ECONOMIC CRISIS AND INDUSTRIAL POLICIES –

Policy Options for a Return to Growth in Russia

by Rudolf Traub-Merz (ed.)

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The collective volume presented here originates from a workshop organized by the Friedrich-Ebert-Stiftung (FES) as part of the 2nd International Political and Economic Congress held in Moscow on 13 May 2015 on the topic »Promoting industrial development in times of economic crisis«. What industrial policy is necessary to release Russia's manufacturing sector from its paralysis and what role might be played in this by the state and classic development concepts, such as import substitution? No uniform concept of crisis analysis is presented here and the contributions are necessarily pluralist with regard to their explanatory approaches and recommendations. Despite the differences of opinion authors agree on one thing: just waiting for another oil boom does not constitute an economic policy. The current state of the Russian enterprise sector exhibits numerous symptoms of resource misallocation and no improvement is to be expected without radical structural changes.

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INDUSTRIALISATION AND THE GROWTH MODEL IN BRAZIL: A HISTORICAL OVERVIEW

Pedro Rossi and Marco Antonio Rocha

1. Introduction

Brazil had one of the highest growth rates in the world between 1930 and 1980. The share of manufacturing in GDP nearly doubled in one of the largest late industrialisation processes in the twentieth century. Industrialisation happened inside the model of developing domestic markets and was boosted with import substitution policies. In recent decades, however, Brazilian industry has lost dynamism due to the debt crisis of the 1980s, followed by the implementation of neoliberal policies in the 1990s. Despite the return of industrial policy in the Workers' Party administrations since 2002, the country is still losing ground in manufacturing development.

This chapter offers a brief historical overview of Brazilian industrialisation, based on the understanding that industrialisation should be embedded in an institutional environment propitious to technological catch up. Industrial policies have to be part of a broader strategy, whose internal coherence is essential to achieve the expected results. We believe that the ongoing deindustrialisation in Brazil is associated with the dismantling of the institutional apparatus that promoted industrial orientation and its replacement by another, oriented primarily towards short-term macroeconomic stabilisation.

In Section 2 we discuss the constrained industrialisation period (from 1930 to 1954), which was marked by the breakdown of the agro-export model, the formation of a domestic market capable of sustaining growth and the unleashing of industrial development in Brazil. In Section 3 we analyse the »heavy industrialisation phase« (1955–1979) and highlight the role of government planning, the implementation of policies via state-owned enterprises and the relevance of a developmentalist ideology, which contributed to the construction of an extremely diversified industrial landscape in Brazil.

The catch-up process ended in the 1980s when the country experienced a debt crisis, as discussed in Section 4. Economic policy efforts were reoriented to the repayment of foreign debt and anti-inflation policies, while industrial policy was no longer a priority. In a closed economy with low growth, Brazilian industry gradually increased its technological gap.

Section 5 addresses the neoliberal growth model (1990–2002), which introduced a productivity shock to deal with an outdated production structure. This increased consumption and led to modernisation in some manufacturing branches but in general reduced the role of industry in generating income and employment.

In 2003, a new growth model was put in place when the Labour Party came to power. In Section 6, we discuss the return of industrial policies, as well as credit policies and the increasing role of public banks in financing industry and exports. We will also show that exchange rate appreciation harmed industrial competitiveness and resulted in a growing import dependence on the part of the manufacturing sector. Despite the policy efforts and the good performance of manufacturing between 2003 and 2008, the industrial sector is characterised by fragilities, exacerbated by the international financial crisis.

2. Constrained Industrialisation (1930–1954)

Manufacturing in Brazil is something of a late-comer. While the processing of goods accelerated somewhat after 1880, its general level remained extremely low until 1930, even compared with other Latin American countries, such as Argentina, Chile and Uruguay (ECLAC 1969). The country experienced agrarian export-led growth and its economy largely depended on foreign demand and international commodities prices, especially for coffee and rubber. Exports left Brazil mostly unprocessed, but some investment in manufacturing linked parts of agriculture and mining deeper into the local economy. Foods and beverages, textiles and some metal-processing were pre-dominant activities in manufacturing, with many of its products going into regional markets (Suzigan 1986).

The significance of these regional industrial complexes was not only the formation of a material base for further industrialisation expansion; it also provided a platform for political representation and promoted the institutionalisation of a lobby that pushed for further industrialisation. During the crisis in the agro-export sector after 1929 calls for incentives to deepen industrialisation gained momentum. Interest associations such as the Federation of Industries of São Paulo (FIESP, in Portuguese) and the National Confederation of Industries (CNI, in Portuguese) were es-

tablished in 1930. Cooperation between these representative institutions and state bodies constituted the basis for industrial planning throughout the National Development period.

After the 1930s, Brazilian industry strongly supported policies for industrial development, known in the literature as import substitution (PSI, in Portuguese). Although the name may imply autarchy, aimed at reducing international trade, the specific import substitution pattern was applied to branches with large trade deficits. Local manufacturing would start with non-durable and semi-durable goods, followed later by the processing of durable consumer goods. At the same time, the import structure would shift from its concentration on consumer goods to one on capital goods (Tavares 1979). From the late 1930s, the main instrument to support import substitution was the introduction of a two-tier exchange rate regime which discriminated between the coffee sector and industry. In practice, it meant the expropriation of foreign currency obtained in coffee exports to pay for industrial imports. Until the 1950s, the cross-sector subsidy remained the main industrial policy development instrument, although some manufacturing activities benefitted additionally from other policies and financial support.[1]

Growing foreign currency demand for the import of machinery and equipment during a time when coffee prices continued their downward trend[2] resulted in severe balance of payments problems. Growing scarcity of foreign exchange led to the introduction of new import channels for industrial equipment. Owners of foreign currency – in particular, multinational companies – received permission to import machinery without participating in foreign exchange auctions.[3] These imports and curren-

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[1] In January 1953, the government established a multiple exchange rate regime and months later established a monopoly on the foreign exchange market by the Superintendency of Currency and Credit (SUMOC, in Portuguese), which at the time was the monetary authority controlled by Banco do Brasil. Through SUMOC Instruction 70, an exchange rate regime was established in Brazil that defined a bonus system for exports (official rate + CR$10.00/US$ bonus for manufactured goods and CR$ 5.00/US$ for coffee) and a more depreciated exchange rate for imports (official rate plus taxes on purchase of dollars in foreign exchange auctions). As only essential imports, such as wheat, paper and pharmaceuticals, had access to the official exchange rate, in practice, the exchange rate regime first imposed a »confiscation« of dollars obtained by the coffee complex and favored manufactured exports through subsidies and in parallel, a financing mechanism for the public deficit and trade protectionism through import surcharging.

[2] The international policy of abandoning controls on coffee prices occurred in 1956, consolidated with Brazil's entry in the International Coffee Agreement of 1962, and the adoption of a new exchange rate policy. Symbolically, the year also marks the recognition of the country's inability to reverse the declining trend in the terms of trade of the agro-export complex.

[3] Basically, SUMOC Instruction 113 allowed the entry of machinery and equipment without the internalisation of payments in foreign exchange. This mechanism enabled

cy arrangements expanded the scope of foreign capital participation in Brazilian industry and from that moment on defined the division of labour between foreign and local capital.

3. Heavy Industrialisation (1955–1979)

The second half of the 1950s saw the beginning of accelerated foreign investment. Brazil, like other countries in Latin America, adopted policies to further stimulate FDI. In addition, the state took centre-stage in investing in infrastructure and heavy industries, thereby promoting the transition from the import substitution of consumer goods to the domestic production of capital goods. However, the world economy witnessed falling commodity prices, and possibilities for subsidising import substitution were shrinking.

With the inflow of foreign capital in the post-war period, industrialisation accelerated and embraced sectors that had hitherto not been included – such as automotive, petrochemicals and electrical equipment. In these new branches, a new division of labour emerged that linked foreign and local capital in covering different segments of the same production chain. This new pattern allowed, on one hand, the rapid growth of industrial production, but resulted, on the other hand, in weak national control over the use of technologies. As few of these products went to export, foreign capital penetration increased pressure on the balance of payments, in particular by the growth of profit remittances.

Some relief came from the fact that much of the industrial equipment brought into the country had already been amortised by its use in developed countries and could be imported without a need for foreign currency. Profit remittances sent to foreign headquarters remained, however (Oliveira and Mazzuchelli 1977), which in the early 1960s gave rise to an intense debate on the possibility of restricting such currency outflows and led to criticism of the future role of foreign capital in the Brazilian industrialisation process.

This was particularly the case with the automotive industry. Up to the 1950s, except for the fabrication of some spare parts, there was virtually no automotive industry in Brazil. In 1956 the Brazilian company ROMI negotiated a technology transfer agreement with the Italian automotive company ISETA for establishing the first local car factory, in the state of

large multinationals to bring in physical capital without hedging; that is, without having to declare the entry of funds for the purchase of imported capital goods. This mechanism allowed multinationals to bring equipment without participating in foreign exchange auctions and without paying surcharges on imports.

São Paulo. In granting privileges to imported equipment by the beginning of the 1960s Mercedes-Benz, Ford, Volkswagen, General Motors, Renault, Willys-Overland, Scania and DKW established subsidiaries for the production of automobiles, SUVs and trucks. To reduce the mounting demand for foreign currency, policies were enacted to increase the local suppliers' content in the assembly of their products.[4] Brazil's automotive sector emerged in a product cycle that saw foreign car assemblers linked to a large number of Brazilian auto component enterprises.

The intensification of industrialisation created bottlenecks in the supply of basic industrial inputs and infrastructure. This marked the beginning of the period of heavy industrialisation (Cardoso de Mello 1982). State policies sought mainly to integrate industrial demand into a domestically created capital goods sector.

A key feature of this period was the establishment of state-owned enterprises, even though the reasons were initially more political – resulting from pressures from nationalist movements – than economic. In creating large public enterprises which operated in the provision of industrial infrastructure (for example, energy, logistics) and basic inputs such as steel and petrochemical products, the state changed the balance of forces and maintained national control over key sectors of the economy. The new state policy favoured increases in the production of basic industries and, together with investment of foreign capital in some industries – such as automotive – dramatically changed the Brazilian industrial structure over the 1950s. While public enterprises improved domestic supply they also, in some cases, provided subsidies to certain basic inputs and worked on technology transfer processes.

The changes on the supply side were complemented by transformation policies for the main components of aggregate demand. Public investment took on a defining role for industrial growth. State participation in industry occurred through large state-owned holding enterprises – *Eletrobras*, *Petrobras*, *Siderbras*, *Telebras* – which became dominant actors in electricity, petroleum, steel and telecommunications. Through them, the state defined sectoral prices and determined the composition of investments. In addition, a number of public enterprises were created to internalise technologies considered strategic, such as Fábrica Nacional de Motores, Nuclebrás and Embraer.

Large state-owned enterprises have largely acted within the framework set by various industrial development investment plans of the 1970s –

[4] Instruction 70 established the multiple exchange rate rules for purchase, according to import priority. Instructions 127 and 128 included automotive and agricultural machinery industries between sectors with advantages in access to foreign exchange markets, as the enterprises increased the local suppliers' content in the assembly of their products.

National Development Plans I, II and III (NDP I, NDP II and NDP III). These plans set parameters to expand national participation in heavy industry, particularly for sectors with high trade deficits and major domestic supply constraints. Industrial development during the 1970s alleviated pressures on payment balance; it also made Brazilian industry use mature technology and reduce demand in the world market.[5]

The 1970s policies, on the other hand, also reinforced the existing division of labour in Brazilian industrialisation since the 1950s between the state, foreign capital and national capital (Evans 1979). The beginning of heavy industrialisation consolidated the institutional role of the state: it acted as the financier of long-term investments and through a set of state-owned enterprises provided the economy with basic inputs and industrial infrastructure, which multinational enterprises could use in producing manufactured goods.

Multinational corporations, through their subsidiaries or licensed national enterprises, were linked to local supply chains and constituted the main connection for technology transfers. Legislation discriminated between national and foreign capital and in restricting foreign capital's operating areas, created niches for national capital expansion. In some cases, large state-owned enterprises increased the market role of local capital by supporting the transfer of foreign technologies. This pattern was particularly characteristic in energy, petrochemical and metallurgy. State-owned holding enterprises controlled main sectoral research centres – CEPEL, linked to Eletrobras; CPQD, linked to Telebras; and CENPES, linked to Petrobras – which could be used in organising technology transfer agreements for national innovation in Brazil.

The first attempts to establish a domestic automotive industry occurred during the 1970s. After Romi's attempt, from the late 1960s a series of projects were geared towards the assembly of vehicles by Brazilian firms. The four largest – GURGEL MOTORES S.A., PUMA, BESSON GOBBI S.A. and AGRALE S.A. – established automobile production lines, utilities, motorcycles and small trucks, although most of them remained within the use of licenses for components of higher technological content. FDI was not barred from entry and expanded production lines – especially FIAT, which concentrated 80 per cent of all its foreign investments in the Brazilian automotive industry in the decade.

In the 1970s a new stage of industrialisation began, when priority sectors and institutional forms of long-term financing were modified. The most striking cases were the creation of FINEP (Funding Authority

[5] With the notable exceptions of aviation, petroleum exploration in deep waters and software policy.

for Studies and Projects) in 1967 to finance investments in innovation or acquisition of technology and the expansion of the National Bank for Economic and Social Development (BNDES, in Portuguese) in 1974 through the use of the Support Fund for Workers (FAT, in Portuguese), making it the largest long-term financing institution in Brazil.

Table 1. Share of fixed assets according to capital composition (1972)[a]

Sectors	National private	Multinational	State owned
Mining	3.1	16.9	79.9
Non-metallic mineral	43.2	56.8	–
Metallurgy	14.9	15.4	69.7
Mechanical	24.8	75.2	–
Electrical appliances and communication	9.9	90.1	–
Transport material	5.6	94.4	–
Wood	75.8	24.2	–
Paper and Cardboard	50.1	49.9	–
Furniture	100.0	–	–
Rubber	29.1	70.9	–
Leather and Skin	70.9	29.1	–
Chemical	50.8	39.6	9.6
Plastic	33.6	66.4	–
Petroleum	5.4	11.9	82.7
Pharmaceutical	6.6	93.4	–
Perfumery	64.8	35.2	–
Textile	58.6	41.4	–
Clothing	48.1	51.9	–
Food	27.8	72.2	–
Beverage	83.5	16.5	–
Tobacco	0.3	99.7	–
Publishing and printing	98.2	1.8	–
Diverse	50.7	49.4	–
Total	24.5	40.3	35.2

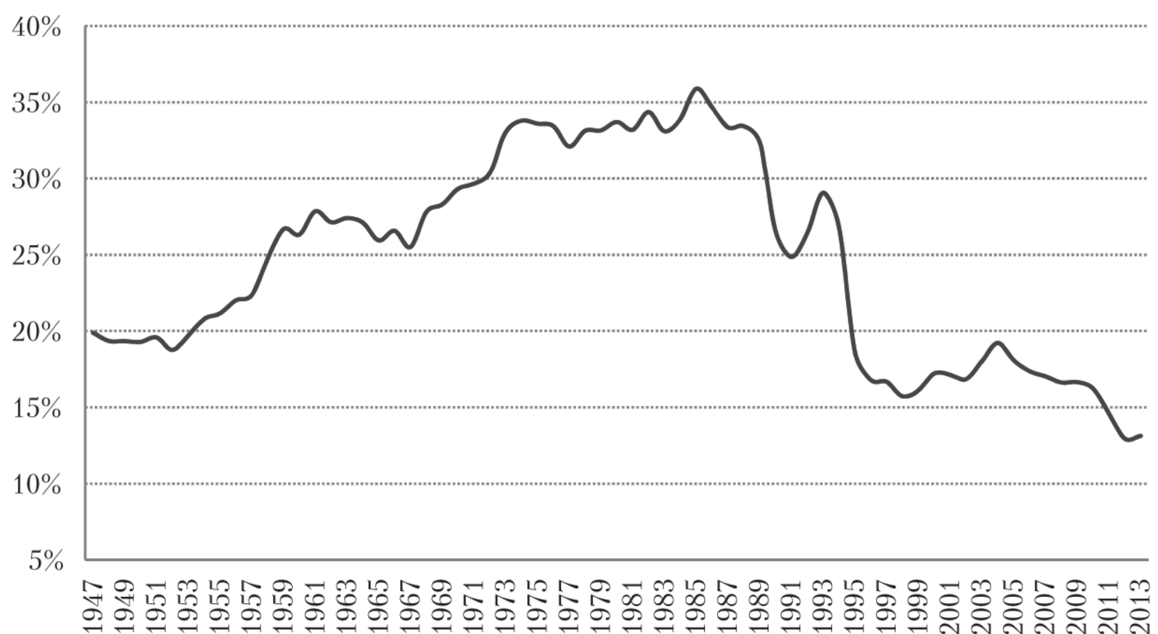
Note: [a] Sample considers the 10 largest enterprises in each sector.
Source: Von Doellinger and Cavalcanti (1975).

When the oil price shocks hit (first round in 1972–1974; second round 1978–1979) and international liquidity was available in abundance, the Brazilian government's choice, contemplated in the second NDP, was to accelerate the catching up process of capital goods and basic inputs. This

included the aim of achieving energy sufficiency by expanding the supply of hydropower, investment in petroleum exploration in deep waters (through Petrobras) and the biofuels industry development programme. Furthermore, steps were undertaken to decentralise Brazilian industry geographically. The main examples were the creation of the Manaus Free Trade Zone and the expansion of regional development banks, especially in the north and midwest regions.[6]

Overall, state policies, the creation of a supportive infrastructure and direct investments gave manufacturing a great push. By the late 1970s, the manufacturing share in Brazilian GDP reached 34 per cent (see Figure 1). At the beginning of the 1980s Brazil had a high industrialisation rate, although heavily concentrated in the southeast region of the country.

Figure 1. Share of manufacturing in GDP, 1947–2013



Source: IBGE. Prepared by the authors.

4. Crisis of the 1980s and the Decline of Manufacturing

Strong Brazilian growth in the 1970s was accompanied by high external indebtedness of the state and the private economy. External funds to serve foreign debt were easily available as OPEC's currency surplus

[6] As a consequence, São Paulo's share in total manufacturing fell from 58 per cent to 53 per cent in the 1970s (CANO 2007). In the automotive industry, the formation of producer clusters in Rio de Janeiro, the Resende region and the FIAT facility in Belo Horizonte metropolitan region, in Minas Gerais, contributed to a decrease of about 10 per cent in São Paulo's share in national production.

kept international interest rates low, international creditors were eager to borrow huge sums of money and the Eurodollar markets expanded. In 1979, when oil prices skyrocketed and the US Fed increased interest rates to fight energy-induced inflation, the scenario changed radically. Brazil witnessed a deterioration in its terms of trade and financing conditions. In the early 1980s, the Brazilian state reacted to the worsening economic and financial scenario by nationalising parts of private debt and changing its macroeconomic policy. Cutting public expenditure severely affected sectors that almost exclusively depended on state demand. Access to foreign currency was impeded, bringing down the output of enterprises dependent on foreign currency. State-owned companies were used as an inflation control mechanism and keeping their output prices down throughout the 1980s served to subsidise prices to the private sector. In the end, they were undercapitalised with no ability to invest. This in many cases damaged their capacity to provide quality products and services.

The foreign debt crisis and the macroeconomic response pushed the economy into a recession and ended the developmental hegemony in public policy. The overall result was a growing technological gap in Brazilian industry throughout the 1980s and reduced international competitiveness in many sectors. For Brazil's industrialisation, the 1980s can definitely be referred to as a lost decade.

5. The Neoliberal Model (1990–2002)

The 1990s again represented a drastic change in the Brazilian business environment, this time featuring trade liberalisation and privatisation. Privatisation involved the full or partial dismantling of state-owned holding companies, leaving only Petrobras and Eletrobras under public control. In addition, sectoral policy guidelines were abandoned. The new economic model dissolved the institutional framework that served to support industrialisation, stopped industrial and commercial discretionary policies and ended with discrimination in the treatment of domestic and foreign capital.

Trade liberalisation and the new economic policy were felt particularly in the emerging technology intensive industry, where the sale of domestic enterprises to foreigners was more pronounced. In sectors in which ownership remained national, a few major Brazilian business groups managed to take the opportunity created by privatisation.

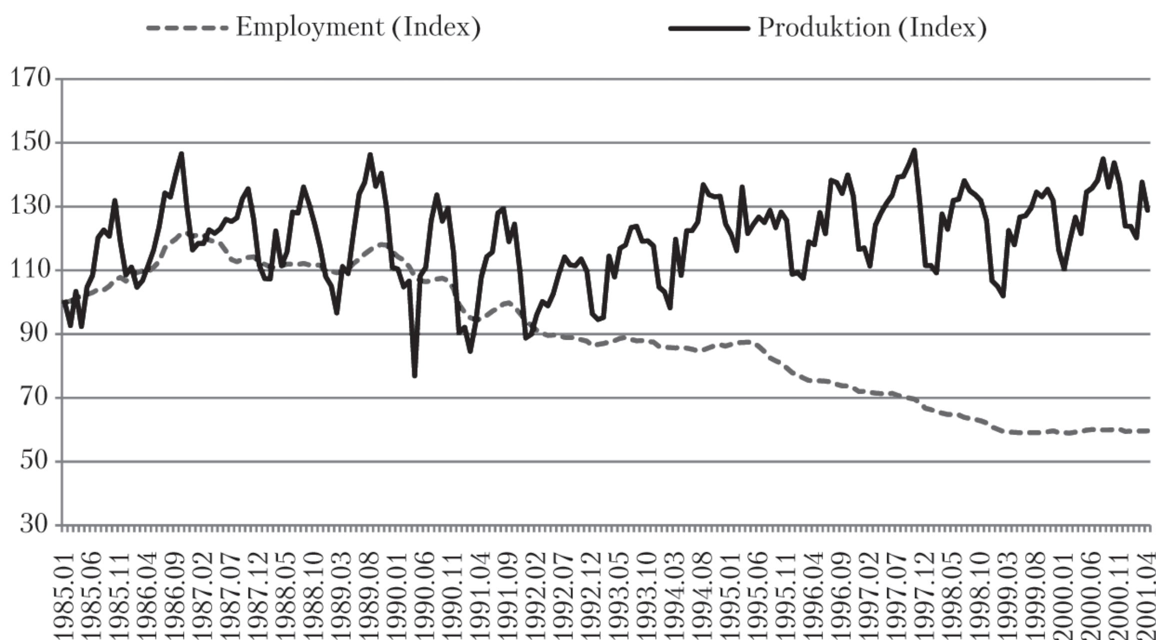
Trade liberalisation ended market advantages built on technology licensing. Foreign enterprises began to cancel such contracts and expanded direct sales in the Brazilian market through imports. The reorganisation of local supply chains, coupled with the maintenance of an appreciated

exchange rate in the second half of the 1990s, contributed to the displacement of Brazilian enterprises from international production cycles.

The automotive industry is a case in point. The liberal policies of the 1990s ended the agreement between Ford and Volkswagen – AUTOLINA – on sharing technologies and jointly developing domestic vehicles. The industry had spent the previous decade with virtually no investments and had survived only on the base of high tariff protection. When trade was liberalised the sector accumulated large trade deficits which in 1996 led to a new policy to attract investment and expand domestic production. Taxes on vehicles were reduced, special trade agreements with Mercosur were established – to reduce the deficit with Argentina and strengthen the integration of the regional automotive industry – some import tariffs on capital goods and automotive parts were reduced and tax incentives were given for new plants facilities. It was only with the return of import substitution policies that, by the second half of the decade, investments began to grow considerably and at the end of the decade over 14 production plants had been established.

The overvalued exchange rate during the second half of the 1990s also contributed to foreign investment and helped to maintain small modernisation cycles by increased production efficiency, even though it contributed little to the expansion of aggregate industrial supply (Bielschowsky 1999). (See Figure 2)

Figure 2. Production and number of people employed in manufacturing industry, 1985–2000 (monthly chained series – 01.1985=100)



Source: IBGE.

Overall, the 1990s saw a massive decline in manufacturing and of its share in the GDP. In an environment of uncertainty created by institutional changes, with lower trade protection and an overvalued exchange rate, a defensive adjustment prevailed, which favoured large enterprises. It also resulted in increased foreign control of the Brazilian industrial structure.

6. Redistribution of Income and the Return of Developmentalist Policies (2003–present)

The electoral victory of the Workers' Party in 2002 ended neoliberal policies and brought to the forefront an economic development approach based on the expansion of the domestic market. Private demand for mass consumption was created with various policies for income redistribution, provision of consumer credit and wage increases (Rossi and Biancarelli 2013).

Increasing wages beyond productivity growth lifted demand for investment goods and allowed some sectors to simultaneously expand production and increase productivity, particularly between 2005 and 2011. The new development model partially resumed a pro-industry agenda. However, the comeback of industrial policy had limited effect against an overvalued exchange rate, high interest rates and high profitability in extractive sectors. Despite this negative environment, the state invested through large capitalisation from BNDES and PETROBRAS in heavy industries such as petrochemicals, steel and shipbuilding, which had been left unstructured since privatisation took effect. Industrial policies in the 2000s stimulated the diversification of Brazilian economic groups, even though this remained restricted mostly to traditional, not technology-intensive sectors (Hiratuka and Rocha 2015).

However, much of the internal market dynamism leaked out, when more demand for components from various industrial sectors was satisfied from imports and Brazilian industry continued to lose out on domestic value added. The rise of import coefficients in almost every sector points to the fact that large Brazilian enterprises adapted to increased economic growth in the 2000s by expanding their imports and reducing their domestic assembly lines (see Table 2).

This regressive development worsened substantially after the international crisis of 2008, when industrial production and domestic consumption became detached. Since then, large-sale imports from China have introduced new challenges for domestic industry. Brazilian companies

are apparently adapting to a new division of labour based on increasing imported inputs and lowering domestic value added.

Table 2. Indices of intra-industrial imports penetration, manufactured, 2007–2013 (%)

	2007	2008	2009	2010	2011	2012	2013
Share of retail revenue in total revenues	7.4	8.2	9.0	9.7	11.7	12.3	11.9
Penetration Coefficient of Imports	–	18.3	16.6	20.4	21.9	22.3	23.7

Source: IBGE/FIESP.

In some cases they practically become resellers of foreign products, being responsible for only the final stages of assembly to make products comply with local trading standards. This type of adjustment is caused by changes in the international environment and the intensification of competition from Asia. But it is also caused by the reduction of domestic incentives for industrialisation and an adverse macroeconomic environment, with long cycles of currency appreciation and high interest rates.

Conclusions

This chapter provides a brief overview of the Brazilian industrialisation process and its associated growth models. Five distinct phases have been identified (Table 3): Phase 1 from 1930 to 1954 marks the beginning of industrialisation in Brazil. During this period of international economic crisis Brazil transited from an export growth model based on agricultural commodities to a model that included import substitution manufacturing of consumer goods for the domestic market. The years 1955–1979 were the height of the Brazilian industrialisation process. The state took centre-stage, established state-owned companies to provide for industrial infrastructure and heavy industries and moved import substitution from durable consumer goods into capital goods. Brazil's march into a fully industrialised economy ended abruptly in the foreign debt crisis of the 1980s. Foreign currency shortages and budget savings drove the economy into a long-lasting recession and increased the country's technological gap again.

The neoliberal model implemented in the 1990s led to profound changes. Trade liberalisation finally led to the abandonment of the state's economic dirigisme. While modernisation investment occurred in some branches, foreign capital encroached on national capital, resulting in

large-scale deindustrialisation and the re-emergence of dependency on industrial imports.

Table 3. Development stages in Brazil

1930–1954	1955–1979	1980s	1990–2002	2003–present
Internal market-led growth	State-led growth	Debt crisis	Neoliberal model	Income distribution model
Constrained industria-lisation	Heavy industria-lisation	Obsolescence of domestic industry	Modernisation and deindust-rialisation	Industrial policies and deindustrialisation

The year 2003 marked the beginning of a growth model based on income distribution. It resumed aspects of developmentalism in bringing back active industrial and credit policies. In this new context, the Brazilian industry performed reasonably well up to the end of the 2000s; since the global finance crisis in 2008–2009, Brazil has again experienced deindustrialisation, suffering from both increased competition in the international market and its own currency appreciation.

The long period of building an industrial economy, as well as rapid deindustrialisation shows the relevance of state intervention in the economy and the effects of dismantling the set of institutions and economic policy interventions. Even the attempt to recreate some industrial policies in recent years lacks coherence as institutions have not been re-established to define a long-term development path for domestic manufacturing with protection and incentive policies. With the lack of a proper policy framework, two trends may continue unabated: large enterprises will prevail over small and medium-sized companies and the ownership of Brazilian enterprises may continue to be transferred to foreign economic groups.

References

Bielschowsky, R. (1999) Investimentos na indústria brasileira depois da abertura e do Real: o mini-ciclo de modernizações, 1995–1997. *Serie Reformas Económicas No. 44*, CEPAL, Santiago.

Cano, W. (2007) *Desconcentração produtiva regional no Brasil: 1970–2005*. São Paulo: Unesp.

Cardoso de Mello, J. M. (1982) O Capitalismo Tardio: contribuição crítica da formação e desenvolvimento da economia brasileira. São Paulo: Brasiliense.

ECLAC (1969) El desarrollo industrial de America Latina. Lima: ECLAC.

Evans, P. (1979) *Dependent Development: the alliance of multinational, state and local capital in Brazil.* New Jersey: Princeton University.

Hiratuka, C. and Rocha, M. A. (2015) Grandes grupos no Brasil: estratégias e desempenho nos anos 2000. *Texto de Discussão*, Ipea: Brasília

Oliveira, F. and Mazzuchelli, F. (1977) Padrões de acumulação, oligopólios e Estado no Brasil: 1950–1976. In: MARTINS, C. E. (1977). *Estado e capitalismo no Brasil*. São Paulo: HUCITEC.

Rossi, P. and Biancarelli, A. M. (2013) The macroeconomic policy in a social-developmentalist strategy. In: Development Strategies: Country Studies and International Comparisons, 2013, Shanghai. Development Strategies: Country Studies and International Comparisons.

Suzigan, W. (1986) *Indústria brasileira: origem e desenvolvimento*. São Paulo: Brasiliense.

Tavares, M. C. (1979) *Da substituição de importações ao capitalismo financeiro: ensaios sobre economia brasileira*. Rio de Janeiro: Zahar.

Von Doellinger, C. and Cavalcanti, L. (1975). Empresas multinacionais na indústria brasileira. Rio de Janeiro: IPEA/INPES.

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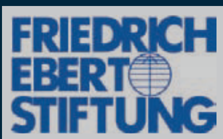
РОССПЭН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