

# Chapter 3

## Industrial Policy and the Post-New Brazil

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### Introduction

In the history of Brazilian industrialization since the 1950's, a policy, Import Substitution Industrialization (ISI), has been implemented, and the government has played a central role. ISI is a trade and economic policy based on the premise that a country should attempt to reduce its foreign dependency through replacing imported industrialized products with local products. In this regime, the role of the state is treated as a developmental actor with state-owned companies mainly in the heavy industries such as steel, minerals, petroleum and the infrastructure. Through the process of state-led industrialization in ISI, foreign capital companies gravitated toward the domestic market, then invested in local production in manufactured consumer products such as cars and electrical appliances. In addition to Brazil's market potential, obviously, one motivation for the local production was to avoid the restrictions on imports under the ISI regime. With these investments, national capital companies also obtained opportunities for growth. They had grown as suppliers for state-owned and foreign capital companies and exploited the non-durable goods market that had been preserved through the import restrictions. In the 1970s, Evans [1979] published *Dependent Development*. He explained the successful industrialization of Brazil from the 1950s to the 1970s by focusing on the relationship between the state and foreign and local capital companies, which he called "the triple alliance." During industrialization, this alliance prospered in a protected domestic market.

However, after the international debt crises of the 1980s, the Brazilian government could not sustain its ISI regime due to its economic problems. It then became a neo-liberal regime adopting the typical policies of the Washington Consensus. In the 1990s, implementing policies like trade liberalization and the privatization of state companies, the triple alliance that had contributed to Brazil's industrialization was dismantled. All companies were exposed to international competition. Less competitive local companies were weeded out. On the other hand, companies who were able to adjust to the new environment could survive and grow. State-owned companies were

privatized, and then foreign capital companies increased their investment, acquiring local capital and privatizing companies. This process is considered a turning point in the modernization of Brazil's companies [Ninomiya 2013]. As for industrial policy, after it had played a central role, it gradually lost so much legitimacy over the course of the 1980s that it was virtually absent from the new economic model that was ushered in by the structural reforms, at least in its strictest version [Peres 2006, 69]

In the 2000s, perspectives on industrial policy changed. In 2003, Luiz Inacio Lula da Silva of the Worker's Party (PT) was elected president. The new government's position on industrial policy was one of the key differences from the prior government (1995-2002) of President Fernando Henrique Cardoso of the Brazilian Social Democratic Party (PSDB), which had implemented neo-liberal policies. Arbix and Martin [2010, 2] claim that the industrial policies implemented by the Lula government (PT) were evidence of the rebirth of "State Activism". Kupfer, Ferraz and Marques [2013, 327] state that "In the 2000s, industrial policy made a comeback in Brazil, and with growing importance". This tendency, the "comeback of industrial policy," is not unique to Brazil. According to Peres and Primi [2009, 43], "Industrial policies have been making a (slow) return in Latin America and have been able to operate, albeit on a small scale, in open economies and with orthodox macroeconomic policies, contrary to the previous conventional wisdom that they were incompatible". Industrial policy has attracted attention in the past decade. In Brazil's case, The PT government's proactive stance on industrial policy is seen to be a reinstatement of the government role in the economy, and it also seems to have been a reaction to the decade of the Washington Consensus in the 1990s, whose aim was to minimize government's role.

The literature that supports the vision of a "comeback of industrial policy," mostly describes a theory of industrial policy in economics with public policy both its justification and the method of its implementation. These are important discussions for understanding industrial policy in Brazil, if one wants to extract the relevant lessons for good practice. However, the original purpose of industrial policy is industrial development with structural change. It is important to analyze the impact of this both for industry as a whole and for business.

In Brazil's case, there was a significant increase in industrial production during this decade, whether this was due to the government's industrial policy or not. For example, the number of cars produced increased from 2004 (2,317 thousand units) to 2014 (3,173 thousand units), as did television production from 2004 (8,729 thousands units) to 2014 (14,537 thousands units). Due to the discovery of huge petroleum and gas

reserves in the Pre-Salt layers in the deep sea, daily oil production increased from 1,543 thousand barrels in 2004 to 2,253 thousand barrels in 2014. With massive investment from Petrobras, the state oil company, international suppliers have been attracted to the Brazilian market. These facts reinforced the image of the “New Brazil”. This phrase is used in the literature to support the idea that Brazil had made structural changes and reached a new stage in its development [Fishlow 2011, Roett 2010, Konta 2013].

Nevertheless, in the short term, what we see in the current Brazilian situation makes us doubt the New Brazil. After the Rousseff administration succeeded Lula in 2011, industrial production has been stagnant, as it has suffered from severe competition from imported goods. Domestic consumption, which was the engine for the increase in industrial production, has slowed down because of the high burden of family debt, inflation near the limit of the government target and the rise in interest rates to double digits. Currency appreciation and increasing labor and material costs have caused industry to lose its competitiveness. Thus, it seems that Brazil has already been in a “Post-New Brazil” era. The Rousseff government tried to resolve these problems with a variety of industrial measures, especially the “Greater Brazil Plan (*Plano Brasil Maior*: PBM).” However, in the presidential election of 2014, this plan was criticized for being a “protectionist” policy with few benefits. So, what was the meaning of the PT government’s industrial policies? Did they have any impact on industry or business? To consider these questions is the principal aim of this paper.

The paper is in four sections. The first reviews the return of industrial policy after the Lula administration. The second describes the consequences of recent industrial policy, the Greater Brazil Plan (PBM), and selects typical measures that have directly affected industry and business. The third describes the impact on companies from foreign direct investment by describing the cases of the Japanese shipbuilding and automobile industries. The fourth reviews the arguments about industrial policy in the 2014 presidential election. The purpose of this paper is not to judge the effectiveness of industrial policy through an empirical analysis. This paper aims to deepen the discussion about Brazil’s industrial policy from the micro and qualitative perspective of Japan.

## **1. Industrial Policy after the Lula Administration**

In 2004, the Lula government launched its Industrial, Technological and Trade Policy (PITCE). According to Kupfer [2012], this policy had three rationales. First,

regarding the macroeconomic dimension, it aimed to remove external constraints like the vulnerability of the external account, high sovereign risk, and volatility in the exchange rate. Second, industrially, it sought to overcome Brazil's lack of competitiveness due to backwardness in critical sectors like semiconductors, software and capital goods. Third, regarding innovation, the intention was to open the windows of opportunity to affordable development in scientific and technological systems by focusing on sectors like oil and gas, agriculture and pharmaceuticals. PITCE has the characteristics of a sectorial policy targeting strategic sectors. In this case, the semiconductor, software, capital goods and pharmaceuticals sectors were selected as prioritized. These sectors were chosen because: (i) they display sustained and increasing dynamism; (ii) they account for significant proportions of international investment in research and development; (iii) they open up new business opportunities; (iv) they are directly related to innovation in processes, products and modes of use; (v) they increase the density of Brazil's productive fabric; and (vi) they are important for the future of the country and have the potential of developing dynamic comparative advantages [Governo Federal do Brasil 2003, 16].

PITCE contributed to arranging a structural support system for industrial development. According to Kupfer [2012], some important regulations that improve business development were created such as the Innovation Act (Law 10.973), the *Lei do Bem* (Law 11.196), the Biosecurity Act (Law 8.974) and the Biotechnology Development Policy (Decree 6.041). New government institutions were also founded, for example, the Council for National Industrial Development (CNDI) and the Brazilian Industrial Development Agency (ABDI), which is in charge of the coordination and implementation of policy. In the strategic sector, Brazilian Development Bank (BNDES) created a financial program for the pharmaceutical industry (Profarma) and for software (Prosoft). Peres and Primi [2009, 37] describe PITCE as marking the return of industrial policy to the country's development agenda.

In 2008, the government launched its Productive Development Policy (PDP). The PDP took a step forward from PITCE by broadening its scope and activities in order to sustain cycles of economic expansion. It posed four general challenges: to expand supply capacity, strengthen the balance of payments, to increase innovation, and to strengthen small and medium size enterprises (SMEs). Its slogan was "Innovate and Invest to Sustain Growth." To meet these challenges, quantitative targets were fixed. The macro-targets contemplate an increase in gross fixed capital formation, a rise in private spending on R&D, an increase in Brazil's share of international exports, and a

higher number of exporting SMEs. In PDP, targeted sectors were categorized by program. First, for programs to consolidate and expand leadership, the aeronautics industry, petroleum and gas, bioethanol, meat processing, mining, iron and steel, and cellulose and paper were selected. Second, the sectors chosen for programs to strengthen competitiveness were the automotive industry, capital goods, textiles and clothing, wood and furniture, personal care, perfume and cosmetics, civil engineering, the services sector, the shipping industry, hides, leather and handcrafts, agroindustry, biodiesel, plastics, wheat, consumer electrical goods, and toys. Third, the mobilization of programs in strategic areas was directed at the health industry, IT, nuclear energy, the defense industry, nanotechnology and biotechnology. The most noticeable difference between PITCE and PDP is the number of sectors. PDP covers almost all sectors including services and agroforestry.

These two programs follow the same path by focusing on innovation and strengthening industrial competitiveness but their contributions have been different. PITCE helped to establish the basis of a development policy by creating new regulations and an institutional framework, while PDP contributed to broadening measures to support industries directly through fiscal incentives, subsidies and financial support. These two programs opened up a new era of industrial policy in Brazil.

## **2. The Greater Brazil Plan**

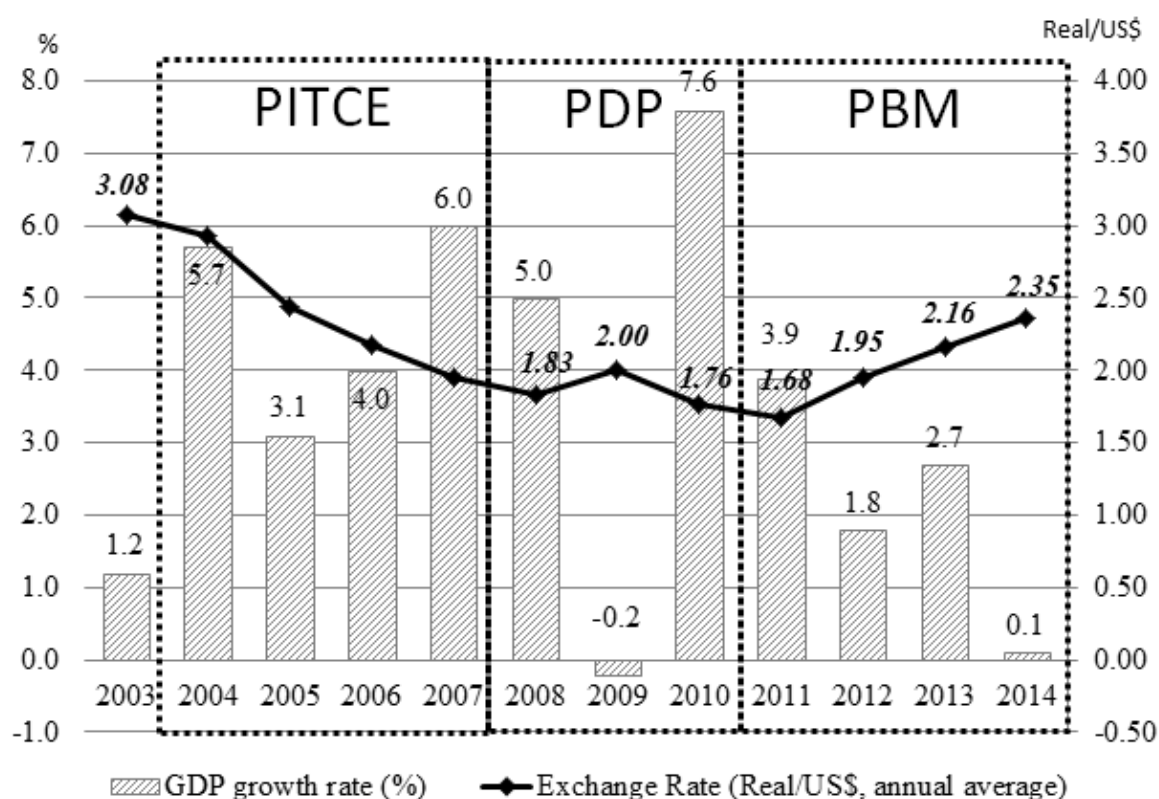
### **2.1. Sequence of the Greater Brazil Plan**

In August 2011, a new industrial policy, the Greater Brazil Plan (PBM), was launched by president Rousseff. The objective is to build and strengthen critical competencies in the national economy, to enhance productivity and technological density within value chains, to expand the domestic and external markets of Brazilian companies, and to ensure socially inclusive and environmentally sustainable growth [Kupfer 2012, 23]. This shows that the government is continuing to give priority to industrial policy, but the degree to which it has done so has changed due to economic circumstances. The financial crises of 2008 and the European debt crises triggered by Greece in 2010 forced the global economy to slow down and that had a negative impact on emerging economies such as Brazil. During the Lula administration, macroeconomic stability, the expansion of the consumer market and high commodity prices were the driving forces behind Brazil's economic growth. Simple average GDP growth was 4.8%

from 2004 to 2008. The main objective of the PDP, “to sustain cycles of economic expansion,” was a result of these advantageous economic conditions, but after the international financial turbulence, the situation completely changed. GDP growth dropped to minus 0.2% in 2009, but with the support of government through its fiscal policy, financial incentives for the consumer market and public works, the GDP recovered and grew rapidly by 7.6% in 2010. This changed the image of Brazil from being an economically fragile country with a poor government to one that had a solid economy and good government management. *The Economist*, in November 2009, showed the statue of Christ that is the symbol of Rio de Janeiro launching into the sky and the headline “Brazil takes off.”

However, other problems at that time were getting worse. Industry was losing its competitiveness. One reason was the appreciation of the Real. The average exchange rate in 2003 for Brazil’s currency was R\$3.08 to the dollar. The Real’s value continued to rise until 2011, when it was R\$1.68 to the dollar [Figure 1]. Currency appreciation and expanding domestic consumption increases imports. Local industry suffered severe competition from these imports and lost competitiveness not only domestically but also overseas. This problem was one of the reasons behind the new industrial policy. On announcing the PBM, the government explained one of the concepts of the program, by using the expression to “promote a minimum level of isonomy between Brazilian companies and their foreign competitors” [Governo Federal do Brasil 2011, 13]. This reflects the recognition of Brazil’s government of the Real’s disadvantageous position internationally. In September 2010, Finance Minister Guido Mantega stated his concern about the world currency war with its competitive devaluations between major countries. He said that this situation threatens Brazil because it takes away the competitiveness of Brazil’s industry [*O Globo* 2010].

**Figure1. GDP Growth Rate, Exchange Rate and Industrial Policy**



Source: Authors' elaboration with data from Central Bank of Brazil and IBGE.  
 Note: GDP growth rate (%) on left vertical axis, otherwise exchange rate on right in Real/US\$.

However, before citing currency appreciation, there is an old issue called “The Brazil Cost.” This phrase is often used to describe common problematic and unnecessary costs in Brazil related to taxation, labor law, logistics, the bureaucracy, and so on. The National Confederation of Industry (CNI) defines this term as “focusing on inefficiencies and distortions that block the competitiveness of domestic production and deter foreign direct investment in Brazil’s economy.” [CNI 1998]. According to a report by the Federation of Industry of the State of Sao Paulo (Fiesp), the cost of locally manufactured products is 23.4% (excluding currency appreciation) higher than that of manufactures in Brazil’s principal trading partners. In that 23.4%, taxation is calculated at 13.8%, which is the highest cost [Fiesp 2014]. For this reason, the industrial sector has complained that the tax issue has been a major problem for competitiveness for a long time.

Besides structural problems such as “The Brazil Cost,” we should pay attention to productivity, which is fundamental to competitiveness. Squeff and De Negri [2013,

27-38] calculated the labor productivity by sector from National GDP data. According to their work, the annual average growth of labor productivity from 2000 to 2009 was minus 0.8% for manufacturing. The highest rate was plus 3.8% for agriculture and the stock-breeding sector. This demonstrates the weak competitiveness of Brazilian manufacturers. In addition to currency appreciation and “The Brazil Cost” which is an exogenous factor for industry and business, productivity, which is an endogenous factor, should be focused on. Hence, the principle objective of industrial policy should be to concentrate on improving productivity.

Due to solid economic expansion until 2011, imports have risen rapidly. Comparing the annual average growth rate of exports and imports in value from 2003 to 2011, which are 17.0% and 21.3%, respectively, the growth rate for imports is much higher than that for exports. Increased imports are becoming a great concern for local industry.

From 2012 until now, economic growth has stagnated at about 2%, and large scale citizens’ protests occurred in 2013. *The Economist* in September 2013 had a cover of the launched statue of Rio de Janeiro’s Christ almost falling and the headline “Has Brazil blown it?” Therefore, the attenuating impact of the global economic crisis has grown in importance with respect to PBM’s objectives [Table1].

**Table 1. Industrial Policies in Brazil, 2004-14**

Policy	PITCE(2004-07)	PDP(2008-10)	PBM(2011-14)
Economic Conditions	<ul style="list-style-type: none"> <li>• Slow GDP growth (average 1.7% 2001-03)</li> <li>• External Account restrictions</li> </ul>	<ul style="list-style-type: none"> <li>• High GDP Growth (average 5.1% 2006-08)</li> <li>• Improvements in terms of trade</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate GDP growth (average 3.3% 2009-11)</li> <li>• Raising industrial imports</li> </ul>
Focus, goals and institutional framework	<ul style="list-style-type: none"> <li>• Selected sectors</li> <li>• Creation of an institutional support system</li> </ul>	<ul style="list-style-type: none"> <li>• Large number of sectors</li> <li>• Focus on investment and the management of the international crisis</li> </ul>	<ul style="list-style-type: none"> <li>• Large number of sectors</li> <li>• Defense of the internal market and fostering systemic competitiveness</li> </ul>

Source: Ferraz, João Carlos, David Kupfer and Felipe Silveira Marques(2014,298).

However, looking back on the definition of industrial policy in the literature, there is room for discussion on how to treat short-term cyclical issues of this kind. According to Bianchi et al. [2006], industrial policy is defined as a variety of public actions aimed at guiding and controlling the structural transformation process of an economy. In the Brazilian literature, Kupfer and Hasenclever [2002], the definition is more specific, “The set of incentives and regulations associated with public actions that is able to affect the inter and intra-industrial allocation of resources, influencing the



productive and patrimonial structure, and the conduct and performance of economic agents in a specific national territory”. Although these expressions differ, both assume public action to accelerate structural transformation.

Given this, however, there is still no explicit understanding on how industrial policy should handle short-term cyclical issues and mitigate the adverse effects of an international crisis. There is an opinion that macroeconomic policy, not industrial policy alone, should deal with overall cyclical disturbances. Corden [1980, 14] states that “the industrial policy which is designed to moderate the short-term effects of the business cycle has to work in harmony with macroeconomic policy. It must not negate the latter’s main thrust. It is always important to ask whether the supposed short-term task of industrial policy is not better performed by modifying macroeconomic policy directly.” In my paper, I will not judge Brazil’s use of industrial policy to handle short-term cyclical issues. I will just emphasize the growing importance of mitigating the adverse effects of an international crisis in PBM’s objectives.

## **2.2. Principal Measures of the Greater Brazil Plan**

PBM’s slogan is “Innovation for competition. Competition for growth (*Inovar para competir. Competir para crescer*).” PBM’s purpose is to focus on competitiveness and defend local industry. The latter element distinguishes PBM from Brazil’s previous two industrial policies. As I mentioned before, it was justified as an attempt to establish a minimum level of isonomy between Brazilian companies and their foreign competitors. There are three pillars. The first is the incentive to invest and innovate, the second is foreign trade, and the third is industry and the defense of the domestic market. Bearing these pillars in mind, various measures have been implemented: tax relief regarding and the expansion of finance for investment and exports, the simplification of bureaucratic procedures; an increase in resources to improve innovation; the stimulation of small businesses; a stronger defense of trade; the creation of a special regime for value aggregation and productive supply chain technology, and a public procurement law to stimulate production and innovation [Governo Federal do Brasil 2011, 9]. In this paper, I will describe the principal measures that directly affect business and industry.

### **2.2.1. Tax Relief and Finance**

In the PBM, tax relief is one of the most prominent and effective measures for reducing production costs. Citing examples, tax relief on social security contributions taken from workers' salaries in labor-intensive industries is a decisive factor in Brazil's competitiveness. In Brazil, each company used to have to pay 20% on each worker's salary for social security. The government has changed this system to a tax on gross revenue excluding exports. This is advantageous for companies with a large number of employees but little revenue. The tax rate was fixed at 1 or 2%, depending on the sector, of which there are 56. The government estimates the value of this tax relief at R\$21.6 billion in 2014 [ABDI 2014]. Normally, the labor cost impacts to production costs directly. This tax relief was considered highly effective by the industrial sector.

Besides tax relief, financing is also important in this regard. Brazil's official target for its overnight interest rate, the Special System for Settlement and Custody (Selic), was 11.75 % per year in December 2014. According to World Bank data, Brazil was the only country that kept interest rate with double digits among BRICs in 2013. In this adverse financial situation for companies, public financial institutions, such as the BNDES, play a key role. After the global financial crisis of 2008, BNDES started its Investment Maintenance Program (PSI) in July 2009. Initially, this was a measure with a limited time frame, but it was continued until the end of 2014, as it included a list of PBM measures. The annual interest rate used in PSI capital goods was 4% to 6%, depending on the products purchased with the funds. This relatively low interest rate, when compared to Selic, has stimulated investment.

### **2.2.2. Import Duties and Local Content**

To defend local markets, the government raised import tariffs on 100 items in October 2012. The items included not only manufactured goods but also foods like potatoes. These products were selected by the government based on requests from domestic industry. The tax rate reached 25% for many products. The government insisted that they could be raised to 35% according to regulations of the World Trade Organization (WTO) but they were not. This measure was only for a year and conforms with Southern Common Market (Mercosul) and WTO regulations, but it has provoked concern over growing protectionism in Brazil. On the other hand, the Brazilian government had to confront the side effects of raising import tariffs, which has

increased the costs for industries that use imported materials. For this reason, the government did not extend this measure after a year.

A typical case of the local content requirement has been seen in the oil and gas industry. Obviously, the purpose of this policy is to promote local industries, to hire and train local workers. The Brazilian local content requirement was implicitly defined in the Petroleum Law of 1997 (Law 9478). However it was only since 2003, the start of the Lula government to be exact, that rigorous requirements were introduced. In 2003, a National Program for the Mobilization and Development of the Oil and Gas Industry (PROMINP) was established with the support of Petrobras to promote local capacity building. Resolution No.36 of 2007 and Regulation No.6 of 2007 define the criteria and procedures for implementing local content certification, requiring international oil and gas companies to show evidence of up to 40% local participation for bids which are evaluated by the country's National Agency for Oil, Gas and Biofuels (ANP) [Ngoasong 2014, 473]. Oil and gas companies exploring the oil field have to meet these requirements.

### **2.2.3. Policy for a Specific Sector: *Inovar-Auto***

A new automobile policy, the *Inovar-Auto* (Program of Incentives for Innovation and Densification in the Production Chain in the Automobile Industry) was implemented in October, 2012. The main purpose of this program is to introduce innovation and sophistication to the automobile industry. At the same time, the program promotes an increase in local production and aims to reduce car imports. This program has been implemented in two steps. It first increases a Tax on Industrialized Products (IPI) by 30% for all light vehicles and light commercial vehicles. Second, it imposes requirements on automakers if they wish to qualify for up to a 30% discount on the IPI, which is a tax on industrialized products that are imported to Brazil. This means that, automakers in Brazil who manufacture locally and have received an authorized tax discount will have an advantage over imported brands.

The first basic requirement is the carrying out of a certain number of manufacturing processes in Brazil, and to choose at least two out of three pre-requisites to qualify for the program – (1) investment in research and development (R&D), (2) investment in engineering, industrial technology, and supplier capacity, and (3) participation in the Vehicle Labeling Scheme, which is required to ensure a vehicle's efficiency [Table 2]. One of the unique points of this program is that it is not limited to

manufacturers. Importers and companies that have plans to invest in manufacturing can also join the program. According to Ministry of Development, Industry, and Trade (MDIC), 54 companies had been authorized to take part in the program by April 2015. Of these, 15 are authorized to be importers and 16 companies plan to invest in manufacturing. As for the importers, they have to meet all the requisites except for the first basic requirement and they can then obtain a certain import quota for vehicles with a 30% discount under the IPI.

**Table 2. Inovar-Auto Requirements**

Year	Minimum Number of National Manufacturing Processes(1)	Minimum R&D Investment	Minimum Engineering Investment	Minimum Participation in PBEV(2)
2013	8	0.15%	0.50%	36%
2014	9	0.30%	0.75%	49%
2015	9	0.50%	1.00%	64%
2016	10	0.50%	1.00%	81%
2017	10	0.50%	1.00%	100%

Source: Decree-Law 7819 on 3rd October, 2012.

Note:

- 1) This number of processes is for passenger cars and light commercial vehicles.
- 2) PBEV: Programa Brasileiro de Etiquetagem Veicular.

After the implementation of *Inovar-Auto*, passenger car imports have gradually decreased. The imports of motor cars and other motor vehicles in 2011 were valued at US\$10.8 billion. In 2014, this fell to US\$7.7 billion. As for the proportion of imported cars in total car sales, this was 23.4% in 2011, but it fell to 17.6% in 2014. *Inovar-Auto* is considered a protectionist measure by developed countries such as the EU and Japan. The program is set to expire on 31 December 2017, but it may continue in a revised version.

### **2.3. Performance of the Industrial Sector during PBM (2011-14)**

The mitigation of the international crisis was a priority for the PBM. However, the performance of the industrial sector, especially manufacturing, fell short of expectations. As we have seen, GDP was poor during this period. One cause was the industrial sector, which was targeted by the PBM. The annual GDP growth of the

industrial sector was negative in 2014, due to the poor performance of manufacturing [Table 3].

**Table 3. Quarterly GDP Growth Rate by Sector (comparison with same period of previous year in %)**

	Agriculture and live-stock	Industry				Total	Service	GDP Total
		Extrative Mineral	Manufacturing	Construction	Electricity and gas, water, sewage and urban cleaning			
2011.I	5.3	3.9	4.7	8.7	4.7	5.6	4.7	<b>5.2</b>
2011.II	0.6	3.3	4.1	7.4	6.1	4.9	4.3	<b>4.6</b>
2011.III	7.7	2.6	1.8	9.4	6.0	3.9	2.7	<b>3.4</b>
2011.IV	11.2	3.6	-1.2	7.6	5.6	2.1	1.8	<b>2.5</b>
2012.I	-10.7	3.9	-0.1	8.4	6.6	3.2	1.7	<b>1.6</b>
2012.II	0.5	-1.3	-4.1	1.4	-1.1	-2.2	1.8	<b>0.8</b>
2012.III	5.4	-2.3	0.4	2.4	1.8	0.5	2.7	<b>2.3</b>
2012.IV	-5.6	-3.0	0.2	-0.5	-5.5	-0.9	3.3	<b>2.3</b>
2013.I	21.4	-7.4	-0.5	1.0	-4.0	-1.5	2.5	<b>2.6</b>
2013.II	9.7	-2.6	4.6	7.9	0.9	3.8	3.2	<b>3.9</b>
2013.III	-3.3	-0.2	2.1	5.8	-1.4	2.2	2.5	<b>2.4</b>
2013.IV	3.4	0.0	1.7	3.8	6.4	2.4	2.0	<b>2.1</b>
2014.I	3.4	6.1	1.0	3.5	7.2	3.0	2.4	<b>2.7</b>
2014.II	-1.5	7.6	-6.3	-5.6	-4.7	-3.6	-0.2	<b>-1.2</b>
2014.III	-1.4	11.1	-4.0	-5.3	-6.5	-1.9	0.3	<b>-0.6</b>
2014.IV	1.2	9.7	-5.4	-2.3	-5.9	-1.9	0.4	<b>-0.2</b>

Source: IBGE.

With the implementation of its industrial policy, the government prioritized the need to maintain employment. According to the Brazilian Institute of Geography and Statistics (IBGE)'s Monthly Employment Survey (PME), the unemployment rate was 4.3% in December 2014. Compared to 5.3% in December 2010, the employment situation has not deteriorated. Instead, it shows some improvement. However, analyzing the data of employment by sector, what contributed to job creation was the service sector. According to the annual social information report<sup>1</sup> of the Ministry of Labor (MTE), services occupied 34.2% of total employment (49 million) in 2013. This share had been increased from 32.6% in 2010. On the other hand, manufacturing occupied 16.9% in 2013, down from 17.9% in 2010. Although the absolute number is increasing in manufacturing, its contribution is relatively low, compared to the service sector [Table 4].<sup>2</sup>

<sup>1</sup> *Relação Anual de Informações Sociais (RAIS)*

<sup>2</sup> There are some observations about the reason for the low unemployment rate. According to the *Folha de São Paulo* (4 de janeiro, 2015), it can be explained by the number of students that

**Table 4. Number of Employment in 31st Dec. by Sector**

	2010		2013		Absolute number change	Number variation (%)
	Number	Share (%)	Number	Share (%)		
Mineral Extractive	211,216	0.5	261,383	0.5	50,167	23.8
Manufacturing	7,885,702	17.9	8,292,739	16.9	407,037	5.2
Public utility industrial service	402,284	0.9	444,674	0.9	42,390	10.5
Civil construction	2,508,922	5.7	2,892,557	5.9	383,635	15.3
Commercial	8,382,239	19.0	9,511,094	19.4	1,128,855	13.5
Service	14,345,015	32.6	16,726,013	34.2	2,380,998	16.6
Public administration	8,923,380	20.2	9,340,409	19.1	417,029	4.7
Agriculture	1,409,597	3.2	1,479,564	3.0	69,967	5.0
Total	44,068,355	100.0	48,948,433	100.0	4,880,078	11.1

Source: Authors' elaboration based on data RAIS/MTE.

In fact, the tendency for manufacturing's share to decline in contrast to services' increasing share is not a temporary phenomenon. If we focus on the long term, manufacturing has been losing its share of GDP. In value added in GDP, manufacturing's share declined from 15.6% in the fourth quarter of 2003 to 12.7% in the fourth quarter in 2014 [Table 5]. From industrial data in recent years, manufacturing's decline has not stopped during the period of the PBM (2011-14). Although the PBM may have an impact on sustaining industry in the short term, there is no evidence so far that PBM has contributed to a reversal of this trend.<sup>3</sup>

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attend higher grades at school as the number of university entrants is increasing, due to rising incomes and financial support from the government. This generation formed a major proportion of the unemployed in the past.

<sup>3</sup> PBM has ten macro-targets: 1. to expand gross fixed investment, 2. increase R&D expenditure by private firms, 3. improve human resources, 4. expand national value added, 5. strengthen knowledge intensive industry, 6. strengthen medium, small and micro companies, 7. promote production while saving energy, 8. diversify exports, 9. expand national participation in technology, goods and services for energy, 10. expand access to goods and services to improve the quality of life. The majority of targets are not expected to be achieved [*Valor Econômico* 2015].

**Table 5. Participation by Sectors in Value Added of Quarterly GDP**

	Agriculture and livestock (%)	Industry (%)	Manufacturing (%)	Service (%)
2003.IV	5.0	25.7	15.6	69.3
2004.IV	4.7	26.1	16.0	69.1
2005.IV	4.7	25.7	15.8	69.6
2006.IV	4.9	25.5	15.7	69.3
2007.IV	4.8	25.2	15.5	69.5
2008.IV	4.8	24.4	14.5	70.5
2009.IV	4.6	24.6	14.3	70.5
2010.IV	4.6	24.6	14.1	70.6
2011.IV	4.9	24.6	13.6	70.2
2012.IV	4.6	23.9	13.4	71.3
2013.IV	4.6	24.0	13.3	71.2
2014.IV	4.7	23.6	12.7	71.6

Source: Authors' elaboration with GDP data from IBGE.

Note: This data is based on constant value in 1995.

### **3. Impact on Business Activities and Foreign Direct Investment:**

#### **A Japanese Perspective**

##### **3.1. Overview of Japanese Investment**

There are many discussions about the determinants of Foreign Direct Investment (FDI) in the literature. Most empirical analyses on the determinants of FDI use cross-country regressions to identify characteristics such as a country's market size, the quality of its infrastructure, labor costs, openness, taxes and tariffs, and political instability [Asiedu 2002, 109-110]. Industrial policy, which in some cases controls taxes and tariffs, is one factor that influences decisions on FDI. The current movement of FDI flows is extremely complex, and the motivation behind this flow relates to a wide variety of factors that are linked to the competitive environment in which firms operate, their specific characteristics, and economic factors at home and in the host country [Chaudhuri & Mukhopadhyay 2014, 8-10]. In this sense, we should analyze each industry and company. In this section, I will choose two industries, shipbuilding and automobiles, which have shown distinct forms of development in the last decade. The reason for this selection is that these sectors have been given importance in Brazil's industrial policy and are currently the focus of new investment from Japan.

Before analyzing these two sectors in detail, I will review Japanese investment in Brazil. According to the foreign capital census of the Central Bank of Brazil, Japan was the 6<sup>th</sup> largest foreign direct investor in 2012 with US\$ 32.1 billion [Table 6]. In 2000, it was 10<sup>th</sup> with US\$2.5 billion. Thus, Japanese investment has increased in the last decade. Reviewing Japanese FDI by sector, participation in manufacturing is 53.4% in 2012, which is a slight decrease from 56.4% in 2000. On the other hand, investment in extractive industries like petroleum and gas, and the mining sector rose from 8.9% in 2000 to 20.8% in 2012. Increasing international demand has made Japanese companies invest in Brazil's natural resources. Significant participation in the industrial sector in FDI shows Japanese companies' contribution to Brazil's industrial development. On an annual flow basis, Japanese direct investment in 2013 was US\$2.5 billion, a rise of 71.1% over the previous year. The sectors that contributed most to this increase were oil and gas related industries, and automobiles [JETRO 2014, 320]. In 2014, Japanese direct investment continued to grow and reached US\$3.8 billion, despite the economic stagnation of Brazil.



**Table 6. Foreign Direct Investment in Stock by Country (ultimate investing country (1))**

	2000	2012		
	Value(US\$ million)	Value(US\$ million)	Share(%)	Rate Increase (annual average,%)
United States	28,918	125,440	20.3	13.0
Spain	12,785	71,256	11.5	15.4
Belgium	599	70,675	11.4	48.8
United Kingdom	2,586	46,875	7.6	27.3
France	7,062	36,907	6.0	14.8
Japan	2,510	32,063	5.2	23.6
Brazil(2)	1,227	26,030	4.2	29.0
Germany	5,129	24,489	4.0	13.9
Italy	2,771	18,246	3.0	17.0
Switzerland	2,083	18,153	2.9	19.8
Luxembourg	1,145	15,112	2.4	24.0
Canada	2,092	14,593	2.4	17.6
Mexico	201	13,415	2.2	41.9
Netherlands	9,746	13,298	2.2	2.6
Bermudas	1,367	12,263	2.0	20.1
Portugal	4,325	10,822	1.8	7.9
China	-	10,226	-	-
Others	18,468	67,747	11.0	11.4
Total	103,015	617,384	100.0	16.1

Source: Central Bank of Brazil.

Note:

- 1) The ultimate investor occupies the top of the control chain and does not necessarily coincide with the immediate investor.
- 2) Investment from affiliate of Brazilian companies in abroad.

### 3.2. The Shipbuilding Industry

Brazil has developed offshore oil reserves in the deep sea of the Pre-Salt oil field in the Santos and Campos basins in the southeastern area of the Brazilian coast. This discovery was officially announced in 2006 and production started in 2008. In 2013, Brazil's state oil company, Petrobras, produced 301 thousand barrels per day from the Pre-Salt oil field, which is 15.6% of its total production of 1,931 thousand barrels per day. According to Petrobras' forecasts in July 2014, oil from Pre-Salt will amount to 53% of the total production, 4,200 thousand barrels per day. To explore this huge oil

field, Petrobras announced an aggressive investment plan. Then this announcement awakened the interest of global and local suppliers. Due to aggressive investment by Petrobras, local shipbuilding industries have been developed. According to National Union of the Naval and Offshore Construction and Repair Industry (Sinaval), the number of workers in shipbuilding in November 2014 reached 85,000. The number has increased 6.7 times in a decade.<sup>4</sup>

Japan's shipbuilding industries have also started to invest in local production in recent years. Toyo Engineering Corporation announced in April 2012 an agreement with *Óleo e Gás S.A.* (SOG) to establish a joint company in Brazil. Both companies established a holding company *TS Participações S.A.*. Of the new company's affiliates, *TOYO-SETAL Engenharia Ltda.* is engaged in the Engineering, Procurement and Construction (EPC) of the onshore business, and *Estaleiros do Brasil Ltda.* (EBR) is engaged in the EPC of the offshore business, including Floating Production, Storage and Offloading Systems (FPSO). EBR owns and operates a module fabrication and integration yard for its offshore business in the state of Rio Grande do Sul.

Kawasaki Heavy Industries (KHI) has announced in May 2012 that it has decided to participate in a joint venture to build marine structures such as drilling ships in Brazil. KHI has invested in *Estaleiro Enseada do Paraguaçu S.A.* (EEP) in Bahia State. EEP is a joint venture company founded by the general contractors, Odebrecht, OAS and UTC (Brazilian partners) for the construction and integration of offshore units, such as platforms, support vessels and drilling units, to which KHI will transfer its technology for the construction of a shipyard and drilling ships.

IHI Marine United<sup>5</sup> announced that it had executed an agreement for technical consultancy services with *Estaleiro Atlantico Sul S.A.* (EAS) in June 2012. EAS is the largest shipyard in the shipbuilding and offshore industry in Brazil. It has been in operation since 2008. It was established by the general contractors, Camargo Corrêa and Queiroz Galvão. In June 2013, IHI, which holds shares in JMU, announced that it had acquired a stake in EAS. IHI has over 35 years of extensive experience from 1959 to 1994 in Rio de Janeiro through *Ishikawajima do Brasil Estaleiro S.A.* "ISHIBRAS". IHI

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<sup>4</sup> Although there was a boom in the exploration of the Pre-Salt reserves, Petrobras' investment plans and the market conditions for the marine structure business changed for the worse in the latter half of 2014, because of the corruption scandals linked to Petrobras and the falling oil price on the international market.

<sup>5</sup> Currently named Japan Marine United (JMU). JMU was created in 2013 by integrating two companies, Universal Shipbuilding and IHI Marine United, which were leaders in the shipbuilding industry in Japan.

acquired a 25% stake in EAS through its subsidiary, *Japan EAS investimentos e participações Ltda.* (JEI).<sup>6</sup>

Moreover, five Japanese companies – Mitsubishi Heavy Industries, Ltd. (MHI), Imabari Shipbuilding Co., Ltd., Namura Shipbuilding Co., Ltd., Oshima Shipbuilding Co., Ltd. and Mitsubishi Corporation – announced in October 22, 2013 that they had agreed to acquire a stake in *Engevix Construções Oceânicas S.A.* (ECOVIX), whose shipyard is located in the State of Rio Grande do Sul. ECOVIX was established in 2010 to build Petrobras an initial eight FPSO hulls for in support of Brazil's oil exploitation program of the Pre-Salt layer.

### 3.3. The Automobile Industry

Brazil's car market has expanded rapidly in a decade. In 2014, the number of car sales (registrations of new vehicle) was 3,498,012 units and production was 3,172,750 units. Sales grew 2.2 times and production 1.4 times in the decade after 2004. As for car sales, Brazil was the fourth largest in the world after China, the USA and Japan in 2014.

Four Japanese companies have local plants: Toyota, Honda, Nissan, and Mitsubishi.<sup>7</sup> The total number of local Japanese cars produced in 2014 was 366,233 units, 11.5% of the total. As we see from Figure 2, this number has been increasing over the last decade. Due to the solid expansion of the car market, these companies have increased production capacity. Toyota inaugurated a new plant in Sorocaba-SP in August 2012, and started production of a new model “Etios,” which is a small car aimed at the global market. Annual production capacity is 70 thousand cars, which, with the 70 thousand Corolla medium sedans that it produces at its Indaiatuba plant, means Toyota has doubled its capacity. At the same time, Toyota has announced that it is to invest in a new engine plant in Porto Feliz, São Paulo State. With this plant, Toyota will start local engine production for its Etios and Corolla models in 2015.

In November 2013, Honda announced an investment in a new car plant in Itirapina-SP. In the new plant, the SUV (Sport Utility Vehicle) model “Vezel” will be produced from 2015. Its annual production capacity is 120 thousand cars, which, with

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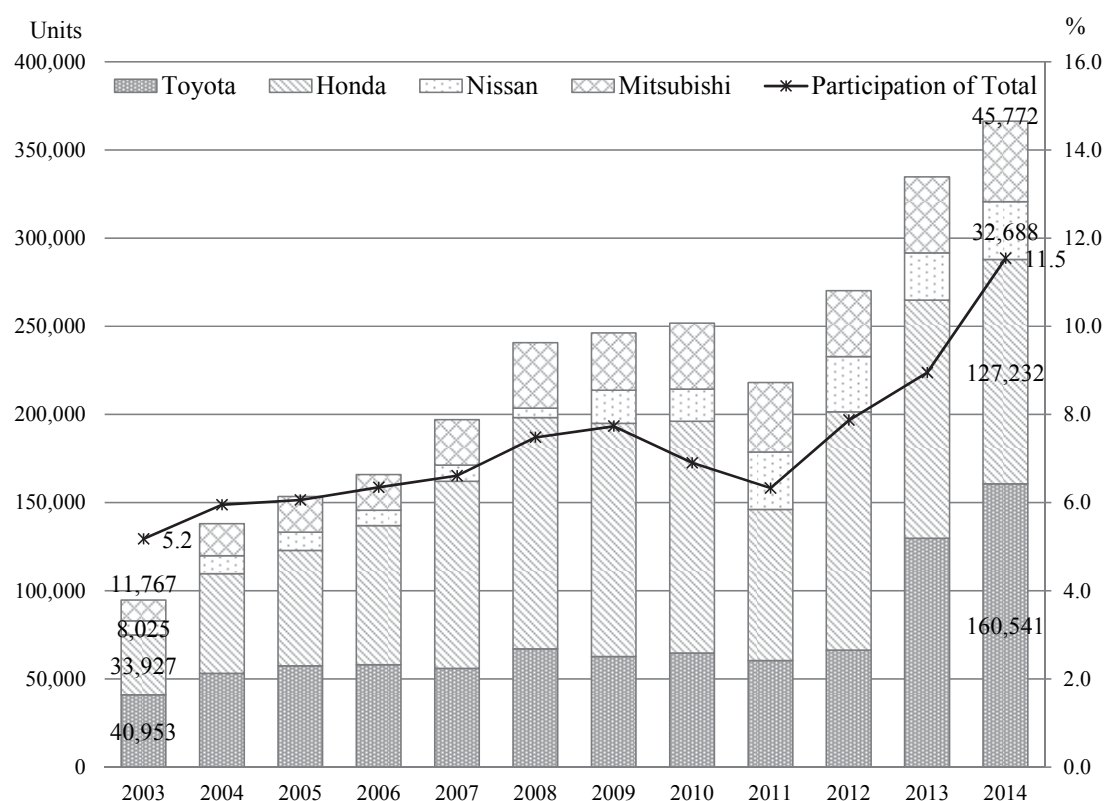
<sup>6</sup> JEI was established by three shareholders, IHI (60.448%), JMU (14.925%) and JGC Corporation (24.627%), which is a Japanese engineering company. (This information is based on a press release by IHI, June 12, 2013.)

<sup>7</sup> Mitsubishi Motors does not have a subsidiary in Brazil; they operate through an exclusive distributor and assembler, *MMC Automotores do Brasil Ltda.* (MMCB).

the 120 thousand FIT, Civic and City models that it is producing at its Sumaré plant, means that it also has doubled its production capacity. In addition to this plant, Honda inaugurated a Research & Development Center in February 2014. This unit aims to enable the development of models that meet the specific demands of the Brazilian market, in addition to increasing the localization levels of components and technologies.

In October 2011, Nissan announced an investment in a new plant in Resende-RJ. It has one existing plant in Parana State with Renault, but it has decided to build its own new plant. Annual production capacity is 200 thousand cars and 200 thousand engines. In Nissan's case, they invested in a supplier's park near the plant, where some Japanese auto parts companies have newly invested. Nissan plans to have 80% local content by 2016. The inauguration ceremony was held in April 2014, and they then started production of the small "March" model, which had been imported from Mexico until then.

**Figure 2. Production of Cars of Japanese Companies and Share**



Source: Authors' elaboration with data from Anfavea.

Note: Production numbers on left vertical axis, otherwise Japanese companies share in total production on the right in %.

### 3.4. Investment Motives among Japanese Companies

#### 3.4.1. The Brazilian Factors

Why have Japanese companies in these two sectors invested in Brazil, especially in these years? To identify their motives, I will analyze the Brazilian factors and the Japanese factors [Table 7].

First, the clear Brazilian factor for both industries is the attractiveness of Brazil's market. For shipbuilders, there is a huge petroleum and gas reserve in the Pre-Salt layers. Petrobras has played a central role in its development, and shipbuilders were attracted by business opportunities with Petrobras. In the case of the car assemblers, Brazil's car market has become the fourth largest in the world. Although its growth rate has been lower in recent years, it is still expected to reach 4 million cars by 2020.

The second Brazilian factor is industrial policy. In the process of the development of an offshore oil field, a variety of ships and equipment is needed, such as drilling ships, FPSO, and offshore support vessels. A number of multinational suppliers have been trying to participate in Petrobras' project, but there is the barrier of a local content requirement, as I described previously. As for the automobile industry, the Brazilian government established the *Inovar-Auto* program in October 2012. The Brazilian government intended not only to introduce innovation and sophistication to the automobile industry, but also to promote an increase in local production and reduce car imports through a 30% discount in the IPI for locally manufactured cars. Toyota's announcement to invest in an engine plant contributes to an increase in local content and the inauguration of Honda's new R&D center results in an increase in R&D expenditure as requested by *Inovar-Auto*.

In Nissan's case, their strategy initially was to import cars from their Mexican plant, using a trade agreement on automotive industries between Brazil and Mexico. In January 2003, Mexico and Brazil implemented a preferential agreement on automotive products under an Economic Complementary Agreement (ACE) No.55. During the first eight years of the ACE, Brazil ran a trade surplus with Mexico in automotive products. In January 2012, Brazil announced its intention to terminate the ACE with Mexico citing the rapid increase in imports of Mexican-made automobiles as the main reason. According to the statistics of the MDIC, in 2011, imports of passenger cars from Mexico had a value of US\$2,071 million, which is 67 times larger than that of 2003

(US\$31 million). The value of Brazilian exports of passenger cars to Mexico in 2011, was US\$ 372 million which is one third that of 2003 (US\$ 1,119 million). After negotiations between the two countries, they agreed to a temporary cap or quota on the value of vehicles that could be exported to each other's markets. Moreover, they have agreed to increase the regional content requirements for their trade in automobiles. Nissan's announcement of a new plant was prior to the revision of the agreement. However, this revision should affect Nissan's investment plans in Brazil.

**Table 7. The Motivations for Japanese Investments in Brazil**

	Shipbuilding Companies	Automobile Companies
The Brazilian Factors	<ul style="list-style-type: none"> <li>• Market attractiveness (Pre-Salt).</li> <li>• Industrial policy (Local content).</li> </ul>	<ul style="list-style-type: none"> <li>• Market attractiveness(The fourth largest market).</li> <li>• Industrial policy (Inovar-Auto, Revision of regional trade agreement).</li> </ul>
The Japanese Factors	<ul style="list-style-type: none"> <li>• Competition with Chinese and Korean shipbuilders.</li> <li>• Necessity for shift to marine structure business.</li> </ul>	<ul style="list-style-type: none"> <li>• Weak presence in Brazilian market under the global strategy.</li> </ul>

Source: Authors' elaboration.

### 3.4.2. The Japanese Factors

As for the Japanese factors, there was a strategic motive for Japanese companies. According to the World Shipbuilding Statistics 2013, the volume of the world's new ships built is concentrated in three countries, China (36.8%), Korea (34.8%) and Japan (20.7%). Japan was a leader until the 1980's in merchant fleet and marine structures. Since then Korea and China have surpassed Japan due to their strong advantage in low costs and improved technology. Because of this heated competition and the reduced demand in the marine structure business together with falling oil price after the 1990s, Japanese shipbuilders shifted their production to commercial ships such

as oil tankers, and bulk and container carriers. Although merchant fleets are the main market for the global shipbuilding industry, the marine structures market was predicted to be larger than that for merchant fleets in the medium and long term. Because of this market forecast, Japan's shipbuilding companies started to recapture their share of the marine structures business. Brazil, which is presently developing oil and gas reserves in the Pre-Salt layer, fits into this transition in the shipbuilders' strategy.

In the case of Japan's automobile companies, the Japanese factor was Brazil's current international position. Table 8 shows the number of automobile sales and the market share of Japanese brands by principal country and region in 2013. Japanese brands' shares in total sales in the principal developing countries are 13.3% in China, 12.0% in Brazil, 41.6% in India and 17.5% in Russia. The share in Brazil is the lowest among the BRICs. Although Brazil is the fourth largest car market, Japanese brands' presence is low. This weak performance in the Brazilian market gives car makers the impression that there is room for improvement.

**Table 8. Principal Automotive Market and Japanese Brands Share in 2013**

	Total Sales (thousands)	Japanese Brands Sales (thousands)	Share (%)
China	21,984	2,931	13.3
U.S.A	15,884	5,787	36.4
EU12+EFTA	13,182	1,507	11.4
Japan	5,376	5,095	94.8
Brazil	3,767	451	12.0
India	3,241	1,349	41.6
Russia	2,999	517	17.2
Canada	1,780	584	32.8
Korea	1,544	21	1.4
Thailand	1,331	1,165	87.6
Indonesia	1,230	1,171	95.2

Source: Authors' elaboration.

Note: Total Sales is from OICA, Japanese Brands Sales in China, U.S.A, Russia, Japan and Korea is from Marklines. Japanese Brands Sales in India, Canada, Thailand and Indonesia is from JETRO. Japanese Brands Sales in EU12+EFTA is from ACEA. Japanese Brands Sales in Brazil is from Anfavea.

#### **4. Industrial Policy and the Presidential Election**

In the presidential election campaign, one of the targets for criticism was industrial policy, especially the PBM. There were two opposition candidates. Marina

Silva from the Brazilian Socialist Party (PSB), an ex-senator of the national congress, and Aécio Neves from the Brazilian Social Democratic Party (PSDB), an ex-governor of Minas Gerais State. In the first ballot on October 5<sup>th</sup> 2014, Marina Silva was eliminated. Dilma Rousseff and Aécio Neves went on to the final ballot on October 26<sup>th</sup> 2014. This resulted in Rousseff's victory by a narrow margin.

The opposition candidates' manifestoes often criticized Rousseff's industrial policy, and the word "protectionism" was often used. In Silva's manifesto, "What is expected from the industrial policy of a country like Brazil is a decisive contribution to the transformation of industry in competitive sectors with high productivity. In this respect, Brazil's industrial policy has clearly not worked. It has some positive aspects but these have been isolated and partial. Actually, an excessively defensive and protectionist orientation has been its distinguishing characteristic." Neves's manifesto states, "It behooves us to redefine the relationship between Brazilian industry and the rest of the world. The protectionist vision should be replaced with a vision that integrates our industrial park with global industry. This is all the more important if we consider that global industry is passing through a new technological revolution with production chains fragmented in various countries. We should not stay away from the more advanced industrial poles." [PSDB 2014]

Confronting this criticism, Rousseff emphasized that the PBM contributed to defending local industry in adverse economic conditions, promoted local production chains through *Inovar-Auto*, and stimulated exports and investment with tax incentives and public financial credits. One point that we should notice is the word used in her refutation. She never used the word "protect." Instead, she used "defense." The government has given more importance to alleviating global crises and to tackling the severe competition that resulted from the excessive appreciation of the Real. Moreover, Minister Mauro Borges of MDIC countered the criticism of protectionism in an article in *Folha de São Paulo* on October 18<sup>th</sup> 2014. He insisted that the average import duty in Brazil is 13.5%, which is not so high compared to the averages for China (9.6%) and India (13.7%). Anyway, the definition of protectionism or the degree of protection should be judged using data where one can compare one country with another.

PBM programs were not only about tariff control, local content and public finance but also about innovation policy and the provision of support to develop human resources in order to increase productivity. As for innovation policy, the government implemented *Inova Empresa*, which, with a budget of R\$32.9 billion, started to give grants for innovative projects in the private sector in 2013. As for the development of



human resources, the government implemented the National Program for Access to Technical Education and Employment (Pronatec), which offers scholarships and funding for vocational training courses. Eight million students had participated in this program by 2014. To verify the effects of these programs on the growth of productivity will take a long time.

The other point that we should take note is that, although the opposition criticized the government's industrial policy for being protectionist, they did accept the need for an industrial policy. This means that there was no pressure to go back to the same neo-liberal policy that had disregarded industrial policy, which was in place before the PT government. Neves recognized the difficult situation facing industry and proposed that industrial policy target productivity growth and promote the internationalization of Brazil's companies and their integration in global value chains. As for trade policy, he insisted that the government should pay attention to trade negotiations with developed regions and countries like the EU and the USA, criticizing the government trade policy that paid excessive attention to Mercosul and Latin America.

To sum up, the central issue for industrial policy in this election was how to promote industrial development, not the need for its existence. With this understanding, Rousseff puts importance on government initiatives to foster local industry (not only national capital, but also multinational subsidiaries) with national endowments such as Brazil's huge market and its natural resources. This stance became more evident in measures to mitigate the effects of the international crisis. Neves placed importance on productivity and global value chains, opening up to international competition. It should be noted that both supported tax and labor system reform to reduce "The Brazil Cost," investment in infrastructure, building human resources, and innovation policy. Thus, the need to tackle these topics is now a shared understanding.

## **Conclusion and Final Remarks**

Since the Lula government, industrial policy has returned with growing importance. PITCE (2004-2007) contributed to strengthening the institutional framework and to giving importance to technology-intensive sectors, PDP (2008-2010) contributed to broadening measures to support industry directly, such as through fiscal incentives, subsidies and financial support, and PBM (2011-2014) contributed by focusing on the reduction of taxes and financial costs and by sustaining local

production.

Reviewing the economic environment when PBM was announced, the policy was not just an industrial policy with long-term targets. It also intended to mitigate the negative effects of international financial crises and currency wars in the short term. With this recognition, although there was criticism, we can understand the government's intention, taking measures like tax relief to sustain employment, increasing import taxes to defend local industry and providing subsidized credit to promote investment. If these measures had not been taken, industrial performance would have been worse, as the government insisted.

Although Brazil's industrial policies have been criticized for not having helped to achieve a higher GDP, they, combined with some Japanese factors, have played an important role in attracting Japanese direct investment. Shipbuilders have linked with local companies to produce ships and equipment to meet the demand for developing the Pre-Salt reserves. Car assemblers have invested so as to increase production capacity and local content. For the Brazilian government and its industries, these results can be seen to be the outcome of industrial policy. However, for Japanese companies, these investments are just a start. They will be judged a success or failure from now on. Especially for the shipbuilding industry, Petrobras's scandal is causing serious problems for their operations and Japanese shipbuilders have been forced to review their strategy. As for automobile companies, they have to confront the stagnation of the market from 2014 and intensified competition with new comers, such as Hyundai.

The Brazilian government has stimulated investment in production and R&D activities, and subsequently, Japanese companies have increased their investment. However, the aim behind their investment is not only to meet Brazil's domestic demand. Brazil occupies an important position in their global strategy. They expect Brazil to become a global production base in the medium and long term. This vision of the future is a key to the breakthroughs in industrial development of the next stage. Innovation and competitiveness, as mentioned in PBM's slogan, are signs in the right direction but there is still much to be done.

In Rousseff's second term, industrial policy seems to be modest due to the fiscal constraints. In her first term, her government provided fiscal support and took some defensive measures in favor of national industry in order to mitigate the effects of the currency war and the international crisis over the short term. Considering the recent depreciation of the Real and the fact that several years have already passed since the implementation of counter-cyclical measures, the justification for these measures is

losing legitimacy. In this context, the time is coming for the government to shift from counter-cyclical measures to its original concept of an industrial policy that aims to increase productivity and achieve structural transformation in the medium and long term. With this understanding, it is necessary to tackle structural problems such as taxation, the labor system and the reduction of the bureaucracy, all of which represent “The Brazil Cost.” Moreover, bilateral trade agreements with principal economies, including Japan, are an important tool to enhance the export competitiveness of Brazil’s industry. These efforts should contribute to structural transformation by benefiting industry as a whole. In second term, president Rousseff appointed Armando Monteiro, senator of the national congress to the minister of MDIC in January 2015. He is ex-president of CNI that represent the industrial sector. This appointment increases expectation to the advance of structural reform.

As a matter of fact, some experiments in this direction have already been carried out. For example, a tax reform bill, PEC 233 of 2008, was proposed in Congress. Several issues, like tax dispute between the states and tax relief for social security contributions out of salaries resulted in some progress being made. Moreover, the simplified tax regime, “SIMPLES Nacional,” has been implemented for micro and small businesses with Complementary Law No. 123 of 2006. However, there seems to have been only a partial improvement, if we consider the severity of the current business environment, rooted as it is in structural problems.

Although the outlook may appear dim when it comes to structural reform, there are some favorable signs, which may represent a step forward to tackling these problems. One is the common understanding among Brazilians for change. As we saw in the election campaign, both candidates adopted the slogan “*Mudança* (Change).” As for the industrial sector, which once seemed to take a passive stand on trade agreements with developed countries concerning competition, they have now taken a proactive position. Another factor is pressure from the population. The fact that Rousseff won by only a narrow margin sends a strong message to her to adjust her position, including on industrial policy. These adverse circumstances could be a driving force to advance historically pending structural reform, which paves the way for the next stage in its development in the Post-New Brazil era.

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