Regulation
Time to rethink regulation

Trade
A new direction for Brazil's trade agenda

Interview
James Ferrer Jr.
Director of the Center for Latin American Issues, GWU



THE BRAZILIAN ECONOMY

FGV IBRE A publication of the Getulio Vargas Foundation • June 2015 • vol. 7 • nº 6



Water: How to turn the tap back on

Water scarcity mobilizes businesses and governments to search for more efficient management of water and sanitation

FGV IBRE

The Getulio Vargas Foundation is a private, nonpartisan, nonprofit institution established in 1944, and is devoted to research and teaching of social sciences as well as to environmental protection and sustainable development.

Executive Board
President: Carlos Ivan Simonsen Leal

Vice-Presidents: Francisco Oswaldo Neves Dornelles, Marcos Cintra Cavalcanti de Albuquerque, and Sergio Franklin Quintella.

IBRE

BRAZILIAN INSTITUTE OF ECONOMICS

The institute was established in 1951 and works as the "Think Tank" of the Getulio Vargas Foundation. It is responsible for calculating of the most used price indices and business and consumer surveys of the Brazilian economy.

Director: Luiz Guilherme Schymura de Oliveira
Vice-Director: Vagner Laerte Ardeo

Directorate of Institutional Clients:
Rodrigo de Moura Teixeira

Directorate of Public Goods:
Vagner Laerte Ardeo

Directorate of Economic Studies:
Márcio Lago Couto

Directorate of Planning and Management:
Vasco Medina Coeli

Directorate of Publication:
Claudio Roberto Gomes Conceição

Comptroller:
Célia Reis de Oliveira

Address
Rua Barão de Itambi, 60
Botafogo – CEP 22231-000
Rio de Janeiro – RJ – Brazil
Phone: 55(21)3799-6840
Email: ibre@fgv.br
Web site: http://portalibre.fgv.br/

THE BRAZILIAN ECONOMY

Economy, politics, and policy issues
A publication of the Brazilian Institute of Economics of Getulio Vargas Foundation. The views expressed in the articles are those of the authors and do not necessarily represent those of the IBRE. Reproduction of the content is permitted with editors' authorization. Letters, manuscripts and subscriptions: Send to **thebrazilianeconomy.editors@gmail.com.**

Chief Editor
Vagner Laerte Ardeo

Managing Editor
Claudio Roberto Gomes Conceição

Senior Editor
Anne Grant

Production Editor
Louise Pinheiro

Editor
Solange Monteiro

Art Editors
Ana Elisa Galvão
Marcelo Utrine
Sonia Goulart

Contributing Editor
Chico Santos – Regulation
Lia Baker Valls Pereira – Trade
Louise Pinheiro – Interview
Rodrigo Leandro de Moura – Unions
Silviia Matos – Economic Outlook
Tiago Cabral Barreira – Unions
Wagner Freire – Oil sector

CORRECTION: In the cover story "Getting productivity back on track" of last May (page 9), it should read "Latin American and Caribbean countries have lower per capita income than in the 1960s relative to the US income per capita." In absolute terms, Latin American and Caribbean countries' per capita income has increased since 1960s, but it has lagged behind the increase in US per capita income.

THE BRAZILIAN ECONOMY

IN THIS ISSUE

FGV IBRE Brazilian Institute of Economics | June 2015

News Briefs

5 Jobless rate rises, economy shrinks, industrial output down … energy prices push up inflation … Petrobras has a clearance sale … China to invest US$17.6 billion in Brazil … new trade agreement for Mexico and Brazil … possible trade agreement with the EU … IMF insists on austerity … Levy will stay … Brazil to cut US$22.5 billion in spending … Government launches massive infrastructure program … Senate approves fiscal reforms

Cover Story

8 Water: How to turn the tap back on

Because of the drought, since January some rivers basins and their tributaries have special rules for uptake of water, and if water gets scarcer, it will be rationed. As a result both businesses and government are searching for ways to manage water more efficiently, and some companies have cut their needs drastically. Experts speaking at a recent IBRE/FGV seminar on Sanitation and Water Treatment explored what more can be done, and why it's not easy. Solange Monteiro reports.

Public Policy

18 Unger and the new public policy strategy

Minister of Strategic Affairs Roberto Unger is recommending three strategies to shift the focus from increasing demand to democratizing supply: improve basic education, encourage technology-intensive small and medium companies, and translate productivism into regional policies. Solange Monteiro reports on a recent speech by Unger and the reaction from his audience of economists.

Regulation

21 Time to rethink regulation

Brazil's regulatory structure is having a 20th birthday, and experts gathered at an IBRE/FGV seminar to see what lessons the regulatory vices and virtues of the past may have for the future. They dealt with questions like how much regulation is needed and what kind, and what should be the relationship between the regulator and the regulated industry, with opinions coming from across the spectrum. Chico Santos reports.

Unions

25 Unions and economic freedom

Researchers Rodrigo Leandro de Moura and Tiago Cabral Barreira explain the relationship between unions, economic freedom, protectionism, and economic theory, and what factors lead workers to gather together to exert their influence. They place their discussion in the context of how unions have fared in other countries and how they are affected by government decisions in Brazil.

Oil Sector

28 Price controls and deep-sea oil

Engineer Wagner Freire traces the remarkable development of Brazil's oil industry from the 1960s through the opening up of the oil sector in the 1990s to the current somewhat confusing situation brought on by the deep sea oil finds and resulting government decisions. However, he concludes that once properly regulated, markets will provide adequate support for investments in oil.

Trade

30 A new direction for Brazil's trade agenda

There is a growing consensus, even among government officials, says Lia Baker Valls Pereira, that Brazil needs to move on its trade agreement agenda as a way to boost exports. She also argues for deeper trade integration with South America, despite the difficulties of negotiating broad agreements in the region.

Interview

34 What Brazil needs to do to again be a force in the region

In an interview with Louise Pinheiro, James Ferrer Jr., Director of the Center for Latin American Issues at George Washington University in Washington, DC, and former acting U.S. ambassador to Brazil, speaks to the current economic and political situation in Latin America, the future of U.S.-Brazil relations, Brazil's problems with protectionism and productivity, and where he thinks Brazil should be focusing its attention if it wants to grow.

Economic Outlook

45 The outlook for the world economy is still uncertain, with recovery taking different trajectories in different countries, says Silvia Matos, technical coordinator of the IBRE Macro Bulletin. She also notes that "Among emerging countries, Brazil has been a negative highlight," and explains why IBRE has rethought some of its earlier forecasts.

From the Editors

PROTECTIONISM IS CONDEMNING BRAZIL to low growth and mediocre progress. Entrepreneurs, who usually do not like to take big risks, do not invest because it is more comfortable to be protected by the government. This does nothing to generate competition, which is essential for innovation and increasing productivity. These direct comments were made by James Ferrer Jr., founder and director of the Center for Latin American Affairs (CLAI) of George Washington University in this issue's interview. They help to explain why Brazil has been unable to grow: IBRE staff are projecting that GDP will fall 1.8% this year.

Besides being one of the most closed economies in the world, Brazil has not been able to make its institutions more agile and efficient in improving the business environment and addressing one of the country's main bottlenecks, infrastructure. Now that regulatory agencies have turned 20, they urgently need to be streamlined so they can carry out their mandates efficiently, as this month's cover story makes clear.

Preparing a long-term development agenda for the government is in the hands of Minister of Strategic Affairs Roberto Mangabeira Unger. The starting point for an all-too-familiar topic: low productivity. To increase it will not be easy. The government has begun to elaborate a long-term policy to support growth based on three points: improvement of high school education (which in the minister's opinion is calamitous); encouragement of small and medium enterprises; and regional growth.

Many believe that flexible labor laws would help improve productivity; others are more concerned with increasing job security and weakening the power of unions to organize workers and fight for their demands. Among the structural changes in the world economy in recent decades, membership in trade unions has plunged from 43.7% in 1980 to 25.5% in 2013. The best way to protect workers is to invest in their health and education, which would heighten their productivity. More productive workers are a valuable resource; companies will pay better salaries and be more reluctant to fire them.



THE BRAZILIAN ECONOMY

Subscriptions
thebrazilianeconomy.editors@gmail.com

ECONOMY

Jobless rate rises again as economic downturn bites

Unemployment rose again in April, reaching 6.4%, its highest level for four years, government statistics agency IBGE said. The figures suggest the economic downturn has taken employers past the point at which they can no longer avoid making expensive lay-offs. (May 21)

Economy shrank in the first quarter

Gross domestic product (GDP) declined by 0.2% quarter-on-quarter in the first quarter of 2015. This release was supported by a buildup of inventories (+0.8% quarter-on-quarter). However, without inventories, the GDP contraction would have been 1%. Compared with the same period in 2014, GDP declined 1.6% in the first quarter of the year. The economy grew just 0.1% in 2014, its fourth straight year of meager expansion. (May 29)

Industrial output plunges in April, points to recession

Industrial output fell sharply in April from the previous month, adding evidence that the once-booming economy could be sinking into a recession. Industrial production dropped 1.2% in April from March, government statistics agency IBGE said. Production retreated 7.6% in April from a year earlier, less than the median forecast for a 7.9% decline. (June 2)

High energy prices push up inflation

The official IPCA consumer price index rose to an 11-year-high of 8.47% in the 12 months through May, far above the government's 4.5% target, government statistics agency IBGE said. Energy prices have soared since the beginning of the year as the government, facing the threat of a credit downgrade due to a growing budget deficit, opted to pass on to consumers the higher costs of thermal power generation because of insufficient rains in hydroelectric reservoirs. Food prices also rose because of a steep increase in staples such as tomatoes and onions. (June 10)

TRADE AND INVESTMENT

China to invest US$17.6 billion in Brazil

Beijing has come to the rescue of Brazil's slumping economy with trade, finance, and investment deals worth at least US$17.6 billion. On his first official trip to Latin America, Premier Li Keqiang and President Dilma Rousseff signed a raft of agreements, from confirmation of a US$1 billion purchase of passenger jets made by Brazil's Embraer to lifting of an import ban on Brazilian. (May 20)

Mexico and Brazil agree to expand bilateral trade

Meeting in Mexico City, Mexican President Enrique Peña Nieto and Brazilian President Dilma Rousseff agreed to expand a trade accord they hope will double business between the two biggest Latin American economies from the current US$9.2 billion over the next 10 years. The countries will add agricultural and industrial products to their 2002 economic cooperation agreement and expand it to services, electronic commerce, and intellectual property rights, Mr. Peña Nieto said. Mexico exported US$4.74 billion worth of goods to Brazil in 2014 and imported US$4.47 billion in merchandise from Brazil. (May 26)



Photo: Marcelo Camargo / Agência Brasil

President Rousseff and Chinese Prime Minister Li Keqiang.

Trade accord with Europe?

Uruguayan President Tabare Vazquez said that Uruguay, Brazil, and Paraguay are ready to sign the long-delayed trade and cooperation agreement between Mercosur and the European Union. The agreement has become a cornerstone of the Vazquez presidency, which is dealing with falling exports and limited markets. "We are ready to sign now; some Mercosur members will most probably join later on," Vazquez said. "Uruguay's position regarding a free trade agreement between Mercosur and the European Union is well known," he said. However, if it is not possible for the agreement to be signed by all Mercosur members, Vazquez said, "Uruguay has proposed that we advance differently, at different speeds, and different timings. But advance we must." (June 10)

ECONOMIC POLICY

Levy will stay

President Dilma Rousseff on Thursday rejected calls from some lawmakers in her Workers' Party that Finance Minister Joaquim Levy quit. Rousseff said she has full trust in Levy, who is trying to push through unpopular austerity measures to reduce the government's fiscal deficit. (May 21)



Photo: Jose Cruz/Agencia Brasil.

Planning Minister Nelson Barbosa announces spending cuts.

Government announces US$22.5 billion spending cuts

Government finally announced its much expected budget consolidation. It will freeze US$22.58 billion in spending on investment, education and health programs this year, in a bid to convince investors that President Dilma Rousseff is committed to saving the country's investment-grade rating. Priority social programs will be preserved. Planning Minister Nelson Barbosa told reporters in Brasilia that "This is the first step for Brazil to return to growth." Still, most analysts believe the freeze will not be enough to meet Brazil's fiscal surplus goal of 1.1% of GDP. (May 23)

Government launches massive infrastructure program

President Dilma Rousseff has unveiled a concession program to draw in US$64 billion in private investment over five years to upgrade and operate Brazilian roads, railways, airports and harbor terminals. The plan covers 4,371 kilometers of new highways, the extension of existing railway concessions, and private operation of airports in four cities. Auctions for the airport concessions will start in the first quarter of 2016. Brazil will also open 29 state-owned port terminals to private operators in Santos, the country's largest port; a second round of auctions will cover terminals at Paranagua, Itaqui and other ports. Brazilian development bank BNDES will continue to have a "relevant" role in financing infrastructure building, the government said, particularly railway projects that can be funded up to 90% by state bank BNDES. (June 9)

Senate approves fiscal reforms

The Senate voted by a large majority to limit sick leave and pension payments for surviving relatives. Congress had already passed a bill reducing unemployment benefits. Together the two bills could save the government about R$14.5 billion (US$4.6 billion) a year. (May 28)

BUSINESS

Petrobras to sell share in six oilfields

State-oil Company Petrobras is to sell its share in six oilfields in the Santos and Campos basins, hoping to realize more than US$4 billion from the sales. The deals are part of a larger program of asset sales, including gas distributors, thermoelectric plants, and gas stations located abroad. One of the most important parts of the program is the sale of oil exploration and production assets, which is being managed by Bank of America Merrill Lynch.

Follow FGV Brazil

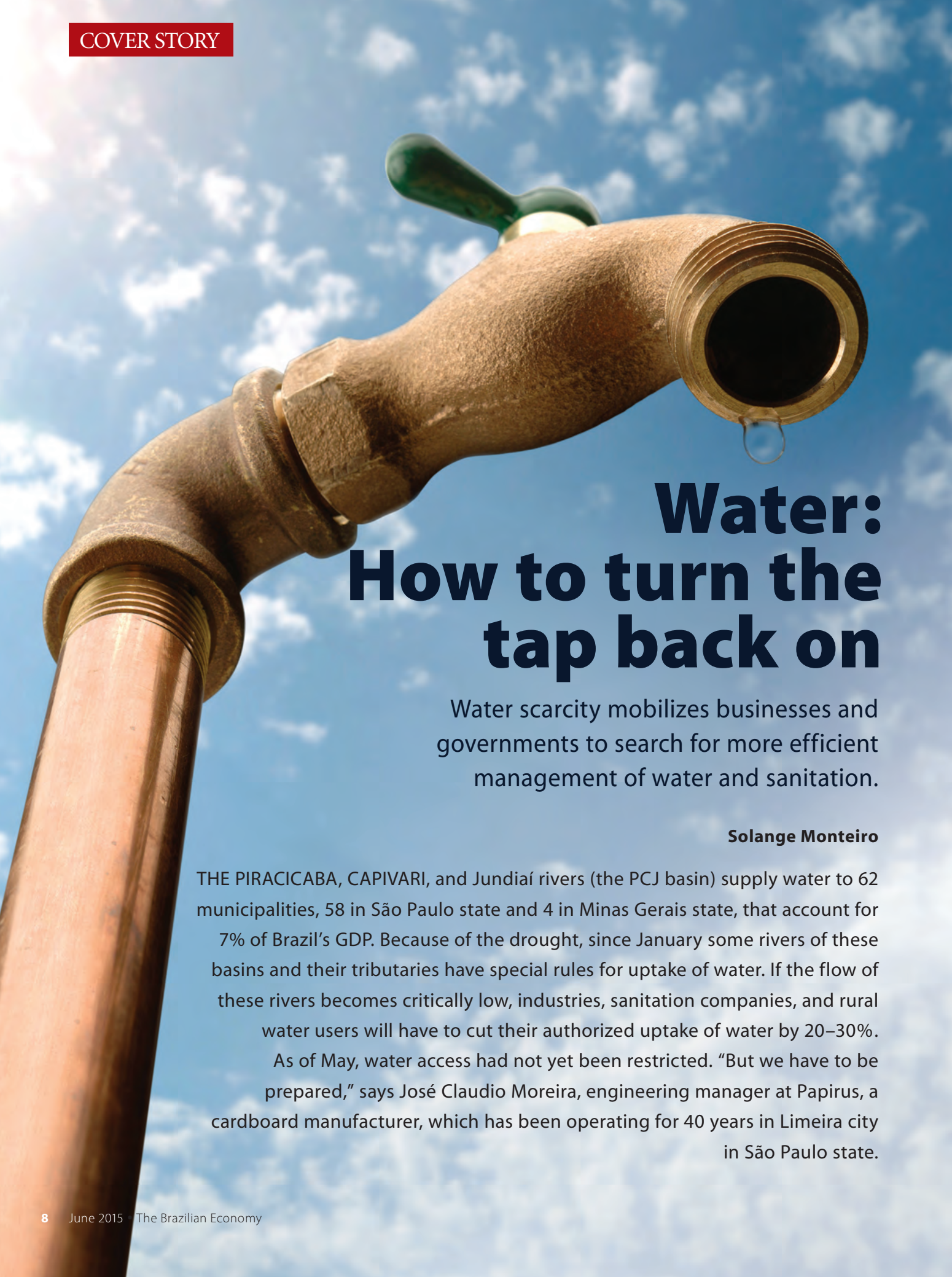
Get the latest news from FGV,
world-renowned Brazilian Think Tank

Twitter
twitter.com/**FGVBrazil**

Linkedin
linkedin.com/company/**FGV-Brazil**

Google Plus
google.com/**+FGV-Brazil**

Facebook
facebook.com/**FGVBrazil**



Water: How to turn the tap back on

Water scarcity mobilizes businesses and governments to search for more efficient management of water and sanitation.

Solange Monteiro

THE PIRACICABA, CAPIVARI, and Jundiaí rivers (the PCJ basin) supply water to 62 municipalities, 58 in São Paulo state and 4 in Minas Gerais state, that account for 7% of Brazil's GDP. Because of the drought, since January some rivers of these basins and their tributaries have special rules for uptake of water. If the flow of these rivers becomes critically low, industries, sanitation companies, and rural water users will have to cut their authorized uptake of water by 20–30%. As of May, water access had not yet been restricted. "But we have to be prepared," says José Claudio Moreira, engineering manager at Papirus, a cardboard manufacturer, which has been operating for 40 years in Limeira city in São Paulo state.

Moreira, who monitors river flow every Monday and Thursday, echoes the worry of industries in the Southeast: how will they survive the May to November dry season when the hydrology situation is already unfavorable? In May, the water intake limit for the PCJ basin was 150 cubic meters (m^3) per hour, down from 720 m^3 in previous droughts. For the Cantareira reservoir, it is expected that once again "dead water" reserves will have to be tapped.[1] "It will be a very difficult year," says Alexandre Villela, who represents the Federation of São Paulo State Industries (FIESP) on the Industry Technical Board of the PCJ Basin Committee.

With a permit to take up 300m^3 of water per hour to supply its daily output of 350 metric tons of cardstock, since last year Papirus has intensified its efforts to limit water use. "For years we have been working to reduce water consumption as much as possible, and reduced intake from 300 to 250 m^3 per hour. In 2014, we also began reusing part of the water, bringing down water consumption to 210m^3 per hour," says Antonio Valdovino Pupim, Papirus industrial director. At this point, Papirus already meets the limit if there is restriction. "But," Moreira says, "we do not know how much the river level may fall." The company also therefore sought permission to explore four water wells, one of which is already drilled.

[1] Dead (inactive) water is water in a reservoir that cannot be drained by gravity through a dam's outlet works, spillway, or power plant intake and can only be pumped out.

"We are used to the misconception that water is abundant in Brazil. This is only true in the Amazon region, which holds 81% of the country's water."

Gesner Oliveira

The shortage of rainfall, which affects the urban population in many cities, has forced companies and families to face harsh reality. "We are used to the misconception that water is abundant in Brazil. This is only true in the Amazon region, which holds 81% of the country's water," says Gesner Oliveira, president of consultancy GO Associates. The Southeast, where Brazil's industrial production is concentrated, holds less than 10%. Persisting related problems (among others) are the coverage and management of sanitation services, which cause losses in water distribution, and the low level of sewage treatment, both of which aggravate a situation already punished by shortages of rain.



Water treatment innovation

The same São Paulo region that today suffers from water shortages also hosts one of the most modern systems of water treatment in Latin America. In Campinas city, the public sanitation utility built the first large scale municipal biological sewage treatment plant with a membrane bioreactor (MBR).

The Recovered Water Production Facility (Epar) was developed in partnership with a consortium formed between GE and CNO companies. Its capacity of water treatment is 360 liters per second, which corresponds to the water consumption of 180,000 people. The facility's treated water is sold to industrial and commercial clients, and will meet the Viracopos Airport's water needs in the future.

The system eliminates bacteria, parasites, and other microorganisms harmful to human health. Marcus Vallero, GE, said that eventually Epar wants to treat further the water produced turning it in drinking water for households' consumption. This will require new safety regulations, which are being discussed.

Photo: GE.



The 2014 warning intensified industry's long-standing concern about water shortages. Companies highly dependent on water—pulp and paper, processed food, textiles, steel, and petrochemicals—are more sensitive to the issue. "Our targets for water consumption, reuse, and recycling are updated annually," says Tatiana Finamore de Paula, quality manager of ArcelorMittal in Piracicaba city in São Paulo state. The company's mill processes metal scrap to produce steel rebar used in construction. "The water intake to produce a ton of crude steel was reduced from $2m^3$ in 2004 to $1.5m^3$ in 2014 as a result of investments in industrial automation, process control, and online monitoring, among others," she says, noting that, because of its temperatures, the steelmaking process requires higher capacity to cool equipment. With the 2014 water crisis, ArcelorMittal has replaced the heat exchanger system with cooling towers and a rainwater collection system.

"Last year's water shortage provided lessons to the public sector, industry, and agriculture that will help as they face the 2015 dry season," says Jorge Peron, environmental expert, Federation of Industries of Rio de Janeiro State (FIRJAN). Peron

says that industries in the state that are supplied by the Paraíba do Sul basin—which covers 184 municipalities (88 in Minas Gerais, 57 in Rio de Janeiro, and 39 in São Paulo)—have reduced their water consumption by 26% in the last two years. "It is a necessity. If we look at the history of water crises, it took 50 years between the first two (1954 to 2003), and only a decade between the second and this one. We have to get out of this crisis and prepare for the next," he says.

Water losses

The shortage of rain would have been more serious for industry if the economy were not slowing. In the long run, however, industry recognizes that water constraints will become yet another obstacle to growth and competitiveness, especially if not addressed by all parties. "We need to make water and sanitation management a public policy priority. It is no use seeking new sources of water if we are losing water in the distribution network. And we have technology to change this situation," says Anícia Pio, FIESP environmental manager.

Pio participated in the seminar on Sanitation and Water Treatment, sponsored by IBRE and FGV, in May in Campinas city, São Paulo state, where speakers identified the main problems in water supply management. The first is heavy losses in the water distribution network. A GO Associates study for the Trata Brasil Institute found distribution losses amounting to 37% and financial losses to 39%. This means that every year 6.5 billion m^3 of treated water cannot be accounted for—6.5 times the capacity of the Cantareira reservoir—generating an estimated financial loss of R$8 billion (US$2.7 billion). "That's 80% of what the country invests in water and sewage a year. If we reduced water losses by 15% over five years, we would save R$3.9 billion (US$1.3 billion)," says Édison Carlos, Trata Brasil Institute CEO.



"If we look at the history of water crises, it took 50 years between the first two (1954 to 2003), and only a decade between the second and this one. We have to get out of this crisis and prepare for the next."

Jorge Peron

The second problem is collection and treatment of sewage. National Sanitation Information System (SNIS 2013) data show that sewage is not collected from 51% of Brazilians, and only 39% of the collected sewerage is treated. Better sanitation has a high economic return: "We have studies that show the provision of sanitation would raise real estate prices and expand the tourist potential of Brazilian cities," Carlos says. Another Trata Institute study found that universal sanitation coverage could lead to a 20% increase in school performance.

Sanitation hurdles

According to the National Sanitation Plan (PLANSAB), to reach universal sanitation coverage in 18 years, Brazil would have to invest R$508 billion (US$169 billion) between 2013 and 2033. Access to drinking water would rise from 82.5% to 99%, sewage treatment would shoot up from 39% to 93%, and water distribution losses would drop from 39.9% to 31%. However, Brazil is currently investing too little to meet these targets. In 2013 and 2014, GO Associates estimate that investments in water and sanitation were only R$10 billion. "We will have to increase by at least 50% the amount invested. Otherwise, we will not get universal sanitation before 2050," said Oliveira of GO Associates.

The current fiscal adjustment makes execution of the water investment program even more problematic. On whether credit would be available for sanitation projects, Fernando Ciotti, regional manager responsible for large infrastructure companies at federal savings bank Caixa Econômica, says that the expectation for 2015 is that financing will be close to the R$33.8 billion invested in 2014. He points out, however, that amounts contracted may take four to five years to be disbursed. For instance, in 2011 only 21.8% of the total budgeted for sanitation was spent and in 2012 only 10.92%, although in 2013 spending reached 87.5% of contracted amounts.

The problem of funding to meet sanitation targets has not been more obvious because of the lack of capacity to spend the budgeted amounts. Ilana Ferreira, policy analyst with the National Confederation of Industry (CNI), agrees that, in the case of sanitation, "The Ministry of Cities makes public calls for projects with the budgeted resources, but there is no predictability about when resources will be released, when public calls for projects will take place, and when they finally occur [because] project evaluation

procedures are very bureaucratic, delaying the release of resources."

Ferreira says that project quality can also cause delays, but bureaucracy tends to aggravate the situation. "A project that … takes more than a year to have the work permit approved will have to make many changes because cities are dynamic and require changes," she says. The CNI advocates both cutting bureaucratic red tape and improving sanitation company management.

Reinaldo Nogueira, mayor of Indaiatuba and president of the PCJ Committee, points out that delay is part of the Brazilian dynamic in all processes—"Projects exist, but to leave the paper and survive the bureaucracy it takes political will"—adding that project deadlines do not always coincide with government terms in office. The water crisis in the PCJ basin, he says, could have been mitigated if long-projected dams had been built. Carlos of the Trata Institute emphasizes the need to train technical staff in both municipalities and regulatory agencies.

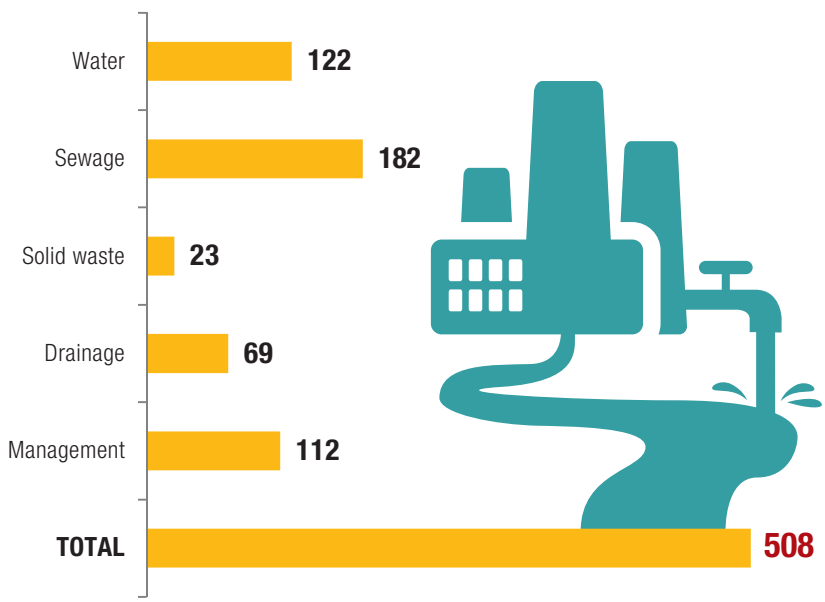
"We need to make water and sanitation management a public policy priority. It is no use seeking new sources of water if we are losing water in the distribution network. And we have technology to change this situation."

Anícia Pio

"Regulation in Brazil is still lagging behind and we must deal with much older water companies that have been self-regulated. And there are difficulties in finding technicians to improve services," acknowledges Alberto Bovo, coordinator, Technical Board of the Brazilian Association of Regulatory Agencies.

Brazil would have to invest R$508 billion (US$169 billion) between 2013 and 2033 to reach universal sanitation coverage in 18 years

(Billions of reais)



Source: Ministry of Cities.

Every year 6.5 billion m^3 of treated water cannot be accounted for—6.5 times the capacity of the Cantareira reservoir—generating an estimated financial loss of R$8 billion (US$2.7 billion).

Carlos points out that the deadline for municipalities to meet PLANSAB requirements has been extended three times, but later this year they will have to hand over their sanitation management plans. "In the best- case scenario, about a third of the municipalities will not be able to deliver their plans," he estimates. "There are about 2,000 small municipalities that do not have the technical capacity to plan."

According to Oliveira, to move the sector forward faster, it will be necessary to improve the management of municipal sanitation companies, 80% of which are state-owned, and promote public-private partnerships (PPPs). A survey by the Brazilian Association of Private Concessionaires of Water and Sewage Services and the National Union of Private Concessionaires of Water and Sewage Services found that private sanitation services now serve 27 million Brazilians in 297 municipalities. These companies expect to invest R$12 billion in 2014–2018.

Aegea is an example: Currently operating in 38 municipalities with 3 million residents, the company accounts for 17% of the private sanitation sector. Recently, it won concessions for water and sanitation services in several municipalities in the North and Northeast. "We are testing our business model in the poorest municipalities, adapting it to local

Photo: Aegea



Operations Control Center of Guariroba waters utility company.

conditions. With technology and manpower training, we hope to reach an adequate level of profitability to expand our market share," says Hamilton Amadeo, company president. Aegea already has funding from the International Finance Corporation and the Singapore Sovereign Fund that currently represent 15% of the company's total funding. "But we do not take risks in foreign currency. This ends up limiting the size and type of our operations, because we need viable hedging mechanisms, but it prevents currency mismatches from slowing our development," he says.

Valdir Folgosi, president, National Equipment Industries for Sanitation and Environmental Union, believes the time is opportune for companies to adopt cutting-edge technologies. However, "Law 8666 on public tenders favors purchase at the lowest price, making it difficult to acquire new technology," he says. "To buy equipment or systems, we need to assess quality, technology, and cost of energy. We have companies in Brazil able to serve the market, and it makes no sense to have to adopt old technology if it is possible to improve," he says.

Marcus Vallero of GE Water & Process Technologies identifies some alternative sanitation technologies: reverse osmosis, membrane and electrolyte systems, ultrafiltration, and removal of metals by biological processes. "There is no technology suitable for everything. And no one throws money away. If someone is willing to install a membrane to stabilize effluent, it is because it makes economic sense. This should be the guiding criterion," he says.

"A project that … takes more than a year to have the work permit approved will have to make many changes because cities are dynamic and require changes."

Ilana Ferreira

Johnny Ferreira dos Santos, deputy secretary, National Supply Department, Ministry of Cities, acknowledges that progress in meeting sanitation challenges has been slow, but "We have to expand the technical and institutional capacity of regulatory agencies and reduce the planning and execution cycle of projects. It's really excessive to take seven to eight years to execute certain projects. And there is room for improving engineering quality," he says. The reality is that the water crisis urgently requires responses. "We need governments to not lose focus," says Carlos of the Trata Institute. "It is no longer possible to rely only on rain."


Souza Cruz. A Brazilian
symbol of excellence.

Entrepreneurship, a reference in management and logistics, a generator of thousands of jobs and wealth for the country for more than a century. This is Souza Cruz. By constantly investing in its talents, being an example in the preservation of natural resources, and generating value for its shareholders and sustainability for its production chain, Souza Cruz is one of the most solid Brazilian companies. And it will continue to be, thanks to its commitment to excellence in everything it does.

www.souzacruz.com.br

SOUZA CRUZ



Unger and the new public policy strategy

At FGV in May, Minister Roberto Mangabeira Unger discussed the administration strategy for development after fiscal adjustment



Photo: Beto Felicio

Solange Monteiro

THE MINISTER OF STRATEGIC AFFAIRS of the Presidency of the Republic (SAE) is once again Roberto Mangabeira Unger. His mission is to prepare a long-term development agenda to guide Brazil after the fiscal adjustment. In May, Unger defended proposals developed by the SAE at the Getulio Vargas Foundation in Rio de Janeiro. The starting point of the minister's list is a familiar diagnosis: low productivity. "During the growth period, which was based on the production and export of commodities and consumption, we kept the vast majority of Brazilians employed, but mostly in very low-productivity services," he said.

To move beyond this problem, Unger is recommending three strategies that converge on the same goal: shift the focus from increasing demand to democratizing supply. The first is improving basic education, "whose quality is appalling." The second, what Unger calls "inclusive productivism," in general implies the encouragement of technology-intensive small and medium companies. "The late Brazilian Fordism[1] has achieved standards of excellence, but is still competitive in the world only by keeping labor remuneration low. Now we are pinched between a cheap labor economy and other high-productivity countries," he said. To escape, Unger cited examples among the largest economies in the world, such as the German mittelstand, where medium-sized enterprises concentrated knowledge and start-up innovations that were then absorbed by large corporations. The third guideline is to translate the proposal of productivism into regional policies. "In a country like Brazil," Unger said, "national strategy only touches the ground when translated into regional policy." In his opinion, the country suffers from the erroneous conception that regional policy should be limited to a policy of compensating for their relative backwardness, such as cash transfers from wealthy to poor states. Unger said, "The Northeast has had no strategy since the time of Celso Furtado.[2] The void has been occupied by the marriage of two illusions: encouraging artisanal activities to occupy people in the semi-arid region. And outside the semi-arid region, there is a fascination with large works, such as steel mills, refineries as enclaves, without changing anything. It will be necessary to change this situation to form a strategy."

[1] Fordism, named after Henry Ford, is an economic and social system based on industrialized standard of mass production. It is also associated with mass consumption and changes in working condition over time.

[2] Economist Celso Furtado was one of Brazil's most distinguished intellectuals of the 20th century. He was Minister of Planning from 1961 through 1964.

Asked how long the proposed strategy would take to show results, Unger was emphatic in arguing that the strategy is not a jumble of technocratic actions: "It's a provocation: Preliminary ideas translated into concrete proposals of actions that are also preliminary, with the dual purpose of starting a debate and launching a political articulation." But he recognizes the need to eliminate some blockages, in a move he calls "democratizing institutional innovation." Among the tasks, he lists actions to address law and tax blockages. "The private sector faces legal blockages. The environmental area illustrates the problem: We have delegated discretionary authority to administrative authorities, but have no established rules—for example, rules that differentiate the treatment of areas transformed by human action from virgin land. As a result, environmental licensing becomes a nightmare for the producer," he says. He defended simplification of the tax system by adopting an added-value tax, saying, "This allows for maximum revenue with minimal economic disorder because a value-added tax does not distort relative prices." Unger also pointed out the need for corrections in the credit market: "Public banks played an important role in providing credit with long maturities. Now, however, I believe there is less need to subsidize credit, and I hope credit expansion becomes more important."

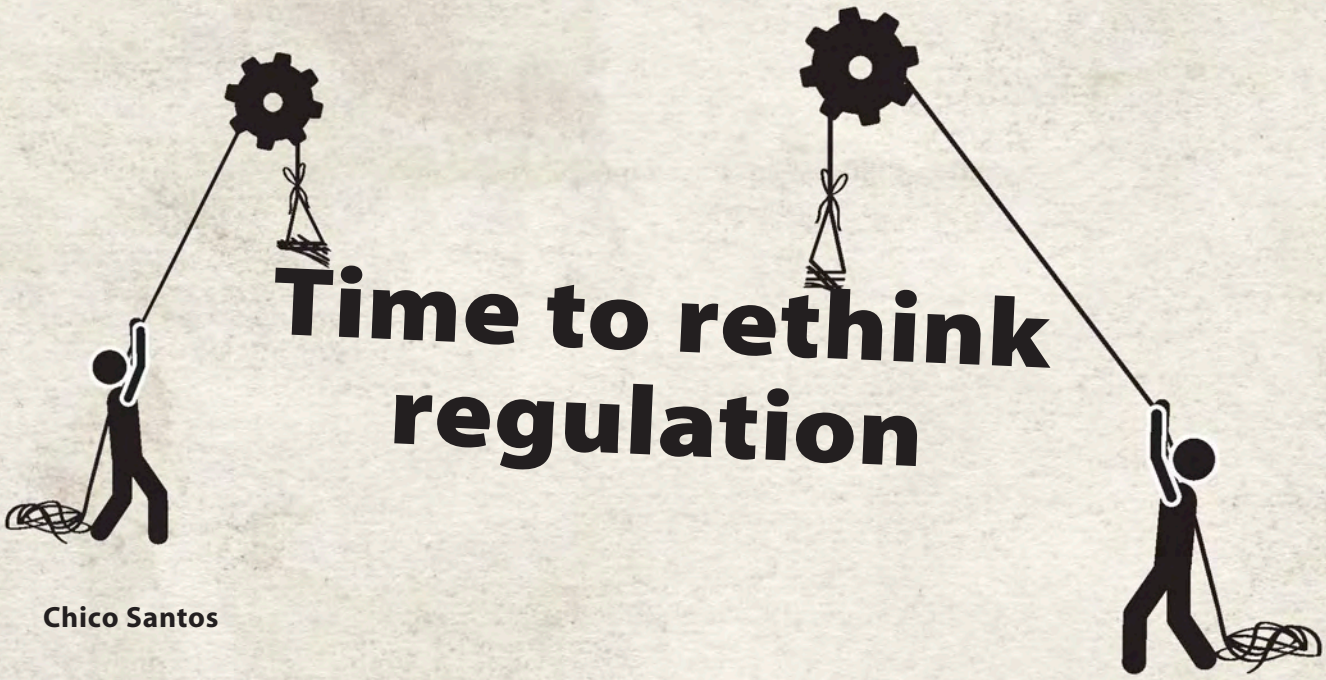
After economic adjustment in a scenario of new fiscal realism, Unger advocates using the room obtained from stricter discipline in spending to reduce interest rates to fund fixed capital. He also supports a free-floating exchange rate, but with compensation for importers of high technology for the rising costs caused by exchange rate depreciation. To have innovation, "we also have to give up, even unilaterally, all tariff and nontariff restrictions on imports of technologies," he concluded.

José Roberto Afonso, IBRE researcher, argued for better coordination between development strategy and instruments of economic and fiscal planning. "Of course, the fiscal adjustment is not in itself a reform agenda, it needs to be embedded in a fiscal consolidation strategy of the kind most developed economies adopted after the global fiscal crisis at the end of the last decade," he said. "Especially when you have difficulty delivering results in the short term, it is necessary to adopt structural measures to ensure results in the long term." Afonso noted the importance of such definitions to guide the multiyear budget plan that the government will present this year. He also advocated reinforcing fiscal institutions to comply with the prudential limits of public debt. "We do not have a management board that unites the different spheres of government and could discuss the harmonization of public accounts. It would be positive to discuss the successful experiences of the states," he suggested.

To have innovation, we have to give up, even unilaterally, all tariff and nontariff restrictions on imports of technologies.

Rubens Penha Cysne, director of the Graduate School of Economics of Getulio Vargas Foundation Rio de Janeiro, reiterated the importance of fiscal control: "When you submit the country to the combination of fiscal leniency and a flexible exchange rate, it generates very different consequences from combining fiscal leniency with a fixed exchange rate, which is responsible for monetary crises. . . . To the extent that it is necessary to raise interest rates and attract foreign savings, industries that export (on the edge of technological innovation) will lose markets gradually. And to the extent that interest rates rise, national private investment will be crowded out." Cysne defended the use of the budget as a macroeconomic management variable, but noted, "This is an institution that needs to be redesigned: when Congress votes a measure that imposes certain costs, it does not have the political cost of having to identify the necessary cuts in spending or increases in taxes." This, Cysne reflected, shows the need for establishing a more impartial political representation less based on interest groups. "If we cannot show the individual how much he makes a difference and continue to have democratic representation associated with big party donors, we will continue wasting time telling where we would like to go, and we will not be able to get there," he concluded.


FGV IBRE
Research, development and dissemination of important economic and social performance indicators:
FGV's Brazilian Institute of Economics carries out economic research and analysis, stimulating the growth of public and private businesses across the country. The Institute's statistics forecast principal short-term economic trends, serving as an excellent tool for planning and strategic decision-making.
Present in 100% of Brazilian State Capitals
Sound Understanding of Market Dynamics and Practices
Highly Skilled Technical Team
Tradition and Experience in Price Research and Economic Surveys
ibre@fgv.br | +55 (21) 3799-6799 | www.fgv.br/ibre



Time to rethink regulation

Chico Santos

ON THE WAY TO TURNING 20, the Brazilian regulatory framework created to replace direct government intervention in public goods and services, especially infrastructure, lost course. It urgently needs to be revised now because it is a major obstacle to improving the country's infrastructure.

Those were the main conclusions of the May 8th seminar "Regulation and Economy in Brazil: The Role of Regulatory Agencies after 20 Years," organized by the Getulio Vargas Foundation (FGV), the Brazilian Institute of Economics (IBRE), and FGV Law School in Rio de Janeiro.

The Fernando Henrique Cardoso administration (1995–2003) broke with Brazil's long tradition of direct government intervention in the economy. The first two regulatory agencies it created in 1997 were the National Telecommunications Agency (Anatel) and the National Petroleum Agency (ANP). The ANP had been planned since November 1995, when Constitutional Amendment nº 9 eased the state monopoly of oil, allowing companies other than state-owned Petrobras to enter the market.

Several seminar participants pointed out serious regulatory flaws that had accumulated over the years, such as the capture of independent agencies by government ministries, the political game of party nominees, and delays in appointing new directors for vacant regulatory positions: As of May 21, at the National Civil Aviation Agency (ANAC) two of the five director positions were occupied; of four director position, the National Land Transportation Agency (ANTT) had three acting directors, and one of Anatel's five director positions was vacant.

Because currently the role of regulatory agencies lacks definition, Luiz Guilherme Schymura, IBRE director and former president of Anatel (April 2002-January 2004), proposed that they simply be given a clear mandate to maintain stable rules. Government ministries would define the rules for each regulated sector, ensuring the prerogative of the federal government to formulate policies. "Agencies should have the role of providing technical support to regulated sectors and monitoring contract compliance. If the agencies had this mandate, I think it would be fantastic," Schymura said.

According to Schymura, the original conception of regulation as established by the Cardoso administration was that the Ministry of Infrastructure would coordinate all regulatory agencies. Ideally, it would have been a more technical framework, focused on improving "efficiency in resource allocation." But the political reality did not endorse the ideal. "The framework was not possible at the time and even today," Schymura said, noting that as the number of ministries increased, centralized coordination of regulatory agencies was diluted.

Today, regulation is subject to constant political peddling within the party coalition supporting the government. Schymura points out that directors appointed to regulatory agencies have fixed terms that

"Regulatory agencies should have the role of providing technical support to regulated sectors and monitoring contract compliance. If the agencies had this mandate, it would be fantastic."

Luiz Guilherme Schymura

make them more attractive than minister positions, which are subject to dismissal at any time.

As long as this situation is perpetuated, Brazil will lag behind, especially in transport infrastructure. Schymura pointed out that, while in mobile telephony Brazil is on the level with rich countries and just below them in other telecommunications systems and electricity, in terms of roads, railways, ports, and airports Brazil is below poor countries.

"We need to make an effort to eliminate the [regulatory] bottleneck in transport infrastructure," Schymura said. He pointed out that in granting concessions for infrastructure the government has to balance the low tariffs desired by society and the return on capital required by private investors. The current government had been dodging the dilemma by capping returns but providing investors with low-interest loans from the National Development Bank (BNDES). With the current fiscal tightening, that has become impossible.

Noting that a major reason for poor infrastructure was the lack of proper planning, as a result, important projects are flawed, and conducted in a hurry without the necessary licenses. Schymura believes that regulation can only help Brazil to overcome this situation if its institutions are strengthened; he pointed out that institutions take time to mature and take root.

The history

Luiz Roberto Barroso, justice of the Supreme Federal Court (STF), commented on a practice rooted in Brazilian society to seek public subsidies for personal or business projects. "We are addicted to public sector blessings," Barroso said, stressing that this habit produces "undue interference by the public sector in private business."

He notes Brazil's history—"not atypical in late capitalist economies"— of government intervention in economic life based on the belief that "the government is the only one that has the capacity to invest in infrastructure." That view prevailed in the 1940s, when the government established mining and steel companies, Companhia Vale do Rio Doce (now Vale) and Companhia Siderurgica Nacional (CSN), which were both privatized in the 1990s.

In the 1950s, the state established Petrobras and BNDES, and in the 1970s more than 300 more state-owned companies were created. "In the 1990s, there was a push for a government focused less on intervening and more on regulating economic activity," Barroso explained, adding that regulatory agencies were created with political and financial autonomy; directors are appointed by the executive, with Senate approval, and have fixed terms.

Dissatisfaction

Joaquim Falcão, dean of the FGV Law School sees regulatory shortcomings reflected in the general dissatisfaction of society with the quality of services utilities companies provide. The dissatisfaction has resulted in a surge in lawsuits against telecommunications, electricity, and other utilities. Falcão believes that better regulation of utilities is essential for Brazil to achieve the universal access to goods and services society requires.

In the view of Elena Landau, former director of privatization for BNDES (1994–96), one problem is that regulatory agencies were created to support the privatization of loss making state-owned companies and help the fiscal adjustment. This was not a real conceptual change, which explains some of their imperfections. The Cardoso administration, for which she worked, stopped the sale of electric utility Eletrobras when the government fiscal situation normalized. Today, she sees the same fiscal concern when President Rousseff speaks of "privatization" of state-owned power distribution companies.

Joísa Dutra, coordinator of the FGV Regulation Center and former director of the National Electric Energy Agency, pointed out that the regulatory agencies were designed to "seek efficiency" and added that the current crisis of regulatory legitimacy is not unique to Brazil; other countries have been having difficulties in balancing regulatory change and legitimacy.

Regulation and policy

Carlos Ari Sundfeld, professor of administrative law at FGV São Paulo, believes that regulatory agencies in Brazil have a serious problem that needs to be fixed immediately. He agrees with Landau that when the agencies were created the government was not really sure of how active they should be: "It was important that the regulatory framework defined clearly what was regulation and what was policy, but it did not. Here lies the failure in the legislation."

This was not a mistake, Sundfeld explains. "The vagueness of what was a policy issue was something the executive wanted," he said. He cites examples: "Who decided in the airport concessions that first-round participants could not participate in the second round? Who decided to build hydroelectrics without reservoirs? It was not decided. One does not do [something] because no one else is doing it." Sundfeld believes "there is a general perception that the regulatory framework is at risk," especially because of political appointments to regulatory agency management positions.

Virtues and vices

Floriano de Azevedo Marques, law professor at the University of São Paulo (USP) and the São Paulo FGV, sees virtues and vices in regulation in the past 20 years. He diagnoses Brazilian society as suffering from the evil of immediacy—the desire for fast solutions—which is incompatible with efficient regulation

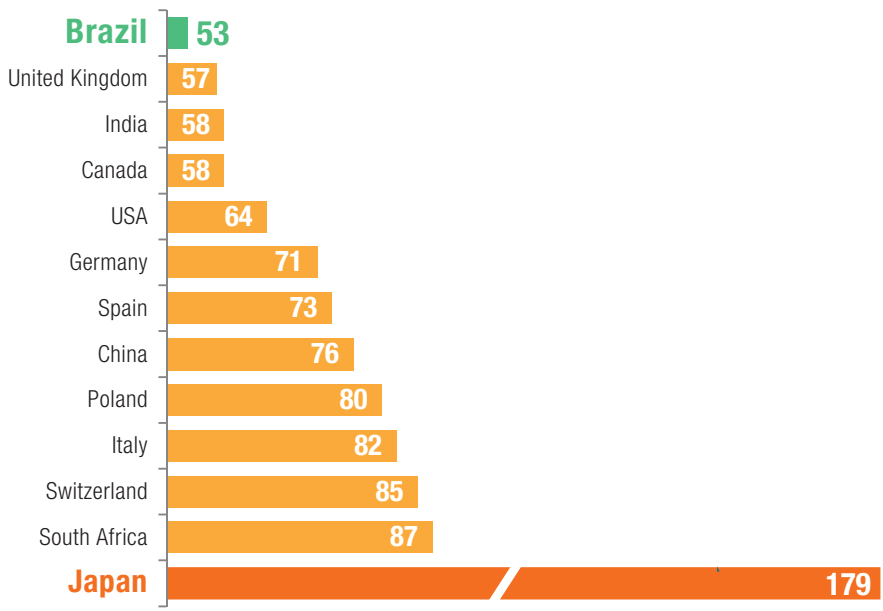
"The current regulatory framework is not only deterring the advancement of infrastructure but also limiting access to regulated markets, favoring oligopolies."

Carlos Ivan Simonsen Leal

On the positive side, Marques identifies the idea that whoever regulates does not operate utilities and whoever operates utilities does not regulate. Regulatory stability has won the debate in business circles. Brazil has created "a regulatory bureaucracy" that in some cases is well-structured, and transparency has become prominent, with the rise of public consultations standing out.

Brazil's infrastructure stock as a share of GDP is one of the lowest in the world.

(% of GDP)



Source: McKinsey Global Institute.

On the negative side, Marques sees as vices to be corrected the political peddling of regulator management positions, the fact that fiscal responsibilities override regulatory responsibilities, the belittling of agencies by ministries, excessive focus on punishment, and the urge of regulators to micromanage regulated entities.

Carlos Ivan Simonsen, FGV president, believes that allowing agencies to regulate state-owned enterprises demonstrates an absolute lack of authority. "If the enterprise belongs to government, it should follow government orders," he added. Simonsen thinks the current regulatory framework is not only deterring the advancement of infrastructure but also limiting access to regulated markets, favoring oligopolies.

Egon Bockmann Moreira, law professor at the Federal University of Paraná (UFPR), questioned whether new initiatives are seeking to "bury" the current framework. Creation of the Planning and Logistics Corporation, in his opinion, would eliminate the need for the ANTT, the ANAC, and the National Agency of Waterway Transportation.

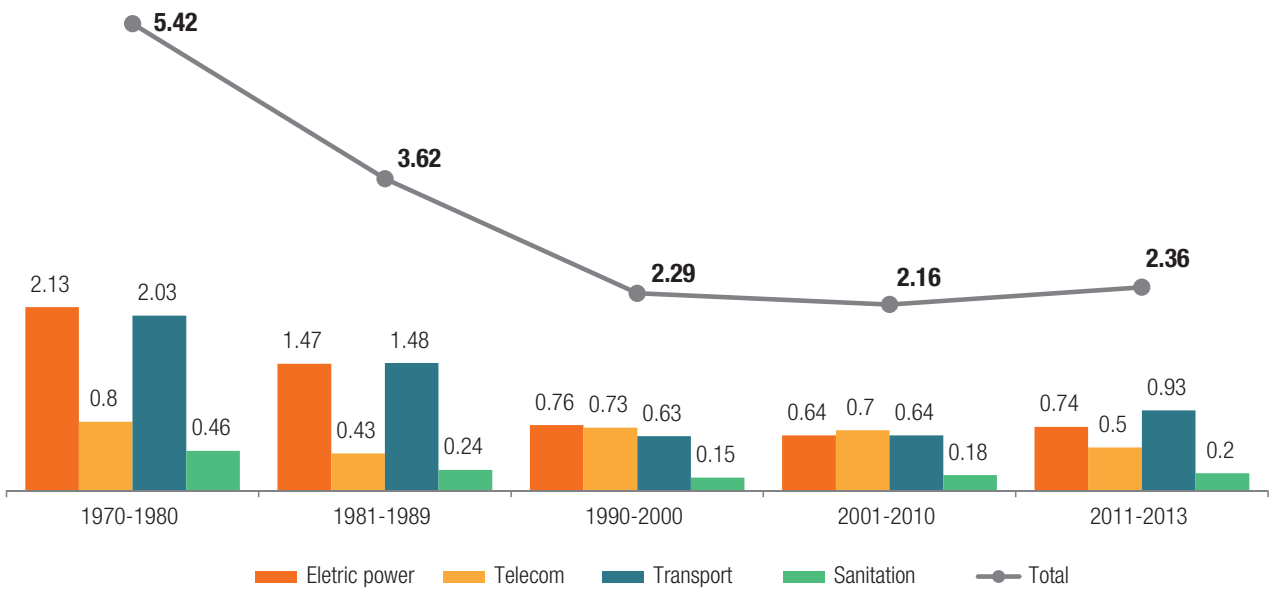
Mario Veiga, director of PSR, one of Brazil's leading energy consultant has a more sectoral approach. He said that in the electricity sector "there was a great slippage," but expressed optimism about the choice of Luiz Eduardo Barata, former president of the Electric Energy Trading Chamber, to become the Executive Secretary of the Ministry of Mines and Energy. "It signals that the government is back on the track," he said.

IBRE researcher Armando Castelar Pinheiro was also more focused on the microeconomic effects of current regulation; he said Brazil's infrastructure deficit has not diminished and the biggest problem is not lack of money but failures of management and regulation. "In Brazil the problem is not lack of money. We have money, but we are not able to spend it," he said.

Pinheiro believes that an even bigger problem is that what little the country spends does not translate directly into infrastructure capacity. Projects are interrupted midway, like the construction of the new airport in Vitória in Espírito Santo state, or drag on for years, doubling the costs, like the project to divert part of the São Francisco River to supply drinking water, which was planned for completion in 2010 at a cost of R$4. 5 billion; the cost is now estimated at more than R$8 billion without a drop of water yet flowing.

For three decades, Brazil has invested just over 2% of GDP in infrastructure

(investment in fixed capital as % GDP)



Source: Giambiagi and Pinheiro (2012), and Frischtak (2013).

Unions and economic freedom

Rodrigo Leandro de Moura
IBRE Senior researcher

Tiago Cabral Barreira
IBRE researcher

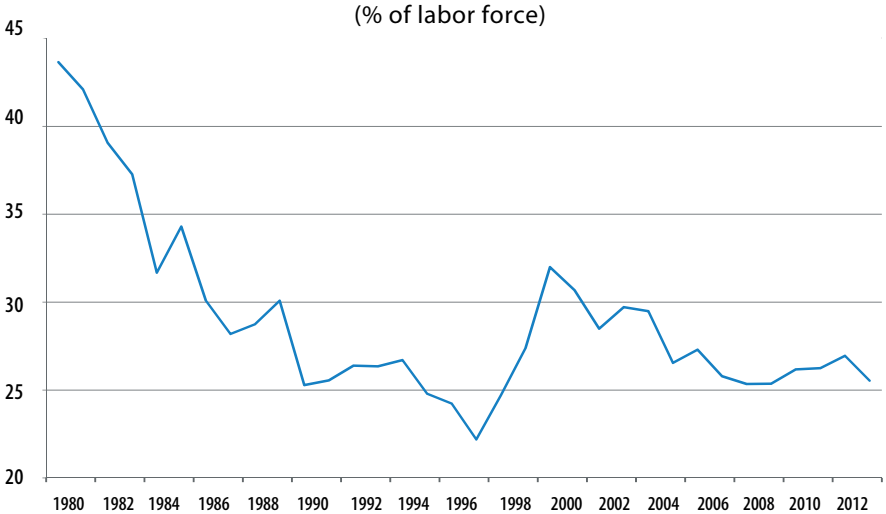
FOR THE UNIONS, MEASURES TO increase labor market flexibility—such as the outsourcing of core activities—increase job insecurity and weaken the power of unions to organize workers and fight for their demands. Among the structural changes in the world economy in recent decades, membership in trade unions has plunged from 43.7% in 1980 to 25.5% in 2013.

In this sense, empirical research shows that the lower the economic freedom in a country, the greater the participation of workers in unions. Economic freedom is measured by four indicators: flexibility of labor laws, degree of trade liberalization, lower government participation in the economy, and freedom to do business.

According to economic theory, in a competitive market, there would be no incentive for workers to associate collectively in unions because there is no room for collective wage bargaining in a market with low profit margins, in which the companies operate with low prices and close to production costs. In this context, an improvement in the living conditions of workers takes place only from cost savings and increased

World membership in trade unions plunged from 43.7% in 1980 to 25.5% in 2013

(% of labor force)



Source: International Labor Organization.

profits in an expanding economy. Thus, as workers would leave their jobs in search for higher salaries offered by rival, more profitable and growing companies, companies would compete with each other to retain workers by raising wages.

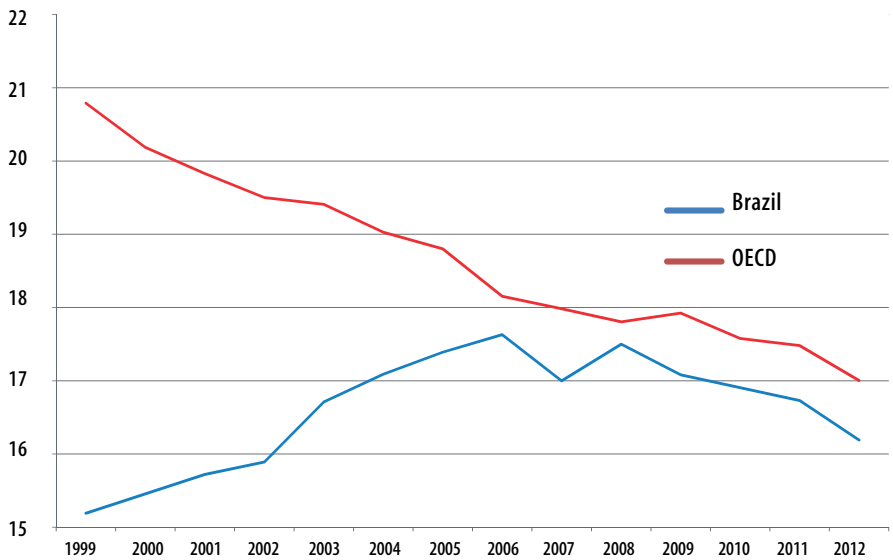
However, economic theory does not rule out the possibility of forming trade unions and collective bargaining, which would emerge in situations of oligopolistic markets with existing companies holding a considerable share of profit margins and a relatively low number of new competitors. Thus, there would be room for workers to organize themselves to capture a greater share of profit margins in the form of higher wages, in a process known as rent seeking.

The unions do not operate very differently from a business cartel. Unionists are pushing the sale price (wage per hour worked) by demanding shorter working hours and higher wages. The success of unions depends on companies having surplus income (rents) so they can take part of the rents and transfer them to workers.

In addition, trade protectionism and government intervention in the economy bring about distortions in the economy that also create an oligopolistic market. Closing a country's trade to foreign competitors would create opportunities for rents in protected markets and consequently encourage unions. On the other hand, government intervention in the economy by means of granting subsidies and loans to certain sectors or enterprises, so-called "national champions," would also create rents in favored sectors and consequently unions interested in seizing part of the rents.

Brazi's membership in trade unions was just over 16% in 2013, close to the 17% of OECD countries

(% of work force)



Sources: OECD and PNAD.

In the 30s and 40s, amid the escalation of trade protectionism and government interventionism of the New Deal, the US saw a significant increase in the unionization of the workforce, which declined only in the 80s. The same would occur in Argentina during the same period, with the collapse of the free trade regime and the rise of a new import substitution policy. As a result, the unions would play an increasing role in Argentine society since the Perón administration (1946-55).

The greater freedom of business (less bureaucracy, greater protection of property rights, less regulated activities, etc.) also impacts negatively on the collective organization of workers, as it reduces barriers to entry for new companies, making the domestic market more competitive.

Finally, more flexible labor laws—including lower labor costs, easier hiring and firing, and less rigid working hours—have a negative effect on workforce unionization. Unions will be weaker where there is greater freedom of wage bargaining between employer and employee, and will be stronger where there is a law that encourages collective bargaining. According to the Fraser Institute's indicators of economic freedom, southern European countries (Portugal, Spain, Italy), which have higher labor market rigidity, have more unionized workers than countries like the Anglo-Saxons (England, United States, Canada), which have more flexible labor markets.

The exceptions are noteworthy. Scandinavian countries have about 70-80% of their workforce unionized and still maintain a high degree of flexibility in the labor market, which leads us to believe that cultural factors can also be very important in the decision of a worker to unionize.

Does size matter?

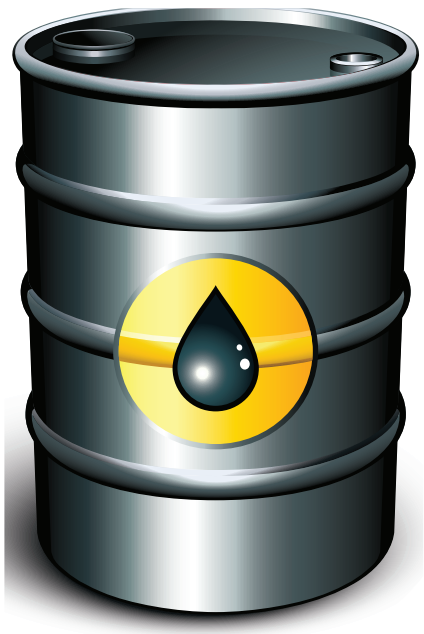
We should note that the low level of unionization does not necessarily mean low power of the unions. France has a relatively low number of unions, but they are concentrated mostly in the public sector, with high bargaining power because they are highly centralized and organized.

Brazil's low position in the ranking of economic freedom, rigid labor laws, excessive bureaucracy, and low trade openness would suggest a high degree of unionization. However, Brazil's workforce participation in unions was only 16.2% in 2013, close to the unionization in OECD countries of 17%, and relatively low compared to the world average of 25.5%. However, as in the French case, Brazilian unions have high capacity to coordinate, occupy strategic positions in the public administration, and exert strong political influence to press for legislation and lawsuits in the courts.

The unions played an important role in the 2009 economic crisis. Together with the government, they mediated between workers and the employers, negotiating reductions in layoffs in the industry. At the same time, they are one of the main forces of resistance to the austerity measures recently adopted by the government and changes in the outsourcing law, as well as a broader project of labor reform. So unions can play an important role in the course of the economy, explaining the success or failure of countries in carrying out long-term economic reforms.

Price controls and deep-sea oil

Wagner Freire
Engineer and FGV Energy consultant



THE UPSTREAM SEGMENT of the oil industry developed remarkably in the 1960s, thanks to oil company investments in the North Sea and the Gulf of Mexico. That brought about extraordinary technological innovations and changes in the operations of companies that partnered to search for better technologies, cost savings, and reduction of exploration risks. In Brazil, with the breaking of the monopoly of state-oil company Petrobras, passage of the Petroleum Law (Law 9478 of 1998), and creation of the National Petroleum Agency (ANP), the ANP in 2000 launched the first round of bids for oil blocks, which attracted a large number of international and national companies.

The Petroleum Law created an additional tax called the Special Participation, which applies to fields with high production and high productivity. Ultimately special participation revenue reached levels similar to royalties. When significant discoveries were made in 2005 and 2008 in several blocks in the Santos Basin (often referred to as pre-salt, but also known as deep-sea oil), the Lula administration, in our view, moved hastily. The result was a series of measures approved by Congress in 2010. Among them were definition of an area of 149 square kilometers (58 square miles) of pre-salt oil reserves from the coast of São Paulo state to Espírito Santo state; changes in how oil exploration is regulated by replacing concession agreements with production-sharing agreements for oil exploration in pre-salt blocks only; and a special exploration contract that can only be granted to Petrobras, in violation of constitutional provisions, on pre-salt blocks chosen by Petrobras, against prompt payment to the federal government of the equivalent present value of the oil to come.

The new laws limited the association of Petrobras with other companies. In a way, that

was a concealed ploy to reinstate the Petrobras oil exploration monopoly. When the government then exempted the special exploration contract from the special participation tax, the State of Rio de Janeiro filed suit in the Supreme Court against this decision; that suit is still in the trial process. The new measures also prevent oil companies from selling any of their rights in the blocks to other companies, as happens often with concession agreements. However, Petrobras, which owns several pre-salt blocks, can sell part of its interests in these blocks, to its economic advantage.

Another serious problem is that the oil market is pegged to international prices of Brent crude oil. Since the Brazilian market for petroleum products is not competitive, it used to be regulated by ordinance MME-MF 03/27/07/98, which indexed prices of petroleum products produced or imported by Brazil to the average prices of the Gulf of Mexico market, which is very competitive. The ordinance, however, expired in 2002. Thereafter, the government, with clear political motivation, started to control the prices that oil companies could ask. This forced Petrobras to keep domestic oil product prices below prices on the international market, which greatly undermined its financial situation and performance. It is time for a new ordinance, similar to that of 1988, that can ensure the solvency of oil companies and establish principles to discipline oil product pricing policy.

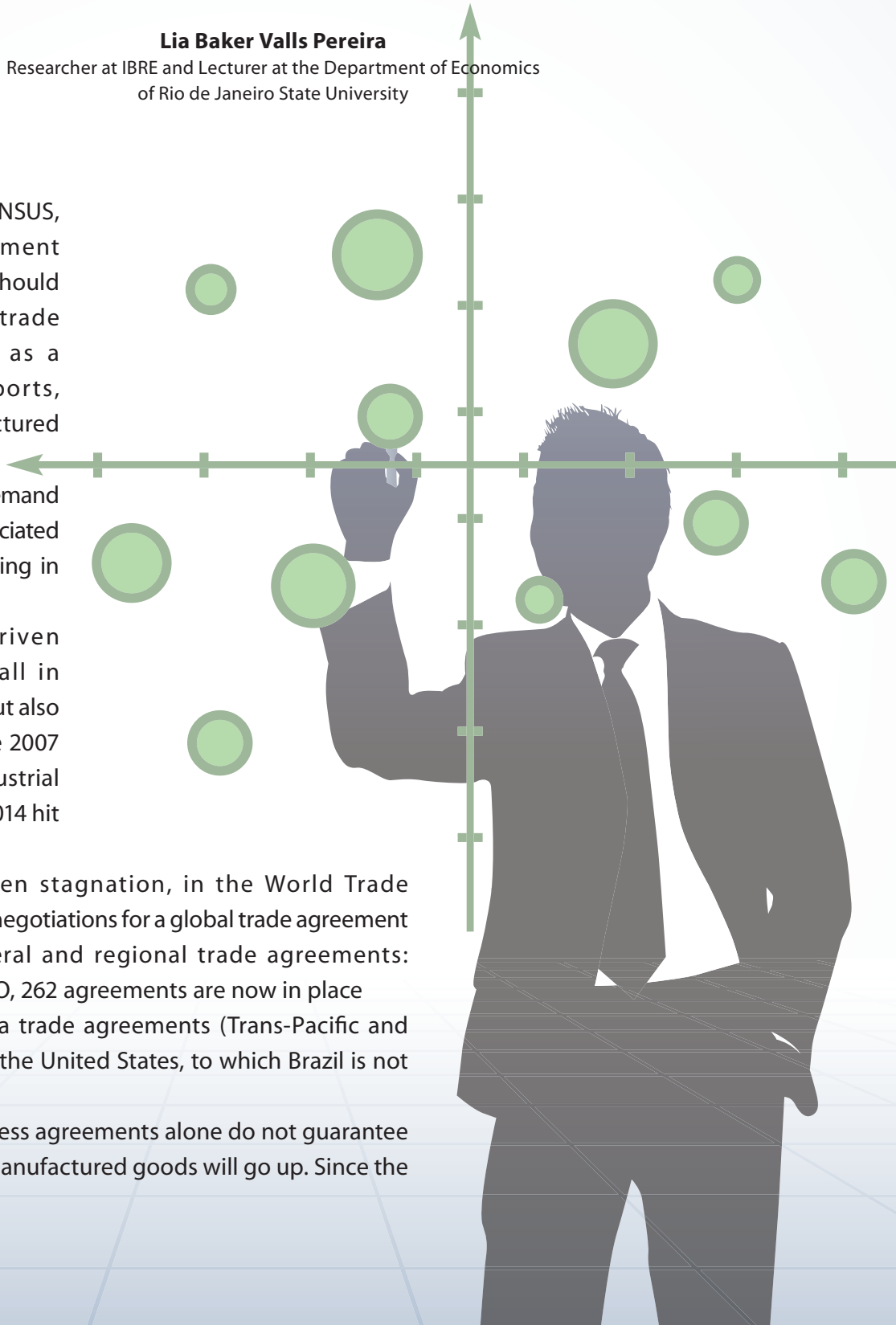
In late April of 2015, the global corporate market was surprised by Shell's decision to purchase British Gas (BG) for US$70 billion. This decision, which was widely reported, has major implications for the Brazilian market, Petrobras, and many companies investing in Brazil. As is widely known, Petrobras, Shell, BG, and many other companies hold stakes in Santos pre-salt blocks, some of which are already producing oil. This opens up enormous potential for companies to buy and sell interests and associate in joint ventures; that would create opportunities for investment that has great potential for technological advances and innovations and will undoubtedly increase the production potential of the area. Currently, only two fields are pumping Santos pre-salt oil: Lula, which produced 299,000 barrels of oil equivalent per day last December, and Sapinhoá, which produced 180,000 barrels. At the time Brazil's total oil production was 3 million barrels per day. Thus, pre-salt oil fields were already accounting for almost 15% of the country's production.

It is time for a new ordinance, similar to that of 1988, that can ensure the solvency of oil companies and establish principles to discipline oil product pricing policy.

Our survey of Brazil's oil sector suggests that not only does Petrobras have significant rights, but that, once properly regulated, markets will provide adequate support for investments. Regulation is particularly important because the ANP is scheduled to open the 13th bidding of oil blocks on October 7, 2015, although this round does not include pre-salt blocks.

A new direction for Brazil's trade agenda

Lia Baker Valls Pereira
Researcher at IBRE and Lecturer at the Department of Economics of Rio de Janeiro State University



THE GROWING CONSENSUS, even among government officials, is that Brazil should seek to advance its trade agreement agenda as a way to leverage exports, particularly of manufactured goods, because of

- Slowing growth in demand for commodities associated with what is happening in the Chinese economy
- A trade deficit driven not only by the fall in commodity prices, but also by the increase since 2007 in the deficit in industrial products, which in 2014 hit about US$ 60 billion
- The slow pace, even stagnation, in the World Trade Organization (WTO) negotiations for a global trade agreement
- The surge in bilateral and regional trade agreements: according to the WTO, 262 agreements are now in place
- Negotiation of mega trade agreements (Trans-Pacific and Transatlantic) led by the United States, to which Brazil is not a party.

However, market access agreements alone do not guarantee that sales of Brazilian manufactured goods will go up. Since the

early 2000s, in addition to China, other Asian countries associated with supply chains in their region have increased their share of world trade in manufactures. During this period, industrial productivity in Brazil declined. Thus, Brazilian manufactures face growing competition because they have lost competitiveness.

Although agreements are no guarantee of manufacturing sales, access to markets is still a necessary condition. Agreements also provide access to inputs and cheaper capital goods, which can stimulate competitiveness.

The visits of President Rousseff to Mexico in late May and to the United States in June can open opportunities for a new direction for Brazil's trade agreement agenda. Mexico and the U.S. are among the top five markets for exports of Brazilian manufactures.

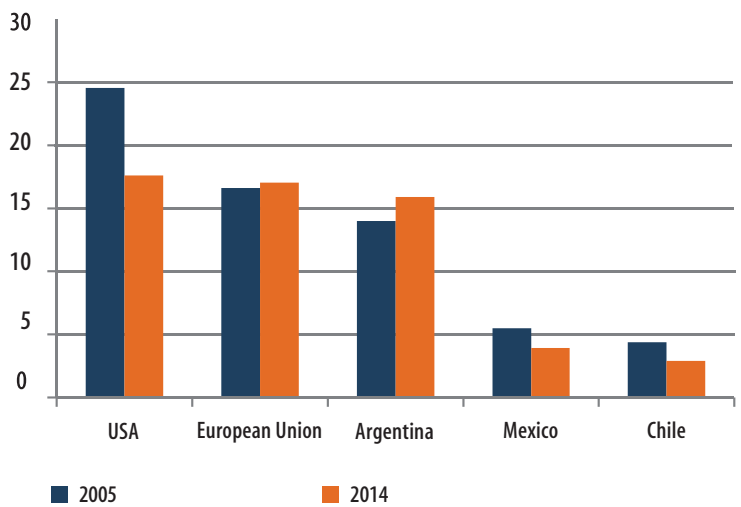
The U.S. is Brazil's second largest trading partner, and unlike China it is an important market for Brazilian manufactures.

Trade relations

Mexico's main trade partner is the U.S.—it is responsible for 80% of Mexico's exports and 50% of its imports—but the country has other extensive agreements, with, e.g., the European Union (EU), Japan, Colombia, and Peru.

In 2002, Brazil signed an agreement regulating the automotive trade and another of more limited scope (it does not cover all products) which aims to create a free trade area. The automotive agreement has been revised. A revision last March established that automotive trade would be free between Brazil and Mexico from March 2019. Expansion of the partial trade agreement has, with ups and downs, advanced slowly toward a free trade area for all Mercosur countries, including Mexico.

Brazil's main manufacturing export markets
(country's share in total manufacturing exports, %)



Source: Ministry of Development, Commerce and Industry.

The difficulties of negotiating broad agreements in the region should not paralyze Brazil's trade policy. Brazil should seek new agreements, regardless of Mercosur.

Mexico is the second largest market in Latin America, after Argentina, for Brazil's manufactures. However, in 2014 Mexico as a market for total Brazilian exports, not just manufactures, fell from 5th place to 14th. Yet Mexico increased its share in Brazilian imports, moving up from 19th to 11th place. Brazil's trade balance with Mexico has gone from a surplus to a deficit since 2008, partly because automotive trade became more favorable to Mexico. In 2014, Brazil's total trade deficit with Mexico was US$1.6 billion, of which passenger vehicles accounted for US$1.4 billion.

The U.S. has free trade agreements with 20 countries and is negotiating the Transatlantic Agreement with the European Union and the Trans-Pacific Agreement with Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. The U.S. has not proposed a free trade agreement with Brazil. However, there is a wide range of agreements and memorandums of understanding that emerged from the Economic and Financial Dialogue Brazil-United States of 2011. Some topics, such as double taxation agreements, visa facilitation, and partnership in biofuels, are part of an agenda that was suspended with the wiretapping by the U.S. National Security Agency that led to suspension of President Rousseff's visit to the United States in 2013. The trade agenda with the U.S. may now be back, as indicated by President Rousseff's trip this June.

The U.S. is Brazil's second largest trading partner, and unlike China it is an important market for Brazilian manufactures. However, between 2002 and 2014 U.S. participation in Brazil's total exports fell from 25% to 12% and in Brazil's total imports from 22% to 15%. Since 2009, Brazil's trade balance with the U.S. has been in deficit; in 2014 it hit US$7.9 billion.

An agreement with Mexico is being negotiated but it is unlikely to be concluded any time soon. A free trade agreement with the United States is only a remote possibility. However, President Rousseff's two visits may perhaps signal the resumption of negotiations with Mexico and the U.S. that have long been on hold.

Possible scenarios

The growing consensus that trade agreements could boost exports of Brazilian manufactures does not rule out different scenarios that have been discussed. Brazil has signed free trade agreements with all the other countries in South America. By 2019, the tariff liberalization schedule will have been completed, and the exceptions will be few. Even with these agreements, however, the free trade agreements of several South American countries with the United States, the EU, and China have eroded preferential access for Brazilian manufacturers. Thus one view emphasizes the importance of diversifying trade agreements to Brazil's other major export markets. An alternative view is that regional integration should be encouraged. These questions lead us to suggest three possible scenarios.

Deeper integration with South America

In this scenario, trade policy should favor the South American forums UNASUR and MERCOSUR. The possible admission of Bolivia into Mercosur (pending approval by the Congresses of Brazil and Paraguay) illustrates this approach. However, realization of this scenario has some problems. Since trade liberalization in the region will be almost complete by 2019, advancing the integration agenda would require broadening the negotiations to other areas, such as services, investment, and government procurement. The history of Mercosur shows the difficulty of negotiating regulatory issues. The issue becomes even more complicated when the countries of the Pacific Alliance, which have negotiated regulatory issues with the U.S. and the EU, are incorporated. We may advance in areas such as infrastructure, which is important for the region, but there is a risk of continued stalled negotiations.

Integration with South America and expansion of the network of agreements with the rest of the world

The difference from the previous scenario is expansion of trade agreements with the rest of the world. The premise is that difficulties of negotiating broad agreements in the region should not paralyze Brazil's trade policy. Brazil should seek new agreements, regardless of Mercosur. This does not mean abandoning Mercosur but would give a pause that may or may not be permanent for the common external tariff. According to the 1994 Ouro Preto Protocol, Mercosur should have become a customs union with a common external tariff by 2006. Given numerous extensions since, it is not clear when the full customs union will be in force. Also, the interpretation that Mercosur obliges member countries to negotiate trade agreements together has been challenged.

With regard to Mexico, Brazil should propose a full schedule of tariff liberalization and incorporate in the agreement such issues as trade in services. Investment agreements, such as those already signed with Angola and Mozambique, should also be considered. Brazilian international corporations have an interest in such agreements as protection from unexpected expropriations.

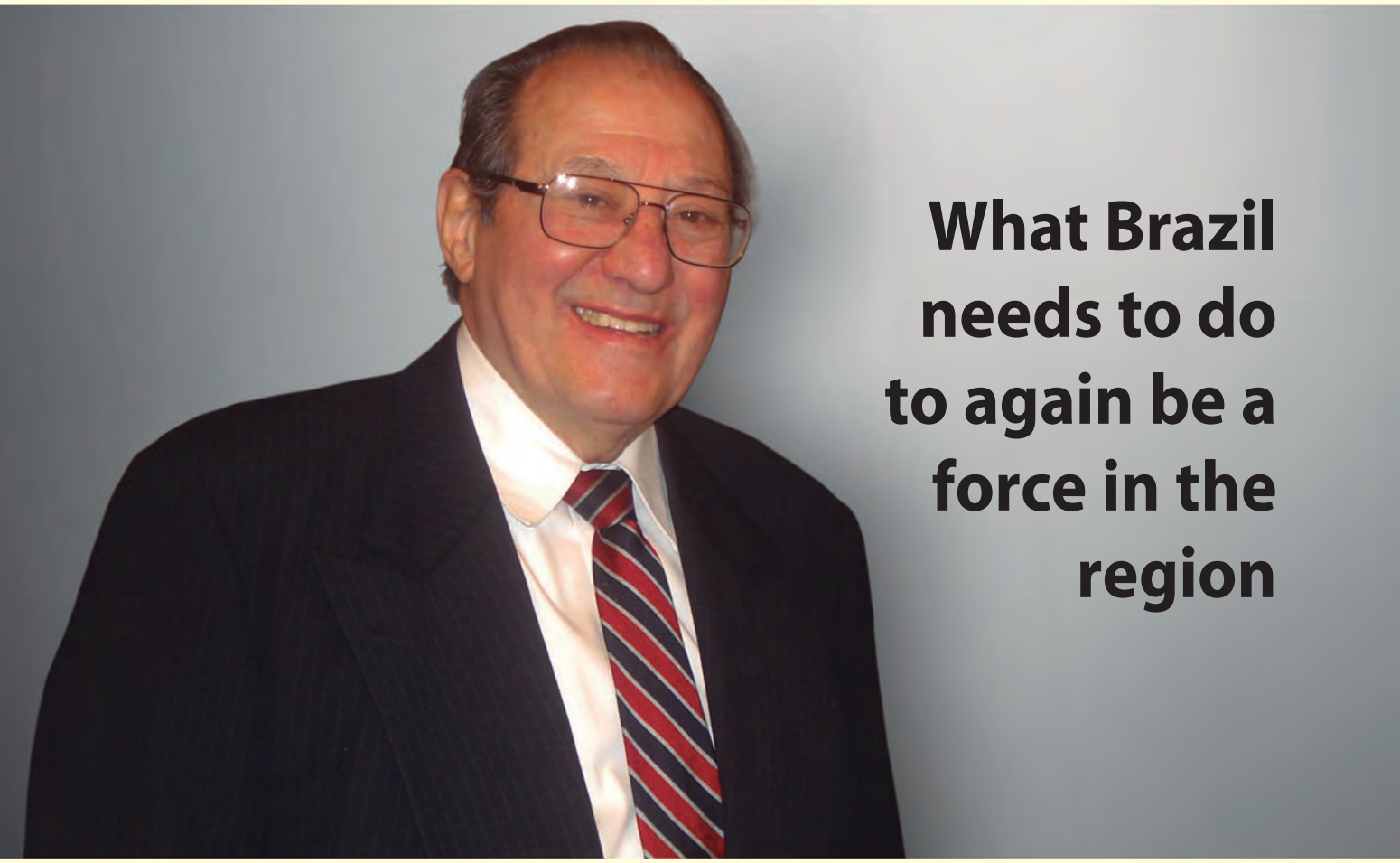
Regarding the U.S., memorandums of understanding, letters of intent, and agreements should be reviewed, and a list of priorities added in addition to those already agreed on (double taxation agreement, visas, and physosanitary barriers). Regulation in areas of common interest could help move forward discussions on opening markets.

Low priority for South American integration

This starts with the premise that South American integration discussions have excluded economic issues and kept Brazil away from the world's leading economies. Brazil needs to ensure access to markets in developed countries and participate in negotiations on new regulatory frameworks. A closer relationship with the countries of the Pacific Alliance and agreements with the EU and the U.S. should have priority.

Given the multilateral character of Brazilian trade, the second scenario should be favored. Separate trade negotiations do not necessarily imply the end of Mercosur. South American integration and Mercosur do not be limited to trade. Ensuring a favorable environment in the region for international Brazilian companies could expand trade through increased investment. ■

Photo: Mario Ronci



What Brazil needs to do to again be a force in the region

James Ferrer Jr.

Director of the Center for Latin American Issues at George Washington University

Louise Pinheiro

James Ferrer Jr. is the director and founder of the Center for Latin American Issues (CLAI) at George Washington University. Ferrer earned a PhD in Latin American history from the University of California at Berkeley. Before creating CLAI, he worked for the U.S. Department of State for 30 years, serving as Deputy U.S. Ambassador and Acting Ambassador in Brazil, Alternate US Representative to the United Nations Economic and Social Council, and Director of Economic Affairs at the U.S. Embassy in Lisbon. He believes that Brazil is key to the development and stability of Latin America. He considers Brazilians to be very creative and resourceful, and given the opportunity and the right incentives they would make real progress. He warns, however, that trade protectionism is condemning Brazil to low growth and poverty.

***The Brazilian Economy*—Latin America seems divided between left-wing Chavismo and market-friendly and pro-reform countries like Mexico, Chile, and Colombia. What is your take on the political situation in Latin America and where Brazil fits?**

***James Ferrer Jr.*—**Brazil does not fit nicely in either category. Brazil is really living the extension of its long history of heavy state involvement in the economy and the pro-market reforms since 1995 with President

Fernando Henrique Cardoso and then in many ways reinforced or emphasized in the Lula administration. There is some debate about whether President Rousseff would like to continue the pro-market polices or go back to an earlier phase of state involvement in the economy. I think that is one of the problems that Brazil currently faces in its economic policies. However, Brazil does not fit with either group. Brazil is trying to play its normal diplomatic role, as a mediator that tries to reconcile differences between friends and at the same time to remain friendly with all of them and not alienate any of them.

Brazil reaches out to Venezuela on the left and in a way helps to integrate it into the rest of South America, and of course to Argentina, where Venezuela has its own friendly relationship. But Brazil wants to keep all of them within a spirit of friendship, and that of course limits its ability to influence their policies because to do so Brazil would have to take positions on issues within those countries—which might not strike a friendly chord—and so they resist.

Despite Brazil's efforts to reach out to Venezuela and integrate it into South America, Venezuela seems to be going the wrong way in terms of political freedom and economic policies.

The policies that President Maduro has been implementing, following late President Chavez, will never work in reality. Any effort to make them work will simply bring about stagnation. He is moving more and more toward dictatorial rule against strong domestic opposition and his policies are contributing to the bad economic situation, which reinforces the political deterioration. He has only one future, a dismal future out of office. How that will happen, I don't know. I hope it is peaceful, but I don't give him much time in office.

Brazil is really living the extension of its long history of heavy state involvement in the economy and the pro-market reforms since 1995.

Is the winding down of the commodities boom contributing to Chavismo running out of steam?

Yes, low oil prices in particular are undoubtedly taking away resources that Maduro had been wasting in support of ill-advised policies. But more important is that the domestic economy is breaking down. The shortages of eggs, milk, and other products are symptoms of bad economic policies that are causing a deterioration of economic activity and productivity, and that means the livelihoods of people are deteriorating as time goes by. Electric power shortages now happen almost every day in some part of the country. There is a lack of investment, and there is no prospect that investment will increase under this government. These situations always tend to get very bad before they are resolved.

Do you think other left-leaning countries in Latin America like Bolivia and Peru are learning from Venezuela's experience?

Brazil is trying to play its normal diplomatic role, as a mediator that tries to reconcile differences between friends and at the same time to remain friendly with all of them and not alienate any of them.

In Peru President Ollanta Humala when campaigning was very leftist but when he took office, he moved to the center, and Peru has been doing relatively well. Even Bolivia, which I expected was going to be a disaster, is avoiding it because President Evo Morales is being very careful in how he makes contracts for natural resources exports. Bolivians are producing, they are exporting, and they are earning enough to maintain the economy. I give him credit for that and I suspect that he may have learned a bit from Venezuela. I hope Argentina will learn a little more.

In Argentina there is a difficult economic situation aggravated by investigations of alleged involvement of government officials in covering up a foreign terror attack. How do you see this situation?

Cristina Kirchner cannot run for reelection; she is presumably leaving office at the end of this year. I think she is leaving under rather negative circumstances, and this prosecution case will, I suspect, get hold of some people in her administration. There is a strong feeling in the country against what was done, and a strong desire to find out what really happened; some of the blame is going to fall on her.

Do you think that it will be possible to revive US-Brazil relations in this U.S. administration or will we have to wait for another one?

We will have to wait. This administration has so many problems, and so many policies have had difficulties, that I don't think they are really looking very seriously at Latin America and Brazil. Secretary of State John Kerry himself is so involved, in the Middle East especially and in the terrorism question, I don't think he has time to look deeply at Brazil. Now, the new initiative with Cuba will require much of their attention. Moreover, the NSA phone tapping was a real concern in Brazil, and understandably there is some resistance in Brazil to closer relations with the U.S. I think it would be more productive to wait for a new administration to come in before you can expect to rebuild the relationship between the two countries.

It seems that Brazilian foreign policy in recent years has been more guided by ideology than by national interest. What do you think?

I have a different view. I think national interest is defined within the terms of your ideology, so I don't think you can really say, because ideology and national interest really are a blend: you don't know what your national interest is until you apply your ideology to your criteria. And of course former President Lula had a different ideology from Fernando

Henrique Cardoso. So Lula had a different interpretation of what were Brazil's role and objectives in international relations. Lula's main objective was to try to improve income distribution throughout the world. He thought the poor nations would come to follow him, and want him to be their leader; however, in effect they ignored his recommendations. They saw his scheme as unworkable and unrealistic, so he lost his opportunity to become an international leader. That affected his role.

Do you think recent administrations have neglected trade agreements? Mexico and Chile have been more active in pursuing bilateral agreements.

Brazil's view has always been protectionist, no open borders, no big trade agreements, and that policy continues. Mexico, Chile, and Colombia have changed; they opened up trade. Brazil in contrast has protected domestic industry and that is one of President Rousseff's main problems now. That is still her belief, and that is something that she has to change. I am hoping that Finance Minister Levy is an indication that she is going to change the direction of economic policy. But if she doesn't, she will have the same problems she has had for the last four years.

It seems that Lula in his second term, and Rousseff in her first have intensified state intervention in the economy.

Look at the Rousseff administration's treatment of the automobile industry: The industry was afraid of competition, the Mexicans outcompeted them, they called for protection, and the government raised import duties

President Maduro is moving more and more toward dictatorial rule against strong domestic opposition and his policies are contributing to the bad economic situation, which reinforces the political deterioration.

to protect the sector. That was the wrong step to take. The government has to put the automobile sector under pressure so it will innovate, invest, and become more creative, productive, and efficient. You build a solid industry by making it live up to competition, not by protecting it.

Protectionism is condemning Brazil to low growth. If you don't have to compete, you won't. The businessmen's objective may be to create a monopoly, but the government's objective has to be to ensure competition, and then you will get investment. People ask why there hasn't been more investment in Brazil, both domestic and foreign. Why would you invest if you think the government is artificially protecting companies? And when you have a problem, you go to the government and get protection and your input costs go up. When you invest it takes a lot of planning and effort; you have to get financing and take risks. Why should you do all that if it is easier to simply get government protection?

Bolivians are producing, they are exporting, and they are earning enough to maintain the economy.

Many businesspeople argue for some protection to offset other costs, such as poor infrastructure. Why is Brazil's infrastructure still inadequate?

The concessions [to build and operate infrastructure], especially at first, were set up so badly that corporations were being asked to accept risky obligations without the promise of adequate compensation. They didn't want to invest their money, so Brazil's infrastructure has not been improved: the railroad network is still very limited, ports are too small, and the electricity sector is deficient. The government has to get a lot of money into infrastructure to repair the bridges, roads, ports, airports, etc. Millions of dollars are lost every year because trucks take agricultural products from the far west to the east coast ports and then they wait at the port for sometimes a month, before they can load their cargo onto ships. That's a tremendous waste of money.

The government should really have been pressing the private sector, giving them concessions and getting them involved. Brazilians are very creative and if you give them the opportunity they would take advantage of it, they will go out and find the money, and put it into these projects if they are financially viable. Current infrastructure is so ineffective that new infrastructure projects would immediately become competitive and profitable.

What about Brazil's participation in the BRICS?

The BRICS is an artificial association. Brazil has little in common with China or Russia. How can Brazil associate itself with the more aggressive stand that China is now taking in the Pacific or the stand that Russia is taking in Eastern Europe? Brazilians have no empathy or sympathy for those positions. China grew rapidly for a number of years, but it began from a very low base. With stability, it was expected to grow. The good policy [for Brazil] would have been simply to take part in that growth process but not become overcommitted to China as a partner. Brazil should take advantage as much as it can, and use its exports to become more competitive. I think China's fast-growth period is over; China is going to settle down to a more normal growth. Otherwise its urban-rural conflict will get worse, and its inflation will rise.

Should Brazil do more to develop the partnership with India?

India has a democratic process, and it is reforming its economy, and so it is likely to grow more quickly now and in the future. India will be a good market for Brazilian exports. Many opportunities are likely to arise.

Where should Brazil's focus be?

Brazil's major interest, I think, is Europe and the US. They are dynamic markets with money and technology. Brazil should be getting resources to grow, and those are mostly in the U.S., Europe, Japan, and Canada.

Do you think the Brazilian government has shied away from free trade?

That's a typical attitude in Brazil: "We are a relatively closed economy, we are big, we don't need the world, we have a big domestic market here, we don't have to export or import, and we should produce everything here." This attitude would condemn Brazil to poverty. Trade not only gives a country products, it also brings the competition that helps a country to become efficient, competitive, and productive. Look at our major industries in the U.S.: They produce products that combine both imported and domestic goods. If we did not import aircraft parts, our aircraft companies would hardly be able to sell any planes abroad; they would be too expensive. Often the majority of the parts of a plane produced by Boeing today are imported, including the engines. The company that has the technology and puts together the product is the one that makes the largest profit, and that is what Boeing does.

What can Brazil learn from Mexico and Chile?

Both of them are putting much more emphasis on the private sector and diminishing the role of government. Chile is showing tremendous innovation in the private sector. It has turned the wine industry, which when I lived in Chile was relatively small, into a first-class industry because of competition. The wine we used to buy in the 1970s is today one of the best known, and they are able to make it so efficiently that they can keep virtually the same price as it was 20 years ago, which enables them to stay competitive.

In Peru President Ollanta Humala when campaigning was very leftist but when he took office, he moved to the center, and Peru has been doing relatively well.

Turning to domestic issues, many on the left are criticizing the president for turning away from her policies in her first term. However, there seems no alternative to a substantial fiscal adjustment to recover credibility.

The failure last year to achieve a substantial fiscal surplus was a very bad step. So you got rising inflation that now is higher than 8%, which scares investors, and that also means prices that are too high. Brazil today is an expensive country, so how many manufacturing companies want to invest here? You don't have an industrial complex that is competitive. The Brazil market is big but there are limits to it. So the government has got to change that. It has to work for fiscal surpluses to pay down the public debt and have a monetary policy that will avoid causing inflation and make Brazil more competitive.

Many observers say that it may take two years of recession or very low growth before the economy recovers. What is your view?

Brazil will have a recession this year for sure, and probably going into the next year. The

Current infrastructure is so ineffective that new infrastructure projects would immediately become competitive and profitable.

measures the government has put into place may begin to have an effect by the second half of next year, and the economy could begin turning around. Then there is the problem of the state-oil company Petrobras. That's a big disaster.

Investigations of allegations of corruption involving Petrobras have stimulated the idea that Brazil is thoroughly corrupt. If you were an investor, do you want go to a country that is so corrupt? The amount of money that was stolen is horrendous. I would never have imagined that the thievery could be so large.

How do you see the current political situation in Brazil?

President Rousseff is going to have a tough time in her second term. She has to show great leadership and great innovation to make it a success. Brazil has the resources it needs to be a success, but it needs a political revolution to achieve it. As I said before, it has to open its economy; it has to become more efficient and distribute the benefits of growth. Yes, the government should continue trying to make income distribution more equal, but it must encourage production before it can distribute. Don't follow the Venezuela model of just trying to redistribute existing wealth.

So the key is to increase productivity?

Right. Get workers really producing more—and that takes more capital as well. President Rousseff should move to stimulate both domestic and foreign investment in the private sector. If she wants Brazil to be part of the world economy, she needs to attract financing and technology from around the world and gain access to their markets. Brazil needs high levels of investment, as we talked about before for upgrading infrastructure, and the government should take advantage of the international capital markets to get the money for it. The president won't get a higher level of income until she has a good strong economy; she won't get that until Brazil has the capital and the technology; and that won't happen until Brazil has the image of an efficient, competitive producer and potential major exporter—and fighting corruption is a big part of it. That won't be easy; she has to project that new image throughout the country and abroad. The president needs to show that Brazil wants to be part of the world economy. The image she creates for Brazil has to be one of an honest, transparent country, where you can invest with security that judicial decisions will be fair. Without that, many big international investors will stay away, or they will require such high rates of return that their investments won't have the desired stimulus effect on the economy.

AEGEA





ÁGUAS GUARIROBA - **MS**



PROLAGOS - **RJ**



ÁGUAS DE BARRA DO GARÇAS - **MT**

By efficiently supplying quality water and treating all the sewage collected, AEGEA has become one of the greatest Brazilian companies in waste treatment and one of the companies mainly responsible for helping to give locations across the country access to exceptional water and sewage services. Its expertise allows AEGEA to expand investments, consolidate current concessions and acquire new markets. Nowadays,38 cities of various sizes count on the services of AEGEA: from a town with 2,000 inhabitants to a capital with approximately 800,000 inhabitants. Thus, demonstrates the capacity for catering to different economical and geographical realities in order to ensure more health and quality of life for the users.

- Growth of 21.9% on net earnings (2013/2014)
- EBITDA of R$ 295 million (2014 closing)
- "A+" rating (bra) by Fitch Ratings agency
- 17% of the private market
- Best private company on Revista de Saneamento Ambiental ranking



ÁGUAS DO MIRANTE - **SP**



NACIONAL ÁGUAS E SANEAMENTO - **SC**

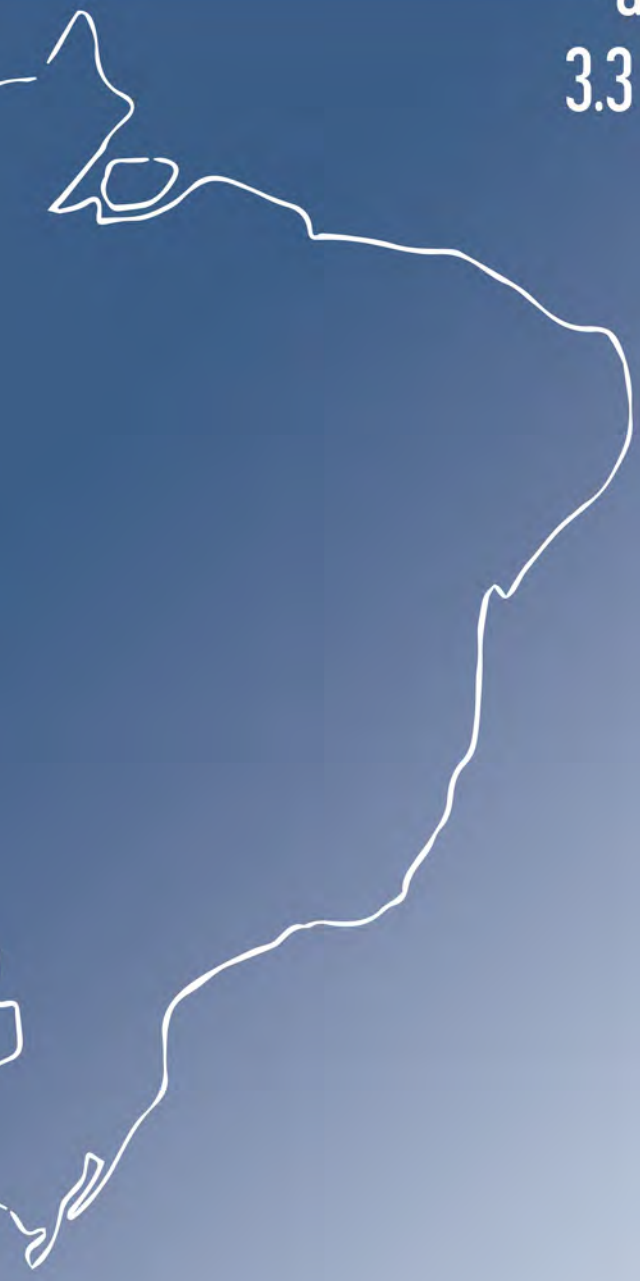


ÁGUAS DE SÃO FRANCISO - **PA**

8
BRAZILIAN STATES

38
MUNICIPALITIES

Essential service that already reaches 3.3 million Brazilians



AEGEA

twitter.com/aegeasaneamento

facebook.com/aegeasaneamento

www.aegea.com.br

LEV Comunicação

Brazil's domestic outlook has become more challenging

Silvia Matos
Technical coordinator, IBRE Macro Bulletin
silvia.matos@fgv.br

THE OUTLOOK FOR THE WORLD ECONOMY is still uncertain, with recovery taking different trajectories in different countries. The U.S. economy is expanding moderately, so the Fed should begin normalizing its monetary policy by the end of the year, and the euro area economy is beginning to accelerate, driven by domestic demand.

However, the Chinese economy is still slowing, although low inflation gives it room for a more expansionary monetary policy if needed. China should grow around 6.8% this year; the new official target is 7.0%, down from 7.4% in 2014.

Capital flows to emerging countries are likely to decline and the dollar will keep strengthening. With the prospect of U.S. interest rates rising, emerging countries have little scope for countercyclical policies. A strong dollar and high interest rates will keep commodity prices low—and recovery in emerging economies sluggish.

Among emerging countries, Brazil has been a negative highlight. In 2014, its growth of 0.1% was the worst among the BRICS (Brazil, Russia, India, China, and South Africa); in the rest of Latin America, only Argentina and Venezuela are expected to have worse numbers.

Uncertainty over economic policy, the unfolding investigations of graft in the state-oil company Petrobras, and risks of electric power shortages make the growth outlook for 2015 very weak. We expect that GDP will fall by 1.8% in 2015, compared to our earlier projection of 0.6%.

Despite the weak economy, Brazil's inflation is on the rise. Exchange rate depreciation has been significant, and adjustments in controlled prices should be about 13.8% this year. IBRE staff expects inflation to reach 8.7% in 2015, well above the 6.5% government target. Thus, monetary policy is expected to continue tightening to prevent a generalized increase in prices and deterioration in inflation expectations.

Imports of goods and services have declined, which in principle could significantly improve the trade balance, but exports have also declined because prices of Brazil's commodities have fallen. We are forecasting a trade surplus of only US$3 billion in 2015 compared to the US$8 billion previously projected.

Since 2013, foreign direct investment has not been enough to finance the external deficit. Some funding comes from short-term capital flows, which makes the balance of payments more vulnerable to external shocks. Still, so far foreign investors have been willing to finance much of the growing current account deficit. However, today the much more uncertain scenario is unattractive to investors, and normalization of U.S. monetary policy will reduce global liquidity.

Brazil: IBRE baseline scenario for 2014-2016

	2013	2014	2015 Proj.	2016 Proj.
Real GDP growth (% change)	2.7	0.1	-1.8	0.5
Inflation (% change)	5.9	6.4	8.7	5.3
Central Bank policy rate (end-period, %)	10.00	11.75	14.50	12.50
Exchange rate (average, Reais per U.S. dollar)	2.2	2.4	3.2	3.5
Primary balance surplus (adjusted, % of GDP) [1]	0.5	-1.5	0.0	1.1
External current account balance (% of GDP) [2]	-3.4	-4.4	-4.5	-4.3
Trade balance (US$ billions)	2.6	-3.9	3.0	4.0
Export (US$ billions) [1]	242.0	225.0	192.0	201.0
International reserves (US$ billion)	376.0	374.0	370.0	380.0

Source: Institute of Geography and Statistics (IBGE), Central Bank of Brazil, IBRE staff projections.

[1] Recurring government primary balance surplus defined as budget balance excluding interest payments on public debt, extraordinary revenues from dividends and concessions, and some investments of the Growth Acceleration Program.

[2] Balance of payments compilation methodology changed in 2014.