THE CHANGING ROLE OF THE STATE

Rediscovering the Path to Stable Growth in Brazil: Global Views on the Brazilian Dilemma

COLUMBIA | SIPA Center on Global Economic Governance

COLUMBIA GLOBAL CENTERS | RIO DE JANEIRO









THE CHANGING ROLE OF THE STATE

Rediscovering the Path to Stable Growth in Brazil: Global Views on the Brazilian Dilemma

December 12-13, 2018

Organized by: Edmar Bacha Thomas J. Trebat

Instituto de Política Econômica Casa das Garças Rio de Janeiro, Brazil

> FECOMERCIO São Paulo, Brazil

CONTENTS

FOREWORD BY EDITORS	5
PARTICIPANTS IN THE CONFERENCE	8
OVERVIEW CHAPTER: RESTARTING GROWTH IN BRAZIL	9
PANEL I - Fiscal and Monetary Challenges in 2019 and beyond	
Fiscal Priorities and Political Constraints in Brazil Ana Paula Vescovi	20
Monetary Policy and Credit Conditions in the Global Economy: What Should Brazil Expect? <i>Patricia Mosser</i>	34
Promoting Fiscal Adjustment in Brazil: Old and New Approaches Gustavo H.B. Franco	44
PANEL II - Reforming the State in Brazil: New Ideas and Approaches	
Reforming Brazil: Growth, Efficiency and Redistribution Arminio Fraga	48
A More Efficient State in Brazil: Is It Possible? Ana Carla Abrão	51
Legal Impediments to Economic Reform <i>Carlos Ari Sundfeld</i>	57
The Outlook for Social Security Reform in the New Government <i>Paulo Tafner</i>	59
PANEL III - Policies to Promote Innovation and Employment in Brazil	
Brazil: A decisive and divisive time ahead Albert Fishlow	68
The Challenge of Infrastructure Modernization in Brazil <i>Claudio Frischtak</i>	70
The Reforms Brazil Really Needs José Alexandre Scheinkman	75
Macroeconomic Policy and the Middle-Income Trap: Latin America vs. East Asia Takatoshi Ito	77

CONTENTS

PANEL IV - Business Perspectives on the Challenge of Restarting Growth in Brazil: What Priorities for the Government?

New Business Opportunities in Brazil: A Multinational Perspective André Clark	85
An Executive's Perspective on the Challenge of Resuming Growth: Priorities for the New Administration <i>João Miranda</i>	88
Should Brazilian Businesses Be Optimistic? <i>Marcio Holland</i>	92
PANEL V - Brazil and the World: Opportunities and Risks	
Brazil and the World: Opportunities and Risks Jan Svejnar	97
Pathways and Proposals for a New Cycle of Trade Opening in Brazil Sandra Polónia Rios	105
Brazil and the World in the Years Ahead <i>Pedro Malan</i>	111
Closing Remarks President Fernando Henrique Cardoso	115

FOREWORD BY EDITORS In the aftermath of the great global recession of 2008–2009, perhaps no country has struggled more to reestablish a path to stable growth than Brazil. Per capita GDP over the last ten years has stagnated. Serious fiscal imbalances have resurfaced. Competitiveness has suffered. Political unrest and polarization have undermined Brazil's ability to respond to the economic challenges.

In many respects, Brazil's dilemma is surprising. In the early 2000s, the country was widely believed to be on a path of sustainable growth. Governments at the time seemed to have found a formula for economic growth that would also ameliorate longstanding income inequalities, a growth that seemed to boost the prospects of Brazil's poorest residents and traditionally excluded groups while at the same time attracting significant private investment. Brazil appeared to be resuming a major place on the global stage.

Restoring Brazil to a path of sustainable growth, therefore, has been the dominant debate in Brazil for the past decade. Recent elections in Brazil suggest that the electorate is ready to consider new ideas to restructure the economy and restore growth and a sense of optimism about the future. Yet, the debate remains. What reforms are needed? Can such reforms, if implemented, really help Brazil restore growth?

These simple yet all-important questions motivated the organizers of this volume to convene the conference Rediscovering the Path to Stable Growth in Brazil: Global Views on the Brazilian Dilemma. The two-day conference took place in São Paulo and Rio in December 2018 and gathered the opinions of economists, policymakers, and business leaders. Many chapters in this volume are verbatim transcripts of conference remarks. Others are written submissions by the authors. All are written in simple, accessible style so that non-specialists can understand and form opinions about complex issues. Published as it is in English, this conference volume is aimed especially at audiences outside of Brazil that are perplexed about the country's direction.

The conference itself was an extraordinary cooperation between Brazil's Instituto de Estudos de Política Econômica/Casa das Garças, one of the country's most important think tanks, and Columbia University through Columbia's Center on Global Economic Governance and its Global Center located in Rio de Janeiro. The Rio and São Paulo sessions have been seamlessly interwoven in the chapters of this book to group presentations together by themes.

Fecomercio in São Paulo played a crucial role by sponsoring a full day of sessions in São Paulo in their headquarters in São Paulo. We are grateful to them and to our media partners, Um Brasil, especially Maria Izabel Collor, André Rocha, and Paula Dias. Revista Voto provided critical financial support to the conference. Special thanks go to the Executive Director Karim Misculim.

Many persons collaborated to put this volume together. Fernanda Guardado led an excellent team of volunteers (luri Honda, Henrique Pires, and Yan Moreira) who capably recorded the event in Rio. Joana Negri helped with translation and initial editing. Lyle Prescott provided excellent copy editing services. Maria Eduarda Vaz did the layout. Ilana Cac of the Columbia Global Center in Rio oversaw putting all the parts together to produce this book.

We would also like to make special mention of Professor Jan Svejnar, Director of Columbia's Center on Global Governance. His vision has been behind the three annual conferences held to date on the role of the State in Brazil. His experience has helped us all to understand Brazil's dilemma, and its opportunities, in global comparative perspective.

The Columbia Global Centers | Rio de Janeiro gratefully acknowledges the vital institutional support it receives from the Lemann Foundation.

Finally, the editors are deeply grateful to all those authors who contributed to this slim yet important volume. We join with them in the hope that the book will stimulate understanding and debate inside and outside Brazil on restoring economic growth in this most dynamic of countries.

Edmar Bacha Instituto de Estudos de Política Econômica Casa das Garças

Thomas J. Trebat Columbia Global Centers | Rio de Janeiro

Participants in the Conference December 12-13, 2018

Edmar Bacha IEPE/Casa das Garças

Thomas Trebat Director, Columbia Global Centers | Rio de Janeiro

Jan Svejnar Director, Center on Global Economic Governance and Professor, Columbia | SIPA

Ana Paula Vescovi Deputy Minister, Brazilian Ministry of Finance

Elena Landau Partner, Law Firm of Sergio Bermudes

Patricia Mosser Senior Research Fellow, Columbia | SIPA

Armínio Fraga Former President, Central Bank of Brazil

Albert Fishlow Professor Emeritus, Columbia | SIPA

Claudio R. Frischtak Director, International Growth Center (LSE) and President, Inter.B

José Alexandre Scheinkman Professor of Economics, Columbia University

Takatoshi Ito Professor of International Affairs, Columbia | SIPA

Marcos Troyjo Ministry of the Economy

Sandra Polónia Rios Director, Centro de Estudos de Integração e Desenvolvimento (Cindes) Pedro Malan Former Finance Minister of Brazil

José Carlos Carvalho IEPE/Casa das Garças

Maria Silvia Bastos Marques President and CEO, Goldman Sachs Brazil

Mansueto Almeida Secretary of the Treasury, Ministry of Finance

Gustavo Franco Former President, Central Bank of Brazil

André Clark CEO, Siemens-Brazil

Augusto Lins President, Stone Pagamentos S.A.

João Miranda CEO, Votorantim

Márcio Holland Professor, Escola de Economia de São Paulo (FGV)

Ana Carla Abrão Brazil Market Leader, Oliver Wyman

Carlos Ari Sundfeld Professor, FGV-SP

Patricia Ellen da Silva Country Manager, Optum Brazil

Paulo Tafner Researcher, FIPE – Universidade de São Paulo

Fernando Henrique Cardoso President, Fundação FHC

OVERVIEW CHAPTER: RESTARTING GROWTH IN BRAZIL

RESTARTING GROWTH IN BRAZIL

EDMAR BACHA & THOMAS J. TREBAT

The two co-editors of this volume are pleased to present this summary of an extraordinary set of discussions that took place in Rio and São Paulo in December 2018, just as the interim government of President Michel Temer was preparing to hand over the economy to a new team under President Jair Bolsonaro. We believe that the brief essays in this volume provide one of the most comprehensive, up to date, and userfriendly discussions of the Brazilian economy available in the English language.

The overall theme was to discuss pathways to stable and sustainable growth in Brazil. The conference assembled a group of 23 speakers, including academic economists, policymakers, think tank researchers, and business leaders. The large cast of local Brazilian experts was joined by economists from Columbia University's Center for Global Economic Governance. The Columbia group provided a global comparative context for the expert analysis of the Brazilian dilemma provided by the Brazilian participants.

This introductory chapter begins with a view of the problems with economic growth in Brazil. It then goes on to summarize the principal reform proposals presented by the speakers at the December 2018 conference. For the most part, we are able to refer to author chapters in this volume that develop in more detail the points contained in this summary. However, we are also including in this overview the insights derived from a number of speakers who elected to speak off the record and not to include their remarks in this volume.

A Diagnosis of the Growth Dilemma in Brazil Simply put, Brazil has been a society inspired by an optimistic view of its future as a great and prosperous nation. The economic reality for Brazil and the Brazilians, however, has been quite different, especially in the last several decades. Except for a several years of a

THE CHANGING ROLE OF THE STATE

commodity-led boom in the early 2000s, growth and living standards have barely improved and productivity has stagnated. Brazil, it seems, is a classic case of an economy stuck in a "middleincome trap", meaning it has failed to converge toward the per capita incomes of the club of wealthy nations.

Put more starkly, rather than converging toward the wealthy nations, Brazil is lagging behind many emerging and developing economies around the world, including, but not limited to, India and China and other Asian economies. The sheer numbers are alarming. In his chapter, Pedro Malan describes how Brazil has been falling behind for at least the last two decades. During the 2003-2010 period, economic growth in Brazil was on the order of 4% per year, respectable, to be sure, but considerably slower than the almost 7% annual increase registered in the rest of the developing world.

Brazil's economic situation worsened in the ensuing decade and diverged sharply from the rest of the developing world. From 2011 through 2018, the Brazilian economy barely grew at all, averaging just 0.7% per annum. The developing world as a whole grew at a much faster clip: 4.9%, or fully 4% faster than Brazil. As this conference took place in late 2018, the consensus growth outlook for 2019-2020 in Brazil was for this frustrating pattern of growth stagnation to continue.

Virtually all speakers in the conference referred to explanations for this alarming growth panorama in Brazil. A consensus emerged early on that the problem was rooted in an outdated, inefficient role of the State in the Brazilian economy. Pedro Malan refers to a strong and deeply embedded idea in the country that the *deus ex machina* of economic development in Brazil is the State and state intervention through a variety of instruments, such as stateowned enterprises, state-owned development banks, and aggressive government reliance on compulsory savings. He argues that this conception of an omnipotent and salvific State is slowly changing in Brazil, but that this understanding still penetrates deeply in government and in civil society.

Many other speakers echoed these remarks about the primacy of getting the fiscal house in order as the first order of business. Ana Maria Vescovi, for example, called attention to the deterioration in Brazilian public sector finances. This fiscal dilemma is marked by a plunge in the primary budget surplus of 5% of GDP and a rapidly rising debt to GDP ratio, now in excess of 75%, already much higher than in peer developing economies, and trending steadily higher. Per capita income in Brazil since the 1990s has been mired at about only one-fourth of U.S. GDP. While such measures of comparative income are flawed, this suggests that living standards in the United States are four times the level of Brazil, a very large and persistent gap indeed.

Vescovi and other speakers emphasized that these fiscal imbalances started to reverse during the interim Temer government, but that much more needs to be done, she argues, as do many other contributors to this volume. Most of the reforms proposed in this volume are directly related to reducing the heavy fiscal burdens on the State while unleashing Brazil's private sector. By and large, the proposals put forth do not involve raising additional taxes in the country. Brazil's tax burden stands at about 33% of GDP, fully 10% higher than the average for Latin American economies.

Besides acting as a drag on growth and productivity, the fiscal stance of the Brazilian government worsens income distribution by a regressive tax system and by directing transfers disproportionately to upper-income groups. Brazil's income distribution, it bears mention, has long been among the least equal in the world, so the distributional impact of fiscal policy is a particularly serious matter. The tax system relies heavily on indirect taxes, which fall most heavily on lower-income groups, so this is another facet of how the poor fiscal stance contributes to high rates of inequality in Brazil. After taking into effect the combined effects of taxation and fiscal transfers, Brazil's income distribution barely improves at all which is a sharp contrast to patterns in wealthier countries.

The Political Economy of Reform in Brazil

Many speakers cautioned that economic reform in Brazil requires much more than sound technical analysis of policy alternatives. Broad popular support, and support from the Brazilian Congress, must be marshaled for any reform effort to succeed over the long-term.

Mansueto Almeida, a senior government official who addressed the conference, warned against excessive optimism about what could actually be accomplished in terms of fiscal reform and fiscal adjustment. The official expressed the belief that broad societal consensus in favor of fiscal adjustment does not yet exist in Brazil. Although he believed that social security reform would, eventually, be passed, the reform would likely be watered down. Furthermore, more fundamental fiscal reforms, and a real change in the role of the State, would depend on the Government's ability to present data, to spend political capital in Congress, and to mobilize support in civil society for the type of radical fiscal reforms that Brazil so clearly needs.

Almeida argued that the stakes for Brazil are very high and that there is no "easy way out". A political failure by the new Bolsonaro government to achieve a consensus in Congress on fiscal reform in Brazil would prolong the economic stagnation, cause the tax burden to rise, and risk a resurgence of inflation. He emphasized that winning the support of Congress would necessarily be time consuming, require a great deal of political skill, and probably result in economic reforms that fall short of any technocratic ideal.

The speaker also pushed back against the simplistic way of thinking that waging the ongoing battle against political corruption in Brazil would be enough to clear the way for economic reforms. Reaching consensus on which reforms to carry out, and when to do so, is a much more complicated proposition. "Much of what has gone wrong in Brazil", he argued,

"is a consequence of our misguided choices as a society." Almeida was cautious about the new Bolsonaro government's strength in Congress. While the President's party (the PSL) won a large number of seats in the Congress, those added up to only slightly more than 10% of the total, and the Government would need to work with many other parties to build a durable political coalition in favor of reform.

Gustavo Franco referred to a thin basis of support in public opinion for the types of marketfriendly economic reform being promoted by the new government's economic. Jair Bolsonaro appeared to attract a great deal of support for a liberal economic agenda, but how deep does this support really penetrate? Much of the popular support appeared to come from the understanding that liberal economic reforms were worthy of support not because of the intrinsic worth of the ideas, but simply because they were the opposite of policies traditionally supported by the Workers Party.

The point seemed to be that the types of economic policies being promoted by the new government had become tinged with ideology. In other words, such critical concepts as fiscal responsibility have become, in the popular conception, a political platform coopted by the most conservative elements in Brazilian society, rather than a matter of good sense, logic, and rational thinking. Just as the need for fiscal equilibrium in Brazil has become tinged with ideology, so, too, have other policies such as openness to foreign trade, competition policy, the struggle against corruption in government and crony capitalism, and so forth.

Far from being merely the subject for a dry academic debate, the survival of these ideas in Brazil will be absolutely crucial to the construction of a durable formula for accelerating growth in the future. As Takatoshi Ito and Jan Svejnar both argued in looking at successful growth acceleration experiences in other developing regions of the world, it was the ability of policymakers of various ideological persuasions to communicate clearly and with data the importance of "liberal" economic ideas, not as elements of a right-wing plot, but as planks of a new economic growth formula that should be of appeal to governments of both the left and the right.

In the end, speakers expressed differing opinions Bolsonaro on whether the government, at the highest levels of government, had either the inner conviction or the political skill to win the day. Many expressed admiration for the new economic team, and most called attention to the roadmap for reform already drawn up by the interim Temer government. Others expressed unease about the Bolsonaro government's likelihood of success and worried about the consequences for Brazil of a potential failure to implement the right sorts of reforms in a timely manner.

Proposed Solutions: The Broader Framework

In terms of detailed reforms to be enacted, the starting point for the conference discussion was the economic reform framework put in place after mid- 2016 by the interim government of Michel Temer. Ana Maria Vescovi, in her contribution to this volume, presents a comprehensive overview of what the interim government economic team tried to do in terms of reform, and, more importantly, how it set forth the reform agenda for the new government taking office in 2019.

Vescovi, who at the time was working with the Temer government's economic team, sketched out the government's main economic agenda. It was based on three pillars: 1) fiscal consolidation; 2) increased productivity; and 3) efficiency in the credit markets. These pillars cover the large number of reforms under discussion in Brazilian society as a whole. The proposed reforms that fall under these broad headings are many, and the list continues to grow. These include, first and foremost, reform to the social security system. Other reforms include: labor market reform, international trade policy reform, reform of the credit markets, privatization of stateowned enterprises, and improvements in the business environment.

The Temer government was able to make limited progress toward implementing the three pillars.

PANEL I - FISCAL AND MONETARY CHALLENGES IN 2019 AND BEYOND

Its major economic reform accomplishments included a ceiling in real terms for the growth of government expenditures, a fiscal recovery regime for bankrupt Brazilian states (including the State of Rio de Janeiro), better governance procedures for state-owned enterprises, and improved regulation of the credit markets. It also enacted one of the most important recent reforms in Brazil's outmoded labor market regulations. Looking back at the track record of the two-year period (2016-2018), speakers at the conference were generous in their evaluation, while also confessing that much more could have been accomplished absent political constraints, some of these of the Temer government's own making.

For the most part, speakers focused primarily on the future reform agenda, on what has to be done over the next four years. In Vescovi's view, the proposed reforms are "fair, reduce inequality, and increase the economy's growth potential." However, the specific reforms are, also, each one of them, facing organized resistance from interest groups that benefit from the current policies. Other speakers during the two days picked up on this theme, i.e., that the debate in Brazil was not so much one of a clash of competing ideas on what ought to be done to restore growth, but, rather, a clash between new and better approaches to the economy and deeply entrenched interest groups pursuing narrow sectoral interests.

We now turn to a more detailed consideration of the proposed reform agenda for Brazil as discussed at the conference.

Social Security Reform: The Key Reform

In his contribution to this volume, Paulo Tafner, a noted expert on social security finances, set forth the most important parameters. While still a relatively young country, Brazil's generous pension system results in an annual expenditure on the order of 14.5% of GDP, fully 50% of the central government budget. On current projections, retirement spending by the federal government will reach 80% of all expenditures by as early as 2023. In an affirmation shared by other speakers, Tafner described this possibility as a "tragedy", requiring immediate and forceful action. If anything, he argued, the situation was even worse when the deficits in retirement spending by Brazilian states and municipalities were taken into account. Something has to be done, and quickly, was the consensus opinion regarding social security.

Convinced of the need for a sound reform plan coming from civil society, Arminio Fraga teamed up with Tafner (and other experts) to propose a daring reform of social security in Brazil. Their two chapters in this volume cover the plan in some detail. The key bottom line was that the plan, if fully implemented, would deliver an impressive fiscal impact. Their calculations suggested a savings from reform on the order of 20% of GDP over a ten-year period, and up to 25% of GDP if the states and municipalities were to join in the reform. The impact of 2-2.5% of GDP per year would be the equivalent of half of the current primary fiscal deficit of 5% of GDP, so it would make a substantial contribution to fiscal solvency and have an effect on investor expectations.

As it turned out, the reform proposal presented at the conference was overtaken by subsequent events in Brazil. However, its boldness and its clear principles appear to have had an outsized effect on the actual legislation currently (mid-2019) moving through Congress. Obviously, a plan of this magnitude does involve some pain; retirees in Brazil would have to spend more time on the job before retiring, consistent with the changing demographics of Brazilian society. At the same time, the resulting system would attack privileges now afforded to interest groups and, on balance, improve the distribution of income. For example, it would include a universal basic income for any Brazilian at age 65. The reform could also be phased in slowly and, eventually, it would allow for the creation in Brazil of fully funded individual accounts. A key additional feature of the reform would be to remove pension guarantees from the Brazilian constitution, a move that would permit future adjustments to the social security system by legislative action rather than the much more cumbersome process of constitutional reform.

Civil Service and Administrative Reform

speakers identified the Numerous large spending on the civil service workforce in Brazil as an example of an uncontrolled expansion of the State in the economy and an obstacle to sound fiscal management. For example, the number of civil servants employed by the federal government in Brazil has increased 28% in just the last two decades. Salaries, benefits, employment stability, and retirement systems for public sector employees are far more generous than for those in the private sector. The result is that the public sector attracts the "best and the brightest", but without adequate controls in place to limit spending and guarantee efficient provision of public services.

Speakers, including Fraga, Carlos Ari Sundfeld, and Ana Carla Abrão, all called attention to how little reform has occurred over the years in the area of human resource management in the Brazilian public sector. Civil service could well be a "dark area" within the broader reform agenda, but it is far from innocuous in its importance for fiscal stability. One of the reasons for this neglect is that the number of separate career tracks and unique legislative frameworks within government in Brazil is mind-bogglingly complex. Abrão, in her chapter, talks of 287 separate tracks (or "careers") in the federal government alone. Worse yet, states and municipalities also have an enormous multiplicity of career tracks. The State of São Paulo has 180 for its workforce; the City of São Paulo has 52.

Human resource management in the Brazilian public sector is difficult as well as complex. Employment stability and promotions, for example, bear little or no relationship to job performance. Sundfeld calls attention to the fragmentation of legislative competence on personnel matters since municipalities, states, and the federal government all have separate legislations. Financial control agencies and audit courts are also fragmented. States and municipalities, for example, have found creative ways to circumvent the strict limits on personnel expenditures imposed by Brazil's

Fiscal Responsibility Law.

Fraga and others called for "radical" changes in the way the State is being managed in Brazil. Abrão and Sundfeld came up with specific plans to promote such change as detailed in their chapters. The complexity born of the multiple career tracks must be drastically reduced so that hiring policies can become more rational and can change as demands on government change over time. Mandatory performance evaluations must be conducted, with adverse consequences for poor performance. The incentive structure must be modified, doing away with the present system of automatic promotions and pay raises. Government must regain the ability to dismiss workers who consistently fall short of performance expectations.

Tax reform

A consensus emerged from the conference discussions that Brazil's tax system is broken. The common understanding in Brazil, echoed by many speakers, is that the large and complex burden of taxes in the economy (in excess of 33% of GDP) places a drag on economic growth by undermining productivity. It also fails in terms of basic fiscal fairness and contributes to economic underperformance by distorting resource allocation. Above all, the relatively large burden of taxation, which is higher than in the US or Japan, stands in stark contrast to the poor quality of public services in Brazil in such fields as health, education, public security, and economic infrastructure.

Vescovi argued, for example, that changing the current tax structure is critical to increasing productivity, encouraging job creation, and reducing social inequality. She called particular attention to the large amount of fiscal resources expended upon tax subsidies and tax exemptions that benefit interest groups - particular sectors and businesses. These subsidies to business over the last two decades have risen from 3% of GDP to 6.7%, a huge corporate tax giveaway and three times larger than government investment in future growth.

In his chapter, José Alexandre Scheinkman

echoes the call for tax system reform in Brazil, arguing that it contributes to low productivity in the economy. He proposes instead the creation of a national value-added tax (or VAT) with uniform tax rates across all products. The proposed VAT would replace a multitude of taxes now in effect that contribute to resource misallocation. In his view, the VAT would be collected centrally and then distributed to the Brazilian states. Among other speakers, he also called for reform to income tax legislation, which currently results in highly paid professionals (e.g., lawyers, doctors, consultants) paying far less than their fair share of income taxes.

Privatization of State-owned Enterprises

Brazil has a long tradition of state-owned enterprises (SOEs) operating in key economic sectors (especially energy, but in other sectors as well). These include such well-known firms as Petrobras, Eletrobras, and the National Development Bank (BNDES). In the 1990s Brazil had a strong record of privatizing state firms, but the momentum halted in the last two decades. However, the presidential elections in 2018 brought privatization back to the reform agenda, particularly focused on Brazil's largest remaining SOEs. After all, speakers asked, were the largest state firms really still strategic or were they, instead, a drag on competition?

Several speakers at the conference issued strong calls for privatizing the state firms, thus taking advantage of the evolution of public opinion on the subject. While recognizing substantial resistance from interest groups, one speaker proposed jettisoning piecemeal approaches to privatizations by selling all SOEs, without exception, in the shortest timeframe possible. More measured approaches to reducing the size of the SOEs would, in this speaker's analysis, result in endless delays and court battles.

The Brazilian Constitution of 1988 actually strictly limits the role of SOEs to areas directly related to national security or, more vaguely, to promote the collective interest. Speakers spoke in support of a strict interpretation of the Constitution, noting that most of the largest SOEs came into existence prior to the promulgation of

the 1988 document and under legislation that might not meet the stringent conditions of the Constitution. Thus, the proposal would be to put all SOEs up for privatization as a first order of business, and only then filter the list for the firms that truly are vital to national security or that clearly promote some collective interest. Following that determination, the privatization process would be handled expeditiously without the need for Congress to authorize it on a caseby-case basis.

In his own comments on Eastern European economies, Jan Svejnar alluded to their privatization experiences following the demise of the Soviet Union. State control of enterprises was much larger in Europe than in Brazil. While this region privatized relatively quickly, lessons emerged that might be relevant for Brazil. The first was that rapid privatizations did not always assure that the privatized firms wound up in the right hands; foreign ownership resulted in greater productivity gains in the first ten years whereas results were more mixed when stateowned assets were sold to local investors. The second was privatization's adverse impact on employment tended to be less than initially feared. Many newly privatized firms took advantage of broader economic reforms, especially Eastern European countries' decision to open their economies to foreign trade almost all at once, and actually increased employment. This helped diminish political opposition to the privatization process and contributed to a better resource allocation.

Trade Liberalization and Reform

Brazil today is a remarkably closed economy and poorly integrated into global value chains. Despite trade liberalization in the early 1990s, the industrial sector in Brazil remains highly protected through a variety of policies, including tariffs and non-tariff barriers, such as national content requirements. Takatoshi Ito called attention to the sharply contrasting evolution of openness in the case of the rapidly growing Asian economies. Many of these economies were as (or more) protected than Brazil prior to reforms which ignited their economic growth spurts. Korea's foreign trade sector, for example,

today is the equivalent of 60% of GDP; China's, is 45-50%. In Brazil, openness is only on the order of 29% of GDP. Speakers remarked on Brazil's reluctance to engage in bilateral or multilateral trading arrangements beyond the Mercosul arrangement. The EU-Mercosul Trade Agreement which was finally completed in 2019 was under negotiation for more than 20 years, for example.

For other speakers, Brazil's trade policies seemed stuck in a time warp dating back to an era in the 1950s and 1960s when the key to rapid growth appeared to be taking resources out of the backward area of the economy (i.e., agriculture) and reallocating them to industry. Many years later, the industrial sector is characterized by low productivity and poor global integration while the agricultural sector is a world leader. Clearly, Brazil as a society needs to think beyond agriculture and evolve its role in the global economy. The internationalized part of the economy needs to grow.

Sandra Rios made one of the most direct and specific appeals for a bold trade reform for Brazil, although cautioning that even a radical opening would not be a panacea for economic growth. According to the World Bank, the impact of unilateral trade liberalization is more positive than the impact of endless complicated trade negotiations that are often stymied by resistance from interest groups that benefit from protectionism. With this in mind, Rios strongly supported unilateral actions by Brazil as a means to break through the logiam of interest group politics. Her detailed policy proposals covered four areas of trade policy: 1) unilateral tariff reduction with a focus on industrial goods; 2) reduction and dismantling of non-tariff barriers; 3) simultaneous negotiation of preferential trade agreements to lock in unilateral reforms (following the example of India); and 4) dismantling of industrial policy instruments (e.g., national content and phytosanitary regulations) with embedded protectionist biases.

Other speakers echoed the call for trade reform. One suggested reorganizing the government trade bureaucracy to merge trade data and trade

intelligence functions into other government units handling trade negotiation and resolution of trade disputes. The resulting trade apparatus should also be in permanent dialogue with Brazil's business community. Given the tendencies of the incoming Bolsonaro economic team, one speaker predicted that Brazil would become a much more open economy over the next four years than it was in 2018, predicting "exponential growth" in the number of trade agreements. These would be pursued with all potential partners, with perhaps a special focus on the Asian countries. This same observer also predicted that Brazil would forge entirely new and deeper relationships with multilateral and international financial institutions the world over, not allowing ideology to stand in the way of reaching new partnerships.

José Alexandre Scheinkman supported lowering tariff and non-tariff barriers as key to the productivity dilemma and used the case of Brazilian agriculture to buttress his Between 2000 and 2013, total factor point. productivity barely improved in services and it appears to have actually fallen in industry in Brazil. Yet productivity doubled during the same period in agriculture. Why? First, Brazil invested heavily in the science of agribusiness through the Brazilian Agricultural Research Corporation (EMBRAPA), and this pocket of excellence in science boosted productivity. Brazil has also maintained an open trade policy in agriculture since 1990, a sharp contrast with the high rates of protection afforded domestic industry. Scheinkman's conclusion: "The good news is that the performance in agriculture indicates that Brazil may need to solve only a few of the problems depressing productivity (in industry and services) to achieve much higher growth rates."

Infrastructure Reform

In his chapter, Claudio Frischtak takes on the critical, and relatively neglected, area of infrastructure reform in Brazil. The stock of economic infrastructure in Brazil (comprising transportation, telecoms, power and water/ wastewater) is about 30% of GDP; it should be at least 60% in order to provide the required support for higher rates of economic growth. Moreover, most of the infrastructure in Brazil dates back at least 30-40 years, and alarming signs of physical decay caused by low investment and deferred maintenance are evident in many infrastructure sectors. Worse yet, the largest investment gaps are precisely in those services that disproportionately affect the poorest in Brazil (water and sanitation and urban mobility, among others). Frischtak points out that the youngest Brazilians (ages 0-5 years) are those who suffer the most from this poor infrastructure.

Bold plans to address infrastructure deficiencies should be a top priority for Brazil's new government. In order to reach the target level of 60% of GDP in infrastructure over the next 20 years, a minimum goal, the present rate of investment must be increased from 2% of GDP to at least 4% net of depreciation of existing infrastructure assets. Frischtak argues that a gradual buildup in public and private investment in infrastructure (the investment push does not have to come all at once) would have a significant and cumulative effect on GDP growth in Brazil over the next eight years.

What should Brazil's reform agenda in infrastructure be? Speakers agreed with Frischtak that the process of infrastructure planning and investment is highly fragmented resulting in an enormous waste of scarce resources. The diagnosis cries out for the federal government to conduct a more unified decisionmaking process. It is of particular concern that Brazil devotes relatively few resources to exante cost benefit analysis of public projects and little or nothing to ex-post impact evaluation. Beyond these basic steps, Brazil must pay closer attention to the need to create the proper legal and regulatory environment to attract much more private investment into the sector. Government resources alone will not suffice to reach the target levels of infrastructure needed.

Brazil in the World: The Global Constraints on Growth

A number of the Columbia University contributors to this volume used their comments to set forth the external factors that will influence growth prospects for Brazil. Albert Fishlow pointed out the many risks in the international arena that will complicate growth even if the reform agenda advances in Brazil. He emphasized the ratcheting down of global growth resulting from the Brexit imbroglio in Europe, the swollen size of the US fiscal deficit, the China-US trade war and its chilling effects on trade, and the festering instability in Venezuela. He warned as well that the global immigration crisis would not abate any time soon and would remain a major source of political and economic instability. Fishlow argued that all these factors, taken together, suggest the need for a great deal of caution before forecasting substantial increases in foreign investment in Brazil even if some of the key reforms are passed.

Patricia Mosser dedicated her remarks to an analysis of global credit conditions and the implications for Brazil. On this front, she emphasized that the outlook for Brazil could be encouraging. Global credit conditions continue to ease despite an earlier attempt by the U.S. Federal Reserve Bank to tighten monetary policy. Growing leverage is a global phenomenon, and is increasing particularly rapidly in China and Mexico. However, in Brazil, recently credit has not been expanding, in contrast to the global pattern. This could actually be good news for Brazil, she argues. If the reform agenda put forth in this conference is implemented, Brazil could find good access to international credit to finance investment and growth.

Other speakers agreed with the assessment of easier global credit conditions for Brazil. However, they also mentioned risks to this more optimistic credit scenario. Mosser herself emphasized that lenders in the United States were taking excessive risks in the search for higher yields. China's rapid credit growth remains a global concern as it could lead to a rapid and destabilizing process of deleveraging. The US economy itself, though strong for the moment, poses significant risks to global credit, particularly if the US enters into a recession or period of slower growth. This would surely cause global credit conditions to worsen. Slowdowns are already underway in Europe and in Japan. The likelihood of global trade contraction, a distinct possibility resulting from the trade wars, would also worsen credit conditions for Brazil.

Reactions from the Brazilian Business Community

Representatives of the business community provided a focus on more microeconomic measures Brazil needs to improve its notoriously poor business environment. In his chapter, João Miranda endorsed the call for simplification of the tax regime which adds enormous expense to business and distorts resource allocation. He echoed calls for substantial regulatory reform in Brazil in order to increase private investment, sweeping reforms in the capital markets to permit level playing field in access to credit, and an end to concentration in the Brazilian banking sector.

Miranda and other business leaders saw a role for government to stimulate investment in science and in innovation that could have spillover effects on business and entrepreneurship in Brazil. He endorsed the proposals to lower tariffs and non-tariff barriers. Patricia Ellen, the incoming Secretary for Economic Development in the State of São Paulo, spoke favorably of efforts under way in São Paulo to integrate industry and commerce in the state with public funding for science and innovation, seeing a greater role for collaboration between universities and business, to the benefit of both. The point was made that São Paulo was well placed to take advantage of trade liberalization in order to increase the participation of industry and service sectors in global value chains.

Discussion occurred around the theme of the future of Brazilian industry, especially knowledge-based industries incorporating technologies popularly referred to as Industry 4.0. Consensus opinion seemed to be that Brazil was lagging behind much of the rest of the world in transforming its industrial sector, but also that the country had some momentum in knowledge-intensive industries and that it could close the gap with improved policies. Andre Clark, for example, argued that Brazil could build on the successful experiences to invest much more heavily in technology and empowerment of the workforce. All industries and sectors, he emphasized, need to invest in digitalization as a pathway to the global economy of the future.

Márcio Holland argued against concerns are that the economy is "de-industrializing" and, therefore, needs to remain protected and closed. These concerns underlie popular support for industrial policies and business subsidies, but such support only protects industries of the past with poor productivity profiles. He argues that the new industry emerging in Brazil (Industry 4.0) depends more on tight integration into global value chains rather than the orientation toward the domestic market characteristic of Brazilian industry in the past. This shift would require breaking with the industrial policies of the past and embracing a new set of policies to promote knowledge-based industries and science education. Fervent pursuit of the basic reforms discussed in this conference could help Brazil catch up quickly in these areas.

Conference Closing Remarks

Former President Fernando Henrique Cardoso provided closing remarks that helped capture the spirit of these two days of conferences. He agreed with the importance of economic reform in a variety of areas, starting with social security reform, as a means for Brazil to resume a path of stable economic growth with income distribution. At the same time, he cautioned against misplaced faith in economic reforms alone, or in the power of liberal economic thought alone, to transform Brazilian society. The political and social reality in Brazil is even more important than the economic policy agenda, and more discouraging than the economic reality. Restoring growth in Brazil calls for much more than an economic agenda. It will require political consensus and explicit policies to address the social agenda as well. Cardoso warns in his chapter: "It is an illusion to believe that the growth of the contemporary [Brazilian] economy will solve the new challenges of social inclusion."

With these words in mind, a consensus did

seem to emerge from the conference on several fronts, perhaps best summarized by Pedro Malan, but shared by others. It was that the Brazilian people would come to embrace the reforms emphasized in the conference. Fiscal responsibility and a more globally integrated and market-friendly Brazil were not ends in and of themselves, but without these conditions, Brazil will have scant hope of achieving the higher rates of growth of income and employment that the Brazilian people desperately need. And, as many speakers concurred, the Brazilian people have shown in the past - and will again in the future - that they are up to the challenges that lie ahead.

PANELI: FISCAL AND MONETARY CHALLENGES IN 2019 AND BEYOND

FISCAL PRIORITIES AND POLITICAL CONSTRAINTS IN BRAZIL

ANA PAULA VESCOVI

Brazil's large fiscal imbalances and distribution challenges call for the next government to take strong measures to make the required fiscal adjustments. Accelerated expenditure growth over many years has led to chronic fiscal imbalances. The primary fiscal position has moved to a deficit of about 2% of GDP. The gross debt-to-GDP ratio has increased 20 percentage points in the last four years to 75% of GDP (see **Figure 2.1**).

At this debt-to-GDP level, Brazil compares extremely unfavorably to most peer developing economies (see **Figure 2.2**).

In Brazil, growth is extremely slow because of our low level of productivity at a time when other developing countries are increasing their productivity much more rapidly. The slow growth has been a drag on income growth, especially in the context of the Brazilian population's accelerated aging. Since the 1990s, Brazil's percapita income has been stagnant at less than 20% of US GDP per capita (see **Figure 2.3**).

Labor productivity, a principal factor explaining this outcome, is actually below the 1990 levels and compares unfavorably with the productivity trends in other developing economies. It is even among the lowest of the major Latin American economies; far lower, for example, than productivity levels in Mexico and Chile (see **Figures 2.4** and **2.5**).

Brazil is also one of the countries in the world with the greatest inequality; it has a GINI

Figure 2.1. Chronic fiscal imbalance due to accelerated expenditure growth



Chronic fiscal imbalance due to accelerated expenditure growth

Source: Secretary for Economic Policy (SPE) and Central Bank



Figure 2.2. Debt to GDP of Brazil and 11 other countries around the world, 2017

Figure 2.3. GDP per capita - % of US (current US\$)



GDP per capita - % of US (current US\$)

Source: World Bank





Source: World Development Indicators. World Bank.





Source: Caselli (2016).

Elaboration: World Bank (Emprego e Crescimento: A Agenda da Produtividade, 2018)

coefficient of 52.9. Worse, fiscal actions by the public sector actually worsen the pre-transfer GINI coefficient (37.03); i.e., the public sector significantly aggravates concentration of income in Brazil (see **Figure 2.6**).

Government transfers to the poorest 10% of the population are extremely low, despite a very high tax burden and high level of monetary transfers (see **Figure 2.7**).

The large amount of fiscal revenues earmarked for social spending was not enough to guarantee better income distribution. Several of these social programs, primarily pension payments and formal market benefits, clearly favor persons in upper-income brackets as do expenditures on public institutions of higher learning. Other expenditures, especially for public health and pre-college education, do primarily benefit the poor, but not by nearly enough to create a more equal society (see **Figure 2.8**).

Turning to other considerations, Brazil's interest rate spreads in unregulated markets (lending

rates minus deposit rates) are among the highest in the world (see **Figure 2.9**).

Credit market policies also play a role in worsening distribution. Subsidized credit at much lower interest rates is available through BNDES, but the credit flows mainly to very large companies. In a recent ten-year period (2007–2017), 70% of credit allocated by BNDES went to large companies and only 30% to small and medium-sized ones. By comparison, credit flowing through private banks was more equitably distributed between large and small companies (see **Figure 2.10**).

So while Brazil's credit market does intermediate significant resources, larger creditors benefit disproportionately from credit policies designed to lower interest-rate spreads.

We will now respond to these priority concerns. We start from the assumption that Brazil has a lot of room to improve in all key respects (as reviewed above). We can grow. We can balance our public finances. And we can have



Figure 2.6. GINI coefficient in Brazil, 2013



Figure 2.7. Government transfers per income decile, 2015

Figure 2.8. Monetary transfers by income class and type of transfer (%). Use of National Health Service (SUS). Enrollment in public educational institutions in Brazil



Figure 2.9. Interest rate spread in Brazil and 14 other countries (lending rate minus deposit rate, %)



Interest rate spread (lending rate minus deposit rate, %)

Figure 2.10. BNDES' and private banks' credit concessions, 2007–2017 and March 2017, by company size



better distribution of income, all at the same time. This is because we are very far from the efficiency frontier.

Brazil's economic agenda must focus on three main pillars: fiscal consolidation, increased productivity, and efficiency in the credit market. These three pillars are based on reforms that are under discussion and some have been approved. The reforms under discussion touch on a variety of areas: social security reform, labor market reform, free trade, credit market reform, privatization, and improvements in the business environment. These proposed reforms are fair, reduce inequality, and increase the economy's growth potential. At the same time, they face organized resistance from interest groups that benefit from the current economic model (see **Figure 2.11** and **Figure 2.12**).

We turn next to a more detailed consideration of advances in the agenda of fiscal consolidation (see fuller list in **Figure 2.13**).

Among the most noteworthy advances are the establishment of a ceiling, in real terms, for the growth of government expenditures. The fiscal recovery regime for bankrupt Brazilian states is also noteworthy. For now, the State of Rio de Janeiro has been the main beneficiary, as other states have not yet been willing to take the needed measures. The reformulation of the federal student loan program (Fundo de Financiamento Estudantil, FIES) to provide low-cost student loans was also an important advance (see **Figure 2.13**).

Advances in Brazil's productivity agenda have occurred as well (see fuller list in **Figure 2.14**).

New governance rules have been established for state-owned enterprises. The accounting profits of federal companies have increased substantially in recent years. These state-owned companies' debt has also been declining since 2015, with a particularly large reduction in the debt of the Petrobras Group (see **Figures 2.15** and **2.16**).

Figure 2.11. Opportunity: growth by distributing income in Brazil

Opportunity: growth by distributing income

- Brazil has a lot of room to improve: we can grow, balance our finances and distribue income at the same time, as we are far from the efficiency frontier.
- To do so, Brazil's economic agenda must focuses on three pillars:
 - Fiscal consolidation;
 - Productivity increase;
 - Credit market efficiency.
- These pillars are based on reforms that are already under discussion, some of them have already been approved: social security reform, labor market reform, free trade, credit market reforms, privatizations, improvement of the business environment.
- These reforms are fair, reduce inequality and increase growth potential, but face organized resistance from groups that benefit from the current model.

Figure 2.12. The reform agenda



The government's response: a reform agenda

Figure 2.13. Advances in the fiscal consolidation agenda

Advances in the fiscal consolidation agenda

- Expenditure ceiling
- · Fiscal Recovery Regime for States
- FIES' reformulation
- Antecipation of BNDES' debt payments
- Reduction of subisidies
- Redesigning and resizing inefficient programs
- Use of the resources of the Sovereign Fund to reduce public debt
- · Review of elegibility of the beneficiaries of social secutiry programs
- More stringent rules for the Federal Government to guarantee state loans
- Suspension of "margin of preference" in public purchases

Figure 2.14. Advances in Brazil's productivity agenda

Advances in the productitivy agenda

- · Labor reform and regulation of outsourcing
- · New regulatory framework for the oil and gas industry
- Reduction of trade barriers
- New governance rules for state owned enterprises
- High School Reform
- Concessions and PPP's
- Improvements in business enviroment
- Distribution of FGTS profits and withdrawal of inactive accounts
- IPO of the Brazilian Reinsurance Institute (IRB)





Source: Ministry of Planning





Federal Companies Debt (BLR billion)

Source: Ministry of Planning

The credit market reform agenda has also advanced (see fuller list in **Figure 2.17**).

A new credit policy has been implemented at BNDES, including a reformulation of the longterm interest rate (TLP) charged on most of the bank's loans. New regulations have been put into place to encourage a better and safer environment that allows growth of the FinTech sector. Many improvements have occurred in the instruments of credit, capital, insurance, and social security markets. As a result of these reforms, the cost of credit for companies in Brazil is falling sharply and loan growth is accelerating (see **Figure 2.18**).

Clearly in the last few year Brazil has been moving in the direction of greater efficiency in its capital markets. All these accomplishments naturally lead to a suggestion for an agenda for the country's next government. Brazil is emerging from the worst economic recession in its recorded history. At the same time, the reform agenda already in place must continue in order to achieve sustainable growth and job creation and reduce poverty and inequality. Solving Brazil's fiscal imbalance is crucial for the economy's sustainable recovery. It is necessary to avoid a solvency crisis in the public debt market and ensure a sound macroeconomic environment. By restoring the fiscal sustainability of the Brazilian state, the reforms suggested will allow future governments to invest more in socially relevant areas and will allow changes in the tax structure in order to reduce its complexity and distortions.

Social security reform

Reforming the rules of the various social security regimes in Brazil is a necessary condition to reduce the accelerated growth of social security expenditures. The reform put forth by the Temer

Figure 2.17. Advances in credit market agenda

Advances in the credit market agenda

- New credit policy of BNDES
- TLP (Long Term Rate)
- Covered bonds (LIG) regulation
- Fintechs' regulation
- · Eletronic registration of receivables assets
- Virtual Commercial Paper (duplicata eletrônica)
- Restructuration of the Insurance business of Caixa Econômica Federal
- Improvements and reforms in instruments of the credit, capital, insurance and social security markets
- · Price differentiation according to payment method
- BC+ agenda

Figure 2.18. Credit cost indicator - companies (percent per year) and average term of credit concessions - companies (12 month moving average)



government is also in the direction of social justice. It reduces privileges for favored groups of pensioners while protecting the pensions of the poor.

The mandate should be to promote greater efficiency in the multiplicity of social programs in Brazil while focusing benefits on the poorest of the poor. This involves continuation of the evaluation, revision, and resizing of social programs. The aims are effective programs, fiscal sustainability of programs, higher productivity in the economy, and a reduction in inequality. Reform in this area is particularly critical in view of the relatively rapid aging of the Brazilian population.

Fiscal reforms

A broad set of reforms is under discussion. Fiscal recovery of states and municipalities should be high on the agenda. Cooperation between the federal government and state municipal governments can bring fiscal balance to the consolidated public sector.

Brazil also expends fiscal resources in the favor of tax subsidies and exemptions. These subsidies to businesses have risen sharply (from 3% of GDP in 2003 to 6.7% in 2017). At the end of 2018, these subsidies still amount to 5.4% of GDP for a large variety of programs that benefit business, such as the Manaus Free Trade Zone. Many distortions are associated with the subsidies, which affect productivity and economic opportunity and aggravate fiscal imbalances.

Broader tax reform initiatives should be maintained. The so-called "Golden Rule" should be implemented via automatic restrictions in the event of non-compliance caused by governments borrowing to finance current expenditures. In general, the tax system in Brazil is complex and generates significant inequality. Changing the current tax structure is critical to increasing productivity, encouraging job creation, and reducing social inequality.

Energy sector reforms

Brazil must move to modernize the legal frameworks for natural gas and electric power with the goal of increasing competition in these sectors. Bottlenecks exist in the current models. Eletrobras is also in need of capitalization to permit efficiency gains in the generation and transmission of energy, strengthening of management ranks, and increases in the supply of electricity at lower costs.

Reforms in the oil sector are needed as well. Among these is the transfer of oil production rights ("cessão onerosa") updating a 2010 agreement between the federal government and Petrobras giving the oil company at that time the right to extract up to 5 billion barrels of oil from the pre-salt reserves. As the volume of oil in these fields significantly exceeds this figure, adjustments in the agreement will benefit both Petrobras and the federal government by accelerating oil field development, generating income and employment, and increasing public sector revenues.

Deepening international integration

Brazil needs to do more to open its economy to the rest of the world. Among other advantages, deeper integration will increase competition in the domestic market by making new and cheaper technologies more accessible. These will increase competition in the domestic market and reduce the "Custo Brasil," thereby boosting productivity and economic growth.

The above list of suggested reforms is by no means exhaustive. Legislative and regulatory changes can also increase competition. A new governance law for state-owned pension funds, for example, would provide more transparent and efficient management of these important investment entities.

Regulatory agencies across the board in Brazil need to be strengthened. These changes would boost institutional stability, reduce political influence, and increase professional management in regulatory bodies. Greater stability and professionalization, in turn, would lead to greater stability in the regulatory regimes of critical economic sectors, thereby boosting investments in infrastructure and increasing productivity.

Finally, improvements in legislation involving bankruptcy and enterprise recovery following bankruptcy proceedings are important to pursue. These would correct distortions in existing law and its implementation, with a view to accelerating the dissolution of nonviable companies while facilitating recovery of potentially viable firms.

Conclusion

Despite many political restrictions on its ability to design and implement policy, the economic policy team under Interim President Michel Temer (2016–2018) worked to guarantee fiscal sustainability, restart economic growth, create jobs, increase competitiveness, and alleviate poverty and inequality in Brazil. The agenda of reforms set forth in this paper is the cornerstone of a more just and prosperous Brazil. This reform agenda is not the agenda of any particular administration. It is an agenda for future generations in Brazil. Congress must contribute to its success and civil society must also be involved.

MONETARY POLICY AND CREDIT CONDITIONS IN THE GLOBAL ECONOMY: WHAT SHOULD BRAZIL EXPECT?

PATRICIA MOSSER

My task is to describe the global monetary and credit backdrop for the economic reforms described by the previous two speakers this morning. Let me start with monetary policy in the US, mainly because in the advanced economies, the US is the "outlier" in terms of comparative monetary policy. Unlike other advanced economies, the US has been tightening monetary policy over the last three years.

During this time, the Fed has been very transparent about when and by how much it intended to tighten policy. This has been conveyed to the public and markets through statements and speeches as well as use of what are called "dot plots," the latest of which is depicted in **Figure 4.1**.

The blue dots describe the projections of individual Federal Open Market Committee (FOMC) members for the evolution of interest rates, each blue dot representing the projection of an FOMC member at a point in time. The top line (red) is the average of the FOMC member projections. The bottom two lines describe projections by the financial markets on the future course of interest rates.

Market and FOMC projections overlapped closely for 2018, but for 2019 and 2020; a widening gap has opened up between what the market expects and what the Fed expects. This pattern is not new. If we go back to the dot plots in previous years, we can see this divergence. In 2017, market expectations were below those of the FOMC as well (see Figure 4.2).

In 2016, the divergence in Fed vs. market views is especially striking (see **Figure 4.3**). To illustrate, the market in 2016 projected a Fed Funds target rate of 1% while the Fed expectation was 3%.

The same pattern can be seen in the data for



Figure 4.1. Implied federal funds target rate

Source: Federal Reserve and Bloomberg





Source: Federal Reserve and Bloomberg





Source: Federal Reserve and Bloomberg

2015 (see **Figure 4.4**). In each case, the Fed's forecast for future federal funds rate increases falls well below the expectations implied by financial market prices.

What is going on here? Do the markets not believe the FOMC for four years?

Another piece of evidence can be examined. In Figure 4.5, the blue line is the 10-year Treasury note yield in the 2007-2018 period. The bottom line (red) is a measure of the premium that investors receive from holding a 10-year Treasury notes over time rather than a series of short-term Treasury bills. The striking aspect is that the relative return to holding a long-term bond is below the return to holding a series of short-term bonds is negative, and has been negative for years, going back to 2014. Investors during this period would have been better off holding a series of short-term US Treasury securities rather than longer-term US Treasury securities. Charting the use of European sovereign securities would also show negative term premia.

Similarly, **Figure 4.6** shows a steady erosion in term spreads since 2013. Whether one looks at the 10-year-to-2-year term spread (blue line, Figure 4.6), or the 10-year-to-3-month spread, the conclusion is the same: falling term spreads. The 10-to-2 spread, in particular, is almost zero. The question remains, "Why?" For a long period of time in the US, it has been common to associate a negative term spread as a sign of looming recession.

So one possibility could be the sign of recession, but the long-term decline is an odd pattern for term spreads that usually fall sharply when monetary policy is tightened and then rise again when the economy enters recession. This time, the decline has been slow and gradual, going on since 2013. Another possibility and my preferred explanation for this phenomenon is the excess demand for safe assets by investors around the globe.

Looking at changes in policy-rate expectations among the advanced economies, the US, and possibly Canada, are the only countries where



Figure 4.4. Implied federal funds target rate

Source: Federal Reserve and Bloomberg


Figure 4.5. Ten-year treasury and term premium

Sources: U.S. Treasury Department and Federal Reserve Bank of New York

Figure 4.6. 10-year-to-2-year spread vs. 10-year-to-3-month spread



Source: US Treasury

markets anticipate additional tightening of rates (see **Figure 4.7**). All other advanced economies are anticipating additional declines in shortterm rates, an indication that long-term yields are still going down.

Figure 4.8 shows the yields on global "safe assets" in advanced economies. It illustrates the contrasts between US long-term yields and yields in Japan and Germany. It is clear here that US long-term assets are the only positive-yielding assets in the world, and they are backed by a large supply.

It then comes as no surprise that investors around the globe are pouring into these assets, in the process depressing yields on bonds, preventing them from rising. The depressed yields on German and Japanese bonds are likely to persist for the foreseeable future. The Bank of Japan is still buying assets. The European Central Bank has announced it will stop buying assets, but the time between implementation of this policy and a rise in rates could be a lengthy one. While the Fed is rolling safe assets off of its books, it is a slow process, and the Fed may not dispose of large amounts of these assets. In short, the balance sheets of global central banks are likely to remain large for years to come. While the US has a large fiscal deficit to finance, for now, the market is absorbing the new supply of bonds and not exerting much in terms of fiscal discipline.

So what does all this mean for credit? Credit conditions in the US and most of the world remain remarkably easy. The global credit boom, which the Fed and other central banks originally sought to encourage, is still going on, despite the US's shift to tighter monetary policy. As an example, in the US, many high-yield corporate bonds ("junk bonds") have been issued with limited or no covenants to protect investors. That means the investors who purchase these assets have no recourse if the company makes bad decisions, and is unprecedented.

Figure 4.9 shows how US businesses have taken advantage of these conditions to leverage up. The red line is the credit-to-GDP ratio for

Figure 4.7. Policy rate expectations and changes in policy rates & market expectations

- Extraordinarily easy monetary policy in advanced economies
- Easier than 9 months ago











Figure 4.9. Business and household-sector credit-to-GDP ratio





Source: Federal Reserve Board staff calculations based on Bureau of Economic Analysis, national income and product accounts, and Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

businesses. The black line shows household credit-to-GDP ratio. The good news for the US is that households are not levering up, perhaps having learned the lessons from the great financial crisis, but the business sector certainly is increasing leverage. If you think this may not end badly, the blue bars in **Figure 4.9** show the onset of US recessions and the relationship with business credit growth. This could end badly.

Leverage is a global phenomenon, even in the emerging markets (see Figure 4.10). Credit is expanding, particularly rapidly in Mexico and China, but elsewhere as well credit is increasing. Brazil is somewhat of an exception to this global pattern. Credit growth here is actually declining as reforms are implemented.

This is actually a good sign for Brazil. If the reforms being discussed in this conference are actually made, capacity exists in the global demand to meet an increasing demand for credit, providing that credit conditions remain similar in the future. We all know there has been a divergence in financial conditions around the world (see **Figure 4.11**). IMF estimates show that despite continued monetary policy tightening, US financial conditions have eased across the board in terms of interest rates, housing prices, and corporate valuations. Credit conditions have actually become easier in the last six months.

In Europe (Figure 4.11, top right), credit conditions remain fairly easy, although not as much in the US. In China (Figure 4.11, bottom left), financial conditions have tightened significantly, but China has offset external pressures by easing the monetary policy, which has kept the economy going. In most other emerging economies of systemic (including importance Brazil), financial considerably, conditions have tightened mostly due to capital outflows.

While this tightening of financial conditions in emerging markets has been playing out, the actual increase in cost of credit has been



Figure 4.10. Credit-to-GDP ratio (%)

Sources: Bloomberg Finance L.P.; Haver Analytics; IMF, International Financial Statistics (IFS); and IMF staff calculations.

Note: Data labels use International Organization for Standardization (ISO) country codes.

¹Credit is other depository corporations' claims on the private sector (from IFS), except in the case of Brazil, for which private sector credit is from the Monetary Policy and Financial System Credit Operations published by Banco Central do Brasil, and China, for which credit is total social financing after adjusting for local government debt swaps.



Figure 4.11. Financial conditions index

Sources: Bloomberg Finance L.P.; Haver Analytics; IMF, Financial Soundness Indicators; official sources; and IMF staff calculations.

Figure 4.12. Corporate bond spreads



small (see **Figure 4.12**). The figure depicts the evolution of corporate bond spreads before, during, and after the great financial crisis. Emerging markets' corporate spreads have gone up, but, in context, this rise is relatively small. By historical standards, the adjustment in credit conditions has been modest.

Risks and challenges

In addition to domestic political considerations, the new government's reform agenda, including privatization, is going to be influenced by global credit conditions. The risks are important. If there is a recession or slowdown in the US, which seems likely, credit conditions will tighten there, particularly if the US tax cuts are not extended beyond 2020. Slowdowns are already underway in Europe and in Japan.

If the slowdown in the US comes, the odds of the credit bubble bursting are higher, which could make credit conditions tighten. If one factors in the possibility of a global trade contraction, which, unfortunately seems possible, in addition to increased geopolitical tensions, the resulting mix would have a global impact on credit.

In terms of policy responses in such a scenario, the US and other advanced economies have limited headroom for fiscal and monetary policies. Some countries in Europe have the capacity to ease fiscal policies, but there has been reluctance to do so. If the global credit bubble does burst, large capital outflows could affect emerging economies, particularly the developing and frontier economies among them; some of these countries (unlike Brazil) just recently venturing into global capital markets.

If that scenario happens, global investor demand for what is considered to be "safe assets" could intensify the problem of global yields on some sovereign assets below fundamental values.

Questions for the panel

Q: Could you describe the risks you see in China's credit expansion?

Mosser: China has a massive credit problem. The line between public and private credit is also blurred, with lots of the credit in real estate. The problem extends to state and local governments. China has taken steps over many years to manage imbalances in its economy. For example, the credit-to-GDP ratio has started to flatten out in China in the last two years. The Central Bank seemed worried and they have pushed to tighten conditions. If the economy slows down, the government will once again be under pressure to increase credit. If they manage to deal successfully with a credit-to-GDP ratio, which today is 230% of GDP, I am sure it will be the first time in history that an economy has managed to do so without a major recession.

The Chinese have not been shy about increasing controls on foreign exchange outflows, and might do so again if faced with a crisis. They would have no hesitation in making the Chinese currency non-convertible, a drastic step that would deal a blow to China's reputation, but might be necessary to maintain domestic tranquility.

Q: What about the trade war and how might it affect China?

Mosser: The big issue is a dispute about intellectual property and even about what it means. Stealing business secrets is considered to be an absolutely normal business practice in China. So a massive disconnect exists with the service-based advanced economies. Significant concessions by China in this regard would require a change in the way business is done in their economy. It would threaten China's continued access to technology. If the US and other advanced economies really do prevail in this argument, it would be a bigger blow to China than even the bursting of the credit bubble.

Q: What is your advice for the new Brazilian government in terms of reforms?

Vescovi: First of all, I would argue that the whole matter of privatization is not a fiscal issue. It is a part of the national productivity agenda and, in that sense, it is very important.

The sequencing of reforms is politically important. If the government elects to go first with the privatization push, everything else on their agenda will be stopped. Stop all other discussions with the Congress on such issues such as gun control, abortion, and so forth, and focus on social security reform. If the government succeeds, a lot of opportunities can be created in terms of lower interest rates, increased credit, and more credibility for the government.

After pension reform is passed, other items can be addressed. For example, openness (trade liberalization) is a low-hanging reform. Much can be done without depending on Congress.

The new economic team represents liberal economic thinking, which is a step in the right direction. However, they need support in terms of what is possible and when. They have the opportunity to do many good reforms, but, I repeat, they must start with pension reform. Our discussions with the new team have focused not on what to do, but how to do it.

PROMOTING FISCAL ADJUSTMENT IN BRAZIL: OLD AND NEW APPROACHES

GUSTAVO H. B. FRANCO

I believe that the issue before us today is to interpret the results of the startling election of Jair Bolsonaro and what it has brought and will bring. I would like to first focus my remarks on this historic moment and then get to the fiscal issues and the opening of the economy to competition.

If I could summarize in a single expression what I think is happening in Brazil, I would say, optimistically, that there is a kind of "liberal spring." Already during the presidential campaign, it was curious to see that each candidate was accompanied by an economist of liberal persuasion, usually US-educated. This economic advisor was a kind of "designer handbag" whose presence was essential at all events and, in some cases, he himself was the candidate running for office, as in the case of Henrique Meirelles.

This association between liberalism and political expediency was a preview, I believe, of something that later became clear: opportunistic alliances, or marriages of convenience uniting free-market economists and politicians never before associated with such ideas. Such was the association between Paulo Guedes and then-candidate Jair Bolsonaro. With his victory, the relationship between Bolsonaro and his "designer handbag" - his "Posto Ipiranga" - has now become a subject of paramount importance for the country. In fact, I think it is fair to say that there are three components to this marriage: one is Jair Bolsonaro, the second is Paulo Guedes himself, embodying liberalism, and the third is anti-Workers Party (PT) sentiment.

Anti-PT sentiment

It is curious that political scientists have said that what won the elections was this widespread anti-PT sentiment motivated by the historic failure of PT's economic management. The ethical, economic, political and moral failure had become such an absolutely nefarious thing that anti-PT sentiment itself not only became electorally viable, it organized itself as a program and was spontaneously presented to other candidates as a way of fixing the Brazilian economy.

The candidates' common economic proposal was to do the exact opposite of what PT proposed to do, especially in the Dilma Rousseff era and its "new economic framework." In this liberal spring we are living, Brazilian liberalism is curiously constructed from what the PT itself defined as its enemy, that is, neoliberalism. This neoliberalism was thus constructed on the basis of policy proposals the PT had attacked.

I was part of the government when PT was the opposition. I was accused many times of neoliberalism and for many reasons, both proper and improper. However, it was curious to see, for example, the agenda of fiscal responsibility accused of being an imposition of neoliberal ideals. One sees how something that does not necessarily have to do with neoliberalism ends up being associated with it. Fiscal responsibility, after all, should be a non-partisan matter of common sense, of logic, of rational thinking. But the practice became tainted with ideology and lumped together with other more ideological themes. It suffered the same fate as other policies, such as openness to foreign trade, defense of competitive practices, fight against cronyism and corruption, and even the growth formula that Brazil should adopt for the future.

I am worried about this alliance between liberalism and Jair Bolsonaro. One apparently became hostage to the other, and neither had clear prior affinities. However, a failure of this government would be not only the failure of liberalism, it would also be the failure of the Bolsonaro government. In this event, no one would be happy.

In the past, liberal reformist ideas, in the Brazilian

sense, had an alliance on the left in the social democratic government of the PSDB. Now we have an alliance to the right with a curiously similar and symmetrical dynamic.

It should not seem strange that we are living a liberal spring in Brazil nor that nothing in this so-called liberal platform is unpopular. Just look at the findings of the National Household Survey (PNAD). There are 27 million people in the country who are self-employed or employers. This entrepreneurial group is almost the same size as employees working in the formal sector (33 million). These are data from the end of last year, which probably have not changed much.

Class struggle?

There is a well-known research study conducted by the Perseu Abramo Foundation (the PT's think tank) that queried residents in the outskirts of São Paulo on class struggles and similar subjects. The answers may not have pleased the PT.

It turns out that nobody in the periphery of São Paulo knows what "class struggle" means. They understand that the boss is someone who is more or less in their same boat. Most of the day-to-day experience of these people is to undertake or participate in small businesses, where the boss is someone who is present. If the boss fails, the employee loses a source of livelihood. So there is much more solidarity than conflict between employers and employees.

We also have institutions such as the Labor Courts, which cost more to taxpayers than the entire UK judiciary. It exists to foster mistrust and conflict. There can be nothing more anticapitalist than this thing called "Labor Justice" in Brazil. It is time for it to end. It can be absorbed by the courts of Civil Justice and nothing will be lost from the point of view of legal principles. The way in which the Labor Justice Courts work surely makes everything more expensive and harder in the business world. The work of those who create jobs is also work and not the enemy of work. I believe that this type of speech, perceived as heretical in times past, will now in the liberal spring receive much more attention.

Brazilian liberalism and the private sector

I will say a few words about how this Brazilian liberalism is being built, because I think we are talking about a work in progress. Much has been said in this conference about the tax issue. I would remind you again that this theme, in theory, should not be part of the discussion on liberalism and non-liberalism. Tax policy should be neutral, but it is not.

Much also has been said here about statelevel finances, which are a real tragedy. I can talk about the matter as someone presently close to the situation in Minas Gerais, where indebtedness has rebounded to the levels at the time of the Fiscal Responsibility Law in the early 2000s.

About gross fixed capital formation, it is important for us to be clear on the importance of the private sector. This morning, we heard Mansueto Almeida say that there is no more money for public investment, which accounts for just 0.6% of GDP. Rapidly growing countries in Asia have gross fixed capital formation of approximately 25–30% of GDP. Here in Brazil, the corresponding figure is only 15%. For Brazil to make this transition, 10 percentage points of GDP investment will not come from the public sector. So let's forget the idea that public investment could contribute significantly to bridge this gap.

The incremental investment effort will have to come from the private sector. It is another paradigm. Almeida gave some interesting and timely indications, but they point to the fact that we will have to work to break paradigms and think out of the box with respect to the way things were done in the past.

There was much talk today as well on economic opening. We must not overlook the fact that this is perhaps the most difficult reform area because it has to do with the free market and the functioning of a market economy. That is where the hypocrisy is absolutely the greatest. In the film shown here, we had defenders of protectionism in Brazil, speaking of the small degree of openness of the economy. We have a curious problem because Brazil has the same degree of openness it had in the 1960s, exactly 18%. From then until now, Korea went from less than that to something close to 60%. China's degree of openness went from one-half of one-half of Brazil's to 45-50%. We are the last country in the world in degree of openness. However, 33% of Brazilian GDP is produced by multinational companies and these companies employ 3.5% of the country's actively employed population. Doing the numbers, productivity in multinational companies is 12 times higher than productivity in domestically controlled firms. It is commonly argued that growth consisted of taking resources from the backward sector, which used to be agriculture, and allocating these to industry. This is no longer the case, for we have already seen that in agriculture, Brazil is not at all backward, much to the contrary. Where to draw resources from? Which are the backward sectors?

It appears to me that backwardness is rampant in protected sectors and nontradables production where competition is absent. So the challenge today is to make the internationalized sector of the economy grow. That is what economic opening is all about. About 20,000 multinational companies operate in Brazil. Surely they can be part of the future opening of the economy.

III FÓRUM: **A MUDANÇA** DO PAPEL DO ESTADO

PANELII: **REFORMING THE STATE IN BRAZIL: NEW IDEAS AND APPROACHES**

REFORMING BRAZIL: GROWTH, EFFICIENCY, AND REDISTRIBUTION

(Remarks delivered on December 13, 2018)

ARMINIO FRAGA

I have been asked to speak today about reforms of the State. I have been part of several studies looking at what could be done to improve efficiency and economic growth. The story behind this is the following. About a year ago, I thought there was a chance that I would wind up in Brasilia and I began to think about the legislative action that I would propose. At that time, three topics occurred to me: tax reform, social security reform, and a partial reform of the State.

I am not going to talk about tax reform. Ana Paula Vescovi, in her excellent presentation, has already laid out many reforms that I think the country is ready to adopt.

I will talk instead about the other two reforms, starting with social security reform. What are the objectives? What are the obstacles?

On the list of objectives, fiscal impact is the first item. We have seen on the screen this morning figures showing that half of the Federal government's expenditures are on social security, and that this trend is going to continue. So this is dysfunctional. The adjustment we need in our fiscal accounts is extremely large, and, if we do not have something to count on coming from social security reform, it cannot be done. The primary fiscal deficit is on the order of 2% of GDP. The debt-to-GDP ratio is also high. It would be irresponsible not to do something to put the ratio on a downward path.

Social security reform

The first action I took was to convene a group of fantastic professionals headed by Paulo Tafner and comprised entirely of civil servants. The numbers we have produced are impressive. We believe that, over a ten-year period, the social security reform we designed can deliver an impact of 20% of GDP, about 2% per year. When reforms at the state level are factored in, the impact could reach 25% of GDP in ten years, about 2–2.5% per year. This would cover about one-half of the overall fiscal effort that Brazil requires (about 4%), so it is really quite substantial.

I believe that a reform of this magnitude would have an amazing impact on expectations.

The second objective of social security reform would be the issue of fairness and inequality: public and private systems should be equalized and a universal benefit for anyone reaching the age of 65 should be assured. An interesting calculation resulting from this exercise is that the reform would result in a 16% reduction in Brazil's Gini coefficient of social security payments, which is very significant. Obviously, not everyone can come out ahead with an adjustment of 20 points of GDP; people will have to work for a few years more, for example. At the same time, our proposal would reduce the glaring inequality in our present system and the extremely poor would come out ahead.

The third objective of social security reform would be to help our states, most of which are in dire fiscal straits. The legislation behind these state-level regimes would be carefully revised and made much simpler, leading to far lower litigation costs.

The new system would be phased in slowly; there is no other way to do it. It will have provisions for individual accounts, but these will come later in order to reduce the costs associated with transition from a pay-as-yougo structure to capitalization.

Comparing our proposal to that of the Ministry of Finance (from 2018), one advantage of our

approach would be that it would take everything out of the constitution. This is a matter of great contention, but I will leave it at that.

In all, I am slightly optimistic that this sort of approach could work. At present, many different social security reform proposals are circulating, but, eventually, these are going to have to converge into a single proposal. A sequence of political efforts will also be needed to get the reform done. I am hopeful because the new economic team has excellent people dedicated to this issue, including Leonardo Rolim, who worked on our proposal and has encyclopedic knowledge of the legal details of the reform.

The opposition to this is obvious. It will anger many people and groups. The proposal has to become the proposal of the government, and that is the bottom line. I am feeling a bit uneasy because I am not sure that the President-elect is fully behind it. He has made vague statements about not wanting to "kill old people."

Finally, with respect to social security reform, everything our working group has put together is available to the new government, including 500 pages of text, simulations, applied models, etc. They will have it all.

The second point of my remarks will concern reforms in Brazil to the State itself. This could mean all kinds of things.

Why reform the Brazilian State? We have in examining it seen all sorts of signs that it is not working well - inefficiencies, interest group capture, and so forth. The State is clearly not delivering - despite the fact that our State is larger than that of our regional peers. In Chile, Colombia, and Mexico, public-sector payroll is about 8.5 -9% of GDP, whereas in Brazil it is 13.3%. Then, adding in social security, which is clearly extravagant, the government spends 28% of GDP on payrolls plus social security. This figure is far higher by a considerable margin than our neighbors in Latin America (about 8-10% of GDP in Chile, Colombia, and Mexico). So that is the backdrop. Other examples of wasteful or extravagant spending

can also be cited, such as 5.4% of GDP financing various tax subsidies for businesses.

Reform of the State in Brazil

Starting 1 January 2019, every single action of the government must be evaluated, which has not been the case up until now. It does not require any legal changes; it just requires good management. Such scrutiny would send a signal. Each ministry has to identify longterm goals, short-term goals, and a list of problems to tackle. My previous experience in government at Brazil's Central Bank was that this approach to better management was motivating throughout the ranks of management. A top-down approach to program evaluation will not work.

I would then move on to consider critical reforms that do require legislative changes. These reforms have been delineated in work done expertly by a team led by Ana Carla Abrão and Carlos Ari Sundfeld. We hope to have a detailed proposal ready for the new government in January.

This proposal incorporates a new approach to human resources in the government, a focus on productivity and quality of the government's work. Over time, we can do the same things less expensively. This type of reform requires a change in mindset in addition to changes in prevailing legislation. Many legal changes can be made via changes in ordinary legislation in Brazil, although it may be necessary to change the Constitution as well.

The proposal, in its essence, involves five key points. First, something must be done to improve the planning of career tracks of those working in the public sector. There are hundreds of career paths at present and it is all extremely messy. This proposal may sound innocuous, but, believe me, it is not.

Second, there should be a mandatory evaluation of all public employees. The evaluation should be absolute and relative, with some type of forced curve to judge performance. Third, incentives must be taken into account. There should be no automatic promotions or pay raises. Zero. If you do the work and deserve it, you will earn a promotion, otherwise not. This system will be complicated to put into practice, of course, but it can be done with attention to details and considerations of fairness.

Fourth, a revision of disciplinary measures is needed. It should be possible to fire people, based on recurring poor performance.

Fifth, while our proposal initially applies to the federal government, I am confident that states would then tend to pass legislation along these lines as well.

Stepping back, and considering both social security reform and administrative (HR) reform, I believe that the states want these changes to occur. It should not be necessary to offer the states financial incentives to support social security reform; they want it done. The same can be said about human resource policy. All states are struggling to meet the payrolls they manage.

In conclusion, Brazil should go "all in" for social security reform and also send a signal of a radical change in how the State is managed. These are part of broader productivity and distributive agendas. If we do not do much now while people are excited about changes, serious problems could ensue as we near bankruptcy. We have got to do something, or it could all go the wrong way.

Commentary following Arminio Fraga remarks

Q: How much political capital is available to the government? If there is no political will, maybe a major crisis will ensue?

Fraga: My view is that the government has the political capital needed. If, as Paulo Guedes says, social security reform is really a matter of life or death, then we have to get it done. Without savings here, the amount of discretionary spending available to the government is really tiny. Significant fiscal slippage occurred at the end of the Dilma government, on the order of 6% of GDP. In the short-run, it may be necessary to increase the tax burden, by raising marginal rates and eliminating subsidies. We need an adjustment of about 4% of GDP per year. With several percentage points coming from social security and others from tax reform, you can accomplish this level of effort.

But to go back to the point of political capital, I repeat that you have to go all in at the beginning. There is no such thing as "muddling through."

Fishlow: You are proposing changes that are so fundamental that the whole method by which allocations are made will have to be changed. You can be too aggressive in terms of the changes you want. You have to start gradually, and the only way you can start is when a crisis occurs. Then, and only then, will Congress accept changes that otherwise it never would. That is a more realistic approach than simply saying "we have to change the system."

Fraga: I generally agree. I do not believe major constitutional changes are needed. I went back and read Article 60, for example, which has been interpreted to imply a link between minimum wage legislation and social security payments. I just think we are "up the creek without a paddle," as the Americans in the room might appreciate. We have to be bold. Adjustments must be made that will have significant impact, without constitutional change. A partial social security reform that vielded annual fiscal savings of less than 1% of GDP would be disappointing. Partial social security reform, gradual reform, would waste political capital and, in all likelihood, make it harder to restart the reform process at a later date. I would go all in.

A MORE EFFICIENT STATE IN BRAZIL: IS IT POSSIBLE?

ANA CARLA ABRÃO

The question I pose here is the following: What does the State's human resource policy have to do with growth? We economists have been discussing the question of productivity in Brazil at length and conclude that it is difficult to defend or believe in increased productivity in the overall economy if we do not have increased productivity in the public sector. I say this in view of the size of Brazil's public sector and the interference of the public sector in the private sector in ways that may even compromise its own productivity. So we need to look at the Brazilian State if we want to talk about increased productivity, growth and generation of employment and income.

As Secretary of Finance of Goiás, I can say that over the last four years, finance secretaries have been rather unpopular and have not been invited to many social events in order not to spoil the party. We are accused of talking incessantly about fiscal adjustment, public employees, and spending cuts. In my own defense, I can say that my focus is not on public employees or cutting costs. I have another motive. When we talk about reforming the State's human-resources (HR) policies, the intention is to improve the quality of public services in Brazil, which has the world's third worst concentration of income and a huge contingent of public employees. More than half of Brazil's population makes a living from basic public services or depends on public services as the only chance to improve their lives, so the country must focus on the quality of these services.

Brazil's stark realities

These are our realities: over half the Brazilian population needs basic quality education so that children of poor families can have access to a higher income level than their parents. More than half the population cannot afford a health plan and depends on basic public care for a minimum of dignity. And more than half

depends on effective public security not so much for preventing street crime but for keeping their children from falling into a life of crime or getting murdered by the age of 15. For all these reasons, we have to look at quality improvement in Brazil's public services as a matter of social justice and generation of opportunities.

So improving public services is more a social rather than fiscal imperative. And that is the position we defend when we talk about the human resource policies of the State. How do these things connect?

To improve public services, we must regain our ability to manage people in the public sector. Every company depends on the management of its employees. If we want to improve the quality of service in Brazil, we need to manage people and, for that, we have to change the current operating model of the State's HR practices. Over time, the current model has eroded away our ability to manage personnel, provide proper incentives, prepare employees to assume responsibilities and take the opportunities to master the tools and working conditions and training they need so they can provide good service.

We have another motive as well, which is to increase productivity; i.e., resume growth and generate jobs and income. And in third place is the fiscal question itself. After all, mainly at the subnational level, a single line item in the budget is at the heart of the fiscal imbalance: spending on personnel - active workers, retirees, or a combination of the two.

We must manage HR efficiently in order to improve quality of public services, increase productivity, and achieve rational public spending in Brazil. We have made progress, including in terms of the GDP, and have been increasing spending in the areas of safety, health and education, where the demand for services has been growing (see Figure 7.1).

The problem is that we have tried to meet this demand, as much as possible, through increased spending. It is not the lack of allocation of additional resources that has caused quality to plummet. When we compare Brazil's situation to the international sphere, the country currently spends about 40% of its GDP on government bureaucracy, which is indeed an extremely large volume of resources compared with more developed countries (see **Figure 7.2**).

Meanwhile, quality of public services has been steadily deteriorating, especially in the areas of health and education, which can be observed in growing public dissatisfaction. Spending is high; quality is poor, and the public sector continues to grow. When we compare Brazil's spending on public employee payroll in relation to trajectory of revenues, the country spends about 13% of its GDP on salaries and benefits (not counting pensions), and evolution of revenue has grown much more slowly than growth of spending (see **Figure 7.3**).

The basic diagnosis is that Brazil increasingly spends too much, and the bureaucracy continues to swell in size with no positive impact on quality of services.

In terms of size of the public sector, , the number of public employees rose 28% from 2003 to 2016 and there was a 56% real increase in spending on personnel in the same period (see **Figure 7.4**).



Figure 7.1. Spending on safety, education, health as % of GDP, 2010-2017

Nota: Gastos referente a despesas federais liquidadas, não considera despesas de outros entes federados. Fontes: Tesouro Nacional, Balanço do Setor Público Nacional (BSPN), Banco Central do Brasil (BCB), e análise Oliver Wyman





1) Valores abaixo de 50 pontos significam que o percentual da população que considera o serviço de baixa qualidade é superior percentual que considera o serviço de alta qualidade Fonte:OECD, Pesquisa "Retratos da Sociedade Brasileira - CNI"

Figure 7.3. Spending on civil servant remuneration (% of GDP)



Fonte: Boletim Estatisticas Fiscals Trimestrais do Governo Geral - Tesouro Nacional; OECD - Dados de 2015, apresentados em Government at a Giance 2018; Boletim de Finanças dos Entes Subnacionais 2017 - Tesouro Nacional

Figure 7.4. Number of federal government workers (millions) and spending on personnel and social programs



The model is clearly out of balance. When we look at the states, the situation is even more dire (see **Figure 7.5**). We have a Fiscal Responsibility Law that stipulates no more than 60% a state's or subnational entity's revenue can be spent on personnel.

States presently spend an average of 74% of their revenue on personnel costs (see Figure 7.6). The legislation setting the 60% limit is not simply to rein in salaries of public employees; the limit was set so that state treasuries would have some remaining resources to invest and maintain proper working conditions for public employees. But today the situation is that a great deal is spent on public workers while working conditions have completely deteriorated, not to mention the fact that in recent years public investment in Brazil has been systematically shrinking, particularly in subnational entities.

This whole situation is the result of an established model. The country's working

public bureaucracy model sets the stage for our situation today. This is why we speak of recuperating effective personnel management in the public sector. The task is daunting.

First, we have a myriad of laws. When we speak of federal government, we refer to the laws that govern the relationship of federal public employees with the central government. The same applies at the state and municipal levels. The central government does not have the legal authority to legislate in this matter for states and municipalities. This fragmentation has spawned a multiplicity of career laws that have generated a plethora of specific benefits and rights or privileges (depending on how we prefer to call it) for the various career categories that have been created.

To give you an idea, the municipality of São Paulo has 52 categories, the central government has 287, and states on average have close to 180. Imagine how many career laws exist in Brazil, by multiplying this by 27! These laws basically

Figure 7.5. State revenue as percentage of net current income (aggregated) and percentage of net current income committed to personnel spending, by state, 2016



Figure 7.6. Commitment of net current income per adjusted personnel spending, % of net current income, 2016



1. Por ex., auxilios moradia e transporte, mão de obra terceirizada, verbas indenizatórias, pagamentos retroativos com base em decisões judiciais. Fonte: Tesouro Nacional e SICONFI

set the stage for vegetative growth of the public payroll. Whether managers work diligently or do nothing, their salary grows 5% each year. In some cases, annual growth is 7% due to promotions, automatic progressions, gratuities and bonuses completely unrelated to merit and salary increases unrelated to productivity. It is no wonder that the wage bill grows by 56% even without significant increases for any category of employees.

This pattern is repeated throughout Brazil and generates vegetative growth in personnel expenses. And it also indirectly generates an automatic bureaucratic growth process. In addition to increased spending due to promotions and automatic progressions, the public sector periodically requires new public entrance exams to contract public employee candidates, mainly to serve the population.

Here is an example from the police department. If we open a public call today to hire 2000 new police officers, in two years, given the promotions and progressions they are entitled to, they will be off the streets and in office jobs. And it will again be necessary to issue a public call to hire another 2000 new police officers. And workers in office jobs can retire at the age of 48. We are talking about promotions, automatic progressions, performance appraisals, and planning for this workforce, but the expense is multiplied when other benefits are taken into account, such as "spouse-salary," post mortem promotions in rank, and so forth.

The main point is that while the extent of employment stability in the public sector is a problem, there is an HR reform agenda that could be pursued and implemented, independent of employment stability. We will be able to improve management and efficiency of the bureaucracy by means of laws, revision of local laws, or a complementary federal law that will promote productivity gains, quality of public services, and rationalization of the personnel spending we have today.

LEGAL IMPEDIMENTS TO ECONOMIC REFORM

CARLOS ARI SUNDFELD

I am a professor of administrative law and so I bring a legal perspective to the analysis of reforms in Brazil. And what draws my attention is that in recent decades we have been able to make important reforms in management of the country's public services that have involved important, sophisticated and complex legal transformations.

I will give three examples that I find significant.

The first was the reform of public economic services that were once the responsibility of state-owned enterprises in Brazil following a monopolistic model without competition instituted in the 1988 Constitution. This corporate structure made any reform difficult. We were able to successfully implement a constitutional reform, build institutions – the regulatory agencies – and foster competition with sectoral laws. We were able to draft legislation on public service concessions, which became the general law of publicprivate partnerships. We were able to fashion basic legislation for key economic sectors.

Other reforms are still needed, including in the area of economic freedom; that is, striking the right balance between regulation and free enterprise. Brazil's new government appears to be sensitive to this fact. Nevertheless, it is important to remember that we succeeded in making reforms during these decades, including transformations in ways of thinking about the economy.

A second example involves public social services, especially in the health sector. We had a health service provision model by the Brazilian federal government. It involved public employees and semi-autonomous agencies or hospitals as units of the central government. Over time, Brazil was able to construct a very different solution for health care involving the nonprofit sector, social organizations, and civil society organizations. Legislation in this area has been evolving, and we have gained contractual experience. We do not claim perfection, far from it. But it is important to realize that we were able to put into place health care reforms that faced resistance, not only because of past practices, but also rooted in the legal culture.

The third example is the public decision-making process and its oversight. Here as well, Brazil was able to institute important reforms. We established oversight bodies and created benchmark legislation and new types of judicial action. We wrote laws that sought to improve the public deliberation process, including laws governing administrative processes in the states that began in São Paulo and were later adopted by the federal government itself. As recently as this year, we have been able to institute an important change in the Law of Introduction to the Brazilian Civil Code to include rules on legal certainty in the public sector. We have been able to put important reforms into place, addressing the former authoritarian paradigm that permeated Brazilian law and the functioning of public management.

Brazil's public management

Surprisingly, we have made little progress in the area of human resources in the public sector, despite the fact that we were able to make constitutional reforms in 1998, altering some important factors. In that period, for example, we were able to change the rules on provision of public economic services in order to break up monopolies. And we began to reconstruct legislation of administrative processes in the country.

In the case of regulations on human resources in the public sector, we have made little progress, although several constitutional reforms have been approved, including modification of the regulation on employment stability, which is still in place but has been modified to allow use of performance evaluations as a mechanism to break stability. And what has actually happened? Absolutely nothing. Some regulations on salary ceilings were approved to curtail spending on personnel, but nothing on improving management capacity of those in charge of human resource management in the public sector.

One of Brazil's main challenges is fragmentation. First, we have fragmentation of legislative competence in Brazil. All municipalities, states, and the central government legislate on personnel matters. Financial control agencies are also fragmented. Brazil's audit courts are completely autonomous. In particular, there is no hierarchy between federal and state audit courts. In addition, the legal interpretation of the Fiscal Responsibility Law (which imposes limits on personnel spending) varies from state to state. This confusion is a convenient means used in order to adjust payroll amounts to the most lenient interpretation. This aspect of fragmentation is one that we will have to face.

Constitutional reform

The problem is that such fragmentation requires new and innovative constitutional reform. Is it something Brazil has to do? Yes. Do we expect our initial efforts will be successful? No. What can we do then? We can address the challenge of fragmentation from another perspective.

In today's newspapers, the future Minister of the Economy is facing a revolt from the Office of the Attorney General of Brazil's National Treasury because the Minister plans to appoint as head of the body a lawyer from the public sector who is not affiliated with that specific corporation. Here is an example of the effect of career fragmentation. How can we reform the fragmentation? The federal government must take the first step by unifying careers. A new paradigm different from that which has guided management of government personnel in the past must be introduced. We can no longer continue with fragmentation of careers. We have to unify them and the central government can set the example.

A second key point is that we must be able to implement what was behind the 1998 constitutional reform, which loosened employment stability, allowing dismissal based on performance evaluation. Why does performance evaluation not work in Brazil? The process has been captured by the interests of each employee group. All employees receive the best possible performance evaluation score.

With a federal law, we can put an end to the practice of automatic promotions, thereby requiring that payment variation be linked to performance evaluation. And we must require performance evaluation to be realistic. It is essential, at this first moment at least, to grade performance on a curve. It is the only way to have honest performance evaluation.

This change has to start somewhere and the ideal place is the federal administration. We can create a human resource model that can then be incorporated in a reform to the Fiscal Responsibility Law. Such a reform would allow a Brazilian state to set a new timeline for adjusting its personnel spending to the ceiling provided for by law. In exchange for this concession, as a precondition for negotiation of adjustment, the federal government can require states to adopt reforms based on unification of careers and use of performance evaluation as a tool to help determine the position of public employees in their careers and pay.

This has been a summary of the proposal. I also want to highlight the enormous challenge of transferring these reforms to states and municipalities, but we must begin a realistic legal reform at the federal level.

THE OUTLOOK FOR SOCIAL SECURITY REFORM IN THE NEW GOVERNMENT

PAULO TAFNER

I have worked on questions of social security for a long time. Perhaps as one of my last activities in this area, with Arminio Fraga's generous help I assembled a group of experts in the field from around Brazil. A study of this scope was obviously only possible because of 20 years of experimentation with proposed reforms that never became law.

As the pension problem steadily worsened, we decided to propose a reform that basically met the four conceptual imperatives that were in my mind from the beginning.

First, a reform has to have fiscal strength. My assessment is that we need to adjust about 3,5–4.0% of GDP to reverse the growth trajectory of public debt. To achieve this fiscal adjustment, we need to have a contribution from a pension reform to cover approximately 30% of the overall fiscal adjustment.

Our group's work is now complete. The main result is that if our proposal is implemented, Brazil could lower pension spending over ten years by around BRL 1.3 trillion. We made a further estimate with a higher initial retirement age and the fiscal impact of the reform increases to BRL 1.48 trillion.

Obviously, these are important fiscal impacts, not only on the public debt trajectory and long-term interest rate curve, but also on the country's growth dynamics.

The second imperative of pension reform is to respect the foundation of the Brazilian nation: the federalist principle. Therefore, we also have to be mindful of the need to design instruments for governors and mayors to deal with their own urgent social security issues.

The third imperative is a social security system that restores the principles of equity and justice; it is an all-out assault on privileges of all kinds. The reform proposal incorporated this dimension.

The fourth imperative is to reduce the internal rate of return of our pension system because it is too high – the best investment any citizen can make.

Following implementation of these four imperatives, there would be room for a capitalization option for new entrants into the pension system, so this option was provided for as well.

We set up this design while also keeping two fundamental strategic limits in mind. First, the change in the social security system cannot be financed by increasing the tax burden. There will no longer be a social security tax. Yet we cannot accept losing revenue either. That is, while the reform does not increase the burden, it also cannot cause a loss of revenue.

Baby steps in social security reform

These were the parameters of the project. We also understood that merely publishing the text of the reform would not be enough. We would have to do more than that. So, we set about to write, not only elucidating the more academic aspects, but writing the legal texts. We designed a constitutional amendment and four ordinary laws because, for us, it was also an important challenge to try to separate the social security issue from the Constitution. In many cases I can see that the Constitution contains not an enumeration of rights but rather the crystallization of privileges. Each group manages to gain something from the Constitution. The idea was to do away with privileges in the Constitution and leave in only the general guidelines for what the Brazilian social security system should be. Actual operation of the system would be handled by a set of infra-constitutional laws.

The constitutional amendment and four

complementary laws were all expressed in proper juridical language. One proposed law was dedicated exclusively to public sector employees of the central government, states, and municipalities. Another specific law dealt with the pension system of Brazil's Armed Forces, amid the many misunderstandings and scant knowledge about it.

The third proposed law, aimed at military police and firefighters, tackles the problems of subnational entities – in this case, specifically the states. The final law was aimed at the General Social Security Regime that affects all private-sector workers.

In this way, we would have a comprehensive reform, passing through a transition process that would stretch out to 2034. The social security treatment would be equal for all citizens, something to celebrate. And, finally, we would have a new social security model, a capitalization option, aimed exclusively at Brazilians born after 1 January 2014. No earlier date would be possible without an unacceptable loss of revenue as a result of the capitalization.

What do we already know? We already know that we spend far too much – 14.5% of GDP – on social security. The primary fiscal deficit is 5% of GDP, up from 3.2% in 2014. Our social security expenditure increases BRL 50 billion a year at the central government level alone. If we add in expenditures at the state and municipal levels, it reaches BRL 70–75 billion per year. Social security spending already consumes 50% of the central government's budget and if nothing is done it is projected to reach 80% by 2023. That would be a tragedy (see **Figure 10.1**).

Social security spending in the states and

INSS	2014	2015	2016	2017	2018
Receita	5,9	5,9	5,7	5,9	5,8
Despesa	6,9	7,4	8,1	8,4	8,6
Resultado	-1,0	-1,5	-2,4	-2,5	-2,9
Servidores - União					
Receita	0,3	0,3	0,3	0,4	0,5
Despesa	1,6	1,7	1,8	1,9	1,9
Resultado	-1,3	-1,4	-1,5	-1,5	-1,4
Servidores - Estados e Municípios					
Receita	1,2	1,2	1,2	1,3	1,4
Despesa	2,1	2,1	2,2	3,2	3,4
Resultado	-0,9	-0,9	-1	-1,9	-2
Resultado Agregado					
Receita	7,4	7,4	7,2	7,6	7,6
Despesa	10,6	11,2	12,1	13,5	13,9
Resultado	-3,2	-3,8	-4,9	-5,9	-6,3

Figure 10.1. Brazilian social security spending 2014-2018 (% of GDP)

Source: MPOG, STN – If BPC is considered the INSS's expenses reach to 9,3% of GDP

municipalities is huge, and the deficit rose from BRL 126 billion in 2015 to BRL 203 billion in 2018. It is a Chinese growth in our spending (see **Figure 10.2**).

Our demographics are not good. The three relevant groups are children (including young people), working-age adults, and the elderly. **Figures 10.3** and **10.4** show the demographic dependency ratio, or actually the inverse of it, which is number of active workers that would be able to finance each retiree. In 1980, we had 9.2 active workers to fund each retiree (see **Figure 10.3**); in 2020, the number will be 4.7 (see **Figure 10.4**). In 1980 we had only 7.2 million elderly people; 40 years later, we have 29.3 million. The working-age population was 66 million in 1980. By 2018 it had more than doubled, reaching 138 million, while the number of elderly persons quadrupled.

Looking ahead 40 years, number of workingage adults will decrease while number of elderly adults will increase by a factor of almost three. That is, the dependency ratio will drop to just 1.6 working-age adults to fund each retiree. In 20 to 30 years, each young person is practically going to finance the retirement of one elderly person (see **Figure 10.5**).

In terms of comparative demographics, we face an impending crisis. The United Nations

Population Division for 203 countries. The data start in 1950 and include projections through 2100. An important demographic statistic is the incidence of elderly individuals in the total population. Demographers understand that when 10% or less of the total population is elderly, the country is young. At the other extreme, when 30% or more of the population is elderly, the population is aged.

Taking all these countries into account, I estimated how long it will take for Brazil to go from 10% to 30%. Brazil will experience this demographic transition so rapidly that it will be among the 10 fastest countries in the world.

In **Figure 10.6** we can see that Belgium took 162 years to age to the point of the elderly comprising 30% of the population. Brazil will make this transition in just 48 years. The transition in Brazil will occur faster not only than in European countries, but also faster than in our neighbors in Latin America (including Colombia, Chile, and Argentina).

What is our proposal? The proposal, as I said, is a constitutional amendment (or PEC) and four complementary laws. The system that deals with private-sector workers (known as RGPS) is presently governed by two laws. In our project, we combined the two laws into

Total	-126.7	-155.7	-181.0	-203.3
Demais	-4.5	-5.5	-6.8	-8.3
Militares	-32.5	-34.1	-36.1	-41.8
Civis	-35.5	-37.6	-41.2	-42.4
União	-72.5	-77.2	-84.1	-92.5
Estados/DF	-60.9	-89.6	-112.1	-128.2
Municípios	6.7	11.1	15.2	17.4
ENTES	2015	2016	2017	2018

Figure 10.2. Municipal, state, and federal regimes – financial results (BRL billion)

Source: MPOG, STN



Figure 10.3. Brazil's demographic groups (children, adults, the elderly), 1980

Figure 10.4. Brazil's demographic groups (children, adults, the elderly), 2020









DEMOGRAFIA BRASIL 1980-2060: FATOS

Source: IBGE

Figure 10.6. Time (in years) for elderly (aged \geq 65 years) population group to transition from 10% to 30% of total population, in 36 countries around the world



Tempo (em anos) de transição de 10% para 30% da participação da população de 65 anos ou mais no total

Fonte: United Nations, Population Division - World Population Prospects: The 2017 Revision

one and eliminated all problems arising from imprecise legal drafting, which was a concern on our part, since inaccuracies in legal texts have allowed excessively wide latitude in subsequent judicial interpretation. In practice, such imprecision has meant that many socialsecurity benefits actually arose out of decisions made by the courts.

For example, 30% of rural pensions exist as the result of rulings made in the justice system. Systematically, a growing litigation of social security matters is taking place, often traceable to imprecision in original legislation and, also, to activism in the Brazilian judiciary, which, with all due respect, needs to be corrected. The judge cannot play the roles of the justice system and the executive and legislative branches as well. The judiciary commonly write articles into a law; it is actually a Brazilian disease. The proposal has a part called the parametric reform, which corrects such situations, prepares an equalization of rules for all workers, and provides for a short but palatable and fair transition. By the mid-2030s, all workers would be covered by the same social security rules (see **Figures 10.7-10.9**).

On the logic of capitalization, I had an excellent group of researchers helping me who managed to find an interesting solution for capitalization.

If the capitalization option is approved, and the PEC approved, it would come into existence in 2020 but would only become operational in 2030 when the oldest eligible person would be just 16 years old. A novelty is that our proposal would allow, but not require, employees to transfer up to 25% of their retirement fund (*Fundo da Garantia do Tempo de Serviço*) into a

Figure 10.7. Minimum retirement age and rapid transition

1	T (1 1 1 1 / / /	· · ·	
V	Estabelece idade mínima	nara anosenfadoria e	uma fransicao rapida.
	Lista selecte lande minimu	para aposentation me	unna transişao rapiaan

	Regras atuais	Regra proposta - Inicial	Transição	Regra proposta - Final
Aposentadoria por tempo de contribuição	Sem idade mínima	Idade: 55 (homem) e 53 (mulher)	12 anos	65 (homem e mulher)
Aposentadoria dos servidores públicos	Fórmula 85/95 para quem entrou até 1998: soma de idade e tempo de contribuição igual a 85 para mulheres e 95 para homens.	Idade: 60 (homem) e 55 (mulher)	10 anos	65 (homem e mulher)
Aposentadoria rural	Idade: 60 (homem) e 55 (mulher)	Idade: 60 (homem) e 55 (mulher)	10 anos	65 (homem e mulher)
Aposentadoria dos professores	Sem idade mínima, 5 anos a menos de tempo de contribuição	Idade: 52 (homem) e 50 (mulher)	15 anos	65 (homem e mulher)

Figure 10.8. Pension regulations

Regras atuais Regra proposta Transição Regra proposta -Final Pensão por morte -Reposição 100% 60%, mais 10% por dependente adicional até o limite de 100% Sem Transição

✓ Estabelece regras para a Pensão

Estabelece regras para Acumulação de Benefícios

	Regras atuais	Regra proposta (valor cumulativo e alíquota progressiva)	Transição	Regra proposta - Final
Acumulação de Pensão por morte com aposentadoria (2º benefício)	100%	até 1 Piso previdenciário: 100% entre 1 e 3 Pisos: 80% entre 3 e 5 Pisos: 60% entre 5 e 8 Pisos: 50% acima de 8 pisos: 40%	Ser	n Transição

Figure 10.9. Formula to calculate amount of pension

Anos de Contribuição	Percentual de reposição para cada ano	Reposição acumulada no final da faixa
de 1 a 15	4,0%	60,0%
de 16 a 25	1,0%	70,0%
de 26 a 30	1,5%	77,5%
de 31 a 35	2,0%	87,5%
de 36 a 40	2,5%	100,0%
Acima de 40	2,0%	adicional

Art. XX. O salário-de-benefício consiste:

I – para as aposentadorias por idade na soma das seguintes parcelas:

a) piso básico previdenciário universal; e

b) média aritmética simples de 100% (cem por cento) dos salários-de-contribuição, deduzidos do piso básico previdenciário universal, apurados em todo o período contributivo utilizado para a obtenção do benefício desde a competência julho de 1994 ou desde a competência do início da contribuição, se posterior àquela competência, atualizados pela inflação na forma do § Yº do art. ZZ, multiplicada pela soma dos seguintes percentuais, dependendo do tempo de contribuição

capitalization account.

The new social security will be structured on three pillars: a universal basic income for the elderly, one part based on sharing and another comprised of capitalization. It is important to note that the accumulated cost of our capitalization proposal over 20 years (2030– 2050) is BRL 70 billion (see **Figure 10.10**). It would be equivalent to a one-year increase in social security expenses under the current system, which is practically negligible.

In conclusion, I believe we have good prospects for a reform that would remove the issue of social security from the table.

Figure 10.10. Projection of accumulated cost for capitalization system (2030-2050)





PANELIII: POLICIES TO PROMOTE INNOVATION AND EMPLOYMENT IN BRAZIL

BRAZIL: A DECISIVE AND DIVISIVE TIME AHEAD

ALBERT FISHLOW

Politics have changed in Brazil.

In the final election totals, Bolsonaro won a decisive victory. When Congress resumes in February, the Social Liberal Party (PSL) will have the largest number of representatives in Congress, and is certain to overtake the PT. The PT managed to do better than expected, with the second largest number. The former major contenders – the MDB and the PSDB – have both lost decisively, in both the first-round presidential election as well as in the governorships and Senate.

What are the implications?

First, socially, there is a divisive moment ahead. Bolsonaro will seek to shift slightly away from the extreme positions he had taken earlier, but not enough to alter his strong social and evangelical positions. Gun ownership will be extended to a larger group in the population. Violence will be countered with greater violence. Sexual choice is no longer an option. Inclusion of God will commonly appear in his speeches. Health and education outlays will devolve even more greatly to states and municipalities, as federal economic outlays are progressively reduced. Moreover, public education will be more strictly applied and enforced, and private education will be looked upon favorably.

Second, in the economic area, the government will take on the issue of pension reform as a central problem to be resolved. Already power has been concentrated in the hands of Paulo Guedes, who is committed to establishing a capitalized social-security system similar to the system in Chile. This is a central issue in the country, dating back to the Cardoso regime. It will be costly to create, because of demographic change. The young, – who are steadily and quickly becoming a smaller proportion of the population – will have to finance their own payments as well as those of their elders. To what extent, and how rapidly, will this process occur? And will the costs be tenable in a situation where fiscal revenues are constitutionally required to decline as a percentage of income?

Note that fiscal gains from social-security reform occur over a much longer period, while the spending limit is immediate. Pressure for rapid change over the next six months will be paramount. External investment will hold back, waiting to see the final outcome of negotiations between Congress and the Executive.

Dealing with the problems of the states and their continuing excess of spending on wages will be more complicated. Many of the populous states are in great need of financial assistance from the federal government, and this circumstance will, as has always occurred in the past, lead to an increase in federal debt and reduction of state debt as acceptable actions are taken to resolve the problem.

Brazil in the world

More broadly, troubles are also brewing on the international scene, complicating expectations for foreign investment even if a satisfactory solution is reached in the social-security issue. World growth has been ratcheted downward as a result of Brexit negotiations (or lack thereof), size of the US fiscal deficit, the ongoing negotiations between US and China, the troublesome situation in Venezuela, and countries' disability in general to deal with a real problem that will not disappear: immigration. The rise of guite conservative feelings about border walls and new limitations on entry by a number of countries is now a political issue ranging from Sweden to Australia.

In addition, there is a likely upward trend in global interest rates and possible reversal of the slight price increases that have occurred over the last several years, which could have an impact on foreign investment, offsetting potential gains from successful resolution of the pension problem.

Finally, there remains the problem of longerterm growth in Brazil even if short-term growth works out over the next half year. Brazil cannot progress without significant investment in infrastructure. Soy exports are regularly curtailed. Foreign investment can help, but it is not the entire answer. Brazil's private sector as well as the government need to be involved. Plans exist but they are outdated. Federal resources are also much restricted.

Brazil needs a major boost in investment. Where is it going to come from? Consumption growth is continuing its rise. Productivity expansion is irregular and closely related to the successful and efficient agricultural expansion program. Industry may have opportunities stemming from excess capacity, but that does not restore the growth of the past.

THE CHALLENGE OF INFRASTRUCTURE MODERNIZATION IN BRAZIL

CLAUDIO FRISCHTAK

My point of departure is a graph that describes the stock of capital invested in Brazilian infrastructure since 1970, based on estimates of investment in the sector (comprising transportation, telecoms, power and water/ wastewater) (see **Figure 12.1**).

As can be seen over the almost 50-year period from 1970 through 2018, capital investment in infrastructure has fluctuated significantly. A peak occurred in the early 1980s as a result of significant investments in the 1970s, before a downward trend resumed. Capital investment turned slightly upward again during the intensive privatization period in Brazil in the late 1990s, then again during the Dilma years of profligate – and not very efficient – spending. Recently, in the face of a deepening fiscal crisis, the trend has turned downward again.

Most of the country's infrastructure is quite old, built at least 30–40 years ago, and maintenance levels of this stock are below what is generally required. This translates into efficiency losses that are more persuasive than most people realize. The operating costs of these assets are extremely high, which is reflected in the regulated utility rates paid by consumers (in power and water, for example). And a non-trivial risk exists related to the physical integrity of many of these assets. Infrastructure assets are long lived, but they are not eternal, and certainly are even more vulnerable if maintenance has not been steady. Accidents will occur with increasing frequency.

Figure 12.2 indicates the investment gaps in infrastructure, measured as the ratio of required and actual investment in the 2001– 2017 period. It turns out that the most significant gaps are in services that disproportionately affect the poor – water and sanitation and transportation (and, within transportation, urban mobility in particular). The low coverage in the water/wastewater sector has enormous implications for the health of the poorest (not



998

966

999

66

2000

2002

Figure 12.1. Infrastructure Capital Stock, 1970-2018 (% of GDP)

984

986

982

986

988

990

1976 1976 1978

30%

970

56

35.9%

018

2010

012

2008

2006

2016

Source: Frischtak e Mourão, (IPEA 2018, Chapter 3) and Inter B (own estimates)

	Annual Average (2001 – 2017)	Needed	Hiatus	Hiatus /Average Investment (%)
Transports	0.67	2.00	1.33	199
Energy	0.60	1.07	0.47	78
Telecom	0.56	0.72	0.16	29
Sanitation	0.18	0.45	0.27	150
Total	2.01	4.24	2.23	111

Figure 12.2. Investment in infrastructure by sector (% of GDP)

Source: Erischtak e Mourão, (IPEA 2018, Chapter 4) and Inter.B (own estimates).

only in terms of infant mortality and morbidity from water-borne diseases but also from the myriad of high human and financial costs of diseases spread by mosquitoes – such as dengue, zika and chikungunya). Diseases from poor sanitary conditions also affect the cognitive ability of children. In fact, Brazil has a far a more effective system for protecting society's elderly than its youngest people, with this age cohort (0-5 tears, in particular) paying a huge price for the poor infrastructure.

Finally, it is noteworthy that the gaps in infrastructure are not equal in size across all sectors; they are not as wide in the power sector and telecommunications, both sectors in which major efforts to privatize were made in the 1990s (albeit less in the case of power).

How many years will it take to close these gaps in infrastructure? If in the future the country continues to invest at the same rate as in the recent past (2001–2017), it will never reach the target level of infrastructure stock to GDP, estimated at 60% based on the studies we conducted for IPEA in 2018, which is significantly above the current level of just under 36% of GDP. A stock of 60% of GDP would reflect a relatively modernized infrastructure, but not one at the efficiency and innovation frontier. Thus, if Brazil continues to invest an annual average of only 2.01% of GDP, the target level will never be attained. An average investment effort of 4% of GDP, on the other hand, would take the stock to a level above 60% by 2044, 24 years after start of the investment increase (the stock would eventually stabilize at 67.5% of GDP); see **Figure 12.3**.

The point is that we are far from where we should be. In fact, in 2018 and 2019, we will have invested less than 2% of GDP in infrastructure, barely sufficient to offset the levels of depreciation of the capital stock. This is a glaring example of misplaced priorities. The country spends resources it can hardly afford in a myriad of tax incentives (costing 5% of GDP as Ana Paula Vescovi presented this morning, the rationale and effectiveness of which is not well known or assessed). As Armínio Fraga reminded us, Brazil is an outlier in terms of payroll and social security spending - about 28% of GDP - well above other comparable countries. Meanwhile, in terms of infrastructure spending, Brazil is far below its Latin American neighbors. Even with China removed from the comparison, Brazil compares poorly to Chile, Peru and other middle-income countries that are investing over 6% of GDP.

How might the growth in infrastructure investment affect potential GDP? We have

		Year	Steady State Stock (% of GDP) ¹
	2.01	-	34.4
Average investment in infrastructure as of 2020	3	-	50.7
	3.5	2096	59.1
	4	2044	67.5
	4.5	2036	75.9
	5	2032	84.3

Figure 12.3. Year in which target level of 60% of GDP is attained based on average annual investment in the sector (% of GDP)

Source: Erischtak e Mourão, (IPEA 2018, Chapter 4). (1) Stock level reached when depreciation equals investment, taking into account a weighted average depreciation of 3.9% and an average growth of 2% p.a.

simulated the impact over the eight-year period (2019–2026), assuming a gradual increase in infrastructure investment spending, reaching 4.5% of GDP in 2023 and stabilizing thereafter.

We are also assuming an elasticity of GDP to infrastructure capital of 0.2 in the initial four-year period, thereafter declining to 0.1 in the following four years, and also a time lag of three years between construction of the capital assets and their full operation. On this basis, the impact on potential GDP growth would be higher in the initial four-year period (2019-2022) - on the order of 0.84% of GDP and somewhat lower in the next (2023-2026), namely 0.5% of GDP, but the combined impact would be an impulse on the supply side of 1.3% at the end of the period and stabilizing thereafter, which is very significant (after all, it is estimated that currently potential GDP is about 2-2.5%).

What is the infrastructure reform agenda in Brazil?

First, to expand and improve the allocative

efficiency of infrastructure investments has to be a policy of the Brazilian State, not of one particular government. After all, it is a longterm concerted effort beyond a particular presidency. It is of course imperative to use all public resources judiciously and carefully, and at all levels of government. To ensure that resources do not go to waste (as in the recent past), an ex-ante cost-benefit evaluation of public projects is required, as well as an expost impact evaluation.

Second, it is necessary to improve the business environment for infrastructure investment in Brazil by providing greater judicial certainty and regulatory predictability. In addition, it is important for the government to provide visibility to investors, a so-called planning horizon, a demand from the private sector, which in the foreseeable future will be driving infrastructure investment in the country. If the right policy and regulatory environment to attract private investment are not in place, the country will be complicit in the demise of its infrastructure.
Planning

Planning carried out competently is essential. Until recently the country had been concentrating in Brasilia the implementation of public infrastructure projects - which should be naturally decentralized - while dispersing infrastructure planning across states and municipalities, creating overlaps, wastina resources, doing away with potential synergies, and bringing gross allocative inefficiencies. Clearly, public investment requires far better governance; and private investment in its turn a portfolio of projects with a medium- to long-term horizon, in order to guarantee both learning and scale.

Most private investors in infrastructure are not one-off investors: they are interested in building a portfolio of projects to take advantage of synergies and dilute fixed costs. There are many approaches to planning; the UK, Australia and New Zealand, among others, depend on the interaction between the public and private sectors, especially the two-way exchange of information, in order to allow the capture of useful information that only the private sector can provide. The traditional one-way flow, from government to private sector, is characterized by a high loss rate when translating plans into programs and concrete actions.

In addition to improving the planning system for infrastructure investment, it is necessary to temper the level of judicial insecurity. There is a perception that the judicial environment is not only complex, but judges' contradictory decisions or apparent misinterpretations of the legislation produce significant uncertainty with first-order effects on efficiency and equity.

So how can this power be tempered or moderated?

At a basic level, judges must be more aware of the economic impact of their decisions. Decisions must be clearer and based on an exante analysis of their economic consequences. Decisions made by a single judge should be subject to accelerated review by a panel of judges, a procedure that might contribute to greater stability in the rule of law.

Reflecting further on judicial insecurity, greater clarity must be brought to bear in instances in which conflicts occur among various levels of judiciary and among government control organs as well. Brazil is a federation, so conflicts can and do arise among judicial authorities at the federal, state, and local levels. Conflicts also occur among the government agencies responsible for audit and control of public spending.

Reducing judicial uncertainty will help improve the business environment in Brazil. The evidence indicates that in Brazil there is a tendency toward excessive use of courts to settle State / private-sector disputes, increasing the costs of doing business. It would be better if public authorities were to accept other more efficient and less time-consuming conflict resolution mechanisms, such as use of arbitration and Committees for Dispute Resolution.

Regulation and regulatory agencies must also be improved, with a reduction in regulatory uncertainty and ad hoc interventions in the market. It is absolutely unacceptable that governments use regulatory agencies as political bargaining chips.

In this regard, Congress has recently (May 2019) approved the Law of Regulatory Agencies (PL 6621/2016), providing federal agencies with greater administrative, decision-making and financial autonomy. The legislation is in many different respects ground-breaking, consistent with the best global practices, and a fundamental measure to provide the country with greater regulatory predictability and stability, including strict criteria for hiring of agency directors. Hopefully the new legislation will stop the common practice of the past – stuffing regulatory agencies with political appointees.

Infrastructure Financing

The Temer administration, in introducing for BNDES operations the "Long-term Interest Rate" (TLP), significantly reduced governmentsubsidized credit, which led to increased participation of capital market instruments – and commercial banks – in infrastructure investments. In fact, we do not regard financing as a major obstacle for increased infrastructure investment.

Over and above BNDES, institutional investors need products that are consistent with their medium- and long-term liabilities and infrastructure investment has a strong appeal to the extent that it provides reasonable, steady returns. Insurance companies can equally play a greater role, dependent however on certain regulatory changes, such as the introduction of effective "step-in" rights.

An infrastructure agenda would be incomplete if privatization of state-owned or state-controlled enterprises is not addressed. The reasons are well known why it is so important to carry out an effective privatization program, and they are grounded not only in the experience of other countries but in our own circumstances: poor governance with the capture by political agents, employees and their Unions, economic agents used to syphon off resources and other stakeholders; little autonomy of public managers, which detracts from their ability to effectively maximize value of those firms at a minimum cost; investment limitations linked to the political use of pricing decisions, combined with fiscal pressures, which impose transfer of profits to the government at the expense of investment. With few exceptions, I do not see any justification to keep these enterprises in the public sector. Public-sector firms in the infrastructure sectors, their assets, and operations should be privatized as soon as possible. And in this process, it is essential first to have the political will then proper modeling on how best to privatize, to ensure that the process is consistent with the public interest; and have a timely execution.

Finally, BNDES is, arguably, underutilized. It has the human and technical skills but not the mandate to undertake the privatization process. It is possible that no other federal government institution has the critical mass in terms of human capital and accumulated expertise to carry the privatization mandate. Such resources are being grossly underutilized. It is imperative – if not urgent – to put them to good use.

THE REFORMS BRAZIL REALLY NEEDS

JOSÉ ALEXANDRE SCHEINKMAN

Brazil faces today at least two distinct economic problems: an unsustainable fiscal deficit and low growth. And any solution to these two problems must also take into account that inequality in Brazil is simply too high.

The fiscal problem is urgent. The primary deficit reached 1.24 % of GDP in the 12 months ending in October 2018, Combined with low GDP growth rate and even lower but still robust interest rate, this level of primary deficit implies a fast-growing debt/GDP ratio. Since the share of GDP collected by taxes exceeds 1/3 (an already high level for an economy with Brazil's development level), deficit reduction must come from expense reduction. In the long run, there are many possible tools to lower expenditures. But in the short run, pension reform is the most efficient way to signal a reduction in future growth of debt/GDP. Pension reform can actually lower inequality; for example, the project led by Armínio Fraga and Paulo Tafner, eventually eliminates most of the public sector's "special regimes" and proposes a reasonable minimum age that applies to all.

The Plano Real led to much lower inflation rates and, at least during the period 1999-2013, Brazil produced annual primary surpluses. Many observers believed that with the major macroeconomic imbalances eliminated. Brazil could return to the high growth rates that it had enjoyed before the first oil shock. Unfortunately, the growth rate, except perhaps in some years of the commodity boom, has been mediocre. According to the World Bank WDI's GDP per person employed (constant 2011 PPP dollars) series, output per worker employed grew only 18% from 1995 to 2017. During this period, Brazil's distance to the frontier increased; a Brazilian worker went from producing 34% of a US worker's output to 29%.1

1 The Conference Board's Total Economic Database, November 2018 version, reports a slightly worse

Brazil's growth rate would certainly benefit from improvements in education of the labor force and a higher investment rate; but growth accounting points toward total factor productivity (TFP), which measures how efficiently and intensively labor and capital are used in production, as a major contributor to this loss in relative output per worker between Brazil and the US. TFP calculations are notoriously imprecise, but according to the Total Economic Database, the growth factor in Brazilian TFP in 1995-2017 was only 68% of the corresponding US growth factor. In the Penn World Table (PWT), v9.0 Brazil's TFP at current Purchasing Power Parity fell from 61% to 48% of US TFP from 1995 to 2014. In comparison, the Human Capital Index in Brazil in the PWT increased from 52% to 74% of the US index.²

Possible sources for the post-Real low performance in productivity include an increasingly complicated tax system that favors specific sectors and even particular firms and subsidizes smaller firms. The effect of this highly distortionary tax system was aggravated by the increase in tax burden in 2017 from 25% of GDP pre-Real to 33.6%. A tax reform should replace the many taxes³

performance (from 33% to 26%). A third data series, Penn World Table (PWT) v9.0 (see Feenstra et al., 2015) actually reports an improvement from 1995 to 2014 in Brazil's output/worker relative to the US. The data in PWT implies a growth rate of 22.9% for Brazil's GDP in 1995–1996 while the other two sources report more reasonable growth.

rates: 2% (WB) and .02% (TED). This single data point explains 3/4 of the difference in output per worker between the PWT and the other sources

2 The role of TFP in depressing the relative performance of Brazil's output/worker is not a recent phenomenon. Ferreira and Veloso (2015) estimated that in 1990 TFP differences explained more than half the difference between Brazil's output per worker relative to the US.

3 These taxes include the IPI (basic sales tax on industrial products), Pis /Cofins (social contributions on gross revenue), ICMS (tax on interstate movement of goods), and ISS (municipal service tax). that affect production by a national valueadded tax (VAT) with uniform tax rates across all products. States and municipalities would receive a portion of the VAT receipts. Brazil should also start treating income in nonincorporated businesses as income to partners and tax it exactly as wages. The current system results in lower income-tax rates for highly paid professionals than for mid-level employees of firms. A reduction of corporate income tax financed by taxes on dividends is also desirable.

Foster et al. (2001) document that much of the US's growth in productivity comes from the process of entry and exit of firms. But in Brazil, a myriad of laws and regulations protect incumbent firms. Review of the laws and regulations aiming at increasing competition in Brazil is urgently needed.

Brazil's notoriously uncertain legal environment, among other things, discourages private infrastructure investments. Stable rules and less legal uncertainty would generate an expansion of investments in infrastructure.

Growth of output per worker in Brazil has varied greatly across major economic sectors. Between 2000 and 2013, output per worker in manufacturing fell 5.5%, rose only 11.7% in services, but rose 105.6% in agriculture.4 TFP in agriculture grew 4.3% per year in 1997-2014.5 In addition to a deregulation shock in the 1990s, agriculture benefitted from two factors absent in manufacturing or services: (i) public investments in research through the Brazilian Agricultural Research Corporation (Embrapa), which among other things developed the new techniques that transformed the Cerrado region into an agricultural powerhouse; and (ii) an open agriculture trade policy since 1990 that contrasts with the high rates of protection in manufacturing. Gasques et al. (2012) estimated that a 1% increase in agribusiness exports raised agriculture's TFP by 0.35%. Brazil will greatly benefit from a well designed R&D support system, like Embrapa, and from lowering tariff and non-tariff barriers to trade.

The good news is that the performance in agriculture indicates that Brazil may need to solve only a few of the problems depressing productivity to achieve much higher growth rates.

Arias et al. (2017) p. 2, referencing: IBGE.

⁵ Arias et al. (2017), p. 7.

MACROECONOMIC POLICY AND THE MIDDLE-INCOME TRAP: LATIN AMERICA VS. EAST ASIA

TAKATOSHI ITO

My purpose today is to contrast economic performance between Latin America and the main developing countries of East Asia. My interest in the topic dates back to 1992 when I got involved in a World Bank study of the Asian miracle.

In terms of per-capita income, over the last almost-four decades (1980–2017), Asian countries have grown, while Latin American countries have stagnated. In 1980, for example, Argentina ranked above all Latin American and Asian countries (except Japan) in terms of per-capita income. However, by 2017, Argentina had fallen behind Singapore, Korea, Taiwan, and Chile. I will trace the growth experiences of Asian countries and Latin American countries in the framework of growth convergence theory. My sample set of Latin economies includes Brazil, Argentina, Chile, and Mexico. Asian countries used here include China, Korea, Malaysia, and Thailand. I will compare these two groups of countries using standard macroeconomic dimensions: growth rates, inflation, currency depreciation, fiscal deficits, and current account deficits.

Figure 14.1 shows a distinct contrast in growth performance between the Asian and Latin American countries. Asian countries recorded high and relatively stable GDP growth rates

Figure 14.1. Growth performance of Asia vs. Latin America

Growth performances Asia (high & stable) vs Latin (low & volatile)



Gross domestic product per capita, current prices (USD)

from 1980 to 2017. Latin American countries, by contrast, experienced generally low and volatile growth rates over the same period. Performance of the Japanese economy shows a growth spurt that peaked in 1995 followed by relatively stable growth. The strong performance of Singapore's economy is especially noteworthy.

Figure 14.2 contains a simple ranking of growth performance in this sample of 11 countries, which gives us a clear view of the relative decline of Latin American economies in terms of per capita GDP as measured in US dollars at market rates.

In 1980, Japan was the leading country, Argentina was second, followed by Singapore, Mexico, and Chile. Brazil was ranked ninth.

By 2017, significant shifts in the per capita GDP rankings had occurred. Singapore and

Japan flipped places at the top of the ranking, with Singapore moving to the first position as the wealthiest country. Several Latin American countries slipped significantly over this time period, especially Argentina and Mexico. Chile experienced volatility in its ranking but remained unchanged from 1980. Brazil moved up to seventh position, a relative improvement, but was still in the bottom half.

Figure 14.3 is complicated in its structure but informative in terms of telling us the story of growth convergence and the so-called middleincome trap. The figure illustrates the ratio of country GDP per capita to US GDP per capita, in current prices and expressed in log form. Zero on the horizontal axis is the benchmark level, at which country income is equal to per capita US GDP. So the distance from zero is how much a country is behind the US, i.e., how wealthy the country is at a point in time.

Figure 14.2. Relative decline of Latin countries per capita GDP (in USD)

Relative decline of Latin countries Per capital GDP (in USD, market rate)

	1980	1990	2000	2010	2017
1	Japan	Japan	Japan	Singapore	Singapore
2	Argentina	Singapore	Singapore	Japan	Japan
3	Singapore	Taiwan	Taiwan	Korea	Korea
4	Mexico	Korea	Korea	Taiwan	Taiwan
5	Chile	Argentina	Argentina	Chile	Chile
6	Taiwan	Mexico	Mexico	Brazil	Argentina
7	Malaysia	Brazil	Chile	Argentina	Brazil
8	Korea	Malaysia	Malaysia	Mexico	Malaysia
9	Brazil	Chile	Brazil	Malaysia	Mexico
10	Thailand	Thailand	Thailand	Thailand	China
11	China	China	China	China	Thailand





The vertical axis in the figure corresponds to per capita GDP growth rates at current prices. Each of the 11 sample countries' convergence paths is described at three points in time. The dot on the far right is 10 years after the great recession of 2008. The middle dot indicates growth rates in the 10 years between the Asian currency crisis in the late 1990s and the 2008 global financial crisis. The first dot on the left represents the rate 10 years before the Asian currency crisis.

According to growth convergence thinking, the general trend is that low-income countries can achieve high growth rates because it is relatively easy for them to catch up by adopting better technologies and raising low productivity rates.

Convergence becomes more difficult for middle-income countries, since gains from incorporating new technologies are smaller.

For higher-income countries (those nearer the OECD average), catching up to the US is even more difficult. In **Figure 14.3**, Japan and Singapore are closest to the US level. Mexico, Argentina, Chile, and Argentina represent the middle-income countries.

As a country grows and its economy increases in size, its growth rate can be expected to decline. Theory would predict that each of these country-specific growth paths would slope downward and rightward over time. And if one accepts the hypothesis that all countries have access to the same technology, it is reasonable to assume that the growth path should be about the same for all countries, i.e., countries "catch up" along the same path.

However, the paths or lines in **Figure 14.3** describe not one pattern, but several. In particular, looking at the group of middle-income

countries, it appears that some countries do not have the "lift" to converge toward the US. They appear to crash toward zero growth, at which point they cease converging. This is the socalled "middle-income trap" condition.

Brazil and Argentina both seem "stuck" at around zero. Mexico is slightly better, and Chile significantly better. Malaysia seems still to be converging. Taiwan, in contrast, is sliding downward toward the middle-income trap. China appears to have considerable lift and is still sustaining high rates of growth. It could be heading toward Korea and Taiwan, or even toward Singapore and Japan, which would put it close to OECD levels of per-capita income.

Breaking out of the middle-income trap

Looking at Brazil, the question becomes: "How to break out of the middle-income trap?" The answer involves some of the issues being discussed here today, including reforms to improve productivity. Productivity increases will shift the per-capita GDP growth line upward and to the right over time.

It is also important for middle-income countries to avoid repeated currency crises. If domestic currencies are depreciating strongly, even high local currency growth rates will not translate into increases in GDP in dollars. The currency crises are a clear sign that macroeconomic fundamentals are weak and growth potential is not being realized.

I will now move to consider currency crises. Two types can be identified. The first is a "traditional" currency crisis, of the type experienced by Latin American countries in the 1960s, 1970s, and 1980s. The pattern of such crises is familiar. It involves fiscal deficits, printing money, inflation, current account deficits, and a "fear of floating." The result is an appreciation of the real exchange rates, declines in exports, and losses in foreign exchange reserves.

Another type of exchange rate crisis is the "21st century crisis," typified by the Mexican

peso crisis in 1994–1995. It also follows a familiar pattern. Countries experience a period of strong capital inflows leading to currency appreciation, a domestic economic boom, and mounting current account deficits. Then, some political event (possibly a small one) occurs domestically, and international confidence declines, capital outflows intensify, the currency depreciates, and the authorities step in to stop depreciation. Foreign exchange reserves are exhausted and the country is forced to turn to the IMF. In addition to Mexico, other economies that have experienced 21st-century-style crises include Thailand, Indonesia, and Korea in 1997; Brazil in 1999; and Argentina in 2001–2002.

The next set of figures compares some basic macroeconomic factors in Latin America and Asia in recent years. **Figure 14.4** presents the sharply higher inflation rates of four Latin American countries (Argentina, Brazil, Chile, and Mexico) compared to four Asian countries (Korea, Malaysia, Singapore, and Thailand).

Figure 14.5 shows relative performance in terms of nominal exchange rates during past decades. In this comparison, the Latin American economies show a marked tendency for currency depreciations. The Asian economies, with the exception of the period around the time of the currency crisis, have generally maintained domestic parities against the dollar.

Other indicators sharpen the contrast between the two regional groupings. Fiscal deficits have been lower in Asia than in Latin America. Levels of public debt are similar across the two regions (see **Figure 14.6**). A look at other basic macroeconomic factors suggest, however, that Asian countries may be in a better position to manage their debts to avoid crises.

Current account deficits, at least since 1996, have generally been lower in Asia than in Latin America (see **Figure 14.7**). In more recent periods, most of the Asian economies in the sample are recording current account surpluses, which they can use to boost

Figure 14.4. Inflation rates in Latin America and in Asia

Inflation Latam > Asia



Figure 14.5. Exchange rate changes: Latin America (depreciation) vs. Asia (stable)

Exchange rate changes: Latam (depreciation) vs Asia (stable)





Figure 14.6. General government gross debt (% of GDP)

Figure 14.7. Current account balance: Latin America < 0 < Asia

Current Account Balance Latam < 0 < Asia



Figure 14.8. Foreign exchange reserves (% of GDP): Latin America < 20% < Asia

Forex Res/GDP Latam < 20% < Asian EM



international reserve levels. These large reserve levels come in handy during periods of capital inflows. So, despite what the IMF may say, piling up international reserves might be beneficial. In fact, larger reserve levels did help protect these Asian economies in the 2008–2009 global financial crisis.

In **Figure 14.8**, relative reserve levels (foreign exchange reserves in percent of GDP) do not exceed 20% of GDP. All the Asian economies have reserves of at least 20% of GDP. Singapore's ratio is almost 90% of GDP.

In conclusion, I would like to urge us to focus on the different growth convergence paths between Asian and Latin American country. That would be the most important conclusion of my presentation.

DO PAPEL DO ESTADO **PANEL IV:** BUSINESS **PERSPECTIVES ON** THE CHALLENGE **OF RESTARTING GROWTH:** WHAT PRIORITIES FOR THE NEW **GOVERNMENT?**

A MUDANÇA

UN

NEW BUSINESS OPPORTUNITIES IN BRAZIL: A MULTINATIONAL PERSPECTIVE

ANDRÉ CLARK

Brazil is slowly emerging from the worst economic recession of its recent history and at the same time experiencing a set of structural changes. To name a few: a) new-found low basic interest rate and seemingly low inflation despite the stark fiscal deficit; b) institutional reforms due to anti-corruption; c) election process almost fully driven by social networks; d) large-scale energy transition driven by the new-found oil and gas reserves. It is possible to say that this scenario is driving changes in the role of the state in Brazil.

Siemens' history of over 150 years in Brazil coincides with its industrialization and infrastructure development. For the company, maintaining a long-term strategic perspective on Brazil is a key element. Siemens is present in all five areas: energy, mobility and transportation, urban infrastructure, healthcare, and industrial digitalization (also known as Industry 4.0). The changing role of the State in Brazil can be felt in all of these areas.

In this context, Brazil needs to regain economic growth while undertaking efforts to stabilize its fiscal deficits (therefore with very limited public spending) — all this under direct and enormous pressure from an angry middle class that is extremely active on social networks. This same lack of options is pushing the country toward painful and unpopular reforms that are testing the strength of Brazil's democracy. All this spiced up by ongoing and healthy anti-corruption efforts that are done with extensive international cooperation.

When evaluating this new panorama, it is possible to say that the country is executing a pro-business and pro-private investment effort in several areas of the economy, with special focus on the energy sector. The Brazilian energy sector assumes a structural role in the national economy by providing broad access to modern energy sources, as well as through its capacity to generate investment, employment, and tax revenues.

The Power Sector, Gas and the Brazilian Energy Transition

The regulatory system of the power sector in Brazil has shown resilience to the recent political turmoil and has been showing a remarkable dynamic, given the state of the economy. There are still new investors and large global utilities acquiring brown and green field operations.

Further, the new ultra-deep offshore oil discoveries in Brazil come with great relevance associated with gas. The Government is taking measures to further liberalize this market and thereby motivate the monetization of these resources by bringing production onshore along the coast and using the oil as a transition fuel to greater participation of renewables. The oil occurs along the shores of the southeastern states of São Paulo and Rio de Janeiro where the industrial sectors are more developed and where a possible positive impact should be relevant in the years to come. Maybe we will see cheaper gas and energy revitalizing Brazil's industrial assets?

At the same time, given the excellent wind and sun conditions of the country, the renewable generation has been growing very fast. In September 2018, 14% of all energy consumed in the National Integrated System (SIN) was supplied by wind farms that were operating at more than 72% of capacity factor, causing new paradigms shifts in the grid stability (given the intermittence of this energy source) challenging and requiring investments in the grid. All this is being done without any participation of the public sector and dramatic reduction of the state financing bodies (BNDES and others). Here the new role of the state is clear: to be the regulator and the short- and long-term planner

of the power system.

Strategic Sectors: Oil and Gas

Another strategic player with an upcoming window of opportunity is the oil and gas sector, mainly because of the pre-salt oil reserves. Siemens, as one of the global leaders in solutions for this market and with a scope that covers one-third of the typical offshore equipment for oil exploration and processing (FPSOs), offers solutions to meet the growing demand for more digital, autonomous and agile projects. These solutions are built on three pillars – automation, electrification and digitalization – which together increase efficiency and optimize operations in upstream (exploration and landbased) production.

With respect to the oil segment, Brazil has decided to liberalize the midstream (gas transport) and downstream (refineries and natural gas processing units) oil markets, by refocusing Petrobras' business plans on deep oil exploration and therefore privatizing assets.

In Siemens' view, for this market to gain even more dynamism, the remaining monopolies (refining, logistics and natural gas) need to be relaxed in order to attract new players on a competitive basis. Incentive mechanisms need to be evaluated for segments demonstrating competitive advantages in order to integrate them into global value chains. It is necessary to provide greater predictability to the environmental licensing in the areas of exploration and production through prior definition of environmental requirements and restrictions. It would also be desirable to promote a simplification of exploration and production contract models and optimize allocation of mandatory expenditures, granting greater autonomy and responsibility to the operating companies.

Another key point is to promote legal and regulatory security by simplifying existing systems and reducing judicialization in the energy sector. Another important initiative will be to ensure the independence of regulatory agencies and establish decision-making autonomy (both financial and functional), thereby eliminating appointments of a political nature and transforming regulatory agencies into independent budget units that function as state and not federal agents.

The environmental licensing process must also be improved by reviewing legislation that casts personal blame directly on the licensing authority's executive for developing a less bureaucratic, more efficient, qualified, and predictable process.

Industry 4.0, AI, and the Productivity and Employment Agenda

Industry is another important economic sector that has undergone a paradigm shift in recent years, the result of an intensive automation process, which has evolved into the fourth major change in modes of production, a concept known in Germany as Industry 4.0 (or the Fourth Industrial Revolution).

The Industry 4.0 platform has emerged as a way to use the full potential of integrating available technologies to increase productivity, based on integration of digital, mechanical and automation systems and establishing new production paradigms. So the time it takes to launch products on the market has been drastically reduced, and factories have become more flexible and efficient, thanks to so-called cyber-physical systems, in which products and machinery communicate all the time, enabling greater speed and flexibility, lower costs, lower costs, and improved quality.

Here Brazil presents deep contrasts. In some segments, such as agriculture, automobiles, banking, and fibers, industry is very advanced and productive. In these areas, companies are quickly adopting the Fourth Industrial Revolution by using tools such as the internet of things, cloud computing, deep analytics, and artificial intelligence. However, in other sectors, industry is only starting to gain a crude understanding of basic lean management procedures. Brazil is an early adopter and a robust player in the IT world and quite competitive in software development.

Also, we have been surprised by a very active and relevant innovation ecosystem. Brazil has created approximately 16 clusters covering many areas. Brazil is also one of the key markets for Uber and similar internet-based companies.

Recent government efforts to advance Industry 4.0 and innovation are very positive. Examples include Embrapii, a federal government program that brings key research and development centers in universities to cooperate with the private sector in high technology innovation. Some successes have already been recorded. In the coming years, Brazil, although still unfamiliar with Industry 4.0, has an opportunity to put national production on the road to the future. To do so, the country needs to invest in technology and workforce empowerment to increase productivity and, above all, to add value. To continue competing in this new scenario, companies, regardless of their sector or size, need to invest in digitalization.

In this context, Siemens works with solutions that respond to the challenges of transitioning to Industry 4.0, increasing companies' competitiveness and, consequently, Brazilians' quality of life. Moving forward in this new world means looking beyond it. We have the opportunity to help not only our customers but also our customers' customers to improve their businesses, creating a valuable outcome for society as a whole.

The well-known challenge of "doing more with less" has become a must for industries that have to ensure results in an adverse economic environment. Business opportunities are directly linked to entrepreneurs' perceptions of the rapid returns possible with increased productivity and new business opportunities made possible by digitalization technologies.

To be part of this future, we must choose our goals and manage all plans in an integrated way. Governance must be relevant. If there is no integrated policy setting the priorities, we run the risk of getting nowhere. Adding technology to sectors where we already have comparative advantages – energy and food production, for example – is the natural way. But some decisions must be made in order to move in that direction. In Industry 4.0, innovation is not just about technology; it also influences the business model. It is important to focus on customer needs, tailor digital strategies, and intensify internal and external collaboration with partners in the value chain. It is a true cultural shift and calls for a holistic view of technology, which opens opportunities and enables creation of new business models.

One priority should be the establishment of regulations, mechanisms and incentives that align the academic sector with business. Innovation must become part of an industrial public policy that goes beyond tax rebates to include education, resolving infrastructure bottlenecks and connecting with academia. These initiatives require goals, accountability and partnerships with the private sector and the market in general.

Trade policy needs to be integrated with industrial policy and innovation policy. Brazil needs a single unified plan. It cannot have several different plans led by different entities. For Industry 4.0, alignment – or even a single governance – is needed for initiatives by different governmental public policy bodies, always seeking the complementarity of these initiatives.

For Siemens, which actively participated in Germany in design of the "Industry 4.0" Platform, this solution will help companies be more competitive in an increasingly connected world. We believe that the digital transformation process in Brazil brought about by implementing the concepts of Industry 4.0 will help propel the country to make a quantum leap in productivity and competitiveness and help place Brazilian industry in a relevant position in global value chains.

AN EXECUTIVE'S PERSPECTIVE ON THE CHALLENGE OF RESUMING GROWTH: PRIORITIES FOR THE NEW ADMINISTRATION

JOÃO MIRANDA

I have always felt hopeful that Brazil can be an economically sound, more inclusive and fairer country; a country that offers quality opportunities for all, that enables a democratic state and effective exercise of citizenship, a country that respects institutions.

I started working in the early 1980s, known as the lost decade. Lost for the economy, maybe, but crucial to laying the foundation for the return to representative democracy. Since then, I have seen how limitations to sustained economic development can hinder opportunities for individual and collective growth. The Plano Real was the beginning of a period of good macroeconomic management and fiscal responsibility, which were key to restoring credibility and for economic agents to create positive expectations. Unfortunately, this period was interrupted by reintroduction of an alternative development model wrongly sustained by expanded public expenses and consumption incentives, with an excessive increase in household credit, which was frustrating for economic agents and caused suffering for the population.

We have been through one of the most severe crises in our country's history. Extremely high unemployment rates, scarcity of real income, retracted investment and consumption, and fiscal stress in federal, state, and city government spheres. Added to that, the political class has lost credibility after decades of clientelism, alienation of constituents' interests, and morally dubious or even illegal behavior. I like the idea of leaving behind a developmental state model, one that relies on fiscal expansion and, most of all, on increased public apparatus and the spoils system.

I am still hopeful that Brazil will be better for all Brazilians, and I believe we must work to transform such hope into optimism.

We have a new president, elected by the

majority of votes, who defends liberal precepts for the economy and is conservative in customs. The results of congressional elections were also revealing. The turnover rate was extremely high. The decision made at the polls regarding concerns about public security (both of citizens and properties) and support for combating corruption was absolutely clear. Brazil's present reality was democratically stated in the elections.

We may need some time to realize that the elections are over, the political stages have been taken down, and life goes on. Much remains to be done for us to leave this current state of distress. The President-elect and the new Congress cannot afford to wait, and beginning 1 January 2019, they will have to make urgent decisions that will affect the lives of all Brazilians.

The domestic situation facing the new administration also has positive elements that should be preserved.

The new administration will see interest rates and inflation at historically low levels, in addition to idle capacity in several segments of the economy. While such idle capacity may come at the cost of a high unemployment rate (which needs to be handled), it also allows for a quick response by the economy, provided that it is combined with the necessary credibility shock and good governance. In order to keep inflation expectations well grounded (and interest rates low) and to recover credibility, which is paramount to attract investments, the fiscal imbalance and growing internal debt must be tackled. Fortunately, external debt is no longer a concern.

Had it not been for events that negatively impacted the Brazilian GDP – such as the truckers strike, currency depreciation, and inaction caused by perplexity regarding politics

- 2018 would not have failed to meet growth expectations.

Brazil in the global scenario

We have to be cautious about the global scenario. While 2016 and 2017 were years of good growth, 2018 has been marked by the effective beginning of a monetary tightening cycle and uncertainties arising from the US-China trade war. How the US economy will behave in 2019 – and consequently how the Federal Reserve as well as the largest global economies will respond – is currently the source of great uncertainty. We have to be cautious, because a reversal in the expected scenario of global benign growth could put pressure on commodities and worsen the Brazilian trade balance, reducing its positive impact on the Brazilian economy.

That said, in order to resume sustainable growth, the new government's priorities should be:

- Preserve important achievements in the economic sphere, such as low inflation and interest rates.
- Urgently and bravely tackle fiscal imbalance, the public sector's low productivity, and reform of the state's corporate role.
- Create conditions to improve the business environment and, consequently, Brazilian competitiveness.
- Create transparency mechanisms to enable society's oversight of actions of the executive, legislative, and judiciary.
- Create opportunities for Brazilians to prosper.

Right from the start, the next administration will need to find the path toward fiscal balance. Reforms are needed (such as pension reform), as well as revision of tax reliefs, and reform of the State's funding structure and its role as an economic agent. Also a well-balanced solution is needed to the delicate situation facing the states currently under strong fiscal imbalance. The Congress's educational process, together with the forging of alliances and the balancing of strengths between the executive and legislative powers, will play a key role. We have to be realistic, but it is also known that when it comes to much needed changes (such as pension reform and other fiscal matters), gradual usually works better than abrupt (abrupt changes can trigger additional imponderable risks).

Regarding the State's economic role, privatizations need to be made as well as new concessions in infrastructure areas, not only as funding in support of fiscal balance, but also modeling that better serves the Brazilian people and the functioning of the economy. I would highlight the following examples to address in the modeling:

- Basic sanitation: prioritize universal access to services, with incentives to privatizations and new concessions, which should require regulatory revision.
- Oil refining: do not replace a public with a private monopoly; ensure competition. A pro-market instead of pro-business model.
- Energy: focus on low-cost energy security, promoting proper structure of energy sources. Let go of old fallacies, such as considering Eletrobras a strategic asset in the hands of the State. Create environment that enables greater private participation in the natural gas sector.

Brazil's business environment

In addition to fiscal balance, proposals should be sought that improve the business environment and allow the country and its economic segments to become more competitive. Greater competitiveness would improve conditions for the sustainable creation of jobs and income, in addition to enabling the increase in domestic savings.

Some concrete examples, which should not be a surprise to anyone, include:

 Create a single tax on goods and services, charged at the destination, simplifying the calculation and collection system, minimizing allocation skews and making taxation of goods and services less regressive. The current tax system interferes with economic agents' decisions, creates inefficiencies, and causes loss of competitiveness.

- Lower corporate income tax rate and taxation of dividends not above the current corporate income tax rate, thereby encouraging productive investments.
- Provide tax relief on investments.
- Judiciously discontinue special tax regimes, exemptions, and ineffective subsidies.
- Provide tax relief on payrolls, keeping only cost of salaries and pension contributions. Nothing else.
- Reduce excessive regulations, which hinder capacity to do business in Brazil, in addition to actions to curb excesses sometimes committed by public authorities based on such regulatory tangle.
- Foster development of financial and capital markets. Foster further development of fixed income markets for private issuers, encouraging and facilitating participation of institutional investors. Improve coordination between agents that regulate and oversee these investors. Proceed with Central Bank initiatives to increase competition in the banking sector.
- Save public funding mechanisms only for technology and innovation and businesses in the development stage, fostering entrepreneurism.
- Open trade by reducing or eliminating tariffand non-tariff barriers.
- Continue supporting the fight against corruption, considered to be one of the worst factors affecting Brazil's business environment, according to a survey by the World Economic Forum; build on measures that award companies' social responsibility.

Once again, we must be cautious. Much of what has been discussed by the transition team seems to be going in the right direction, at least when it comes to the most pressing economic issues. However, only decree-laws, proposed bills, and public commitments will provide us with a true measure of the new economic team's intended scope and impact. Especially with regards to trade openness, there is still much misinformation and fear in the air. Openness is good in the mediumand long-term for the country and its industry, because increased competition stimulates improved productivity, provides access to intellectual capital and innovation, placing the country and its companies inside global supply chains. It also improves capital allocation by pointing toward the sectors that have a comparative advantage.

In a recent interview, Pedro Wongtschowski from the Industrial Development Study Institute (IEDI) described the Brazilian tariff system as disorganized, with too many tariffs, and higher tariffs for acquisition of inputs and lower tariffs for finished products. A clear view of the starting point is needed before taking action. That way we can prevent perverse effects on employment and income, tax collection, and gross capital formation in the short term.

Improved public governance will play as important a role as macroeconomic stability and a better business environment. Public management should be modernized bv updating the public service career, attracting and developing leaders focused on managing targets, aligning benefits, and digitizing administration proceedings. Such measures could potentially reduce state bureaucracy, enabling a more efficient service, and reducing wastage of public resources. It would also increase transparency by opening intelligible information to citizens, encouraging the exercise of citizenship, and ensuring government accountability. Increased transparency in all spheres of the administration will be paramount for restoring trust in public agents.

The political reform, considered by many to be the mother of all reforms, should be tackled in its own time. Good intentions, projects, and competence will be of no avail if we remain stuck on an excessive number of political parties and clientelism, which has led to less prudent allocation of resources.

Last but not least, it is paramount to invest in

The sticky business of opening trade

quality education for all. Brazil has advanced in terms of access to education—94% of Brazilians ages 4 to 17 are in school. The quality of education offered in the country, however, is the greatest challenge—93% of youths finish high school without proper knowledge of math, for example.

The World Economic Forum's Global Competitiveness Report 2018 places Brazil in the 124th position out of 140 countries in its indicator on general guality of education. India and China rank 36th and 37th, respectively. In the OECD's Programme for International Student Assessment (PISA), which assesses 70 countries, Brazil ranks among the bottom 10 countries. Every 100 points in the PISA, a country grows an average two percentage points in per-capita GDP per year. Without promoting quality education, we cannot be competitive, we will not solve income distribution or inequality issues, and we will be doomed to fall behind.

I believe education is the only means of transforming people's lives; creating better opportunities for individual and collective progress; and fostering entrepreneurism, productivity and innovation. Education is also the best way to make our young representative democracy even healthier, ensuring every vote cast is based on knowledge and awareness.

In order to promote quality education for all, it is worth looking at recent achievements to empirically assess successful actions. Key aspects to improve the quality of education in Brazil include valuing teachers and investing in continued education, adopting results-based planning and monitoring policies, implementing curriculum standards for full-time basic education known as the Base Nacional Comum Curricular (national common core curriculum) and making high school education more flexible by focusing on education for work.

Discipline and fiscal responsibility, adjustments to the roles played by the state, and return to growth pave the way for faster creation of opportunities for individual progress, inclusion, and effective exercise of citizenship by everyone. It also makes room for the government to focus on improving essential services and fulfilling its duty to enable access to quality education, health and public security for all Brazilians.

SHOULD BRAZILIAN BUSINESSES BE OPTIMISTIC?

MARCIO HOLLAND

Macroeconomic Outlook

The Brazilian economy has faced challenging tasks. In the aftermath of the international financial crisis of 2008, the domestic economy has experienced volatile output cycles, political crises and severe and prolonged fiscal stress. Even after more than a decade, the economy is still struggling to find a path to sustainable growth. Actually, since the 1980s, the growth of productivity has semi-stagnated, growing on average 0.7% per year. Brazil asks for a comprehensive agenda of economic reforms. In 2017, a profound labor reform was approved, easing the relationship between workers and entrepreneurs.

The economy is underperforming. Since the beginning of the recent recession (2014), the GDP grew on average -0.8% annually. However, there is no miracle; not even a silver bullet. Demand-side economic measures became ineffective. There is no fiscal space for fiscal stimulus and the monetary policy interest rate has reached its lowest level. Supply-side policies seem to be the only way to get the economy out of this mediocre situation.

Under such circumstances, there are at least five genuine initiatives to promote Brazilian growth. First, the entire pension system needs to be reformed since it has become unsustainable and unreliable. Spending on pensions, including all benefits and states and municipalities, reached 13% of the GDP, while public investment is running below 1% of GDP. Spending for pensions under the control of the Federal government alone accounts for more than 50% of the budget and close to 65% of tax revenue. Early retirements and privileges, especially for civil servants and rural workers, are the most important causes of the increasing deficits in the pension system.

The aging of the Brazilian population is proceeding much faster than earlier international experiences. The ratio of dependency has increased so that, in several decades, two workers will be expected to support one retired people. Nowadays, this ratio is around five working-age persons per retiree. The population over 65 years old accounts for 9% of the total population, but in 2060 the percentage is projected to be close to 30%. Not only because of fiscal stress, but also due to population aging, Brazil is bravely moving toward new pension system adopting minimum age and other criteria for retirement.

Approval of a new pension system is a sort of cornerstone for a new cycle of growth. Its economic effects are unprecedented. It is expected to bring inflows of capital to fund long-term investment, especially in the infrastructure sector and in innovation.

Second, Brazil likely is going to adopt a new tax system. The current system is extremely inefficient with several taxes, rates, special regimes and judicial uncertainty. The high tax burden on payrolls encourages informality in the labor market and hurts domestic competitiveness. The system is regressive, cumulative, imposes a high cost of compliance, and is far from neutral and fair.

Most of the proposals aim to amend the federal constitution. Regardless of the differences among the various proposals, the idea is to simplify the entire system and diminish the amount of litigation. The challenges are enormous. Shifting the tax system means dealing with the fiscal federalism, states and municipality autonomy, special sectorial and regional regimes, lobbies and sectorial negative impacts. Specialists and policymakers alike are coming to consensus on the need to adopt a sort of a VAT (Value Added Tax), in the process replacing several taxes (such as PIS and Cofins, IPI, ICMS and ISS).

The economic impact of tax reform on domestic competitiveness is immeasurable. Overall costs

of production are expected to be reduced, including cost of compliance, increases in economic efficiency of firms and, therefore, increased potential output.

Third, the Brazilian economy is well known as a closed economy, which harms growth. After 20 years of negotiations, Mercosur and the European Union recently (mid-2019) reached a comprehensive trade agreement. The deal aims to remove the majority of tariffs on EU exports to Mercosur, an economic and political bloc comprising Argentina, Brazil, Paraguay and Uruguay, plus several associate members. The Brazilian government also intends to reduce various tariffs on imports, despite international agreements. Openness, ever controversial in the economic literature, in the Brazilian case should be considered good for growth.

Fourth, under a market-oriented agenda, the government intends to reduce the burden of the state in the economy with a bold privatization plan. Some state-owned enterprises (SOEs) started an aggressive de-investment policy (for example, Petrobras); and BNDES (National Development Bank) has been reoriented to funding only infrastructure, innovation and small enterprises. As we know, there are 134 SOEs under federal administration, which is far more the average of OECD members. Most of these companies are not capable of investing, and suffer from the abuse of stakeholders' power and political party influences. Privatization is an important policy to foster efficiency in the economy.

Fifth, the monetary policy interest rate has reached its lowest level ever. The weakness of the economy, as seen in the GDP growth and elevated unemployment rates, explains in part the low inflation rates. However, Brazilian inflation rates have been persistently higher than those observed in peer developing countries. Economic reforms combined with trade openness can bring down inflation rates in Brazil.

Additionally, the Central Bank of Brazil (BC) is

being highly proactive with its microeconomic agenda called BC+ – recently changed to BC# – in order to incentivize the creation of socalled "fintechs". The banking spread in Brazil is absurdly high regardless of the economic and political circumstances. Banking concentration, verticalization of the system, legal rights of creditors with the lack of availability of credit information are all relevant in determining the banking spread. The BC# is an important initiative to disseminate credit in a sustainable way with lower lending rates.

On the macroeconomic front, the biggest concern is fiscal stress. Brazil has not been able to reduce the primary fiscal deficits nor to stabilize the public debt-to-GDP ratio. The pension reform should partially mitigate such this constraint. However, mandatory government spending with other public policies is still high and calls out for adjustments. The fiscal consolidation strategies adopted 2018-2019 are strongly based on investment cuts rather than on cuts in primary spending.

Despite the economy's current weakness, economic policy is on the right path now to promote efficiency and competitiveness of the economy and, therefore, to increase potential output. Under such circumstances, the private sector would benefit from long-term sustainable growth and macroeconomic stability. With economic reforms and good practices in fiscal and monetary policy, private investments and stimulus to innovate are invigorated.

Industry 4.0 in Brazil: Perspectives

The promising combination of three different worlds – digital, biological and physical – is provoking disruptive technologies as IoT (internet of things), AI (artificial intelligence), machine learning, deep learning, big data, robotics, and so forth. This new paradigm of technology is changing international value chains, entirely altering business models and the labor market. The role of emerging market economies like Brazil is still unpredictable. As far as we know, the more openness of the economy, the more integrated it can be with

global value chains.

Robotics is only one part of the recent technological transformations. But it is illustrative about what is going on around the world in the digital era. According to the World Robotics Report 2017, robot sales increased by 30% (to 381,335 units) over the previous year, a new peak for the fifth year in a row. The main drivers of this exceptional growth in 2017 were the metal industry (+55%) and electrical/ electronics industry (+33%). Robot sales to the automotive industry increased by 22%; this sub-sector remained the primary customer for industrial robots with a share of 33% of total supply in 2017.

Since 2013, China has been the biggest robot market in the world with continued dynamic growth. China has significantly expanded its leading position as the biggest market with a share of 36% of the total supply in 2017 (30% in 2016). About 137,900 industrial robots were sold to China in 2017, 59% more than in 2016¹.

Brazil's performance is far below China's. While estimated annual shipments of multipurpose industrial robots in China is 210,000 in 2019, in Brazil it is only 900.

Policies to catching up to the frontier of the new technologies are more sophisticated than those implemented decades ago. From 1930– 1970, these consisted of import substitutions policies and, from 1990–2010, industrial polices based on local content, high import tariffs, and subsidies.

Many analysts believe that Brazilian industry suffers from the phenomenon of "early deindustrialization." According to this view, industry's shrinking participation in the GDP must be taken into account for the authorities to reverse the decline by implementing traditional industrial policy such as protectionism, currency devaluation and subsidized public funds to private investment. This view is clearly focused on Industry 2.0 (as

1 These statistics are from the World Robotic Report – Executive Summary 2018.

in the second industrial revolution) rather than on Industry 4.0. The new industry depends on tight integration into the global value chains, is focused on knowledge rather than local content, and its higher added value is associated with development of software more than production of hardware. In other words, in the new economy, software development creates more value than manufacturing computers and printers. Industrial automation with use of control systems (such as computers or robots, and information technologies for handling different processes) are more relevant than steel, plastics and other similar products in manufacturing.

To promote Industry 4.0 (that is, to incentivize the introduction of disruptive technologies such as IoT, IA, robotics, etc.), there are at least three key public policies: high quality of education, infrastructure in communication, and good practices with respect to property rights and patent registration.

Education in Brazil is frustrating, as evident in its PISA (Program for International Student Assessment) ranking. Unfortunately, presently no one single policy can overcome this historical malaise. As the country industrialized from 1930 to 1980, it did not invest suitably in education. Import substitution policy did not take into consideration human capital in its toolkit. The domestic educational system faces plenty of distortion as the government invests much more in college students than in primary education.

Investment in information technology (IT) is evolving much better than in education, but it is still below the required level. This is likely attributable to the recent recession (2014–2016) followed by slow GDP growth (2017–2019)² which caused many decisions on investment in this sector to be postponed. Investment in IT is s sensitive to the economic outlook. Economic

² Brazilian GDP growth declined eighth consecutive quarters, from the peak in 4Q2010 to the bottom 4Q2012. Then it entered a weak recovery in 2013 and a meltdown from 4Q2014 to 3Q2017. And a mediocre recovery up to the present.

reforms present a more sustainable way to accelerate IT investments.

Getting patents registered in Brazil takes, on average, more than 90 months, but only about 22 months in the United States or in China. Recently, the government agreed to sign the Madrid Protocol, which is a convenient and cost-effective solution for registering and managing trademarks worldwide. It is a remarkable step toward better practices to incentivize research, development and innovation domestically.

As can be seen, Brazil is on the right path to foster competitiveness by reducing costs, improving institutions, and preparing the productive sector to absorb new technologies.

Final remarks

There is no doubt that the Brazilian economy was hit by a perfect storm from 2014 to 2017. A combination of corruption scandals, political instability (including impeachment of a president), economic meltdown and fiscal crisis took place all together. It reminds me of a quote attributable to Rahm Emanuel, a former mayor of Chicago. He said: "You never want a serious crisis to go to waste. And what I mean by that is an opportunity to do things you think you could not do before."

The only agenda Brazil has to deal with the current economic weakness is associated with structural reforms. Despite political polarization, it seems the country is trying to take advantage of that perfect storm. It is rare in the international experience for a country to struggle to implement so many different reforms in such a short period of time as Brazil is trying to do now.

A labor reform was already approved in 2017, opening space for more flexible and modern relationship between workers and entrepreneurs. Pension reform is to be completed in 2019. Mercosur and the European Union reached a trade agreement to be implemented by 2021. And tax reform is already under discussion in the Congress with promising proposals. The role the Central Bank of Brazil has played is noteworthy, with its agenda of microeconomic measures to disseminate credit even within a very concentrated banking system.

In a few years from now, because of such a bold agenda of economic reforms, Brazil can become a more competitive economy with an industry able rapidly to absorb new technologies. Considering the country's enormous opportunities for investments in different sectors and regions (such as infrastructure, energy, telecommunication, health care, education, agribusiness, industry 4.0, etc.), it is reasonable to hold an optimistic view of the near future of Brazil.

PANELV: BRAZILAND THE WORLD: OPORTUNITIES AND RISKS

Svejnar

BRAZIL AND THE WORLD: OPPORTUNITIES AND RISKS

JAN SVEJNAR

I would like to draw some lessons for Brazil from Europe. First, two observations about Brazil: it is a country with great potential and it just has to realize it.

Figure 19.1 (below) presents recent growth projections by the IMF. The most important point is that none of the economies surveyed appears to be in a recession. Brazil has emerged, and so has Russia. The Euro Area is out of recession, although some indications hint that a slowdown may be in course.

Stepping back, the US and Europe still control a large share of global resources, but they are less important than they used to be. Far and away, Asia has grown faster than the rest of the world.

Figure 19.2 illustrates relative shares in the global economy since 1960. Notice that together

the US and EU had 70% of world GDP in the early 1960s. Presently they account for about 46%. This decline is the fastest decline for leading economies in world history.

China has had an incredible increase at the expense of the leading powers, the US and Europe, but also at the expense of Japan to some extent. Brazil appears to be gaining, but not nearly as much as would be desirable. That is the topic of our conference today. Brazil is about 3% of world GDP. China, after 40 years of extremely fast growth, is now at 15% of world GDP.

Figure 19.3 illustrates the world economy in 1820. The striking fact at that time was that China and India were about 50% of world GDP. The US was just 2%. So, clearly, fortunes can change dramatically in what are relatively short periods of time historically.

Figure 19.1. Output growth in perspective: forecasts

	2013	2014	2015	2016	2017	2018	2019
World	3.5	3.6	3.5	3.3	3.7	3.7	3.7
Advanced economies	1.4	2.1	2.3	1.7	2.3	2.4	2.1
USA	1.8	2.5	2.9	1.6	2.2	2.9	2.5
Japan	2.0	0.4	1.4	1.0	1.7	1.1	0.9
Euro area	-0.2	1.4	2.1	1.9	2.4	2.0	1.9
Germany	0.6	2.2	1.5	2.2	2.5	1.9	1.9
France	0.6	1.0	1.0	1.1	2.3	1.6	1.6
Emerging and developing countries	5.1	4.7	4.3	4.4	4.7	4.7	4.7
China	7.8	7.3	6.9	6.7	6.9	6.6	6.2
India	6.4	7.4	8.2	7.1	6.7	7.3	7.4
Brazil	3.0	0.5	-3.5	-3.5	1.0	1.4	2.4

Output Growth in Perspective: Forecasts

Forecast for 2018 and 2019. Source: IMF - World Economic Outlook, Updated October 2018





Figure 19.3. History or future of global economy? Shares of global GDP in 1820



Now we look again at distribution of world GDP today, with Brazil at 3% (see **Figure 19.4**).

If we look at population in the global economy, China and India are in the lead. Brazil is also about 3% of world population (see **Figure 19.5**). That does not seem to be right: an average level of GDP taking into account GDP per capita. It should probably be higher than that.

Brazil is not a very open economy (see **Figure 19.6**). Similar to the US, a substantial amount of trade occurs within its borders; but the opening beyond its borders is relatively limited.

Figure 19.7 illustrates the middle-income trap (see Figure 19.7) shows that Brazil is following the pattern of Peru and Mexico, and not piercing through the middle-income barrier, which is about USD 13,000 per capita. A big question is whether China can continue to grow as quickly as it has. Another is whether Brazil can begin to grow more rapidly and become an advanced country.

Turning to the lessons to be learned from

Europe, it is helpful to divide the area into several models. It is not a uniform region by any means.

Four different European models can be distinguished.

The Nordic countries (Norway, Denmark, Sweden, Finland, and the Netherlands) are characterized by high social spending and universal welfare protections. These are protective societies, but it is important to note that they protect people rather than unproductive jobs. You have to make sure that new firms enter and that people move to these firms; money is not spent on unproductive jobs. Expensive fiscal intervention occurs. It is an active fiscal policy that moves people. Strong labor unions, which are present in the Nordic countries, cooperate with this. It is noteworthy these economies have a more compressed wage structure.

Ireland and the UK present an alternative European model characterized by weak labor unions, wider and increasing wage dispersion, and a relative abundance of low-paying jobs. A

Figure 19.4. Structure of world economy in 2017 (%) based on GNI in USD and current prices







Figure 19.6. Openness: exports to GDP ratio, 2015 (exports of goods and services as % of GDP)



Figure 19.7. "Middle income" trap, GDP per capita, inflation-adjusted dollars: Latin America and Asian economies



large social assistance program exists, but it is an assistance of "last resort," aimed primarily at the working-age population.

The continental European model (Austria, Belgium, Germany, France, Luxembourg) offers extensive benefits to workers based upon an insurance scheme. Unions, which remain quite strong, have an amplified impact on the labor force because whatever they negotiate on behalf of their members is often extended to non-union members. In that sense, cooperation among trade unions is essential in these models.

The Mediterranean model (Greece, Italy, Portugal and Spain) concentrate a significant proportion of social spending on pensions, which are often complex arrangements somewhat similar the different pension regimes in the case of Brazil. The population's participation in the labor market is uneven and, on average, relatively low. The wage structure is covered by collective bargaining agreements.

Looking schematically at the four models (see **Figure 19.8**), the horizontal axis represents the employment rate (defined as number of persons working divided by the population). The vertical axis tracks the poverty rate.

One can see that the Nordic countries are doing quite well on both indicators: high employment rates and relatively high poverty reduction. The other country groups have various combinations of employment and poverty reduction. The Mediterranean countries stand out with relatively low scores in both employment and poverty reduction. The relatively inflexible labor markets combined with regulation are among



Figure 3: Employment Rates and Probability of Escaping Poverty in European Social Systems



the reasons for the Euro Area's growing concern about these countries. It is a system that does not produce innovation or competitiveness amid fiscal problems that include significant tax evasion. Other factors contribute to making reform extremely difficult.

In terms of efficiency and equity, the four models can be divided into different quadrants (see Figure 19.9). Once again, the Mediterranean economies score low in terms of both equity and efficiency. These economies were the poorest performers in Europe before, during, and after the Great Recession of 2008.

Let me now address the situation of the Central and Eastern European (CEE) economies, the newest members of the European Area. Their recent evolution bears some similarity to the Brazilian model. Economies such as those of Czechoslovakia and East Germany started from a point of complete state-ownership (much more so than in the case of Brazil), but they subsequently opened up and privatized.

The opening occurred partly as a result of

Source: Sapir (2006)

deliberate policy moves and partly due to historical reasons. As much of their trade had previously occurred with one another, the CEE economies had only quantitative controls and no tariffs. So when communism fell, they absence of tariffs resulted in a free-for-all. which governments sought only to ameliorate through surcharges.

The important point is that these economies essentially imported the world economy into their borders in an extremely short period of time, so it quickly became obvious which firms were viable and which were not. Simultaneously, significant privatization occurred, especially through foreign direct investment.

From an efficiency perspective, domestic firms had to quickly become competitive with new entrants in the domestic market from abroad. The FDI came from many countries, predominantly Germany, but also from the US and UK and elsewhere.

The change in ownership came about through multiple forms of privatization. Mass privatization through distribution of vouchers



Figure 19.9. Equity and efficiency in four European models

 Interestingly enough – Sapir and others who wrote about the problems of social models in Europe in mid 2000s almost precisely identified the countries which would experience the worst problems during the financial crisis...

- One exception: Ireland
 - Successful and flexible exporter hit by an adverse shock

to citizens was one form. Hungary, for example, took a firm-by-firm approach, where each individual firm was sold to the highest bidder; in many cases, that was a foreign investor.

A large number of studies were done on the privatization experience. What was found was that privatization in the first decade resulted in dramatic increases in productivity in the case of foreign ownership. Productivity results in firms sold to domestic owners, however, resulted in a mixed set of outcomes. The legal framework was not fully worked out. Fraud played a role as well as asset-stripping. In terms of total factor productivity studies, these observations are borne out, with productivity increasing more in firms associated with foreign ownership and much less in the case of domestic ownership. In the case of Russia, privatization had a negative impact on productivity.

In cases of foreign ownership, the impact on employment turned out not to be a significant concern. What happened is that the new owners sought to integrate the companies into global value chains, which required scaling up production three to five times above previous levels. So production was scaled up dramatically and the fear of an employment impact did not materialize.

We also looked at the differential impacts from "rushed" versus "non-rushed" privatizations. It turns out that if privatization is rushed too much, the government agencies overseeing the process are not able to handle it properly. This can subsequently have a negative effect on firm performance. So it is a tricky decision whether to rush privatization or not.

Creation of new firms was one of the keys to success in all these economies. The origin of new firms firms is related to the process of privatization. As individuals often received vouchers, these vouchers could be used as collateral to borrow from banks, thereby providing access to capital for new enterprises.

The CEE countries had to grapple with the problem of unemployment, which did not exist during the communist era. Policy reforms had to set up social security systems and unemployment benefits and significant pension reforms. Poland was particularly agile in setting up these new protection systems; other countries were not as successful.

The medium- and long-term success of the CEE countries has been that the median wage level has been rising, slowly but surely, which is surprising in view of expectations when the opening occurred three decades ago.

Other initial conditions are worth considering. I mentioned the fact of low tariff barriers. Another was a strong educational system, which helped a lot. Another factor is that the CEE countries had "terminal conditions," i.e., entering the European Union was a goal and each economy had to satisfy a whole set of initial conditions and requirements. This goal created a great deal of pressure on government institutions, eventually leading the countries to become advanced economies. Obviously, EU access is not available to all countries; but it proved to be a useful incentive for reform in the case of the CEE.

To conclude, Brazil can look to examples in Europe to inform its own reform efforts. The Nordic country model has much to offer, and Brazil can also extract valuable lessons from the case of the CEE countries.

PATHWAYS AND PROPOSALS FOR A NEW CYCLE OF TRADE OPENING IN BRAZIL

SANDRA POLÓNIA RIOS

I will start by saying that trade opening is a necessary but insufficient reform for sustainable economic growth. It is very important but it is not a panacea.

With that said, Brazil remains a fairly closed economy today, one poorly connected to global value chains. This isolation is the result of industrial and trade policies based on a resilient strategy of import substitution and inward-looking development ("the national development strategy").

In the first half of the 1990s, Brazil did significantly update its trade and industrial policies. Tariff barriers were reduced; nontariff barriers were addressed; Mercosur was negotiated; our intellectual property regime was revised. All of this trade liberalization was welcome. The problem, of course, is what happened (or did not happen) over the next 25 years up to the present. Brazil continues to be a closed economy and apply high tariff rates, and it is one of the least active countries in the network of preferential trade agreements.

The important question now is: What are the effects of import substitution strategies on economic growth and welfare in a country stuck in the slow growth trap?

In some respects, trade policy took steps backwards, especially after 2009, through policies such as the provision of subsidies to firms to compensate for the high cost of doing business in Brazil ("Custo Brasil"). The concept, broadly supported by public opinion, was that we had to counter the threat of "deindustrialization." In addition to subsidies, tariffs were raised, local content rules strengthened, and anti-dumping duties imposed. The net result of these policies was

Figure 20.1. Import tariffs in manufacturing - simple average (%)



Fonte: World Development Indicators/

https://data.worldbank.org/indicator/TM.TAX.MANF.SM.FN.ZS?

to increase production costs and intensify misallocation of resources. So the measures actually accelerated the deindustrialization process.

Looking toward the future, I believe that the crisis of Brazilian growth is a crisis of productivity (Bonelli, 2016) and therefore the focus should be on domestic reforms that spur productivity. Resuming the country's economic growth will demand relinquishing import substitution policies.

The evolution of tariffs in Brazil tells part of the trade policy story since the liberalization in the early 1990s (see **Figure 20.1**). Brazil's import tariffs for manufactured products (blue line in the graph) have been basically stable for the last 20 years, with an increase after 2007. In 1997, our tariff level was about equal to Mexico's and well below that of India. Mexico, subsequently, continued to liberalize trade. India has implemented important trade reforms, particularly from 2004 on, opening its economy, at least outside of agriculture.

It is also of interest to examine the structure of Brazilian protection (see Figure 20.2). Brazil and Argentina have similar tariff structures because of their connection through Mercosur. Both countries have a significant tariff escalation with high protection for capital goods and consumer products with lower levels of protection for imports of raw materials and intermediate goods. All other countries in the comparison also have higher tariffs for consumer products, but Brazil is still an outlier in this sample set and has relatively higher rates of protection for capital goods compared to other countries.

Brazil's protectionist policies also extend to a heavy use of non-tariff barriers (NTBs) compared to international levels (see **Figure 20.3**). The only difference is that in Brazil we do not use price controls as extensively as the rest of the world where protection of agriculture and food prices is a more pressing policy concern. Brazil does protect its domestic agriculture through other types of NTBs, including phytosanitary restrictions. These are used against bananas

Figure 20.2. Applied tariff per stage of processing (%), 2016







NTBs in Brazil and other countries (2015, %)

imported from Ecuador, sardines from Peru, coffee from Vietnam, etc.

Domestic service providers in Brazil are protected as well (see Figure 20.4). Compiled by the OECD, the statistics show Brazil's level of service sector protection compared with the OECD average. Data show that Brazilian protection is quite high in sectors that are important for competition: logistics, banking, transport, etc.

In view of these policies and the poor performance of the external sector, there is a general awareness in Brazil that a new cycle of trade opening is overdue. Much less consensus exists on how to do it. Recent studies by the World Bank and the OECD as well as Brazilian agencies all suggest positive impacts from trade reform: GDP growth, income distribution, export growth, with negligible impact on total employment.

Those same studies also show that there

will be both winners and losers as a result of the reforms. Inefficient companies in highly protected sectors will be forced out of the market, with damaging effects on employment and strong regional concentrations. Employment losses will be higher in sectors such as apparel and shoes where considerable productive capacity is located in small regions of the country.

The background for the reform effort includes another finding by the World Bank: the impact of unilateral trade liberalization is more relevant and positive than the impact of the complex and often endless trade negotiations.

An honest discussion on how to open Brazil's economy must address several dilemmas. The first is the question of which path to start on: liberalize trade or eliminate the "custo Brasil." One possibility is that trade liberalization could unlock pressures for other reforms.

A second dilemma is that of unilateral vs.





Services Trade Restrictiveness Index - Brazil -2017

Source: OECD: http://www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm.

negotiated trade liberalization. Brazilian business leaders may recognize the need for trade agreements, but as they voice their support, they are also counting on these negotiations never reaching a conclusion. The Mercosur-EU agreement has been under discussion for more than 20 years. Brazil continues to demand liberalization in the agricultural sector, which the EU does not accept. Europe continues to insist that Brazil modify its tariff escalation structure, also to no avail. The latest round of negotiations with the EU is taking place in Brasilia as we speak and is not expected to result in any forward progress. Even if an agreement were to be reached, it would take another two to three years for the Brazil Congress and EU Parliament to approve. Then it might take 15 years for the approved tariff reductions to enter into effect. Tariffs on capital goods, which are the most relevant for productivity, would come only at the end of this period.

These are the reasons that lie behind my belief that Brazil should engage in a unilateral trade liberalization. Our efforts should then turn to the question of the shape of the new tariff profile that would result from unilateral liberalization.

Proposals for a new cycle of trade liberalization

Our proposals are intended to address protectionism in its various dimensions in Brazil. These include bureaucracies in customs and ports, import tariffs, credit and fiscal subsidies tied to local content requirements, and preferences for local production in government procurement programs.

Specific proposals address four areas of liberalization:

- 1. Tariff reform;
- 2. Reduction and dismantling of non-tariff

barriers;

- Simultaneous negotiation of preferential trade agreements (PTAs) to lock in unilateral reforms, as India has done;
- 4. Dismantling of industrial policy instruments with embedded protectionist bias.

I will discuss each of these areas in turn.

Tariff reform

With respect to tariff reform, since 2013 we have been developing a program along with other groups and organizations. We already have some indications that leading industrialists in Brazil would be willing to accept our proposal. Our guidelines would bring greater rationality to the tariff structure, impart longer-term predictability through pre-announced tariff reduction schedules, and implement tariff reform over four years. We would have to deal with Mercosur, perhaps by offering the program to the other Mercosur members. The tariff reform would have particular parameters. Tariff escalation will be reduced. The cost of imported intermediate and capital goods will also be reduced. This measure is important for productivity growth and it would also gather political support for the reform from sectors not directly affected. Finally, a simple tariff profile would be adopted (see **Figure 20.5**), with four levels ranging from 0% to 15%. The structure would simplify customs procedures and cut down on bribery opportunities. The reform would involve the immediate reduction of all tariffs in excess of 15% to the new tariff peak of 15%, consistent with WTO guidelines.

Reducing and dismantling NTBs

Our proposal involves a number of key elements categorized as anti-dumping measures, trade facilitation, and standards and technical regulations.

In regard to anti-dumping, we propose reviewing the methodology for analysis of injury

Figure 20.5. Tariff profile

Guidelines:

- Rationality of tariff structure
- Long term predictability
- Pre-announced schedules of tariff reductions
- Implementation period: 4 years
- Offer the program to Mercosur members

Parameters:

- reduce tariff escalation
- reduce the cost of imported intermediate and capital goods
- simple tariff profile: 4 levels 0%, 5%, 10% e 15%

Transition scheme:

Current tariff (ranges)	Final tariff	
20% to 35%	15%	Ď
15% a 2to%	10%	
5% to 15%	5%	
Below 5%	0	

and causation to incorporate assessment of the impact of such measures on competition, prices, and downstream effects on the production chain.

Trade facilitation reform aims to streamline procedures by eliminating red tape and unnecessary requirements. We would also move to eliminate duplication of inspection procedures by different government agencies.

Standards and technical regulations reform call for adoption of international guidelines on application of standards, technical regulation, and conformity assessment. Such regulations in Brazil should align with those adopted in the main consumer markets of the world.

Trade negotiations

Most relevant markets in the world have lower tariffs than Brazil, but their protection is often concentrated in a sector in which Brazil has a natural advantage: the agricultural sector. So from the Brazilian viewpoint, such negotiations always seem unequal or unfair. We are opening our markets in exchange for being able to sell additional amounts of beef or ethanol. We need to decide how to deal with the political economy of trade negotiations. We believe that such negotiations can only be successful if we ourselves are committed to a path of opening our economy.

We should conclude negotiations with the EU, accepting that they will not give much in terms of agriculture.

In negotiations with the Americas, we should try to negotiate a comprehensive PTA in Latin America, incorporating the spaghetti bowl of existing regulatory issues (mainly services) already in existence. We should also launch the basis for a bilateral PTA with the US.

We should join various plurilateral trade agreements that until now Brazil has avoided. These include the WTO's Information Technology Agreement, which eliminates tariffs on information equipment. We should also join the Government Procurement Agreement, also of the WTO, which would allow us to drop various industrial policies that have not been very successful over the years. We should also join in the negotiations for the Trade in Services Agreement (TiSA), which focuses exclusively on trade industries. (These may not succeed, but participating will help us learn how to reform our protection for the services sector.)

We should persist in seeking to join the OECD. Of course, this is not a trade agreement, but participation in the OECD would force us to examine many elements of our trade policy, as I doubt that the OECD would accept us with our current structure of protection.

Dismantling of protectionist industrial policy mechanisms

Finally, industrial policies that hinder trade openness must be revamped. We should remove tax and credit subsidies intended to promote use of local content. Policies based on credit subsidies or government shareholdings geared to promote "national champions" in one or another sector must be eliminated. Sectoral industrial policies based on subsidies that promote a misallocation of resources must be dropped. Such policies allow the survival of inefficient industries in Brazil.

BRAZIL AND THE WORLD IN THE YEARS AHEAD*

(*Transcription of oral remarks, December 13, 2018, revised by the author)

PEDRO MALAN

The overall theme of our conference is rediscovering the path to stable growth in Brazil. This path requires that one adopt a longer time horizon, even though 2019 will be an extremely important year for the economy, as will the remaining years of the current presidential mandate. Depending on the results of the next presidential elections in 2022, the policies upheld this year and in the next three years will strongly influence the Brazilian economy through the rest of the decade, and maybe into the early 2030s.

Let me begin with some observations on 2019, starting with the world economy. In her comments this morning, Patricia Mosser mentioned the possibility of a slowdown or even a recession in the US economy. Let us go back to what former Secretary of the Treasury Tim Geithner said in March 2009 upon conclusion of the round of stress tests applied to the major US banks and the bailing out of Bear Sterns. He wrote that a crisis of the magnitude then being observed could not be attributed to a single cause or reason. However, he emphasized that the US had vastly overborrowed and allowed its domestic financial system to take on irresponsible levels of risk and leverage. He was certainly right. Earlier today, when Armínio Fraga and I asked about China, our questions arose from a shared concern about the enormous amount of credit leverage that sustained the impressive growth of China at near (or over) double digit levels for such a long time.

My main concern about the global economy, however, arises from another issue, also already mentioned by Patricia Mosser, partly associated with slower global growth, partly with signs of trade wars. We can characterize the current US administration's approach to trade in three steps: "make threats, strike deals, declare victory" – always. Then start the loop again, not only in trade but also in other public policy issues. The technique seems to have been honed by President Trump in his real estate deals in Manhattan.

With regard to trade, the current US preference appears to be for bilateral deals, under the reasonable assumption that the US as a country will come out better in bilateral deals rather than engaging in more complex multilateral negotiations with the broader goal of reaching sustained economic growth in the wider world.

Uncertain global scenario

Given the propensities of US President Trump, much uncertainty exists in the world. There is widespread concern about US-China relations, among the most important bilateral relationships in the world. Concerns are heightened because since the mid- 1960s, growth of world trade has been about two times greater than growth of the world economy. The elasticity is much lower today for a variety of reasons. We run the risk of a slowdown in global growth if trade volume growth remains low or declines further in relative terms. The US-China trade dispute in early 2019 certainly adds to this risk.

Trump's approach to trade policy is reminiscent of the "lazy planner" approach to trade often followed in Brazil, which involves a focus on bilateral deficits in trade balances and in import substitution policies with the overall goal of improving the trade balance. Trump appeared to be following a similar line with his focus on China, Mexico, and Canada and on steel and aluminum tariffs. He is pursuing specific issues and not acting within a broader framework that would emphasize the important role of the Unites States in the global economy, the linchpin of the global order since the end of World War II. This shift is a sea change for the global economy. This particular orientation toward trade may eventually be attenuated, but it seemingly will remain present during President Trump's mandate.

Turning to other issues affecting the global outlook, it seems clear that the US has little scope to implement more stimulating fiscal policies to ward off a slowdown in its economy. The Central Bank has limited room to increase its balance sheet. The margin for maneuvering is relatively narrow – although, differently from the ECB or the Bank of Japan, the US Fed had some space to reduce the Fed Funds rate.

At the same time, the US remains the main provider of safe risk-free assets and is still the economy with widest, deepest and more liquid capital markets. If global tensions increase for economic and/or geopolitical reasons amid risks of a slowing economy, a demand would persist or may even increase for dollar-denominated assets. This demand would be the main driver of a trend toward appreciation of the dollar, which would mean, of course, a depreciation of other currencies throughout the world, including the Brazilian real.

Turning to Brazil in 2019, we have a small window of opportunity that must be used at the risk of the grave consequences that would result from a failure to act. I favor a program of gradual trade opening, as Edmar Bacha, Sandra Rios and Pedro Motta Veiga, among others, have proposed, taking place over four years or so, and departing from a pre-announced schedule of reductions in tariffs and non-tariff barriers. Resistance can be anticipated from affected sectors, especially those slow to realize that the true test of productivity is the ability to compete for market shares in foreign markets. The name of the game is to improve the "tradability" of the Brazilian economy, taking into account exportables and importables. We have to take these actions, realizing that resistance from Congress and especially from affected and vocal economic sectors will be strong.

All roads lead to social security reform

More broadly, and notwithstanding the

importance of trade reform, the "mother of all reforms" in the case of Brazil has to be pension reform. This effort to improve our finances in the medium-term will define the trend, affect confidence and help shape expectations of investors, both domestic and international, in Brazil's future.

Doubts have been raised about the willingness of Congress to go along with ambitious reforms. From my experience in dealing with the Congress, I can make two observations. First, the perception of each member of Congress is determined by the impact of particular measures on their immediate constituency; congressional members also try to respond to shifts in public opinion. Second, they are also influenced by the nature of the executive's conviction in trying to push reforms through Congress. It is a combination of these two factors: shifting public opinion and interactions with the executive.

My main concern about social security reform revolves around President Bolsonaro's personal involvement and degree of commitment to ensure that the reforms are approved in Congress. He has to be absolutely convinced that the reforms are critical for the future of Brazil. At present, I do not see this conviction – but this may, gradually, change.

It is particularly important that the President take the lead, as the general public does not perceive that the country is in a serious fiscal crisis and action is urgently needed. The debt-to-GDP ratio in Brazil has been high for some time and we are in the fifth year of a large primary fiscal deficit. In all likelihood, the deficits will continue for some years to come. The sense of an immediate fiscal crisis needing to be addressed is absent from the popular perception, although it is being increasingly realized by the more informed public opinion.

Conviction about the importance of reforms has to be better communicated to the Brazilian public and to the Congress. The corporatist views of many important groups in Brazil (civil servants in the Executive branches of the three levels, in the Judiciary, in the Legislative, in the military, and in many others) are extremely influential and will be forcefully expressed. Great conviction is needed at the highest levels. If the man at the top is not convinced, it will be hard for the reforms to advance at the pace required.

Now, to address other themes, I have been visiting Singapore, which has made impressive advances in just two generations and has become the richest country in Asia. In the 1960s, it did not want to be a client state of either Indonesia or Malaysia, which could have happened. Instead the country took a different approach to its very small size and lack of natural resources. Singapore's leaders had an interesting saying, almost a mantra: "We are too small to change the world, but we can benefit from it and take advantage of the ways in which the world is changing." And that is exactly what they have been doing, extremely well, since the 1960s.

To relate this approach to Brazil, perhaps we could also say: "We are not big enough to change the world at large, but if we understand it, we can benefit from the ways in which the world is changing and take advantage of it." Ten years before it became common to speak of BRICs (the major emerging national economies of Brazil, Russia, India, China and, much later, South Africa), George Kennan referred to the "monster countries of the world:" the US and the four largest of the BRICs. Kennan wrote: "There is a further quality of greatness, or size; one might define it as the hubris of inordinate size. It is a certain lack of modesty in the national self-image of the great state, a feeling that the nation's role in the world must be equivalent to its size, with a consequent relative tendency to overweening pretensions and ambitions. Generally speaking, the great country has a vulnerability to dreams of power and glory to which the smaller state is less easily inclined."

One reason for Brazil's inclination toward protectionism is that we have a huge domestic market (an economy of USD 2 trillion), which, in purchasing power parity terms, is much bigger than that. Private consumption accounts for 65% of GDP. This is a large market by any measure. Many international companies that have come to Brazil did so in order to sell to the domestic market under high protective barriers. They came as an infant industry and many have remained so, depending on continuing types of "protection." The only significant foreign purchaser of the automotive industry, for example, is Argentina. Brazil must be exposed to foreign competition, taking into account that firms in Brazil have arguments and complaints about the business environment, including juridical uncertainty, regulatory issues, the tax system, which in their view leaves them at a competitive disadvantage and not because of their own fault. We have problems of inefficiency in infrastructure. We have problems of a lack of evaluation of government programs plus a non-irrelevant ideological opposition to privatization.

An idea that has historical roots and strength in Brazil is that the *deus ex machina* of economic development is the State, including the use of state-owned companies, state banks and stateuse of compulsory savings to the maximum. The bill has now come due, and must be addressed. Yet awareness of its urgency has not yet penetrated public opinion and the halls of Congress. This is changing now and growing, largely because a broad perception is gradually emerging in the country that we are lagging behind not only our potential but also behind a large number of other emerging markets and developing countries, not just the China, India and other fast-growing Asian countries.

To illustrate this last point: During the 1995– 2002 period, Brazil on average grew just slightly over 2.4%, compared to 4.2% for the developing world as a whole. During the 2003– 2010 period, Brazil grew by 4% while the rest of developing world grew 6.8%. During the 2011– 2018 period, average growth was just below 0.7% per year, while in the rest of the world it was 4.9%. Brazil's growth was more than 4 percentage points below the average of the rest of the developing world (and, in recent years, of the developed world). Let me conclude, as we move toward the next fifteen years, by reaffirming a certain degree of confidence in our capacity to rise to the challenges we are facing. We have done it in the past. We have no alternative other than to believe in the power of persistence. And I also reaffirm a certain idea of a decent Brazil, politically democratic and republican, socially progressive and inclusive, in addition to being economically responsible - in particular in the handling of public finances. This last one is not an end in itself, but without it, there is no way that Brazil could achieve, in a sustainable fashion, higher growth rates of income and employment, which clearly are the desire of the majority of the Brazilian people. And this depends on us, Brazilians.

CLOSING REMARKS

PRESIDENT FERNANDO HENRIQUE CARDOSO

It is important to take stock of opportunities and possibilities, as was done in this conference, so that Brazil can resume its path, not only of economic growth but also of income distribution. The economic reforms are important, but we also have to keep in mind Brazil's political reality, which is perhaps more discouraging than its economic reality.

This reality includes the large number of parties in Congress that can also be understood practically to mean the nonexistence of parties as such. The whole power game occurs in the exchange of one for one, in bargaining. This bargaining is, in part, something that exists in many democracies, but it is accentuated when in practice that is all that the political process involves.

Someone referred to the fact that, at one point in my life, I was the Finance Minister by virtue of a mistake made by Itamar Franco, the President of the Republic at the time. It is true. We designed an economic plan that succeeded in containing inflation.

What was my role at that time and what happened with the Plano Real? It was obvious that we had a big problem in Brazil. Inflation disrupted life and businesses, although some profited. But there was a feeling, more than a feeling, of uncertainty about the future. In everyday life, all those who were wage earners in practice lost money as a result of inflation. If individuals had money in the bank, the bank revalued people's assets. (We invented monetary correction.) Those who did not have a bank account simply lost money. There was a huge process of concentration of income during the inflationary period.

I remember well that I was in New York when the President of the Republic made the decision to put me in charge of the Ministry of Finance. I discussed it with two or three friends who were in New York at the time, including, curiously, Pedro Malan and Arminio Fraga. Arminio said he could not return to Brazil because he was just beginning a new position in New York. Malan promised to come once a month and spend a few days in Brazil. So, I felt extremely unprepared because I needed someone with greater technical skills than mine, since I am by training a sociologist. I had read some economics, had a little bit of experience, but not enough to understand in depth all the problems.

Nevertheless, when I came to Brazil to take office, the President assured me that he had selected me. I told him that I was surprised by the nomination and thought it was a mistake. I wondered what he was going to say the next day.

There was still an afternoon meeting at the Ministry of Finance, and I went there to make a normal speech upon assuming office. I said that Brazil had three problems. The first was inflation, the second was inflation, and the third was inflation. We are going to end the inflation. That is, you must choose the course, what to do at each moment of the story. You cannot do everything. You have to know what is the most challenging issue, what must be done, and then try to do it.

And how to do it? Of course, the first condition is to gather around people who do know, who have competence. But if at the same time you do not have political leadership, the technical options remain in academia. For better or worse, in the case of public life and politics, ideas have to be embodied in a leader or else they are not of much practical use.

When I was President, I had a Vice- President, Marco Maciel, who said that there is a moment when the right person appears at the right time. Who is this person who embodies the right approach? The disembodied idea is in the University. There, the more ideas you have, the better. And at the University, when you do have an idea, you should run quickly to sign your name underneath it before someone else does.

In politics, however, this is not the best way to proceed. You have to convince others or even make them believe that the idea is theirs and then work together with them. Here is our big challenge: What can we do together?

My role, as Finance Minister, was basically to talk to the nation, to motivate the people. But that is not enough. We also need to speak in Congress. Since I had been a senator, it was easier for me because congressional representatives-the senators and deputiesare outspoken. If you are frightened by their tough rhetoric, you are lost. You have to realize this is a word game. You have to stand up in the face of it and try to win. And you have to do so with everyone-opposition, government, and others. You have to try to motivate them, but this alone is not enough because structures exist, and the interests of society are deeply rooted in politics. Interest groups are represented -- by labor unions, by companies -- and it is necessary to listen to them and dialogue with them in order to convince them of the course of action that is being taken.

And then there is the bureaucracy. The Brazilian bureaucracy weighs heavily and is colored by its culture, habits, traditions, values, and beliefs that do not disappear by laws. You can design the law, but people then make of it what they want. Bureaucracy is a powerful instrument for enforcing legislation or not. You have to gain the trust of bureaucratic bodies.

So, basically, the challenge we face is one of leadership. The need is for people to be able to see what the main problems are.

Concerning the problems of the moment, quite a bit is already known. Mention was made in the conference of Brazil's fiscal difficulty. It is huge, rooted in not only economic but also political interests. Everyone wants to gain the advantage while not giving anything away.

So how it is possible to make a transformation

that gains support from these people as well? In our case, the fiscal challenge itself is enormous. You do not have to be an astute person to see it. This challenge is translated into numbers. Growth of public debt has been immense. Net debt is 70% of GDP.

There comes a point where the lenders look at the public debt and think, "Well, they will not pay me. If the government will not pay, I do not buy. And if I do not buy, what does the government do?" The answer is that the government will make use of inflation in order to survive. The government will not come to an end nor will the demands of society disappear. Society will continue to put pressure on the government. So it is essential that the government pay attention to the growth of public debt.

In the area of international economic relations, the basic objectives of a country such as Brazil - large, populous, diverse, and eccentric (that is, far from the poles of the conflict) - must be to accelerate economic growth on a sustainable socioenvironmental basis, improvina the population's living conditions, preserving the good relations the country has built over time, affirming (and internally practicing) values that are dear to us, starting with democracy. We do not need to take sides in the face of a possible clash of interests between China and the US or anyone else. It will be better to keep our influence in South America, our region, and participate more fully in global flows (trade, information, creativity and development) to gain the best possible insertion in the world.

The world has changed greatly. Social democracy itself is dated; it evolved as the best response to the reality of industrial capitalism over the 20th century: reconciliation between "the logic of capital" and the values of freedom and equality, of the democratic ideal. The expression of this conciliation was seen in the welfare states constructed in advanced industrial countries, which inspired Latin American leaders and parties coming to power after the predominance of authoritarianism in the region.

The answer to the new challenges – not only in Brazil and Latin America but also in the major developed countries - is more difficult than the social democratic response during the capitalist urban-industrial development of the latter half of the last century. How to give employment and income to the majority of the population in globalized economies where productivity increasingly depends less on unskilled labor and more on the knowledge, adaptive skills and innovation that can be offered by skilled workers or smart machines? Even if a decent minimum income can be ensured for all, how can we address the issue of the occupation of marginalized people in the labor market? These are questions that have no easy answers. But economic liberalism is not the answer. It is an illusion to believe that growth of the contemporary economy will solve the new challenges of social inclusion.

It is nonetheless necessary to resume the positive pace of the economy, which depends on balancing public accounts and ensuring the State's solvency. For this reason, among the many issues on the agenda, social-security reform is urgent. This is a challenge not only for the government but also for the country. But throwing away the "social agenda" and replacing it with another "economic agenda" will not lead us in the right direction.

Above all, we need to imagine, critically and creatively, how to adapt the ideology of social democracy to the present times.

Layout: MXRS Comunicação

Columbia Global Centers | Rio de Janeiro

Rua Candelária, 9 - Centro, Rio de Janeiro - RJ, Brasil +55 (21) 3553-0991 | <u>riodejaneiro.cgc@columbia.edu</u>

