transactions—the system can imply an over or under-provisioning over time. Throughout the year, funds may also be withdrawn from the account by the Ministry of Finance to cover expenses. The year-end liquidation will help in netting out all these movements and may result in some liabilities between FEP and the Treasury, which can be compensated in the subsequent budget exercise.

II.2. The Stabilization Fund for Social and Productive Investment and Debt Reduction

Introduced by the Fiscal Responsibility Law in June 2002,⁴ the Stabilization Fund for Social and Productive Investment and Debt Reduction (FEIREP) was created as a special trust fund, managed by the Central Bank. FEIREP collects the state revenues arising from heavy crude oil production (i.e., the crude oil transported through the Heavy Crude Oil Pipeline, OCP, operating since late 2003), 45 percent of oil revenues above those initially included in the annual general budget—the share that was previously earmarked for FEP— as well as any year-end central government fiscal surplus and the fund’s investment revenues.

The FEIREP funds—to be registered in the budget but not to be considered current revenues, thus avoiding some earmarking—were expected to be used according to the following breakdown: (i) 70 percent for debt-buyback operations and debt payments to the Social Security Agency; (ii) 20 percent to stabilize oil revenues and for emergency spending, particularly for natural disasters, with a 2.5 percent of GDP ceiling for the stabilization fund; and (iii) 10 percent for education and health spending. In any case, the FEIREP funds could not be used for current spending.

II.3. The Special Account for Social and Productive Investment, Scientific Development, and Fiscal Stabilization

Three years after its creation, FEIREP was replaced in July 2005 by the Special Account for Social and Productive Investment, Scientific Development, and Fiscal Stabilization (CEREPS).⁵ The political argument behind the change was the need to direct a larger share of oil funds to social investments instead of debt repayments.

CEREPS was created as a special and separate account in the budget (not as a trust fund).⁶ It receives revenues from several sources, mostly those that previously went to FEIREP: state revenues arising from heavy crude oil production (i.e., oil with a density below 23 degrees

⁴ See the third title of the original version of the *Ley Orgánica de Responsabilidad, Estabilización y Transparencia Fiscal*, published in the Ecuadorian Official Registry on June 4, 2002.

⁵ See the reforms to the *Ley Orgánica de Responsabilidad, Estabilización y Transparencia Fiscal*, published in the Ecuadorian Official Registry on July 27, 2005.

⁶ See section III.2 for a more detailed discussion of the practical differences between a trust fund and a separate budget account.

for API gravity); 45 percent of oil revenues above those initially included in the annual general budget—after deductions for earmarked revenues directed by law to regional funds—as well as any year-end central government fiscal surplus; the closing balance of FEIREP; and the account’s investment revenues.

The CEREPS funds are prohibited from use for current spending, and are to be distributed as follows:

(i) 35 percent for four alternative uses: (a) credit lines at below-market interest rates to finance productive projects for agriculture, industry, fishing, small business, and micro enterprises, through first and second-tier operations by two state-controlled development banks (the *Corporación Financiera Nacional*, CFN, and the *Banco Nacional de Fomento*, BNF), with some constraints related to the beneficiaries’ creditworthiness; (b) the payment of longstanding debts to the Social Security Agency; (c) debt buyback operations on domestic and foreign public debt, with the understanding that the new funds released through these buybacks should be used for infrastructure investments, credits to the productive sector, and education, health, and housing; and (d) infrastructure projects aimed at enhancing competitiveness and productivity (with a ceiling of 10 percent of the total funds earmarked for this item).

(ii) 30 percent for social investment projects, half in education and culture, and half in health and sanitation, both within the priorities of the Social Development Plan.

(iii) 5 percent for research and development, in the form of research and technological projects through several specialized agencies and universities.

(iv) 5 percent for road improvement and maintenance, through the Public Works Ministry.

(v) 5 percent for environment and social projects to address negative externalities from hydrocarbons and state-controlled mining activities.

(vi) 20 percent to stabilize oil revenues and address emergency situations.

II.4. The Fund for Savings and Contingencies

The law creating CEREPS also set up the Fund for Savings and Contingencies (FAC) as a trust fund collecting the funds for stabilizing oil revenues. The trust fund is to be managed by the Central Bank, and its resources can only be used for revenue stabilization and emergency spending. The fund has a ceiling of 2.5 percent of GDP for the relevant cumulative funds. In addition, all funds unused by year-end from CEREPS are automatically transferred to FAC.

The FAC funds can be used to compensate any shortfall in budgeted oil revenues, for example as a result of declining international oil prices or smaller than expected production volumes. FAC can also be used for emergency spending, which has a rather lax definition. According to the Constitution, the President can declare an emergency state in part or all of the country, in case of an imminent external attack, war, natural disaster, or an acute internal upheaval. The emergency could affect some or all activities. The President must notify Congress of the state of emergency within 48 hours, and Congress can potentially revoke it. The state of emergency can last up to 60 days, and can subsequently be renewed or revoked.

In practice, successive governments have used the state of emergency rather liberally. In recent years, and even more often in recent months, several decrees have declared an emergency in a wide array of sectors—electricity, jails, education, health, national roads, areas affected by a volcanic eruption, and the police—paving the way for channeling FAC (and potentially FEP and CEREPS) resources to finance spending in all those sectors. As a result, the initial FAC objective of being a genuine mechanism for stabilizing oil revenues and facing natural disasters has been largely diverted.

II.5. The Energy and Hydrocarbon Investment Fund

The Energy and Hydrocarbon Investment Fund (FEISEH) is the most recent oil-related fund. It was created through a special law approved after the authorities decided in May 2006 to rescind the existing oil exploration contract with U.S.-based Occidental Petroleum Co. (Oxy), following alleged breaches of the company's contractual obligations.⁷ The law, approved in

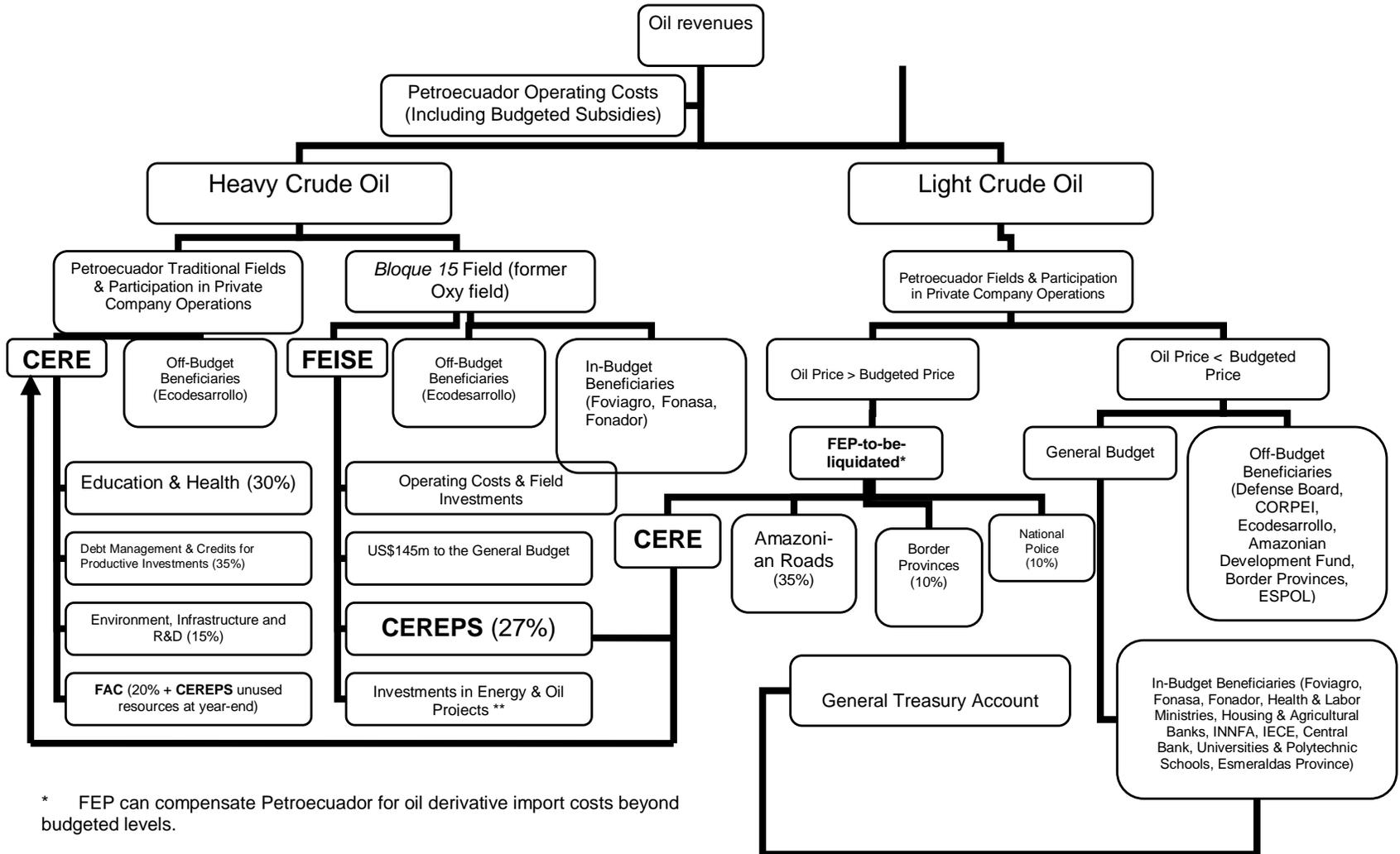
⁷ The alleged breaches of Oxy's contractual obligations involved the transfer of 40 percent of its holdings in the country to Canada's ENCANA without previous authorization. The decision meant that Oxy was legally obligated to return to the state its oil production field (known as "*Bloque 15*") and related assets with no compensation. Subsequently, Oxy—until then the largest private oil producer in Ecuador, producing more than 100,000 barrels per

October 2006, channels to the FEISEH trust fund, administered by the Central Bank, all net oil revenues arising from the exploitation of the former Oxy's fields—whether the production is used for crude oil exports or any alternative use and for any kind of exploitation options—and from the trust fund's investment income. The fund's resources, which will not flow through the FEP-CEREPS framework except for a specific provision, are earmarked for four uses:

- (i) CEREPS, 27 percent, in order to compensate it for the lost revenues it would have received if Oxy had continued to operate the *Bloque 15* field.
- (ii) Reimbursement of Petroecuador's operational and investment costs related to *Bloque 15* fields.
- (iii) Annual transfers to the budget for US\$145m, to compensate for the loss of the income tax previously paid by Oxy. This transfer is, in turn, subject to partial earmarking to other entities, such as universities, in line with other laws.
- (iv) Investment projects in the electricity and hydrocarbon sectors. FEISEH is to be used to finance hydroelectric and alternative energy projects providing 2,300 MW in additional electricity generation capacity, as well as to expand existing oil and gas refining capacity (with the aim of processing all Petroecuador's production except that arising from the *Bloque 15* field), to expand and enhance oil derivatives and light crude oil pipelines, and to build LPG storage infrastructure. Once these objectives are met (with no specific preexisting ceiling), these funds should be channeled to FAC.
- (v) The trust fund's operating costs and audit and overseeing costs for energy and hydrocarbon investments.
- (vi) A one-time US\$70m allocation for microcredit financing or guarantees through state development banks (CFN and BNF).

day— presented a demand against Ecuador before the World Bank-affiliated International Center for Settlement of Investment Disputes (ICSID) through an international arbitration procedure. The Ecuadorian authorities' position is that Oxy failed to comply with Ecuadorian laws and its own contract, which explicitly give the state the right to rescind the contract in case of a sale of assets without prior authorization. Thus, they argue that the decision is a matter of national jurisdiction that should not be taken to international arbitration. While the process is ongoing, no proviso is included in FEISEH to cover potential legal liabilities.

Figure 2. Ecuador – The Use of Oil Revenues



II.6. Other Earmarking of Oil Revenues

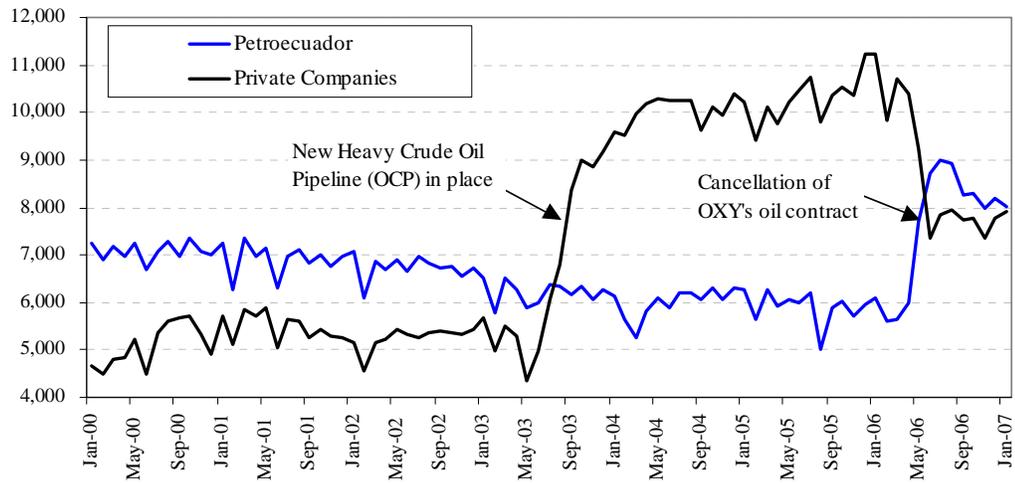
In addition to the funds reviewed in the previous sections, Ecuador's oil revenues are subject to a number of legally mandated earmarking provisions. As presented in Figure 2, oil proceeds are thus subject to a highly complex system of distribution, including the oil funds detailed above.

Petroecuador's Operating Costs

Oil revenues are used to compensate Petroecuador for its operating costs. However, a few important caveats apply:

- The financing of Petroecuador's new investments is subject to political considerations and arbitration by the Ministry of Economy and Finance. As a result of the tendency to give priority to current spending to appease social tensions and yield to lobbying by special interest groups, successive governments, in recent years and amid large political instability, have tended to relegate investments in the oil sector. Thus, Petroecuador has received limited funds for investments in the sector. Combined with large inefficiencies at the company level coupled with corruption, this has resulted in a downward production trend of oil production by the state company for 11 years in a row. In recent years, as presented in Figure 3, this trend has contrasted with the increased production of private companies, reflecting the much larger amounts that private companies channel for new investments and maintenance of oil fields. The only exception to this trend was the decision to rescind Oxy's contract, which resulted in May 2006 in a one-off transfer of a production field from a private company to Petroecuador.

Figure 3. Oil Production by Petroecuador and Private Companies
(In thousands of barrels, monthly data)



Source: Petroecuador.

- The growing financing needs to cover large subsidies for oil derivative products have resulted in large costs for Petroecuador, which needs to import costly derivatives to be sold in the domestic market at subsidized prices. Meanwhile, domestic demand for oil derivatives has been increasing rapidly, reflecting distorted relative prices, significant smuggling activity to border countries where prices are much higher (LPG prices in Colombia and Peru are about ten times larger), and growing demand for diesel for electric generation purposes.⁸

⁸ Ecuador's electricity sector also suffers from large inefficiencies and capacity shortages, as a result of under-investment in hydroelectric plants and increased reliance on more costly thermoelectric generation or imports. Thus, Ecuador has the questionable particularity of having rather high final electricity costs by regional standards despite subsidizing those prices. The inefficiencies of distribution utilities—plagued by political influences, inefficiencies, and conflicts of interest in their management—have in turn resulted in low incentives for private investment in new plants, particularly hydroelectric ones that require large investments and have a long cost recovery period.

Table 1. Explicit and Implicit Subsidies for Oil Derivative Products
(US\$ millions and percentage of GDP)

<i>Net direct import costs</i>					
	Diesel	High-quality gasoline	LPG	Total	% GDP
2003	-13.0	-58.5	107.7	36.2	0.1%
2004	71.8	-0.3	203.5	275.0	0.8%
2005	318.3	117.9	293.5	729.7	2.0%
2006	499.9	183.4	390.7	1,074.0	2.6%
<i>Net direct import costs + opportunity costs</i>					
	Diesel	High-quality gasoline	LPG	Total	% GDP
2003	-39.2	-153.1	146.9	-45.5	-0.2%
2004	245.3	-0.8	272.1	516.7	1.6%
2005	833.4	268.9	370.3	1,472.6	4.0%
2006	1,025.0	444.6	492.3	1,962.0	4.8%

Source: Petroecuador, Central Bank of Ecuador, and author's estimates.

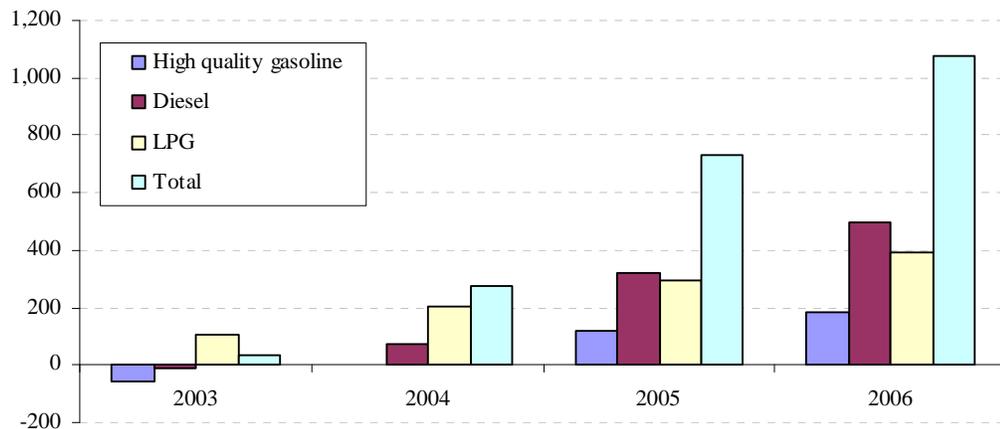
Oil derivative subsidies can be estimated both by the net explicit costs related to oil derivative imports and by opportunity costs, as Petroecuador uses its own oil production to refine derivatives to be sold at subsidized prices in the domestic market. As detailed in Table 1 and Figure 4, such subsidies have drastically grown in recent years with rising oil prices. Explicit subsidies reached 2 to 2.6 percent of GDP in 2005-06, while total (explicit and implicit) subsidies totaled 4 to 4.8 percent of GDP. Barring any political decisions, the latter could represent about 5.3 to 6.2 percent of GDP in 2007, according to estimates by the Ministry of Economics and the Central Bank of Ecuador for the 2007 budget.

From a fiscal stabilization perspective, in the short run, oil subsidies imply some automatic counter-cyclical patterns: they tend to increase when oil prices are boosting fiscal revenues and to decrease when the government receives smaller oil-related inflows. However, this type of automatic fiscal stabilizing mechanism is highly inefficient for various reasons. First, several studies have shown that generalized subsidies are highly regressive.⁹ Therefore, counter-cyclical fiscal policy does not achieve its objective to protect public expenditure items that are critical for medium-term growth and poverty reduction. Montenegro (2006) notes that the large amounts needed to finance such subsidies are one of

⁹ About 85 percent of gas and diesel subsidies benefit the richest quintile of the population, while the LPG subsidy benefits the richest quintile five times more than the poorest quintile; see SIISE-STFS (2003) and WB-IDB (2004).

the reasons explaining the weak investment levels of Petroecuador in recent years. In turn, this has resulted in reduced oil production levels by the state oil company, thus affecting the country's potential output and future fiscal revenues.¹⁰ Finally, large subsidies have fueled the growth of smuggling of oil derivatives (particularly diesel and LPG) to neighboring countries as well as dynamic demand trends, which may somehow attenuate the direct counter-cyclical impact.

Figure 4. Net Import Costs of Oil Derivative Subsidies
(In US\$ thousands, monthly data)



Source: Petroecuador and Central Bank of Ecuador.

- The growing cost of oil subsidies has also implied the need for more creative ways to finance them. Petroecuador usually deducts these import costs from the revenues arising from the domestic sale of oil derivatives, before transferring the net amount to the budget. This explains, among other things, why the budget revenues from the sale of oil derivatives have not shown an upward trend in recent years, in opposition to oil export revenues. However, rising costs have led to a situation where net direct import costs have become larger than budgeted revenues from oil derivative sales. Thus, the state has had to devise alternatives to cover such costs. This has been done either by withdrawing funds from the FEP-to-be-liquidated account, in advance of FEP's year-end liquidation, or by using FAC funds to finance Petroecuador sales of diesel and other derivatives to thermoelectric generation plants. Such a move has been justified by the emergency status of the electricity sector, granted through successive Presidential Decrees (with the aim of avoiding blackouts), which paved the way for the use of the FAC funds.

¹⁰ In addition to Montenegro (2006), see Alborno, Cueva, and Gordillo (2006) for a discussion of oil sector prospects and challenges.

Table 2. Ecuador – Earmarking Oil Revenues – Direct Oil Sales

Beneficiaries	Traditional Petroecuador Fields	State Share from Private Companies (Light Crude Oil)	State Share from Private Companies (Heavy Crude Oil)	Operational Alliances	Incremental Participation Bloque 15	Services Provision Contracts	ESPOL Contract
<i>Distribution based on the FOB export price</i>							
Petroecuador's Net Cost Recovery							
Petroecuador Defense Board	8%			8%			
CORPEI	0.05% of FOB export value		...	0.05% of FOB export value			
FEP-to-be-liquidated	FEP provision 1/		...	FEP provision 1/	
ECODESARROLLO			50 cts per exported barrel		50 cts per exported barrel		
Services Provision Companies						Investments recovery	
Esmeraldas, Napo & Sucumbíos Provinces						\$0.005 per barrel	
Development Fund for the Amazonian Region						Share of services to Petroecuador 2/	
Central Government Pipeline tariffs						Income Tax	
<i>In-Budget distribution</i>							
Oil Investment Budget	10%	10%		10%			
Treasury Unique Account	89.73%	89.91%		90% (first 5 months) & 22.24% (from the 6th month onwards)		100%	
FOVIAGRO	0.06%	0.06%			0.07%		
FONASA	0.02%	0.02%			0.03%		
FONAFOR	0.01%	0.01%			0.01%		
Other Beneficiaries 3/	0.18%						
CEREPS			100%				
BCE-MEF Trust Fund for Companies' Cost Recovery				67.76% from 6th month onwards			
Bloque 15 MEF Account					99.90%		
ESPOL							100%
Esmeraldas Province Solidarity Fund							
ISSFA							
<i>Participation over incremental export revenues</i>							
CORPECUADOR	10% of Treasury's participation over incremental export income						...

1/ Actual minus budgeted oil price times number of barrels.

2/ 2.5% for national companies and 4.5% for foreign companies on services provided to Petroecuador.

3/ Health & Labor Ministries, BEDE, FODESEC, Esmeraldas Provincial Council, BEV, INNFA, IECE, BCE, BNF, Public and Private Universities & Polytechnic Schools.

Source: Central Bank of Ecuador (2006) and Artola and Pazmiño (2007).

Table 3. Ecuador – Earmarking Oil Revenues – State Royalties and Participation in Other Oil Contracts

Beneficiaries	Traditional Petroecuador Fields	Nororiente Field	State Share from Private Companies (Light Crude Oil)	State Share from Private Companies (Heavy Crude Oil)
<i>Distribution based on the FOB export price</i>				
Petroecuador Defense Board	Petroecuador's Net Cost Recovery			
CORPEI		0.05% of FOB export value		...
FEP-to-be-liquidated		FEP provision 1/		...
ECODESARROLLO				50 cts per exported barrel
Services Provision Companies				
Esmeraldas, Napo & Sucumbíos Provinces		\$0.005 per barrel		...
Development Fund for the Amazonian Region				
Central Government				
Pipeline tariffs		SOTE tariff (90% for the Treasury & 10% for PIP)		...
<i>In-Budget distribution</i>				
Oil Investment Budget				
Treasury Unique Account	57.50%	99%	100%	
FOVIAGRO				
FONASA				
FONAFOR				
Other Beneficiaries 1/				
CEREPS				100%
BCE-MEF Trust Fund for Companies' Cost Recovery				
Bloque 15 MEF Account				
ESPOL				
Esmeraldas Province	2.60%			
Solidarity Fund	40%			
ISSFA		1%		
<i>Participation over incremental export revenues</i>				
CORPECUADOR				

Source: Central Bank of Ecuador (2006) and Artola and Pazmiño (2007).

Earmarking Oil Funds to Diverse Entities

Once Petroecuador's deductions for operational costs are made, oil revenues are subject to earmarking to both off-budget and in-budget beneficiaries, as detailed in Tables 2 and 3.

Off-budget spending implies the transfer of funds to public and, in some cases, private entities before the money is allocated for budgetary purposes. Such entities include, for example, the Defense Board (for military expenditures), Amazonian oil-producing provinces, or CORPEI, an agency in charge of export promotion and foreign investment attraction. Their budgets are excluded from the General Budget, thus limiting transparency in the use of funds for the general public.

In-budget expenditure is subject to a somewhat increased level of public accountability through the budgetary process. However, once the funds are allocated to the budget, the legal provisions imply the need to specifically include spending for those entities. This kind of revenue earmarking is common in Ecuador, both for oil and non-oil revenues, and has limited the margin for budget flexibility.¹¹

The legal provisions regarding earmarking vary with the type of contract and the type of crude oil involved:

- Light crude oil revenues within the budget limits are used for earmarking beneficiaries and the budget.
- Light crude oil revenues beyond the budget limits go to the FEP-to-be-liquidated account, which is partly used for spending throughout the year and is subject to a year-end liquidation procedure.
- Heavy crude oil revenues come from Petroecuador's traditional fields and its participation in various oil contracts with private companies. It is also subject to off-budget earmarking for Ecodesarrollo (an Amazonian development fund, channeled through local governments), before going to CEREPS, which is then subject to withdrawals throughout the year for its intended uses.

¹¹ Several studies have estimated that budget flexibility—the percentage of budget revenues that can be modified in the short run to reflect the government's policy priorities, taking into account the earmarking of oil and non-oil revenues and expenditure, the short-run inflexibility for several categories of spending—is very limited, in the range of 2 to 8 percent; see World Bank-IBD (2004); Almeida, Gallardo, and Tomaselli (2005); and Cueva (2006). See Alier (2007) for a discussion of budget rigidities in Latin American countries.

- Heavy crude oil revenues arising from the *Bloque 15* (former Oxy) field also go to off-budget beneficiaries and FEISEH, which in turn partially funds the budget and in-budget beneficiaries.

- Reforms of the Hydrocarbon Law approved in 2006 increased the government's take in hydrocarbon revenues. The legal changes were aimed at addressing the previous lack of provisions in several existing oil contracts. The reforms adjusted the government's participation in oil revenues in case of high oil prices, despite opposition from private companies because they considered that such a move was a unilateral change in their contracts. The reforms granted the state a 50 percent share of excess earnings, calculated by comparing the actual FOB price of Ecuadorian crude oil with the actual price at the time of the subscription of the individual oil contracts, with some adjustments for U.S. inflation and oil quality.¹² These resources are collected in a separate budgetary account.

Overall, the existing legal arrangements for the use, earmarking, and saving of oil revenues in Ecuador are extremely complex, with many different rules on revenue earmarking, the type of beneficiaries, the constraints regarding the potential use of the different funds, the loose definitions regarding the specific situations when governments can make use of the funds, and the transparency requirements regarding the use of the money. This combination of intricate legal rules and procedures for channeling oil resources is clearly inefficient from a transparency perspective. In addition, the complexity makes it extremely difficult to develop an open discussion of public spending priorities and has imposed growing constraints on the central government's cash management.

III. FISCAL TRENDS AND PROSPECTS

This section reviews fiscal developments in recent years in Ecuador, from the perspective of oil revenues and stabilization funds. To that end, it briefly reviews recent fiscal trends, before addressing the prospects for the oil industry and its potential impact on fiscal revenues, contingent fiscal costs, as well as the impact of oil derivative subsidies and their fiscal treatment. It includes some scenarios regarding oil revenues, expenditure, and the related evolution of stabilization funds.

¹² See *Reforma a la Ley de Hidrocarburos*, approved on April 19, 2006.

III.1. A Growing Addiction to Oil Revenues

Ecuador has benefited from a favorable international environment and high oil prices since the early 2000s. As a result, the economy has been growing faster than in the previous two decades, with greater oil and non-oil fiscal revenues. And greater income tax collection to a large extent reflects higher taxes from oil companies operating in the country. This has allowed the non-financial public sector balance to remain positive over the past six years, which in turn has led to a marked improvement in public debt indicators. The debt/GDP ratio fell from 86 percent by end-2000 to about 34 percent by end-2006.

However, as presented in Table 4, the country's fiscal indicators show a growing dependence on oil revenues, as witnessed by a sharp deterioration in non-oil public sector balances. On the revenue side, booming oil export revenues have increased, on average by a 19 percent annual nominal growth rate during 2001-06 (although this growth rate is underestimated by the exclusion of the funds directed for oil derivative imports). Meanwhile, net income from the domestic sales of oil derivatives declined over the same period, reflecting the above-mentioned generalized subsidies on the final prices of oil derivatives. As non-oil revenues have also seen a healthy 19 percent average annual nominal increase over the same timeframe, these trends have allowed a sustained increase in public spending. However, the composition of expenditure is largely tilted toward current outlays, despite a marked decline in interest payments, which in turn reflected the improvement in debt indicators. Over 2001-06, while primary current spending had average nominal growth close to 23 percent (excluding oil subsidies), the corresponding nominal growth rate for capital expenditure was less than 7 percent.

Table 4. Non-Financial Public Sector Operations

	2001	2002	2003	2004	2005	2006	Average Annual Nominal Growth
	(% of GDP)						(%)
Total revenues	23.3	25.5	24.1	25.1	25.1	27.5	17.8
Oil	6.4	5.6	5.8	6.5	6.1	7.9	19.1
Exports	4.5	3.9	3.8	5.0	5.8	7.9	27.6
Domestic derivative sales	1.9	1.7	2.0	1.5	0.2	-	-100.0
Non-oil	16.5	19.2	18.0	17.8	18.8	20.4	19.0
VAT	6.9	6.7	6.1	5.8	5.9	6.0	10.9
Excise	0.6	0.9	0.8	0.8	0.8	0.8	20.2
Income tax	2.5	2.4	2.6	2.7	3.2	3.6	21.9
Tariffs	1.7	1.7	1.4	1.4	1.5	1.6	12.5
Social Security contributions	2.1	3.1	3.1	3.1	3.0	3.8	27.9
Other	2.6	4.4	4.0	4.0	4.2	4.6	27.9
Public enterprises operating surplus	0.5	0.8	0.3	0.7	0.2	(0.7)	-223.6
Total expenditure	23.3	24.7	23.0	23.0	24.3	24.3	14.9
Current spending	16.7	18.4	17.9	18.0	19.3	19.5	17.7
Interest payments	4.7	3.4	2.9	2.4	2.2	2.2	-2.1
Wages	6.4	8.1	8.0	7.9	8.0	7.7	18.4
Goods & Services	2.7	3.6	3.3	3.2	3.1	3.7	21.0
Other	2.8	3.3	3.7	4.5	6.0	5.9	31.9
Capital spending	6.6	6.4	5.1	4.9	5.0	4.8	6.7
Overall balance	0.0	0.8	1.6	2.1	0.7	3.3	
Memo items:							
Non-oil balance	-4.5	-3.1	-2.2	-2.9	-5.1	-4.6	
Primary balance	4.7	4.2	4.4	4.5	2.9	5.5	
Non-oil primary balance	-1.6	-1.4	-1.4	-1.9	-3.1	-2.4	
Primary spending	18.6	21.4	20.1	20.5	22.1	22.1	23.0

Source: Central Bank of Ecuador and Ministry of Economy and Finance.

Another way to look at these figures is to consider the prudential fiscal rules introduced by the Fiscal Responsibility Law in June 2002, and subsequently amended in July 2005. Although the law calls for a 3.5 percent ceiling on the annual real growth of primary current spending, the actual trends show a 6.6 percent real growth increase during 2003-06. Such inconsistency between the legal objectives and the actual performance can be explained, as the law is only applicable to the proposed budget (and even then, the law is unclear as to which should be the comparative previous-year budget to be used as the reference: the previous proposed budget, the mid-year revised budget, or the implemented one). The law includes no proviso to extend to the implemented budget throughout the year the applicability of prudential limits, which have been repeatedly breached.

In summary, the salient features from these fiscal trends include the following:

(i) Current spending shows dynamic trends, most likely at unsustainable levels for the medium term, with the risk that such spending is hardly reversible in case of a potential shock.

(ii) Such trends are further aggravated by the decision to maintain the prices of oil derivatives frozen, thus further deepening the regressivity of public spending.

(iii) The fiscal dependence on oil revenues is growing in a worrisome trend, leaving the country's fiscal accounts largely dependent on international oil price developments.

(iv) Capital spending has benefited only narrowly from the fiscal revenue boom, although infrastructure expenditure appears to be deeply needed in some areas, such as the electricity and hydrocarbon sectors. The increase in social spending has been mostly related to greater current expenditures.

(v) Capital spending is badly prioritized, with weak assessments of its efficiency, and subject to continuous political economy considerations, which tend to favor groups with strong lobbying power instead of the most vulnerable ones.

All in all, some of the intended features of oil stabilization schemes—including the need to boost public savings in good times, to prioritize capital spending encompassing high long-term returns, and to make room for anti-cyclical fiscal policies—appear to be at odds with actual fiscal trends in Ecuador. This suggests that the existing oil funds are not bearing all their intended fruits.

III.2. A Mounting Appetite for Using Growing Funds

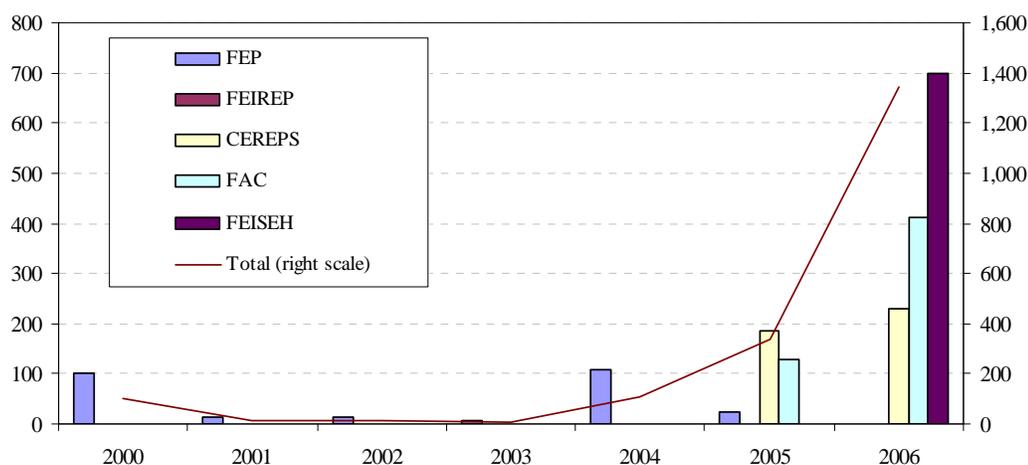
Meanwhile, the balances of the different oil-related funds have been boosted in recent years, reflecting the large increases in Ecuadorian crude oil prices. The creation of FEISEH in 2006, funded with oil revenues from fields previously exploited by Oxy, explained a further increase in oil funds, which reached a combined balance of US\$1.3bn as of end-2006, and US\$1.7bn by end-January 2007.¹³

Figure 5 and Table 5 summarize the growing trends in oil funds, as well as annual inflows and outflows driving the evolution of the different funds.

¹³ In addition to the different oil funds, a special budgetary account is funded by the government's additional take in hydrocarbon activities, resulting from the April 2006 reforms in the Hydrocarbon Law. The balance of the account, based on preliminary numbers, was US\$152m by end-2006 and US\$170m by January 2007.

Figure 5. Cumulative Gross Inflows and Year-End Stock of Oil Funds

(In US\$ millions)



Source: Central Bank of Ecuador and author's calculations.

Table 5. Inflows, Outflows, and Stocks of Oil-Related Funds

(In US\$ millions, preliminary data)

Fund		1999	2000	2001	2002	2003	2004	2005	2006	Jan 07
FEP 1/	Beg-year stock		-	100	-	12	5	109	22	0
	Inflows	252	223	40	79	295	355	458	522	29
	Outflows	252	123	126	66	302	251	545	544	-
	End-year stock	-	100	14	12	5	109	22	0	29
FEIREP 2/	Beg-year stock					-	-	-		
	Inflows					81	559	430		
	Outflows					81	559	430		
	End-year stock					-	-	-		
CEREPS 3/	Beg-year stock							-	185	231
	Inflows							643	1,010	226
	Outflows							459	964	282
	End-year stock							185	231	175
FAC 3/	Beg-year stock							-	129	411
	Inflows							129	426	275
	Outflows							-	144	-
	End-year stock							129	411	686
FEISEH 4/	Beg-year stock								-	699
	Inflows								719	144
	Outflows								20	-
	End-year stock								699	842
Total	Beg-year stock	-	-	100	-	12	5	109	336	1,341
	Inflows	252	223	40	79	375	914	1,660	2,677	674
	Outflows	252	123	126	66	382	810	1,433	1,672	282
	End-year stock	-	100	14	12	5	109	336	1,341	1,733
Memo: Special Account related to April 2006 Reforms to the Hydrocarbons Law									152	170

1/ The FEP was modified in 2002 following a General Prosecutor's legal opinion; the existing stock was liquidated. Subsequent end-year stocks, subject to liquidation, may differ from zero, reflecting timing issues.

2/ Replaced by the CEREPS in July 2005; final stock liquidated.

3/ Created in July 2005.

4/ Created in October 2006.

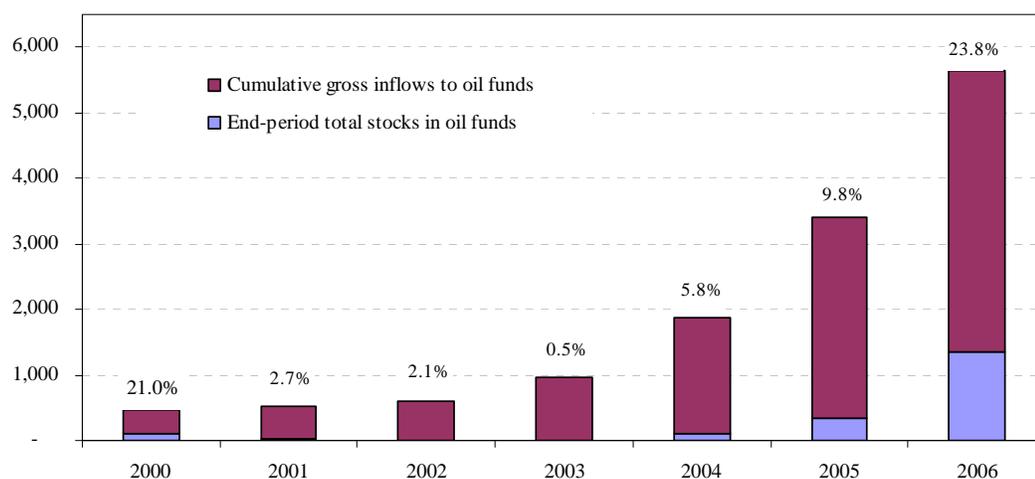
Source: Central Bank of Ecuador, Ministry of Economy, and Observatorio de la Política Fiscal.

Since 2002—following a legal opinion by the General Prosecutor—FEP is liquidated by year-end, although timing issues may explain non-zero balances. A similar pattern applied to FEIREP until July 2005, when it was liquidated and replaced by CEREPS, which has built up resources that—following the year-end closure—are transferred to FAC. Thus, FAC should be the main vehicle for building up future resources over successive years, as long as actual expenditures are not large enough to deplete it. Recent trends reveal a growing tendency to use them as umbrellas to cover diverse spending, made possible by the relatively loose definitions of the legally permitted expenditure. Both FEP and FAC were used in 2006 to face the growing costs of oil derivative subsidies. CEREPS has financed health, education, and housing programs, and diverse emergency situations through FAC, although no clear assessment on the efficiency in the use of the funds is available. In addition, the practice of withdrawing funds from FEP-to-be-liquidated throughout the year could well lead to a final liquidation by year-end showing that withdrawn funds have gone beyond the actual year-end value, which has happened in the past. There is a need to ensure refunds for FEP in subsequent fiscal years.

Considering the legal provisions for cross-transfers between the different funds and their ability to carry over resources over time, FEISEH must be distinguished from the other funds. Although 27 percent of its inflows are channeled to CEREPS and an annual US\$145m is transferred to the budget to compensate for the lost income tax from Oxy, the rest of FEISEH resources are more clearly earmarked for specific investments in the energy and hydrocarbon sectors. These typically relate to long-term projects and must be approved by a specialized commission. FEISEH, created in October 2006, has so far registered only minimal outflows, because the implementation of administrative and legal procedures for making it fully operational has taken some time. Once these issues are addressed, it is likely that the fund will become depleted over time as it is used to finance a few large investment operations. The minimal use of FEISEH so far makes it difficult to assess its potential contribution to growth-enhancing projects or how efficiently it may be used.

Figure 6. Is Ecuador Saving Exceptional Oil Revenues?

(Cumulative gross inflows and year-end stock of oil funds, in US\$ millions)



Source: Central Bank of Ecuador and author's calculations.

How much is Ecuador saving of the resources going into the funds? Figure 6 presents a rough estimate of cumulative total inflows (netting out cross-fund transfers).¹⁴ By end-2006, the country had already spent more than three-quarters of the cumulative fund inflows since 1999. In addition, the relatively larger savings observed in 2006 were mostly due to the above-mentioned limitations for using the recently-created FEISEH, which were expected to be addressed in 2007, further reducing the overall savings of exceptional oil revenues. All in all, Ecuador is using most of the extraordinary oil revenues and saving a limited share.

The relation between the use of the proceeds of the different funds and the budget differs depending on the legal characteristics of the funds. On the one hand, FEP and CEREPS are channeled through the budget, provided the use of funds is in line with the legally defined objectives and beneficiaries. Besides specific institutions benefiting from the funds, the legal mandate for the sector distribution of resources is vague enough to provide leeway for a loose interpretation. In that sense, these funds, more than genuine fiscal stabilization mechanisms, are mainly vehicles to earmark revenues for specific purposes. Moreover, because the money is channeled through the budget, assessing how efficiently it has been used is difficult. This is both because of the lack of information to differentiate the use of such resources from other budget revenues, and a result of the more general

¹⁴ Information on actual cross-fund transfers is only available on a preliminary basis; subsequent revisions are expected, which should not modify the main thrust of the message.

weaknesses regarding budget transparency and the lack of a results-oriented budget. Policy recommendations should address these issues.

On the other hand, FEISEH and FAC are trust funds, administered by the Central Bank, whereby the use of funds is more clearly defined. The use of such resources is separated from the budget accounts and reported separately. However, FAC is increasingly used for “emergency” situations, which can be loosely defined. This opens the way for fiscal expansion based on extraordinary revenues, provides financing for spending in highly diverse areas beyond the budgeted levels, and reduces FAC’s ability to act as a genuine fiscal stabilization mechanism. It is too early to assess the contribution of FEISEH to the country’s economic development, although the sector orientation of its investments brings at least the hope of addressing the obvious historical under-investment in those areas.

III.3. Future Inflows of Oil Funds

What can be expected regarding prospects for the funds in the coming years? Projections for the oil-related funds can be made through 2010, based on some basic assumptions. The objective of such an exercise is not to obtain excessively precise projections—which in any case are dependent on variables that have shown large historical volatility—but to obtain reasonable magnitudes regarding the different funds’ expected future inflows. The main assumptions of the baseline scenario can be summarized as follows:

- International oil prices (for West Texas Intermediate crude, WTI) are assumed to follow the Annual Energy Outlook 2006 projections from the Energy Information Administration (EIA) of the U.S. Department of Energy. The projections are based on a decline in average West Texas Intermediate crude oil prices from US\$65.2 per barrel in 2006 to US\$55.6 per barrel in 2007 and a further gradual reduction to US\$47.3 per barrel in 2010.
- The relative price differentials between the WTI, heavy, and light Ecuadorian crude, as well as oil derivatives are assumed to maintain their historical trends.
- The budgeted oil price (critical for FEP inflows from light crude production) is assumed to be maintained at the 2006 budget level of US\$35 per barrel.
- The consumer prices of oil derivative products remain frozen, thus any changes in oil prices are absorbed by an increase or decrease in oil subsidies.
- Import volumes of oil derivatives maintain their historical trends.

- Production volumes are projected independently for the different fields and oil contracts presented in Tables 2 and 3 (heavy and light crude oil production for Petroecuador fields, *Nororient* field, *Bloque 15* field, private companies' fields with participation contracts, operational alliances, service provision contracts, and the ESPOL contract).

The projections are based on historical trends, either for the most recent year (2006) when trends have been broadly stable, or for the most recent four years (2002-05) when specificities of the contracts, projects, or new developments have led to a higher volatility in recent years for their specific production volumes. Regarding the former Oxy's *Bloque 15* field, the assumptions reflect the expected trends by Petroecuador authorities as of mid-March (when the company's budget was approved). It was expected that the field's production would recover to about 90,000 barrels a day in 2007 and to 110,000 barrels a day in 2009.

In order to perform sensitivity analysis, a pessimistic scenario (whereby both production volumes and prices are 10 percent lower than the baseline) and an optimistic scenario (with higher prices than the baseline) have been modeled. The optimistic scenario is based on the Annual Energy Outlook 2007 projections from the Energy Information Administration (EIA), which imply a slight (2.4 percent) increase in the average WTI crude oil prices in 2007 (to US\$66.7 per barrel), before gradually falling to US\$57.5 per barrel in 2010. WTI prices would thus be 16.5 to 18.5 percent higher than the baseline. Although these EIA projections are more recent than those used for the baseline, the actual average WTI prices in January-February 2007 (at US\$56.8 a barrel) appear to be closer to the baseline's projections so far. The optimistic scenario does not include greater production volumes, both to allow an asymmetric view of the impact of changes in prices and/or volumes, and to reflect the challenges already faced to ensure the baseline's projected volumes.

Table 6. Projected Trends for Oil-Related Funds*(In US\$ millions, inflows during each period)*

	CEREPS	FAC	FEP	FEISEH	Cost of Oil Subsidies	Gross Total 1/	Net Total 2/
<i>(Baseline Scenario)</i>							
2007	390	97	335	1,006	945	1,827	882
2008	363	91	232	1,033	960	1,719	759
2009	345	86	166	1,087	1,013	1,684	672
2010	322	81	78	1,013	1,005	1,494	489
<i>(Pessimistic Scenario)</i>							
2007	315	79	140	904	741	1,437	696
2008	293	73	58	929	730	1,353	623
2009	279	70	5	976	748	1,330	583
2010	261	65	-66	911	703	1,170	467
<i>(Optimistic Scenario)</i>							
2007	484	121	692	1,249	1,366	2,547	1,181
2008	462	116	612	1,317	1,499	2,507	1,008
2009	436	109	512	1,371	1,604	2,428	823
2010	407	102	404	1,280	1,680	2,193	513

1/ Total inflows for the different funds, without considering the cost of oil subsidies.

2/ Total inflows for the different funds, assuming all the net cost of oil subsidies are netted out from the funds.

Source: Petroecuador, Central Bank of Ecuador, EIA, and author's calculations and projections.

Table 7. Projected Trends for Oil Funds, Including Cross-Transfers*(In US\$ millions, inflows during each period after transfers to other funds)*

	CEREPS	FAC	FEP 1/	FEISEH	Total
<i>(Baseline Scenario)</i>					
2007	828	97	167	589	1,682
2008	758	91	116	609	1,574
2009	722	86	83	648	1,539
2010	635	81	39	595	1,349
<i>(Pessimistic Scenario)</i>					
2007	629	79	70	515	1,292
2008	573	73	29	533	1,208
2009	545	70	2	568	1,185
2010	506	65	-33	520	1,058
<i>(Optimistic Scenario)</i>					
2007	1,168	121	346	767	2,402
2008	1,124	116	306	817	2,362
2009	1,062	109	256	856	2,283
2010	955	102	202	789	2,048

1/ The negative FEP inflows in 2010 in the pessimistic scenario would result from a lower than budgeted actual oil prices.

Source: Petroecuador, Central Bank of Ecuador, EIA, and author's calculations and projections.

Table 6 presents the results, detailing the projected trends for each oil fund through 2010 under the different scenarios, including gross annual expected inflows to the funds. The legal framework envisages some cross-transfers between the different funds (for example, 27 percent of FEISEH revenues to be channeled to CEREPS; half of year-end liquidated FEP to be transferred to CEREPS; and US\$145m annually to be transferred from FEISEH to the general budget). Table 7 displays the projections including such transfers.¹⁵ In both cases, the results correspond to inflows to the funds, which can be expected to finance the legally envisaged expenditures or contingencies over time. As a result, the actual year-end stocks of the funds depend on the effective implementation of such expenditures. In addition, any other revenues (arising for example from investing the proceeds of the funds) are excluded.

Some general comments can be made about these projections:

- The expected declining trends over time for international oil prices explain the gradually falling inflows for the funds. In the baseline scenario, the funds have total inflows of US\$1.8bn in 2007 (about 4.2 percent of GDP), before declining to about US\$1.5bn in 2010 (2.8 percent of GDP).
- The alternative scenarios point to a larger sensitivity to prices than to volume changes. Total fund gross inflows would decrease to US\$1.4bn in 2007 in the pessimistic scenario (with 10 percent lower prices and volumes); they would increase to US\$2.5bn in the optimistic scenario (with 16.5 to 18.5 percent higher prices than in the baseline).
- The net costs of importing subsidized oil derivatives would absorb about US\$0.9bn in the baseline scenario. In all cases, net import costs would be greater than 50 percent of total gross inflows to the different funds. This proportion would grow to 67-77 percent (depending on the scenario) in 2010, assuming that oil derivative final prices remain unchanged while oil-related revenues decline as the demand for oil derivatives is assumed to continue growing.
- Total oil derivative subsidies (including explicit net import costs and implicit opportunity costs) will likely be larger than the total gross inflows to the oil funds in 2007, even in the optimistic scenario.

¹⁵ Total inflows in Table 7 are lower than those in Table 6, as the law envisages a US\$145m annual transfer from FEISEH to the general budget, in order to compensate the Treasury for the income tax revenues that were previously paid by Oxy.

- FEISEH is, in all cases, the largest fund in terms of gross annual inflows.¹⁶ However, once cross-fund transfers are taken into account, CEREPS becomes the largest fund in terms of annual inflows available to finance legally permitted outlays.

- The year-end FEP transfers to CEREPS could be reduced if some of the revenues expected to fund FEP are diverted throughout the year to finance oil derivative subsidies, thus depleting FEP's expected inflows.

CEREPS's unused funds by year-end would go to FAC, which could thus grow faster than projected.

IV. FISCAL STABILIZATION MECHANISMS: WEAKNESSES AND SUGGESTIONS

This section takes a look at the existing fiscal stabilization mechanisms, to assess their weaknesses and limitations. It evaluates the existing prudential fiscal rules and their actual impact on fiscal policy, the budget implementation mechanisms, and existing bypasses and escape clauses from a fiscal responsibility perspective. It offers suggestions on potential changes to improve the existing fiscal stabilization mechanisms, taking into consideration Ecuador's political economy as well as international experiences.

IV.1. Shortcomings of the Existing Funds and Arrangements

The existing oil-related funds can be assessed from various perspectives:

- From a theoretical perspective, are oil stabilization funds desirable, or can they constitute second-best strategies?

- Are the funds achieving their objectives? Are they helping to address – or instead contributing to deepen – the problems related to an inflexible and non-transparent budgetary process?

- Are there political economy considerations behind the creation of so many diverse funds?

- How are the funds related to existing fiscal prudential rules?

- Are there sensible and politically viable alternatives to the existing funds?

¹⁶ The baseline projections for FEISEH inflows do not differ much from those projected by Galarza (2006) in a recent study, with some differences that can be largely explained by some specifics in the law, which was approved after the study was performed.

Oil stabilization funds (or, more generally, natural resource stabilization funds) have been deceptive in many countries, although they have been popular. Although they are expected to address the volatility or unpredictability of oil prices, or the desire to save part of the windfall revenues for the future or less favorable times, oil stabilization funds have rarely been able to fulfill those expectations. (See, for example, Davis et. al. 2001.) One of the most common reasons has been the frequent changes in the governing rules of the funds. Governments have usually been keen to use or direct these monies, or to gain more discretion in the use of the funds.

Ecuador has not been an exception. In the four years after FEP was created in March 2000, the government created five different funds. Of those, one subsequently disappeared, and the recent creation of FEISEH shows that such funds may remain fashionable.

The presence of several funds and their interrelatedness provide evidence of the complexities introduced by such arrangements. There is a lack of clear and enforceable rules to prohibit the excessive use of discretion.

- Currently, one of the funds—FEP—is liquidated annually by year-end and feeds some other fund. Meanwhile, the use in advance of the expected year-end funds has become a rather usual mechanism for the central government to address short-term liquidity needs;

- Most of the funds are intended as a way to earmark resources for specific uses, particularly social and capital spending, rather than as savings or smoothing mechanisms. In fact, FAC is the only fund working, at least in principle, as a savings fund with the intended aim to stabilize fiscal oil revenues. However, the growing recourse to decrees declaring diverse sectors under “emergency” is distorting this objective. The other funds are mostly schemes to channel revenues for predetermined spending, with FEISEH being the most specific in terms of the kind of spending to be financed.

- The managing rules of the different funds have been changed on several occasions, effectively allowing the successive governments to exercise discretion regarding the use of the funds, thereby limiting their initial objective.

- The funds are part of a more complex scheme involving a large number of earmarking systems, which tend to render the whole budget process cumbersome, difficult to implement and understand, and less transparent. This leads to inefficient use of public sector cash management operations.

- Ecuador has usually been characterized by vertical fiscal imbalance, whereby the central government repeatedly faces liquidity constraints while other entities within the non-financial public sector (particularly autonomous bodies and local governments) hold excess liquidity. This problem has been further deepened as a consequence of growing fiscal decentralization, where local governments have tended to receive additional revenues through enhanced earmarking but have not been allocated additional spending responsibilities.
- The large number of earmarking laws and regulations has been further exacerbated by the different oil funds.

If these problems are recurrent, why have funds and other earmarking procedures been so popular? The main answer probably lies in the weaknesses of the existing budget process. On the one hand, the budget preparation process is made difficult as a result of the rigidities that significantly reduce the margin of maneuver of any government regarding the budget proposal. On the other hand, actual budget implementation gives the upper hand to the Ministry of Economy and Finance. Intra-year budget modifications are common in Ecuador: since 2001, each year has seen between 1,100 and 2,000 modifications to the approved budget.

The budget implementation process is subject to permanent lobbying from politically powerful groups aiming to obtain increased financing beyond the budgetary and legally mandated provisions.¹⁷ Such extra-budgetary financing is obtained by reducing budget ceilings for other sectors, typically those lacking a strong political voice. This process essentially involves public investment rather than current spending. Generally, the winning sectors in the process are large cities and public infrastructure projects supported by powerful groups. The losing parties include social spending, which corresponds to projects in poor rural areas with reduced voice, and the capacity of several social ministries is limited. This hurts the medium-term effectiveness of social policies, which are subject to volatile financing flows. In addition, the excessive intra-annual changes to the budget are not clearly explained or made transparent, and external control or auditing is rather difficult.

In this context, many actors have viewed earmarking as a way to protect their revenues from the risk of ending up losing resources in the highly discretionary budget implementation process. Hence, they have pushed for a proliferation of legal mandates to

¹⁷ For a larger discussion of political economy considerations around the budget process, see Mejía, Albornoz, and Araujo (2006) or Cueva (2006).

allocate earmarked oil and non-oil revenues to very diverse entities. Such trends imply several problems. First, an ever-growing share of the budget is predetermined by law or corresponds to expenditure that is highly inflexible, at least in the short run, thus making it increasingly difficult to use the budget as a tool for implementing the government's policy priorities. Second, the central government must deal with repeated cash management challenges. Third, there is a pro-cyclical tendency for fiscal policy, as earmarked revenues tend to grow in good times and generate spending pressures when autonomous entities receive excess money. Fourth, inconsistency has developed between the revenue flows for an entity and its spending needs, which have no particular reason to coincide when the earmarked tax or source of revenue is completely independent of the entity's public policy objective. This results in excess or inadequate financing for specific purposes, depending on the circumstances.

Regarding budget transparency, the financial management system in place (through the *Sistema Integrado de Gestión Financiera*) has several weaknesses. Its decentralized operations hamper the ability to comprehensively track budget implementation and provide early warning signals when spending trends are not in line with budgeted levels. There is no formal system for introducing results-oriented rules. Weak sector leadership of the relevant ministries or entities cannot define and implement the sector budgets in line with policy priorities. And the cash-management process is decentralized and ineffective, which results in some public institutions overflowing with liquidity and others (typically the Treasury) facing recurrent liquidity shortfalls covered by costly financing. The current expectation is to introduce a more efficient, centralized, and transparent system initially for the central government entities, which should be operational for the budget preparation process during 2007 and for budget execution in 2008.

Finally, there is little if any technical prioritization of public investment projects in terms of a true cost-benefit analysis, which would include parameters related to poverty reduction or satisfying basic needs. Public investment spending is typically modified frequently during budget execution to accommodate political pressures from large cities and politically strong constituencies. In addition, the institutional distribution of responsibilities regarding the approval and tracking of public investment remains somewhat unclear between the Planning and Finance Ministries.

IV.2. Policy Recommendations

Considering all the caveats and weakness associated with the existing oil funds and earmarking procedures, could enhanced funds help to establish reasonable medium-term fiscal policies? Ideally, the problems arising from the volatility, uncertainty, and future depletion of oil resources could be better solved by ensuring sound fiscal policy, which would include limiting expenditure in good times, so as to ensure a fiscal and indebtedness cushion for bad times. This could be helped through reasonable and enforceable fiscal responsibility rules. However, although Ecuador has enacted such rules, they have already been changed once. And the current government has announced its intention to support legislation to further weaken such rules and create more spending discretion. As a result, the political feasibility of tightening prudential rules may be limited.

Some of the oil funds could potentially help in solving a few other problems facing Ecuador, at least as second-best strategies. First, the clear trend to engage in unsustainable spending growth trends in favorable times, particularly for current spending, has also resulted in under-investment in key sectors, such as hydrocarbons and energy. Although the best way to ensure efficient new investments in those sectors (including the role of private investment and the corresponding incentives) can be debated, postponing large investments in those sectors has meant significant costs for the country. Therefore, earmarking funds for such purposes could constitute a second-best option.

Second, reducing earmarking should be a medium-term objective to provide fiscal policy with a deeper role. However, getting the different actors involved to accept reduced earmarking appears very difficult as long as the budgetary implementation process remains highly discretionary. Situating fiscal policy in a long-run context, with some explicit agreements to protect key social spending in good and bad times, would be a way to provide some assurance that abandoning earmarking may not be suicidal for some sectors. A Chilean-style scheme with a structural fiscal target (corrected by the impact of the economic cycle) could be a reasonable medium-term objective that would be highly consistent with the new administration's support for a stronger role for planning activities.

Third, market mechanisms to hedge or insure against oil price volatility could be an option to explore. Existing funds could be helpful in reducing the relevant costs.

Fourth, provided oil funds include strong accountability rules, they could end up helping to achieve better transparency practices in the budget. In any case, efforts to enhance

the transparency of the budgetary system and the use of oil funds should be strongly supported.

Along these lines, a few policy recommendations may be useful. Some are more directly related to oil funds; others are directed to the budget process, which is an important tool for channeling oil revenues, including from some of the funds. Although fiscal prudential rules are critical for sound medium-term fiscal policies, reinforcing the existing ones could face strong resistance in the current environment where some proposals have already been suggested to weaken existing rules. However, some specific topics where progress could be made include: (i) introducing a much clearer and unambiguous definition of current and capital spending to be applied to existing fiscal rules, so that procedures cannot be manipulated to elude compliance with the prudential rules; (ii) insisting that the existing fiscal rules (or even modified ones) should apply to the actual budgetary implementation, and not only to the proposed budget, which would be consistent with stronger accountability rules for fiscal policies; and (iii) enhancing the technical capacity in Congress to track and assess the budget implementation process, which is currently very limited.

The government should strengthen the planning and prioritization of public investment and social spending to be funded with oil revenues. Gradually moving toward a results-oriented budget, with clauses to protect social spending for the poor, could bode well for the new administration. Shifting budget policies toward a longer-term perspective in a multi-annual budget framework could thus be combined with some reduction in existing earmarking, including for oil revenues. In this case, political resistance may lie less within the central government than within autonomous entities.

The existing oil funds are too many and too complex. An option might be to keep only two funds. One would earmark revenues for investments in key areas, such as the energy and hydrocarbon sectors and some well-defined and truly pro-poor social spending. The other would boost public savings, whose funds could be used for debt-management operations and to ensure stability in pro-poor social expenditure. The rules for the use of such funds should be clear and unambiguous, including for the cases where emergency spending can be financed.

Rules to enhance transparency in the use of funds should be supported. A few alternatives include: (i) a greater role for civil society organizations and specialized bodies in the budgetary process; (ii) formally including the costs arising from oil derivative subsidies in the general budget, regardless of whether any political decision is made on the levels of such subsidies; (iii) stronger transparency rules for the attribution of public markets for large

investment projects financed from oil resources; and (iv) more formal rules for the accountability and assessment of efficiency in the use of the funds.

Regarding budget transparency and results-oriented budgets, the government should take steps to increase public discussion and awareness of spending priorities and results. It should make clear and easily understandable overall budget objectives to be achieved from the use of public funds, for example in terms of education or health coverage rates, or the extension of new roads to be built. It should regulate the recurrent publication of budget execution information and budget modifications and their rationale. And public institutions should present assessments of their strengths and weaknesses for results-oriented budgets and the achievement of expected objectives.

The expected process for enhancing and modernizing the financial management system, SIGMA, as well as the implementation of a centralized Treasury account at the central government level, should be supported. These would provide the government with a critical tool to better integrate planning and prioritization activities with the budget, as well as to track the implementation of the budget. This move, which may appear as a technicality on first sight, could prove to have a significant impact for an orderly and transparent budget process and to foster greater focus toward a results-oriented budget. In addition, it would help improve the quality, coverage, and opportunity of budget information.

Efficiency in public spending would be improved by clearly defining procedures for sector ministries (particularly Education and Health) to have greater leadership in budget preparation and execution for all the public entities using public resources in their areas. And enhancing the accountability of several regional entities or bodies (FODESEC, CREA, CRM, CEDEGE), which receive significant public funds, including from oil revenues, would help in the assessment of Ecuador's efficiency in using oil revenues.

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