Concessions
The Law of Concessions: 20 years later

Latin America
Latin America is put to the test

Interview
Marilene Ramos
President of the Brazilian Environmental Agency



THE BRAZILIAN ECONOMY

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The need to modernize Brazilian industry

Brazilian industries have been losing ground to competitors and seem to have lost the ability to expand markets. What can be done?

FGV IBRE

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THE BRAZILIAN ECONOMY

Economy, politics, and policy issues

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THE BRAZILIAN ECONOMY

IN THIS ISSUE

FGV IBRE Brazilian Institute of Economics | November 2015

News Briefs



5 Fitch cuts Brazil's rating … Jobless rate unchanged, wages drop … current account deficit widens … new low for consumer confidence … loan defaults near two-year high … Mitsui buys into Petrobras unit …unemployment climbs … strike slashes oil production … industry output still falling … opposition seeks Rousseff impeachment … Lula supports austerity measures … construction tycoon sentenced for corruption … government expects negative primary balance.

Cover Stories

8 The need to modernize Brazilian industry



The share of manufacturing in the economy is now the lowest in history, just 10.9% compared to 35.9% in 1985. Cristina Alves and Claudio Conceição report on recent studies that pinpoint where the main problems are. They also identify Brazilian companies that have bucked the trend to compete successfully in world markets.

17 Brazil: Out of the global market

In recent years China has snapped up some of Brazil's major markets, notably making inroads even in Latin America. Cristina Alves reports on recent studies by IBRE researcher Lia Valls Pereira that quantify exactly how much Brazil has regressed and what the government in particular must do to try to win back the lost ground.

Concessions

20 The Law of Concessions: 20 years later



Chico Santos reports on an October FGV seminar on "20 Years of the Concession Law." Since the law was enacted, Brazil has made unquestionable advances, especially in services infrastructure, but bottlenecks persist. Participants identified progress, questioned the role of government, and what can be learned from other countries for Brazil to reduce costs and delays to reduce the risk for investors. Transport, energy and the environment, and telecoms are highlighted.

Latin America

31 Latin America is put to the test

Minimal growth and inflationary pressures are testing the credibility of the policies and institutions of Latin American countries. Solange Monteiro reports on the latest IMF analysis of the region's economy, which calls for structural adjustments in most countries in the region. For Brazil, because it sees the fiscal situation as worsening and the political crisis to be deep, the IMF sees no possibility of a short-term economic recovery.

Interview

38 A call for clarity



Environmental licensing has been at the forefront of debate about how Brazil can execute projects more efficiently. Marilene Ramos, new president of the Brazilian Environmental Agency (IBAMA), explains to Solange Monteiro how IBAMA is pushing to increase transparency and reduce discretion so that it can streamline the licensing process. She also calls for "higher-level guidance to clearly define for the environmental area which projects are of strategic importance for the country's development."

Editors' Note

A STUDY BY Claudio Considera and Juliana Carvalho, researchers at the Brazilian Institute of Economics, has exposed the harsh realities of Brazilian manufacturing, where a number of sectors have lost significant ground over the years. Many have been virtually wiped out in foreign markets. The study shows that though earlier the share of the manufacturing industry in the economy went up dramatically, from 15% in 1939 to 35.9% in 1985, it has since been in almost free fall except for a brief recovery between 1999 and 2004. In 2014, manufacturing recorded its smallest share of the economy in 65 years, a meager 10.9%. The study is complemented by a study by IBRE colleague Lia Valls Pereira that illustrates dramatically how Brazilian manufactured goods have lost markets to Chinese exports, particularly in South America.

The outlook remains bleak: according to IBRE projections, manufacturing production can be expected to fall by 9.8% in 2015. The International Monetary Fund (IMF) estimates that output in Latin America generally will fall by 0.3% this year, the first decline since 1983 except for 2009, when it felt the effects of the global financial crisis. Acknowledging that the crisis was deeper than expected, the IMF stated bluntly that there is no possibility of a short-term economic recovery for Brazil, which is confronted by a worsening fiscal situation and a deep political crisis.

How might it be possible to get industry back in shape when the outlook is so discouraging? Some Brazilians companies have proved it can be done. Embraer, Weg, and Marcopolo among others have shown that a careful strategy of investment in innovation, training workers, and diversifying markets has made it possible for them to successfully deal with the current crisis. The government could help by promoting greater integration in global supply chains and keeping the exchange rate competitive.

Addressing infrastructure bottlenecks could also significantly improve the competitiveness of Brazilian industry. Twenty years after concessions became part of national life, much progress has been made in utilities infrastructure, with installation of a modern telecommunications network, nearly 10,000 kilometers of roads in good condition, and the recent expansion and modernization of airports. But infrastructure bottlenecks are particularly noticeable in logistics and sanitation. These can only be addressed by attracting private investment, which implies improvements in the business environment.



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ECONOMY AND BUSINESS

Fitch cuts Brazil's rating

Fitch has lowered Brazil's debt rating one notch to BBB-, with a negative outlook, citing rising government debt, difficulty in shoring up the budget, and the weak economy. Fitch also noted that political uncertainty was affecting the government's ability to implement legislation and fiscal reform. (October 16)

Jobless rate unchanged, wages drop

Unemployment remained unchanged in September from August at 7.6%, government statistics agency IBGE said. Wages adjusted for inflation fell 0.8% from August (4.3% from September 2014), to an average of US$552.80. (October 22)

Current account deficit widens in September

The external current account deficit for September was wider than expected at US$3.1 billion, up from US$2.5 billion in August, the central bank said. Year-on-year, however, the deficit shrank 63.3%, reflecting continuing current account adjustment since the start of the year, mainly because the Brazilian real has depreciated. Net foreign direct investment for September was a pleasant surprise, rising to US$6 billion. (October 23)

New low for consumer confidence

Brazilian consumer confidence fell for a sixth straight month in October as a deepening political crisis stoked pessimism. The Getulio Vargas Foundation (FGV) said its confidence index fell from 76.3 in September to 75.7, the lowest since the data series began in 2005. (October 26)

Petrobras sells shares in gas distribution unit

Japan-based Mitsui has signed an agreement with state-oil company Petrobras to acquire 49% of the shares of natural gas distribution unit Petrobras Gás (Gaspetro) for about US$489 million. Gaspetro has equity stakes in local distribution companies in 19 Brazilian states. (October 27)

Photo: Rovena Rosa/Agencia Brasil.



Petrobras employees on strike

Loan defaults at near two-year high

Bank loans delinquent for at least 90 days were again unusually high in September, in response to the recession and rising interest rates. The 90-day default ratio was the equivalent of 4.9% of outstanding non-earmarked loans, the central bank reported. This was the highest for the ratio since October 2013, when it reached 5%. (October 27)

8.8 million looking for jobs

Unemployment in Brazil climbed to 8.7% of the active population in the quarter ending with August, the government said—far higher than the 6.9% recorded in August 2014, according to IBGE. The number of jobless workers went up 1.21 million for the year; 8.8 million were looking for jobs. The population active in the labor market remained stable at 92.1 million. (October 31)

Strike slashes oil production

A strike that began on November 1st has reduced Petrobras oil production by 273,000 barrels a day, 13% of its output, the company said. However, Petrobras reported that fuel distribution has not been affected and it does not expect supply shortages. (November 3)

Industry output still falling

Industrial output fell for the fourth straight month in September, government data show. Production fell a seasonally adjusted 1.3% from August, IBGE said; it was down 10.9 % from a year earlier, the steepest drop since April 2009. (November 4)

Annual inflation nearing 10%

Annual inflation accelerated in October to just below 10%, the highest reading in almost 12 years, after fuel and food prices shot up. Consumer prices rose 9.93% for the 12 months through October, IBGE said. (November 6)

Retail sales fall in September

Retail sales in fell for an eighth straight month in September as the recession worsened. Retail sales volumes excluding automobiles and building materials dropped by 0.5% month-on-moth in September and 6.2% in September from a year earlier, government statistics agency IBGE said. (November 12)

POLITICS

Opposition files petition to impeach Rousseff

Brazil's opposition has petitioned to impeach President Dilma Rousseff, accusing her of illegal accounting practices. One petition author is a founder of Rousseff's Workers' Party. Speaker of the lower house Eduardo Cunha must now decide whether to submit the petition to the entire Congress, which could trigger an impeachment trial. (October 21)

Lula urges support for austerity measures

In response to weeks of attacks against the policy of fiscal adjustment, former president Lula da Silva has urged the ruling Workers' Party to back fiscal austerity measures in Congress, endorsing the efforts of Finance Minister Joaquim Levy to reduce the deficit. Members of the party have opposed moves by President Rousseff to cut public spending and social benefits in order to balance overdrawn accounts and restore investor confidence in Brazil. Lula warned party leaders that Brazil had no alternative but to tighten belts to pull the economy out of its deepest slump in decades; saying the party's future depended on it.

Photo: Fabio Rodrigues Pozzebom/Agencia Brasil.



Former president Lula da Silva

Construction tycoon sentenced in corruption scandal

Judge Sergio Moro has convicted Sergio Cunha Mendes of corruption, money laundering, and racketeering for paying R$31.5 million (US$8.3 million) in bribes to obtain contracts with state-run Petrobras and ordered him to repay Petrobras that amount. Seven other people, including former Petrobras director of refining and supply Paulo Roberto Costa, were also convicted. Costa, who helped prosecutors unravel Brazil's largest-ever corruption scandal in return for a plea bargain deal, is under house arrest in Rio de Janeiro. The treasurer of the ruling Workers' Party, João Vaccari, is already serving 15 years in prison for corruption and money laundering. The sentences, considered stiff for white-collar crime in Brazil, may be appealed. (November 4)

ECONOMIC POLICY

Central bank keeps interest rate unchanged

As expected, the Monetary Policy Committee (COPOM) kept the central bank policy rate unchanged at 14.25%. The decision was unanimous. According to its post-meeting statement, the COPOM believes that holding the rate steady for a "sufficiently prolonged period" is necessary to make sure inflation converges to the midpoint of the target range, and noted that monetary policy will "remain vigilant." (October 22) The bank later acknowledged it was no longer committed to bringing inflation back to the 4.5% official target in late 2016, but instead aimed to lower inflation "in a relevant horizon." (October 29)

Government 2015 fiscal target revised

For the second time the government has revised its 2015 fiscal primary balance target, originally a slight surplus, down now to a deficit of 0.85% of GDP (US$13.32 billion). Estimated revenues have fallen short, and no further progress in cutting expenditures is expected. The government also said that the primary deficit might almost double, to US$26.52 billion. (October 27)

Meirelles urges continued fiscal adjustment

Brazil's former central bank chief Henrique Meirelles, touted as a possible replacement for Finance Minister Joaquim Levy, said that the government needs to continue its fiscal adjustment program, adding that the economy is better prepared now than in the past to face headwinds. Meirelles and Levy both spoke at a lunch for lawmakers and business leaders on November 11th in Brasilia. Both insisted that fiscal austerity is crucial for Brazil to regain investor trust and for the economy to grow again. (November 11)

Photo: Valter Campanato/Agencia Brasil.



Former central bank governor Henrique Meirelles

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The need to modernize Brazilian industry

Brazilian industries have been losing ground to competitors and seem to have lost the ability to expand markets. What can be done?

Cristina Alves and Claudio Conceição

IS BRAZIL STILL COMPETITIVE? The share of manufacturing in the economy is now the lowest in history, just 10.9% compared to 35.9% in 1985. To try to find out why, and what can be done, Claudio Considera, research associate, and Juliana Carvalho, analyst, at the Brazilian Institute of Economics (IBRE) conducted a survey covering what has been happening in a number of sectors since 2000. Their results?

"The numbers show that Brazilian industry lost competitiveness as imports increased and exports declined for many manufactured products. … The country has lost the ability to expand markets," Considera says.

Goods manufactured for domestic use fell from 91.9% of total domestic production in



2000 to 82.7% in 2014. Meanwhile, imported manufactured goods went up from 13.4% of domestic demand to 17.3%.

"The government can give incentives," Considera says, "but reindustrialization is unlikely. We have no innovation or cheap labor with which to recover markets from competitors. All that can be done is to avoid an even greater reduction [in competitiveness]. For example, we are major exporters of iron ore, and we should have a strong steel industry. However, several steel plants are in difficulties or have closed."

According to a study by the Brazil Steel Institute (IABR), steel is going through its worst crisis ever. With domestic consumption down to about 24 million tons a year and declining—and enough capacity to produce 48.9 million tons—crude steel production has only been relatively stable thanks to exports. The IABR study shows that, in August, 20 units in 29 steel mills were not producing, including two blast furnaces, four steelworks, and four rolling mills. With the domestic market shrinking and more competition from China, which now has about 460 million tons of capacity, there seems little hope for a surge in the Brazilian steel industry, at least in the short term.

In the metals sector, the IBRE survey found a steeply increasing foreign presence in the domestic market. Imports of metal products have quintupled, from 3.1% of domestic supply in 2000 to 15.6% in 2014. Meanwhile, exports have stagnated.

The increased foreign competition in both domestic and international markets has been partly caused by an excess supply of manufactured goods since 2008. "Slowdown in Europe and the United States, oversupply, fierce competition from China, and increased production costs in Brazil have buried the country's manufacturing industry," says Flávio Castelo Branco, executive manager of



"Our company [Dudalina] competes with major manufacturers, the big Asian networks. Constant innovation, commitment to high quality, and elimination of waste are what keep us competitive."

Ilton Rogério Tarnovski

economic policy of the National Confederation of Industry (CNI).

Despite the discouraging environment, some companies have shown that a well-defined strategy of investments in innovation and management of brand attributes can still boost sales.

The role of innovation

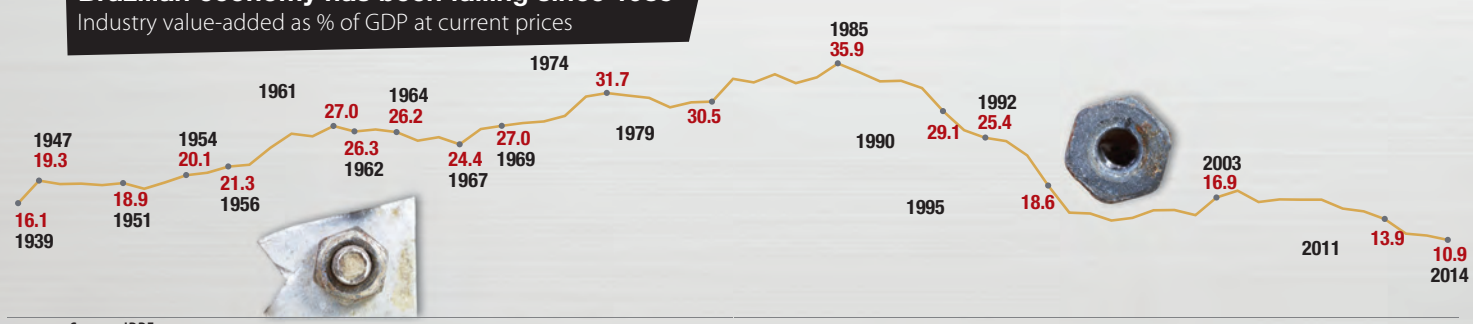
Since it was founded 54 years ago Weg S.A. has become one of the biggest electric motor manufacturers in the world, with plants in China, Mexico, South Africa, India, Germany, Portugal, Austria, the U.S., Argentina, Colombia, and Spain as well as Brazil. In 2014 the company earned R$7.8 billion and in the first nine months of 2015 its revenues grew 24% to R$2.5 billion compared with the same period a year earlier, despite the economic crisis.

"The internationalization of Weg since the 1970s was not the result of a lucky business opportunity; it was a strategic move," says André Luis Rodrigues, administrative and financial superintendent of Weg. Today, with the domestic market contracting, most of the company's investments will be abroad: for instance, by 2020 it plans to invest US$210 million in Mexico and US$135 million in China. By then Weg expects that 60% of its revenues will come from exports.

"Today, we see that China is making the transition from an economy focused on exports to one more directed to the domestic market," Rodrigues explains. In early November, Weg will open a new plant in China.

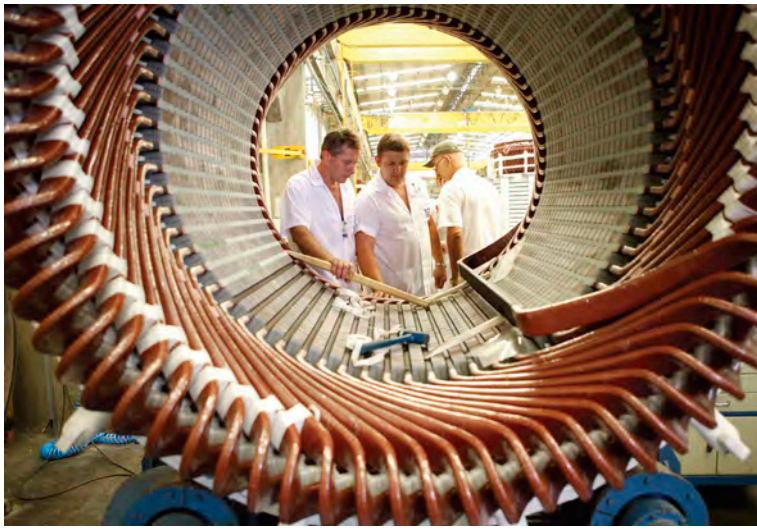
The manufacturing industry's share in the Brazilian economy has been falling since 1985

Industry value-added as % of GDP at current prices



Source: IBRE.

Photo: Weg



Weg plant: To continue to growth, the company invests 3% of its revenues in innovation and in training skilled workers.

Innovation explains much of the presence of Weg in foreign markets. Today, 50% of the company's revenues are derived from products introduced in the last five years. Weg regularly invests 3% of its revenues in innovation and in training skilled workers, 200 of whom qualify as professionals every year.

Antonio Corrêa de Lacerda, professor and coordinator of the Graduate Program in Political Economy at Pontifical Catholic University of São Paulo, argues that "Brazil has important companies like Embraer, Weg, and Marcopolo. The country has conditions to multiply these examples. However, we face false dilemmas, such as what is our comparative advantage: agribusiness, services, or industry? Brazil is one of the few countries, like the US and China, that can be strong on all three fronts."

Despite success stories like Weg, in general the IBRE survey results painted a gloomy picture. For instance, in the machinery sector, Brazilian companies lost domestic market share to foreign competitors. Imports of machinery more than doubled, from 16.6% in 2000 to 37.4% in 2014, and in 2011machinery exports as a share of total domestic production fell from 7% in 2000 to 4.6%.

For clothing and textiles, once an important sector, the rapid loss of competitiveness is almost frightening. In 2000 imports supplied 2.5% of domestic clothing and textile consumption. By 2014 imports reached 17.5%.

Exceptions to the rule

One success story in the clothing sector is Dudalina, a shirt manufacturer founded in 1957. Today, the brand is present in nine cities abroad, from Milan to Stockholm. The company plans to open eight more stores in 2016 as franchises, mostly in South America but also possibly in South Africa, according to Ilton Rogério Tarnovski, company vice president. Sold last year to Restoque SA, Dudalina had the highest net income on equity in 2014, 59%, as ranked by Valor 1000, though the results are likely to be more modest this year.

"The crisis is inevitable and we are not immune. The difference is that in our case, the whole business strategy and revenues are based on brand assets. This gives us resilience to face the crisis," Tarnovski explained. As the dollar appreciated, imports of fabric from abroad were

"To become more competitive, there is need for greater surveillance to combat fishing in the no-fishing season, improve fishermen's working conditions, and invest in new technologies. We are lagging behind in this respect."

Thiago De Luca

reduced from 70% to 60%. But the company continues to buy machinery from suppliers in China, India, Turkey and some European countries because they have higher quality at a cheaper price. "Our company competes with major manufacturers, the big Asian networks. Constant innovation, commitment to high quality, and elimination of waste are what keep us competitive," he said.



Despite a coastline of more than 8,000 kilometers and plenty of rivers, the outlook for the fishing industry is bleak. In 2011 fish product imports reached 38.9% of domestic consumption, while exports plummeted from 20.5% of domestic production in 2000 to only 5.8%. But even though the sector has been losing ground every year, the Frescatto company, founded by Italian Carmelo De Luca 70 years ago, is making its way back to international markets. After nearly eight years without exporting, the company hopes to begin shipping its products to Spain, according to Thiago De Luca, commercial director and a member of the third generation of the the controlling family.

Frescatto's sales this year should reach R$550 million, R$40 million more than in 2014. Today, 65% of the fish that is sold by the company is imported from China, Chile, Argentina, Uruguay, Canada and Vietnam because the cost of processing fish in Brazil is very high. Thiago De Luca cites an example: imported from China, a kilo of panga fish, which is similar to tilapia, can be sold in supermarkets for R$9 per kilo but local tilapia costs R$25.

"It's all very expensive. The cost of labor, electricity, fuel, and financing has increased. To become more competitive, there is need for greater surveillance to combat fishing in the no-fishing season, improve fishermen's working conditions, and invest in new technologies. We are lagging behind in this respect," De Luca says.

Despite the current problems, Frescatto believes that domestic consumption should rise soon; Brazilians consume only 12 kilograms of fish a year, barely half the world average. This year Frescatto plans to open a shop in

Leblon in Rio de Janeiro to sell directly to consumers. In 2016, it will start operating a farm in Pernambuco state that will produce 100 tons of gray shrimp a month.

Another case of a company dodging the effects of its industry's loss of competitiveness is Casa Valduga, a wine-maker in Bento Gonçalves, Rio Grande do Sul state. "We are rolling up our sleeves and working harder," says Juciane Casagrande Doro, commercial director; she predicts 20% growth in gross revenue this year. She prefers not to risk projections for 2016, however, because of uncertainty about the effects of the higher IPI tax on beverages that goes into effect on December 1st this year.

Casa Valduga has diversified production and focused on building the domestic market—annually Brazilians consume 2 liters per capita of wine, far below Italy's 45 liters and Argentina's 30. The company already exports to 23 countries; England accounts for 35% of company sales. Casa Valduga will also enter the craft beer market. To survive, the industry cannot stop, Doro says, noting that Casa Valduga is betting on wine tourism, using hotels, restaurants, and inns for brand exposure, and has taken its first steps in the food business, producing juices and jellies under the Casa Madeira brand.

Not even coffee, the most emblematic Brazil's product, has surmounted industry problems. Processed coffee exports, which accounted for 25.3% of total production in 2004, fell to 10% in 2011. Meanwhile, processed coffee imports grew from 0.1% of total domestic consumption in 2000 to 0.9% in 2011.

"Slowdown in Europe and the United States, oversupply, fierce competition from China, and increased production costs in Brazil have buried the country's manufacturing industry."

Flávio Castelo Branco

Apart from the successful trajectory of the Ambev group, overall the Brazilian beverage sector saw its exports plunge from 8.2% of production in 2000 to 1.7% in 2011. Meanwhile, imports steadily rose from 8% of total domestic consumption to 8.5% in 2011.



Dudalina store: The company's goal is to expand the number of franchises abroad in 2016 and face down Asian competition.

For clothing and textiles, once an important sector, the rapid loss of competitiveness is almost frightening. In 2000 imports supplied 2.5% of domestic clothing and textile consumption. By 2014 imports reached 17.5%.

Loss of competitiveness

One of the sectors that lost foreign market share is office machinery and computer equipment. Imports, rising since 2005, reached 34.8% in 2011, the highest of all the goods IBRE studied. Foreign markets for these products manufactured in Brazil have virtually disappeared, with exports declining from 10.3% of domestic production in 2000 to 1.1% in 2011. "We have had a protectionist policy that led to a technological gap," says the CNI's Branco. "We did not do trade agreements, we are out of the international game, out of global supply chains. Now it is much more difficult to get back in the game."



Frescatto's factory in Duque de Caxias: The company is expanding its distribution network and betting that domestic fish consumption will continue to grow.

Despite all the recent incentives for the automotive industry, exports of vehicles and parts fell from 13.9% of total production to 7.6% in 2011. The loss of competition to Asian carmakers was decisive.

Brazilian appliances have been virtually wiped off the global map: Exports fell from 10.7% of total production in 2004 to just 1.6% in 2011.

In petroleum refining, exports fell from 5.1% of domestic production in 2008 to 3.8% in 2011. Imports, including ethanol, jumped from 3.4% in 2000 to an estimated 14.2% in 2014. Meanwhile, Brazil has become heavily dependent on imported oil products. Between 2007 and 2013, annual demand for oil products increased by 4.6% while domestic production grew only 2.3%.

Chemicals also lost ground: Imports rose from 11.4% of domestic demand in 2000 to 36.2% in 2014, while chemicals exports leveled off at 7% from 2000 to 2011.

Pharmaceuticals also saw foreign competition break into the domestic market: Last year, imports nearly tripled, from 12.3% of domestic

consumption in 2000 to 34.5% in 2014. Exports rose, but only slightly, from 1.8% of domestic production in 2000 to 2.5% in 2011.

The CNI study results agree with IBRE's. CNI found that net manufacturing exports were a negative 0.9% in 2014—that is, Brazil imported more inputs but failed to turn them into final goods for exports, closing the year in the red. Brazil has been losing ground since 2005, when net manufacturing exports reached 9.8%. The situation is most severe in IT and electronic materials (–40.7%), printing and reproduction (–24.9%), petroleum products (–23.9%), chemicals (–19.1%), and pharmaceuticals (–10.8%).

"Devaluation of the exchange rate should bring positive effects for the industry this year," in Branco's opinion. "But only in 2016 will exports pick up strength. The exchange rate only solves part [of the competitiveness gap] and only for a time. To export it takes increased productivity and quality products and design."

Market gains

Among products where Brazil has picked up market share in recent years is meat, mainly because demand has grown, Considera says. Exports of meat products such as beef rose from 6.5% of meat production in 2000 to 11.8% in 2011. Brazilian slaughterhouses —many with the support of the Brazilian Development Bank (BNDES)—have made their way to international markets. Meat imports are very small, about 1% of domestic consumption in 2011.

"The government can give incentives, but reindustrialization is unlikely. We have no innovation or cheap labor with which to recover markets from competitors. All that can be done is to avoid an even greater reduction [in competitiveness]."

Claudio Considera

The pulp market, which was restructured in recent years, continues to be a major exporter, with exports increasing from 45%



Traditional maker of sparkling wine and red wine, **Casa Valduga** is now entering the market of craft beers under its own brand.

"Brazil has important companies like Embraer, Weg, and Marcopolo. The country has conditions to multiply these examples. However, we face false dilemmas, such as what is our comparative advantage: agribusiness, services, or industry? Brazil is one of the few countries, like the US and China, that can be strong on all three fronts."

Antonio Corrêa de Lacerda

of production in 2000 to 60.6% in 2014. Meanwhile, imports have fallen significantly, from 9.9% of domestic consumption in 2001 to 5.4% in 2014.

Transportation equipment, such as Embraer's aircraft, is another important sector, though exports have been halved, from 38.1% of domestic production in 2000 to just 16.6% in 2011. Imports also increased from 28.9% of domestic demand in 2000 to an estimated 31.4% in 2014.

"The big challenge is to build the industry of the twenty-first century in Brazil. We are facing a great opportunity, but [much] depends on political will. The game is not lost, but I do not see this goal being pursued. There is no strategy," says Professor Lacerda. He says that many Brazilian industries have eliminated production lines in Brazil and became representatives of Chinese and other Asian companies. "We need to focus on reducing red tape, improving the tax structure, and innovating. The artificially overvalued exchange rate ended this year. That has opened a possibility for industry to re-establish links in the chain supply and build an innovative environment, which should rely on a close partnership between companies and research universities," he says.





Brazil: Out of the global market

Cristina Alves

IN RECENT YEARS CHINA HAS SNAPPED UP some of Brazil's major markets. A study by Lia Valls Pereira, IBRE researcher, has found that in particular the Chinese have advanced in South America. Between 2009 and 2010, Brazil lost 12.7% of its exports to the region, of which China gained 27.2%. Between 2010 and 2011, Brazil gave way to another 12.3% of exports to South America, of which China got 24.8%.

In the European Union Brazil was less threatened by China. Between 2013 and 2014, Brazil lost 13.6% of exports to the EU, of which just 2.4% went to Chinese products.

Valls Pereira explains that estimates of how much Chinese products have displaced Brazil's in export markets are based on products and exported by both Brazil and China.

"China … has penetrated these markets, and quickly displaced other exporting countries. China became the largest exporter in less than 10 years. What is striking is that China won markets, particularly in South America, where Brazil has geographical proximity and relatively lower transport costs," she points out.

In the U.S., China effectively displaced competitors early in 2000; Brazil lost ground to China in the footwear market there. In Argentina, China displaced competitors in major household appliances and auto parts.

Valls Pereira warns: "For a while, China won markets with low-tech products. Now, it is moving significantly to medium and high technology. China is the largest car exporter in the world. After the large exchange rate devaluation in 1999–2000, Brazil managed quickly to recover markets, including the American markets. Now, if the exchange rate remains devalued, Brazil may recover markets again but not as much because Brazil's

Between 2010 and 2011, Brazil gave way to another 12.3% of exports to South America, of which China got 24.8%.

World Trade Organization data show how Brazil was pushed out of global markets in recent years as other countries have won important shares of world trade.

infrastructure is run down and its services are expensive. We have to find niches and use better geographic ties."

World Trade Organization data show how Brazil was pushed out of global markets in recent years as other countries have won important shares of world trade. China's share of world exports of manufactured goods grew from 0.8% to 17.5% in 2013. Today, it is the world's leading exporter of manufactured goods after the EU.

The US accounted for 9.5% of manufactured goods exports and the EU for 15% in 2013. Brazil does not even appear among the 15 largest exporters of manufactures, which include India, Mexico, Thailand, Malaysia, and Turkey.

On the other hand, Brazil's share of world imports of manufactured goods went up from 0.9% in 1980 to 1.4% in 2013, placing it among the top 15 importers. Thus Brazil is sending more foreign currency abroad to acquire higher value-added products. The US remains the largest importer, but its share has declined. In 2013, it absorbed 13.4% of total global imports of manufactured goods, down from 19.8% in 2000. In 2013 the EU accounted for 10.1% of total global imports of manufactures, followed by China with 9.2%.

"We are not China, nor will we ever be," Valls Pereira says. "But we do need at minimum an export strategy. That does not mean government intervention, but strategy does require a regulatory framework and political decisions. Industry worldwide is changing the way it produces. Industry has not lost importance, but it has been transformed. It must be more innovative."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The Law of Concessions: 20 years later



Chico Santos

ON JULY 1, 1994, AFTER 15 YEARS of relentless inflation, the Real Plan, carried out by the Itamar Franco administration, finally stopped the spiral of rising prices, bringing stability and order to the Brazilian economy. With macroeconomic stability, it was time to rebuild the country, which was devastated by the economic disorganization caused by high inflation. Infrastructure was particularly affected: telecommunications and electricity distribution were technologically backward, most roads and railways were run down, and there were no public resources to address the huge infrastructure bottlenecks that stifled economic activity.

The National Privatization Program, launched in 1991 by the Collor administration, had privatized many state-owned enterprises, transferring steel and petrochemical production to the private sector. The program was completed with the sale of Vale mining company in May 1997. Despite the success of the privatization program, it was urgent to start a program of infrastructure concessions to attract private investment in light poles, telephones, and roads and put trains on the tracks.

On February 13, 1995, the new president, Fernando Henrique Cardoso, signed Law No. 8987, the Law of Concessions. The first concessions granted under the new law were management and maintenance of the President Costa e Silva Bridge



(Rio-Niterói) in June 1995, the President Dutra highway (Rio-São Paulo) in March 1996 and the Light Electricity Services in May 1996. From March 1996 to July 1997, concession contracts were granted for six regional networks of the Federal Railway Network (RFFSA).

On October 5 and 6, 2015, a seminar on "20 Years of the Concession Law," was held at the Center for Regulation and Infrastructure (Ceri) and the Law School of Rio de Janeiro of the Getulio Vargas Foundation (FGV). It demonstrated that since the law was enacted, Brazil has made unquestionable advances in services infrastructure, such as a modern telecommunications network, nearly 10,000 kilometers of highways still in good condition, and expansion and modernization of major airports. But bottlenecks persist in almost all areas, especially in logistics and sanitation.

With the country's fiscal crisis drying up subsidized financing from the National Development Bank (BNDES), it is necessary to find new funding sources to ensure needed investment in infrastructure. The fiscal crisis is also forcing the federal government to resort to concession contracts that maximize bonus collection, which may conflict with the demand for quality services at prices compatible with Brazilian incomes.

Regulatory agencies, created by the Law to monitor concession operators, have had their power and independence curtailed by government meddling. Joísa Dutra, director of CERI, described government's "regulatory activism" as excessive, as in the disastrous reform of the electricity sector in 2012. At the seminar there were calls for greater transparency in concession contracts and in governance of concessionaires to ensure that society has more control over the quality of services provided.

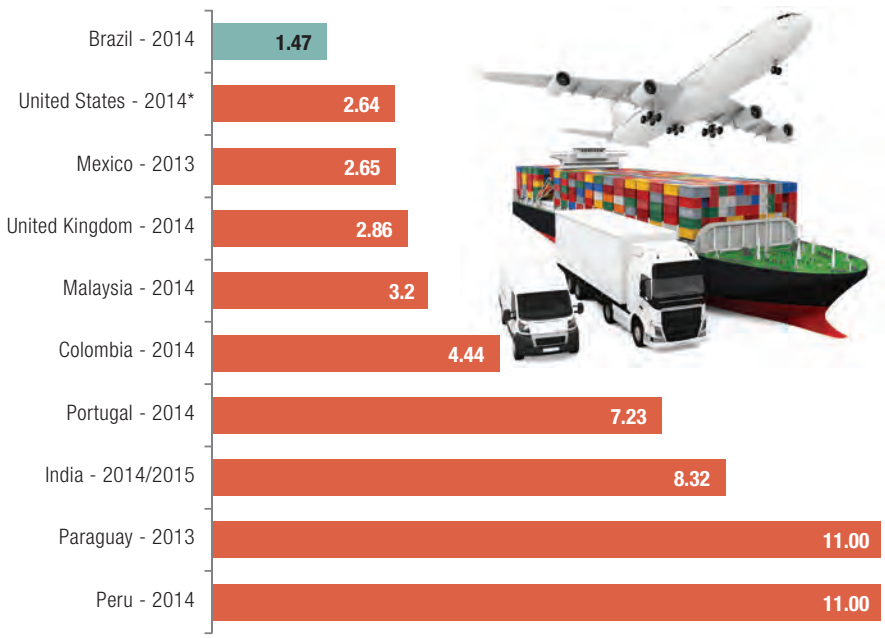
Since the law was enacted, Brazil has made unquestionable advances in services infrastructure, such as a modern telecommunications network, nearly 10,000 kilometers of highways still in good condition, and expansion and modernization of major airports. But bottlenecks persist.

Dutra pointed out that "despite the undeniable benefits" generated from the Concessions Law, Brazil fell from 57th to 75th position among 140 countries analyzed in this year's World Economic Forum *Global Competitiveness Report*, and infrastructure was one of the main pillars analyzed: The report ranks Brazil in 121st place in the quality of roads, 120th in port facilities, and 98th in railways.

Dutra also cited major Brazilian government programs for infrastructure investments: the

Brazil government invests the least in infrastructure as a share of total public spending.

Government investment in infrastructure as share of total federal budgeted spending (%)



Sources: www.usgovernmentspending.com; www.whitehouse.gov; www.gov.uk; www.treasury.gov.my/; www.dgo.pt/; www.abc.net.au; http://budget.gov.au; http://india.gov.in; http://www.minhacienda.gov.co; Siafi; Siga Brasil, Secretaria do Tesouro; BID, Banco Mundial.
Elaboration: Inter.B.

second stage of the Logistics Investment Program (PIL-2) foresees R$198.4 billion in infrastructure investments, R$86.4 billion for railways, R$66.1 billion for roads, R$37.4 billion for ports, and R$8.5 billion for airports. As these investments ultimately depend on private participation, she underscored the urgency of reforming the regulatory framework if the investments are to be successful.

Pillar to grow

In opening the seminar Finance Minister Joaquim Levy said that building infrastructure "is a central part of the growth strategy of countries," especially Brazil, and that "in the fiscal environment in which Brazil and most of the world live today, private sector participation in investments is critical." He stressed that private operators from all over the world are now working successfully, despite economic ups and downs, in various infrastructure sectors, and the goal continues to be to attract both international operators and investors.

"The BNDES played a key role in 1990–2000, and will continue to do so, but we need to attract private financing," Levy said, noting that this was at the heart of the challenges of all the G-20, not just Brazil.[1] To attract these resources, Levy considers it essential for Brazil to better design projects and draft contracts so as to reduce costs and delays in execution and thus reduce the risk to lenders. "Whenever there is ambiguity in projects and contracts, fewer firms [bid]," he said.

1 The Group of Twenty (G-20) is an international forum for governments and central bank governors from the 20 major economies —Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, South Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union.

Later in the seminar, Flávio Amaral Garcia, State Attorney of Rio de Janeiro, described practical details related to Levy's comments: the Ministry of Finance has established a working group of ministry staff and external experts, such as Carlos Ari Sundfeld, professor at the FGV Law School of São Paulo, to propose improvements in regulation of infrastructure concessions. The group's four main concerns are governance, planning, legal certainty, and efficiency. One topic being discussed is amendment of the Public Procurement Law, although Garcia believes that not much can be done while corruption schemes in state-oil company Petrobras are being investigated. But that does not prevent changes in regulations, such as the Concessions Law, that in practice imply change in the procurement law.

Also being discussed is a change in the Civil Code proposed by Senator Antonio Anastasia (PSDB-MG) to give public officials legal protection for making decisions without fear of making mistakes or suffering sanctions by regulatory agencies. According to Garcia, fear of punishment has caused paralysis in some government sectors.

Both Levy and Garcia made it clear that given the current crisis the goal of the government economic team is to build the foundations for a recovery based on stronger institutions.

The Commercial Secretary to the Treasury of the United Kingdom, Lord O'Neill of Getley, said one of the few things he had learned in his 30 years in finance was that "you never let a serious crisis go to waste." O'Neill stressed the importance of creating the right conditions for attracting investment, and that among these it is "very important to have a national plan for the long term."

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O'Neill believes that one reason the U.K. has achieved great success with public-private partnerships (PPPs) is "a relatively stable legal system and tax regime." In recent years the U.K. has attracted more than 730 PPP projects, with investments valued at £54 billion (over US$80 billion), and about 40% of investments in the British economy come from abroad.

Far short of what is required

The executive director of the Harvard Electricity Policy Group (HEPG), Ashley

In recent years the U.K. has attracted more than 730 PPP projects, with investments valued at £54 billion (over US$80 billion), and about 40% of investments in the British economy come from abroad.

Brown, a respected international expert on infrastructure regulation, identified two current issues in Brazil: incentives for concessions and conflicting government interests between improving infrastructure services and maximizing financial compensation for the concession operator. He considers a major obstacle to the development of natural gas distribution infrastructure in Brazil to be the lack of free access to the pipeline network, of which Petrobras has a virtual monopoly.

Portuguese consultant Jorge Vasconcelos, founder of the Florence School of Regulation, recalled the liberalizing context of the late 1980s and early 1990s in which infrastructure concession frameworks throughout the Western world, including Brazil, solidified. However, he said, "The rights and participation of users today, with the resources of the Internet, have nothing to do with what existed in the 1990s." In a world where people are discovering new opportunities that trample markets, as with the Uber transport company taking the place of conventional taxis, Vasconcelos said it is time to adapt regulation to this new world.

Marçal Justen Filho of Justen, Pereira, Oliveira & Talamini, lawyers, said that given the speed at which reality has been changing, the watchword for regulation is "flexibility," rather than putting the Concession Law in a straight-jacket. "What do we do if reality changes?" he asked. "Be flexible," he answered. Among strengths in the Concessions Law that he identified was that it eliminates legal uncertainty, eases the application of the procurement law, disciplines the bidding process, and establishes "fundamental principles" of the relations of government, operators, and users. Among shortcomings, he said, the law lacks flexibility to adapt to new situations, has a static concept of the contractual economic-financial balance, and has brought about multiplication of regulatory agencies with overlapping competencies.

Justen pointed out that reality has prompted changes since the early years of the Concessions Law, such as sectoral regulation like the General Telecommunications Law (9472/1997) and the PPP Law (11,079 / 2004). In sum, he said, "It is impossible to fit all public concessions in the framework of the Concessions Law."

The benefits in terms of upgraded infrastructure under current regulation have been significant, but insufficient. Regis Bonelli, researcher, Brazilian Institute of Economics, and moderator of the current

Brazilian infrastructure panel, said efficient infrastructure generally increases the productivity of the whole economy, but in Brazil infrastructure investments have not been sufficient to boost productivity.

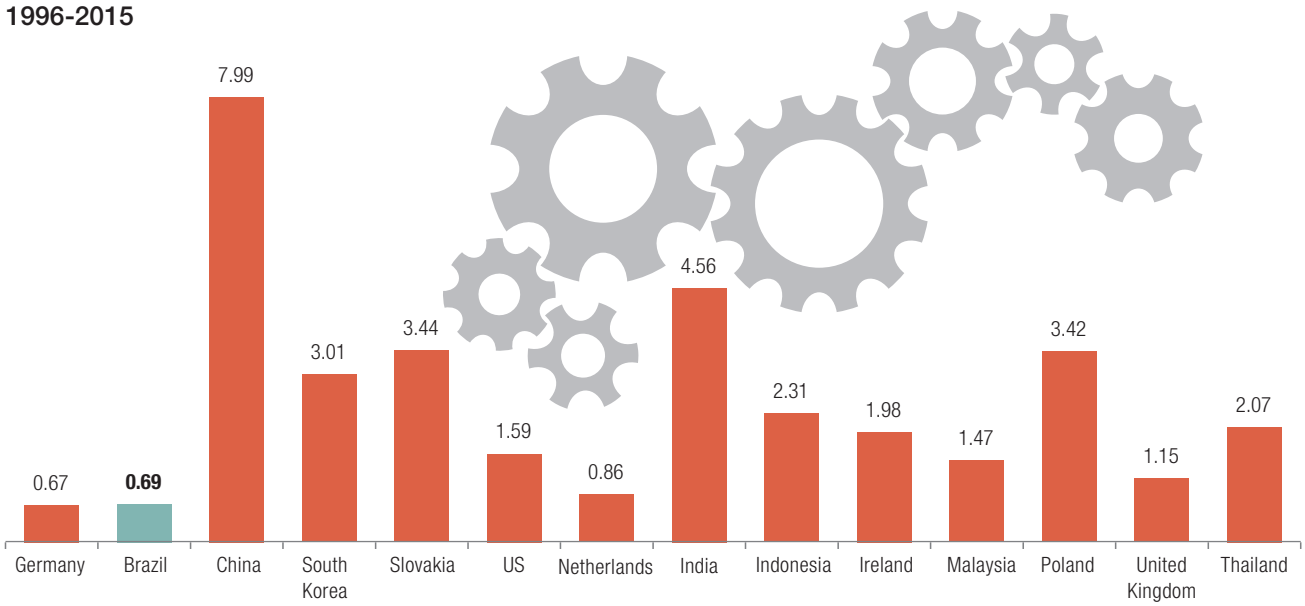
Bonelli pointed out that the annual increase in Brazil's total factor productivity fell from 2.3% in the second term of Lula da Silva (2007–10) to –0.2% in the first Rousseff administration (2011–14). He suggested that the decline in productivity is associated with, among other factors, a larger share of low-productivity services in gross domestic product and "wrong economic policy choices," such as poorly planned and executed infrastructure projects. Among these he cited construction of a wind farm in Bahia state without the necessary power transmission line and Petrobras refinery projects that have been dragged out or discontinued.

Claudio Frischtak, president of Inter B consultancy, underscored the major effects of infrastructure shortcomings on productivity and growth. The problems of the Brazilian economy are so complex that Frischtak does not rule out the possibility that the 2010s will go down in history as a second "lost decade," rivaling the hyperinflation of the 1980s. He showed, for example, that between 1996 and 2015 labor productivity in Brazil grew only 0.69% a year compared to 7.99% in China and 4.56% in India. Frischtak attributes the low productivity growth to such factors as poor education, poor management, regulation uncertainty, the complex tax structure, high taxes, an adverse business environment, and limited investment.

Growth in labor productivity is key for higher income and economic growth. Brazil has one of the lowest productivity growth rates among emerging countries.

Labor productivity measured by GDP in US dollar per employed person (average annual % growth)

1996-2015



Source: Conference Board Total Economy Database, 2015.

"It is impossible to fit all public concessions in the framework of the Concessions Law."

Marçal Justen Filho

With regard to infrastructure investment, Frischtak said, Brazil annually invested 2.12% of GDP in 2001–10 and 2.29% in 2011–14, when it needed to invest 5–6% a year for at least two decades to overcome its infrastructural deficit. Brazil's annual investment in infrastructure is less than the 3% the World Bank considers the minimum necessary to make up for the depreciation of fixed capital. Brazil invests little and poorly in infrastructure, says Frischtak. And why? He highlights flaws in planning, the low quality of public projects, low government low execution capacity, limited fiscal space, and little availability of long-term financing.

He also sees a lack of the predictability, stability, and transparency necessary to attract private sector interest in concessions. He calls for regulatory agencies that are depoliticized and have decision-making and financial autonomy. He also recommended a reform agenda that supports increased public investment and attracts more private investment.

Bruno Dantas, Minister of the Court of Audits (TCU), stated that "Brazil does not know how to do planning," and the lack of planning leads to insufficient financing for proper execution of projects. He also said that the disorganization prevailing in Brazil "torments entrepreneurs and does not allow the execution of necessary investments." Among examples of messy execution of infrastructure projects, Dantas cited the recent TCU ruling that criticized the government's decision to change the criteria for granting eight ports under the Logistics Investment Program (PIL). The criteria changed from "greater cargo handling capacity" to "higher value award." With this change, the TCU believes the government lost an opportunity to seek greater efficiency in port operations.

Engineering consultant Rui Marques, professor at the University of Lisbon, believes the Brazilian infrastructure deficit can be resolved by more PPPs, a public service concession arrangement that is not well developed in Brazil. PPPs could help encourage investments, particularly in sanitation and transport; currently annual investments in infrastructure average R$1 billion a year when the country needs to invest R$240 billion a year. Marques sees as one problem the lack of capacity in the public sector in general to participate in PPPs; Brazil needs to invest in training public sector technical staff.

The eternal conflict between energy and environment



"BRAZIL NEEDS DEVELOPMENT that is neither the National Confederation of Industry, nor the National Confederation of Agriculture and Livestock of Brazil, nor Greenpeace," said Marilene Ramos, president of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), during the seminar panel on "Energy and Environment." She was referring to the eternal conflict between electricity power generation and transmission and environmental agencies.

Ramos, who took office in May, reported that three federal working groups are looking into how to find a solution to the current conflict. She said that sometimes the electricity sector calls for something and IBAMA seems to agree, but IBAMA imposes so many requirements that in fact it seems to deny it.

One suggestion Ramos made was to streamline the process of environmental licensing so that that each priority project submitted to IBAMA comes with a stamp of "strategic" placed by a multisector agency; in the case of electricity, she said, that could be the National Council of Energy Policy. She also said the three environmental licenses—preliminary, installation, and operation—are not the only ones causing delay. Often specific sublicenses, such as vegetation removal, slow the effects of the major environmental licenses.

Mario Menel, president of the Forum of Associations of the Electricity Sector, pointed out a little-known area of dispute between the electricity sector and the environmental agencies that goes beyond technical issues: Since granting a preliminary license is conditional on the auctions of transmission lines, mayors tend to create environmental reserves in the stretches through which transmission lines will run in order to gain bargaining power in the later licensing stages.

Menel added that the initial effect of the Law of Concessions "was spectacular," unlocking 22 electricity projects, but over time the law became cluttered with alterations, the most significant being that embodied in Law No. 12,783, which sets conditions for renewal of power generation contracts. That, Menel said, "broke the electric sector."

Lawyer Elena Landau, former director of privatization of the National Development Bank, agreed that the Concessions Law started well in 1995, but the interventionism historically characteristic of Brazilian governments as always ended up messing it up. She believes that the large exchange devaluation in 1999 made a clear case for concessionaires to request economic and financial review of their contracts as the regulation calls for, but "the central bank opposed it," she said.

In addition, Laudau said, the National Electric Energy Agency has hypertrophied and is dictating electric sector policy. "A concession contract is worth nothing before the Aneel," she said.

The search for a new transport agenda

SEMINAR PARTICIPANTS were surprised when the executive secretary of the Ministry of Transport, Natália Marcassa, said the 7,000 kilometers of new railways planned for the second phase of the Logistics Investment Program (PIL 2), which total R$86.4 billion in investment, will only make up for the first program's lack of success: None of the railway projects of the first Logistics Investment Program (PIL 1) were completed.

The announcement confirmed what everybody suspected. The PIL 1 model established state-owned Valec as guarantor of cargo for railways to be built by the private sector: Valec would purchase all cargo capacity from railway operators and sell it to users. This seemed the ideal response to the railway operators' risk of losses, but in practice it drove away investors who feared that the government would not fulfill its contractual role if operator cash flow should dwindle. In fact, Marcassa said, PIL 2 has buried the Valec guarantee of cargo for railway operators precisely because the government fears it might not be able to fulfill its commitment.

Marcassa reported that the government celebrated the 20 years of the Concession Law by rebidding operation of the Rio Niterói Bridge this year, after the first concession agreement was fully completed. The concession auctioned was again for 30 years, but with a reduction in the toll. The reduction was extensively criticized, during the seminar and elsewhere, because the bridge has excess demand and is at risk of saturation with the cheaper toll.

The government does not have a business model for the new phase of the program. It is considering alternatives to limit risks to investors that would replace Treasury guarantees and cheap and unlimited BNDES financing.

"We need private funding from any source. In Europe there is huge liquidity in search of more attractive yields," said Paulo Correa, Secretary of Economic Policy of the Ministry of Finance, explaining changes that bring greater legal security for investors.

The panel on international experience revealed that there is no easy life in logistics, even in Europe where infrastructure is already largely built. Consultant Mathias Finger of the Florence School of Regulation made it clear that railways are not self-financing. "In the most efficient systems, perhaps the cost of recovery is no more than 50%. The rest is public money," he said, pointing out that cargo, which is the Brazilian option, is profitable, which is no longer true for passengers. As for the business model, Finger said he was not convinced that it is



efficient to separate infrastructure and operations, because the interaction between the two parties ends up generating high costs.

Another European specialist, Duarte Silva, director of the state-owned Infrastructure of Portugal, reported that in his country the option for cargo is total separation of infrastructure and operation (100% private as of January 2016), but with integration between rail and road, with the aim of defining an optimal model that takes advantage of synergies to increase scale and reduce costs.

In Brazil, Armando Castelar, IBRE coordinator of Applied Economics, identified two factors: The successful privatization of railways in the 1990s, which can be measured by increased investment—R$574 million in 1996/1997 and R$5.94 billion in 2014—and the reduced accident rate, which fell from 75.5 per million kilometers traveled in 1997 to 11.6 in 2014. But there is government dissatisfaction with some aspects of the privatization, especially the restricted access of new users to cargo services and the lack of incentives for construction of new lines. Castelar pointed out among serious problems to be addressed is the low speed of trains and the low viability of new projects, such as the East-West Integration railway and Transnordestina railway.

Mauricio Portugal of the Portugal Ribeiro law firm said that the railway business model that was abandoned, with its inevitable fiscal costs, was appropriate for a much richer country than Brazil and therefore did not prosper. He thought that Brazil faces serious risks in achieving its infrastructure investment objectives and said it was not true that more recent concessions, such as airports, were successful. Without resources to pay for subsidies, and without a good payment history, except in securitized debt, in Portugal's view, even the idea of hiring guarantees with multilateral organizations, such as the Inter-American Development Bank and the World Bank, though good in theory, would suffer from the slowness of the institutions.

Some measure of success

Despite setbacks, doubts, recent mistakes, and necessary course corrections, numbers presented by Luiz Ugeda, Director of Regulation and Institutional Relations of the Brazilian Association of Highway Concessionaires, support the correctness of the decision to grant such concessions. He said that since 1995 concessionaires in the road sector have invested R$44 billion and plan investments of R$55 billion over the next five years, although only 30% of users of road concessions pay tolls. He proposed establishment of a center of excellence in logistics, modeled on the Center for Energy Research of Eletrobras.

Marcelo Bruto, director of the National Land Transportation Agency, pointed out that despite the progress so far, it is time to look for new business models for concessions to make it possible to hand over to the private sector roads that may not have enough traffic yet to justify the investment required.

In the airport industry, according to Tomas Serebrisky of the Inter-American Development Bank, "the international assessment is that Brazil's [concessions] program has been successful," in that it has interested operators of the best airports in the world, although there continue to be challenges. One of them is how to manage in times of economic crisis, since the income elasticity in the airline industry is very high. He is also concerned that only airports that give good returns were privatized, eliminating cross-subsidies that supported loss-making airports. Brazil has more than 120 airports in operation. He believes that PPPs can work out solutions for loss-making airports. "Peru has done it successfully," he said.

Telecoms: The new concessions frontier



FOR THE PANEL ON TELECOMMUNICATIONS the sector was seen to be "at a crossroads," as Caio Mario Pereira Neto, professor, FGV Law School of São Paulo, said. Given technological development, it does not make sense to insist on universal fixed telephony, which was the mainstay when Telebras was privatized in 1998. "Today, broadband is the main sector expansion axis," said Pereira Neto, noting that Brazil today has 70 million fixed telephony lines but only 40 million are actually in service.

Pereira Neto argued that to refocus Brazilian telecoms on broadband it is necessary to create a new policy of expansion with multiple instruments, adding "This is more like it was in 1998, when there was a large pent-up demand."

For broadband to be universal, for example, he recognized the need to find mechanisms to reach the poorest areas of Brazil. He suggested use of the Universal Service Fund for Telecommunications Services (Fust) to cover the additional costs for telecom companies to serve these areas. From 2000 to 2013, he said, Fust raised about R$16 billion—resources that were used almost entirely to ensure the government's primary fiscal surplus.

The telecommunications sector is the "champion" in terms of numbers of user complaints to consumer protection agencies.

Igor Vilas Boas de Freitas, board member of the National Telecommunications Agency (Anatel), said that of Fust's R$16 billion, only R$200,000 was used. He agreed that the sector is at a turning point and said Anatel is preparing for this new phase; he noted that "Until 2013, Anatel consisted of mini agencies separated by areas. Today it is organized in a centralized way."

Freitas believes that new challenges also require changes in the accounts of telecom companies, which are today separated by areas and independent services. "Trying to solve the problem of broadband with this accounting separation is not possible," he said. Some broadband service in poor areas, for example, is already being offered by small operators. "With a little encouragement, small operations can solve the problem in small markets."

There were also concerns about telecoms quality and prices. Joísa Dutra, director of Ceri, noted that the telecommunications sector is the "champion" in terms of numbers of user complaints to consumer protection agencies and that this situation is incompatible with progress.

Latin America is put to the test

Minimal growth and inflationary pressures test the credibility of the policies and institutions of Latin American countries.

Solange Monteiro

WITH THE PRICES OF COMMODITIES exported by Latin American economies not expected to recover any time soon, the growth outlook for the region is pessimistic. According to International Monetary Fund (IMF) estimates, in 2015 Latin American GDP is expected to shrink by 0.3%. Excluding 2009, when the effects of the global financial crisis were deeply felt, that will be the first decline in growth since 1983. "The situation is more serious now, because we are no longer talking about something global but a regional problem," said Marcello Estevão, deputy division chief of regional studies in the IMF Western Hemisphere Department. The commodity price shock has also reduced potential growth in the region, which the IMF now projects at 2.9%, the lowest since the early 2000s.

On October 23 in Rio, IMF representatives and researchers of the Brazilian Institute of Economics (IBRE) met to discuss the IMF Latin American economic outlook presented at the World Bank and IMF Annual Meetings in Lima, Peru. The IMF economists pointed out the need for structural adjustments in most countries in the region, particularly Argentina, Brazil, Ecuador, and Venezuela. These countries are causing concern in financial markets. "Under the more difficult conditions, the credibility of policies and government institutions will be tested," Estevão said.

The decline in commodity prices has been reflected to varying degrees in changes in the terms of trade, incomes, and external current account balances of exporting countries. Copper exporters Peru and Chile have been adjusting their economies since metals prices began to fall in 2011. "In the case of Peru, [this has gone] a little more slowly, as the economy is to some extent dollarized and it is consequently more difficult to adjust the exchange rate," Estevão said. At the other extreme are the oil-exporting economies,

For countries that export agricultural products, such as Brazil and Argentina, the impact of lower commodity prices has been relatively small; domestic factors have weighed on growth more.

where the free fall of oil prices has been more recent, since mid-2014. "In Venezuela, the reduction in the price of exported commodities was equivalent to 21% of GDP. As a result, the country's import revenues declined dramatically, generating a large fiscal deficit that was financed by printing money," he said. "Ecuador, in turn, lost almost 10% of GDP," he added, noting that, as Ecuador's economy is also dollarized, the price shock generated a loss of competitiveness and a sudden downturn in the whole economy.

For countries that export agricultural products, such as Brazil and Argentina, the impact of lower commodity prices has been relatively small; domestic factors have weighed on growth more. In Argentina, the focus is on monetization of large fiscal deficits and a decline in international reserves, which call for traditional adjustment policies. For Brazil, where the fiscal situation is worsening and the political crisis is deep, the IMF sees no possibility of a short-term economic recovery, acknowledging that the crisis was deeper than expected. "The concern now is to find a solution to resolve the structural problems of the economy," Estevão said. The IMF projection for 2015 is that Brazil's output will fall by 3%, second only to Venezuela's drop of 10%. For 2016, the IMF estimates that Brazil's output will again decline, this time by 1%.

Low growth, high inflation

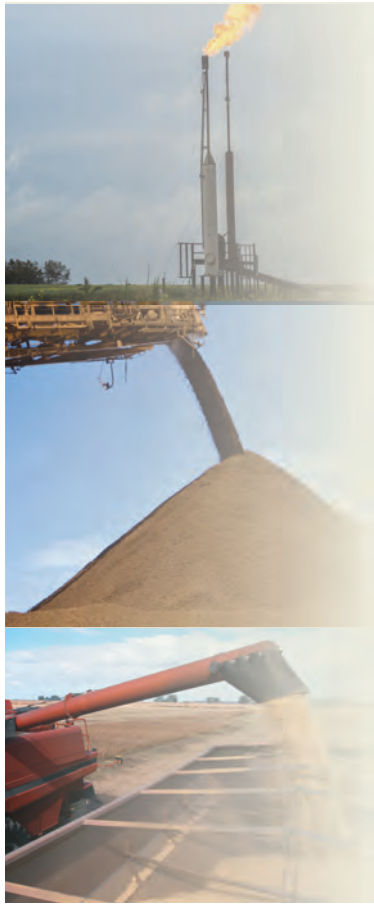
One challenge common to Brazil and other Latin American countries is sluggish growth, if any, compounded by inflationary pressures, even as much of the world is trying to manage disinflation and even deflation. This year, in addition to Brazil, the IMF estimates that Colombia, Chile, Peru, and Uruguay will record

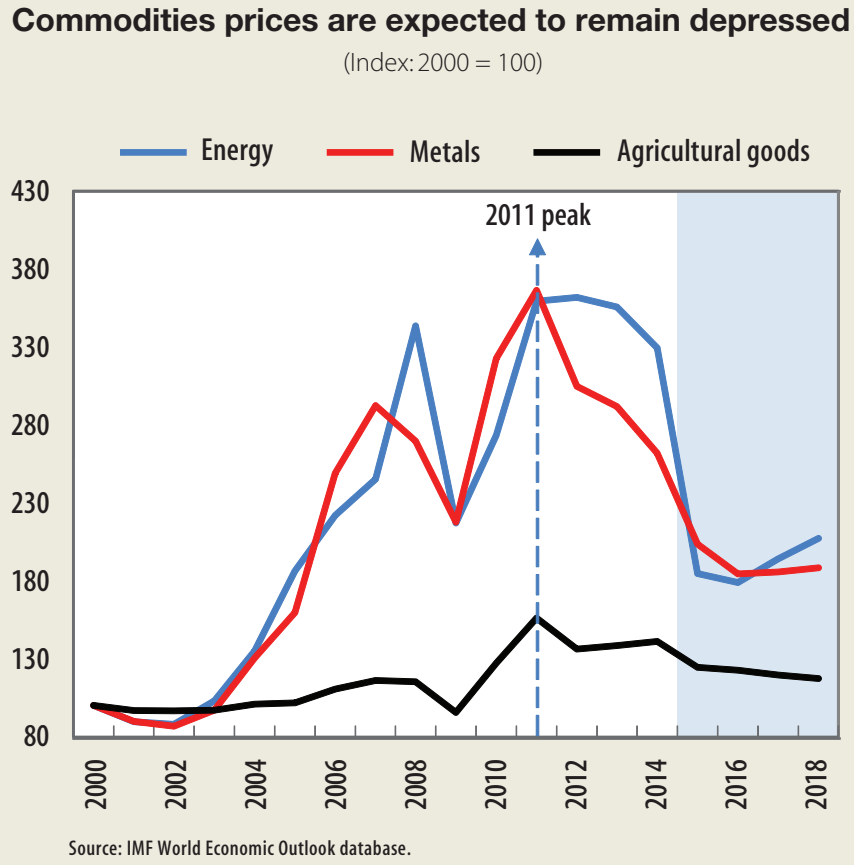
Latin America slows down

GDP growth in %

	2014	2015*
Latin America and the Caribbean	1.3	-0.3
Brazil	0.1	-3.0
Chile	1.9	2.3
Colombia	4.6	2.5
Mexico	2.1	2.3
Peru	2.4	2.4
Uruguay	3.5	2.5
Argentina	0.5	0.4
Bolivia	5.5	4.1
Ecuador	3.8	-0.6
Paraguay	4.4	3.0
Venezuela	-4.0	-10.0

Source: IMF Economic Outlook October 2015.
*** Estimate.**





inflation that is more than 1 percentage point above the center of their targets.

However, the IMF sees monetary policy in the region as a whole as being on track and urges continued efforts to fight inflation. Brazil, however, will not see relief in 2016. IBRE researchers pointed out several factors that are likely to keep inflation above the target ceiling of 6.5%. The first is that the recession has delayed most of the effects of foreign exchange devaluation on industrial input prices for 2016. For controlled prices, IBRE economists Salomão Quadros and André Braz estimate that prices for the items

While in recent years China was able to buy commodities from Brazil's neighboring countries and expand market share for its products in Latin America, Brazil failed to create the same dynamic with trading partners in the region and also failed to gain traction in rich economies.

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that weigh more heavily in the price index will go up: electricity by 9.5%, bus fares by 9%, and gasoline by 8%. Prices for services are expected to increase in line with the expected 10% increase in minimum wage. José Julio Senna, head of the IBRE Monetary Studies Center, highlighted the difficulty of keeping monetary policy efficacious without a clear fiscal policy, noting that the large imbalance in public finances and the low confidence in corrective measures heighten the perception of risk and boost exchange rate devaluation, which in turn puts more pressure on inflation.

Adding to the deterioration of the confidence of both businesses and consumers in fiscal and political institutions is the fall in the value of financial assets and investments, which could be accentuated if the rating of Brazilian investments is downgraded further. Against this backdrop of business uncertainty, Estevão said, it would help to protect public investment as a positive externality for the private sector. He pointed out that normalization of U.S. monetary policy will give an incentive for capital to flow from emerging countries to the U.S.

Another risk factor the IMF staff pointed out is the quantity of corporate debt, which can also compromise productive investment plans in Brazil; they estimate that the debt-to-net assets ratio of Brazil corporations has reached 65%. IBRE researchers Silvia Matos and Vinícius Botelho emphasized the situation of net debtor companies in terms of U.S. dollars. They expect that at least until 2016 the impact of currency devaluation on the balance sheets of these companies should be greater than the profitability of exports.

Boost to export

So far the exchange rate devaluation has not yet boosted Brazilian exports significantly. Lia Valls Pereira, also an IBRE researcher, pointed out that the devaluation has had a more negative effect on imports. She said that "the real effective exchange rate adjusted by inflation depreciated 47% between September 2014 and 2015," which could help make Brazilian manufactured goods more attractive internationally. However, foreign sales of manufactured goods continued to decline in the first nine months of 2015, except for U.S. demand for aircraft and parts, which contributed to increase shipments to the U.S. by 3.7% in the first nine months of 2015

compared with same period a year earlier. Fabiano Rodrigues Bastos, an IMF economist who studies trade integration in Latin America and the Caribbean, pointed out that increasing the share of exports of higher-value-added products is a challenge for the whole region. He noted that within the region Brazil imports less relative to its potential—population size and proximity to relevant markets—and that it is imperative for the country to boost sales to advanced markets. While in recent years China was able to buy commodities from Brazil's neighboring countries and expand market share for its products in Latin America, he said, Brazil failed to create the same dynamic with trading partners in the region and also failed to gain traction in rich economies.

To raise the added value of Brazilian exports, Bastos argued for greater integration in value chains, but said it is necessary to have realistic expectations about the results of this strategy: "It's a first step, but does not guarantee an increase in value added or productivity growth." To increase competitiveness Bastos also advocated for the removal of domestic barriers to reallocation of resources, and for monitoring major trade agreements such as the Trans-Pacific Agreement. "Agreements like this can be good or bad, but one must watch them so that the country is not left out of a more integrated trade landscape," he said.

One challenge common to Brazil and other Latin American countries is sluggish growth, if any, compounded by inflationary pressures, even as much of the world is trying to manage disinflation and even deflation.

In the short term, however, the main determinant of Latin America's exports continues to be China because of the impact of slower China growth on both demand for and prices of commodities exported by Latin American countries. The IMF estimates that on average every 1 percentage point of lower growth in China reduces growth in Latin America by 0.5 percentage point.



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The Mauá public square and the Museum of Tomorrow, in Rio de Janeiro, Brazil.

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A call for clarity

Marilene Ramos

President of the Brazilian Environmental Agency (IBAMA)

Solange Monteiro

Environmental licensing has been at the forefront of debate about how Brazil can unlock infrastructure concessions and execute projects more efficiently. Marilene Ramos, former director of the Regulation and Infrastructure Studies Center of Getulio Vargas Foundation and now president of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), believes that the environmental agency will perform better when to increase transparency and reduce discretion, it eliminates duplicate procedures and spells out the remaining procedures clearly in manuals. Ramos, who has also been secretary for the environment in Rio de Janeiro state and president of the Rio de Janeiro State Environmental Institute, notes, however, that delays in infrastructure projects will be completely eliminated only when Brazil defines which projects are most important: "We need higher-level guidance to clearly define for the environmental area which projects are of strategic importance for the country's development."

The need to eliminate uncertainty in order to attract investment and accelerate infrastructure projects has heated the debate about Brazil's cumbersome environmental licensing process. How does IBAMA intend to address the issue?

Our focus has been to rationalize licensing. Today the process covers a number of related licenses, such as public utility decrees and permits for removal of vegetation, which have their own time-consuming proce-

dures and do not bring any environmental gain. … An IBAMA working group is reviewing the regulations in order to propose changes. … We are also seeking rationalization of IBAMA's internal technical procedures. In most cases, 80% of what has to be done to process licenses is repeated, especially when they are of the same type, whether it is construction of a dam, a railway, or a road. We do not need to treat each licensing as if it starts from scratch. We have a consultant working to identify best international and national practices, such as those of the Environmental Company of the State of São Paulo, to produce manuals to guide the work of both IBAMA staff and entrepreneurs and consultants, so they know what to expect from the licensing process. Uniform guidelines will reduce discretion in granting licenses. This will also cover mitigation measures to reduce the environmental impact of infrastructure projects. … We expect to have manuals for two types of projects in the first half of 2016 that could be used by state and municipal environmental agencies to rationalize their own licensing procedures.

Although there have been efforts to simplify the environmental licensing process since 2011, some businesses, particularly in the electricity sector, have great expectations about your management of IBAMA. Why the optimism?

The Ministry of Environment has really made a great effort to streamline processes. One example is ministerial ordinance No. 060 of 2015 establishing the participation of agencies involved in environmental licensing—FUNAI, Iphan, and the Palmares Foundation—and centering the licensing process in the IBAMA. These agencies now have deadlines to give their opinion; if they are not met, IBAMA can move forward with the process.

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As for the optimism, I think it is based on what was done in Rio de Janeiro state with the creation of the State Environmental Institute and the new state licensing system. Also, we listen to various parties through the management council. Although IBAMA does not have the same characteristics as a regulator, since in the end the license is signed by the president, we are a collegiate body. So when there are differences of views between experts and entrepreneurs, issues are taken to the management council, giving each party the possibility of submitting its arguments and seek a better understanding. It is a more transparent process.

Economist Ronaldo Seroa da Motta points out that the lack of coordination between

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agencies that look after communities and traditional peoples and archaeological and cultural heritage impairs IBAMA's licensing activities. What is your view?

Although the license is not restricted to environmental issues and also covers social, indigenous, and other aspects, the licensing process should continue to be centralized in IBAMA. [Environmental] impacts matter and setting limits is difficult. IBAMA has the legal mandate to demand compensation and mitigation measures for these impacts or prevent them from happening. Environmental licensing is a very strong, powerful instrument, which has a sound legal basis. I think the other aspects are best served by incorporating them into the license. What we must avoid is that other agencies involved do not meet deadlines or make demands that are extraneous to the actual impact of an infrastructure project. Ordinance No. 060/2015 gives the IBAMA responsibility for analyzing the requirements. … I believe that IBAMA should strengthen its technical staff and diversify it so that we can carry out this type of analysis. We need to hire experts such as anthropologists and urban planners, among others.

It's been said that among the causes of delays in infrastructure projects in Brazil is lack of a thorough evaluation of each project. Do you agree?

Licensing such projects as Belo Monte and Madeira River hydroelectric plants has been complex. We need higher-level guidance to clearly define for the environmental area which projects are of strategic importance for the country's development. This decision should have been made by a representative forum of society on the basis of strategic analysis that goes beyond environmental issues. Project analysis needs to take into account also social, economic, and political factors. The lack of prior planning ends up creating a conflicted licensing process, because much remains to be discussed during that process. There would be much more clarity if decisions on a number of projects would come out of a set of analyzed alternatives, which society deems meets the demand for development. I believe in a middle of the road approach, which is not what some entrepreneurs want or some organizations desire.

From 2004 to 2014 the number of applications for environmental licenses increased 335% while the technical staff expanded by only 273%. Until the licensing process is rationalized, how does IBAMA intend to meet the demand?

IBAMA now has excellent technical staff. This is something that really has impressed me … but the number of technicians has not increased in proportion to the demand. We also need to diversify the staff expertise. On the other hand, IBAMA still lacks other tools. … Our IT infrastructure is precarious and our administrative processes too bureaucratic. Previous management had been trying to develop modern systems to respond to the growth in demand. But we know that any IT project in the public sector is slow because contracts must comply with procurement Law 8666. On the other hand, we have very good partnerships, for example, with the Institute for Space Research for remote sensing to monitor deforestation, which is one of the best tools available in the world. We have a new satellite that identifies daily deforestation, with a resolution four times more accurate than the previous satellite. These are important advances toward the goal of zero illegal deforestation by 2030 announced by President Rousseff. We are also developing a new IT system that will computerize the whole environmental licensing process. It will gather data that will facilitate staff research and allow several technicians to work on the same process at the same time.

To what extent might federal fiscal adjustment jeopardize IBAMA's projects for 2016?

There would be much more clarity if the decision on a number of projects would come out of a set of analyzed alternatives, which society deems meets the demand for development.

IBAMA's budget has undergone cuts, although it has been preserved mainly because of the challenge of combating deforestation, which cannot be done without resources. We are working to increase our budget from R$250 million in 2015 to at least R$400 million in 2016. To do this we have just had an increase in the federal environmental inspection fee that will allow us to more than double the revenues collected next year. We are also working on finding external financing for specific projects. IT modernization, the fight against deforestation, and modernization of the environmental licensing system are being financed with development partners such as the World Bank. It was necessary to set up a framework for this because raising funds and applying them is something that takes a lot of dedication and specialized staff. … Regarding management of human resources, my intention is next year to introduce the management contract model, so we can remunerate for results and differentiate remuneration for those working in difficult areas, such as in the Amazon region. Teams working in inspections

We are developing a new IT system that will computerize the whole environmental licensing process. It will gather data that will facilitate staff research and allow several technicians to work on the same process at the same time.

face difficulties. In October we had an environmental agent shot by groups of loggers in Maranhão state. Hardship working conditions need to be recognized.

The critical situation of the Sobradinho reservoir reflects the water crisis that is affecting hydroelectric power generation and water supply. Should IBAMA take a greater role in such measures as rationing water and use of thermal power?

No. I think the water issue needs coordinated work between the ONS, the National System Operator, and ANA, the National Water Agency. Although the ONS claims it is seeking to preserve multiple uses of water, it is an agency of the electricity sector. It tends to prioritize generation of electric energy. The ANA is mandated to look after other uses of water. They need to act in a more coordinated way, not just in times of crisis.

Is IBAMA's current planning aligned with Brazil's projected energy matrix and the goal of reducing greenhouse gas emissions by 37% by 2025 that Brazil must present at the 21th Climate Conference in Paris?

What is missing is what I said initially: Brazilians need to define what development model they want, recognizing their limitations in terms of natural resources and income. … Take the water crisis. Although that is a natural phenomenon that may be associated to climate change, we aggravate the situation because of a lack of sanitation and rivers polluted by untreated sewage and damaged by deforestation. We also waste water. Losses in our water distribution and treatment systems are very high. Some companies have water losses above 50%, while less than 20% is desirable. In the semiarid region in the Northeast, which suffers chronic water shortages, losses in the water distribution system exceed 50%. This is unacceptable. Every day Brazil's debt to the environment becomes more difficult to mitigate because we not only have to pay for it, we also have to deal with more recent challenges of climate change, such as increased desertification, and to reduce deforestation. All this makes our work extremely complex.