

LATIN AMERICA POLICY JOURNAL

A Harvard Kennedy School Student Publication

SHIFTING WINDS IN LATIN AMERICA

VOLUME 7 • SPRING 2018

COMMENTARIES BY

Angel Gurría
Luis Almagro
Rodrigo Valdés
Jaime Saavedra
Gustavo Lopetegui

INTERVIEWS WITH

Juan Manuel Santos
Ricardo Hausmann





Latin America Policy Journal

SHIFTING WINDS IN LATIN AMERICA

Seventh Edition
2018

A Harvard Kennedy School Student Publication

All views expressed in the Latin America Policy Journal are those of the authors or the interviewees only and do not represent the views of Harvard University, the John F. Kennedy School of Government at Harvard University, the staff of the Latin America Policy Journal, or any associates of the Journal.

All errors are authors' responsibilities.

© 2018 by the President and Fellows of Harvard College.
All rights reserved. Except as otherwise specified, no article or portion herein is to be reproduced or adapted to other works without the expressed written consent of the editors of the Latin America Policy Journal.

STAFF

EDITOR-IN-CHIEF

Manuel González Schuler

EXECUTIVE EDITOR

Patricio Goldstein

MANAGING EDITOR

Valentín Sierra Arias

EDITORIAL DEVELOPMENT DIRECTOR

José Tomás Valente

WEB EDITOR

Lucas Urbisaia

CREATIVE DIRECTORS

Luisa Piñeros Sánchez

Jorge Silva Herreros

SENIOR EDITOR

María Fernanda González Icaza

EDITORS

Malena Acuña

José Luis Bacigalupo

Laura Cohen Escobar

Pascuala Domínguez

Raúl Duarte

María Lucía Flórez Jiménez

Omar Ghurra

Michael Lopesciolo

Friederike Strub

Anna Thomas

Jorge Tudela Pye

BOARD OF ADVISORS

ALEJANDRO SANTOS

Director of Revista Semana

AMANDA BEAUJON

Consultant at the World Bank

ANGÉLICA NATERA

Executive Director of Laspau

MICHAEL REID

Senior Editor for Latin America and Spain at The Economist

MICHAEL SHIFTER

President of the Inter-American Dialogue

PRISCILLA GUTIÉRREZ

Country Economist at the Inter-American
Development Bank in Nicaragua

ACKNOWLEDGEMENTS

The Latin America Policy Journal Staff would like to recognize those who have supported us in this journey:

DOUGLAS W. ELMENDORF

Dean and Don K. Price Professor of Public Policy at the Harvard Kennedy School

RICHARD PARKER

Lecturer in Public Policy at the Harvard Kennedy School and Senior Fellow of the Shorenstein Center

MARTHA FOLEY

Assistant Director of Student Services at the Harvard Kennedy School

ANDREINA SEIJAS

Webmaster and Doctor in Design Candidate at the Harvard Graduate School of Design

JEFFREY SEGLIN

Director of the HKS Communications Program and Senior Lecturer in Public Policy at the Harvard Kennedy School

THE LATIN AMERICAN CAUCUS

THE LATIN AMERICAN CONFERENCE

THE HARVARD KENNEDY SCHOOL STUDENT GOVERNMENT

THE DAVID ROCKEFELLER CENTER FOR LATIN AMERICAN STUDIES

HARVARD UNIVERSITY DINING SERVICES

LAPJ BOARD OF ADVISORS

LAPJ TEAM OF EDITORS

CONTENT

IN MEMORIAM	2
EDITORIAL NOTE	3
COMMENTARIES	
Rethinking Institutions to Rebuild Trust and Foster Citizen Well-being in Latin America <i>by Angel Gurría</i>	6
Latin America and the Crisis in Venezuela: An Opportunity to Defend Democracy and Human Rights in the Hemisphere <i>by Luis Almagro</i>	10
“Always Do What You Feel is Right, No Matter How Unpopular it May Turn Out to Be” <i>An interview with Juan Manuel Santos</i>	15
Rethinking Public Sector Management in Argentina: The Role of Leadership and Coordination in the Governance Improvement of State-Owned Enterprises (SOEs) <i>by Gustavo Sebastián Lopetegui and Sebastián López Azumendi</i>	19
Growth-Redistribution Balance and Shifting Coalitions: A View from Chile <i>by Rodrigo Valdés</i>	28
Three Critical Ingredients for a Successful Education Reform <i>by Jaime Saavedra</i>	35
RESEARCH	
Technology and the Future of Work: Why Do We Care? <i>by Eduardo Levy Yeyati and Luca Sartorio</i>	38
The (Un)expected Economic Consequences of the Recent Expansion of Higher Education in Latin America <i>by Ricardo Espinoza and Sergio Urzúa</i>	47
How to Manage Urban Development in Central America: Using Remotely Sensed Data to Better Understand Cities <i>by Jessica Grisanti and Devyn Paros</i>	54

Bright Mirror: How Latin America is Enhancing
Digital Democracy 62
by Cecilia Nicolini and Matías Bianchi

Towards Measuring Economic Policy Uncertainty in
Latin America: A First Little Step 68
by Alvaro Silva

ARTICLES

“The Future of Latin America Depends on its Ability to
Discover How to Evolve its Comparative Advantage” 74
An interview with Ricardo Hausmann

Is Latin America Ready for the Technological Tsunami? 82
by Isabel Guerrero and Sandra Naranjo

The Andean Death Valley: Are Latin American Entrepreneurs
Destined to Fail? 89
by Juliána Castro

Brazil’s Age of Extremes: The Disputed Institutional Legacy
of the Crisis 93
by João Moraes Abreu

Tackling Financial Exclusion in Paraguay: Banks with Souls
and the Role of Public Financial Institutions as a Means to
Reach the Underserved 99
by Juan Manuel Gustale Cardoni

Social Impact Bond in Latin America 104
by Isabel Opice

ARTWORK

Border Stories Project: Biking along the U.S.-Mexico Border 108
by José Antonio Alfaro

In Memoriam of **Peter Ngozi Nwaneri**



The Latin America Policy Journal's Editorial Board would like to express its heartfelt sympathy to Peter Ngozi's family and friends, and pay a special homage to his memory. Ngozi left us too soon – just three months before graduation – and will be well remembered by all the classmates and fellows he influenced at the Wharton School and the Harvard Kennedy School of Government, where he was closely involved in the African Policy Journal (APJ). Ngozi was passionate about private equity markets in Africa, and had a genuine purpose to contribute to financial development in his mother country, Nigeria, where he founded his own firm. At the APJ, he served as an Interview Editor and was the brain and passion behind the podcast and interview series. Besides his undeniable suave, intelligence and unique sense of humor, Ngozi will be remembered for his generosity of spirit and care for others. He lived in the moment and his memory reminds us to live, love, and laugh to the fullest. Ngozi will be missed by all of those who had the privilege to meet him, but will live through the deep commitment to service, strong sense of community, and true love for life that we all shared with and learnt from him.

Editorial Note

By the LAPJ Editorial Board

There is no doubt that Latin American and Caribbean (LAC) countries have been navigating through one of their fiercest storms in years. Latin American people, who are well-known for having a very positive perception about life in the face of adversity, are tackling the endemic diseases of a fragmented continent: after a great recovery from the 2008 financial crash, the region's economies have taken the path of decelerating growth, low productivity is a major constraint, and many countries still rank among the most unequal worldwide. The explosion of corruption scandals in both the public and the private spheres (e.g. Odebrecht, Panama Papers, and FIFA Gate) has smeared political leaders' reputation in almost every country, threatening the stability of public institutions. General discontent is ubiquitous among civil society regardless of the political colors of the government in power. As if that weren't enough, the forces of nature striking Mexico and Puerto Rico remind us of how vulnerable we are towards the effects of climate change. Moreover, two major political events are shaping what can be the regional agenda for the years to come. The arrival of Donald J. Trump at the White House in January 2017 has revived the ghosts of the past, bringing illegal migration and the "War on Drugs" to the front line of diplomatic relations between the United States and LAC. The establishment of a National Constituent Assembly in Venezuela in August 2017 uncovered the Venezuelan regime's attempt to dismantle democracy, aggravating the humanitarian disaster that is already impacting its neighboring countries.

With this troubled context in mind, the Editorial Board of the Latin America Policy Journal (LAPJ) titled its seventh issue "Shifting Winds in Latin America" acknowledging the complexities of this transitional period, yet maintaining a positive stance towards the discovery of innovative solutions. Loyal to its foundational goal of starting a spirited conversation between the Harvard community and key stakeholders and policy-makers in the region, the 2018 Spring edition brings together some of the most relevant political and academic figures of the continent.

Outstanding political leaders such as Angel Gurría, the Secretary General of the Organisation for Economic Co-operation and Development (OECD), invite us to rethink our institutions to restore confidence among the citizenry and foster better social and economic opportunities. Luis Almagro, the Secretary General of the Organization of American States (OAS), makes a strong call to the international community for the defense of democracy and the protection of human rights in Venezuela. Colombian President Juan Manuel Santos (MC/MPA'81) underlines the relevance of persevering and keeping a cold head in moments of leadership crisis and high unpopularity. Gustavo Sebastián Lopetegui, the

Secretary of Policy Coordination of the Government of Argentina, and Sebastian López Azumendi discuss the current endeavors of the Argentinian government to improve the management of state-owned enterprises. Rodrigo Valdés, former Minister of Finance of Chile, analyzes the potential impact of economic growth strategies and redistribution policies on per capita income in Chile, and Jaime Saavedra, former Minister of Education of Peru and Head of the Education Global Practice at the World Bank, stresses the fundamental ingredients for a successful education reform.

Guaranteeing a constructive dialogue between the political and academic worlds is crucial in the quest for lasting and feasible solutions for the continent's challenges, which is why the contribution of Latin American academic authorities is so valuable for this publication. In this edition, Eduardo Levy Yeyati and Luca Sartorio examine the potential effects of automation and the ongoing technological revolution on the future of work in the continent. Moreover, Isabel Guerrero, Adjunct Lecturer in Public Policy at the Harvard Kennedy School (HKS), and Sandra Naranjo (MPA/ID'14), former Minister of Tourism of Ecuador discuss the consequences that the technological revolution will have on Latin American labor markets and the possible strategies at hand to face the challenge. In a context of the expansion of higher education, Ricardo Espinoza and Sergio Urzúa argue that only high-quality college degrees will equip LAC youth with the necessary skills to assure a promising future. Finally, Ricardo Hausmann, Professor of the Practice of Economic Development and Director of the Center for International Development at Harvard, shared in an interview his knowledge on economic development and his personal views on the region's political dynamics.

Yet, the full picture cannot be completed without the insights of those who represent the essence of this Journal: Latin American graduate students. Jessica Grisanti (MPP'17) and Devyn Paros (MPP'17) explore Central America's urban development challenges, and how the use of remote sensing technology can advance urban transformation. Cecilia Nicolini (MC/MPA'17) and Matías Bianchi survey current innovative practices in the areas of e-government and digital democracy, showing how technology can be used strategically to improve government's performance, while opening more participatory spaces for civil society. Alvaro Silva evaluates the impact of uncertainty in policy-making, through the use of economic policy uncertainty indices. Juliana Castro (MPP Candidate) discusses the complexity of scaling up entrepreneurial ventures in the region and the positive outcomes that entrepreneurship can provide to boost development. João Abreu (MPA/ID Candidate) examines the conflicting political narratives emerging from Brazil's institutional crisis. Juan Manuel Gustale Cardoni (MC/MPA'17) considers community development financial institutions as a plausible strategy to tackle financial exclusion

in Paraguay. Isabel Opice (MPA/ID Candidate) invites us to think about social impact bonds as a crucial step to bring the pay-for-performance agenda to the public sector in the continent. Finally, the photos of José Antonio Alfaro constitute a simple and original way that helps us appreciate how life and things look like on the U.S.-Mexican border.

We want to seize the launch of the seventh issue as an opportunity to remind our readers, especially our fellow students, that the LAPJ is an open window to express their opinions, advocate for their ideals, and learn from new and different perspectives. As Latin Americans, we feel proud of the extraordinary countries we come from: speaking the same – or very similar – languages, sharing a common historical legacy, and being able to make other people’s lives joyful through our music and dishes is only a small sample of the immense potential that we have. Yet, this exceptional sense of belonging to our mother nations can also play against us: we have the capacity to ignore very easily the urgencies – and even the achievements – of our neighboring countries because we are immersed in our own domestic preoccupations. In this sense, the Harvard Kennedy School provides us with an invaluable opportunity to share an enriching intellectual environment with other Latin American students, as well as with students from all over the globe. This is a unique chance to reinforce the ties among our sister nations, discuss the issues that matter the most, and sow the seeds for a broader sense of identity that can go beyond political borders. Embracing our diversity is thus crucial to achieve the united region we envision, the one our forefathers have dreamed of for centuries.

—

We would like to thank all the individuals and organizations listed in the Acknowledgements Section for their precious contributions and support, which made the preparation of this Journal possible. A special mention ought to be made to our highly talented team of editors, whose efforts allowed us to ensure a publication of original and high-quality content. We are also proud and grateful for the guidance we received from our newly created Board of Advisors, the financial aid granted by Dean Douglas Elmendorf, and the Harvard Kennedy School Journals coordinators, Professor Richard Parker, Martha Foley, and Andreina Seijas, for their endless support.

Rethinking Institutions to Rebuild Trust and Foster Citizen Well-being in Latin America

By Angel Gurría, Secretary General of the Organisation for Economic Co-operation and Development (OECD)

Citizens in Latin America and the Caribbean (LAC) are increasingly dissatisfied with their governments and public institutions at large. Corruption scandals and the impact they are having across society are certainly part of the explanation of this trend. At the same time, the region's economic slowdown in recent years, with a two-year contraction in 2015-16, has impacted social conditions and consequently the trust of citizens in the ability of institutions to deliver on socioeconomic challenges.

Notwithstanding the relevance of these dynamics, there are other structural issues that appear to be critical drivers of this growing social dissatisfaction, namely the shift in citizens' aspirations, the persistence of profound socioeconomic disparities in the region, and the emergence of new development challenges both at the domestic and the global scale. All this reveals the limitations of the current institutional framework to satisfy society's needs and demands.

This growing disconnect between citizens and public institutions represents a critical issue for the sustainable and inclusive development of the region, as highlighted by our *Latin American Economic Outlook 2018: Rethinking Institutions for Development*.¹ Reconnecting public institutions with citizens and better responding to their demands and aspirations is a vital step to guarantee a new period of sustainable economic growth, social progress, political stability, and greater well-being for all in LAC.

The Erosion of Trust and Satisfaction in Latin America

Citizens' trust in institutions has been traditionally low in LAC, but it has deteriorated further in recent times. Data from *Latinobarómetro* shows that the share of the population with little or no trust at all in their governments reached 75 percent in 2017, 20 percentage points higher than in 2010.² Other indicators of trust point to the same trend: in 2016, only 23 percent of Latin Americans said they were confident in the honesty of elections (compared with 46 percent in OECD countries), just 34 percent had confidence in the national judicial system (49 percent in the OECD), and 80 percent claimed their government was corrupt (up from a level of 65 percent in 2010).³

Satisfaction with public services has also deteriorated in the region. From 2006-16, the share of the population satisfied with the quality of healthcare services fell from 57 percent to 41 percent, well below average levels in the OECD (stable at around 70 percent). Likewise, satisfaction with the education system fell from 63 percent to 56 percent over the same period, while it remained relatively stable above 60 percent in OECD countries.⁴

While the decline of trust is not exclusive to Latin America and it is also gaining ground in other regions of the world, there are some particular features in LAC that seem to be driving this trend. These features are worth exploring to better design adequate policy responses.

A larger middle class has driven up aspirations, while a challenging domestic and global context creates uncertainty.

As the saying goes, “every cloud has a silver lining,” and while the growing disconnect between society and institutions is a critical challenge for citizens’ well-being in LAC, it is fair to say that such disconnect has been partly driven by the rise of the middle class, which has boosted aspirations and expectations about living standards. Indeed, the expansion of the middle class has been one of the major socio-economic transformations of recent times in LAC, to the extent that for the first time in decades, the middle class is more numerous than the population living in poverty. In 2015, around 34.5 percent of the population could be considered “consolidated middle class” (living on US \$10-50 a day expressed at constant 2005 prices in purchasing power parity (PPP)), up from 21 percent in 2001. This expansion has been accompanied by higher aspirations and evolving demands and values, as middle-class citizens are believed to be strong supporters of democracy. But in addition to this, there is a large vulnerable class (living on US \$4-10 a day), which represented around 40 percent of the population in 2015, up from 34 percent in 2000.⁵ This socio-economic group lives with the uncertainty of falling back into poverty as a result of negative shocks. And, finally, around a fifth of the population still lives in poverty. Altogether, the increased (and oftentimes unmet) expectations of the consolidated middle class coexist with the instability and insecurity of the vulnerable middle class and the poor, with pressing and unsatisfied demands across all social groups.

The growing divide between citizens and institutions also reflects some persistent socio-economic challenges,

including insufficient growth and high inequality, compounded by an uncertain domestic and global context. The prevalence of low productivity levels and the so-called middle-income trap – the stagnation of countries at middle-income levels – remain critical challenges for well-being in the region. While LAC economies are experiencing a modest recovery after going through a contraction in 2015-16, the global macroeconomic outlook is still far from the dynamism of the previous growth cycle that boosted demand and provided a much-needed tailwind to the region.

Meanwhile, global trade and investment flows have decelerated in recent years. The costs of increased openness and connectivity are weighted as never before against the benefits, and many perceive that globalization has left them behind. This has fueled inward-looking policies in key global players accompanied by uncertainty about a potential reversal of global integration, with consequences for international trade.⁶ Equally, new challenges such as technological change and its potential impact in the world of work, aging populations, migration, and climate change are intensifying. Confronted with this international context, citizens are uncertain about the capacity of institutions to respond to this complexity and to guarantee further progress.

The social contract is weakening: institutions need to be rethought to build a new state-citizens-market nexus.

The growing disconnect between citizens and public institutions is weakening the social contract in LAC, with critical implications for well-being. When citizens perceive that public institutions are unable to respond to their demands, they have lower incentives to fulfill their obligations in the social contract, mainly voting and

paying taxes. In fact, the willingness to pay taxes (i.e. “tax morale”) remains weak: in 2015, 52 percent of Latin Americans were willing to evade taxes if possible (compared to 46 percent in 2011).⁷ Tax evasion undermines the state’s capacity to provide quality public goods and services effectively. This, in turn, has a negative impact on citizens’ lives – shown by the deterioration of well-being indicators in recent years – and risks perpetuating a negative spiral.

It is in this context that LAC can largely benefit from rethinking its institutions to construct a renewed state-citizens-markets nexus to better respond to people’s needs and demands. There are two broad areas of policy recommendations in this direction, as highlighted in the forthcoming *Latin American Economic Outlook 2018*.⁸

First, institutions must be rethought to support inclusive growth. This objective should go hand-in-hand with the provision of better job opportunities, greater macroeconomic stability and better prospects of socio-economic progress for citizens. A particular focus here must be placed on the institutional transformations needed to achieve greater levels of trade integration, production diversification, and value-addition. LAC needs to shift towards further regional and global integration. To achieve this goal, persistent barriers, mainly non-tariff, need to be removed. This must be accompanied by policies to support investments in skills, technology, and R&D. At the same time, the region should progress towards a stronger common negotiating position in the international arena. There is some progress, however. The rise of the Pacific Alliance is the single most promising development towards regional integration in many decades.

Second, institutions must be rethought to build empowering and enabling states

that deliver and respond to citizens’ demands, creating and providing them with the opportunities to thrive in life irrespective of their socioeconomic background. Effective institutions are critical for broadening access and delivery of key social services and infrastructure that form the foundations of a prosperous society. Better and more resilient institutions will help advance the Sustainable Development Agenda in the region. In this endeavor, states need to be more reliable, forging a culture of integrity and transparency that leads to regaining citizens’ trust; they need to be more capable, improving the efficiency and effectiveness in the delivery of services to citizens and making better use of existing resources; and they need to be more forward-looking, to anticipate change, adapt to emerging challenges and demands, and find innovative responses to them. Corruption, weak state capacities, and lack of effective interaction channels with society all contribute to push public administrations away from citizens’ demands.

As Borges once said, “the future is not what will come, but what we will do.”⁹ The task is clear: to bring institutions closer to Latin American citizens and adapt them to the changing needs and aspirations of society.

NOTES

1 OECD/CAF/ECLAC, *Latin American Economic Outlook 2018: Rethinking Institutions for Development* (Paris: OECD Publishing, 2018).

2 Corporación Latinobarómetro, “Informe 2016,” 2017, www.latinobarometro.org.

3 Gallup, “World Poll database,” 2016, <http://www.gallup.com/services/170945/world-poll.aspx>.

4 Gallup, “World Poll database,” 2016, <http://www.gallup.com/services/170945/world-poll.aspx>.

5 World Bank, “Tabulations of SEDLAC (CEDLAS and the World Bank) and World Development Indicators (database),” 2016, www.worldbank.org/en/topic/poverty/lac-equity-lab1/Overview.

6 OECD, *Fixing Globalisation: Time to Make it Work for All*, (Paris: OECD Publishing, 2017).

7 Angel Melguizo et al., *Revisiting the Determinants*

of Tax Morale, OECD working paper (Paris: OECD Publishing, forthcoming).
8 OECD/CAF/ECLAC, Latin American Economic Outlook 2018.

9 Translated from its original version in Spanish, “El futuro no es lo que va a pasar, sino lo que vamos a hacer.”



Angel Gurría

Angel Gurría has been the Secretary-General of the OECD since 2006. Under his leadership, the Organisation has established itself as a pillar of the global economic governance architecture including its active engagement with the G20, G7, APEC, and other international fora. Mr. Gurría has advanced the OECD’s impact and relevance in several policy areas, focusing on the promotion of better lives through inclusive growth and new approaches to economic challenges. He has also made the OECD more inclusive through new memberships, strengthening the link with key emerging economies and fostering its global outreach. Mr. Gurría came to the OECD following a distinguished career in public service in his native Mexico, including positions as Minister of Foreign Affairs and Minister of Finance and Public Credit in the 1990s.

Latin America and the Crisis in Venezuela: An Opportunity to Defend Democracy and Human Rights in the Hemisphere

By Luis Almagro, Secretary General of the Organization of American States (OAS)

The path toward building better democracies in Latin America is not paved with quick, acclaimed victories. The post-colonial national governments that were established were based – in several countries – on unstable centers of power, weak governance, and discriminatory ruling classes. The traditional political elites were reluctant to build strong institutions, fearing they could risk their future hold on power and privilege. They withheld fundamental rights from their people, believing that social mobility could threaten their individual interests.

The biggest fractures in the region – i.e. inequality, corruption, and impunity – are structural, endemic, and persistent. Governments have proven reluctant to make the meaningful changes the people demand. They have avoided – or rejected – building inclusive and redistributive systems, to construct stronger institutions, to fight impunity, and to guarantee human rights. Instead of serving and protecting their nations, leaders have given in to the temptation of perpetual authority. This power yields the ability to uphold the *status quo* under the pretense of stability and governance. In practice, this breed of authoritarianism has generated the exact opposite outcome.

After 200 years of independent history, the region still struggles to build better, more resilient democracies. Although some progress has been made, Latin American countries suffer from the same pervasive structural problems. Poverty, inequality, lack of rights, and lack of infrastructure continue to undermine development in the

region. Our societies must grapple with these challenges on a daily basis. Citizens are urging governments to meet their basic needs, protect their human and fundamental rights, and fulfill basic institutional requests. Despite the countless hours spent parsing out variables and evaluating potential policies, we have still failed to take the necessary actions to uproot the deep-seated sources of these problems.

In Latin America, there is one essential lesson. Without exception, the stronger democracies have all had better, more sustained economic development, with greater social protection and services. At a time when the world is experiencing democratic backsliding and fears a democratic recession, we must renew our commitment to inclusion and equality. This is why it is imperative for the region to work together in addressing the crisis in Venezuela; we cannot allow it to become a roadmap for the dismantling of democracy in the hemisphere. The Organization of American States (OAS) and its Member States must reaffirm their commitment to ensuring democracy for all the citizens of the Americas.

Through the treaties and agreements that OAS Member States have signed, the countries of the Western hemisphere have recognized that democracy is a fundamental condition for political stability, peace, economic development, and social justice. However, we have seen all too many leaders who consider themselves – and their causes – to be exceptions to this principle, producing devastating consequences for their nations. Venezuela has become the

prime example of this nefarious practice. Corruption, bad policies, and the abuse of power have destroyed what should be one of the most prosperous countries in our hemisphere. Now, in a continent that once prided itself on its hard-earned democracies, we count among us not only a dictatorship, but a failed state.

Corruption is a disease that extends far beyond a country's borders. It has no political party or ideology. We have witnessed throughout the region that when we turn a blind eye to these practices, they are replicated elsewhere. Examples such as Odebrecht, the looting of Venezuelan oil wealth, and the Paradise Papers in Panama all point to the unbounded spread of corruption in Latin America. We have also witnessed repeated attempts to politicize the judiciary, and in turn use it to expand the executive's political authority. Corrupt officials have blatantly ignored referendum results. The civic space has been closed and opposition political parties have been eliminated. The protections guaranteed in our constitutions have been treated as if they were drafted in pencil and can be easily ignored. The regime in Venezuela is guilty of violating almost every single constitutional article. Elsewhere, term limits are being removed for the sole purpose of extending the hold on power. Perhaps the greatest tragedy of them all, in a region that has paid such a high cost to ensure the democratic order and civilian oversight of security forces, Venezuela has created a model for reviving the military encroachment in the responsibilities of governance.

Robust and stable democracies require not only strong institutions, but transparency, accountability, fair processes, and vibrant civic space. Democracy must be about so much more than elections. It is natural to favor elections when politicians know they will win. The key challenge is what happens when those in power face

an uncertain electoral outcome. When the executive branch attempts to consolidate power in the hands of the president, it turns elections into a zero-sum game. It allows them to act with impunity, and politics are reduced to a strategy to gain time, skirt accountability, and reduce the odds of landing in jail. These behaviors, fueled by raw, self-interested ambition, have fostered an environment of bad policies and illegitimate deals. Today, the consequences for Nicolas Maduro – the head of the Venezuelan government – of losing an election are now too high for him to take that chance. When losing an election means losing everything, there will always be a motivation to change the rules of the game so they always work in your favor.

For the international community, the easy way out of addressing these problems is to simply ignore them, pretending that these issues are isolated exceptions that will resolve themselves. It is in these instances that the OAS has been expected to remain silent, limiting its mission to a mere oversight role of process validation without any substantial agency. The OAS cannot remain silent. The cost is too high. The permanent message we must adopt is that we can build inclusion, security, and prosperity by strengthening democracy and the rule of law with the help of the Inter-American Legal Framework. However, honoring this commitment also means that we cannot be afraid to act when we see any of our region's hard-earned democracies begin to backslide.

The OAS has a crucial role to play in confronting anti-democratic practices, corruption, inequality, exclusion, and insecurity. Our membership requirements are clear: each Member State chooses to sign on to agreements protecting human rights and democracy, which create both incentives for adherence and mechanisms for enforcement and accountability. We

have also established a clear authority to act in every signatory state when these values are threatened. We have seen the value of these tools in the historic peace deal in Colombia, the ongoing democracy-strengthening process with the Government of Nicaragua, and the joint efforts with the Government of Honduras to tackle corruption and improve electoral legitimacy.

Today, the OAS is the only multilateral organization to have spoken clearly and loudly about the crisis in Venezuela. It is the only multilateral organization to send a strong political signal for strengthening the voice of democracy, showing solidarity from the majority of our hemispheric community. On 23 February 2018, the Permanent Council adopted its second resolution condemning the latest efforts by President Maduro to consolidate another six years of power through false elections.¹

We have been relentless and will continue to denounce the dismantling of the constitution and the democratic institutions, the violations of human rights, and the violent repression against citizens in Venezuela. Maduro's regime also employs a less overt but no less sinister form of repression by controlling society through misery. Control is easier to exert when people have been stripped of their rights, their livelihoods, and their basic human needs. The economy has been decimated and poverty rates have jumped to 82 percent, meaning that a family needs to earn 63 times the minimum wage in order to afford basic food necessities.² In 2016, the number of undernourished people living in Venezuela jumped by 1.3 million people in less than two years.³ It is very difficult for people to take the streets when they have nothing to eat. The mass migration of Venezuelans out of the country means fewer people challenging or opposing the government from within.

The OAS General Secretariat has called on Member States to activate the mechanisms of the Inter-American Democratic Charter. We have produced four reports over the past two years that provide indisputable evidence of the government's efforts to dismantle the country's democratic institutions and the widespread and systematic repression targeting anyone who questions the government's authority. More than 12,000 people have been arbitrarily detained since 2014.⁴ In the 2017 protests, 111 people were murdered by state security forces or their paramilitary allies; that is more than one death per day.⁵ Estimates for the number of wounded reached as high as 15,000.⁶ Hundreds of civilians have been tried by military courts and the number of political prisoners reached 676 at the height of the protests.⁷ We have denounced the unconstitutional interruption of the democratic order and how it severely impairs the democratic process in Venezuela.⁸

Repeated attempts to pursue dialogue with Maduro's regime have simply proven the government's ability to buy off, coopt, or coerce political leaders into doing their bidding. Thus, the only means to hold the regime accountable now lie outside of Venezuela's borders. The OAS General Secretariat has been collecting evidence to analyze the situation in Venezuela and determine whether crimes against humanity may have been committed by the regime.⁹ We welcome the announcement that the International Criminal Court prosecutor made on 8 February 2018 launching a preliminary examination into the situation in Venezuela. This is an important step forward and signals that such political impunity must have an expiration date.

The Venezuelan crisis is not just a domestic problem. It is a threat to international peace and security. The increasing outward flow of migrants could destabilize

the fragile peace and political stability of neighboring countries, fostering a wider humanitarian problem. Colombia, Brazil, Panama, and Peru have already welcomed hundreds of thousands fleeing the crisis. With more Venezuelans taking perilous journeys in search of food, healthcare, and employment, both Colombia and Peru, for instance, have seen their Venezuelan population increase by more than 1,000 percent.¹⁰ In 2015, Venezuela was the largest purchaser of weapons and ammunition in Latin America. Some of the regime's leadership, including the vice president and the presidential family, have even been linked to drug trafficking.¹¹ Recent reports about the growing links between Maduro's regime-connected organized crime syndicates and international terrorism should have the entire region on notice.

The OAS General Secretariat believes that targeted sanctions to hold criminals responsible for the crisis have been useful. Yet, we also believe that it is time to introduce broader, harsher, and more effective sanctions. This is the strongest diplomatic tool we have. The worst possible scenario for the Venezuelan people would be six more years of repression and dictatorship, hunger, sickness, and the deprivation of human rights. That is a certain outcome if Maduro succeeds in stealing the presidential election.

We cannot remain distant or indifferent to this human tragedy. The hemispheric community must stand united in denouncing the illegitimacy of the presidential elections that Nicolás Maduro and his corrupt Electoral Council have convened for April 2018. The international community must exert pressure and demonstrate that he cannot act with impunity. We must demand compliance with the constitution and focus on a democratic exit from the crisis. This is the *raison d'être* of the creation of the Inter-American Democratic Charter.

Latin American countries have the opportunity to reaffirm their commitment to the preeminence of these democratic principles, to the foundation on which this Organization was established. We must be clear in our message that we will defend democracy. Regional solidarity, or non-intervention, cannot come at the cost of human rights abuses, undermining democratic institutions, and exclusionary policies. The ethical and moral values that we subscribe to mean nothing if we do not work diligently and consistently to make them a daily reality for all people of the continent. This is the commitment that all the OAS Member States must honor at this historical moment of truth.

NOTES

¹ Organization of American States, "Resolution on the Latest Events in Venezuela," CP/Res. 1095 (2145/18), 23 February 2018, [http://www.oas.org/documents/eng/press/CP-RES.1095\(2145-18\).pdf](http://www.oas.org/documents/eng/press/CP-RES.1095(2145-18).pdf).

² United Nations Office of the High Commissioner for Human Rights, "Venezuela: Dire Living Conditions Worsening by the Day, UN Human Rights Experts Warn," 9 February 2018, <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=22646&LangID=E>.

³ Food and Agriculture Organization of the United Nations, "The State of Food Security and Nutrition in the World," 2017, 82, <http://www.fao.org/3/a-I7695e.pdf>.

⁴ Foro Penal, "Reporte Sobre la Represión en Venezuela" ["Report on Repression in Venezuela"], December 2017, 1, <https://foropenal.com/2018/01/20/diciembre-2017/>.

⁵ Complaint of Attorney General of Venezuela, Luisa Ortega Diaz, before the International Criminal Court, 6 November 2017.

⁶ "Oposición contabiliza 15,000 heridos tras 63 días de protestas en Venezuela," *Diario Libre*, 2 June 2017, <https://www.diariolibre.com/mundo/latinoamerica/oposicion-contabiliza-15-000-heridos-tras-63-dias-de-protestas-en-venezuela-AN7249002>.

⁷ Foro Penal, "Ascendió a 676 el número de presos políticos en Venezuela," 11 August 2017, <https://foropenal.com/2017/08/11/ascendio-a-676-el-numero-de-presos-politicos-en-venezuela-2/>.

⁸ On 30 May 2016, in accordance with Article 110 of the OAS Charter, I executed my responsibility as Secretary General, in activating the Inter-American Democratic Charter by submitting my first Report on the Situation in the Bolivarian Republic of Venezuela to the Permanent Council, requesting a meeting of the Permanent Council under the Democratic Charter. As the situation continued to deteriorate, I submitted my second report on 14 March 2017. On

3 April 2017, the Permanent Council passed Resolution 1078 declaring that there had been an “alteration of the constitutional order” in Venezuela. CP/Res 1078 (2108/17), http://www.oas.org/en/media_center/press_release.asp?sCodigo=E-022/17.

⁹ Venezuela ratified the Rome Statute in 2002 and therefore falls under the jurisdiction of the International Criminal Court. The third Report of the Secretary General, dated 19 July 2017, stated that there was evidence that “points to the systematic, tactical and strategic use of murder, imprisonment, torture, rape and other forms of sexual violence, as tools to terrorize the Venezuelan people in a campaign planned to crush opposition to the regime. The regime is implementing a systemic policy to assert control over the people of Venezuela that can be measured both through its actions as well as the rhetoric and propaganda used to enflame the polarization and tension in the country. A systematic attack directed against any civilian population is the core definition of crimes against humanity.” (p. 38) The General Secretariat established a three-part process that provided space

for the public depositions of witnesses, victims, and former members of the regime, and facilitated the gathering and compilation of additional documentary evidence in a final report that will be reviewed by a panel of independent international experts. The final report is expected to be released in March.

¹⁰ Anthony Faiola, “The Crisis Next Door,” *Washington Post*, 2 March 2018, https://www.washingtonpost.com/news/world/wp/2018/03/02/feature/i-cant-go-back-venezuelans-are-fleeing-their-crisis-torn-country-en-masse/?utm_term=.f22342382e41.

¹¹ U.S. Treasury Press Center, “Treasury Sanctions Prominent Venezuelan Drug Trafficker Tareck El Aissami and His Primary Frontman Samark López Bello,” 13 February 2017, <https://www.treasury.gov/press-center/press-releases/Pages/as0005.aspx>; Brendan Pierson, “Nephews of Venezuela’s First Lady Sentenced to 18 Years in U.S. Drug Case,” *Reuters*, 14 December 2017, <https://www.reuters.com/article/us-venezuela-usa-crime/nephews-of-venezuelas-first-lady-sentenced-to-18-years-in-u-s-drug-case-idUSKBN1E833G>.



Luis Almagro

Luis Almagro Lemes was elected OAS Secretary General on 18 March 2015. Since taking the helm of the OAS, the motto of his administration has been “more rights for more people,” and his work has focused on bringing the Organization closer to the hemisphere’s new reality to contribute toward guaranteeing more democracy, more security, and greater prosperity for all. A lawyer and career diplomat, he served as the Minister of Foreign Affairs of his country, Uruguay, between 2010 and March 2015. He was elected senator during Uruguay’s national elections in October 2014.

“Always Do What You Feel is Right, No Matter How Unpopular it May Turn Out to Be”

An interview with Juan Manuel Santos, President of Colombia (2010-2018)

President Santos responded to the questions formulated by LAPJ Managing Editor Valentín Sierra, with the assistance of Editor-in-Chief Manuel González, on 23 February 2018. What follows is a lightly edited transcript.

LAPJ Staff: You graduated from the Harvard Kennedy School as an MC/MPA in 1981. Ten years later you served in several cabinet positions, and in 2010 you were elected President of Colombia. Looking back, what did you take away from your time at Harvard?

President Juan Manuel Santos: I have great memories of the time I spent studying at the Harvard Kennedy School, where I had great teachers. There, I completed the consolidation of a concept that I have put into practice in my public service life, the concept of “Good Governance,” which I would summarize in four basic principles: efficacy, efficiency, transparency, and accountability.

LAPJ: Dr. Roger Fisher, Samuel Williston Professor of Law emeritus at Harvard Law School, “was a master at the art of perspective-taking.”¹ How did Dr. Fisher, and your experience on campus in general, influence your approach to the negotiations with the Revolutionary Armed Forces of Colombia (FARC)?

JMS: Professor Fisher was a true master, and on top of that, for me, a friend. His teachings about adopting the other party’s perspective in negotiations was crucial, and I have used them not only to solve the armed conflict in Colombia but also to exercise the ever-complex art of government. Undoubtedly, nobody does

something without having an internal motivation. For that reason, in every situation I try to understand what is it that motivates, inspires, and concerns my counterparts, what makes their hearts grieve, even if their actions are terrible and may seem inexcusable. There’s a human being behind every action, and behind every human being there’s a motivation. If we manage to understand it, we are halfway to a solution.

LAPJ: What are the main development challenges that Colombia will face in the near future?

JMS: The main challenge into the future will be, undoubtedly, to finalize the implementation of the peace agreement in all its aspects, bringing the State and its institutions to be present in the most remote corners of the country, which were also the most affected by the war. We should also keep on working to achieve a true reconciliation among the Colombian people, so that we can leave past hatreds and fears behind and focus on the opportunities the future offers. We must keep fighting poverty and corruption.

LAPJ: Colombia has been affected by the fall in oil prices, but the economy is growing and the country has increased its annual exports by more than 20 percent. What is the key to ensure Colombia’s long-term economic growth?

JMS: Colombia has always been characterized, not only in my administration, for having a serious, prudent, and responsible economic management, and that is a fact that is recognized by multilateral banks and international investors. During my government, we went a few steps further to ensure such responsible management and incorporated the principle of fiscal sustainability in our Constitution, which obligates the State to consider the fiscal effect of its decisions. We also promoted the Fiscal Rule Law, which is a sort of straitjacket that prevents public spending to exaggeratedly overflow revenues. All of this was very useful when we had to face difficult situations such as the slump of oil prices, our main export.

LAPJ: . . . How did you tackle that situation?

JMS: With an austerity policy in public spending, an intelligent austerity that did not cut resources from social and job generation programs. And also, with a tax reform that partly offset the downfall in revenues. It was not a popular measure, but it was the responsible measure. As a result, Colombia navigated through the troubled waters with a slowed-down economy, but we didn't fall into a recession or stopped growing, like other countries in the region. On the contrary, we kept on growing above the region's average.

LAPJ: What are your views on the current state of affairs of regional integration processes in the Americas?

JMS: I'm a believer in the advantages of regional integration. In a globalized world, success may only be achieved if you boost your strengths and offset your weaknesses through fair and well-conceived alliances. I am proud to be a co-founder of the Pacific Alliance, since it is considered the most important and successful regional

integration experience in Latin America. The four Country Members (Mexico, Peru, Chile, and Colombia) share their faith in democracy and free market, and their vocation to attract foreign investment. That is why we have managed to move forward in an integration effort that goes beyond free trade and also encompasses the free movement of capitals and people. The Pacific Alliance has spurred the interest of the whole world. We have 52 observer States and negotiations are under way with four of them (Australia, Canada, New Zealand, and Singapore) to become Associate Members.

LAPJ: You have dedicated over 30 years of your life to public service and have served as President of Colombia for almost eight. What advice would you offer to future government leaders in Latin America?

JMS: Throughout my life in public service, I have promoted and practiced the Third Way doctrine of British sociologist and former director of the London School of Economics, Anthony Giddens. This doctrine promotes a middle way between classic liberalism, which leaves everything in the hands of the market forces, and economic interventionism, which considers that the State should be the economy's regulator. It has been summarized in a simple but compelling sentence: "As much market as possible; as much State as necessary." It is a pragmatic doctrine, successfully put to work by Tony Blair in the United Kingdom, Bill Clinton in the United States, Felipe González in Spain, and Ricardo Lagos in Chile, among other government leaders. I have also put it in place in Colombia. One of the essential features of the Third Way is that it doesn't consider the State and the private sector as antagonists, but rather sees them as allies who may help each other to achieve social prosperity.

That is why my recommendation to Latin America's and the world's future leaders is that they should overcome the inflexibility of the ideologies and adopt a pragmatic approach, which may lead to achieve inclusive economic growth, that is, a strong economy whose profits shall mainly benefit the poorest population.

LAPJ: The Colombian presidential election will be held in May 2018. Do you have any message for your successor?

JMS: My main promise to my successor is that I will not interfere in his or her work. I had the privilege of governing for eight years, and I gave my best, with significant achievements as well as mistakes. I built on what my predecessors had built before and managed to ensure progress on many of the goals that Colombia has as a nation.

We lowered unemployment, but there are still many unemployed. We reduced poverty, but the poor are still too many. We signed peace with the FARC, but total peace has not been achieved yet in the country. To govern is to progress, to take steps forward, even if only a few times do leaders actually see the final result of their actions during their government. I hope the next president will build on what we have built, and will continue moving forward on peace, security, and social development.

LAPJ: What is your legacy for future generations?

JMS: My main legacy is that I found a country amid an armed conflict that had been going on for over half a century with the FARC guerrillas, a conflict that seemed impossible to end, and I am handing over a country without that absurd and cruel war. I am also satisfied to deliver a country with five million less poor people, with a strengthened middle class, with an additional 3.5 million

people with jobs, and with a more modern economy in full recovery.

LAPJ: You were awarded the Nobel Peace Prize in 2016, and the Harvard Law School's Great Negotiator Award in 2017. You became a model of leadership for many in our community. What lessons did you learn during your presidency that can be helpful for current students?

JMS: Ever since I was a cadet at the Naval Academy in my country, I learned that the most important thing in life is having a clear port of destination. When the port you are heading to is clear, even unfavorable winds help you get there. Hence, that is my first and most important lesson: you must have a clear goal and then persevere, always persevere, and never falter when difficulties arise. That is the only way to achieve major objectives.

Looking back, after 20 years working for peace in my country, I see there were more failures than successes. But precisely those failures were the ones that showed me the way and led me to the end result, which was none other than ending the longest and most painful internal armed conflict in the Western Hemisphere.

And I would like to say something else to the students: always do whatever is appropriate, what you feel is right, no matter how unpopular it may turn out to be. If you do, you will certainly have to suffer some consequences. But you will win something that is very important: peace of mind.

NOTES

¹ Robert C. Bordone '97, Thaddeus R. Beal Clinical Professor of Law and Director of the Harvard Negotiation and Mediation Clinical Program. Taken from Harvard Law School Communication, "HLS Professor Roger Fisher dies," Harvard Gazette, 28 August 2012, <https://news.harvard.edu/gazette/story/2012/08/hls-professor-roger-fisher-dies/>.



President Juan Manuel Santos

Juan Manuel Santos was elected President of Colombia on June 2010, then re-elected in 2014 for another four-year term. During his time in office, he worked to achieve the most prominent accomplishment of his presidency: the signature of the peace accords with the Revolutionary Armed Forces of Colombia, which put an end to more than 50 years of armed conflict in the country. The Norwegian Nobel Committee awarded him the 2016 Nobel Peace Prize, Time Magazine included him in the 2017 list of the 100 most influential public figures in the world, and the World Economic Forum earned him the Global Statesman Award for his efforts for peace and his distinguished career as a world leader. President Santos started his professional life as a cadet at the Naval Academy in Cartagena. As a journalist, he was a columnist and Deputy Director of Colombian newspaper El Tiempo. Throughout his political career, he has served as Chief of the Colombian Delegation to the International Coffee Organization in London, Foreign Trade Minister (1991-1994), Finance Minister (2000-2002), and National Defense Minister (2006-2009). President Santos studied Economics and Business Administration at the University of Kansas (1973). He holds a Master of Science in Economics from the London School of Economics and Political Science (1975), and a Master in Public Administration from the Harvard Kennedy School of Government (1981).

Rethinking Public Sector Management in Argentina: the Role of Leadership and Coordination in the Governance Improvement of State-Owned Enterprises (SOEs)

By Gustavo Sebastián Lopetegui and Sebastián López Azumendi

Abstract

Since December 2015, the administration of President Macri has emphasized the relevance of policy coordination and leadership in order to make public policies more effective. He appointed two Secretaries of State, under the Chief of the Cabinet of Ministers (JGM), who established a delivery unit whose main task is to facilitate policy coordination among line ministries. One of President Macri's priorities was the improvement of the performance of SOEs, which demanded the need to think carefully on how to reform a sector affected by an enduring legacy of institutional fragility and poor financial performance. Maximizing synergies among partner agencies and mainstreaming good governance across SOEs proved effective in the adoption of good governance standards by government enterprises. Moreover, the appointment of managers with previous experiences in the industry and the adoption of good practices of management contributed to improving performance and the alignment with good governance standards. High levels of consensus allowed the government to move from individual interventions in SOEs to whole-of-government approaches, which would eventually lead to the approval in February 2018 of the Guidelines on the Good Governance of SOEs.

Introduction

The article describes governance reforms in the State-Owned Enterprises (SOEs) of Argentina, as a result of strong political leadership and enhanced coordination among a range of key government agencies. Since December 2015, the government of President Macri has emphasized the relevance of team building and policy coordination as a means to improve government effectiveness. A whole range of coordination arrangements, from sector roundtables to regular follow-up arrangements directly involving the President and his ministers, were implemented as part of a system to increase the effectiveness of public policies.

This approach was the result of a combination of factors, including a Cabinet composed of members that came from

both the private and public sectors, who shared a management culture focused on results, and a clear will from the top of the Executive to manage policy-making processes through teamwork and the achievement of specific policy priorities.

Countries' experiences highlight the importance of coordination for better policy-making. Based on the challenges presented by high levels of policy fragmentation and the proliferation of ministerial portfolios, the government of New Zealand developed the "Factors for Successful Coordination Framework" as a way to promote synergies and maximize the cost effectiveness of policymaking and service delivery.¹

In Argentina, different entities were tasked with the oversight of SOEs. First of

all, as shareholders of these companies, line ministries were responsible for key decisions concerning the management of SOEs. Line ministers appointed the members to the Board, assessed their performance, and engaged in the approval of companies' investments and strategy. In addition, the Anticorruption Agency (OA) and the National Internal Control Agency (SIGEN) were mandated to, respectively, (i) oversee the implementation of anti-corruption policies by SOEs; and (ii) the effectiveness of auditing processes. Finally, the Treasury Department was responsible for approving the budget and supervising its implementation by SOEs.

During the past presidential administration, oversight agencies were highly influenced by politics, lacking the necessary empowerment to follow their statutory mandates.² There was a large gap between what the law mandated and what the role of oversight agencies was in practice.³ Lack of oversight and poor management resulted in SOEs with huge increases in payroll, economically unfeasible investment projects and large financial losses.⁴

One of President Macri's first measures was to establish a comprehensive government program focused on eight strategic themes. Under the Modernization of the State theme, the President requested the reorganization ("*ordenamiento*") of the SOEs' portfolio, especially through the appointment of experienced managers, the improvement of management processes, and good governance practices. The Office of the Chief of the Cabinet of Ministers (JGM) was charged with this task.

A delivery unit within this Office was established in order to monitor the implementation of the government program and coordinate efforts across the public sector. The unit, led by two secretaries of state, was

tasked with the oversight of ministries and decentralized agencies, including SOEs.

The biggest challenge for the delivery unit was to empower oversight agencies to meet their statutory objectives while maximizing policy coordination efforts. It was not in JGM's plans to generate government silos with disruptive effects on a sector that lacked both institutional maturity and was affected by severe deficits.

The following sections describe the government's efforts during its first two years in office to improve the governance of SOEs.

The Task: Improving the Governance and Performance of SOEs

Argentina has experienced an uneven path of state ownership. From full nationalization and establishment of state corporations to the full privatization of these same enterprises, the country went through different management models for utilities and other industries such as oil and gas. In the period 2003-15, the Kirchner administration nationalized as well as established 13 new SOEs.⁵ Poor management and the full subsidization of utilities forced the Treasury to transfer resources to SOEs, by December 2015, in the amount of US \$9.6 billion.⁶ By December 2015, for every peso of revenue, SOEs spent two pesos on operating costs.

In addition to operational deficits, SOEs suffered from weak corporate governance.⁷ Except for financial institutions and those listed in the stock exchange market – regulated, respectively, by the Central Bank and the National Stock Commission – companies lacked policies aimed at promoting transparency, the prevention of corruption, the professionalization of management, and the reporting of performance. Boards were politically appointed with no qualification criteria, procurement practices

#	Enterprise	Activity	Total Transfers from Treasury	Transfers for Operational Expenditures	Transfers for Capital Expenditures	Employees
1	Energía Argentina	Electricity generation	\$3,678	\$2,928	\$750	645
2	Trenes Argentinos Pasajeros	Passengers' railways: transport of Buenos Aires Metropolitan Area	\$1,609	\$1,435	\$174	24,660
3	Agua y Saneamientos Argentinos	Water and sewage services for Buenos Aires Metropolitan Area	\$944	\$325	\$619	6,441
4	Nucleoeléctrica Argentina	Manages 3 nuclear plants	\$615	\$0	\$615	3,512
5	Aerolíneas Argentinas	National flag airline (passengers)	\$560	\$538	\$22	12,330
6	Trenes Argentinos Cargas	Freight railway's transport	\$559	\$210	\$349	4,598
7	Yacimientos Carboníferos de Río Turbio	Production of coal	\$475	\$340	\$135	2,980
8	Empresa Argentina de Soluciones Satelitales	Satellites industry	\$388	\$0	\$388	539
9	Fabricaciones Militares	Production of military equipment	\$208	\$160	\$47	2,352
10	Radio y Televisión Argentina	TV and Radio Broadcasting	\$195	\$189	\$6	2,806
11	Correo Argentino	Postal Service	\$160	\$160	\$0	18,576
12	TeIam	National news distributor	\$51	\$51	\$0	926
13	Educar	Connection of schools through the internet	\$40	\$22	\$18	403
14	Veng	Aerospatial industry	\$33	\$0	\$33	417
15	Tandano	Ship building and repairing	\$27	\$25	\$2	653
16	Administración General de Puertos	Manages the port of Buenos Aires	\$26	\$10	\$16	522
17	Dioxitek	Production of fuel for nuclear plants	\$18	\$0	\$18	193
18	Radio y Televisión de la Univ. Nacional de Córdoba	Cordoba's University Radio and TV	\$8	\$8	\$0	274
19	Fábrica Argentina de Aviones (FADEA)	Production of military airplanes	\$5	\$5	\$1	1,558
20	Radio Universidad Nacional del Litoral	Litoral's University Radio and TV	\$0	\$0	\$0	67
21	Empresa Argentina de Navegación Aérea (EANA)	Air navigation services	\$0	\$0	\$0	2,257
22	Mercado Central	Wholesale fruit and vegetables market for the Buenos Aires Metropolitan Area	\$0	\$0	\$0	536
23	Casa de Moneda	Security printing	\$0	\$0	\$0	1,693
24	Intercargo	Airport handling services	\$0	\$0	\$0	1,888
25	Banco de Inversión y Comercio Exterior	Financial lending for development	\$0	\$0	\$0	260
26	Banco Nación	Financial lending for development	\$0	\$0	\$0	18,288
27	Lotería Nacional	Lottery services	\$0	\$0	\$0	1,100
28	Corporación Puerto Madero	Real State	\$0	\$0	\$0	28
29	Construcción de Viviendas para la Armada	Real State	\$0	\$0	\$0	67
30	Yacimientos Petrolíferos Fiscales (YPF)	Exploration, production, and distribution of oil and gas				22,025
TOTAL			\$9,599	\$6,407	\$3,192	132,574

Source: Office of the Chief of the Cabinet of Ministers, 2018

Table 1: Financial Situation of SOEs by December 2015

were affected by lack of transparency, in some cases cartelization, and companies who did not abide by transparency standards like in neighboring countries, such as Chile and Peru.

Government Strategy and Results

The JGM team dedicated to SOEs, composed of four members, designed a three-pronged strategy to meet the President's objective, focusing on: a) improving the management of SOEs through better monitoring, capacity-building, and professionalization; b) establishing strategic plans for each firm; and c) improving the oversight and governance standards of SOEs through the adoption of best international practices.

All three pillars were implemented through the set-up of consensus building

and clear collaboration mechanisms among agencies. Under the President's leadership, ministers with the largest SOEs portfolios met bi-monthly to monitor improvements in the performance of SOEs. CEOs were invited to present their strategies before the ministers. Two independent experts from the private sector were invited to join these meetings. This initiative immediately permeated to the media,⁸ highlighting the relevance of improving deficit-prone SOEs as a priority for the administration.

It became clear to the JGM team that the most efficient and effective way to face the challenge of good management in SOEs was through an action plan composed of different phases. Initial phases would be concentrated on communicating to companies the relevance of good governance and on promoting the implementation of good management

practices. Higher levels of institutionalization would come naturally after SOEs believed in the reform. The role of oversight agencies would be critical for the success of the initial phases.

The objective of JGM was to maximize resources and synergies among government agencies with responsibilities for SOEs' governance. In December 2016, under JGM leadership, the Anticorruption Agency (OA) and the National Internal Control Agency (SIGEN) established the Good Governance Team (GGT). The set-up of the GGT allowed for an improved and more coordinated identification of synergies and the reduction of information asymmetries among these institutions. It was very important for the success of coordination to develop a shared vision concerning the outcomes expected as a result of the collaborative engagement.⁹ Its most visible output was the establishment of communities of practice in different areas of SOEs' governance.

In March 2017, the GGT established the SOEs Integrity Network. The objective of the Network was to mainstream anticorruption policies in management processes and facilitate the exchange of practices among practitioners. Whereas only 20 members of SOEs participated in the first meeting, by the end of 2017 more than 100 participants gathered at the Network's meetings.

It was very important for a small team like the GGT to count on "champions" to spread reforms. The announcement of the President's policy priorities and the establishment of the Integrity Network encouraged members of SOEs to contact the GGT in order to advance the governance agenda, most notably the implementation of good management practices and integrity programs. The first

results came from those same champions, whose efforts were recognized by the GGT through different means such as social media (i.e. Twitter), policy documents, and advisory assistance from international donors. Aerolíneas Argentinas, the national flag airline, became a paradigm of change both in terms of financial and governance performance.

The Government also requested an assessment of its corporate governance standards by the Organisation for Economic Cooperation and Development (OECD). The OECD has been defining good governance for SOEs since 2005, when it published the Guidelines of Corporate Governance for State-Owned Enterprises. Different OECD missions came to Argentina to collect information and meet public officials as well as senior management of SOEs. The assessment was important to reinforce the government's message of SOEs that meet international best practices.

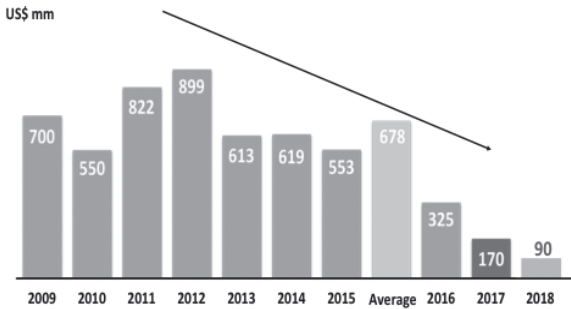
Taking advantage of this momentum, and the fact that mainstreaming efforts were showing positive results, the GGT decided to take a step forward towards government guidelines on good governance. Positions within the GGT went from maintaining the status quo (i.e. ad-hoc approaches), to instructing SOEs to adopt corporate governance codes. It was agreed that the best, most effective, way to build corporate governance institutions within SOEs was to make a strong case about the benefits of change. Forcing SOEs to implement corporate policies could risk the early achievements of a consensus-building practice and stronger awareness of the importance of good governance.

The Good Governance Guidelines for SOEs were conceived as a non-binding policy instrument, a code of practice,

The Case of Aerolíneas Argentinas

Aerolíneas Argentinas went through a radical transformation after December 2015. Between 2008 and December 2015 the company, a fully state-owned enterprise, received US \$5 billion (US \$678 million on average per year) to cover both operational and capital expenses. The company lacked a commercial orientation and was politically captured. Payroll increased from US \$9,161 in July 2008 (nationalization) to US \$12,330 in December 2015.

Reduction of State Subsidies to AR



Source: Aerolíneas Argentinas, 2017

After renewing its management, replacing politicians by managers from the private sector, the company diminished its needs for financial support abruptly. Subsidies from the Treasury were reduced from US \$553 million in 2015 to US \$170 million in 2017; it is expected that the company will require US \$90 million in 2018 and reach break-even in 2020. Whereas in the period 2009-15 the company required on average US \$94 per passenger, that amount is expected to reach US \$7 in 2018. Turnaround efforts were made with little impact on the workforce, which was only reduced by 5 percent.

Procurement policies were also improved in order to generate savings and improve the quality of purchases. Since December 2015, the company reduced annual spending by US \$81 million (2017 vs. 2015), while increasing (including 2018 estimates) by 32 percent the number of transported passengers.

In terms of connectivity, the company focused mainly on the domestic market, where the big growth opportunity lies: if compared to its South American neighbors, Argentines still fly half as much as Brazilians do and one-third as much as Chileans. In only 25 months, Aerolíneas created 38 new routes and increased its capacity by 10 percent. The number of passengers transported increased by 13 percent vis-à-vis 2015 and 7 percent if compared to 2016.

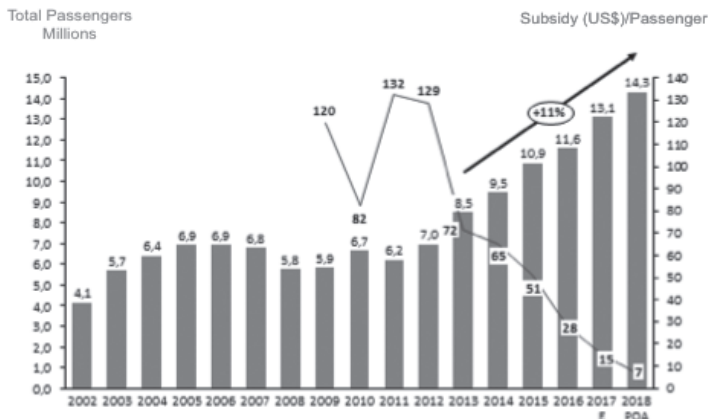
A new hub was created in Córdoba (the second-largest city in Argentina), accounting only a few months after its creation for 6 percent of the overall network traffic.

This expanded offer was supported by an aggressive commercial strategy, which entailed installment plans, agreements with banks and credit cards, and promotions, mainly driven by the airline digital channels. Direct sales of air tickets increased by 38 percent, the majority of them through the company's webpage. Moreover, AR reduced the commissions it used to pay to travel agencies

from 3 percent to 0 percent, generating positive impacts in terms of both cheaper tickets for costumers and savings for the company of US \$8 million.

In 2017, the company broke three times its own record of passengers transported. Once more in January 2018, the company reached its latest record for the month, with 1,241,766 passengers transported, accounting for an average of more than 40,000 daily travelers and surpassing the January 2016 mark by 6 percent.

More Passengers and Less Subsidies



Source: Aerolíneas Argentinas, 2017

through which the government would define its expectations regarding governance in SOEs. In a period of six months, the GGT developed the first draft of these Guidelines, which would later be validated with line ministers, and finally approved by the Chief of the Cabinet of Ministers.¹⁰ Strong political will was critical in moving the agenda forward.

Enforcement of the Guidelines would be based on “comply or explain” approaches. Every four months, SOEs would receive a survey in which they would have to report on whether they met the Guidelines’ criteria for every component and to justify their lack of implementation in cases of non-compliance.

The JGM team made significant efforts not only concerning the improvement of the governance of SOEs, but also with regards to the monitoring of companies’ performance and the reduction of operational deficits. By law, SOEs are obliged to submit monthly reports on how they execute their budgets. However, until 2015, companies rarely shared performance reports with the National Budget Office (ONP), a directorate within the Treasury Department. Following previous approaches on good governance, JGM’s objective was to work closely with ONP towards a better mechanism that would allow both agencies to improve monitoring.

While in September 2016 only 36 percent of SOEs complied with their reporting obligations to the ONP, by January 2018, 97 percent of SOEs submitted performance information under the newly created mechanism, leading to an exponential increase in SOEs’ accountability. Today, the Office of the Chief of the Cabinet of Ministers receives a monthly update on the evolution of the number of employees per enterprise, transfers from the

Treasury, income, expenses, and other performance indicators.

Reforms conducted by the JGM also allowed a substantial reduction in the transfer of resources from the Treasury to cover operational deficits. In 2016, thanks to a result-focused management system, operating incomes increased 10 percent in real terms and costs were reduced by 18 percent, which allowed reducing SOEs’ deficits by 46 percent.¹¹ This decline in deficits also helped reduce SOEs’ impact on the budget by 25 percent. Transfers from the Treasury for current expenditure (which had peaked at 1.5 percent of GDP in 2014) went down to 0.73 percent of GDP in 2016. The percentage of fiscal transfers to cover operational expenses of SOEs reached 0.5 percent of GDP in 2017.¹²

Lessons from the Experience and the Way Forward

The improvement of SOEs’ management processes and practices in Argentina is taking government to rethink traditional rules of policy-making and engagement with both institutional and non-institutional actors. According to traditional public-sector practice, good governance is the result of formal arrangements that shape the behavior of actors. Hence, for example, new legislation should be the way to convince government enterprises of aligning with good governance practices.

Since December 2015, efforts to improve the governance and management of SOEs followed a different pattern. SOEs inherited from the previous administration combined mismanagement, large operational deficits, poor transparency, and weak corporate practices. Aware of these challenges, President Macri’s administration decided to prioritize good governance in SOEs, starting from the development of

internal capacities and the mainstreaming of good practices across the range of SOEs. This was done under the assumption that moving from consensus building to higher levels of institutionalization would be more effective than going in the opposite direction. Several lessons come out of this process.

Firstly, policy reform of relative significance needs decisive political support from the top of government. This was the case in Argentina, where President Macri identified the improvement of management of SOEs as one of the Government’s 100 policy priorities. Consistently with this mandate, the Chief of the Cabinet of Ministers was charged with the task of coordinating SOEs policies across the public sector.

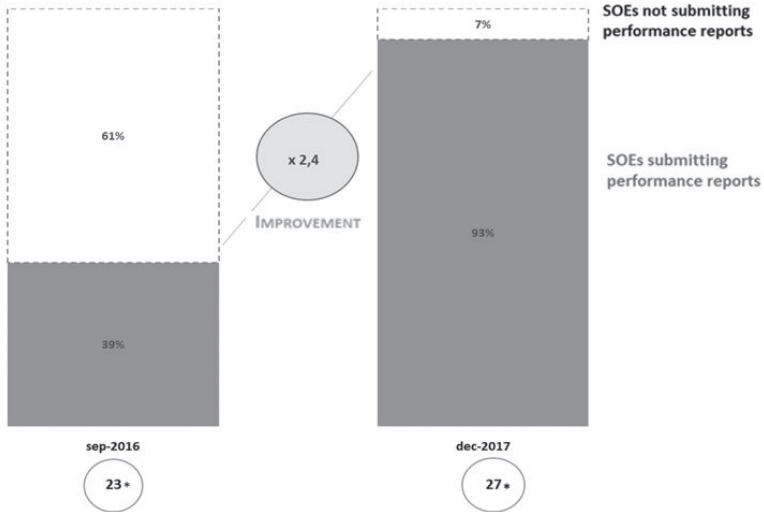
Secondly, developing synergies and reducing information asymmetries among government agencies proved effective in establishing a comprehensive governance agenda. The GGT worked from the

very beginning as a team, maximizing collaboration and coordination. Leading this agenda from one of these institutions without shared and coordinated policies would have provoked permanent overlapping and backlashes, hampering the effectiveness of the administration’s policy priority.

Thirdly, the adherence to international corporate governance standards helped to lock in some of these reforms. SOEs saw good governance not only as part of a government policy but also as an international commitment.

SOE reform put into question the premise according to which good governance is “a one moment” picture, in which the establishment of formal arrangements leads to more transparency and good management. This premise proposes starting from formal arrangements at the very beginning of the reform process, under-estimating the impact of

Monitoring Efforts Improvements of SOEs Performance



* SOEs that received the request for information

Source: JGM, 2018

Figure 1: Monitoring Effort Improvements of SOEs’ Performance

Evolution of Fiscal Transfers for Operational Expenses (as % of GDP)

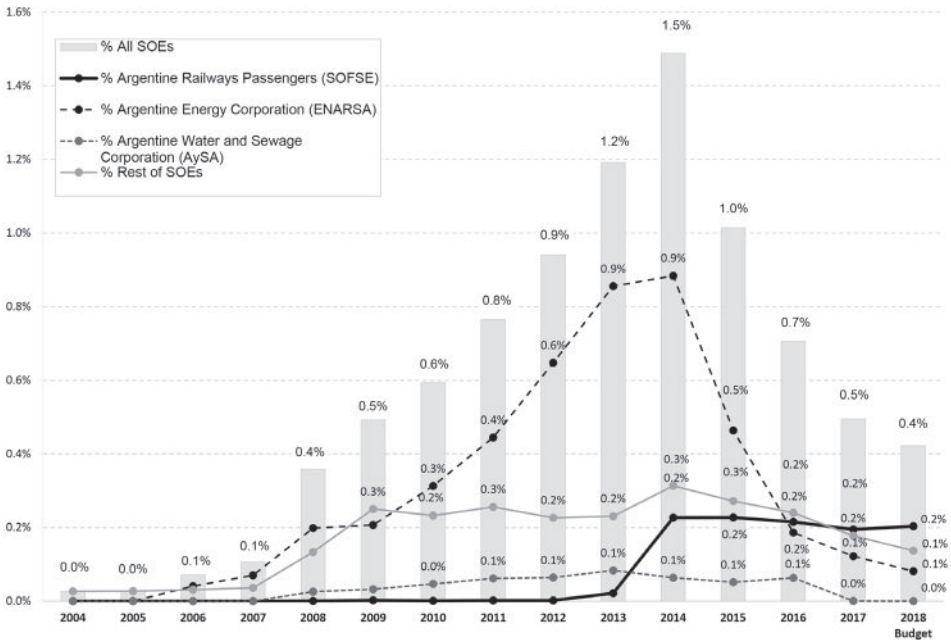


Figure 2: Evolution of Fiscal Transfers for Operational Expenses (as % of GDP)

laws on institutions that may not be yet prepared to change behavioral/organizational/institutional patterns.

JGM started its SOE policy generating consensus and trust, and providing assistance to companies that were affected by severe organizational deficits. Behind this approach lay the objective of creating policy momentum to provide the right incentives for enterprises to believe in the reform. After two years, and despite significant social and political constraints, the program showed relevant results not only in terms of the improvement of the governance of some SOEs, but also in terms of the improvement of financial indicators. Institutional maturity and visible results are currently allowing government to move a step forward towards higher levels of institutionalization, as shown by the recent approval of the Guidelines on the Good Governance of SOEs.

NOTES

¹ New Zealand State Services Commission, *Factors for Successful Coordination: A Framework to Help State Agencies to Coordinate Effectively* (Wellington: State Services Commission, 2008).

² Leonora Colombo, “La eficacia de los organismos de control en la democracia delegativa. Aproximación al problema del control sobre la administración desde las teorías de la democracia,” *Infojus*, 5 June 2014, http://www.saij.gov.ar/doctrina/dacfi40344-colombo-eficacia_organismos_control_en.htm.

³ Organization of American States (OAS), “Mecanismo de Seguimiento de la Implementación de la Convención Interamericana contra la Corrupción,” 2013, https://www.oas.org/juridico/spanish/mesicic_intro_sp.htm.

⁴ Office of the Chief of the Cabinet of Ministers’ Letters, *Empresas Públicas para el Crecimiento* (Buenos Aires: Jefatura de Gabinete de Ministros, 2017).

⁵ Center for the Implementation of Public Policies for Growth and Equity, *El péndulo del mercado al Estado: ¿qué pasó con las empresas públicas en la última década en Argentina?* (Buenos Aires: Center for the Implementation of Public Policies for Growth and Equity, 2016).

⁶ Office of the Chief of the Cabinet of Ministers’ Letters, *Empresas Públicas para el Crecimiento*.

⁷ Office of the Chief of the Cabinet of Ministers’ Letters, *Empresas Públicas para el Crecimiento*.

⁸ Florencia Donovan, “Crean un consejo para revisar la gestión de empresas públicas,” *La Nación*, 3 December 2016, <https://www.lanacion.com.ar/1961869-crean-un-consejo-para-revisar-la-gestion-de-empresas-publicas>.

⁹ New South Wales Public Service Commission, *Collaboration Review* (Sydney: New South Wales Public Service Commission, 2016).

¹² Official Gazette of Argentina, “Boletín Oficial,” 9 February 2018, <https://www.boletinoficial.gob.ar>.

¹¹ Office of the Chief of the Cabinet of Ministers’ Letters, *Empresas Públicas para el Crecimiento*.

¹³ Argentinian Ministry of Finance, “Presupuesto 2018,” <https://www.minhacienda.gob.ar/onp/presupuestos/2018>.



Gustavo Sebastián Lopetegui

Gustavo Sebastián Lopetegui is Secretary of Policy Coordination at the Office of the Chief of the Cabinet of Ministers of Argentina. In this capacity, he leads, jointly with the Secretary of Inter-Ministerial Coordination, the oversight of the implementation by line ministries of President Macri’s 100 policy priority initiatives. He reports to the Chief of the Cabinet of Ministers. Lopetegui has an extensive career in both the private and public sectors. Prior to joining government, Lopetegui was CEO of LAN, a Chilean based airline. He also founded several companies in the food and retail sectors and served as a director of Boards, in addition to leading consulting projects with McKinsey for ten years. In the public arena, Lopetegui was Minister of Production of the province of Buenos Aires. Lopetegui was trained as an accountant and business administrator and holds a Master of Business Administration from IESE Business School of Navarra University, Spain.



Sebastián López Azumendi

Sebastián López Azumendi is a Senior Advisor at the Office of the Chief of the Cabinet of Ministers of Argentina. In this capacity, he advises the Secretary of Public Policy Coordination on the governance reform of State-Owned Enterprises (SOEs). Prior to joining the Office of the Chief of the Cabinet of Ministers, López Azumendi was a Governance Expert with the Getulio Vargas Foundation in Rio de Janeiro (Brazil) for four years, where he researched the relationships between governance and public services delivery and advised both the federal and local governments of Brazil. In the period 2006-2012, López Azumendi was a Public Sector Management Specialist with the World Bank, leading research and policy agendas on the good governance of independent regulatory commissions and of State-Owned Enterprises of the Latin American region. He holds a Master in International Development Policy from Duke University (North Carolina, United States) and a Law degree from Universidad de La Plata (Argentina).

Growth-Redistribution Balance and Shifting Coalitions: A View from Chile

by Rodrigo Valdés, Minister of Finance of Chile (2015–2017)

Abstract

Considering that during the last quarter-century citizens in Chile have experienced first-hand growth and redistribution, politicians need to offer a fine balance to conquer their votes. Thanks to economic growth, the expansion of income and consumption has been too important for too many households to be left on the back burner. This note illustrates that even radical redistribution policies yield only a fraction of what growth can produce in terms of income. A corollary of this is that any political coalition cannot forget to offer a credible growth strategy if it wants to gain and remain in power. An agenda focused on access and opportunities is a promising avenue to make growth and redistribution more compatible.

Introduction

In the last couple of years, key South American countries have seen a shift in their ruling coalitions towards the (political) right. Although there are cases in which complex internal dynamics ended in an unelected new administration (Brazil), there have been elections where the center-right has mustered significant voter support (Argentina and Chile). The obvious question is why.

As usual with this type of question, there are several answers. This note claims that, while the center-right moved towards the center, even adopting part of what could be considered the social democrat agenda, the center-left moved even further (and significantly) towards redistributive objectives, losing the required balance to conquer the median voter support.

This median voter has changed considerably in the last couple of decades. He has experienced first-hand the effects of sustained growth on household income and consumption, and also some benefits from redistribution efforts. He has enjoyed and suffered the mighty force of capitalism

as well as its failures, and the same with government policies.¹ He is significantly more informed and probably less trusting than in the past. He understands well, and better than some politicians believe, the extent of what is at play.

Using the example of Chile in the last 25 years, this note provides simple calculations about the relevance of both growth and redistribution for different quintiles of the income distribution. The exercise illustrates that becoming (significantly and quickly) more equal would produce effects on middle-class income that are commensurate with a relatively short period of high growth. This suggests that it is politically wise to assume that growth, and a credible strategy to deliver it, is a central theme for the median voter.

Of course, this hypothesis does not preclude other explanations of the political shifts mentioned before. The end of the commodity prices super-cycle (in 2013 for metals and 2015 for oil) probably had an important role, despite the fact that macroeconomic management was generally much better than in the

past.² Unemployment increased less than in previous cycles, notwithstanding some countries entering into recession. Still, during the last few years, economic growth was stagnant at best, an obvious difficulty for keeping ruling coalitions in power.

Something similar can be argued regarding a series of political scandals, if not outright corruption in some countries. From illegal political campaign financing in Chile and Brazil to abuse of power in other places, all took a severe toll on politicians' credibility, expediting changes in government despite suitable policy reactions (especially in Chile).

This note concentrates on the role of the appropriate balance between redistributive and growth policies. While there is some evidence that in some cases there is no trade-off between them – extreme inequality could make growth unviable – we assume that political leaders confront economic tradeoffs between these objectives and choose different combinations of growth and certain redistribution efforts.

Growth and Income Distribution, Chile 1990-2015

A useful discriminating question about views on the growth-equity balance in Chile is the perception political actors have about the performance of the economy (and society in general) in the last couple of decades.³

Some would consider this as the most successful period in the country's history, with a flourishing democracy and an excellent economic performance. Some would consider it as the continuation of "neoliberal policies" implemented by force during the Pinochet dictatorship that basically delivered economic growth concentrated at the top, with little shared prosperity. Some would judge this period as an effort to gradually implement a shifting compromise

between growth and efforts to redistribute. In my view, the second group became more relevant in the ruling coalition that took office in 2014 than in the past and continued to dominate the center-left in the 2017 presidential campaign, to the point that the previous two decades were rarely considered something to be proud of.

What are the facts? Chile's per capita GDP increased almost threefold between 1990 and 2015, with short-lived and shallow recessions in 1999 and 2009 only. More precisely, per capita GDP increased a cumulative 280 percent, or 5.3 percent per year (at PPP and constant dollars).

At the same time, the distribution of income improved. According to the World Bank's World Development Indicators, the Gini coefficient moved from a shameful 57.3 to a still very high 47.7 between the same years (Table 1).⁴ Remarkably, all but the top quintile (actually, all but the top decile) improved their share of total income after taxes and transfers.⁵

Despite these improvements, income continues to be pretty unequally distributed in Chile. We consider here three benchmarks for comparisons. "Río de la Plata" is the simple average of Argentina and Uruguay, which happen to have relatively similar income distributions. "Iberia" is the simple average of Portugal and Spain, also with similar indicators. Finally, "Nordics" corresponds to the simple average of Denmark, Norway, and Sweden, again with similar results among them but significantly better distribution. Despite the important improvement, Chile is far from European benchmarks.

This well-known picture also emerges in comparisons with OECD countries. The last Gini coefficient published for Chile is only better than Mexico's. (Intriguingly though, the pre-tax and pre-transfers Gini

for Chile stands 23rd out of 37 countries, and is similar to Australia and better than Germany or Japan).

Considering this unequal distribution, and to gauge the potential effects of redistribution, it is worth calculating what would happen to the income level of different segments if one could implement a sudden change, redistributing and keeping total income unchanged. Of course, this is theoretical, as no public policy could be implemented for such an objective. But it is a useful upper bound.

We consider again the distribution of the three benchmarks discussed before and recalculate per capita GDP for 2015 (Table 2). In this thought experiment we keep per capita income constant but redistribute total income among different groups using the benchmarks distribution. Compared with actual income in 2015 (Column 3), this experiment shows that the top 20 percent is the only quintile that would have less income (in line with the fact that the poor distribution in Chile is explained to a large extent by the top incomes). The second quintile would improve somewhat, while the bottom 60 percent would only see a radical income improvement under the Nordics distribution.

What about the progress in the last 25 years? Compared with 2015, per capita GDP in 1990 was much smaller for all segments: growth generally lifts all boats. But income distribution also improved and its effects were quite relevant. We can also calculate per capita GDP for each segment in 2015 but with the income distribution of Chile in 1990, as seen in Column 2. The top 10 percent would have more than US \$20,000 of additional income, while the bottom 80 percent would have between US \$1,000 and US \$3,000 less.

To gain further perspective, it is useful to compare income growth or change in different segments of the income distribution under the different thought experiments (Table 3). Concretely, we decompose actual income growth in Chile between 1990 and 2015 between redistribution and aggregate growth. Separately, we compare income growth in case the distribution changes to one of the benchmarks. There are at least three important takeaways.

First, the actual gains from the improvement of income distribution between 1990 and 2015 are only a fraction of the total income increase. For the middle 20 percent or “middle class,” growth explained more than 10 times what they gained through better income distribution. For the bottom 20 percent, the redistribution effort was more relevant, though growth was still dominant, explaining six times more than redistribution.

Second, what Chile accomplished in the last 25 years is impressive. For the middle class, even a sudden transformation to the Nordics in terms of income distribution (without changes in aggregate GDP) produces less than one-tenth of what the combination of actual growth and better distribution produced for this segment. The bottom 20 percent gained in these two and half decades more than four times what they would achieve with a sudden Nordic distribution.

Third, in comparison to its Southern Cone neighbors, and despite their better Gini coefficients, the bottom 20 percent in Chile does not gain much with the Río de la Plata distribution. Comparing Chile’s distribution to Río de la Plata and Iberia, the most important differences happen in the middle quintiles. This is not the case with the Nordics, where the bottom 20 percent is significantly better protected

**Table 1. Income Distribution Statistics
(1990 and 2015 or latest)**

	Chile 1990	Chile 2015	Río de la Plata	Iberia	Nordics
GINI	57.3	47.7	42.2	35.8	27.5
Top 10%	47.0	38.0	30.8	26.7	22.3
Top 20%	62.5	53.6	47.5	42.3	36.7
2nd 20%	17.3	19.7	22.7	23.0	22.6
Middle 20%	10.3	13.0	15.0	16.7	17.7
4th 20%	6.6	8.9	9.8	12.0	14.0
Bottom 20%	3.4	4.8	5.0	6.1	9.1
Bottom 10%	1.2	1.7	1.8	2.1	3.5

Source: World Bank

**Table 2. Chile: Per capita GDP in 1990 and 2015 assuming different income distributions
(USD at PPP, 2015)**

	GDP Chile 2015					
	Chile 1990	Chile 1990 Distribution	Actual 2015	Río de la Plata Distribution	Iberia Distribution	Nordics Distribution
Top 10%	29,100	110,723	89,520	72,559	62,900	52,456
Top 20%	19,348	73,619	63,135	55,950	49,766	43,229
2nd 20%	5,356	20,378	23,205	26,738	27,033	26,581
Middle 20%	3,189	12,132	15,313	17,669	19,671	20,810
4th 20%	2,043	7,774	10,483	11,543	14,135	16,530
Bottom 20%	1,053	4,005	5,654	5,831	7,185	10,680
Bottom 10%	743	2,827	4,005	4,123	4,829	8,324

Source: Author calculations based on IMF and World Bank.⁶

Table 3. Chile: Changes in per capita income in different segments, between 1990 and 2015, and distribution shifts (USD at PPP, 2015)

	Chile 1990 to 2015 due to:			Chile 2015 with distribution of:		
	Redistribution	Growth	Total	Río de la Plata	Iberia	Nordics
Top 10%	-19.1%	280%	208%	-19%	-30%	-41%
Top 20%	-14.2%	280%	226%	-11%	-21%	-32%
2nd 20%	13.9%	280%	333%	15%	16%	15%
Middle 20%	26.2%	280%	380%	15%	28%	36%
4th 20%	34.8%	280%	413%	10%	35%	58%
Bottom 20%	41.2%	280%	437%	3%	27%	89%
Bottom 10%	41.7%	280%	439%	3%	21%	108%

Total between 1990 and 2005 is the compound effect between redistribution and growth.

Source: Author calculations based on IMF and World Bank.⁷

(implying that there is still space for efforts to target transfers to this segment).

Of course, the median voter has not made these calculations. But having experienced the results of growth and redistribution policies, he may have constructed a view on the impact of each.

The political relevance of growth is clearly present in opinion surveys. In the case of Chile, for example, CEP asks people to choose on a scale of one to ten whether “income should be made more equal even if this does not reward individual effort” or “individual effort should be rewarded even if this leads to important income differences.” Excluding neutral answers, a strong majority (more than 2:1) prefers to reward individual efforts. González (2017) concludes that citizens have remained closer to an individualistic rather than a community view.⁸

Political Assessments and Agendas

However, the above considerations are rarely considered in political circles. The center-left camp believes that countries in the region are extremely unfair and that efforts have to concentrate on redistribution.

At least in the case of Chile, this resonates well with a simple view of the data. While the country ranks in the top 80th percentile in per capita world income, income distribution as measured by the Gini coefficient ranks in the bottom 15 percent. The assessment implies a simple agenda: offer redistribution. In other countries in the region, the numbers differ, but the overall view is similar: voters are unhappy with the situation and a change of tack is needed.

In practice, this view has taken the form of new “guaranteed universal rights,” a way

to put redistribution so high on the agenda that all other issues, including the budget constraint, become secondary. Taxes and other expenditures will need to adjust to make space to fulfill these rights, which are often enshrined in the constitution and, depending on the exact provisions, protected by the courts.

Within the center-right, the assessment about the relevance of redistribution has been similar, although the political bids have been more nuanced and, more importantly, have produced the (electoral) benefit of moving the agenda towards the center.

Indeed, this camp has shifted from a focus on poverty alleviation as the central (and almost unique) concern to a broader view of economic vulnerability. For example, several years ago, center-right politicians embraced the concept of “ethical income,” a level of income that would be morally acceptable. Given the difficulties of determining a precise number, it can be a form of measuring poverty with cut-offs that became readily adjustable. More recently, the concern has evolved towards attenuating the risks faced by the middle class. While a “lucky” middle-class household can certainly thrive, it can also lose significantly if unemployed, sick, or displaced.

Thus, a relatively shared view that income distribution is central has produced very different outcomes across the political spectrum.⁹

The center-left, by deepening its focus on income redistribution, ended up neglecting growth, both directly when facing difficult trade-offs and, perhaps more importantly indirectly, through ignoring the role of incentives and the stability of rules in a market economy as well as the muscle of the private sector as an engine for growth. Indeed, the redistribution

focus has usually been accompanied by a deep mistrust of the market economy (and capitalism more broadly). Discussions about the potential entrepreneurial role of government in some economic sectors and a profound aversion to public goods provision by the private sector (as well as in social security and infrastructure) have made it difficult to offer a credible growth agenda. And, as discussed in the previous section, if economic growth is indeed first-order for income growth and citizens value income, leaving it as a secondary issue is a recipe for losing elections.

The center-right, on the contrary, became more competitive with the concern about redistribution. Because it has better credentials to offer a credible strategy for growth, it ended up moving to the center and embracing an agenda with some social democrat elements. Perhaps the clearest example in the case of Chile is the new government's offer of continuing the expansion of free tertiary technical education, something unthinkable three months before the election (although this could also be regarded as a populist step).

Final Remarks

When deciding on the central elements of a political platform, a critical question is how to balance redistribution and growth tradeoffs. The center-left, almost by definition, leans towards more redistribution. But how much sacrifice to make in terms of growth has to be calibrated carefully. When citizens value income growth, and more importantly, have experienced it, it is a mistake to assume that an agenda centered basically on redistribution can triumph. Embracing a credible strategy for growth is also needed, and this strategy will probably fail if it forgets that without a well-functioning market economy and a robust private sector it is difficult, if not impossible, to sustain high growth.

This does not mean that equity has to be forgotten. On the contrary, the center-left has as its core mission a more just society. But careful calibration of tradeoffs needs to be made as income growth is also central. This is even more relevant when the scope for income redistribution is not large when compared with what growth can deliver, at least in terms of expanding consumption possibilities.

More importantly, a progressive agenda needs to look beyond what static income distribution figures suggest and dedicate efforts to other forms of unfairness. As the 2017 UNDP report reveals, there is unequal access to education and to political power in Chile, and there is significant heterogeneity in terms of dignity and respect received by different citizens.¹⁰ Lagging regions, poverty among indigenous people and other minorities, lack of social mobility (to the point that family names determine income possibilities), and unequal access to public goods are also critical issues. These constitute differences that determine lifetime possibilities and disconnect outcomes from people's effort and intrinsic capacity. A renewed agenda centered on opportunities and access, in truly leveling the playing field, would ease the tradeoffs between equity and growth. And it would resonate better with the new empowered median voter.

NOTES

¹ Carlos Peña, *Lo que el Dinero Sí Puede Comprar* (Santiago: Penguin Random House, 2017). Carlos Peña has argued for some time already that, contrary to what a majority of the left thinks, there is a large middle class that has embraced consumption as part of their life, and, more importantly, seems pleased with this new model.

² R. Valdés, "Reflexiones Prácticas con 842 días en Hacienda," in *Estudios Públicos* CEP, forthcoming.

³ International Monetary Fund, "World Economic Outlook Database," <https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx>.

⁴ World Bank, "World Development Indicators," <https://data.worldbank.org/products/wdi>.

⁵ Latin America has shown this trend of improving

income distribution in several countries during the last decade. This is a notable result considering the global trend towards a worsening outcome. Interestingly, Sapelli (2016) shows that income (and education) distribution has improved more markedly in younger cohorts, a development that harbingers further gains at the aggregate level. Claudio Sapelli, *Chile: ¿Más equitativo? Una mirada a la dinámica social del Chile de ayer, hoy y mañana* (Santiago: Ediciones UC, 2016).

⁶ International Monetary Fund, “World Economic Outlook Database”; World Bank, “World Development Indicators.”

⁷ International Monetary Fund, “World Economic

Outlook Database”; World Bank, “World Development Indicators.”

⁸ Ricardo González, *¿Malestar en Chile?: Informe Encuesta CEP 2016?* (Santiago: Centro de Estudios Públicos, 2017).

⁹ It is tempting to put together the problems of social democratic regimes in the developed world and what has happened in South America. There is an important difference, however: in South America it delivered income redistribution, whereas in Europe it did not.

¹⁰ PNUD, *Desiguales: Orígenes, cambios y desafíos de la brecha social en Chile* (Santiago: Programa de Naciones Unidas para el Desarrollo, 2017).



Rodrigo Valdés

Rodrigo Valdés has served as Finance Minister of Chile from 2015 to 2017. Prior to his appointment, he was Chairman of the Directive Board and of the Executive Committee of Banco Estado. In the private sector, Mr. Valdés was Chief Economist for the Andean Region and Argentina of BTG Pactual (2013-2014); and as Chief Economist for Latin America of Barclays Capital Inc (2008-2009). Mr. Valdés was also Manager of the Division of Research and Chief Economist of the Central Bank of Chile (2002-2007) and Senior Advisor to the Minister of Finance of Chile (2000-2001). Mr. Valdés also worked at the International Monetary Fund (IMF) as Deputy Director of the European Department and the Americas (2009-2012), where he was also Head of Mission for the United States. Mr. Valdés has a Commercial Engineering Degree, and a major in Economics from Universidad de Chile, and a Ph.D. in Economics from the Massachusetts Institute of Technology (MIT).

Three Critical Ingredients for a Successful Education Reform

by Jaime Saavedra, Minister of Education of Peru (2013-2016)

Over the past decades, education investments in the developing world have led to unprecedented enrollment rates. Yet, even with these historic investments, children sit in classrooms every day without learning. More than a schooling crisis, we face a learning crisis.

The World Bank's most recent World Development Report (WDR 2018), "Learning to Realize Education's Promise," sounds the alarm bell on the global learning crisis and shows that despite progress in countries as diverse as Vietnam, Colombia, and Peru, millions of children leave school without knowing how to read a paragraph or solve a simple two-digit subtraction.¹ This is not just a missed opportunity, but a tragic breach of promise that could banish entire countries to the fringes of the 21st century global economy.

Education systems are extremely complex. They must deliver a quality service every single day to millions of children. This is no easy task, especially when aiming to transcend cultural, geographic, and socioeconomic differences, and equalize opportunities by offering excellent services to all.

But difficult does not mean impossible. In fact, many countries have already achieved it: Some OECD members took several decades to improve their school systems, while others, like Korea, did it in less than 20 years. In 1945, Korea was a poor, war-devastated country, where almost 80 percent of the population was illiterate. By the late sixties, it already had a very decent system with illiteracy rates below 15 percent. Now, it is exceptional.

Successful education reforms require three critical ingredients:

First, it must have reasonably well-designed policies or programs. I say "reasonably" because a perfectly designed policy does not exist. For instance, a policymaker may use top-notch economic knowledge or international best practices to structure a new incentive mechanism that improves teacher effectiveness. However, critical adjustments that consider country-specific institutional and managerial contexts can only be made during implementation. That is why a good design must be paired with a mechanism to assess if implementation is following the right course, so that policymakers can identify and measure impact in real time, and improve policy accordingly. That capacity to learn and adapt comes with time, but it is absolutely critical.

Second, institutions – and the people who work in them – need to be trained to effectively implement reform. A country's ability to execute change depends largely on the quality of its civil service, as well as on the organizational and incentive structures of the ministries. As a result, countries need civil servants who have adequate technical and management know-how, as well as commitment and a clear understanding of the importance of their mandate.

As Minister of Education in Peru, I met committed and talented civil servants like that every day. I remember a Saturday in March 2016, when an advisor in my office went to the Ministry building at 11 p.m. to

pick up materials needed for the beginning of the school year. He called me in surprise: There were 20 young people there, working on a weekend at midnight as if it were a typical Monday morning. From my living room, I asked to speak with them, and inquired about the tasks that they were working on. After a quick debrief, I thanked them for their commitment and dedication to education. One of the young people, Jessica, interrupted me saying: “No, Minister, there’s no need to thank us. We are here changing lives.” She was right. Those are the bureaucrats that have internalized the importance of their mandate.

Implementation capacity varies among civil services in different countries and contexts. In many cases, it is the main obstacle to successful policy change. Therefore, it is critical to make a concerted and collective effort to shore up the quality and commitment of education bureaucracies.

Third, there must be political alignment around education reform so that student learning is always the sole focus of reform efforts. The executive branch, public opinion, trade unions, media, teachers, business sector, parliaments, local authorities, and parents need to unify around the common goal of

education reform. The WDR 2018 found that sometimes interests other than learning influence the behavior of different actors: politicians might focus on providing benefits to special groups; trade unions might seek political influence; bureaucrats might try to protect their power base; teachers might be fixated on job security; and service providers, meanwhile, might be interested in profit, causing them to push for solutions that don’t promote student welfare.²

Aligning all these actors sustainably, and having learning and quality education as the single element that drives their efforts, is fundamental to creating sustainable reforms. That alignment is complex and sometimes unstable, but it is feasible. The challenge is to make it the rule rather than the exception.

When these three factors come together – reasonable design, implementation capacity, and political alignment – student learning can improve dramatically. That is probably the sole, most important determinant of the future of a nation.

NOTES

¹“World Development Report 2018: Learning to Realize Education’s Promise,” World Bank, 2018, <http://www.worldbank.org/en/publication/wdr2018>.

² “World Development Report 2018: Learning to Realize Education’s Promise.”



Jaime Saavedra

Jaime Saavedra leads the Education Global Practice at the World Bank Group. He rejoined the World Bank Group from the Government of Peru, where he served as Minister of Education from 2013 through 2016. He has held positions at a number of international organizations and think tanks such as the Inter-American Development Bank, the Economic Commission for Latin America and the Caribbean, the International Labour Organization, Grupo de Análisis para el Desarrollo, and the National Council of Labor in Peru. Prior to assuming his role as Minister of Education of Peru, he had a ten-year career at the World Bank where, most recently, he served as Director for Poverty Reduction and Equity as well as Acting Vice President, Poverty Reduction & Economic Management Network. Mr. Saavedra holds a Ph.D in economics from Columbia University and a Bachelor's degree in economics from the Catholic University of Peru.

Technology and the Future of Work: Why Do We Care?¹

by Eduardo Levy Yeyati and Luca Sartorio

Abstract

This article seeks to make a compendium of the research and empirical evidence available on the impact of technological change on labor aggregates. It has been documented that increases in labor productivity in the last decades did not have a negative net effect on employment levels. However, technological development and automation have been associated with changes in the composition of employment and polarization patterns that explain the significant fall in the share of middle-class occupations during recent decades in developed countries. In addition, specific characteristics of the digital economy have also been linked to trends in concentration and market power that could explain part of the decline in labor share over income in recent decades. Finally, the article discusses the economics discipline's efforts to anticipate these trends and forecast the future automation of jobs and public policy challenges for the labor markets of Latin America in the fourth Industrial Revolution.

Is the ongoing technological revolution the beginning of the end of the work society? Is automation, now that globalization is reverting, the fundamental reason behind the weakening of the middle class and the decline of labor shares in advanced economies? Can and should the public do something about it?

Interest in the impact of digital developments on both the labor markets and income distribution has increased dramatically in recent years, both in academic and policy circles. Initially, this concern focused on the possibility of a massive automation of employment and various dystopian narratives about the end of (salaried) human work. Through diverse methodologies, the economic literature has built a robust body of empirical evidence shedding light on regularities that dismissed some of the initial concerns while still highlighting major questions and challenges. Although these findings have been sourced almost exclusively

from developed countries, they illuminate the fundamental patterns of the current changes in labor and income, and offer a good starting point to adapt the theoretical frameworks and the empirical methodologies to the idiosyncrasies of Latin American countries to think about the fourth industrial revolution from a developing perspective.

Why Are There Still So Many Jobs?

A classic argument to dismiss the scope of these changes is to highlight the relative stability in the aggregate levels of employment. Far from the dystopia of widespread unemployment and redundant human work, there are still no pronounced falls in employment levels or signs of an imminent human labor obsolescence. Indeed, a look at the US labor market from the mid-20th century to the present reveals even a slight increase in the employment-to-population ratio that, despite recent fluctuations around the 2008 global crisis, already

shows a recovery to levels similar to those of the 1980s (the same could be said of the Eurozone in the latest years).

However, if one thinks of automatic payment toll booths, the increasingly robotized industrial factory, or interactive automatic telephone customer service, one visualizes a landscape where technology gradually but effectively destroys jobs, reducing the available employment in the economy. A priori, it would seem difficult to reconcile these stable trends with the most basic intuition about the nature of technological change and the large amount of inherently human tasks that have been automated over time. How is this contradiction explained?

Autor and Salomons (2017) offer a preliminary answer to this paradox.² Based on their analysis of 19 developed economies during the last four decades, the authors document that increases in labor productivity in a particular industry have a two-fold effect on employment levels. First, a “direct” negative effect: a within-industry reduction in employment. Second, an “indirect” positive cross-industry effect, namely, an increase in employment in other industries. This external effect, in turn, can reflect a combination of multiple factors: “backward linkages” (higher productivity in an industry raises its production levels and thus its demand for inputs, stimulating production and employment in upstream industries), “forward linkages” (higher productivity reduces production price and lowers the costs of downstream productive sectors), and income effects (due to lower prices, consumers have more disposable income for consumption in other industries).

Although estimates of these direct and indirect effects vary significantly across industries, Autor and Salomons show

that the latter tend to outweigh the former, resulting in a modestly positive net contribution of labor productivity to aggregate employment demand. While our perception often focuses only on direct substitution, which is less abstract and easily observable, a rigorous evaluation tends to offer a more complex and less linear panorama.

That said, this premise assumes that technology takes over gradually: what would happen when and if automation moves into all sectors at the same time? In other words, what would happen with this logic if there were no other sectors benefiting from the externalities of automation, and we only have the direct effects?

Polarization: Winners and Losers

Perhaps as important as the impact on the net labor demand, and definitely more urgent, there is the question of how technology alters the composition of labor across skill levels (as well as across labor commuting zones, age groups, and gender). On this front, the central concept has been the polarization (or the “hollowing-out”) of the labor market: high- and low-skilled occupations (empirically associated with high and low wages some time ago) have gained participation in total employment at the expense of middle-skilled ones.

Many recent works have robustly documented this phenomenon in advanced economies, starting mainly from the beginning of the 1980s or 90s.³ They generally proxy the skill content of occupations by their wages in an initial year, and calculate the variation of the share in total employment in the following decades, finding a polarization pattern in advanced economies that is graphically represented by a U-shaped curve, as can be seen in the following graph.⁴



Source: Prepared by the authors on the basis of Autor (2015)

The link between automation and polarization can be explained by what the literature refers to as a “task approach” or, more generally, a “task-biased technical change.”⁵ What occupations are more likely to be replaced by innovation? According to this hypothesis, technological change tends to automate “routine tasks” that follow a set of easily definable procedures, which can be specified by means of a series of instructions that can be executed by computerized equipment. These tasks are usually characteristic of middle-skilled jobs, both “manual” blue-collar occupations like craft and manufacturing workers replaced by industrial equipment, and “cognitive” white-collar office and administrative occupations increasingly threatened by algorithms and data processing capacity.

On the contrary, technology finds it difficult to replace two types of non-routine tasks. On the one hand, there are abstract tasks, a set of activities that require skills such as persuasion, creativity, originality, or problem-solving, among others, typical of managerial, technical, and professional occupations, which are generally highly qualified. On the other hand, there are non-routine manual tasks, activities that require situational adaptability, visual and language recognition, and personal interaction, essential aspects fundamentally of low-skilled services such as cleaning,

cooking, security, transportation, child and elderly care, among others. Many of them may seem like unsophisticated tasks, but they tend to appeal to intrinsically human virtues that do not follow explicit and easy-to-define rules, such as the empathy of a caregiver or the adaptability of a security guard to changing environments in unpredictable contexts. As expressed in Polanyi’s paradox: “We can know more than we can tell.” Our human capabilities are based on skills and rules that are often beneath our conscious appreciation, transmitted to us via culture, tradition, evolution. The difficulty of the recent technological advance to generate strong disruptions in both extremes of the occupational distribution would thus be explained by the inability to substitute either type of non-routine tasks.

Interestingly, this is not the only – nor even the most likely – explanation of the polarization pattern in developed economies. In fact, given that the data used in the polarization charts largely precedes the recent automation trends based on artificial intelligence, it is only natural that several alternative, unrelated hypotheses have been tried. Most notably, one that associates these trends with globalization: the offshoring of middle-skilled jobs, both manufacturing and administrative, to low-income developing countries. This explanation is also compatible with an increasing share of low-skilled services that cannot be offshored due to their “on-site” or “face-to-face” requirements, such as the case of gardeners, hairdressers, or cleaning staff.⁶

More recently, the literature has converged on Task-Biased Technical Change as its fundamental explanation of the ongoing trend, with a number of works robustly documenting the link.⁷ Based on the O*NET database (and its DOT predecessor), which contains a detailed,

standardized, and weighted description, according to its relevance, of the relevance of multiple tasks within each occupation, these authors corroborate that middle-skilled occupations tend to be composed of a greater degree of tasks that can be defined as routine, and show how technology adoption correlates with the decline of occupations intensive in routine tasks, as opposed to high- and low-skilled positions. Conversely, the explanatory capacity of offshorability measures decreased sharply when the effect of technology is controlled for.

Another aspect highlighted by this literature is that the labor demand polarization does not translate into wage polarization. Indeed, the literature has had some difficulty explaining wage changes in response to task-biased technical change,⁸ as recently in some countries wages grew monotonically regarding the degree of qualification of the occupation: the higher the occupation's qualification, the greater the wage growth.⁹ In particular, occupations in low-skilled services that gained share in total employment did not experience a relative wage increase despite the increase in their relative demand.

We can think of at least two reasons for this to happen. First, the existence of complementarities with new technologies can increase the relative value generated by middle- and high-skilled occupations. For instance, the work of a software expert feeds into the provision of more valuable and sophisticated services, enhancing the productivity (and, as a result, the wages) in those sectors. In contrast, although safe from automation, the routine of a waiter has been virtually unchanged over time. Second, it is easier to move down than to move up the skill ladder. Even when the demand for skilled occupations increases, the qualification required limits the scope

for a displaced middle-skilled worker to retrain into one of these jobs. Instead, they are more likely to compete for low-skilled occupations with fewer qualification requirements, driving down wages for low-skill jobs despite their sustained demand.¹⁰

Whatever the underlying reasons, the technologically-driven hollowing out of labor demand in advanced economies seems to translate into a wider wage premium that, in turn, feeds back in a more unequal income distribution.

The Rise of Superstars

Beyond its direct implications within the labor market, recent technological change has also had strong distributive impacts (with winners and losers) and impact on the distribution of total output between labor and capital.

Multiple works have documented the fall of the labor share since the 1980s and 90s in a very comprehensive set of countries.¹¹ Work for the United States shows that, starting in the 80s, this fall has been accompanied by a decline in the pure capital share over income, in favor of an increase in the share of profits, linked to the growing market power of firms.¹² Not without controversy, this phenomenon has begun to be linked to specific market characteristics of the digital economy that emerged during the last decades. In his work, Kurz documents that firms whose business models were transformed by the IT developments are particularly dominant in the growth of market concentration: 36 of the 50 firms with the largest surplus wealth in 2015 were key players in the digital revolution, and many did not even exist in the mid-1970s.

The more notorious companies of the digital economy, often referred to in

the literature as “superstar firms,” typically operate under “winner-takes-all” (or “winner-takes-most”) logic, whereby a dominant firm tends to capture the greater part of its market. Social networks provide the standard example: we all prefer to chat on the platform where we find the majority of our acquaintances, or to trade in purchase and sale websites in which there are more suppliers, more users reviewing products, and a strong base of potential customers for the seller (how many Facebooks or Amazons could realistically co-exist?).

Moreover, many digital giants have strong lock-in effects (incentives to block the migration of customers to other potential competitors). Think of a program or an operating system whose languages and customs are well known by clients and developers, or a social network that stores a lot of shared information of interest to the user. And there are also scale externalities (the number of customers improves the quality, quantity, and efficiency of the product) as in algorithmic search engines, which improve as the number of queries increases, making it possible to optimize recommendations, improve processes, and offer additional products.

For the United States and European OECD countries, labor shares decline the most in industries where superstars gained the most market share, which in turn tend to be those industries that experienced greater technological changes.¹³ Moreover, for the United States, a positive link can be found between the share of IT workers of a firm and its corresponding market share, labor productivity, and operating margins.¹⁴

Finally, recent work has flagged the flipside problem of the digital concentration: its growing oligopsonistic power and the resulting depressing effect on wages, which may play a role in the declining labor shares looking forward.

At any rate, the concentration of these new markets, which is not necessarily associated with uncompetitive practices, presents challenges for competitive regulation, as they must prevent abuse while avoiding regulation that could penalize innovation.¹⁵

The Future of Work

Let’s start with the obvious: we do not know what the jobs of the future will be. We only know that, although they may have the same names, they will be very different from current jobs. With this caveat in mind, the literature has tried to identify a number of occupations that are “vulnerable” to automation and, through workshops or surveys with labor market specialists, to forecast the hypothetical scope of employment automation in the coming decades.¹⁶

Predictably, the results from these speculative exercises vary widely, as a result of different approaches (in particular, whether the unit of analysis is the job or the task) and the technique used to scale up the results to the labor aggregates.¹⁷

Indeed, there are multiple factors that may bias the estimates and explain the variability across estimations. For starters, it is difficult to define precisely the degree of substitutability needed to completely eliminate a job, or force the reassignment of their tasks to other occupations. For instance, the domestic service did not disappear as an occupation with the appearance of the dishwasher and the washing machine. Defining that limit with precision can lead to very different conclusions: the McKinsey Global Institute estimates that less than 5 percent of occupations are entirely comprised of fully automatable activities, while 60 percent of occupations are composed of at least 30 percent of “vulnerable” activities.

Furthermore, these indexes depend fundamentally on the subjectivity and limited knowledge of both the experts consulted and the design of the research work and its weighting methodology, giving rise to multiple potential biases. In addition, the adoption of technologies may not be carried out in the short term even when there is technical capacity to develop them, either because of investment determinants and their cost effectiveness, or because of legal, ethical, or social issues, naturally difficult to predict and weight. Finally, it is difficult to consider if 47 percent of jobs in “high risk” indicate “a lot” (or 9 percent “a little”), since this ultimately depends on the future creation of jobs, which is even more difficult to forecast.¹⁸

For all these reasons, it is practically impossible to make statements of the type “an X amount of jobs in a Y occupation will be automated in the next Z years” with a satisfactory level of confidence. This does not necessarily mean that these works do not have any usefulness; we have a more or less clear idea of occupations that carry a lower automation risk: elderly care or primary education teaching appear less substitutable than warehouse storage jobs. And, even though the period and magnitude of automation cannot be accurately anticipated, these forecasts help illuminate trends, identify vulnerable activities, qualification levels, geographies, or age groups (and the corresponding people) to orient education and retraining, job placement, and income policies.

So, Why Do We Care in Latin America?

“Technological unemployment is a rich-country problem, light-years away from our more urgent problems.” This is a typical response when one brings up the impact of technology on employment in a developing country. And, while it is true that workers in Latin America face more urgent

problems, such as poor training, informality, and rationing, it is also true that, for many reasons, the threat of the technological revolution is even more pressing.

The core of the labor force is comprised of low- and medium-skilled routine workers (hence, the large “exposure to automation” ratios estimated by the World Bank). Indeed, using Autor’s ranking of skill content in the “hollowing-out” chart as an absolute scale, we would probably place almost all of the region’s labor in the most vulnerable two-thirds.¹⁹

The education menu is outdated and poorly matched with the present (let alone the future) demands of skills in the labor market (which suggests that the exposure ratio is likely to deteriorate). This, together with the difficulty in generating quality jobs, may explain the declining education premiums and the growing levels of over-education.²⁰

In addition, the region is facing a demographic bonus (a temporary increase of the active-over-total population ratio), which is good news if the growing supply of labor finds its own demand, but could backfire if new entrants go into low-productivity occupations, or do not work at all.

And while in advanced economies the concern is a gradual replacement of full-time, full-benefit career employment by gig work or contingency contracts, and the challenge is to extend benefits to freelancers and zero-hour workers (by making benefits cumulative or portable, or by broadening unions), in Latin America, for the most part, independent work means something completely different: informal, below-minimum wage, precarious work for people with little or no skills that are rationed from regular labor markets. Technological unemployment may doubly affect this group, by eliminating many of the

low-skill routine task they currently perform, and by increasing competition from workers displaced from salaried jobs.²¹ “Education + entrepreneurship,” a recipe sometimes voiced in global panels on the future of work, would hardly apply in this case.

All of the above does not mean that technology is a threat and that Latin America is doomed to be a net loser as the new revolution deepens. On the contrary, technology means productivity and wealth, which governments should learn how to tax and distribute fairly. And, for the region, it also means that the development edge moves from cheap labor to know-how and knowledge, an area where we still have a chance to compete. More generally, what the evidence so far tells us is that, left to their own dynamic, the technological revolution represents a threat to equity, competition and, possibly, growth. It is the mission of public policy to turn this threat into an opportunity for shared prosperity.

NOTES

¹ This piece borrows from Eduardo Levy Yeyati, *Después del trabajo* (Editorial Sudamericana, forthcoming).

² David Autor and Anna Salomons, “Does Productivity Growth Threaten Employment?”, *ECB Forum on Central Banking* (Sintra, Portugal: 2017).

³ Maarten Goos and Alan Manning, “Lousy and Lovely Jobs: The Rising Polarization of Work in Britain,” *The Review of Economics and Statistics* 89 no. 1 (2007): 118-133; Maarten Goos et al., “Job Polarization in Europe,” *American Economic Review* 99 no. 2 (2009): 58-63; David Autor, “The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings,” Center for American Progress and The Hamilton Project, 2010; David Autor, “Why Are There Still So Many Jobs? The History and Future of Workplace Automation,” *Journal of Economic Perspectives* 29 no. 3 (2015): 3-30; David Autor and David Dorn, “The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market,” *American Economic Review* 103 no. 5 (2013): 1553-1597.

⁴ The research documenting these patterns in developed countries is very extensive and other additional works can be mentioned: Alexandra Spitz-Oener, “Technical Change, Job Tasks, and Rising Educational Demands: Looking Outside the Wage Structure,” *Journal of Labor Economics* 24 no. 2 (2006): 235-270; Kate Mieske, “Low Skill Service Jobs and Technical

Change,” unpublished MSc dissertation, University College London (2009); Daniel Oesch and Jorge Rodríguez Menés, “Upgrading or Polarization? Occupational Change in Britain, Germany, Spain and Switzerland, 1990-2008,” *Socio-Economic Review* 9 no. 3 (2010): 503-531; Craig Holmes and Ken Mayhew, “The Changing Shape of the UK Job Market and Its Implications for the Bottom Half of Earners,” Resolution Foundation, 2012; Adrian Adermon and Magnus Gustavsson, “Job Polarization and Task-Biased Technological Change: Evidence from Sweden, 1975-2005,” *The Scandinavian Journal of Economics* 117 no. 3 (2015): 878-917. A recent IDB report sought to replicate these analyzes in four Latin American economies (Brazil, Chile, Mexico, and Peru), during the first decade of the 2000s. Only Chile and Mexico showed the classic polarization patterns of developed economies (IDB, 2017). However, the period evaluated is too short to evidence a structural change that began in the advanced economies around the 1980s and, therefore, more research is needed to know the depth of these patterns in Latin America.

⁵ Daron Acemoglu and David Autor, “Skills, Tasks and Technologies: Implications for Employment and Earnings,” *Handbook of Labor Economics* vol. 4 (2011): 1043-1171; David Autor et al., “The Skill Content of Recent Technological Change: An Empirical Exploration,” *The Quarterly Journal of Economics* 118 no. 4 (2003): 1279-1333.

⁶ Other alternative hypothesis can be mentioned. On the one hand, if preferences are non-homothetic, the increase in wealth of the high-wage segments could increase demand for low-skill services like childcare, cleaning, security, etc., placing a floor under their job losses (see Francesca Mazzolari and Giuseppe Ragusa, “Spillovers from High-Skill Consumption to Low-Skill Labor Markets,” *Review of Economics and Statistics* 95 no. 1 (2013): 74-86). On the other hand, increased female labor participation could increase the demand of that low-wage occupations by an outsourcing of women’s household production.

⁷ Autor and Dorn, “The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market”; Autor et al., “Untangling Trade and Technology: Evidence from Local Labour Markets,” *The Economic Journal* 125,584 (2015): 621-646; Guy Michaels et al., “Has ICT Polarized Skill Demand? Evidence from Eleven Countries over Twenty-Five Years,” *Review of Economics and Statistics* 96 no. 1 (2014): 60-77; Maarten Goos et al., “Explaining Job Polarization: Routine-Biased Technological Change and Offshoring,” *American Economic Review* 104 no. 8 (2014): 2509-26.

⁸ Goos et al., “Explaining Job Polarization: Routine-Biased Technological Change and Offshoring.”

⁹ Mieske, “Low Skill Service Jobs and Technical Change”; Autor, “Why Are There Still So Many Jobs?”; Stephen Machin, “11 Changing Wage Structures: Trends and Explanations,” in *Employment in the Lean Years: Policy and Prospects for the Next Decade*, ed. David Marsden (Oxford: Oxford University Press, 2011): 151.

¹⁰ Autor, “Why Are There Still So Many Jobs?” Autor also emphasizes that differences in output elasticity of demand combined with income elasticity of demand

can influence the effects of automation on wages.

¹¹ Loukas Karabarbounis and Brent Neiman, “The Global Decline of the Labor Share,” *The Quarterly Journal of Economics* 129 no. 1 (2013): 61-103; Thomas Piketty, *Capital in the 21st Century* (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2014); Mai Chi Dao et al., “Why is Labor Receiving a Smaller Share of Global Income? Theory and Empirical Evidence,” International Monetary Fund, 2017; David Autor et al., “The Fall of the Labor Share and the Rise of Superstar Firms,” National Bureau of Economic Research, 2017.

¹² Simcha Barkai, “Declining Labor and Capital Shares,” University of Chicago, 2016; Jan De Loecker and Jan Eeckhout, “The Rise of Market Power and the Macroeconomic Implications,” National Bureau of Economic Research no. w23687, 2017; Mordecai Kurz, “On the Formation of Capital and Wealth,” Stanford University Working Paper, 2017.

¹³ Autor et al., “The Fall of the Labor Share and the Rise of Superstar Firms.”

¹⁴ James Bessen, “Information Technology and Industry Concentration,” Boston University School of Law, Law and Economics Research Paper no. 17-41. According to Bessen, it is not the use and diffusion of the technology itself that stimulates concentration, but the development of markets in which these systems are owned by a single firm. Note that there is an important distinction between the digital economy and other markets where network effects are present. For example, the telephony or fax service also implies strong network effects, to the extent that the product only gains value as it is used by my users of interest (friends, family, colleagues). However, while the telephony network is not owned by a single firm and companies compete with each other to offer the best service within the same network, in the case of digital platforms or the operating systems, the network is owned by a single provider (or a few networks coexist, offering services with a certain degree of differentiation).

¹⁵ This has been the criterion adopted by the European Commission in recent rulings against Google (a US \$2.7 billion fine for several uncompetitive practices, including privileged placement of its own services), Amazon (forced to change the terms of agreement with e-book editors), and Facebook (a US \$122 million fine for eluding its commitment not to combine datasets with WhatsApp, acquired in 2014).

¹⁶ Carl Benedikt Frey and Michael Osborne, “The Future of Employment: How Susceptible are Jobs to Computerisation?”, 2013, https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf; World Bank, “World Development Report 2016: Digital Dividends,” 2016; Melanie Arntz et al., “The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis,” OECD Social, Employment, and Migration Working Papers 189, 2016; McKinsey Global Institute, “A Future that Works: Automation, Employment and Productivity,” January 2017.

¹⁷ For example, Frey and Osborne estimated that 47 percent of US jobs were at “high risk of automation” (Frey and Osborne, “The Future of Employment.”) Arntz et al. used the same task automation indexes developed by Frey and Osborne but, instead of collapsing them directly on the job descriptions of each occupation (“Occupation-based approach”), they matched them with data at the individual level in OECD countries that contained specific descriptions of the tasks performed by each individual worker (“Task-based approach”), reaching the conclusion that only 9 percent of employment in the US was at high risk of automation (Arntz et al., “The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis.”)

¹⁸ The McKinsey Global Institute tried to estimate the number and nature of jobs that could be created in multiple scenarios from 2017 to 2030 for 46 countries (McKinsey Global Institute, “Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation,” December 2017.) This work can be considered an interesting first step, but more investigation is needed to accord and calibrate benchmark methodologies.

¹⁹ Estimates that use the ranking as a relative scale, such as those estimated by the World Bank (World Bank, “Wage Inequality in Latin America: Trends and Puzzles”) are not strictly comparable: for instance, jobs in the upper decile of the US skill-content ranking (proxied by wage levels) are rare in Latin America. Alternatively, we could proxy skill content by education levels, where the difference in the distribution in the US and the typical Latin American country are more visible.

²⁰ See World Bank, “Wage Inequality in Latin America: Trends and Puzzles”; and Martín González Rozada and Eduardo Levy Yeyati, “Does the Supply of Skills Create Its Demand?”, Torcuato Di Tella University’s School of Government, Working Paper, 2018.

²¹ Not surprisingly, while only 44 percent of independent workers in advanced economies are full-time freelancers (McKinsey Global Institute, “A Future that Works: Automation, Employment and Productivity”), in Argentina this number is as high as 70 percent (Levy Yeyati, *Después del trabajo*).

Eduardo Levy Yeyati is the Dean of School of Government of Universidad Torcuato Di Tella in Buenos Aires (where he launched and directs the Center for Evidence-based Policy) and a founding partner of Elypsis, a macro finance research firm. Prior to that, he was Managing Director of Argentina 2030 at the Chief of Cabinet Office, Director at the Bank of Investment and Trade Credit (BICE), Visiting Professor of Public Policy at Harvard Kennedy School of Government, President of the Center for Public Policy (CIPPEC), Head of Latin American Research and Emerging Markets Strategy at Barclays Capital, Financial Sector Advisor for Latin America and the Caribbean at the World Bank, and Chief Economist of the Central Bank of Argentina (2002). A former Senior Fellow at Brookings (2009-2014) and recipient of Harvard's Robert F. Kennedy Visiting Professorship in Latin American Studies (2006). He holds a Ph.D. in Economics from the University of Pennsylvania and a BA in Engineering from Universidad de Buenos Aires.

Luca Sartorio is an Argentine economist. He holds an economics degree from the University of Buenos Aires and is currently a student in the Master in Finance at the Torcuato Di Tella University. He works as a research assistant of the PhD Eduardo Levy Yeyati studying the impact of automation and other topics in labor economics. Previously, Luca participated in consultancy projects and published articles for the Inter-American Development Bank (IDB) about the implications of new digital developments for labor markets and international commerce. He also worked as an external consultant in ABECEB, an economic consultant firm.

The (Un)expected Economic Consequences of the Recent Expansion of Higher Education in Latin America¹

by Ricardo Espinoza² and Sergio Urzúa³

Abstract

Policymakers in Latin America need to internalize the economic challenges associated with the recent expansion of higher education in the region, which has been carried out at a rapid pace and with weak quality assurance mechanisms. To achieve a more promising future than past generations, current college graduates need more than just any degree. We argue that only high-quality programs designed to effectively equip students with the skills to succeed in the modern labor market will alleviate the intergenerational transmission of inequality in the region. This paper seeks to shed light on this critical issue.

Disclaimer: The views expressed in this paper are those of the authors and do not necessarily reflect those of the Organisation for Economic Co-operation and Development (OECD) or of the governments of its member countries.

Introduction

During the last two decades, several countries in Latin America and the Caribbean (LAC) have expanded their higher education systems. In 1991, the enrollment rate in tertiary education in the region was only 17 percent but had reached 43.8 percent by 2014,⁴ observed in Chile and Colombia during the past decade. During that period, their enrollment rates in higher education increased by 301 percent and 241 percent, respectively.⁵ Nowadays, both countries report rates that are comparable to the levels observed in many developed nations.

As expected, these achievements have been received with optimism in the region. To a large extent, the phenomenon is the result of public policies aimed at facilitating access to higher education institutions (HEIs) and promoting human capital accumulation in economies characterized by large deficits of productive labor. Greater financial support for students and the geographical expansion of tertiary education

during the first decade of the new millennium illustrate these efforts.

And, of course, greater access to higher education was expected to bring economic progress and equity gains. Public policies were designed and implemented under the assumption that first-generation college graduates, particularly those coming from vulnerable households, would benefit from high returns to education. However, this initial optimism has waned. There are growing societal concerns that the expansion has been accompanied by the deterioration in education quality. This phenomenon might explain, at least partially, the massive student protests observed in Chile and Colombia during the past five years.

The objective of this paper is twofold. First, we document the expansion of higher education systems, compare it to what has been observed in developed economies, and discuss the difficulties of

quality assurance. Second, we estimate the economic returns to higher education in two selected countries: Chile and Peru. By using publicly available data on tuition costs and earnings for college graduates from these two countries, we estimate the financial return to particular higher education programs. Specifically, we calculate the financial advantage of pursuing different degrees to alternative career paths, such as not enrolling in postsecondary studies at all. The evidence lends support to the concerns that indeed, the quality of higher education programs has deteriorated.

The Expansionary Process

Two distinctive aspects characterize the expansion of tertiary education in Latin America. First, its speed - enrollment rates have increased significantly in short periods of time in a number of countries. Although they are still lower than those in developed countries, enrollment growth has been significantly higher. Figure 1 shows the evolution of the gross enrollment rate in tertiary education and the GDP per capita in selected countries of Latin America vis-à-vis these trends in developed economies such as France, Norway, and Sweden from 1960 to 2014.

Second, expansion at the tertiary level was not accompanied by efforts to ensure education quality at lower levels (i.e. primary and secondary). Even though most governments have increased education budgets overall, extra funding was directed to improving access (quantity) instead of boosting outcomes (proxies for quality). For instance, according to the OECD (2016), some countries have experienced modest improvements in average PISA scores over the past years (Chile, Colombia, Peru), while in others scores have stalled or even decreased (Uruguay).⁷ Figure 2 shows that the share

of students performing at or above level 5 (highest levels) is significantly lower than in most OECD countries, despite similar enrollment rates in tertiary education. Educational performance at the primary and secondary levels is still far from what is observed in developed economies.

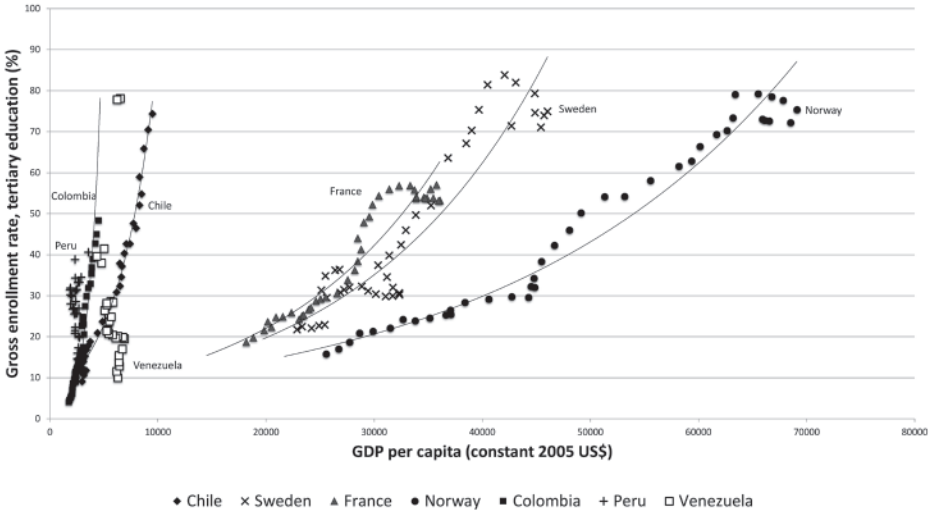
These two features of the development of higher education in Latin America suggest that its expansion was achieved with little-to-no strategic vision. The increase in expenditure and the implementation of mechanisms facilitating access may have come at a high cost. The evidence suggests that the expansion led to a decrease in the average quality and that the supply of degrees and programs remained fairly disconnected from the productive sector. All these factors may have contributed to a decline in the average returns to higher education.⁹

Returns to Higher Education

To illustrate the challenges associated with the expansion of higher education in LAC, we estimate the economic returns to a college degree in Chile and Peru, countries for which degree-specific data on post-graduation earnings, tuition costs, and degree duration is publicly available.¹⁰

We first study the impact of labor market experience on earnings using a Mincer-type regression framework. We then estimate the net economic returns to postsecondary degrees. To this end, we combine the conventional Mincerian returns with administrative information on tuition costs and labor market outcomes for recent cohorts of college graduates and predict lifetime earnings profiles. Our estimates identify the percentage increase in lifetime earnings of pursuing a particular degree versus the alternative of not pursuing any postsecondary degree (for details,

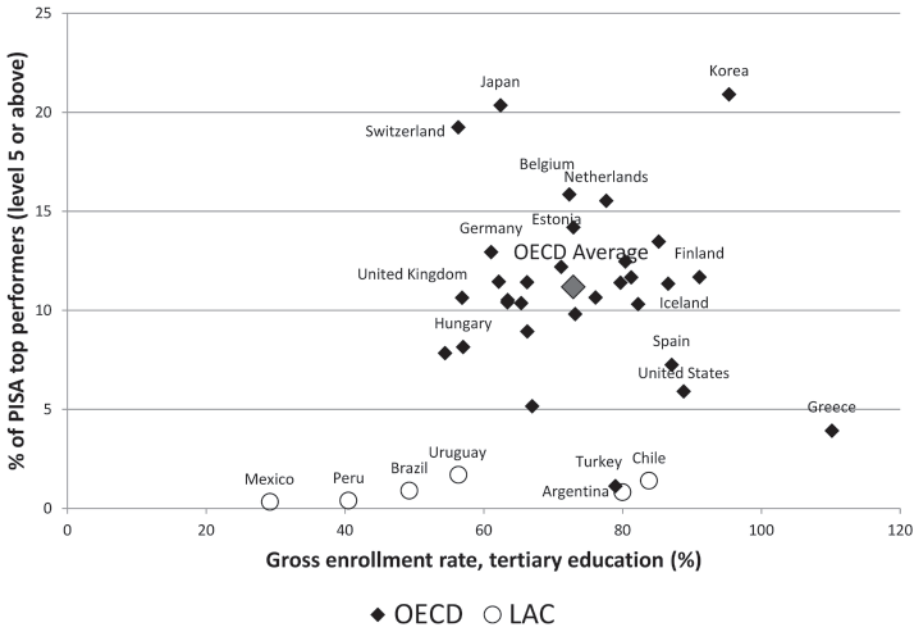
Figure 1: Enrollment rate in tertiary education and GDP growth



Source: Espinoza & Urzúa, 2015⁶

Note: Data from UNESCO Institute for Statistics, 1966–2013

Figure 2



Source: World Bank Data & PISA⁸

see Espinoza and Urzúa, 2016).¹¹ Specifically, the returns to pursuing the degree k , r_k is defined as:

$$r_k = \frac{NPV(k) - NPV_{HS}}{NPV_{HS}}$$

where $NPV(k)$ denotes the expected net present value of earnings of pursuing degree k and NPV_{HS} is the present value of not pursuing higher education after graduating from high school.

The analysis is carried out using data from household surveys (CASEN for Chile and ENAHO for Peru) and publicly available records by the government-run web portals *Mi Futuro* (Chile) and *Ponte en Carrera* (Peru).¹² These portals provide information on tuition costs, program duration, and salaries for most tertiary education degrees in each country.¹³

Results

Table 1 shows Chile's average returns by field of study and type of institution. The results indicate that the largest returns are associated with five-year college degrees in the fields of Business and Administration, Law, Science, and Engineering and Technology. The latter concentrates the highest results across types of institutions.

The table also shows substantial heterogeneity in returns across fields of study and HEI type. For example, while the average student attaining a university degree in Engineering and Technology faces a return of more than 160 percent, for the average student enrolled in the same type of institution but pursuing a degree in Humanities this figure reaches only 2.3 percent. Large differences also emerge across types of institutions for a given field.

Table 2 presents the results for Peru. Returns are, on average, substantially lower and more homogenous than those reported for Chile. The average return is 36.8 percent. The field that exhibits the highest returns is Sciences/Engineering/Manufacturing with returns of 58 percent, while, due to a combination of high tuition costs and low earnings, degrees in the field of education have negative average returns. This evidence is consistent with the patterns found in Chile.

Finally, our estimates suggest that roughly 10 percent of the students in Chile and 12 percent in Peru could face negative average returns to tertiary education. This means that these students would have been, on average, better off (in financial terms) by not pursuing that college degree (versus the alternative of entering the labor force after graduating from high school). Did the students know about the low returns to many of these degrees when applying to them? To what extent were they backed into a corner? How are the negative net returns related to the lack of quality assurance in the region? Did the expansion of the system boost competition among institutions? Did the expansion reduce the quality of the students and/or of the programs? These are some of the critical questions countries in the region need to assess before continuing expanding their higher education systems.¹⁶

Discussion

Many Latin American countries have implemented policies aimed at promoting access to higher education, and many more will continue doing so in the years to come. However, despite its political returns, the empirical evidence on the economic benefits of higher education suggests caution in continuing this strategy, particularly if quality assurance in education at all levels is not addressed. The intuition is simple.

Table 1: Average Returns by field of study and type of institution: Chile

	Type of HEI			Total
	Technical Training Center (2yr degrees)	Professional Institutes (4yr degrees)	Universities (5yr degrees)	
Agriculture	35.3%	42.5%	62.7%	52.5%
Arts	66.1%	31.0%	49.0%	41.2%
Business Administration	57.1%	54.6%	126.8%	78.2%
Education	-2.4%	9.5%	12.7%	9.6%
Engineering and Technology	109.6%	99.8%	163.5%	125.8%
Health	40.5%	40.9%	101.5%	73.3%
Humanities	-5.2%	12.1%	2.3%	4.1%
Law	61.3%	38.6%	128.5%	115.1%
Science	97.2%	115.5%	115.3%	113.6%
Social Sciences	34.5%	18.7%	47.0%	36.2%
Total	66.2%	58.9%	97.5%	78.4%

Source: Espinoza & Urzúa, 2016

Table 2: Average Returns by field of study and type of institution: Peru

	HEI Type		
	Vocational/Technical	University	Total
Arts & Architecture	16.3%	47.9%	34.6%
Business & Administration	31.9%	24.3%	28.6%
Education	-18.5%	-18.5%	-18.5%
Health	31.3%	7.1%	18.8%
Sciences/Engineering/Manufacturing	70.7%	49.4%	58.5%
Social Sciences/Communications	11.6%	27.8%	27.6%
Others	50.5%	33.0%	43.2%
Total	44.7%	30.5%	36.8%

Source: Espinoza & Urzúa, 2016³⁵

To a large extent, the new generations of higher education students attended low-quality primary and secondary institutions for many years. Therefore, for this group, not just any higher education system would guarantee a more promising future. Only one of high quality, designed

to effectively alleviate their lack of skills and provide them with the capacity to succeed in the labor market, would allow them to climb the socioeconomic ladder.

Our findings have major policy implications. A first point that emerges from the

evidence presented here is the importance of further efforts to construct and disseminate information on the performance of higher education graduates in the labor market.¹⁷ In this context, this study highlights the role of precise, reliable, and publicly available data on labor market outcomes when designing and implementing higher education policies. Objective empirical analysis using such data can (and should) call into question the benefits of well-intended initiatives. Our assessment of the dramatic expansion in access to a system that often failed in its promise to improve the economic conditions of those who decided to invest in higher education illustrates this point.

Second, our findings suggest a notorious mismatch between education policies at different levels and economic needs. This calls for developing a holistic approach for developing skills policies in the region. A number of countries (e.g. Estonia, Ireland, New Zealand, Norway) have embraced ambitious long-term plans for developing effective and efficient skills strategies.¹⁸ By actively incorporating several layers of government bodies and stakeholders, including education and labor institutions, unions, firms, regional and local governments, these nations are working towards implementing synergy-enhancing and complementary policies. When it comes to policies aimed at boosting skills, Latin American countries should move towards adopting such approaches.

NOTES

¹This article is based on Ricardo Espinoza and Sergio Urzúa, “The Economic Returns to Higher Education: Funding, Coverage, and Quality in Latin America,” a working paper prepared for the World Bank, 2016. The views expressed in this paper are those of the authors and do not necessarily reflect those of the OECD or of its member countries.

² OECD Centre for Skills, Directorate for Education and Skills. Email: ricardo.espinoza@oecd.org.

³ University of Maryland. Email: urzua@econ.umd.edu.

⁴ “Data Bank,” World Bank Group, <http://databank.worldbank.org/data/home.aspx>.

⁵ “Data Bank,” World Bank Group.

⁶ Ricardo Espinoza and Sergio Urzúa, “The Economic Consequences of Implementing Tuition Free Tertiary Education in Chile,” *Revista de Educación* 370 (October–December 2015): 10–37.

⁷ For example, between 2009 and 2015 the average math PISA scores increased by 2, 10, and 20 points in Chile, Peru, and Colombia, respectively. In Uruguay, it decreased from 425 to 418 over the same period of time.

⁸ “PISA 2015 Results (Volume I): Excellence and Equity in Education,” OECD Publishing, 6 December 2016, <https://www.oecd.org/publications/pisa-2015-results-volume-i-9789264266490-en.htm>.

⁹ Maria Marta Ferreyra et al., “At a Crossroads: Higher Education in Latin America and the Caribbean,” World Bank Group, 2017, <https://openknowledge.worldbank.org/bitstream/handle/10986/26489/2110140v.pdf?sequence=4>.

¹⁰ Ricardo Espinoza and Sergio Urzúa, “The Economic Returns to Higher Education: Funding, Coverage, and Quality in Latin America”; Carolina Gonzalez-Veloso et al., “Returns to Higher Education in Chile and Colombia,” Inter-American Development Bank manuscript, March 2015, https://publications.iadb.org/bitstream/handle/11319/6858/Returns_to_Higher_Education_in_Chile_and_Colombia.pdf?sequence=2; Sergio Urzúa, La Rentabilidad de la Educación Superior en Chile. Revisión de la base de 30 años de Políticas Públicas,” *Estudios Públicos* 125 (2012).

¹¹ Espinoza and Urzúa, “The Economic Returns to Higher Education: Funding, Coverage, and Quality in Latin America.”

¹² See www.mifuturo.cl (Mi Futuro) and www.ponteencarrera.pe (Ponte en Carrera).

¹³ We analyze individual-level data including the degree and institution at which students are enrolled as well as family background characteristics. To estimate individual returns, we match a student’s enrollment decision with her corresponding expected salaries.

¹⁴ Espinoza and Urzúa, “The Economic Returns to Higher Education: Funding, Coverage, and Quality in Latin America.”

¹⁵ Espinoza and Urzúa, “The Economic Returns to Higher Education: Funding, Coverage, and Quality in Latin America.”

¹⁶ Our results must be interpreted with caution. They are intended to identify the average economic gain of those individuals graduating from a specific degree in a particular type of institution versus their alternative of becoming a worker with a high school degree. Thus, they neither represent the average effect of the marginal individual who is indifferent between attending college or not (Pedro Carneiro et al., “Estimating Marginal Returns to Education,” *American Economic Review* 101, no. 6 (2011): 2754–81), nor the internal rate of return (James Heckman et al., “Earning Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond,” NBER Working Paper no. 11544 (2005)).

¹⁷ Raj Chetty et al., “Mobility Report Cards: The Role of Colleges in Intergenerational Mobility,” NBER

Ricardo Espinoza is an economist at the OECD. He works in the National Skills Strategies Team in the Directorate for Education and Skills performing comparative policy analysis, with the objective of contributing to enhance and extend OECD’s capacity to support countries as they develop effective education and labor market reforms. He has also worked as a consultant for the World Bank and IDB. Ricardo is an applied microeconomist, and his main research interests lie at the intersection between education and labour economics. His research focuses on estimating the returns to education and the economic impact of financial aid policies on higher education markets. He is also interested in the study of centralized college admission mechanisms and the extent to which they can improve the welfare of economically disadvantaged students. Ricardo earned a Ph.D. in Economics from the University of Maryland, and a Bachelor and Master’s degrees in Engineering from the Pontificia Universidad Católica de Chile.

Sergio Urzúa is an Associate Professor in the Department of Economics at the University of Maryland. He is a Research Associate at the NBER, Research Fellow at IZA, and International Research Fellow at Clapes-UC. His research has focused on the role of cognitive and noncognitive abilities, and uncertainty as determinants of schooling decisions, labor market outcomes, and social behavior. His research in econometrics is mainly concerned with the estimation of selection models with unobserved heterogeneity. Recently, he has analyzed the effects of early endowments on academic and labor market outcomes. His research agenda includes the evaluation of social programs in developing economies. He received his PhD from the University of Chicago in 2007. He teaches in the areas of Labor Economics and Econometrics.

How to Manage Urban Development in Central America: Using Remotely Sensed Data to Better Understand Cities

by Jessica Grisanti and Devyn Paros

Abstract

Central America is the second-fastest urbanizing region in the world, with most of the urban population growth taking place in intermediate or secondary cities. While urbanization can generate economic opportunities and improve life for urban dwellers, many of these cities are challenged by existing deficits in public services, infrastructure, and institutional capacity. In order to harness the benefits of urbanization, cities will require more information about the ways in which their urban areas are growing and developing. Examples from secondary cities in the region show how innovations in GIS and remote sensing technology – like satellite imagery – can help to fill critical information gaps and prepare cities to manage their urban transformations.

Introduction

Central America (CA) is undergoing an urban transformation. According to the World Bank, 59.0 percent of the region's population lives in urban areas. Within the next generation, however, an estimated seven out of 10 people will live in cities – an increase of nearly 20.0 percent.¹ Governments at the national and local levels face serious challenges managing this urban transition. Cities already suffer deficits in public services, infrastructure, and institutional capacity. As larger numbers of people concentrate in urban areas, it will become increasingly hard for governments to provide basic services, build new infrastructure, alleviate urban poverty, and establish sound policy and regulatory frameworks.

Two factors exacerbate the challenges posed by rapid urbanization in the region and weaken governments' ability to manage growth. First, the rural-to-urban transition is expected to concentrate in secondary cities – meaning urban settlements outside of primary or capital cities in developing

countries – which historically have lower capacity and fewer resources.² Second, policymakers, particularly at the local level, lack the information and data necessary to respond effectively to the rapid urbanization.

Experience from countries around the world shows that if urban growth is met with weak planning and investment then the growing populations in these cities will remain underserved, disconnected from jobs and markets, and cities will expand at costly rates. Well-managed and well-planned urbanization, however, can generate economic opportunities and improve the quality of life for the majority of urban dwellers. It can also drive productivity, innovation, and regional development while helping to alleviate poverty and improve social inclusion.³ In order to harness these benefits, CA must leverage better data and use it to inform urban development policies and planning at the national and local levels. Several countries and cities in both Central and South America are already doing this, empowered by geographic information system (GIS)

technology and data derived from satellite images about the composition of cities and land use.

The next section will provide insight into the urbanization process of Central America, followed by two case studies in Guatemala and Bolivia to show how satellite imagery can help to characterize the land use and show trends that can better inform the territorial development of the region and its cities.

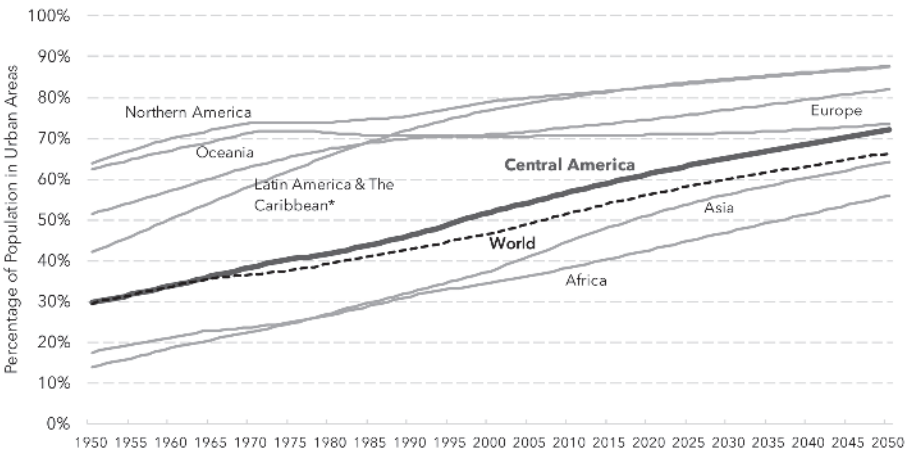
The Ups and Downs of Rapid Urbanization in Central America

CA is the second-fastest urbanizing region in the world after Africa (see Figure 1). The region’s urban population is growing faster than other countries at similar stages of urbanization. Under current urbanization rates, the region’s urban population will double by 2050, making it equivalent to Australia’s total population. The urbanization process has been unequal across the region. Nicaragua and Panama’s urban

populations surpassed 50.0 percent in the late 1970s and early 1980s. Guatemala and Honduras became predominantly urban in 2008 and 2012. The region’s urban population is projected to exceed 70.0 percent, with the exception of Guatemala (67.3 percent). Costa Rica and Panama’s urban populations are projected to reach close to 90.0 percent.⁴

An important driver of the urbanization in CA is rural-to-urban migration. Rural populations are migrating to cities looking for job opportunities, access to education, and overall better quality of life. The level of urbanization rate is often associated with economic growth,⁶ but the urban transformation presents several key challenges to the region: providing better infrastructure, expanding coverage and improving the quality of urban services (water supply, waste management, transport, street lighting, etc.), and providing greater employment opportunities. These challenges are further tied to problems that have long plagued CA countries such as lack of social inclusion, vulnerability to

Figure 1. Central America is the second-fastest urbanizing region in the world



Source: UN World Urbanization Prospects (2014)⁵
 *Latin America & The Caribbean excludes Central American countries.

natural disasters, and lack of economic competitiveness.⁷

While population growth and migration have caused cities in the region to expand, quality and access to housing have fallen short of demand. Slums⁸ and informal settlements in CA house on average about 29.0 percent of urban residents, though the share is higher in the case of Guatemala, where 39.0 percent of the population lives in slums.⁹ Informal settlements are a concern when they are located in areas at risk of natural disasters or are overcrowded.¹⁰ In CA, this is the case for both informal dwellers and the total housing stock in the region – about 10.0 percent to 20.0 percent of the current housing stock in the region is in high-risk areas or is overcrowded. In terms of access to services, statistics show that 50.0 percent of urban poor in Nicaragua don't have access to basic services, while Guatemala and El Salvador have 20.0 percent less coverage in terms of basic services than the average for all urban households.¹¹ Congestion and pollution are also challenges in the region.¹²

While the region has made progress in reducing poverty, as people move to cities the number of urban poor in absolute terms continues to increase. In 2011, the urban poor in CA numbered more than 8.3 million people.¹³ Crime and violence also tend to be higher in urban areas; international evidence shows that rapid and mismanaged urbanization can be linked to higher levels of crime and violence.¹⁴ To tackle urbanization's negative impacts and harvest its intended benefits, management at the city level is crucial. Governments in the region are presented with both an opportunity and a challenge to address urbanization. This is particularly true for local government as cities take ownership of these development challenges.

According to the World Bank, 81.0 percent of GDP in CA is concentrated in the countries' largest primary and secondary cities.¹⁵ Hence municipalities have a central role to play in territorial planning in the region.

Although capital cities and major metropolitan areas represent a large portion of total urban population today, these cities are expected to contribute less than 15.0 percent of the projected increase in urban population over the next decade. By contrast, secondary cities represent between 15.0 percent and 65.0 percent of the national urban systems and are becoming the focus of the region's urban agendas. Cities with populations between 15,000 and 100,000 accounted for between 20.0 percent and 30.0 percent of the population growth in urban areas. For example, official census data indicate that secondary cities in Guatemala and Nicaragua have contributed nearly two-thirds of the total urban population growth in the last decade.¹⁶

City-level policies and planning can help effectively manage the benefits and drawbacks of rapid urban growth. However, accurate, timely information, spatial data, and analysis are necessary for governments to improve urban policies and make sound investments for inclusive urban development. Many cities lack this information. This is especially true for secondary cities, which have been relatively neglected when compared to large metropolitan areas.

This information gap can be filled with innovation and technology. GIS technology and satellite imagery are powerful tools that are increasingly being looked at to fill the information gaps cities face. The types of information derived from these technologies can help assess and mitigate natural disaster risk. Other applications are more modest, but equally important,

for example local governments using technology to improve service delivery and citizen engagement. The next section will provide examples of how technology – particularly satellite imagery – can help decisionmakers understand urban conditions and make informed decisions.

Filling Information Gaps with Remotely-Sensed Data in Guatemala and Bolivia

Examples from Guatemala and Bolivia provide insights into how countries in both Central and South America can actively prepare for urban growth and equip themselves with the knowledge, policies, and institutions necessary to successfully manage urban transitions.

In both cases, remote-sensing technology was used by applying a land-classification algorithm to high-resolution satellite images of the respective cities. The algorithm – developed by the World Bank – categorizes each pixel of the image as a land cover type, such as informal or formal settlement, commercial, vegetation, water, roads, etc. This effectively creates a map of the land cover and use in the cities.

Case Study 1: Chimaltenango, Guatemala

Chimaltenango is a secondary city 50 kilometers outside of Guatemala's capital, Guatemala City, and serves as a gateway between the country's western region and its capital. From 1994-2002, the municipality of Chimaltenango almost tripled its population and had one of the highest population growth rates among secondary cities in Guatemala. In 2002, the municipality had the second-highest urban population (84.9 percent) among secondary cities in the country.¹⁷

With no formal urban plan, Chimaltenango has suffered from a disorderly growth model that hinders more rapid

economic development and contributes to an urban environment suffering from social, health, and environmental problems. The city's educational and health services are no longer sufficient to meet recent and future demographic growth.¹⁸ The aging water and sewer systems are overburdened, and the absence of a sewage treatment plant and comprehensive waste management, combined with illegal dumping, have implications for human and environmental health.¹⁹ The city's insufficient road infrastructure results in intense congestion along the busy Pan-American Highway.²⁰

In 2014, the cadastre of the municipality conducted a city-wide census in order to fill gaps in information about the city's development patterns and land use. The census collected household characteristics and enabled the city to geo-reference land parcels and public service coverage. Through the census process, the cadastre also assigned street names and addresses, which did not exist previously. A study of Chimaltenango in 2017 paired this local census data with the satellite-image-generated land cover data from the World Bank to evaluate how these data could be used to inform urban planning and management.²¹ The map of the city's land cover alone provided useful insights. However, the study took a step further by applying metrics to the data to quantify the urban form of Chimaltenango. The metrics focused on two dimensions – development patterns and connectivity – and measured indicators such as road density and intersections, compactness and fragmentation of the city, and time and distance to residential areas from the center business district.

Paired with the local census data, the study found that access to municipal water service, solid waste management, and electricity is significantly lower or

entirely absent for large portions of residential settlements outside the city center. The study also found that residential areas farther from the center business district have developed in a non-centralized, fragmented fashion. While this may be inevitable or even desirable given that much of the undeveloped land is at high risk of landslides (see Figure 2). This has implications for the costs of extending not only public services, but also improved road surfaces to new developments at the city's periphery.²² To underscore this point, while Chimaltenango has a relatively low share of informal settlements, they are farther away from the city center in both time and distance than formal residential settlements.²³

Ultimately, combining satellite imagery, urban form metrics, and local census data generates a more holistic picture of urban development. This could potentially help the Chimaltenango government to map human settlements, assess access to services, and assess the risk of settlements to landslides, among many other facets of urban life. Following this study, the cadastre requested access to the World Bank data and satellite imagery. While the study described here focused on a single point in time, the city plans to use the information and techniques to allocate resources more effectively and monitor development over time.

Case Study 2: Trinidad, Bolivia

The city of Trinidad, Bolivia is also leveraging insights from land classification data produced by the World Bank to support urban management. In Trinidad's case, the World Bank evaluated not only the present state of development, but also patterns over time.

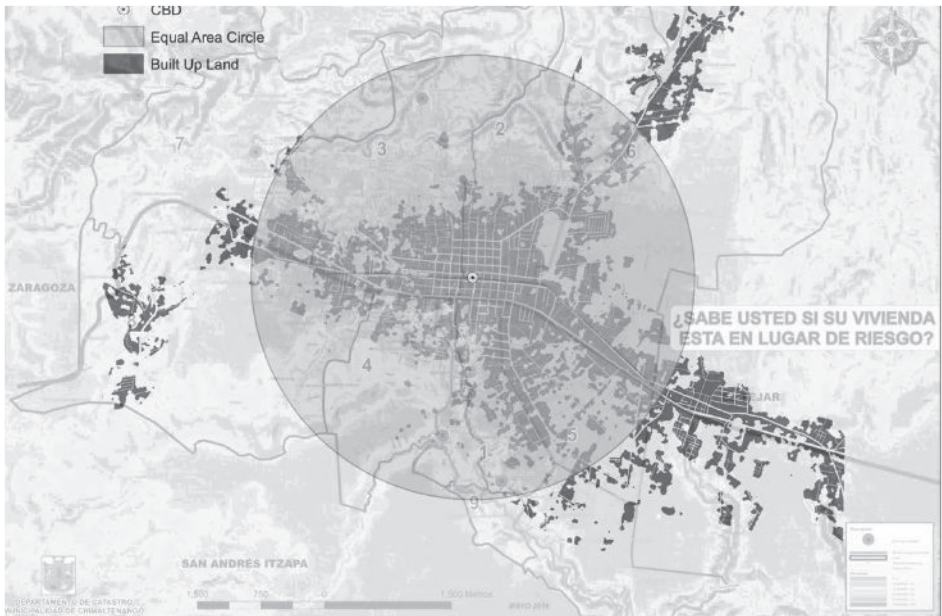
Trinidad – the 10th largest city in Bolivia – is expanding rapidly with the population

growing by nearly 3.0 percent and the urban footprint growing by 4.9 percent annually.²⁵ In 2012, the city developed an Urban Development Plan, Land Use Plan, and a Territorial Development Plan, but the city has yet to actively apply those tools. Since then, the city's population and urban footprint have expanded rapidly due to domestic migration without the proper basic services (water, sewerage, solid waste management). As a result, the urban footprint increased by 38.9 percent in the last few years.²⁶

Bolivia's Ministry of Development Planning commissioned the World Bank to study its intermediate cities. As part of the study, the World Bank compared satellite images of Trinidad in 2007 and 2015; this allowed one to study changes in the urban footprint and land use patterns. The World Bank had two key findings. First, the development of new informal settlements drove most of Trinidad's growth from 2007 to 2015.²⁷ In 2015, informal settlements occupied 40.0 percent of the city's urban land – compared to 31.0 percent in 2007 – and were concentrated at the periphery of the city. This is important because it creates pressure on the city to deliver services in areas far away from the city center. Second, many of these new settlements have developed in areas at risk of flooding.

The World Bank study recommended that Trinidad prioritize investments to extend the coverage of basic services and infrastructure. Many urban planning and diagnostic tools are available to Trinidad to support the implementation of these recommendations and to monitor how conditions evolve over time. However, there is no system in place yet to share or integrate information about service coverage and development across levels of government.²⁸ Such a system would enable government actors at the national and local levels to coordinate

Figure 2. Chimaltenango's Urban Extent overlaid with Risk Map



Source: Chimaltenango Cadastre (2016)²⁴ and Author's Calculation

and prioritize investments, which is critical considering resource constraints. The lack of systemization, and whether it can be addressed, will affect Trinidad's ability to actively manage urban development and to successfully guide investments.

What's Next for Central America?

Secondary cities in Central America face significant challenges as more and more individuals leave the rural areas of their countries in search of opportunities in cities.

Despite existing deficits in local capacity, services, and resources, cities have the opportunity to not only mitigate the challenges, but also be strategic in harnessing the many benefits of urbanization. City leaders and other stakeholders must be equipped, however, with more and better information in order to make effective urban policies and investments.

Not all the responsibility lies with the municipalities, however. Central governments also play an important role in strengthening institutions and building local capacity. Effective city management depends on vertical coordination between local and national governments as well as inter-municipal coordination. This allows cities to better cope with the demands of the urbanization process, and hence become more competitive, inclusive, and resilient.

Moreover, we must acknowledge that measuring urban development and using such information to make decisions is inherently a political process. When measuring urban development, someone must decide what the unit of analysis is. Do we care only about the land within our municipal boundaries, or are we looking at the urban area more holistically?

There are also normative considerations around how a city aspires to develop. To

be sure, there are global and regional best practices promoted in the urban planning literature and by globally influential actors such as the World Bank and UN Habitat. However, a city must ultimately decide whether being more compact or having higher road density is desirable, and to what end. Does the city care about being walkable? Does the city want to reduce the cost of extending sanitary sewer infrastructure? Does the city want to promote socially inclusive development?

These are not questions that we seek to answer here. What we do know is that those decisions can be informed and supported using information generated by satellite imagery and other technological advances. Furthermore, any tracking of urban development will require the political will to invest in capacity and technical knowhow. Ultimately, the effectiveness of any policies or regulations informed by data will also require buy-in from a wide variety of stakeholders, including governments, the private sector, NGOs, and the public at large.

NOTES

¹ World Bank, “Central America Urbanization Review: Making Cities Work for Central America,” eds. Augustin Maria et al., 2016, <https://openknowledge.worldbank.org/bitstream/handle/10986/26271/9781464809859.pdf>.

² World Bank, “Central America Spatial Analysis of Secondary Cities: Mapping Land Cover in Secondary Cities in Central America,” 2016.

³ World Bank, “World Development Report 2009: Reshaping Economic Geography,” 2009, <https://openknowledge.worldbank.org/handle/10986/5991>; Mark Roberts et al., “Urbanization and Development: Is Latin America and the Caribbean Different from the Rest of the World?” World Bank Policy Research Working Paper no. 8019, 2017, <https://openknowledge.worldbank.org/handle/10986/26363>; Juan Vargas et al., “Urban Growth and Access to Opportunities: A Challenge for Latin America,” RED 2017, <http://scioteca.caf.com/handle/123456789/1091>.

⁴ World Bank, “Central America Urbanization Review.”

⁵ United Nations’ Department of Economic and Social Affairs, Population Division, “World Urbanization Prospects: 2014 Revision,” 2015, <https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Report.pdf>.

⁶ Roberts et al., “Urbanization and Development”;

Vargas et al., “Urban Growth and Access to Opportunities.”

⁷ World Bank, “Central America Urbanization Review.”

⁸ Slums represent an extreme deprivation of infrastructure, land tenure, and shelter quality. See World Bank, “Central America Urbanization Review.”

⁹ World Bank, “Central America Urbanization Review.”

¹⁰ World Bank, “Central America Urbanization Review.”

¹¹ Author’s calculation; and Center of Distributive, Labor and Social Studies (CEDLAS) and the World Bank, “Database for Latin America and the Caribbean,” retrieved 20 March 2017, <http://sedlac.econo.unlp.edu.ar/eng/statistics.php>.

¹² Pichardo-Muñiz and Chavarría (2012) show that in the greater metropolitan area of San Jose (Costa Rica), existing road conditions of the city’s transport system contribute to severe road congestion and cost US \$3.8 billion between 2005 and 2009. This equals 2.8 percent of Costa Rica’s annual gross domestic product. See Arlette Pichardo-Muñiz and Marco Otoyá Chavarría, “Agglomeration Economies Versus Urban Diseconomies: The Case of the Greater Metropolitan Area (GMA) of Costa Rica,” InTech, March 2012, https://www.researchgate.net/publication/221929697_Agglomeration_Economies_Versus_Urban_Diseconomies_The_Case_of_the_Greater_Metropolitan_Area_GMA_of_Costa_Rica.

¹³ World Bank, “Central America Urbanization Review.”

¹⁴ Julie Berry Cullen and Steven D. Levitt, “Crime, Urban Flight, and the Consequences for Cities,” *The Review of Economics and Statistics* 81, no. 2 (1999): 159–69.

¹⁵ World Bank, “Central America Spatial Analysis of Secondary Cities.”

¹⁶ World Bank, “Central America Urbanization Review.”

¹⁷ Amanda Morán, “Las ciudades intermedias y el desarrollo regional en Guatemala,” Serie: Territorios y Regionalización en Guatemala, Centro de Estudios Urbanos y Regionales, 2009.

¹⁸ SEGEPLAN, “Plan de Desarrollo (PDM) de Chimaltenango,” Consejo Municipal de desarrollo de Chimaltenango, Guatemala, <http://www.segeplan.gob.gt/nportal/index.php/biblioteca-documental/category/49-planes-desarrollo-departamental?download=39:dpp-chimaltenango>.

¹⁹ SEGEPLAN, “Plan de Desarrollo (PDM) de Chimaltenango.”

²⁰ Juan Cervantes, “Chimaltenango: La suma de todos los males en una carretera,” Plaza Publica, 8 January 2017, <https://www.plazapublica.com.gt/content/chimaltenango-la-suma-de-todos-los-males-en-una-carretera>.

²¹ World Bank, “Central America Spatial Analysis of Secondary Cities.”

²² Jessica Grisanti and Devyn Paros, “Rapid Urbanization in Central America: How Quantifying Urban Development Can Inform Policymakers,” Policy Analysis Exercise, Harvard University, John F. Kennedy School of Government, 2017.

²³ Grisanti and Paros, “Rapid Urbanization in Central America.”

²⁴ Department of Cadastre, Municipality of Chimaltenango, Guatemala.

²⁵ World Bank, “Ciudades Intermedias en Bolivia: Informe de Asistencia Técnica,” 12 June 2017,

<http://documents.worldbank.org/curated/en/753511500916920170/pdf/117714-revised-spanish-59p-Informe-AT-Ciudades-Intermedias-FINAL.pdf>.

²⁶ World Bank, “Informe tecnico: Ciudades Intermedias en Bolivia.”

²⁷ World Bank, “Informe tecnico: Ciudades

Intermedias en Bolivia.”

²⁸ World Bank, “Desarrollo Urbano Integral de Trinidad: Estudio de Caso,” <http://documents.worldbank.org/curated/en/716221500916216368/pdf/116273-REVISED-OUO-9-Estudio-de-Caso-Trinidad-FINAL.pdf>.

Jessica Grisanti is a Venezuelan economist and consultant in urban development at the World Bank. She holds a Master in Public Policy from the Harvard Kennedy School of Government and a Master in Economic Policy from the University of Illinois Urbana-Champaign. Prior to coming to the World Bank, Jessica was the senior economist at Ecoanalitica, a prominent Venezuelan economic consultancy firm. For three years, Jessica also served as an Adjunct Professor of Macroeconomics at Universidad Católica Andrés Bello, where she received an award for teaching excellence. At the World Bank, she is currently working on disaster risk management and territorial development projects in Latin America at the Social, Urban, Rural and Resilience Practice.

Devyn Paros is the Deputy Director of Strategy for the Massachusetts Executive Office of Technology Services and Security, working at the intersection of government, technology, and digital services. She holds a Master’s degree in Public Policy from Harvard University’s Kennedy School of Government and a BA in international development from Ohio State University. Before attending graduate school, she worked in public policy and legislative affairs for the City of Columbus, Ohio, with a focus on community and economic development, public safety, and environmental sustainability.

Bright Mirror: How Latin America is Enhancing Digital Democracy

by Cecilia Nicolini and Matías Bianchi

Abstract

Digital Democracy has emerged as a phenomenon that aims to transform the entire relation between state and society, potentially being able to fix the current crisis of liberal democracies. Despite the fact that reality is showing that we are far from that technological panacea, many government and social movements are using those tools to empower marginalized actors, to make governments more transparent and accountable, and to make policies more participatory. This article unpacks the opportunities and challenges digital democracy has to offer, and reviews specific cases from Latin America in which these tools are being used for improving the quality of democracies.

Introduction

Our democracies are outdated. In the second decade of the 21st century, governments seem unable to address the complex challenges the world is facing, and citizens' trust in public institutions is at the lowest point in decades. The good news is that the digital revolution is providing a window of opportunity for bringing politics back to society. The so called "Triple Revolution" (i.e. internet, smart phones, and social media) can help us move from hierarchical decision-making processes and representative democracies to more inclusive, horizontal, and participatory mechanisms for dealing with public issues.

Yet, there are still many obstacles to overcome such as the digital divide, the domination of techno-elites, or the abuses of the owners of the technology infrastructure. In Latin America, many young activists and governments are using technology to address some of those challenges, by increasing participation, making governments accountable, or providing new voices to the public arena.

Digital Democracy

In his famous book *Polyarchy*, Robert Dahl describes democracy as "the continued responsiveness of the government to the preferences of its citizens, considered as political equals."¹ Today, we have the technological tools to fulfill these premises more efficiently, to make them more inclusive and in real time. This phenomenon, called Digital Democracy or E-democracy, has emerged in the last years as "the practice of democracy using digital tools and technologies"² and has the potential of transforming the entire relation between state and society.

This transformation could bring government and society closer,³ allowing citizens to formulate their preferences, signify them, and weigh them equally in a free public contestation realm.⁴ New software, web platforms, and mobile applications are accelerating and facilitating the processes necessary for idea collection, discussion, decision-making, and voting, as well as media and content creation. This approach sustains that by going digital, democracy can go beyond representation by using,

for instance, an online space for deliberation and voting political proposals such as DemocracyOS software,⁵ secure trust by using blockchain,⁶ increase accountability of public officials with Chequeado.org,⁷ or even profit from collective intelligence to design and execute public policies with an initiative such as GANA PAE.⁸

The benefits that digital democracy is bringing are enormous. Technology became a powerful weapon to demonstrate that complexity was not a wall anymore to keep citizens out of the decision-making process. Hacktivism and civil disobedience emerged as common elements for social movements around the world, providing governments and institutions the tools and solutions to become more transparent and accountable. Digital technologies enabled now to communicate in a horizontal way, with networks that allowed more people to participate, becoming “decisive sources of power construction.”⁹

The Limits of Technology and Politics

Sadly, reality is showing that we are still far from that utopian vision of digital democracy. Twenty years after publishing his famous book *Strong Democracy*, where he over-celebrates the power of new technologies, Benjamin Barber acknowledges that far from solving the most urgent problems, technology has, in many cases, “mirrored and reinforced deficits already existent in our democracies.”¹⁰ Some years ago, technologies promised a “new global agora, a new democratic electronic frontier”¹¹ with new possibilities for direct and deliberative democracy. However, skepticism arose among a number of experts, pointing out the problem of the so-called digital divide.¹² Robert Putnam worried about a possible “cyber-apartheid”¹³ and the increasing exclusion of those without access to internet or technologies, while

others showed concern with the market concentration within the technology sector, deepening the already wide income gap with the richest 1 percent owning half the world’s wealth.¹⁴ Harvard professor Cass Sunstein believes that as the power of the internet grows, it creates new threats to democracy. He emphasizes the role of social media and the power to create echo chambers driving political fragmentation, polarization, and even extremism.¹⁵ The so-called filtered bubble created an ideal environment for fake news, trolls, and other pernicious elements to impact democracy in a negative way.

While there are not magic tools or solutions to a broader array of problems our societies and governments have, digital technologies can be part of the solutions to achieve more equal, transparent, and inclusive democracies. Yet, “finding ways to reincorporate technology into a strong democratic strategy will depend not on the technologies themselves, which remain pro-democratic in many of their aspects, but on political will.”¹⁶

A Bright Mirror

Despite all these risks and threats, technology can certainly bring more opportunities to improve our democracies. Latin America has both inspired and been inspired by social movements around the world. Participatory budgeting in Brazil during the 1980s, the network of the Zapatista Movement in Mexico, or the Popular Assemblies of the *Piqueteros* in Argentina, shaped new ways of understanding civic engagement and political disruption. At the same time, the Arab Spring, the *Indignados* in Spain, or the Occupy Wall Street Movement in recent years became sources of activation for the creation of new spaces of contestation in the region. Emerging political expressions such as #NiUnaMenos

in Argentina, #Soy123 in Mexico, and more recently #JusticiaYa in Guatemala, or #Yasunidos in Ecuador, have raised solidarity and actions all around the region. There is a new generation of democratic and digital natives that are using technology to strengthen new voices, to foster civic engagement, to increase accountability, and to propose a new ethics for politics.¹⁷

In most of the cases, social movements implemented an innovative decision-making process, using decentralized and horizontal organizational approaches to make collective decisions or co-create proposals with the help of technology platforms.¹⁸ They promoted spontaneous mobilizations, letting it “overflow” their own movement, creating transnational movements of solidarity and common action such as #NiUnaMenos to defend women against violence or #Yasunidos to protect the Yasuní Natural Reserve. Finally, they developed new subjectivities, with reference to the framing of the self and the others in an attempt to denounce the cooptation of power and abuses by a ruling elite.¹⁹

Social movements and civic insurgence are paving the way to create a new array of experiences in Latin America that are using digital technologies for improving democracy. The following lines will show some innovative initiatives that are proposing profound changes to politics in Latin America. Some are bottom-up, like *Wikipolítica*, *Verificado S19*, or the Academy of Political Innovation; and others are government-led, like *Lab por la Paz*. Some aim at increasing participation, others transparency, and others to a more effective delivery of public goods. All of them are trying to bring state and society closer together.

Innovative Experiences

MEXICO: “Wikipolítica,” Defying the Idea of Representation

“The walls do fall” was the rallying cry of Pedro Kumamoto and his group in Jalisco, Mexico during the elections of 2015. Inspired by the #YoSoy132 mobilizations in 2012, instead of creating a party, they developed a collaborative platform to promote independent candidacies willing to disrupt the traditional party competition and promote an innovative and participative new way of representation.²⁰

Wikipolítica emerged in an environment of distrust and fragmentation of political institutions in Mexico. According to *Latinobarómetro*, only 9 percent of Mexicans trust political parties, and only 18 percent are satisfied with the way democracy works in the country.²¹ But instead of building their narrative in a contentious and belligerent way, *Wikipolítica* decided to become a beacon of hope, promoting collaboration, transparency, and inclusion. Decisions would be made collectively, they would not accept public funding, and local politics would be a priority.

Naturally, digital technologies became their main ally to amplify their message and reach a wide number of supporters. They defied the whole idea of representation, putting the citizen again in the center, avoiding professional politicians, and creating a dynamic relation between online and offline communities that could retro-feed and collaborate to rewrite the narrative of what it means to be a real democracy.

BRAZIL: “Co-Lab,” Citizen to Government Engagement Platform

A Brazilian entrepreneur wanted to bring citizens and local government closer and enable a direct conversation to solve the city’s everyday problems. Therefore, he

created an app or “management platform” to allow users to file reports for daily problems such as potholes, graffiti, or broken lights.²²

But the app went beyond, and citizens are now able not only to propose solutions to problems, but to give constant feedback on public services. People evaluate their experience at public hospitals, schools, or even at the police department. Both the mayor and the responsible officials of the area receive the feedback, making it easier (or unavoidable) to respond in a more agile, efficient, and transparent way.

The innovation also resides in its pushing strategy. While some cities still didn't implement the app, people are able to give feedback about the service or infrastructure of the city, upload the data in the platform, and eventually, make it very hard for the government to avoid opening a channel and engage in a direct conversation with their citizens.

COLOMBIA: “*Lab por la Paz*,” Opening the Box of Policymaking

Located on the periphery of Colombia, at the border with Ecuador, the department of Nariño contains many socio-economic challenges: low-income ethnic minorities such as African-Colombian people and indigenous communities are present in an area of rough geography, where a historical armed conflict has been present for decades. The current Governor Camilo Romero (2016-19) proposed technological innovation at the core of his platform. Becoming the first open government initiative at the subnational level in the country, his administration promoted 10 measures to combat corruption, ranging from publishing affidavits of every public official and every spending of the budget to a tracking system of food delivery in public schools.²³

In February 2018, the state government launched *Lab por la Paz*, a public accelerator that supports 11 technological solutions to make peace possible in a country torn apart by 50 years of violent conflict that affected an estimated more than eight million victims. The Lab has invited 100 experts from Latin America and other countries around the world as well as mentors, technical experts, and local mediators in order to turn these prototypes into real innovative solutions.

MEXICO: “*Verificado 19S*,” Providing Trust

Only minutes after the earthquake hit Mexico in September 2017, killing more than 300 people, citizens came out to the streets to help survivors under debris, and to collect medicine and food supplies for victims. Despite the good intentions, information was confusing, fake news was widespread, and the lack of an efficient government response made aid chaotic and difficult to manage.

A group of activists, coders, and journalists decided to build a platform that could make information more reliable, and able to provide details about what was actually needed, where and when. Overnight these organizations created *Verificado 19S*, which included an interactive map and a collaborative database that kept verifying the information coming from the news and the people on the ground on a real-time basis.²⁴ The platform soon became the trustworthy reference to coordinate the crisis and a more reliable source of information than the government itself.

LATIN AMERICA: “*Academia de Innovación Política*,” Preparing Leaders for Digital Democracy

If the world is changing, our democracies need leaders with the capabilities to face those challenges. Who is training them? In 2016, the Argentinian NGO *Asuntos del*

Sur, led by one of the authors of this article, mapped and analyzed the curricula of 165 training programs for leaders in Latin America. The result was conclusive: we are still training leaders for a state-centered, hierarchical, industrialist world. Trying to fill that void, they launched the Academy of Political Innovation, an online platform for training leaders for the 21st century.

Using the open software Moodle, they are training social and political leaders on hacker ethics, the use of open data and big data, and innovative tools for more inclusive and participatory democracies. In its first year they trained over 500 leaders from 21 countries. They have specifically supported emerging political movements like the ones described above (e.g., with *Wikipolítica* they tailored a specific program for their teams).

Conclusion

Today, liberal democracies are at their lowest levels of trust in decades, and therefore democracy is screaming for a reinvention.²⁵ Digital technologies are providing the tools that could potentially restore trust and improve the quality of public policies. We are experiencing an array of innovative experiences that are taking advantage of those tools to help reconnect the *demos* with the *kratos*.

Yet, it is important not to be blinded by sophisticated algorithms and beautiful platforms and forget about the main priority of making our democracies more inclusive and egalitarian. The goal of democracy is to respect and enhance citizen rights. If digital democracy does not do that, we will be just experiencing a digitalization of the *status quo*.

NOTES

¹ Robert Dahl, *Polyarchy: Participation and Opposition* (New Haven and London: Yale University, 1971), 1.

² Julie Simon et al., “Digital Democracy: The Tools Transforming Political Engagement,” NESTA, February 2017, 11, https://www.nesta.org.uk/sites/default/files/digital_democracy.pdf.

³ Jan van Dijk, “The Myth of Digital Democracy: Digital Citizenship, the Internet, Society and Participation,” *Journal of the American Society for Information Science and Technology* 61, no. 3 (March 2010): 631-633.

⁴ Dahl, *Polyarchy*.

⁵ For more information about DemocracyOS, see <http://democracyos.org/>.

⁶ The World Identity Network (WIN) initiative seeks to provide internationally valid identifications for people. See <https://www.win.systems/>.

⁷ Chequeado is an Argentinian non-partisan, non-profit digital media organization that is dedicated to the verification of public discourse and the promotion of access to information and the opening of data. See <http://chequeado.com/>.

⁸ This policy is designed to track the distribution of food in public schools in Colombia. See <http://ganapae.narino.gov.co/public/>.

⁹ Manuel Castells, *Redes de Indignación y Esperanza* (Madrid: Alianza Editorial, 2012), 25.

¹⁰ Benjamin Barber, *Strong Democracy: Participatory Politics for a New Age* (Los Angeles: University of California Press, 2003).

¹¹ Barber, *Strong Democracy*, xv.

¹² Matthew Hindman, *The Myth of Digital Democracy* (Princeton: Princeton University Press, 2009).

¹³ Robert Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon & Schuster, 2000).

¹⁴ “Global Wealth Report 2017,” Credit Suisse, <https://www.credit-suisse.com/corporate/en/research/research-institute/global-wealth-report.html>.

¹⁵ Cass Sunstein, *#Republic: Divided Democracy in the Age of Social Media* (Princeton: Princeton University Press, 2017).

¹⁶ Barber, *Strong Democracy*, xv.

¹⁷ Matias Bianchi et al., “Transformaciones de la participación política en América Latina,” *Revista Electrónica de Ciencia Política* 7, no. 2 (2016).

¹⁸ Geoff Mulgan, *Big Mind: How Collective Intelligence Can Change Our World* (Princeton: Princeton University Press, 2018).

¹⁹ Donatella Della Porta et al., *Movement Parties Against Austerity* (Cambridge: Polity, 2017).

²⁰ For more information about *Wikipolítica*, see <http://wikipolitica.mx/>.

²¹ Latinobarómetro, “Informe 2017,” <http://www.latinobarometro.org/LATDocs/F00006433-InfLatinobarometro2017.pdf>.

²² For more information about Co-Lab, see www.colab.re.

²³ For more information, see GANA (Gobierno Abierto de Nariño), <http://gana.xn--nario-rta.gov.co/>.

²⁴ For more information about Verificado 19S, see <http://www.verificado19s.org/>.

²⁵ Larry Diamond, "Facing Up to the Democratic Recession," *Journal of Democracy* 26, no. 1 (2015).

Cecilia Nicolini is a Research Fellow at the Harvard Ash Center and Harvard Kennedy School Mid-Career MPA 2017. She is a political scientist with more than 14 years of experience as international consultant working for governments, international organizations, and large corporations in Latin America, Europe, and the US. She has managed a presidential campaign, advised governors and mayors, and run an election for an international organization. She is also Chief International Officer at Opinno, a global consultancy firm, working in the intersection of public policy, technology, entrepreneurship, and innovation.

*Matías Bianchi is a political scientist with a PhD from the Institute d'Études Politiques de Paris (Sciences Po). He has worked for the Woodrow Wilson Center, the Government of Argentina, the Development Center of the OECD, and also led the Instituto Federal de Gobierno. Matías is the founder and director of Asuntos del Sur, a think tank focused on political innovation in Latin America. He has recently published Bianchi (Editor), *Recuperar la Política: agendas de innovación Política en América Latina*, 2017.*

Towards Measuring Economic Policy Uncertainty in Latin America: A First Little Step¹

by Alvaro Silva²

Abstract

I provide a quick look at economic policy uncertainty indices in Latin America, constructed using text-search methods. The indices show spikes whenever important economic policy-related issues arise. Descriptive evidence also showcases how global economic policy uncertainty influences Latin American countries, but to different extents. These indices can be useful to assess how economic policy uncertainty may impact the economy. This is important since Latin American countries are experiencing turbulent political and economic times and will, probably, continue to do so in coming years. I encourage researchers, especially Latin American researchers, to measure economic policy uncertainty in their countries.

Introduction

Economic policy uncertainty (EPU, hereafter) is a major issue for the world economy. Some prominent examples of rises in EPU are the 2008 financial crisis, the Brexit referendum, and the 2016 US presidential election. Yet, reliable measures of EPU are only available to a handful of countries, which in Latin America (LATAM) includes Brazil, Mexico, and Chile. This is important since economic uncertainty, which EPU is a part of, has been shown to have non-negligible effects on economic activity.³

In this document, I explain why text-search methods provide a well-designed strategy to measure EPU in LATAM countries. To do so, I mostly rely on methods pioneered by Baker, Bloom, and Davis (2016).⁴ I argue that the indices behave quite well when compared with countries' economic history, and provide a reliable measure to conduct empirical exercises.

Recent events have shown the importance of understanding EPU in LATAM. For example, on 11 March 2014, Michelle Bachelet assumed the presidency of Chile.

With her, a large program of breakthrough reforms in major fields (such as labor regulations, education, and taxes) arrived. Several academics and policymakers were concerned about the impact that the program would have on the economy. In 2015, the International Monetary Fund (IMF) provided estimates that around one-third of Chile's economic growth decline in the past years was due to external reasons, leaving two-thirds to internal causes.⁵

That internal causes explain two-thirds of the economic activity drop opened the door to study what were the reasons behind them, and to look for a way of quantifying them. In Cerda, Silva, and Valente (2016), we constructed the Chilean EPU index to fill that gap.⁶ If the text-search method was right, an EPU index must have increased during this period. As it is shown below, this was exactly what happened.

The structure of this document is as follows. In Section 2, I describe how to construct the EPU indices. In Section 3, I show the EPU indices for Brazil, Chile, and Mexico. I also compare them to the

global economic policy uncertainty index constructed by Davis (2016). Section 4 illustrates the potential of the EPU indices. Finally, Section 5 concludes.

Indices Construction Using Text-search Methods⁷

Indices constructed using text-search methods rely on frequency counts of articles that meet certain criteria. In this section, I show how to use these methods, first implemented by Baker, Bloom, and Davis (2016), to construct the Chilean EPU index.⁸

First, I access a unique database that contains all the digital archives of articles published by *El Mercurio* and *La Segunda*, two of the most important newspapers in the country, from 1993 to December 2017. Second, I make a monthly raw count of articles that contain at least one word in each of the following categories: Economic (E), Policy (P), Uncertainty (U), and Chile (C). Table 1 provides a detailed account of the terms used in the text search.

To avoid the fact that in each month the number of articles may increase only because a newspaper is writing more

articles, I scale the raw count by the total number of articles published by each newspaper in each month. Then, I compute the standard deviation of these scaled counts between January 1993 and October 2016 and divide them by their respective standard deviation to obtain a normalized measure for each newspaper. I then take a simple average in each month of these normalized measures to obtain a unique monthly series. Finally, I normalize the series to have a mean of 100. The resulting series corresponds to the Economic Policy Uncertainty Index.

The Behavior of EPU Indices

Figure 1 shows the EPU indices for Brazil, Chile, and Mexico,¹⁰ where I labeled some of the major world economic episodes during the last 20 years.

Note that the EPU indices tend to follow a similar pattern. All countries show increases whenever an international event occurs, as they did, for example, during the Asian crisis or the sub-prime crisis. This indicates that there may exist an aggregate uncertainty component common to these countries.

Table 1. Keywords in Spanish

Category	Words
Economic (E)	Any word beginning with "econ", such as words like <i>economista</i> , <i>economía</i> , and <i>económico</i>
Policy (P)	<i>Política*</i> or <i>impuesto*</i> or <i>regulación</i> or <i>regulaciones</i> or <i>recaudación</i> or <i>reforma</i> or <i>congreso</i> or <i>senad*</i> or <i>diputad*</i> or <i>gasto fiscal</i> or <i>gasto pública</i> or <i>déficit fiscal</i> or <i>deuda pública</i> or <i>presupuesto fiscal</i> or <i>Banco Central</i> or <i>Ministerio de Hacienda</i>
Uncertainty(U)	<i>Incertidumbre</i> or <i>incierto</i>
Chile (C)	Any word beginning with "Chile"

Note: A * is included to account for any word that begins with the word left of the symbol. For instance, "impuesto*" includes both the word *impuesto* and *impuestos*.

Overall, however, different countries have different movements due to their own internal events. The Mexican case is interesting as it has shown large levels of EPU from 1996 until 2004. Some of the internal episodes that contributed to EPU during this period were the massive election loss of the Institutional Revolutionary Party (PRI) in 1997 (the first in almost 70 years), the tight monetary policy of Banxico in 1998, and concerns about *Petróleos Mexicanos* (Pemex, a Mexican oil company) in 2003. Since then, the Mexican EPU index has remained stable around its mean, showing its last peak during the 2016 US presidential election.¹¹ This highlights the importance of correctly understanding what the EPU index tells, and does not tell. Higher levels of EPU do not necessarily mean a bad thing. Mexico was obviously exposed to several sources of external uncertainty in recent years, most notably since Trump's administration took office. However, what its EPU index reflects is that this uncertainty is not as relevant when compared to its historical average.

Since 2014, economic policy uncertainty in Brazil has increased at a rapid rate due to political corruption scandals. In 2014, a corruption scandal involving Brazil's most important oil company, *Petroleo Brasileiro* (Petrobras), emerged. The Workers' Party (PT) and its coalition partners, who by that time ruled the country, received billions of dollars from Petrobras since they appointed the company's most important executives.¹²

Since then the scandal climbed to extremely large levels of EPU, with events such as the impeachment of President Rousseff in 2016 as one of the milestones. Nevertheless, Brazilian authorities were able to create an environment of confidence for the economy and democracy in the past year, as illustrated in the decline of Brazil's EPU index, but much remains

to be done to ensure its stability. Note that this marks a stark difference with the EPU behavior of Mexico and Chile. Brazilian EPU stems primarily from internal causes throughout the years.

Chilean EPU, in contrast, is heavily influenced by external events. To see this, note that almost all the peaks in its EPU index correspond to major global events: the Asian crisis in 1998, the dot-com bubble in 2001, the great recession of 2008, and the China's slowdown of 2016. This illustrates the small open economy nature of Chile. However, there are at least two episodes where the Chilean EPU index did not have an external source, both of which occurred during 2014. Interestingly, these coincide with the time when President Bachelet's government introduced two major reforms: the tax reform in August and the labor reform in December.

Conclusions regarding internal versus external events are even more properly illustrated in Figure 2, which shows the EPU index for these countries together with the global economic policy uncertainty (GEPU) index. Davis (2016) constructed the index as a weighted average of EPU indices from countries that account for two-thirds of world GDP.¹³ In that figure, we observe that (i) Chilean EPU closely follows GEPU (except in the last years); (ii) Brazilian EPU does not follow GEPU, except for episodes of large uncertainty (such as global crises); and (iii) the Mexican EPU constantly declined throughout the years, following in some periods the GEPU pattern.

Overall, the EPU indices tend to track rather well both internal and external EPU events. While it is true that the text-search method may be prone to errors, for instance that of false positives, until now it is doing a decent job in terms of capturing prominent EPU events.

Fig 1. Economic Policy Uncertainty Indices for Latin American Countries

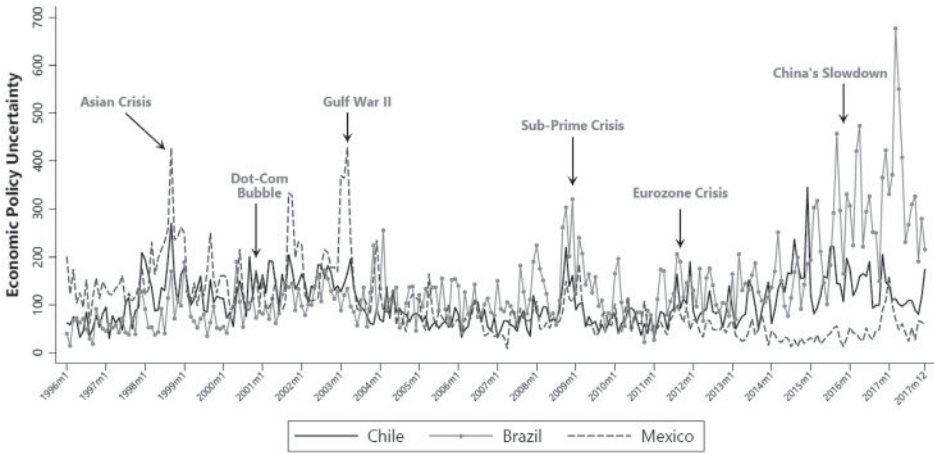
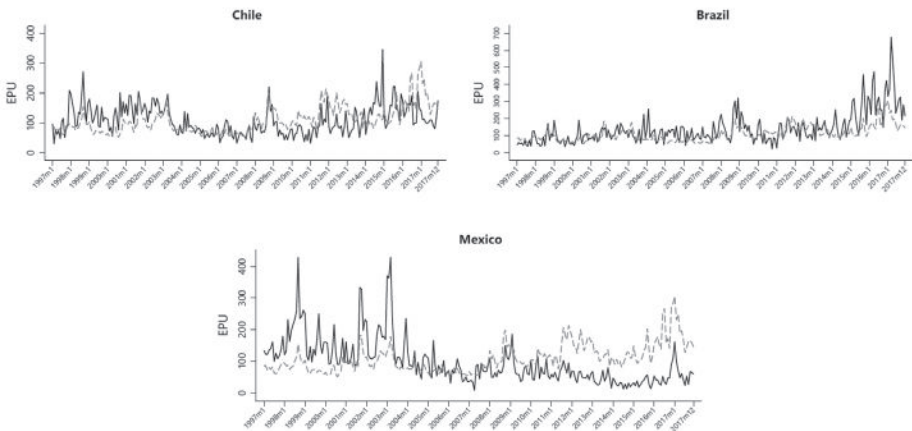


Fig 2. Economic Policy Uncertainty Indices for Latin American countries and Global Economic Policy Uncertainty Index.



Note: The gray dashed line corresponds to the Global Economic Policy Uncertainty index of (Davis 2016). The black solid line correspond to the EPU index of the respective country.

The Relevance of EPU Indices for Policymakers

The last section demonstrated how indices constructed using text-search methods are useful in quantifying what had previously only been qualitative beliefs. This is important since it provides policy makers with a way to assess how people's attitudes toward the economic environment are. In addition, these quantitative measures may

allow policymakers to quantify the impact of EPU on people and the economy in general.

The latter is better illustrated with an example. As I argued in the introduction, economic uncertainty may be one of the causes behind the Chilean economic slowdown in the past four years. In Cerda, Silva, and Valente (2017), we estimate that Chilean economic uncertainty is, on

average, 70 percent internal, i.e. due to factors other than consumers' confidence or external uncertainty (as measured by the VIX index).¹⁴ We also estimate that a one standard deviation economic uncertainty shock entails a drop in GDP of around 2.5 to 5 percentage points. If we take the lower-bound impact (2.5 percent), we conclude that an internal uncertainty shock implies a GDP drop of 1.75 percent. This is about 70 percent of the observed GDP growth drop between 2013 and 2016, which fell from 4 percent in 2013 to 1.6 percent in 2016. Surely, this exercise can be refined and improved. However, it is interesting to note that this is almost the same order of magnitude that the IMF attributes to internal causes for the Chilean economic slowdown.

The last exercise illustrates one of the potentials of these indices, as it is not the only kind of exercise that we can do. For instance, it is possible to test if EPU impacts the economy in different ways during booms and busts.¹⁵ In addition, we can also explore the role that EPU has at the micro-level, such as that of firms or consumers.¹⁶ This has been done during recent years, but much remains to be done. That is our challenge.

Conclusion

I have shown how to construct EPU indices using text-search methods, as in Baker et al. (2016).¹⁷ Using available indices for LATAM countries, I show that they represent rather well the economic uncertainty expected behavior, i.e. they show spikes whenever important economic policy-related issues arise. Descriptive evidence also shows that global economic policy uncertainty influences LATAM countries but to different extents. Small open economies, like Chile, show spikes mainly during international events; while big economies, like Brazil, show spikes due to internal reasons.

The years to come are going to be plagued by erratic behavior in EPU with its corresponding effect on important macroeconomic variables, as extensive economic literature suggests. Therefore, measures of EPU will be a valuable asset in the next years to assess how EPU may affect the economy. Researchers around the world should try their best to collect data from newspapers and to apply text-search methods that until now have shown to be useful.¹⁸ With my colleagues in Chile, we made a little step towards this goal. I strongly encourage others – especially Latin American researchers – to do so.

NOTES

¹ I would like to thank José Tomás Valente, Sergio Urzúa, and Scott Baker for useful comments and suggestions.

² Latin American Center for Economic and Social Policies (CLAPES UC), Pontificia Universidad Católica de Chile. Email: alsilvau@uc.cl.

³ Nicholas Bloom, “Fluctuations in Uncertainty,” *Journal of Economic Perspectives* 28, no. 2 (2014): 153-176; Scott R. Baker et al., “Measuring Economic Policy Uncertainty,” *The Quarterly Journal of Economics* 131, no. 4 (2016): 1593-1636.

⁴ Baker et al., “Measuring Economic Policy Uncertainty.”

⁵ International Monetary Fund, “World Economic Outlook: Adjusting to Lower Commodity Prices,” 2015, <http://www.imf.org/external/pubs/ft/weo/2015/02/>.

⁶ Rodrigo Cerda et al., “Economic Policy Uncertainty Indices for Chile,” 2016, http://www.policyuncertainty.com/media/EPU_Chile.pdf.

⁷ In this section, I draw heavily from my work with Rodrigo Cerda and José Tomás Valente on this topic, as in Cerda et al., “Economic Policy Uncertainty Indices for Chile” and Cerda et al., “Impact of Economic Uncertainty in a Small Open Economy: The Case of Chile,” *Applied Economics* (2017): 1-15. I would like to thank them for kindly allowing me to use it at my discretion. In addition, I extend that work by incorporating more data that has become available since we published the indices for the first time at www.policyuncertainty.com.

⁸ The same procedure is applied to construct the Mexican and Brazilian EPU indices (Baker et al., “Measuring Economic Policy Uncertainty”).

⁹ This database was provided by *El Mercurio Documentation Center*, which stores all the articles both in paper and digital archives.

¹⁰ Data was extracted from www.policyuncertainty.com and was constructed using the methods presented in Baker et al., “Measuring Economic Policy Uncertainty.”

¹¹ For a detailed account of the EPU episodes for

Mexico, see “Economic Policy Uncertainty Index for Mexico, January 1996 to September 2017,” http://policyuncertainty.com/media/Mexico_EPU_Index.pdf.

¹² Joe Leahy, “What is the Petrobras Scandal that is Engulfing Brazil?” *Financial Times*, 31 March 2016, <https://www.ft.com/content/6e8boe28-f728-11e5-803c-d27c7117d132>.

¹³ Steven J. Davis, “An Index of Global Economic Policy Uncertainty,” National Bureau of Economic Research, Working Paper no. 22740, 2016.

¹⁴ Note that this is economic uncertainty and not economic policy uncertainty. The only difference between the indices is that the first do not use the terms C and P that I explained in Section 2.

¹⁵ Giovanni Caggiano et al., “Economic Policy

Uncertainty Spillovers in Booms and Busts,” Melbourne Institute Working Paper Series, no. 13/17, 2017.

¹⁶ Baker et al., “Measuring Economic Policy Uncertainty”; Hyunseob Kim and Howard Kung, “The Asset Redeployability Channel: How Uncertainty Affects Corporate Investment,” *The Review of Financial Studies* 30, no. 1 (2017): 245-280.

¹⁷ Baker et al., “Measuring Economic Policy Uncertainty.”

¹⁸ This is by no means the only way to measure uncertainty. Nonetheless, all countries seem to have newspapers. Not all of them, however, have the extensive data requirements that other methods need. For other methods, see Kyle Jurado et al., “Measuring Uncertainty,” *American Economic Review* 105, no. 3 (2015): 1177-1216, and the literature review therein.

Alvaro Silva is a researcher at CLAPES-UC, an economic research center based at Pontificia Universidad Catolica de Chile. His research has focused on macroeconomics with an emphasis on understanding business cycles. His recent research has been mainly on the measurement and impact of economic uncertainty, the consequences of price fixing policies for resource allocation, and the role of international trade on business cycles. He received his M.Sc in Applied Economics from Universidad de Concepción.

“The Future of Latin America Depends on its Ability to Discover How to Evolve its Comparative Advantage”

An Interview with Ricardo Hausmann, Director of the Center for International Development at Harvard University

Professor Hausmann sat down for a conversation with LAPJ lead editors, Manuel González and Patricia Goldstein, on 6 March 2018. What follows is a lightly edited transcript.

LAPJ Staff: Professor Hausmann, thanks for accepting our invitation. We would like to start with a general economic assessment. What has happened in Latin America in the last two decades?

Ricardo Hausmann: The period 2004-2014, 2012 depending on the country, was a period of relative rapid growth in Latin America, typically associated with positive terms of trade, shocks, and ample access to international finance. In general, the countries of Latin America fared relatively well during the 2008-2009 international crisis, but they got into trouble when the terms of trade deteriorated afterwards. Right now, the question is how can Latin America grow in the context of relatively stable terms of trade? And that implies they have to be able to expand their exports, typically not necessarily by expanding quantities in their existing industries but by being able to expand into newer industries. Evolving the comparative advantage of the countries is at the core of what might signal future success.

LAPJ: What are the most recurrent binding constraints for growth that you observe in the region?

RH: The glass is half empty and half full. First of all, countries are very different from each other. In some of them, you see interesting things; in others, you see enormous policy efforts that were targeting constraints that were not really important.

For example, countries like Chile (2004) and Colombia (2012) invested an enormous effort in signing Free Trade Agreements with the United States (the US), but we did not see any impact of that in terms of greater export dynamism to the US or much US investment. In a country like Mexico, on the other hand, when they signed the Free Trade Agreement with the US in 1993 (i.e. NAFTA), exports doubled in the following six years, they doubled again in the subsequent ten years, so you saw an enormous explosion of trade associated with the agreement. Thus you might have thought that they removed the constraint that was really important. But Chile and Colombia copying other people's reforms did not imply copying the outcomes of the reforms, because those reforms were not targeting things that were as important in those countries.

Take a country like Argentina: it is obvious to me that in a country where 40 percent of the population live in the capital city, you don't expect the capital city to be producing agriculture or much manufacturing, you would expect that capital city to be producing internationally traded services, and especially if these services can be provided in a way in which geography matters less (last time I checked, Argentina was not located at the center of the globe.). So the ability of countries to move into new industries will depend on their ability to adapt their productive ecosystems to support those industries.

We just finished a study on Panama, which is a country that has had remarkable growth for the last 25 years, and it has been led by high-skill export services. They did a lot of very unconventional policies to attract those industries to Panama. Ex post, we found enormous synergies between different efforts. Obviously, you have the Canal, but you did not have ports before the Americans left in 1999, so now, with ports you can have logistics. They already had a financial center, but then they developed an airport hub and were lucky enough to get a successful regional carrier. Then they passed a law to attract the regional headquarters of multilateral corporations. And then they had to adapt their immigration policies, to let people in, so that multinational corporations could move in, and they created a couple of special economic zones, which also forced them to relax immigration restrictions, and this relaxation allowed them to attract enough foreign talent to complement whatever skill shortages were at home. That policy reform is radically different from others that have been inspired by copycatting OECD countries.

The future of Latin America depends on its ability to discover how to evolve its comparative advantage, and that may not involve just copying “best practices.”

LAPJ: At Harvard you teach a class on economic development named “Why Are So Many Countries Poor, Volatile, and Unequal?” Have you found already the answer to that question?

RH: The short answer is that countries are poor because technology did not diffuse into them. The reason why they have less technology is because technology is really defined by three things: tools, codes, and know-how. Tools and codes are relatively easy to move. Know-how is hard to move, because know-how exists only in brains,

and moves with enormous difficulty from brain to brain throughout a long process of imitation and repetition. Know-how is not objective knowledge that can be written down; it is an ability of the brain to recognize patterns, to move the body and to react to situations. It takes forever to train a violinist, it takes us at the Kennedy School forever to graduate a PhD, and the reason is that we don’t know how to teach it, because it is just imitation and repetition until people get it. Modern technology requires not only individuals with know-how, but teams with different bits of complementary know-how that have to be brought together to implement the technology, and that is what slows the process down.

Why are countries poor? Because technology did not diffuse into the country, because collective know-how did not diffuse into the country. Why are they unequal? Typically, because the technology that has diffused into one part of the country is hard to move to the rest of the country, so there are enormous technological differences within the country. Why are they volatile? They are volatile because their economies are highly undiversified, and there are many missing markets, so any shock to one part of the system is hard to absorb, as there is not enough capacity to move resources to other parts of the economy.

LAPJ: More recently, you have been working on a new research subject called “The Sense of Us.” What can you tell us about it?

RH: There is a tension between how anthropologists see humans and how economists see humans. Economists see humans as these very selfish individuals that have very personal preferences and do whatever they like the most, given the constraints they have. Anthropologists look at humans and think that we are the most cooperative species on

Earth. An economist would say that the reason we cooperate is because we have incentive-compatible contracts, such as stock options, but actually we evolved for hundreds of thousands of years before people invented stock options. How did we do that? An anthropologist would say that we evolved moral sentiments. We don't procreate because we are taught in school that it is important to procreate to maintain the species. We procreate because evolution developed a sexual sentiment, and we cooperate because evolution developed a moral sentiment. Thus, we know that we have to cooperate. With whom? With "us."

The problem of sustaining cooperation is the "free rider problem." The solution to the "free rider problem" is that when you feel that you are supposed to cooperate, and you did not, you feel guilty. When other people find out, you feel ashamed. When you find out that other people did not cooperate or cheated, you feel outraged. In order to punish the other people in a way that is safe for you, you gossip and you derive pleasure from gossiping, and you derive pain if you are the object of gossiping. All of these moral sentiments support cooperation. Different cultures feel guilt and shame for different reasons, but the ability to feel guilt and shame is in some neurotransmitters that are coded for in our genes. We are a highly cooperative species, we are "parochially" cooperative, we cooperate with people we call "us" and not with people we call "them." We evolved that in order to defend "us" from "them," so we cooperate in fighting "them."

All of this is important because in order to maintain the coherence of an organization, say the Center for International Development, or the Harvard Kennedy School, or Harvard University, or the State of Massachusetts, or the US, you must have some sense that you must cooperate with

"us." Governments act on behalf of "us." They act legitimately if they can articulate why what they are doing is on behalf of "us."

The question is what do we mean by "us," and that is a historical construct, because in our evolutionary past we used to interact with very small groups, with people who spoke, believed, and looked like "us," but economies of scale – maybe associated with technology – have made us cooperate with ever larger groups. As groups become larger, they become inherently more heterogeneous. Latin America in this respect is a very unique place, because you have 18 countries speaking the same language, but what is typical in the world is to have one country speaking many languages. For example, in South Africa there are 11 official languages, in India the census recognizes over 1,600 languages, and 700 languages in Indonesia. Societies are racially and religiously different, and on top of that heterogeneity you have to construct a "sense of us," and most countries stumble in the process of defining a "sense of us." For example, in Kenya politics tend to be tribal based, so you vote your tribe; in India, as the saying goes, you don't cast your vote, you vote your caste. In Pakistan, they don't have a common language, but they have tried to create a "sense of us" based on a common religion. In Albania, they don't have a common religion, so they have tried to create a "sense of us" based on a common language. Every country has a very different way of defining "us," and the definition of "us" also involves the definition of "not us."

In the US, there is a debate between two "senses of us": one that is in some sense narrower, which says that "us" are the descendants of the European settlers, and another "sense of us" that is more encompassing, which includes African Americans, Latinos, Muslims, etc. The problem is

that if you have a broader “sense of us,” in order to work it has to be deep enough to make shared decisions on what kind of public goods you want – What should be taught in schools? Should there be prayer (or no prayer) in schools? How much redistribution should you have? If the poor don’t look like the majority, are they really part of “us” and should we tax ourselves to help them? – These tensions are important determinants of the nature of the problem states face, and consequently are determinants of the challenge to generate a capable state.

LAPJ: Currently, we count at least seven regional integration processes in Latin America (i.e. ALBA, CAN, CARICOM, MERCOSUR, SICA, PACIFIC ALLIANCE and UNASUR), which make the continent look quite fragmented. Are countries failing in their will to cooperate?

RH: When Latin America became independent, the country I am from [Venezuela] was a political unit that also included Colombia, Ecuador, and Panama. For some reason, history has fragmented the space and created borders. For instance, Guatemala became five countries. It happened very quickly in the 19th century, but it has been sustained over this period.

In the 1860s there were very strong nationalist movements in Europe, such as German and Italian nationalism, which created not smaller states – like Catalonia – but larger states of all German-speaking people or all Italian-speaking people. Interestingly enough, in those places there were many sovereign states (different jurisdictions), but there was the aspiration of joining all these small states into a bigger one. One of the common public goods that they focused on was a common national language, because there were really many German and Italian languages, but not

a common one. So the creation of a national language like *Hochdeutsch*, or the creation of modern Italian, based mostly on Tuscan, was part of the national aspiration of creating a broader political unit. The question is why were the Europeans focused on a broader political union, and we were more focused on “I would rather be a big fish in a small pond?” My answer to that question is economies of scale.

The Industrial Revolution created enormous incentives to have larger markets, so the Germans in 1815 started with a customs union, the *Zollverein*. The *Zollverein* wanted to standardize things to have access to a larger market, and there were industries such as books, culture, newspapers, etc., that needed to standardize language. Union meant that all of these products could have bigger markets. So there was a strong political force behind lowering the barriers caused by different borders and jurisdictions. For some reason, those incentives in Latin America were subdued because we really had very few cash crops and mineral products to sell, and we were not selling them to each other but to distant places. So in some sense, our kind of economic development did not create enough incentives for us to sell to each other and consequently to try to eliminate the transactions costs associated with changing jurisdictions. To this day, the trade of Latin America with Latin America is astonishingly small.

LAPJ: In 2018 there will be elections in Mexico, Brazil, Colombia, Venezuela, Paraguay, and Costa Rica, countries that count for almost 80 percent of Latin America’s population. How do you see the current political landscape in the region?

RH: Well, when most people will read this interview, the answers to these questions

will have been resolved by history. So, I am not going to guess what is going to happen, but I will rather talk about the issues that are going to be decided.

I think that Latin America moved left in the context of high commodity prices, or at least the left was very successful and long-lived during the period of high commodity prices. Then the left got into trouble when commodity prices came down. So, for example, Lula was fairly successful in his two presidential terms, Dilma was somewhat successful at the beginning of her first presidency, but things really deteriorated when the terms of trade became less supportive, and when they had to pay for other economic sins that they had committed.

In Argentina the economic and political dynamics were quite dramatic. The right lost power in the context of the 2001-2002 economic crisis. This was followed by a spectacular recovery aided by high soybean prices and volumes. The left seemed to be super-entrenched and were able to change many things. Then, the external environment became a little harder and they mismanaged it big time. As a consequence, they lost political power.

On the other hand, Mexico has been ruled mainly by the center right, and now there is a bit of disappointment there. They have had sort of mediocre but not catastrophic performance, in spite of the fact that they had to face very significant shocks. As opposed to the rest of Latin America, they are on the export side of China, not on the import side of China. Chinese competitiveness – and the competitiveness of East Asian countries more broadly – has represented a big challenge for Mexican exports to the United States.

And then there is Venezuela. I cannot

explain to you the level of human suffering that the management by the radical left has caused.

So, the question would be “will the move be to the left or to the right?”, and my guess is that in Colombia the move is probably going to be to the right; in the case of Brazil it is more uncertain; in the case of Mexico, there is a risk of a “populist backlash,” which is what people fear the most at this time. Yet, in Mexico the question is not so much about how many votes will the left-wing candidate Andres Manuel López Obrador get, but instead on how fragmented will the votes of the center right be. If the left gets up to 40 percent, what is going to happen to the remainder 60 percent?

In the end, the question is going to be, “Did Latin America speak with a clear voice as to how do they see their future?” Chile has spoken, for instance. Argentina seems to have spoken last October and they want more of the same. In Peru, even though they are going through a period of very significant political weakness, the opposition is dominated by the center right. So, I think that Latin America will broadly stay in the center right of the political spectrum, but it will very much depend on what happens in Mexico and Brazil.

LAPJ: Are Latin American countries doing what they have to do vis-à-vis the current political and economic crisis in Venezuela? What role should they play?

RH: I must say that Latin American countries have not played a constructive role for a very long time while the crisis was being created. The crisis was hidden behind high oil prices and especially behind a lot of international borrowing. When oil prices came down, international borrowing became impossible, and the situation

in Venezuela deteriorated dramatically because the government had used the bonanza to destroy the opposition-led domestic productive apparatus. For a long period after the beginning of the collapse, the international community remained quite ineffective.

However, through the leadership of the Secretary General of the Organization of American States Luis Almagro, and increasingly through the leadership of other important political players, there has been a growing coalition of countries that want change.

Initially this was attempted through the Organization of American States (OAS). Yet, it is clear that in the OAS the English-speaking Caribbean countries used their overrepresentation in the organization to support Maduro in a way that history will remember and that they will remember with great shame. Then the countries of Latin America decided to create an alternative group, known as the Lima Group, and they have been quite forceful, as forceful as Latin America has ever been, in terms of expressing the need for change in Venezuela. Whether this will be enough or not, I am not sure, but what I am definitely sure is that when the history of this period is written, Venezuela will be the largest humanitarian catastrophe that Latin America has probably ever seen, short of “The War of the Triple Alliance” that started in 1864.

LAPJ: What have been the main obstacles preventing the Opposition to succeed?

RH: Venezuela is governed by a totalitarian regime, so the Opposition has to be organized in a context in which if you organize you go to jail, you are exiled, or you are blackmailed. Thus it is a situation where your behavior does imply enormous

personal or organizational threats. I like to give the example of *Voluntad Popular*, a party which is led by Kennedy School graduate Leopoldo López (MPP’96). It has a Managing Board with 12 members, of which only three are free in Venezuela, others are either in jail, as Leopoldo is, or in exile. So, this is an enormously difficult and aggressive environment in which to operate, and there is not much you can ask from people who fight with democratic tools against a totalitarian dictatorship.

LAPJ: Some people think that the solution to the crisis in Venezuela has to come from the inside, while others are already calling for a foreign intervention. What needs to be done to start solving the problem?

RH: The problem is that elections have shown not to determine power, because the Opposition won the National Assembly with a two-thirds majority, but the National Assembly is prevented from making any decisions because the Armed Forces are not willing to enforce any decision made by that body. So the problem is the loyalty of the Armed Forces to the Constitution, and that is not going to be solved through elections. Democracy is when the people choose the President. Democracy is not when the President chooses the Opposition candidate, which is what has just happened. I think that there has to be a break within the Armed Forces, but I have argued that an international threat would be amazingly useful because I do not believe that the Armed Forces are led by people who are willing to die for their country. I think they are led by people who are willing to murder for a salary, but only if the opponent is an unarmed civilian. And since that is not enough for them to live a posh life, they complement their income with smuggling, narco-trafficking, grand larceny, and corruption. Under that system we are talking about a rogue state, a criminal state. I am sure that

if there was an international military threat that regime will collapse.

LAPJ: At the Center for International Development (CID) you are working on a project with participation from other Venezuelan and international experts, which aims to plan what ought to be done when democracy returns to the country. Can you tell us a little bit about it?

RH: The initiative is called “The Morning After.” We applied our tools and techniques to diagnose the situation. We asked ourselves, “What is the binding constraint to growth or to output in Venezuela?”, and we came to the conclusion that beyond property rights, which have been decimated, it was access to imported raw materials, intermediate imports, and spare parts.

When you have a shortage of these kinds of inputs, the rate of return on all other complementary inputs collapses: human capital, physical capital, and everything else have very low returns because without imported inputs, there is not much that can be produced. So, in our mind, in the transition we have to assure that there is a big increase in intermediate inputs and raw materials. We must ensure that these are efficiently allocated to support the expansion of production, because the rest of the installed capacity is there, human capital is sort of there, although it is dwindling right now because of massive outmigration, given that the returns to human skills has collapsed.

We therefore need to recreate a market mechanism, which involves unifying the exchange rates, freeing prices, bringing monetary emission under control – at last count the monetary emission of the Central Bank of the last 12 months has grown 2600 percent and inflation is in the order of 6000 percent – so in that context you need to focus not only on how can

you reduce the fiscal deficit in the medium term through economic growth, but how will you be able to fund the fiscal deficit in the short term with real resources and not with monetary emission.

That means that we need to restructure the foreign debt and get substantial international financial assistance. In the process of doing that, we will create space for intermediate inputs and raw materials to grow, output to grow, and out of the increase in output, we will get tax revenues that will help us lower the fiscal deficit.

LAPJ: The CID will have its 20th year anniversary next year. What do you think are its biggest achievements to date? What are you envisioning for the future?

RH: I think that we should be very proud of our contributions. Growth Diagnostics is a tool that is being used everywhere, at the World Bank, the Inter-American Development Bank, and bilateral agencies such as the UK’s Department for International Development and the Millennium Challenge Corporation, in countries, etc. The Problem-Driven Iterative Adaptation approach developed by Matt Andrews, Lant Pritchett, and Michael Woolcock is also a very powerful way of thinking of implementation. The way the Evidence for Policy Design group has been transforming randomized control trials from being a mechanism to audit and evaluate the performance of others into really a tool to help design the programs that practitioners are trying to get done in a process that they call Smart Policy Design. Finally, the efforts we have done in trying to understand economic complexity are allowing countries to think of what are the paths to diversification and prosperity in ways that were not visible before and that are also of increasing use. Going forward our goal has to be to create new

frameworks, new conceptual apparatuses, new tools, that can help people find paths to prosperity.

LAPJ: One last message for the Latin American students completing their studies at Harvard.

RH: The first thing is that there is nothing more challenging and more exciting than to lead your country to prosperity. So, we are trying to form leaders and empower leaders with the tools to succeed, so the first thing is to try to do that.

The second thing is that there is an enormous value in the network, in the fact that

you came here, that you were all in class and interacting together. You have become like a brethren of co-travelers and there is a lot of value in using your peers as a sounding board, as a resource, as a way to access talent and achieve common goals. This network can make it easier for each one of you to achieve great things for the world.

I find that in the countries where we have not just one student but a whole tradition of students, when I go and visit those countries, I see the transformation they can create, and the fact that it is not just one person alone in one part of the space but a whole community of people that are trying to transform that space.



Ricardo Hausmann

Ricardo Hausmann is the Director of Harvard's Center for International Development and Professor of the Practice of Economic Development at the Kennedy School of Government. Previously, he served as the first Chief Economist of the Inter-American Development Bank (1994-2000), where he created the Research Department. He has served as Minister of Planning of Venezuela (1992-1993) and as a member of the Board of the Central Bank of Venezuela. He also served as Chair of the IMF-World Bank Development Committee (1992-1993). He was Professor of Economics at the Instituto de Estudios Superiores de Administración (IESA) (1985-1991) in Caracas, where he founded the Center for Public Policy. He holds a PhD in economics from Cornell University.

Is Latin America Ready for the Technological Tsunami?

By Isabel Guerrero and Sandra Naranjo

The pace of technological innovation is accelerating exponentially, and it seems that we are rapidly reaching the world of the Jetsons. Cars that do not need drivers, robots that obey our requests and turn on the music we want to listen to or order the food we want to eat. Google has just released hearing aids that allow for simultaneous translation. Uber and the Brazilian firm, Embraer, signed an agreement for the development of electric-powered cars. In the warehouses of Alibaba, the largest Chinese retail company in the world, most of the work is done by robots, who have replaced 70% of the staff.¹ Sophia became the first humanoid robot in the world with recognized citizenship in Saudi Arabia. It is a robot capable of imitating more than 60 gestures and human expressions, it was designed to express emotions and empathy, and to interact and hold a conversation.²

The technological revolution will have an impact 3,000 times greater than the industrial revolution.³ This opens up endless possibilities, but it is also an earthquake that will shake up the labor market. This earthquake, which we are already living, will bring sequels, say a tsunami, which will change the nature of work as we know it. We know this from the experience of the industrial revolution. If the industrial revolution was an earthquake of five-degree magnitude, this technological revolution that we are experiencing is at least a 10. In the period of industrialization, great benefits were generated for society through improvements in the quality of life and productivity, greater efficiency, and comfort. However, there were large costs generated by these changes, including lower income in the

agricultural sector, unemployment, and an increase in inequality between the countryside and the city.

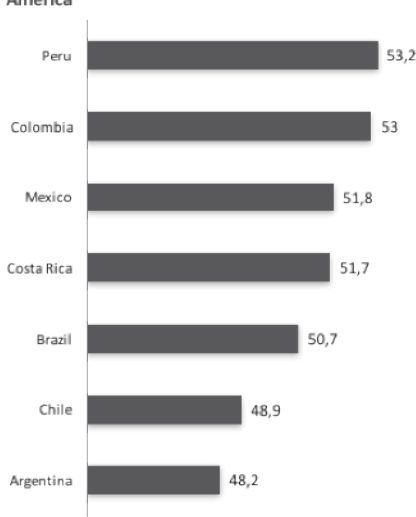
The second machine age, as defined by MIT, is disrupting the labor market through its impact on the types of jobs, wages, and skills required.⁴ This is the tsunami that comes after the earthquake. On the one hand, there are workers who can be replaced by robots; this will happen especially in those tasks that are repetitive and can be automated. In Latin America, half the workers in the region could be automated, with greater proportions in manufacturing, tourism, and agriculture (see Figure 1).⁵ On the other hand, there are the new jobs that will be created, such as those that did not exist until very recently: social network managers, engineers for the development of driverless cars, Uber drivers, analysts of big data, drone operators, and virtual reality film makers, among others.

Those jobs that require creativity, social, and non-cognitive skills will be difficult to replace. Similarly, there will be greater demand for everything that is inherently human, which demands personal interaction and social intelligence such as the care of sick people, negotiation processes, or persuasion. The so-called “soft skills” will be highly desirable in the training of new professionals.

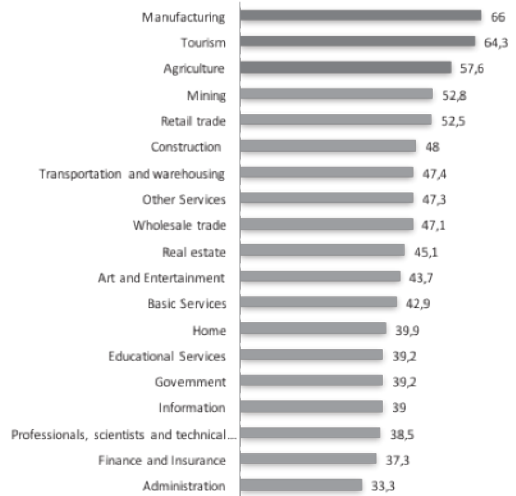
New technologies also generate changes in the characteristics of new jobs. There is greater flexibility in terms of time and the type of employment. AirBnB, for example, has thousands of self-employed workers. Geographical distances will be less and

Figure 1: Percentage of total full time equivalent (FTE), 2016

FTEs technically feasible for automation in Latin America



FTEs technically feasible for automation, by sector



Source: Cadena, A. et al (2017). Where will Latin America Growth Come From? Discussion paper. McKinsey Global Institute.

less important, with the use of virtual platforms to facilitate the connection between collaborators or the hiring of professionals around the world through platforms such as Upwork or Fiverr. Even traditional means of payment today present alternatives that we could not have imagined possible, such as mobile money, which is already being used in 19 countries in Latin America, and that has been especially successful in El Salvador, Honduras, and Paraguay.⁶

In sum, we expect to see a polarized labor market. There will be demand for people with high specialization and knowledge. There will also be demand for manual labor with low wages. The challenge, both for the public and the private sector, are the people who are in the middle, whose routine work will be easily replaced by robots and artificial intelligence. This includes tellers, translators, lawyers, accountants, etc.

The positive effects and opportunities that this technological tsunami may

generate for the region will depend to a large extent on our ability to respond, anticipate, and prepare for a reality which is already here. Adapt or die.

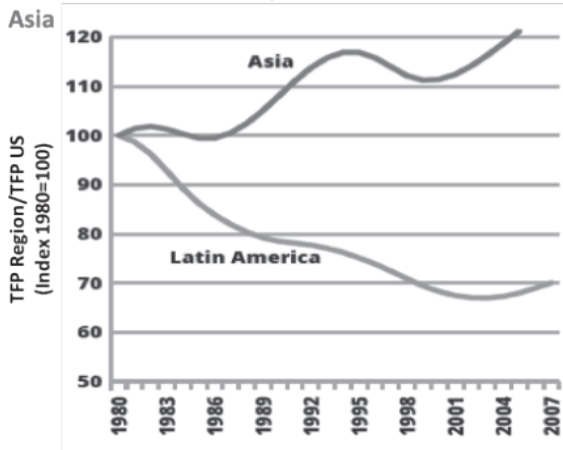
PREPARING FOR THIS TSUNAMI

What Can We Learn from Asia?

Latin America’s capacity for forecasting and long-term planning has been weak, and it diminishes its ability to generate the changes required to face this technological earthquake and prepare for the tsunami that is coming in the labor market. Perhaps one of the flaws is precisely our planning horizon. While we continue talking about the Latin American decade, Asia is thinking about how to reach the maximum potential of the “Asian century.”

The Asian Development Bank published a study on the vision of Asia to 2050, with the objective of taking actions to maintain the momentum for the next 40 years, adapting to a changing global economic

Figure 2
Total Factor Productivity in Latin America and East Asia



Source: Bitar, Sergio (2016). Why and How Latin America Should Think About the Future The Dialogue, Global Trends Report

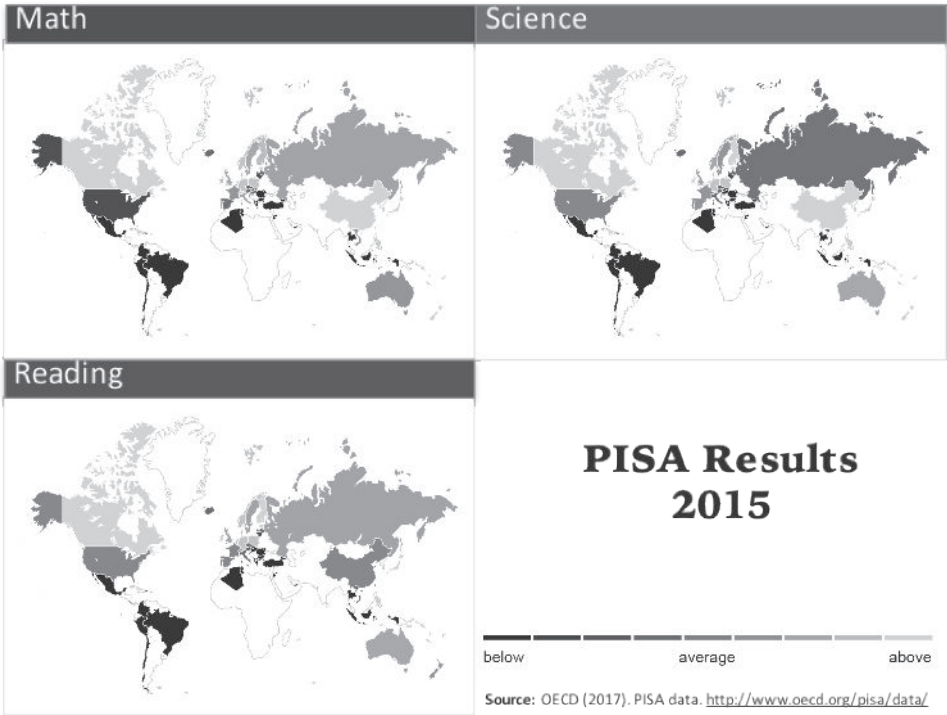
environment.⁷ The pessimistic scenario of the publication, which seeks to stir regional leaders into action, is for Asia to follow the Latin American path of the last 30 years, the middle-income trap. They see Latin America as not very dynamic, with low levels of investment, modest increases in productivity, shyness to carry out long-term projects, excessive inequality, and a lack of pragmatism in its debates about the role of the state and the market, where ideology predominates.⁸ They point out that the intangible assets for the future of the Asian region include: the ability of its leaders to focus on the long term, the commitment to modernize governments and their institutions, the ability of their citizens to think in a pragmatic and non-ideological way, and the strength of regional integration. A clear illustration of the different time horizon is that the long-term document of Latin America was published in 2016 for the next 15 years; Asia did it for a horizon of 40 years, and it includes inter-generational actions.⁹ This contrast of vision, and of ambition, has translated into great differences in productivity and growth.

The main challenge of our region continues to be increasing productivity levels, which directly affects growth rates. Compared with other developing regions, Latin America had the worst economic performance in the last 15 years, measured by the GDP growth rate. It reached barely 2.9 percent, while the average of developing regions was 5.6 percent, in China 9.4 percent, and in Southeast Asia 6.7 percent. The decomposition of growth shows us that technology has played a key role. While 86 percent of Asia's productivity comes from technological changes, in Latin America this contribution is only 22 percent.¹⁰

In fact, between 2000 and 2015 in developing economies, productivity grew at 3.9 percent per year and GDP per capita increased by 4.2 percent. During the same period in Latin America, growth was only 0.6 percent and 1.6 percent respectively.¹¹ Figure 2 shows how the productivity gap between Latin America and Asia continues to grow. There is no time to lose.

The long-term vision of Asia would seem to be even more ambitious for the coming

Figure 3



Source: OECD (2017). PISA data. <http://www.oecd.org/pisa/data/>

years. They aspire to go from a model of “equalizing” developed countries to one where they become the global benchmark, with breakthrough actions in science and technology.¹² What is the long-term vision of Latin America?

Education is Latin America’s Best Bet

Education is the main instrument to face the challenges of the region, including increasing productivity. Human talent and the knowledge economy open up an infinite number of possibilities for the region that can be exploited by generating the right conditions. We are just facing the first battles, well behind other developing regions.

Our young people are at a disadvantage. Although the last 15 years have seen an increase in enrollment, 31 percent of young people have not completed high school

and are not studying.¹³ Even attending, and in the best of cases completing secondary studies, is insufficient due to the low quality of education. If we compare the results of the PISA tests, the countries of Latin America are in the bottom third, while Asian countries occupy the top places (Figure 3).¹⁴

It is striking, for example, that South Korea has the same number of students enrolled in universities in the United States as Latin America, with 10 times less population than our region.¹⁵ The curricula in Asia are constantly looking to educate their citizens to face the challenges of modern society, with an emphasis on science and technology. From elementary school, mathematics and science are the main focus of schools in South Korea, Japan, Hong Kong, and Singapore. These countries are consistently placed among the highest ranks in math and science tests and are early precursors to the famous

STEM – Science, Technology, Engineering and Mathematics.¹⁶

STEM was considered for a long time as the great objective to prepare for the labor market of the future. But the speed of technological change and the progress in the learning capacity of artificial intelligence, such as Google Brain, suggest that the type of work that will be relevant in the future is different from what was expected when STEM was created.

A recent study by Harvard University shows that workers with both social and technical competences, not only technical ones, are in the highest demand in the labor market, and their income per hour has increased the most.¹⁷ In the United States between 1980 and 2012, the proportion of jobs that require high social interaction have increased by 12 percentage points, while those jobs that are intensive in mathematics, but with less social interaction – including several of the STEM occupations – have fallen by 3 percentage points over the same period. The importance of social competencies is already evident.

New, unprecedented categories of work will be necessary around essentially human qualities, reinforcing the trend of recent years. These include coaches for artificial intelligence empathy, translators/interpreters between the technological world and human users, and ombudsmen to uphold the norms of human values and morals.

Art and solidarity are also going to be central, however, because they are not replaceable by artificial intelligence. That is where Latin America has an opportunity to leapfrog ahead of Asia, into the future.

We may start by using the imagination of Borges, Cortázar, and García Márquez, to imagine a future that is currently

unpredictable, but that we know is closer than we thought. Latin America not only has the advantage of a creative tradition, but it also has great strength in terms of social capital and the capacity for warm empathy that will be needed more than ever in the world of the Jetsons.

We think that this is an issue of vital importance for the future of Latin America and that we are working against the clock. The technological earthquake is already here, and we have little time to prepare for the tsunami that is about to hit the labor market. We think that this is a great opportunity for the technological transformation to be an ally for the productive takeoff of Latin America. We do not have the solutions. Those require imagination and debate. But with this article we want to invite you to a conversation on this subject, hoping that the young people contribute in an important way.¹⁸ The future is now!

NOTES

¹ Jasper Pickering, “Take a Look Inside Alibaba’s Smart Warehouse Where Robots do 70% of the Work,” *Business Insider*, 19 September 2017, <http://uk.businessinsider.com/inside-alibaba-smart-warehouse-robots-70-per-cent-work-technology-logistics-2017-9>.

² “Robot Sophia Speaks at Saudi Arabia’s Future Investment Initiative” (video), *Arab News*, 25 October 2017, <https://www.youtube.com/watch?v=dMrXo8PxUNY>.

³ According to the McKinsey Global Institute in “Artificial Intelligence,” *The Economist*, 25 June 2016, <https://learnmore.economist.com/story/57ad9e19c55e9fia609c6bb4.pdf>.

⁴ Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (New York: W.W. Norton & Company, 2014).

⁵ Andrés Cadena et al., “Where Will Latin America’s Growth Come From?,” McKinsey Global Institute Discussion Paper, April 2017.

⁶ Gabriela Barrera, “Existen 15 millones de cuentas de dinero móvil en América Latina,” 29 June 2015, Cobis Blog, <http://blog.cobiscorp.com/existen-15-millones-de-cuentas-de-dinero-movil-en-america-latina>.

⁷ Asian Development Bank, “Asia 2050: Realizing the Asian Century,” August 2011, <https://www.adb.org/publications/asia-2050-realizing-asian-century>.

⁸ Sergio Bitar, “Why and How Latin America Should Think About the Future,” *The Dialogue Global Trends Report*, September 2016, <http://www.thedialogue.org/wp-content/uploads/2016/08/IAD10150-2016-Global-Trends-Report-08.29.16-FINAL-Sept.pdf>.

⁹ Jason Marczak et al., “Latin America and the Caribbean 2030: Future Scenarios,” Interamerican Development Bank and the Atlantic Council, December 2016, <http://publications.atlanticcouncil.org/lac2030/wp-content/uploads/2016/11/LAC2030-Report-VersionNov30-ForWeb.pdf>.

¹⁰ Cadena et al., “Where Will Latin America Growth Come From?”

¹¹ Cadena et al., “Where Will Latin America Growth Come From?”

¹² Asian Development Bank, “Asia 2050: Realizing the Asian Century.”

¹³ OECD/ECLAC/CAF, “Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship,” 29 October 2016, <https://www.oecd.org/publications/latin-american-economic-outlook-20725140.htm>.

¹⁴ Program of International Student Assessment (PISA) is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students.

¹⁵ Bitar, “Why and How Latin America Should Think About the Future.”

¹⁶ STEM is a program that was prepared by both Presidents Bush and Obama to prepare its citizens for the 21st century.

¹⁷ David Deming, “The Growing Importance of Social Skills in the Labor Market,” NBER Working Paper no. 21473, August 2015, <https://www.nber.org/papers/w21473>.

¹⁸ This article also relied on the following publications: Hasan Bakshi et al., *The Future of Skills: Employment in 2030* (London: Pearson and Nesta, 2017); “Sophia, la robot que tiene más derechos que las mujeres en

Arabia Saudita,” *BBC Mundo Tecnología*, 30 October 2017, <http://www.bbc.com/mundo/noticias-41803576>; Gustavo Beliz, “Beyond Borders: The Future of Work in Latin America,” Interamerican Development Bank, 2017; Carl Benedikt and Michael Osborne, *The Future of Employment: How Susceptible are Jobs to Computerization?* (Oxford: Oxford University Programme, 2013); Jorge Familiar, “Time is Now to Build Future for Latin America and the Caribbean,” World Bank, 11 May 2017, <http://www.worldbank.org/en/news/opinion/2017/05/11/time-is-now-to-build-future-for-latin-america-and-the-caribbean>; Arwa Mahdadi, “What jobs will still be around in 20 years? Read this to prepare for your future,” *The Guardian*, 26 June 2017, <https://www.theguardian.com/us-news/2017/jun/26/jobs-future-automation-robots-skills-creative-health>; ManpowerGroup, “A Skills Revolution: From Consumers of Work to Builders of Talent,” 2017, http://www.manpowergroup.co.uk/wp-content/uploads/2017/02/A-Skills-Revolution_Consumers-of-Work-to-Builders-of-Talent.pdf; James Manyika, “Technology, Jobs and the Future of Work,” McKinsey Global Institute Briefing Note, updated May 2017, <https://www.mckinsey.com/global-themes/employment-and-growth/technology-jobs-and-the-future-of-work>; José Salazar, “The future of work, employment and skills in Latin America and the Caribbean,” International Labor Organization, September 2016, http://www.ilo.org/caribbean/events-and-meetings/WCMS_544337/lang-en/index.htm; “The future of jobs,” *The Economist*, special report, 10 September 2011; “The onrushing wave,” *The Economist*, 18 January 2014; H. James Wilson et al., “Companies Are Reimagining Business Processes With Algorithms,” *Harvard Business Review*, 8 February 2016, <https://hbr.org/2016/02/companies-are-reimagining-business-processes-with-algorithms>.



Isabel Guerrero



Sandra Naranjo

Isabel Guerrero is an economist that has worked in development all her professional life, driven to change the world in which she lives. She started as a macro economist, designing policy reforms from the World Bank adjustment operations in Philippines, Morocco and the Former Soviet Union. Between 1997 and 2008, Isabel was sequentially a Country Director for Bolivia, Ecuador, Paraguay, Peru, Colombia, Mexico and India. In that capacity she designed the World Bank Country Strategies for each of these countries, covering a wide range of sectors, including infrastructure, social development, environment, private sector development, rural development and livelihood programs, the financial sector, macroeconomics and trade policy. Between 2008 and 2013 she was the Vice-President for the South Asia region at the World Bank. Isabel co-founded IMAGO Global Grassroots in April 2014, a non-profit that works with organizations at the Base of the Pyramid to help them scale up. She is a Council Member of the United Nations University and a Board member of the Presencing Institute at MIT.

Sandra Naranjo, an Ecuadorian national, has extensive public sector and leadership experience. From 2007 to 2017 Sandra worked in the Ecuadorian government as acting Vice President, Minister of Planning and Development, Minister of Tourism and Chief of Administration in the President's Executive Office. She also has a rich international perspective, having worked for the World Bank in Kenya and Indonesia. She specializes in implementation, public sector efficiency and public financial management. Sandra holds a Bachelor in Economics and Finance with a Minor in Mathematics from Universidad San Francisco de Quito and a Master in Public Administration and International Development from Harvard University.

The Andean Death Valley: Are Latin American Entrepreneurs Destined to Fail?

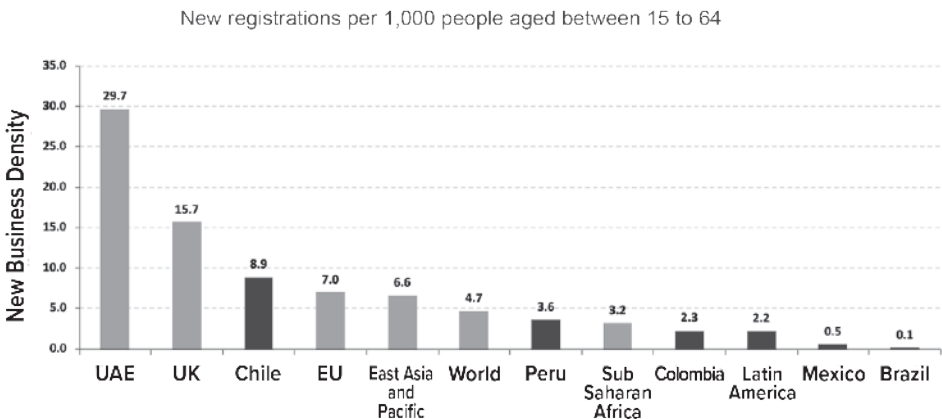
By Juliana Castro

The benefits of entrepreneurship¹ are indisputable.² Start-ups were responsible for all net new job creation in the United States from 1977 to 2005.³ The same trend holds in emerging markets. According to the World Economic Forum, small and medium-sized businesses, which are a widely accepted proxy for entrepreneurial activity, accounted for 97 percent of all formal jobs in emerging economies in 2013.⁴ The Global Entrepreneurship Development Institute argues that improving the global conditions for entrepreneurship by 10 percent could add US \$22 trillion to the global economy.⁵ The correlation between entrepreneurial activities and economic growth is difficult to dispute.

regions of the world.⁶ In Latin America and the Caribbean, there are 2.2 new companies for every 1,000 working-age people, which represents less than half of the global average, ranking the region behind Sub-Saharan Africa.

That said, it is crucial to understand what is behind the region's inability to promote entrepreneurship. The Global Entrepreneurship Monitor (GEM) measures and tracks the factors that determine the ease of starting a business in different economies. In its 2017 survey, entrepreneurs in Latin America ranked the availability to financial resources as the lowest variable tracked by the GEM.⁸ It is worth noting

Figure 1: New Business Density (2016)

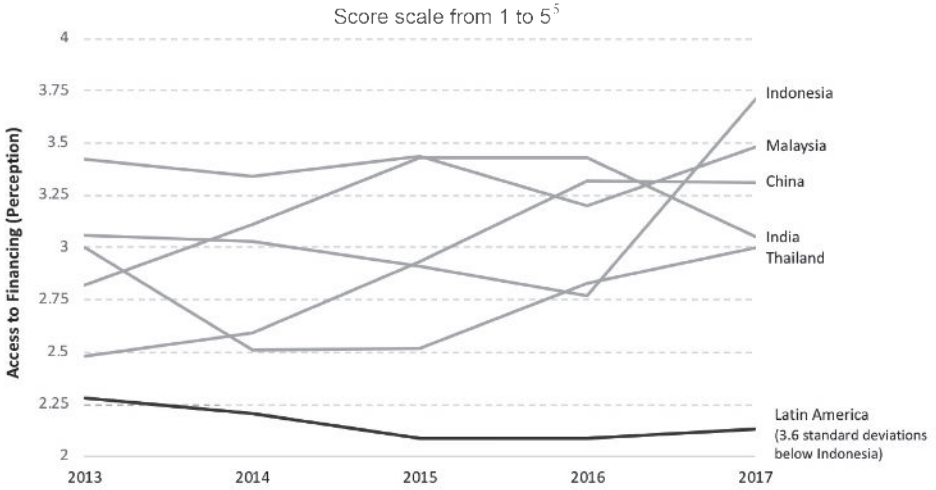


Source: The World Bank, 2016

Despite the multiple benefits of entrepreneurship, Latin America's entrepreneurial ecosystem is still lagging behind. Figure 1 shows the World Bank's new business density indicator for various countries and

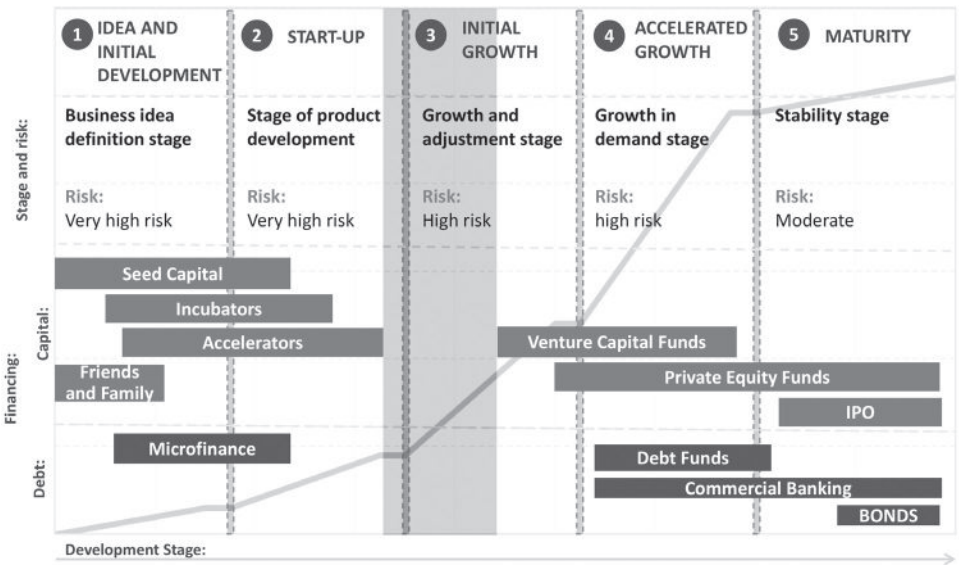
that entrepreneurship education and research and development transfer also ranked very low. Figure 2 shows entrepreneurs' perception of access to finance in various developing economies. The average

Figure 2: Perception of Access to Financing (2013-2017)



Source: GEM

Figure 3: Venture Stages and Financing Resources



Source: Analysis of the Author

for Latin America is 3.6 standard deviations below Indonesia (the highest-ranked country). This suggests that the scarcity of financial resources plays an important role in the limited success of entrepreneurial activity in the region.

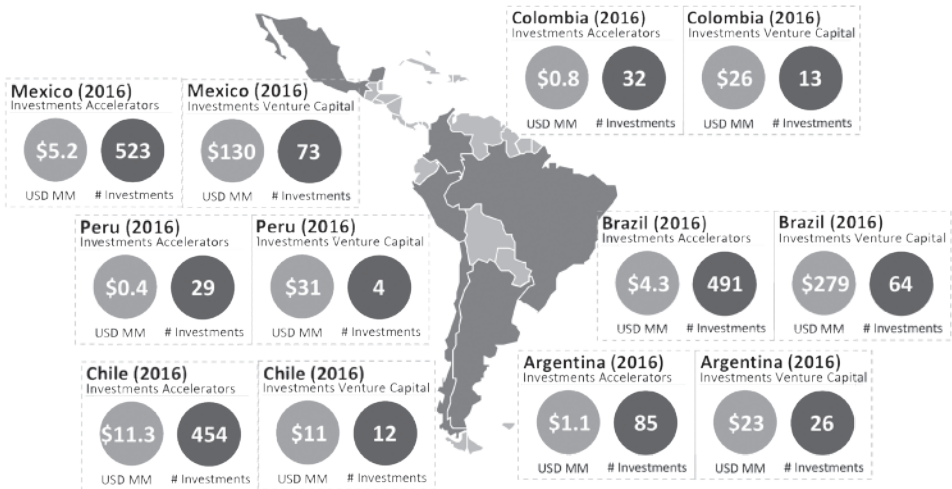
Figure 3 shows the financial resources typically available for each stage of development of a new venture. The expected capital path of a new venture is to receive capital from a venture capital firm after being accelerated in its start-up stage (Stage 2). Some researchers argue that there is an apparent disconnection in the capital available for a venture when it is transitioning from the start-up stage to initial growth (Stage 3). This is known in the venture capital industry as “Death Valley.”

Is there enough evidence to argue that there is a Death Valley between the accelerators and the venture capital industries in Latin America? If so, what is its magnitude and implications?

Figure 4 summarizes the capital deals for accelerators and venture capital funds in the region. In 2016, Latin American accelerators and incubators invested over \$24.2 million in 1,795 start-ups, representing an annual increase of 26 percent compared to the number of investments in previous years.¹⁰ The Latin American Private Equity and Venture Capital Association (LAVCA) reported 197 venture capital investments totaling \$501 million for 2016.¹¹ The average investment by accelerators in the region was approximately \$13,500, while the average investment for the venture capital industry was \$2.5 million. This means that an accelerated startup needs to grow organically – or with debt, which is not easily accessible to companies that have not shown a sustained inflow of revenues – to scale up to a size where they can receive an average capital investment of at least \$2.5 million.

Based on these numbers, the average investment of a venture capital firm is 185

Figure 4: Accelerators and Venture Capital Investments in Latin America - 2016



Source: Compilation by the author based on LAVCA, 2017 and Gust, 2016¹²

times the average investment received with an accelerator in the previous stage of development (Stage 2). This partially explains why many firms can't survive this stage of growth, suggesting the existence of a gap between the start-up stage (Stage 2) and the scale-up stage (Stage 3): namely, *the Andean Death Valley*.

The lack of fluidity of the capital available to support and promote the entrepreneurial ecosystem in Latin America is condemning entrepreneurs to failure. The high-risk nature of the investments is misaligned with the capital requirements and expected returns for private funds. This market failure is jeopardizing the success of a cohesive and thoroughgoing capital cycle that creates conditions for venture survival and growth in the region. It is therefore urgent for Latin American governments to create policies to close this gap. The governmental institutions that foster entrepreneurship should aim to create financial mechanisms and fiscal incentives to generate capital opportunities to scale up, and therefore ensure the survival of new ventures.

NOTES

¹ Entrepreneurship can be defined as the process of designing, launching, and operating startups, beginning with turning an innovation into a sustainable business, through a solid product market fit and a viable business model. Many organizations also include small businesses in their definition of entrepreneurship.

² Steve Ciesinski and Ryan Kissick, "A Note on

Entrepreneurial Ecosystems in Developing Economies," Stanford Graduate School of Business case no. E611, 2016, <https://www.gsb.stanford.edu/faculty-research/case-studies/note-entrepreneurial-ecosystems-developing-economies>.

³ Tim Kane, "The Importance of Startups in Job Creation and Job Destruction," Kauffman Foundation, July 2010, <https://www.kauffman.org/what-we-do/research/firm-formation-and-growth-series/the-importance-of-startups-in-job-creation-and-job-destruction>.

⁴ "Entrepreneurial Ecosystems Around the Globe and Company Growth Dynamics," World Economic Forum report, September 2013, http://www3.weforum.org/docs/WEF_EntrepreneurialEcosystems_Report_2013.pdf.

⁵ Zoltán Acs et al., "Global Entrepreneurship Index 2017," The Global Entrepreneurship and Development Institute, 2016.

⁶ New registrations per 1,000 people ages 15-64. Source: "Doing Business," World Bank, June 2017, <http://www.doingbusiness.org/data/exploretopics/entrepreneurship>.

⁷ GEM's NES questionnaire tracks entrepreneurs' perceptions related to Entrepreneurial Finance, Government Policy, Government Entrepreneurship Program, Entrepreneurship Education, R&D Transfer, Commercial and Legal Infrastructure, Entry Regulation, Physical Infrastructure, and Culture and Social Norms. See GEM, <http://www.gemconsortium.org/>.

⁸ GEM, "Entrepreneurial Framework Conditions," <http://www.gemconsortium.org/data/sets?id=nes>.

⁹ In the GEM survey, entrepreneurs and experts are asked about the availability of financial resources (equity and debt) for small and medium enterprises (SMEs) (including grants and subsidies). The scale is 1 to 5, where 1 means the statement is completely false (very low or nonexistent availability for financial resources), according to the expert; and 5 means the statement is completely true (high availability of financial resources).

¹⁰ GUST, "Latam Accelerator Report 2016," http://gust.com/accelerator_reports/2016/latam/.

¹¹ LAVCA, "2017 Trend Watch: Latin American Venture Capital," <https://lavca.org/industry-data/trend-watch-2016-latin-american-venture-capital/>.

¹² GUST, "Latam Accelerator Report 2016"; LAVCA, "2017 Trend Watch: Latin American Venture Capital."

Juliana Castro is a social entrepreneur who works with indigenous women in Colombia. She is a Master in Public Policy Candidate at the Harvard Kennedy School of Government (HKS), where she is focusing on social entrepreneurship and the intersection between the private and the public sectors. She is also a Teaching Fellow for the course Entrepreneurial Finance at HKS. Previously, she worked as a consultant at McKinsey and Company and as Chief Marketing Officer in a technology start-up in Latin America. Juliana holds a bachelor's degree in Economics and a second one in Industrial Engineering from University of Los Andes in Bogota.

Brazil's Age of Extremes: The Disputed Institutional Legacy of the Crisis

By João Moraes Abreu

Abstract

The economic crisis that started in 2014 was the worst in Brazil's history. Simultaneously, a succession of dramatic political events took place, including a president's impeachment and the current president under investigation by the Supreme Court. The meaning and long-term consequences of these unusual events, however, are fiercely disputed. Two competing narratives have emerged. One sees a highly independent, powerful judiciary successfully challenging a corrupt political elite; the other sees institutions exercising power only against specific people and parties.

"The rise of Brazil since the 1970s was not engineered by economists of international institutions instructing Brazilian policymakers on how to design better policies or avoid market failures. . . . Rather, it was the consequence of diverse groups of people courageously building inclusive institutions."¹

The statement is from the last chapter of *Why Nations Fail*, the best-selling book that popularized the idea of institutions as the main engine to economic growth and development. Since 2012, when the book was published, Brazil's economic and political situation has changed so much that the sentence may sound like a not-so-funny joke to a current Brazilian reader. The economic crisis that started in 2014 is the worst in Brazil's history. And a succession of dramatic political events has taken place, which included a president's impeachment, a former president's conviction, and a current president under investigation by the Supreme Court.

The meaning and long-term consequences of these unusual events, however, are fiercely disputed. Two competing narratives have emerged. One sees a highly

independent, powerful judiciary fighting corruption as an example of what Acemoglu and Robinson would call "pluralistic" institutions.² Hence for the "institutional optimists," once the political and economic crisis is finally over, democracy will emerge stronger and growth will return to its 2002-10 path. The alternative narrative sees the same events through a rather opposite lens: the same powerful institutions work only for specific people and political parties. For the "institutional pessimists," laws are used only to force convenient changes in power, and the fight against corruption will stop short of affecting the core of the corrupt political elite.

To understand how each narrative describes the current situation in Brazil, it is useful to describe the evolution of electoral national politics in the past two decades, with special attention to the last four years.

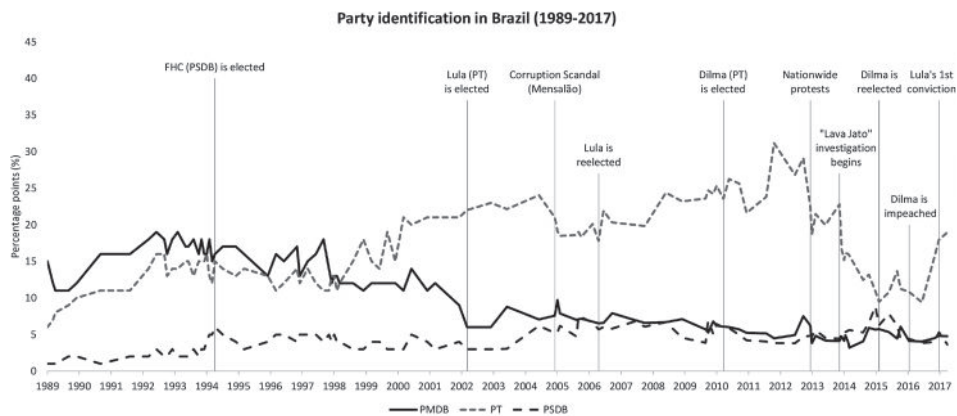
The Party System in Brazil since 1998

In 2014, Brazilians went to the polls to vote for president. Dilma Rousseff, from the incumbent Labor Party (PT), was elected with 51.6 percent of the valid votes in the

tightest election since the country shifted to democracy in 1989. Three days later, the defeated candidate Aécio Neves from the Social Democracy Party (PSDB) formally requested the results to be reviewed, citing fraud allegations on the internet.

The graph below illustrates how Brazil arrived at its current political scene. It shows party identification in the country for three major parties, together with the dates of selected relevant events. Other parties are omitted as they never reached 2 percent in the historical trend.

translating into consistent support for any alternative party. Even in 2014, the tightest election in history, less than 9 percent of the population identified with PSDB, yet the party's candidate got roughly half of the votes. This is a relatively new phenomenon. When Lula's second mandate ended, in 2010, his approval ratings reached 84 percent – an all-time high. It allowed the party to elect Dilma Rouseff, a relatively unknown public figure until a few months before the polls, with 56 percent of the valid votes. The country was not polarized by then. What happened in the four years that followed?



Source: Author's elaboration, based on data from Samuels and Succo (2018)³

Even though Brazil has the world's highest degree of party fragmentation,⁴ only three parties are preferred by a relevant number of citizens and, between 2001 and 2014, Labor Party (PT) support exceeded support for PSDB and the Brazilian Democratic Movement Party (PMDB). Even more recently, as PT support declined, its competitors have not replaced it; rather, the share of the population that reports no preference for a political party has risen sharply.

This helps understand why in the political debate there seems to be two sides: PT supporters and PT critics, with the latter group's political preferences not

2014 to 2018: Political and Economic Collapse

Politics and economics played a key role. In June 2013 the country experienced its biggest public demonstration up to that moment, even as the economy was still growing (the year ended with 3 percent GDP growth) and the unemployment rate for the year was the lowest ever recorded at that point, 5.4 percent.⁵ Protests started as local dissatisfaction after public bus fares were raised. But they rapidly expanded geographically and to other topics, such as corruption and quality of public services. The government's approval rate, as measured by the Datafolha Institute, fell 27 percentage points

in one month, reaching 30 percent, and never fully recovered.

Then, in 2014, the economy started its downward trend, leading to the worst crisis in history. Unemployment reached 12.7 percent, a record high in 2017.⁶ GDP contracted 7.2 percent in two years, ending 2017 at the same level of 2010.⁷ The reasons for the crisis also motivated heated political debate between PT supporters (who emphasize external factors) and critics (who focus on economic policy mistakes by the government).

From 2014 onwards, it is hard to disentangle the political consequences of the economic crisis from the impact of the corruption investigation known as “Lava Jato.” Brazil’s biggest corruption investigation started in March 2014 and, until early 2018, had been responsible for putting in jail several high-profile politicians and businesspeople in Brazil. The former president of the House of Representatives, Eduardo Cunha (PMDB), was arrested, as well as the presidents and vice presidents of three of Latin America’s largest construction firms (Odebrecht, OAS, and Camargo Correa). Three former presidents (Fernando Collor, PTC; Lula, PT; and Dilma Rousseff, PT) and the current president (Michel Temer, PMDB) were charged with corruption. Government Senate speaker Delcídio do Amaral (PT at the time) was arrested during his term in office – the first time in Brazil’s democratic history that a Senate member was arrested while in office.

The consequences of the Odebrecht investigations are not restricted to Brazil’s borders. The company now admits having paid bribes of US \$59 million in Panama, US \$35 million in Argentina, US \$98 million in Venezuela, and US \$92 million in the Dominican Republic.⁸ Brazilian prosecutors say bribes were also paid in Mexico, Ecuador, and Colombia. Peru was

among the most affected, with three former presidents and the current president under national investigation.

Formally speaking, the reasons behind the impeachment of former president Dilma Rousseff in August 2016 had nothing to do with the corruption investigations; rather, it was about “creative accounting” in public expenses.⁹ Nonetheless, the investigations and the economic crisis naturally had a significant impact in the government’s and the party’s popularity, which in turn allowed the impeachment to happen.¹⁰

What Really Happened Since 2014?

The competing “institutional optimist” and “institutional pessimist” narratives start diverging sharply from 2014 onwards. To analyze their contrast, it is useful to first assess the general population’s views on the topic through polls on trust in institutions.¹¹ Results show that the Federal Police – the institution responsible for the corruption investigations – ranked third in public trust, only behind churches and fire corps, in the latest 2017 survey. The regular state-level police forces, on the other hand, were ranked substantially lower. Trust in parliament and political parties historically move together and fell sharply since 2014, from around 30 percent to below 19 percent in 2017 – in line with the evidence from party identification data. Trust in elections and the electoral system also dropped, from a high of 50 percent in the beginning of the decade to around 35 percent in the past three years. Trust in the judiciary system has oscillated around 50 percent since the survey began. These results are remarkably stable across gender, geographical region, income level, schooling, and religion.

Corruption investigations can thus count on significant popular support, as they are viewed as opposing one of Brazil’s “best”

(Federal Police) against one of its “worst” (political parties) institutions. One can also understand “institutional optimism” as an interpretation of the previous events: the past few years of Brazil’s history are seen as an endless fight against corruption that finally managed to reach the most powerful politicians and businessmen, teaching a lesson to the country’s future leaders. This would imply solid institutions, since only a highly independent judiciary and investigation system, strong enough to resist political backlash, would allow for Lava Jato’s accomplishments. Also, substantial structural reforms were undertaken since investigations began: the Supreme Court has made it illegal for private companies to finance electoral campaigns, the confessed source of most of the corruption scandals. It has also allowed for convicted individuals to go to prison before all opportunities to appeal were exhausted,¹² affecting several of those investigated under Lava. These breakthroughs are the ones most likely to be mentioned by institutional optimists as structural achievements of the investigations, with long-lasting positive effects.

Intellectual pessimism, however, provides an altogether different story. Although there is consensus regarding the need to investigate corruption, pessimists would argue that prosecutors were only successful because they hit easy targets at the right moment: that is, a political party on its fourth consecutive mandate, lacking popularity, while a severe economic crisis was underway. This is consistent with the point of view of a hypothetical PT supporter, who would argue that members of other parties are much less likely to be investigated or convicted than members of PT, as the judiciary and elite groups are biased against the Labor Party. According to this view, PT was always the first to be investigated; others, at least as involved in corruption, were spared. Dilma’s impeachment – under a relatively small technicality

and with no corruption charges – was, then, a combined effort of the still-not-convicted politicians of other parties to stop this process and avoid their own political ruin.

A major fact commonly cited to support the institutional “limited independence” was revealed by a secret tape, made public in May 2016. One of the ministers of the current president, Michel Temer (PMDB), was recorded by the Federal Police in a phone call with a former senator (PSDB/PMDB) before the impeachment. In the conversation, the former senator mentioned that he feared being investigated by the General Prosecutor, and that it could further lead to investigations on the minister himself. They discussed the investigations for a while, and then how to stop it, concluding that “we have to change the government to be able to stop this bleeding,” and that “the easiest solution would be to put in Michel [Temer].”¹³ The impeachment, therefore, would be a coup, masked with legal arguments, to stop the investigations. The institutions were indeed independent, but not enough to go beyond PT and reach the rest of the political elite. The secret tape would be the proof.

Another important event concerning the institutional development of Brazil was the decision, by the Federal Senate, to cancel the Supreme Court’s decision that would remove the senator and former presidential candidate, Aécio Neves (PSDB), from office over corruption allegations. A few months earlier, the same Senate decided to comply with the Supreme Court’s similar decision when the accused was PT’s leader in the House. However, even members of PT supported Aécio Neves on the occasion, claiming that the Supreme Court was interfering in Congress. Here, institutional pessimists and PT supporters disagree: the former would explain the episode as an evidence that the political elite is resisting and stopping further consequences of the corruption scandal.

Conclusion

The story that will ultimately prevail concerning the corruption investigations and the economic and political crisis of 2014 onwards remains uncertain. The rhetorical dispute will be determined by facts. In 2017, with approval ratings that reached 3 percent, Michel Temer remained in power as Congress rejected corruption charges against him, blocking a Supreme Court trial that could take him out of office. He was also responsible for appointing a new general prosecutor and a new head of the Federal Police. The Supreme Court has slowed down the pace of its decisions, and no politician was convicted by the highest court for the corruption charges so far. Some of the legal tools of the prosecutors to conduct investigations are currently being discussed in Congress and may be softened in the near future.

It is too early to say how the period will be remembered, but the 2018 elections are likely to play a major role. The new government and Congress will have the task of putting the country back on the track of economic growth. Perhaps even more importantly in the long run, they will be decisive in determining the outcome of the political crisis and the next steps of the corruption investigations. An updated version of the book *Why Nations Fail* might have to review its claims on Brazil, explaining that the inclusive, pluralistic institutions ultimately failed to fully develop, and an unpopular, corrupt political elite managed to stay in power. Alternatively, Brazil might be one of the first developing nations to seriously and systematically tackle the problem of widespread corruption, unlocking the path to higher development levels.

NOTES

¹ Daron Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York: Crown, 2012).

² Acemoglu and Robinson, *Why Nations Fail*, 80. “Political institutions that distribute power broadly in society and subject it to constraints are pluralistic. Instead of being vested in a single individual or a narrow group, political power rests with a broad coalition or a plurality of groups.”

³ David Samuels and Cesar Zucco Jr., *Partisans, Anti-Partisans and Non-Partisans: Voting Behavior in Brazil* (Cambridge: Cambridge University Press, forthcoming).

⁴ William Roberts Clark et al., “A Simple Multivariate Test for Asymmetric Hypotheses,” *Political Analysis* 14, no. 3 (2006): 311-331.

⁵ “Unemployment Rate Was 4.3% in December and Closed 2014 at 4.8%,” Instituto Brasileiro de Geografia e Estatística (IBGE), 29 January 2015, <https://agenciadenoticias.ibge.gov.br/en/agencia-news/2185-news-agency/releases-en/15599-unemployment-rate-was-4-3-in-december-and-closed-2014-at-4-8.html>.

⁶ Instituto Brasileiro de Geografia e Estatística (IBGE).

⁷ “GDP (Constant 2010 US\$),” World Bank national accounts data, https://data.worldbank.org/indicator/NY.GDP.MKTP.KD?cid=GPS_30&end=2016&start=2010.

⁸ “United States of America against Odebrecht S.A., Defendant,” <https://www.justice.gov/opa/press-release/file/919911/download>.

⁹ What the media labeled “pedaladas fiscais” consisted of delaying, for a few days, the government’s payments to public banks that transferred social benefits to the population – like Programa Bolsa Família – artificially avoiding a short-term public deficit at the banks’ expense.

¹⁰ The Senate removed President Rousseff from office by a 61-20 vote in August 2016.

¹¹ “Índice de Confiança Social 2017,” Ibope Inteligência, 28 July 2017, <http://www.ibopeinteligencia.com/noticias-e-pesquisas/confianca-no-presidente-governo-federal-e-congresso-nacional-e-a-menor-em-9-anos/>.

¹² This was a tight, highly controversial decision. The topic is expected to be revisited in future cases. The members of the Supreme Court have changed since the first decision, so it might be reversed.

¹³ Jonathan Watts, “Brazil Minister Ousted After Secret Tape Reveals Plot to Topple President Rousseff,” *The Guardian*, 23 May 2016, <https://www.theguardian.com/world/2016/may/23/brazil-dilma-rousseff-plot-secret-phone-transcript-impeachment>.

João Abreu holds a Bachelor in Economics from University of São Paulo, Brazil, and studied Public Administration for two years at Fundação Getulio Vargas (SP), before joining SP Negócios, the PPP unit of São Paulo City Hall. João participated in the design of several public-private partnerships, from the world's largest public lighting PPP to the regulation of e-hailing apps like Uber in São Paulo - considered the most innovative solution by the World Bank. João is currently pursuing a Master in Public Administration in International Development (MPA/ID) at the Harvard Kennedy School.

Tackling Financial Exclusion in Paraguay: Banks with Souls and the Role of Public Financial Institutions as a means to reach the Underserved

By Juan Manuel Gustale Cardoni

Abstract

*In her book *How the Other Half Banks*, Mehrsa Baradaran (University of Georgia Law School) examines the relevant role of postal banking and Community Development Financial Institutions, and introduces the notion of “banks with souls.” This paper seeks to discuss some of Baradaran’s main recommendations and incorporate relevant applications to the case of Paraguay’s public financial sector, in accordance with the goals set by the National Strategy for Financial Inclusion.² A state-owned institution, Paraguay’s Banco Nacional de Fomento (also referred to as BNF)³ is the ideal channel to conduct and empower increasing levels of banking penetration to the population, by efficiently employing its branched networks to reach the underserved, where commercial banks are, for the most part, absent. Through the inclusion of more people in the formal sector, access to credit will be enhanced. This could result in a virtuous circle of opportunities including higher levels of financial literacy, decreased average indebtedness across the country, poverty reduction, and, overall, better quality of life for families.*

Banks with Souls and Community Development Financial Institutions

In her book *How the Other Half Banks*, through the lens of historical perspective, Baradaran chronologically presents the evolution of postal banking and explains how a banking crisis paved the way for postal banks to emerge. After decades of debate, the United States Congress finally embraced the concept of postal banking in 1910, and the system soon proved efficient as an ancillary tool for banking panics.⁴ However, two decades later, the advent of the Federal Deposit Insurance Corporation (1933) led to the postal banking system’s demise, which finally took place in the late 1960s. The author also introduces the notion of “banks with souls,” taking into consideration (based on Nobel Prize winner Muhammad Yunus’ reflection)⁵ the following question: Should credit availability be considered a human right?

Baradaran focuses on the case of Chicago’s ShoreBank, which represents an emblematic example of a financial company lending to the poor. The oldest and largest community bank in the United States, this institution played a key role in the development of a new banking movement, which resulted in the rise of Community Development Financial Institutions (CDFI). The driving force of community banks was to facilitate access to credit to communities as a mechanism to foster their development. Nonetheless, ShoreBank’s venture also demonstrated the disadvantages of banking for the poor: in 2010, the firm was declared insolvent, having failed mainly because its loans were concentrated in struggling geographical areas, exposing them to more risk during the economic downturn. Analysts speculated that the main cause of the institution’s failure was that its model was based “too much into the social welfare thing.”⁶

The Riegle Community Development and Regulatory Improvement Act,⁷ also known as the Community Banking Act (enacted in 1994), was passed as a means to financially revitalize communities.⁸ However, a vast majority of the funds ended up being diverted to “development projects” instead of being destined to help the unbanked.⁹ Lawrence Summers conceived CDFIs as “market scouts” seeking out profits in overlooked markets, a notion that supported the assumption that such a segment of entities could both serve the poor, and at the same time lend profitably and achieve returns.¹⁰ In alignment with Summers, Baradaran has argued for increasing government support to enable these institutions’ survival with minimal profits. Accordingly, this group of institutions could function effectively and profitably, insofar as government support is available.

The Case of Paraguay: Current Economic Landscape at a Glance

Paraguay is one of the fastest-growing economies in Latin America. An average growth rate of 5 percent (over the last 10 years) has led its economy to be considered one of the healthiest in the region.¹¹ Over the period 2005-2017, Paraguay’s financial system experienced a remarkable evolution by all measures: it increased its levels of deposits and assets and exhibited robust and consistent signals of solvency, liquidity, and profitability, while maintaining levels of non-performing loans below 3 percent.¹²

Commercial banks dominate the domestic financial scene,¹³ with their assets representing approximately 73 percent of the total assets in the financial sector, while the assets of finance companies amounted to only 2.9 percent.¹⁴ The second-largest group of financial institutions consists of cooperative institutions,¹⁵ with a 15 percent market share

of total assets, scattered in more than 300 deposit-taking entities.¹⁶

It is commonly argued that an appropriate legal regime should be introduced in order to boost long-term investment (the economy relies too much on short-term financing).¹⁷ As a matter of fact, Paraguay’s banking sector is very short-sighted, with deposits remaining the most important source of funding.¹⁸ The only state-owned, first-tier bank, Banco Nacional de Fomento, was created in 1961, and its liabilities are fully guaranteed by the Paraguayan government.¹⁹

Paraguay is a leading case in the field of digital financial services,²⁰ which quickly spread throughout the country, gaining great acceptance and enhancing the banking sector’s development. Approximately four million transactions take place on a monthly basis.²¹ Undoubtedly, technology has played a pivotal role in facilitating capital flows and in consolidating the financial sector’s growth. The extraordinary rise in assets and liabilities in Paraguay’s banking sector was supplemented by an amplification of its geographic coverage.²²

Paraguayan financial markets evolved from a traditional, conservative deposit-taking system into a more sophisticated group of entities. In this regard, the implementation of the new payment system (Law 4595/2012, “Sistemas de pagos y liquidación de valores”)²³ encompasses the growth of home banking transactions, electronic payments made through the Automated Clearing House, Real-Time Gross Settlement, and the proliferation of non-bank transfers via mobile phones, as well as the rapid development of electronic money.

The ubiquitous penetration of mobile phones in Paraguay (over 109 percent)²⁴ has dramatically altered the way transactions are conducted. This is especially due

to the development of electronic wallets and the implementation of a new regulatory framework for entities offering products and services associated with electronic money and non-bank transfers.²⁵ Digital financial services have become one of the most salient instruments for financial inclusion worldwide. Paraguay is no exception: higher levels of mobile phone penetration have generated the ideal conditions for cell phones to become a user-friendly, safe, and reliable tool to store electronic money, pay bills, and process non-bank transfers.

Promoting a More Active Role of Public Banking in the Implementation of Paraguay's National Strategy for Financial Inclusion

As the global economy reshapes the way of doing business, the ongoing process of adapting public policies to the dynamic development of the international financial system becomes a rather daunting task. Thus, a gradual process of regulatory reform is ideal. The institutional feature plays a relevant part.²⁶ Paraguay's former finance minister, Santiago Peña,²⁷ quoting Timothy Besley,²⁸ emphasizes the relevance of state participation in financial markets, insofar as scarce development of institutions and market failures occur. In these cases, the state should facilitate the link between lenders and borrowers, complementing the private sector, but not necessarily substituting it.

A great challenge for the Paraguayan government is to trigger a paradigm shift to boost long-term productive investments that will consolidate development. In this endeavor, the state-owned Banco Nacional de Fomento (BNF) has a leading role in enlarging its base of products and services and tapping into its network of branches.²⁹

The BNF should also maximize the potential of technology to fill gaps and

reach places where the private sector does not reach the underserved segments of the population. This will result in access to credit and financial services for the population of remote rural areas with limited access and resources, and whose entitlement to credit is equal to that of any other citizen.³⁰ The role of public banking in Paraguay should not undermine that of the private sector. Instead, it should add value and complement the private sector, filling market gaps without replacing private financial participants.³¹

The BNF retains a great market share of public payrolls (around 95 percent) and, as of January 2018, public funds are gradually migrating towards this increasingly prominent institution.³² A dynamic lending process to boost the productive sector, the small and medium enterprises (SMEs), and the housing market should become a priority for this institution. Definitively, all these factors will largely contribute to Paraguay's broader goal of including increasingly more people in the formal financial sector.

Quid Pro Quo? Revising the Social Contract Between Banks and the Government as a Means to Promote Financial Inclusion

To achieve higher levels of banking penetration, one of the key components of financial inclusion – the social contract between the government and the banking sector – should be reevaluated. The last global financial crisis portrayed banks being bailed out by the government. However, Baradaran, in an effort to stimulate lending to small businesses and the underserved, has argued that those funds were not necessarily redirected towards the public.³³ This poses the question of the validity of such a social contract between the government and the banking system: Once the government has secured

financial support by providing credit to banks, then shouldn't it also assure that banks will provide credit to the people?

The social contract should be revised to guarantee that the public interest is not neglected – to the detriment of the underserved – in future adverse financial situations.³⁴

Conclusions

This paper argues that as a means to counteract financial exclusion in Paraguay, the government must concentrate on delivering secure access to regulated financial services, under a straightforward scheme where reasonable products are offered in a timely manner. Baradaran's conception of postal banking and Community Development Financial Institutions depicts the figure of public legal entities encompassing a wide range of products and services, at a much lower cost than banks, by relying on economies of scale and scope.

The case of Paraguay's Banco Nacional de Fomento presents similarities, given its broad network of branches located throughout Paraguayan territory, its potential to engage in more innovative financial products, and to offer timely, affordable, and transparent services. Accomplishing such an ambitious goal entails considering the importance of emerging technologies, as well as its capacity and potential to reach remote, underserved areas. This, in turn, would contribute to the capacity-building process by improving financial literacy and protecting families against onerous forms of credits obtainable through unscrupulous mechanisms (made available by loan sharks).

Graduating to "bank status" could enable thousands of creditworthy families to escape poverty and have access to more sophisticated financial products.

Hence the conception of "banks with souls" should be revitalized, by virtue of which the government should prioritize the idea of serving the public as the core purpose of public banking. Paraguay's Banco Nacional de Fomento stands in a privileged position to be the main vehicle through which the government could reach this purpose to the benefit of the underserved.

NOTES

¹ Mehrsa Baradaran, *How the Other Half Banks: Exclusion, Exploitation, and the Threat to Democracy* (Cambridge, Massachusetts and London, England: Harvard University Press, 2015).

² See <http://enif.paraguay.gov.py/>. Consulted 20 January 2018.

³ The Decree-Law 281 of 14 March 1961, Presidency of the Republic of Paraguay, created the National Bank of Development.

⁴ The Postal Savings Depository Act of 1910 was passed on 25 June 1910, but only became effective on 1 January 1911.

⁵ Randeep Ramesh, "Credit is a Basic Human Right," *The Guardian*, 5 January 2007, <https://www.theguardian.com/world/2007/jan/05/outlook.development>.

⁶ David Greising, "Recession Played a Part, but Shore-Bank Wounded Itself Too," *The New York Times*, 22 May 2010, <http://www.nytimes.com/2010/05/23/business/23cncshorebank.html>.

⁷ Riegle Community Development and Regulatory Improvement Act of 1994, Pub. L. No. 103-325, 108 Stat. 2160 (codified as amended in scattered sections of 12 U.S.C.).

⁸ Under this law, banks were given specific charters to serve poor areas. Legislation triggered a competitive market, with up to 1,000 institutions of this nature operating in a short period of time after the law had been passed.

⁹ Baradaran, *How the Other Half Banks*, 168.

¹⁰ Lawrence Summers, "Building Emerging Markets in America's Inner Cities," remarks to the National Council for Urban Economic Development, 2 March 1998, www.treasury.gov/press-center/press-releases/Pages/r2262.aspx.

¹¹ Moody's Investors Service, "Rating Action: Moody's Affirms Paraguay's Ba1 Government Bond Ratings and Maintains a Stable Outlook," 21 June 2016, https://www.moody.com/research/Moodys-affirms-Paraguays-Ba1-government-bond-ratings-and-maintains-a-PR_350843.

¹² Central Bank of Paraguay, "Financial Stability Report 2016," <https://www.bcp.gov.py/informe-de-estabilidad-financiera-i103>.

¹³ Commercial banks and finance companies fall under the scope of the Organic Law of the Central Bank

(Law 489, 1995) and the Banking Law (Law 861, 1996, partially amended by Law 5787/16).

¹⁴ Jose Insfrán Pelozzo, “Where Is the Paraguayan Financial System Headed?,” published in *Beyond Macroeconomic Stability: Achievements and Challenges* (Banco Central del Paraguay, 2016).

¹⁵ World Bank Group, “Paraguay’s National Financial Inclusion Strategy 2014-2018,” December 2014, <https://www.bcp.gov.py/estrategia-de-inclusion-financiera-i459>.

¹⁶ According to a survey conducted by the World Bank in 2014, 19 percent of adults reported having an account at a cooperative, as compared to 12 percent for banks. See World Bank Group, “Paraguay National Financial Inclusion Strategy 2014-2018,” December 2014, <https://www.bcp.gov.py/estrategia-de-inclusion-financiera-i459>.

¹⁷ See International Monetary Fund, “Press Release: Staff Completes 2016 Article IV Mission to Paraguay,” 26 February 2016; and International Monetary Fund, “IMF Country Report 16/116,” May 2016.

¹⁸ As explained by Insfrán, “Certificates of Deposit are the installment savings scheme par excellence.” See José Insfrán Pelozzo, “Where Is the Paraguayan Financial System Headed?”

¹⁹ The National Bank of Development’s operations must abide by its Charter (Law 5800, 2017). Where appropriate, the Banking Law and prudential regulations issued by the Central Bank and the Superintendency of Banks are also applicable.

²⁰ Christian Tondo, “The Paraguayan Experience with Digital Financial Services,” Alliance for Financial Inclusion, 31 October 2017, <https://www.afi-global.org/blog/2017/10/paraguayan-experience-digital-financial-services>.

²¹ Tondo, “The Paraguayan Experience with Digital Financial Services.”

²² Data indicates that the degree of expansion across the country went from 264 agencies and branches of banks and financial institutions in 2002 to 408 in 2009, and to as many as 647 in 2017. See National Report of Financial Inclusion, *Estrategia Nacional de Inclusión Financiera*, November 2017, 36.

²³ Effective as of 2012, Law 4595/2012, “Sistemas de pagos y liquidación de valores.”

²⁴ BuddeComm, “Paraguay – Telecoms, Mobile and Broadband – Statistics and Analyses,” 2015, <https://www.budde.com.au/Research/Paraguay-Telecoms-Mobile-and-Broadband-Statistics-and-Analyses>.

²⁵ These institutions are under the supervisory scope of the Central Bank, according to Resolution No. 6, “Reglamento de Medios de Pagos Electrónicos de Pagos,” Board of Directors, Central Bank of

Paraguay, 13 March 2014, <https://www.bcp.gov.py/otras-normas-vigentes-i596>.

²⁶ As the celebrated British economist Goodhart underlines, “the institutional structure of regulatory agencies has significance beyond simple bureaucratic tidiness.” See Charles Goodhart (emeritus professor at The London School of Economics) et al., *Financial Regulation: Why, How and Where Now?* (London and New York: Routledge and the Bank of England, 1998).

²⁷ Santiago Peña, “Financial Inclusion,” published in *Beyond Macroeconomic Stability: Achievements and Challenges* (Banco Central del Paraguay, 2016), 147.

Timothy Besley, “How Do Market Failures Justify Interventions in Rural Credit Markets?,” *World Bank Research Observer* 9, no. 1, (January 1994): 27-47.

²⁸ As of December 2017, there are more than 75 across the country. See Banco Nacional de Fomento, “Red de Sucursales y Centros de Atención al Cliente,” n.d., www.bnf.gov.py/sucursales.

²⁹ The BNF should also embark (along with an array of other public and private institutions) on the nationwide program of financial education.

³⁰ According to the World Bank, the involvement of public financial institutions “should be evaluated and determined if they are providing services that are not already being provided by private financial institutions.” See World Bank, “Technical Note: Financial Regulation for Financial Inclusion - Paraguay,” First Initiative/World Bank, Washington, D.C., November 2014.

³¹ This was given as a result of a recently enacted legislation (National Budget Law 2016, No. 5554/16), which establishes the compulsory transfer of funds of public entities (reaching a staggering estimated amount of \$354 million).

³² Baradaran, *How the Other Half Banks*.

³³ Baradaran concludes by asserting that “Subsidies for banking have been justified because they provide a benefit to all citizens. Mainstream banks have met part of their obligation, but a large portion of the population, namely the poor, has been left out. It is time, then, for the government itself to meet the demand for credit.” See Mehrsa Baradaran, “It’s Time for Postal Banking,” *Harvard Law Review Forum* 127 no. 165 (24 February 2014), <https://harvardlawreview.org/2014/02/its-time-for-postal-banking/>.

³⁴ A significant feature of the National Bank of Development is that this institution might be conceived as more flexible and user-friendly, which makes people feel more comfortable when initiating a relationship, as opposed to the case of traditional commercial banks.

Juan Manuel Gustale Cardoni is a Member of the Board of Directors of the National Bank of Development - Paraguay. He holds a Master in Public Administration (MC/MPA'17) from Harvard University and a Master of Laws, Banking Law and Financial Regulation (LLM'12) from London School of Economics.

Social Impact Bond in Latin America

By Isabel Opice

Abstract

Social Impact Bond (SIB) contracts were first launched in 2010 in the United Kingdom. Since 2014, there has been an enormous effort to bring the mechanism to Latin American countries. However, only one contract was issued. This paper describes the Social Impact Bond model and the challenges faced by Latin American countries trying to implement it, as well as the personal experience of the author, working in the development of a SIB in the State Government of São Paulo.

The Social Impact Bond (SIB) model was created in the United Kingdom in 2010, and it rapidly spread as an outstanding government innovation for enhancing social outcomes in developed countries. In 2014, the Inter-American Development Bank (IDB) started the first attempts to bring the mechanism to Latin America (LA). A few years after, the question of whether SIBs are effective or not remains open.

After reducing poverty indicators throughout the last decade and a half, the next challenge for LA countries is how to provide good-quality public services.¹ For instance, of the countries that participated in the Program for International Student Assessment (PISA), those in LA were positioned at the bottom of the education quality ranking.² Conditional Cash Transfer (CCT) programs have played a crucial role in bringing poverty indicators down, making a considerable difference in the lives of the poor. The solution to the new challenge, though, is not as straightforward as reducing poverty by transferring cash to poor households, such as CCT programs did. Moreover, improving public service outcomes, without increasing the budget, requires maximizing the value for money of resources by spending on effective policies. In this context, SIBs appeared as an appealing answer.

The Social Impact Bond model is based on a contract between the government and the private sector in which the government prioritizes a social issue and selects a social service provider to improve specific outcomes. The payment depends on the achievement of a previously established metric, such as reducing the reoffence rate of prisoners by 10 percent, or increasing graduation rates by 7 percentage points. Investors provide risk capital for the social providers, which will return depending on the improvement of the outcome, as rigorously measured by an independent evaluator.

The model transfers the financial risk to the private sector. If the intervention does not achieve the agreed goals, investors do not get their return, and governments do not spend taxpayers' money. Another benefit of the contract is enabling experimentation within the public sector, different from standardized large-scale public policies, since the scale of the contracts are usually small. Lastly, SIBs align incentives among stakeholders and enforce accountability through the evaluation process, changing the way governments allocate social resources from the typical purchase of public services based on quantity to outcome-driven contracts.

The first SIB in the world was launched in 2010 in the United Kingdom (UK). The contract aimed to reduce the reoffending of short-sentenced offenders in Peterborough. Seven years later, the social provider exceeded the target (the goal was a 7.5 percent reduction and the outcome achieved was 9 percent), giving investors a return of 3 percent per annum for the period of the contract.³ During this period, SIBs spread across developed countries. There are 33 launched SIBs in the UK and 16 in the United States (US) in such areas as housing, criminal justice, and education.⁴

In March 2014, the Inter-American Development Bank (IDB) announced a US \$5.3 million program to test and develop SIBs in LA and the Caribbean.⁵ The grant enabled countries in the region to structure SIB feasibility studies for local contracts. The first SIB in LA was launched in Peru in 2015 and aimed to support sustainable cocoa and coffee production and marketing by indigenous Asháninka people. Currently, there are 14 SIBs being developed in Argentina, Brazil, Chile, Colombia, Ecuador, Costa Rica, and Mexico.⁶

The scopes of the contracts in development in LA vary significantly. In Ecuador, the contract aims to expand the availability of industrial-grade bamboo building materials to speed up post-disaster reconstruction, a response to the earthquake in 2016. In Mexico, there is a project to reduce complications associated with type II diabetes. Argentina, Chile, and Colombia are studying how to improve employment outcomes for vulnerable groups. Many of those projects are supported by organizations such as the IDB, Social Finance, the non-governmental organization (NGO) that first issued an SIB, and Instiglio, an NGO based in Colombia that helps the social, public, and private sectors to improve the impact of social programs.

Although highly promising, transferring SIBs to LA is not an easy task. This helps to explain why so many projects are still in the development phase. Adapting the model to the local regulatory framework can be defiant, as legal conditions forbid governments from contracting in multi-year periods and conditional on outcomes. Additionally, the lack of data available for designing and evaluating the intervention might increase the cost of the contracts. Lastly, implementing the model requires a change in mindset towards a data-driven approach, which might encounter resistance among LA members of the SIB ecosystem, such as NGOs, service providers, philanthropists, and the government.

None of these difficulties is insuperable, although they increase the cost of importing the SIB model. LA countries have implemented public-private partnership (PPP) legislation, which might help to contract for outcomes.⁷ Also, although the data available might not be as rich as in the UK and the US, there are plenty of administrative data lost through government bureaucracy that could be used for better-designed contracts.

When working in the State Government of São Paulo, in Brazil, I participated in the designing of an SIB contract aiming to improve educational graduation rates in public high schools. The project started in mid-2015, when IDB approached the under-secretary of Partnership and Innovation, proposing the funding of a feasibility study to test the viability of SIBs in the country. We decided to target educational outcomes both because of the challenges public schools face, and the high supply of service providers working with educational issues, which could potentially participate in a future bid.

The most significant difficulties we faced while developing the contract were related to political instability and lack of prioritization. The secretary of education was dismissed at the end of 2015, leading to numerous changes in the team who oversaw the project. Every time there was a change we would have to explain the peculiarities of the model and what we had designed so far, making it hard to follow the initial schedule. Additionally, given the small scale of the contract (61 high schools, which is equivalent to 2 percent of the number of schools in the state), the project was far from being a priority in the Secretariat of Education.

After almost three years, the state government of São Paulo is now close to launching a US \$5.5 million contract to increase the graduation rate in public high schools.⁸ The public consultation of the deal ended in December 2017, and the final documents are now being reviewed for the bid.

In my view, though, one of the key takeaways from the project was that it could be more efficient to improve the performance mechanisms of existing public-sector contracts rather than designing a social impact contract from scratch. For instance, half of the state hospitals are run by NGOs, through management agreements that could be significantly improved. The state government pays approximately US \$1.3 billion a year to health-related NGOs that indirectly provide social services to citizens.⁹ Most of the metrics on the agreements are process indicators rather than outcome indicators, and there is no use of incentives payment mechanisms. There is an immense potential for saving public resources and enhancing health services by re-designing those contracts. Lastly, although the idea of bringing third-party funding to public services is bold, not having them, as it happens in the health

management agreements, is easier since the state does not have to worry about making the deal attractive for investors or providing a guarantee.

In the US and the UK, a whole field of pay-for-success and oriented outcome contracts evolved from the initial SIB style to help improve government spending without necessarily using third-party funding. For instance, in 2015 at the Harvard Kennedy School of Government, the Social Impact Bond Technical Assistance Lab, which used to provide technical assistance for issuing SIBs, became the Government Performance Lab, which also works to improve procurement practices and the results of government core spending. In the UK, the Oxford University Government Outcomes Lab has a similar mission, seeking “to deepen the understanding of outcome-based commissioning and provide independent support, data and evidence on what works, and what doesn’t.”¹⁰

It takes time until innovative ideas get fully embedded in organizations. SIBs in LA are currently moving from a moment of inflated expectations towards a more realistic understanding of its potential. During this path, the SIB model could be a crucial tool to bring the pay-for-performance agenda to the public sector in LA, as well as it was in other developed countries.

NOTES

¹ Between 2002 and 2016 poverty and extreme poverty decreased by 15.2 and 2.4 percentage points, respectively, in the region. See Economic Commission for Latin America and the Caribbean (ECLAC), *Social Panorama of Latin America 2017* (Santiago: United Nations publication, 2018).

² María Soledad Bos et al., “Latin America and the Caribbean in PISA 2015: How Did the Region Perform?” IADB, 2016, <https://publications.iadb.org>.

³ “World’s First Social Impact Bond to Reduce Reoffending in Peterborough,” Social Finance, n.d., <https://www.socialfinance.org.uk/peterborough>

-social-impact-bond.

⁴ “Impact Bond Global Database,” Social Finance, n.d., <https://sibdatabase.socialfinance.org.uk/>.

⁵ “MIF to Test Innovative Social Impact Bonds Financing Model in Latin America and the Caribbean,” Multilateral Investment Fund, 19 March 2014, <https://www.fomin.org/en-us/HomeOld2015/News/PressReleases/ArtMID/3819/ArticleID/1097/MIF-to-test-innovative-Social-Impact-Bonds-financing-model-in-Latin-America-and-the-Caribbean.aspx>.

⁶ “Impact Bond Global Database,” Social Finance.

⁷ David Bloomgarden et al., Social Impact Bonds & Education in Latin America, GEMS Education Solutions, 2014.

⁸ “Minuta de Edital de Concorrência,” State Secretary of Education, São Paulo state government, n.d., <http://201.55.46.199/wp-content/uploads/2017/11/CIS-MINUTAS-EDITAL-TR-e-CONTRATO-v7-21-11-2017-16h07min.compressed.pdf>.

⁹ Ernesto Martins Faria et al., “Value-for-money e geração de valor público na atuação das organizações sociais de saúde: contribuições para o governo do Estado de São Paulo,” dissertation presented to the São Paulo Business School, 2015, https://bibliotecadigital.fgv.br/dspace/bitstream/handle/10438/14166/Disserta%C3%A7%C3%A3o_out2015_FINAL.pdf.

¹⁰ “Our Mission,” Government Outcomes Lab, n.d., <https://golab.bsg.ox.ac.uk/about/our-work/>.

—

Isabel holds a bachelor and a master’s in economics from the University of São Paulo. She has worked at the Ayrton Senna Institute, one of Brazil’s larger educational NGOs, and as an advisor at the Undersecretary of Partnerships and Innovation of the State Government of São Paulo. In the government, she participated in projects involving partnerships with the private sector, especially in the social area. Isabel is currently pursuing a Master in Public Administration in International Development at the Harvard Kennedy School of Government.

Border Stories Project: Biking Along the Mexico-U.S. Border

*By José Antonio Alfaro, MPA Candidate at the Harvard Kennedy School
Photos by Andrés Casares*

Since President Donald Trump took office in January 2017, a narrative against Mexicans and Mexico has become more salient in some sectors of the American population. On May 2017, Andrés Casares and I embarked on an exciting adventure and started a 1,000-mile bike ride along the U.S.-Mexico border, around two-thirds of its total length (i.e. 1,500 miles approximately).

Throughout this initiative, our main motivation was to have a firsthand experience with border life. We biked through over 40 cities and villages and slept in nearly 30 different places. We listened to people's stories, documented their testimonies, and captured photographs of the magnificent landscapes of the region. Our journey allowed us to learn more about the implications of the current bilateral relations between the two countries through the lens of the residents of both sides of the border.

The Shorenstein Center on Media, Politics, and Policy at the Harvard Kennedy School supported this initiative by granting funding for a summer internship in Vice Mexico, where the articles were subsequently published. All the articles, stories, and pictures are available on our website and social media networks.

Instagram: @borderstoriesproject

Facebook: @Borderstoriesproject

Website: https://www.vice.com/es_mx/topic/historias-de-la-frontera

The compilation of pictures that follows presents some of the highlights of our adventure:

NOTES

¹ "About Half of Americans Say Trump Moving Too Fast," Gallup, 2 February 2017, <http://www.gallup.com/poll/203264/half-americans-say-trump-moving-fast.aspx>; "Americans' Favorable Views of Mexico Highest Since 2006," Gallup, 22 February 2017, <http://www.gallup.com/poll/204212/americans-favorable-views-mexico-highest-2006.aspx>.

² "Tijuana Regional Profile," San Diego Regional Economic Development Corporation, 13 February 2017, https://usmex.ucsd.edu/_files/frontera-friday/tijuana-regional-profile-2017.pdf.



The end of the Río Grande / Río Bravo, where the U.S. and Mexico meet at the Atlantic Ocean. Matamoros, Tamaulipas, and Brownsville, Texas.



“The Prada Shop.” Valentine, Texas. This “shop” has never been open for business. It was created in 2005 by the artists Elmgreen and Dragset and the architects Ronald Rael and Virginia San Fratello. The artists define their work as a “pop architectural land art project.” It is located 26 miles from Marfa, Texas. People interested in culture and art from the region regularly visit the city.



The wall in Nogales. Sixty-four percent of Americans in 2017 had a favorable view of Mexico, the highest favorable view since 2006, and only 40 percent thought that building a border wall was a very important, or somewhat important, goal.¹



Mailboxes close to Arivaca, Arizona. Having several mailboxes in one spot simplifies the postal service's work in this area. Most of the properties are ranches with many miles of land.



On our way to “La Rumorosa,” a mountain chain in Baja California, Mexico. We started biking from Mexicali to Tecate, Baja California. We left Mexicali at 4 AM (at 105 degrees Fahrenheit) and after 100 miles, an elevation gain of 4,500 feet, several flat tires, and bike repairs we made it to Tecate, Baja California, at sunset by 6 PM.



Playas de Tijuana. The beach at Tijuana, Baja California and San Diego, California, where the two countries meet at the Pacific Ocean.²

“The editors of the Latin America Policy Journal are to be congratulated for bringing together interviews with an important group of policymakers and academics as well as valuable contributions from graduate students, to approach what they rightly describe as a complex moment in the region. The articles in this issue range widely across topics and countries, from the impact of the technological revolution on Latin American labour markets to the challenges of urban development in Central America, Brazil’s institutional crisis and financial exclusion in Paraguay. It makes for a stimulating and informative read.”

Michael Reid, Senior Editor for Latin America and Spain at The Economist

“This Journal is a must read for anyone interested in Latin America. It provides a comprehensive and fresh view on the complex challenges the region faces and offers diverse perspectives on how to address them. The Latin America Policy Journal brings together the viewpoints of government leaders, academics and students on crucial issues, such as education reform and the way technology is changing the future of work. Collectively, the authors provide practical and innovative insights that invite the reader to think outside the box, stimulating the use of creative problem-solving strategies.”

Angélica Natera, Executive Director of Laspau

“At a time when democracy is being threatened by corruption, inequality, distrust and fake news, it is essential to understand the value of leadership, institutions and technology. The Latin America Policy Journal offers a magnificent analytical approach to explore the tough challenges that democracy faces today. Beyond the ethical and political crisis in the region, after reading these pages there is room for optimism.”

Alejandro Santos, Director of Revista Semana

“Voice is power. The Latin America Policy Journal is one of the school’s younger student policy journals, yet its editors have already shown how the best in a new generation are using voice to shape the future, not just for themselves but their people. Power across the Americas is shifting dramatically, and after more than a century of Washington’s near-unilateral hegemony, is entering a new phase. Democratic voices in Latin America will play an ever increasingly important role and the Latin America Policy Journal is where you will see it happening.”

Richard Parker, Public Policy Lecturer at the Harvard Kennedy School

