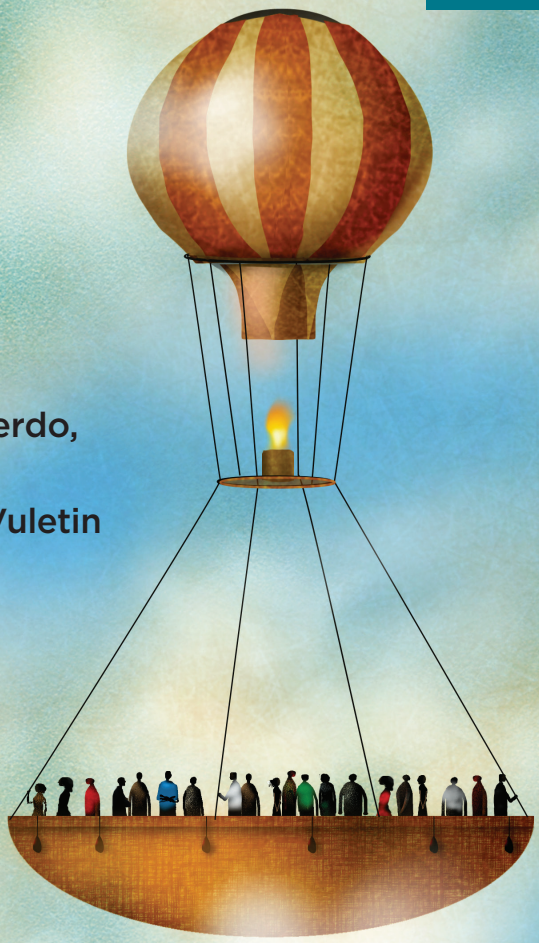
DEVELOPMENT IN THE AMERICAS

Better Spending for Better Lives

How Latin America and the Caribbean Can *Do More with Less*

EXECUTIVE SUMMARY



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IDB

The Development in the Americas (DIA) series is the flagship publication of the Inter-American Development Bank (IDB). Each year the IDB presents an in-depth study of an issue of concern to Latin America and the Caribbean. This year's edition, titled *Better Spending for Better Lives: How Latin America and the Caribbean Can Do More with Less*, offers the region's governments a way to reap greater returns from their investments. Public spending has climbed in Latin America and the Caribbean. Riding a worldwide spending trend and a commodity windfall, governments around the region tried to spend their way into the future. Unfortunately, the party is over and policymakers must find a way to keep their economies growing and their citizens happy in a fiscally sustainable manner. The traditional answer to this moment of truth has been to simply cut spending. This book suggests there is another way out. Even if governments need to spend less in aggregate, the same or even more services could be provided if ways are found to be smarter about spending, to be more efficient, to make every penny count.

This executive summary reviews the recent growth in spending and analyzes its composition, particularly in terms of current and capital spending. It looks at the two faces of efficiency: technical efficiency, which aims to achieve better outcomes with the same or fewer resources, and; allocative efficiency, which tries to identify the right mix of short-term transfers and long-term investments. The key is how to allocate spending efficiently without shortchanging the future. However, allocation is more than a simple economic decision and can be complicated by political economy forces. Biases against long-term investments such as infrastructure or education may reflect citizens' lack of trust in government which may lead people to prefer transfers to meet immediate needs over more profitable, long-term investments that take time and may or may not materialize. Finally, this summary outlines a few of the dramatic results that greater efficiency implies in sectors as diverse as health, education, public safety, and infrastructure. Together, this synopsis and the table of contents provide just a taste of the rich information and valuable policy implications contained in this edition of the DIA.

Contents of the Full Report

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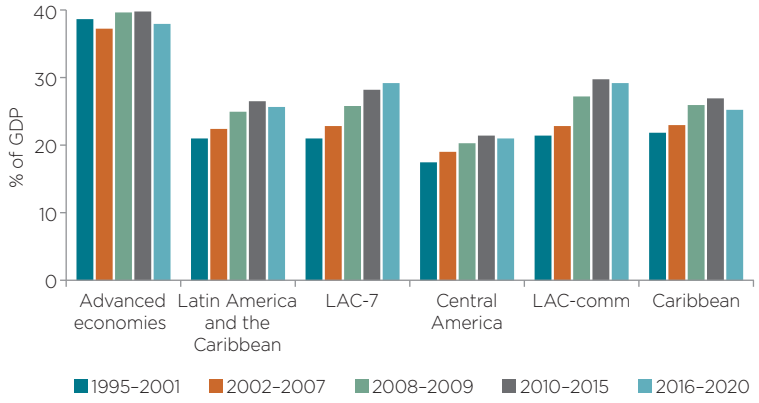
Better Spending for Better Lives

Since the early 1900s, the role of governments and their participation in the economy has steadily increased around the world. Typical public spending to GDP ratios have crept up from about 5 percent in the early 1900s to about 22 percent in 2018. Government participation is almost twice as large in the developed world as in developing countries, Latin America and the Caribbean included (40 percent vs 20 percent of GDP, respectively). The latest commodity boom of the 2000s pushed the size of government to 25 percent in Latin America and the Caribbean as a whole, and to 30 percent in the LAC-7 (seven largest regional economies) plus commodity producers. Moreover, following the Great Recession in the United States and its repercussions in the developing world, many countries in the region followed expansionary policies in an effort to bolster aggregate demand. However, many of these expansionary policies, which were considered counter-cyclical at the time, led to permanent increases in expenditure, mostly through higher wages and transfers, which are very difficult to reverse.

This upward spending trend raises the question, how large should government participation in the economy be? The answer depends on a myriad of issues ranging from ideological and economic to demographic. However, a key determinant is the country's degree of economic development, typically proxied by GDP per capita. In a nutshell—and following the so-called Wagner's Law—as GDP per capita increases, public spending tends to increase.

Focusing on the more recent past, since the mid-1990s, the speed of public spending growth has varied widely across regions and groups of countries in the world. As shown in Figure 1, public spending has increased relatively rapidly in Latin American economies and those with large commodity-exporting

Figure 1. Government Expenditure in Latin America (percent of GDP)



Source: Authors' calculations based on IMF WEO data.

sectors, compared to Central American and Caribbean economies. For example, LAC-7 and large commodity-exporting countries have, on average, pumped up public spending from 20 percent to 30 percent of GDP.

Does this growth in public spending threaten fiscal sustainability? Not necessarily. In fact, some of the countries with the greatest public spending in the world, such as the North Scandinavian economies, have both high levels of public expenditure and high standards for fiscal sustainability. However, as Latin America and the Caribbean's history makes plainly clear, surges in public spending, especially during good times, have typically forced countries to adjust dramatically in bad times, producing a now well-known procyclical pattern. Table 1 classifies societies along two dimensions: their high or low preference for public expenditure, and; the institutions that make them fiscally sound, or fiscally "exuberant" and eventually unsustainable if not kept in check. Usually, the struggle lies with countries that belong to the northeast quadrant of Table 1: those that have a higher preference for expenditure but lack the

Table 1. Preference for Public Spending vs. Fiscal Sustainability

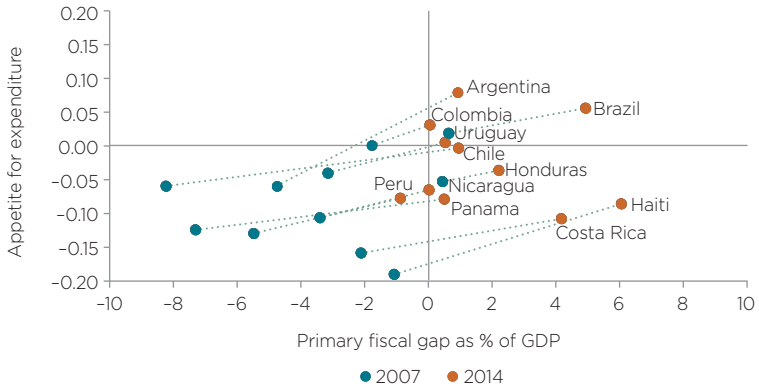
		Fiscal sustainability	
		Sustainable	**Not sustainable**
Preference for public spending	*High preference*	Liberal on preferences and fiscally sound	Liberal on preferences and fiscally "exuberant"
	Low preference	Conservative on preferences and fiscally sound	Conservative on preferences and fiscally "exuberant"

institutions or national arrangements to make this expenditure sustainable.

Greater Public Spending: At What Cost?

During the last decade, has the increase in public spending come at the expense of fiscal sustainability? According to Figure 2, the answer is a resounding yes. It shows in the x-axis the "fiscal gap," and on the y-axis, the so-called "Appetite for expenditure." Essentially, the four quadrants in Figure 2 mimic those of Table 1 and show the situation of Latin American and Caribbean countries for which these data are available both in 2007, the year before the Global Crisis (marked in blue), and in 2014 (marked in red). A picture is worth a thousand words. From 2007 to 2014, all countries have moved northeast, meaning that the increase in countries' preferences for public spending has typically raised fiscal sustainability concerns. Naturally, not all countries have evolved alike. Whereas Colombia has moderately raised its public spending while barely changing its fiscal gap, Argentina has "traveled" a great distance, both in terms of its appetite for public spending (actually moving from a low level of spending preference for its degree of development to a high level of spending preference) as well as its greater exposure to fiscal sustainability concerns.

Figure 2. Fiscal Preference and Sustainability, 2007–2014



Source: Authors' calculations based on IMF WEO data.

Does this mean that all countries in the region should cut their spending? Not necessarily. Many countries in the region still spend less than the level predicted by their degree of development, as measured by their GDP per capita levels. Several countries like Guatemala and El Salvador currently have public expenditure levels below what is expected given their level of development. In these cases, countries may want to consider providing a wider range of public services.

Two clear messages emerge:

1. Some countries in the region spend more than what is suggested for their level of development without the necessary fiscal institutions to make these levels of expenditure sustainable in the long run. These countries will need to adjust. In principle, there is nothing wrong with meeting the demands for greater spending, as long as it does not compromise growth and is accompanied by higher taxes and other fiscal institutions that ensure sustainability. Increasing public expenditure without institutions for

sustainability often leads to crises that undo all the good provided by greater public expenditure or may prompt long and costly adjustment processes.

2. If the experience of many Latin American countries teaches anything it is that countries that spend less than what is predicted for their level of development should refrain from increasing spending if they haven't planned on sustainable ways to pay for it. Of course, this does not mean that a thorough analysis of the need for more and better public services should not be carried out, but it must be accompanied by sustainability institutions that make the spending increase payable not only in good times, but in bad times as well.

In light of growing fiscal sustainability concerns and debt levels, several governments in the region are (and will continue) adjusting. However, the manner in which these adjustments take place, both in terms of their size and composition, will be key for the future of the region. Not all adjustments are created equal: across-the-board expenditure cuts may produce different results than carefully planned cuts that resolve inefficiency issues in the public sector. Badly planned adjustments, as would be the case of large decreases in public investment, could jeopardize growth prospects for the region. Large drops in public transfers could wipe out the social gains achieved during the good years and, in some instances, rekindle widespread social tensions. This book explores public spending inefficiencies in detail, ranging from technical to allocation inefficiencies —as well as the political economy issues involved—in hopes of providing a roadmap for smart spending with better and lasting institutions that herald efficiency for the future of the region.

Difficult Choices for Spending Efficiency

Efficiency is about doing more with less. It involves maximizing outputs such as the volume of services provided, minimizing inputs such as the amount of resources, time, or capital required to produce those services, and maintaining or improving quality. Public spending efficiency can be classified into technical efficiency, which deals with the inefficiencies in each expenditure component, and allocative efficiency, which aims to prioritize between alternative spending items based on evidence and allocate expenditure to programs with higher social rates of return. The allocative and technical efficiency of public spending are critical to foster long-term economic growth and improve equity.

Technical Efficiency: Doing the Right Things, Right

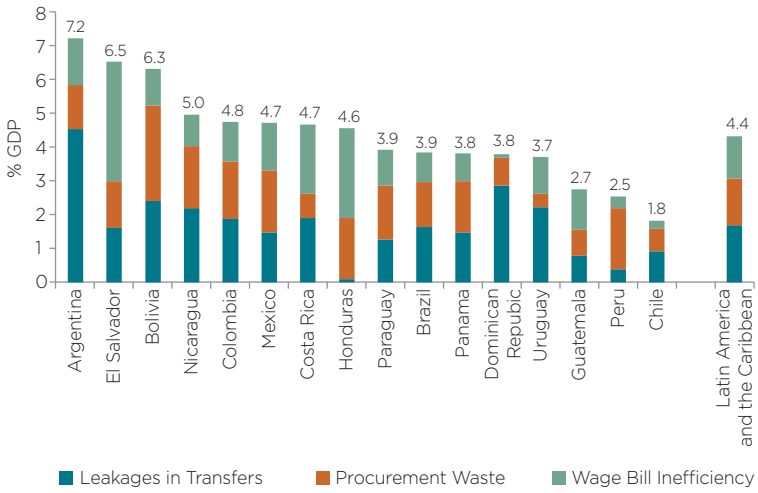
Some of the waste in public expenditure relates to technical inefficiencies: governments do the right things badly, using more resources than needed to achieve a given outcome. What is the optimal mix of labor, goods and services, construction, and transfers to deliver services to citizens? To produce public services, the government should combine its inputs efficiently at the lowest cost.

This book analyzes technical efficiency for three key components of government production costs: procurement spending, which is the cost of goods and services including capital expenditure; the costs of compensating civil service employees, and; part of the cost of subsidies and transfers, which suffer from leakages to the non-poor. Inefficiencies in procurement can be measured by the difference between the market and purchase prices of different goods and services and can even be measured by goods of the same price but different quality. It can also be

measured indirectly with corruption studies or by how much procurement processes can diminish waste and inefficiencies. Both the number of workers (usage of inputs) and wage differentials in the public and private sectors provide indications of inefficiency in the public bill. And waste in transfers can be estimated through the cost of leakages to the non-poor population.

Taking a moderate estimate of inefficiencies in procurement, civil service, and targeted transfers, the total average amount of waste in the region is approximately 4.4 percent of GDP and amounts to about 16 percent of average government spending (see Figure 3). However, estimates vary widely across countries, ranging from potential inefficiencies of more than 7 percent of GDP in Argentina to a low of 1.8 percent of GDP in Chile. The average estimate of 4.4 percent of GDP is larger than current average spending in health (4.1 percent) and almost as large

Figure 3. Technical Inefficiency in Targeted Transfers, Procurement and Wage Bill



Source: Authors calculations adding the estimated waste in procurement, wages and targeted transfers based on Figure 3.1, 3.4, 3.6 and 3.7. For most countries, the data correspond to year 2015 or 2016 or latest available.

as average spending in education (4.8 percent) in the region. At $220 billion, regional inefficiencies surpass the total GDP of Peru ($190 billion) and almost reach the total GDP of Chile ($250 billion). Correcting these inefficiencies would be more than enough to eliminate the extreme poverty gap and even diminish moderate poverty in many countries. Or the savings could be used to build 1,225 hospitals with 200 beds (about 47 hospitals more per year in each of the 26 countries).

Allocative Efficiency: Doing the Wrong Things Right

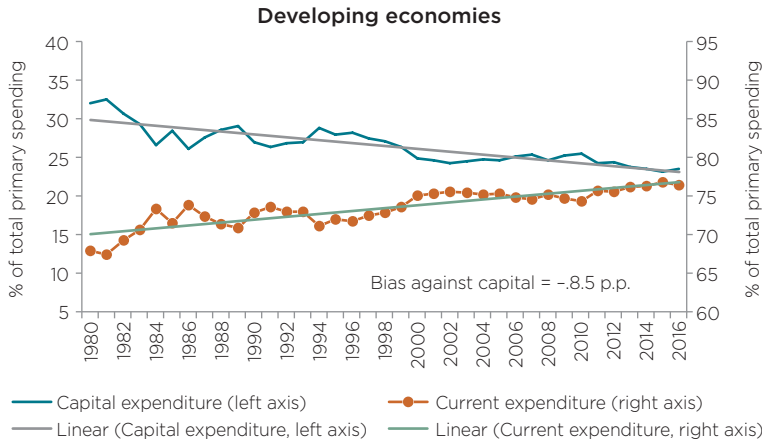
While doing the right things wrong can incur large losses, doing the wrong things right can incur even larger losses. In the simplest terms, allocative efficiency refers to how governments allocate their spending across different functions—education, health, social promotion, investment, defense, across generations, across levels of government, etc.—in order to maximize productivity and growth in the economy.

When considering the allocative efficiency of spending, it is useful to view the options available to countries in pairs: current vs. capital spending, youth vs. the elderly, early childhood education vs. higher education, prevention vs. punishment of crime. Policymakers face clear choices that imply very different futures for economic growth and fiscal sustainability.

Today vs. Tomorrow: Current vs. Capital Spending

During the past two decades and a half, public spending composition has basically remained constant in industrial economies while it has changed dramatically in developing economies. Figure 4 plots the evolution of current and capital spending shares of primary total spending since 1980 and clearly shows a growing bias against capital spending in developing economies. This implies a conscious decision to prioritize present expenses over investments in building the future. In short, today won out over tomorrow.

Figure 4. Evolution of Public Spending Composition, Economic Classification (percentage of total primary spending)



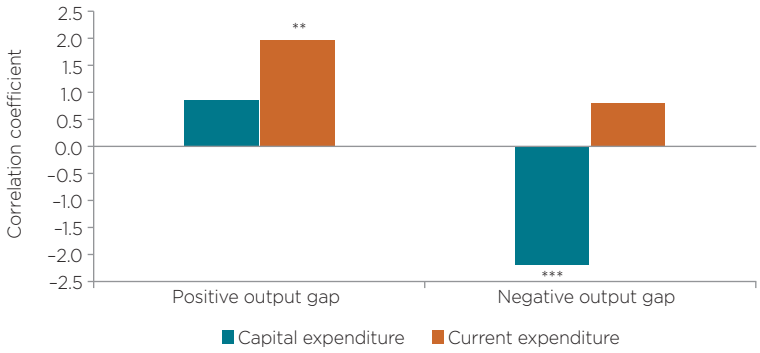
Source: Izquierdo, Puig, Vegh and Vuletin (2018).
Notes: Real government capital spending is defined as general government gross fixed capital formation. Real government current spending is defined as general government current spending net of interest payments. Total spending is defined as the sum of capital and current spending. Variables are deflated by the GDP deflator. The bias is defined by the absolute variation of capital spending share between 2016 and 1980.

An important reason why capital expenditure has been losing ground against current expenditure is the way governments manage current and capital expenditure along the business cycle. In principle, current expenditure (other than unemployment insurance) should be a-cyclical. Education and health expenditures, for instance, need not depend on business cycle fluctuations as they target long-term goals that are independent of the cycle. On the other hand, capital expenditures are the counter-cyclical expenditure "par excellence," as they can be increased to sustain aggregate demand in downturns—thus reducing the size of output fluctuations—and rolled back to lower levels in upturns. Unfortunately, there is a fundamental asymmetry in the way current and capital expenditures behave in developing countries, including Latin America and the Caribbean: current expenditure is *increased* in good times (when it should

not) but is not decreased in bad times, while capital expenditure is *decreased* in bad times (when it should be expanded) and not increased in good times (see Figure 5) .

Interestingly, advanced economies do not display this behavior as they follow a-cyclical policies for current as well as capital expenditures, both in good and bad times. What lies behind these differences between developing and industrial countries? According to Ardanaz and Izquierdo (2017), two major elements are to blame. The first difference relates to institutions. The effect of capital expenditures in bad times is large and significant for countries with low levels of institutional quality, while it becomes small and insignificant at high levels of institutional quality. The opposite occurs for current expenditure: it increases in good times only when institutional quality is low. Thus, Latin American countries, which typically fall on the low institutional quality side of the spectrum, tend to reduce capital expenditure in bad times and increase current expenditure in good times, something that industrial countries don't do on average. The second element at work is the impact of electoral cycles in current expenditures. When authorities are far away from the end of their term in

Figure 5. Capital and Current Expenditure in Good and Bad Times



Source: Authors' elaboration based on Ardanaz and Izquierdo (2017).
Note: This figure was constructed using a cyclical component value of 1 for positive cyclical components, and a value of -1 for negative cyclical components.

government, they don't cut capital expenditures or increase current expenditures in good times—they behave properly. However, when they are close to ending their term or reelection is coming up, they pump up current expenditures in good times—to attract more voters—and cut back on capital expenditures—which are less harmful politically— in bad times. Advanced economies do not seem to engage in these practices on average.

In addition to how countries spend over the business cycle, other factors also affect public expenditure composition. Inequality, as measured by the Gini Coefficient, reduces capital spending's relative participation, an important finding given that Latin America and the Caribbean is the most unequal region in the world. Among political and institutional factors, leftist-oriented governments usually attach greater importance to social security and health care, while rightist-oriented governments favor infrastructure and defense (Van Dalen and Swank, 1996). Thus, capital expenditure's share is expected to be lower in left-leaning governments. Interestingly, corruption tends to punish capital spending even though it is easier to collect hefty bribes on large infrastructure projects or sophisticated defense equipment than on textbooks or teachers' salaries (Mauro, 1998). Democratic systems seem to favor current expenditure over capital expenditure as median voters may prefer redistributive policies and, therefore, demand greater social spending.

Fiscal rules are a key determinant of public spending composition and seem to bias public spending toward current spending. Although fiscal rules have been mostly implemented in industrial countries, in the past decade, Latin American and Caribbean countries have increasingly implemented them. In this context, the design of fiscal rules that protect public investment, beyond representing good management of the business cycle, becomes a central issue in the makeup and efficiency of public spending.

Large population dependency ratios—measured as the sum of young (under 15 years of age) and old (65 years of age and

above) over total population—favor current spending, especially for social purposes. The young tend to push for more health and education spending, while the elderly prefer increases in health and social security spending.

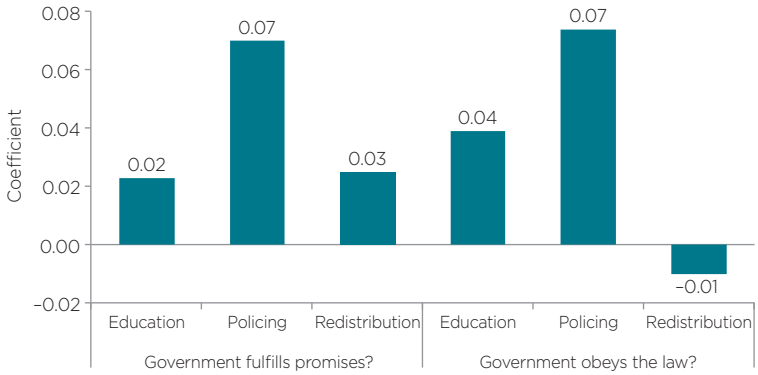
Finally, lack of trust in politicians is another key determinant of public spending composition, as it biases preferences toward certain, short-term spending such as transfers instead of uncertain, but perhaps more profitable, long-term spending such as infrastructure. Thus, the lack of credibility may lead citizens to prefer "a bird in hand (transfers) rather than two in the bush (infrastructure)."

Clearly, mistrust undermines support for all types of public policies, including those for which benefits appear further in the future (education) and those with more immediate results (redistribution). But which policies are most affected?

Survey responses reveal that the two most relevant trust variables for the cross-policy comparison are respondent beliefs about whether politicians and government officials fulfill their promises and obey the law. The objective is to discover whether these two variables disproportionately affect policies that exhibit a longer time horizon (infrastructure spending) and greater complexity (education and policing), compared to redistribution, which has both a shorter horizon and is less complex. Figure 6 demonstrates that among respondents who are not always for or against larger government (the vast majority of respondents) neither measure of trust affects preferences for redistribution. However, both measures of trust are significantly associated with support for higher taxes for policing. Whether respondents believe that government officials obey the law is also significantly associated with support for higher taxes for education, another long-term policy.[1] Thus, particularly for the vast majority who do

[1] See Talvi and Vegh (2005), Kaminsky, Reinhart, and Vegh (2004), and Frankel, Vegh, and Vuletin (2013), and Vegh and Vuletin (2015) for further discussions on procyclical fiscal policy in the developing world.

Figure 6. Trust in Government and Preferences for Higher Taxes for Education, Police, and Redistribution, 2017



Source: Authors' elaboration based on IDB-LAPOP Database.
Note: Each bar indicates the amount by which a one unit increase in trust is associated with higher preferences for taxes to finance education, police, or redistribution, rather than lower taxes to support private provision of education or security, or to accelerate economic growth. The association controls for country fixed effects and a large number of respondent charasteristics, ranging from political to demographic. The two trust measures are: Do you think politicians/ government officials fulfill their promises? Do you think they obey the law?

not have a strong view on government size, low levels of trust may be bias expenditure demand against long-term policies, which includes capital expenditures. Trust may be particularly important for processes that take time, such as education or capital expenditures, which cannot be verified as soon as transfers, for instance.

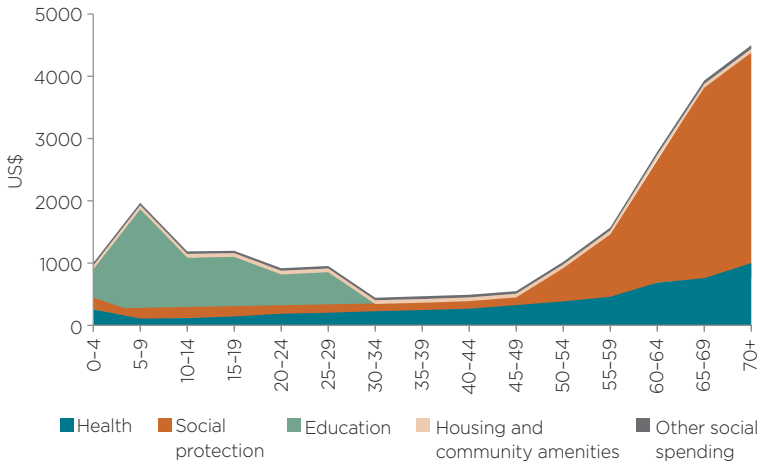
Age-Related Spending: Favoring the Elderly over Youth

The good news: people in Latin America and the Caribbean are living longer and healthier. The region's advances in health and life expectancy are a major accomplishment. The bad news: a longer-living, aging population poses long-term fiscal challenges and, unlike Europe, Latin America and the Caribbean is growing older before its incomes rise sufficiently. Many Latin American and Caribbean countries spend heavily on pension and health

benefits today, even though their populations are still relatively young. This fiscal burden is going to increase further over the coming decades as the number of old people rises much more rapidly than it did in Europe.

The decision of how to allocate lifesaving resources between the young and the old is as much about equity as it is about efficiency. Latin American and Caribbean governments spend an average $4,000 per capita on people aged 65-plus, about $500 per capita on people aged 30 to 49, $1,000 on young people between 10 and 25, and $1,500 from birth to 10 years of age. That is, they spend about 4 times more on older people than on younger people (Figure 7). The current system of public expenditures is unfair to younger generations: the vast and growing size of unfunded health and retirement benefits will require today's children to bear a heavy tax burden when they grow up to be working-age adults. For the younger cohort's sake, the elderly should pay their share of taxes before transferring it to the next generation. While equity is undoubtedly affected by the allocation of public monies across age-groups and across

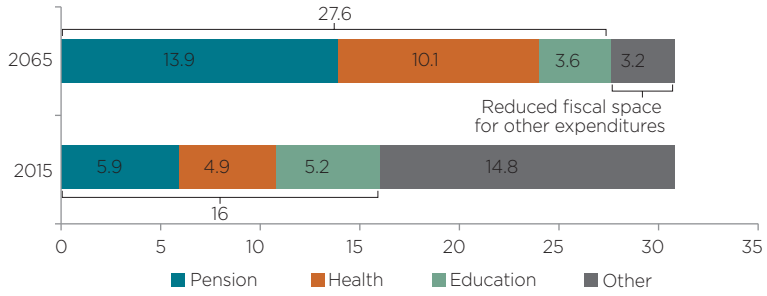
Figure 7. Per capita Government Spending by Age Group



generations, efficiency is also very much affected. A lower accumulation of human capital among disadvantaged families leads to losses in the social rates of return to early childhood investments and impacts growth.

Without reforms, public spending on aging in the region (pensions, health care, and education), is expected to increase from 16 percent to 27.6 percent of GDP from 2015 to 2065. Pension costs are expected to contribute the most to the rise in age-related spending, increasing by 8 percentage points. Public spending on health is expected to rise 5.2 percentage points by 2065, while education expenditure is projected to decline 1.6 percentage points as expenditures per student remain steady at the 2015 level (Figure 8). Assuming total government spending remains constant as a share of GDP, the amount left for other components of spending should fall from almost 15 percentage points of GDP to just 3.2 percentage points to distribute among infrastructure, human capital, the functioning of the state, social protection programs, to name a few. The deficit of the system will increase with current contributions reaching unprecedented levels (Pessino and Panadeiros, 2018). The window of opportunity to improve the quality of physical and human capital will be totally lost unless investment is strengthened today, and policies are enacted as soon as possible to accommodate aging.

Figure 8. Composition of Expenditure in 2015 and Projection for 2065



Preventing vs. Punishing Crime: Smart Spending for Citizen Security

Latin America and the Caribbean is the most violent region in the world. It has 9 percent of the population, but 33 percent of the world's homicides. The homicide rate (24 per 100,000 inhabitants in 2015) is four times the world average. Of the 50 most violent cities in the world, 43 are in the region (CCCSPJP 2018). Almost 140,000 lives are lost every year. With such a crime profile, it's understandable that public safety is a top priority in the region for governments and citizens alike. Unfortunately, spending has not produced commensurate results.

For every additional dollar a government has to protect its citizens, it must make a crucial decision: how can it best use these resources to protect the physical integrity of both its inhabitants and their property? Hire more police officers to increase patrols, raise their pay to increase motivation, equip forensic laboratories to capture more offenders? Invest in social programs to deter young people from embarking on criminal careers or build more prisons to accommodate more offenders for longer? The list is long. Fortunately, the academic literature agrees on three key principles to guide spending on security: preventive rather than reactive and punitive; targeted instead of dispersed; and based on scientific evidence of impact—preferably cost-benefit—instead of intuition.

Preventing crime not only avoids the suffering of personal and material losses, it is also cheaper than reacting to committed crimes and their consequences. This is common sense. When a crime is committed, the state must spend on: (i) police to pursue and apprehend offenders; (ii) justice services to investigate and judge criminals; (iii) the sanction system to apply a punishment and promote rehabilitation; and (iv) reparation services for damage to victims. This spending adds up and when compared with the cost of preventing a crime, the balance is clearly in favor of prevention. This is even truer after considering the private and social costs of the crime, and the costs of future

crimes prevented. For example, intensive tutoring programs for at-risk adolescents, such as *Becoming a Man* in Chicago, resulted in 44 percent fewer arrests for violent crimes (in addition to educational improvements) (Heller et al., 2017). The cost-benefit evaluation awarded a benefit of almost eight dollars for every dollar invested (WSIPP, 2017).

The second principle for smarter security spending pertains to targeting. Crime is disproportionately concentrated in a small number of high-risk places, people, and behaviors (Abt, 2017). The more targeted security and justice spending is in these three areas, the greater is its impact.

- *Places*: Some 50 percent of crime is concentrated in 5 percent of street segments in cities in the United States and Europe and between 3 percent and 7.5 percent in Latin American cities (Weisburd, 2015; Jaitman and Ajzenman, 2016).
- *People*: Some 10 percent of the population is responsible for 66 percent of crimes (Martínez et al., 2017). In Boston, 1 percent of young people aged 15 to 24 were responsible for 50 percent of gunshots in the city (Braga and Winship, 2015). In Montevideo, a survey of the adolescent school population revealed that 2 percent are responsible for 70 percent of violent incidents (Trajtenberg and Eisner, 2014). Targeting prolific offenders can prevent more crimes with fewer resources.
- *Behavior*: Bearing a firearm, particularly if illegal, alcohol abuse, due to its association with violence, and association with groups of lawbreakers or gangs, increases the probability of committing crimes (WHO, 2010).

Finally, the quality of spending allocation is enhanced by using practices and programs based on evidence of impact and cost-benefit analysis. A robust base of scientific evidence exists on cost-effective interventions to prevent crime and violence,

mainly in developed countries. To make this information more accessible to governments in the region, the IDB is developing a repository with evidence from more than four hundred interventions.

Any citizen security policy that aims to spend smartly needs to build and finance a portfolio of interventions based on this global evidence. Achieving this is a gradual and complex process. The first step is to compile global evidence about what works and does not work in citizen security, and to develop locally adapted interventions and programs based on that knowledge.

Educational Efficiency: Early vs. Higher Education

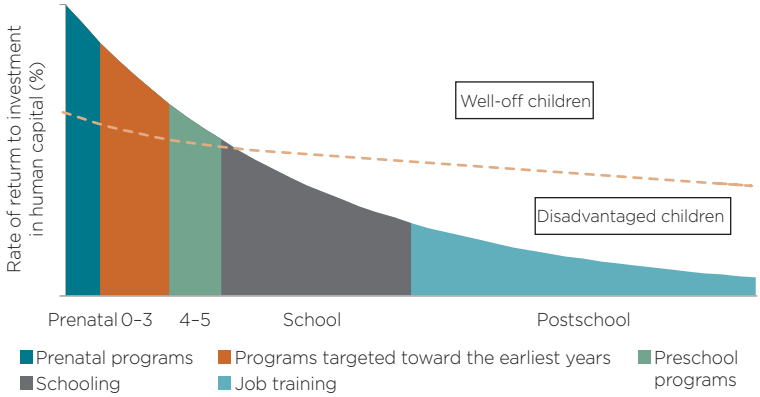
In the context of school finance, allocative efficiency is reached when educational funds are distributed in the most socially efficient way across educational levels. Although there is no research consensus on how educational resources should be ranked, prioritizing public education funding for preschool (0 to 5 years old) appears to have the highest social returns (Heckman, 2012). Early experiences often have persistent and significant effects on a wide array of important adult outcomes (Berlinsky and Schady, 2015). Moreover, investments made in the early years of child development might increase the return on investments made later in life (Cunha and Heckman, 2007).

In Latin American and Caribbean countries, much more is spent on primary, secondary, and tertiary education than on early childhood education. Expenditure in pre-primary education on children under 6 is only about a fifth of that of children 6–12 years of age or older. As a percentage of GDP, pre-primary spending is 0.4 percent, primary 1.9 percent, secondary 1.6 percent and tertiary 1.1 percent. (World Bank, 2018). For a GDP per capita that is one third that of the OECD, Latin America and the Caribbean should spend more on the early years than on the late years since the region has a higher percentage of disadvantaged low-income families. Attendance in pre-primary education is about 60 percent in Latin America and the

Caribbean for children between 3 and 5, and enrollment (which is lower than attendance) is about 20 percent for age 2 children and much lower for younger ages. Hence, although expenditure *per student* is fairly high in pre-primary (about 12 percent of GDP per capita), spending per child in preprimary and early childhood is just 4.3 percent of GDP per child. There are even more possibilities to shift spending from upper education spending. Tertiary spending per graduate, considering that the average tertiary dropout rate is greater than 50 percent, is 40 percent of GDP per capita and hence, almost 10 times higher than pre-primary spending per child (and usually on children of relatively wealthy families).

A shift in resources from higher education to earlier ages of disadvantaged children would additionally result in a more efficient (and equitable) allocation of resources. Smart investments in early interventions of lower-ability children have much higher economic returns (as they tend to equalize abilities and subsequent rates of return) than remediation programs later in life, such as public job training, adult literacy programs, tuition subsidies, or expenditure on police to reduce crime (Figure 9). Data also show that investing in the developmental growth of at-risk young children is important for economic growth. To increase allocative efficiency, it is first important to prioritize investment in quality early childhood education for at-risk children. Afterwards, it is important to sustain gains with effective education through adulthood. Investments for disadvantaged youth have lower rates of return, meaning that they are more costly interventions, but to level the playing field, more resources should be devoted to enhance their skills and chances in life. For severely disadvantaged adults with low ability levels, subsidizing work and welfare may be a better response for alleviating poverty than investing in their skills with job training programs. The literature on the financing of tertiary education argues for an increase in private funding, and for the introduction of fees, coupled with well-designed student loans and grants. The latter

Figure 9. Returns to a Dollar Invested in the Skills of Disadvantaged Children (Compared to Well-Off Children) at Different Stages of Life Cycle



Source: Adapted from Heckman (2008, 2016) and Woessman (2008).

would ensure that able students from disadvantaged families are provided the financial means to cover tuition and costs. In general, though, such students have a lower probability of entering university. However, the cause seems to be more a lack of basic skills to advance to university, due to insufficient earlier investments, rather than credit constraints, as is the case in some countries such as Chile.

Public Spending and Equity

Over the last decade, poverty and inequality declined in Latin America and the Caribbean until leveling off in 2014. Poverty fell in virtually every country, and the fraction of people in the region living on less than $2.50 per day halved from 25.9 percent in 2004 to 12.7 percent in 2015. The declines in inequality are similarly impressive. In 2004, the (disposable income) Gini coefficient was 0.532 on average, and by 2015, it had fallen by more than 6 percentage points to 0.467. Despite this decline in inequality, Latin America and the Caribbean continues to be one of the most unequal regions in the world.

Most programs that affect equity directly are included in social spending and can be divided among programs that provide social insurance; programs that redistribute income; and those that build human capital, including education. There is a positive relation between the size of spending and redistribution. However, when comparing Latin American countries with OECD countries that spend roughly the same, advanced countries redistribute much more. The Latin American countries that reduce inequality most (between 6 percent and 14 percent) are Uruguay, Argentina, and Brazil, and they are also among the countries that spend most on social programs. However, size is not everything. European countries with similar levels of social spending reduce inequality at least four times as much.

Latin America and the Caribbean redistributes inefficiently. For 16 Latin American countries, direct taxes and cash transfers reduce inequality by only 4.7 percent on average, while in a sample of advanced countries the decline is 38 percent. Problems include: 1) the low redistributive capacity of fiscal policy, particularly spending policy; 2) high spending on regressive programs and low spending on progressive programs; 3) the low targeting capacity of social programs; 4) ever-greater noncontributory spending, which elicits behavioral responses that diminish the effect of social policy; 5) spending on health and education that, when quantified at cost, seems progressive, but when analyzed by its coverage and quality, is actually regressive; and 6) the increasing share of subnational governments' contributions to social spending, which adds an additional challenge for equity.

Adding It All Up

This executive summary has outlined only a few examples of the choices policymakers face as they try to make every penny count for their citizens. This book shows that weighing these alternatives can make a world of difference in many sectors. In

the health sector, greater efficiency is estimated to improve life expectancy by an average of four years, reduce infant mortality by about 47 percent, and lower the number of years lost due to poor health, incapacity, or early death by 19 percent. In education, PISA scores in the region could increase 17 percent. In the fight against crime, greater efficiency could result in 30 percent fewer violent crimes. And in infrastructure, cutting cost overruns and delays could save as much as 1.2 percent of GDP.

These gains are not trivial. The policies and institutions proposed in this book show governments a way to achieve better outcomes with the same or fewer resources. The challenge is to find the right mix of transfers to meet today's needs and investments to prepare for tomorrow.

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Better Spending for Better Lives gives a comprehensive, in-depth analysis of the effectiveness of public spending in Latin America and the Caribbean. It covers the full range of fiscal activities of governments, evaluating both the marginal costs and benefits of expenditure programs in the region. It critically examines anti-investment bias in policy. It candidly discusses the need for transparency and reform across the region. This book will shape the discussion of expenditure policy in Latin American countries for years to come.

James J. Heckman
Nobel Laureate; Professor and Director, Center for the Economics of Human Development, University of Chicago

Public spending has been at the heart of Latin America and the Caribbean's policy debate for a long time. Given the frequent need to undertake costly adjustments in the level of public spending, however, little attention has been paid to the effects of public spending composition and efficiency on overall economic prosperity. This incisive volume is a must-read for anybody interested in fiscal policy, public finance, or development and, in particular, policymakers and practitioners eager to learn how to do more with less and how to develop the right institutions that will help safeguard public investment for inclusive growth.

Carlos Végh
Chief Economist, Latin America and the Caribbean, The World Bank

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