

**The economic development and taxation system: a comparative
study of Brazil and Japan**

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Abstract

This thesis analyzes the economic and taxation policies of the Japanese Government during the rapid economic growth era (1955-73) and the Brazilian economy in the 1990s. The democratic reforms of the Supreme Commander of the Allied Powers (SCAP) after World War II are also being covered, being fundamental prerequisites for Japan's rapid industrialization.

Lessons are drawn from the Japanese experience that can be applicable in the case of a developing country like Brazil. Special attention is given to the study of Brazil and Japan's tax policies.

The thesis concludes that the Brazilian tax system is unfair and inefficient, it hinders economic growth and promotes income inequality. Taking into account peculiarities of the country and the present tax structure, a proposition for tax reform is made.

As for other policies, the conclusion is that Brazil needs a new development pattern that leads to a self-sustained growth. An industrial policy that promotes competitiveness of domestic industries, enhances the domestic market and equilibrates the balance of payments is urged.

To my father Henrique and mother Terezinha

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INTRODUCTION

A comparison between two countries at different stages of development is always a difficult task. Indeed, drawing lessons from one country does not mean a simple application of procedures that have proved to be successful in a foreign land. Learning from abroad is an arduous process of adopting elements of one country that could be applied in another. The Japanese showed excellence in learning navy and merchant marine practices from the English, army and medicine from the Germans, law from the French, and business methods from the Americans. The challenge is to wisely select what is useful from other countries' experiences.

It may be argued that Brazil and Japan represent different stages of development, and therefore a comparison between the two countries would not be fruitful. In fact Brazil's per capita GNP was 9 times lower in 1996 than Japan's at US\$ 4,400 compared to the US\$ 40,940.

However, at the start of the high-speed growth era (1955-73), Japan had a per capita GNP 7.5 times lower than the USA, the richest country in the world. At that time Japan's economic structure was different, and without the right macroeconomic policies, it would not have achieved its present position in the world arena.

Brazil nowadays is the most powerful country in Latin America. It is the leader of the Mercosur, an economic bloc also comprised of Argentina, Uruguay and Paraguay as effective members, and Chile and Bolivia as associated partners.

Likewise, in spite of the damage suffered during World War II, Japan emerged in 1945 as the most technologically advanced economy in Asia, due to the scientific and industrial development accumulated since the 1868 Meiji Restoration.

Therefore, we understand that Brazil's relative stage of development is similar to Japan's in the 1950s.¹ Both countries have other similarities, in different historical

¹ Brazil in the 1990s is, as Japan was in the 1950s, a relatively industrialized country; Brazil economy is the strongest in Latin America, as was Japan's in Asia. Brazil per capita GDP ratio to the richest industrialized country is similar to Japan's at the start of the rapid growth era.

periods. Prior to the democratization reforms of the postwar period, Japan had, like Brazil nowadays, a regressive taxation system; an unfair land distribution; a high income inequality; low wages and a restricted domestic market.

Another similarity between Brazil and prewar Japan is the ownership of conglomerates. Prior to their dissolution, the zaibatsu (Japanese conglomerates) were controlled by a single family, and competition in the domestic market was restricted. Likewise, Brazil's conglomerates are family-ruled, and their monopolist and oligopolistic positions hinder competition.

The mainstream of present tax policies asserts that taxes should be charged for the simple purpose of revenue collection. This idea appears to be very simple and attractive, but it leads to a regressive system and to an unfair income distribution. Countries that have implemented those sorts of policies have widened the gap between rich and poor, e.g. the USA, England and Chile.

Tax policies should have close linkages with other macroeconomic policies, especially industrial policy. On top of the collection of revenue, a tax system can be an important instrument of redistribution of wealth. Before World War II, in Japan, the tax structure was highly regressive, with a great burden of taxes falling on those least able to pay. In the postwar period, the equity principle of taxation was emphasized. A forcible redistribution of wealth came at a stroke, and the tax system became highly progressive. Nowadays Japan has the most even income distribution amongst industrialized countries. Income distribution and economic growth can be complementary, as the Japanese experience has shown us.

The progressive taxation of Japan is due to the tax structure. Roughly 70 percent of the total tax collection corresponds to direct taxes. Taxes on income and on property have high brackets and efficient enforcement. On the other hand, in Brazil the collection of taxes on income and on property is very low. Taxes on consumption predominate, being a plight for the poorest part of the population. This regressive system is in accordance with the distribution of wealth, which is one of the worst in the world. Moreover, the system is complicated, stimulates tax competition and hinders economic growth.

When discussing tax reform in Brazil, the equity principle of taxation should be highlighted. In a progressive system, vested interests would be affected, but that is unavoidable in any process of modernization. A fairer distribution of the wealth must be prioritized not only due to moral considerations. A huge gap between the rich and the poor may lead to social unrest and political instability. Maladies such as these tend to hamper economic growth, inasmuch as new investments in unstable countries are unlikely.

The primary purpose of this paper is to compare Brazil and Japan's tax systems. However, the linkages between tax and other government policies compelled an inclusion of an analysis of Japan's economy during the rapid growth era and Brazil's in the 1990s. Special attention is given to the industrial policies of both countries. Industrial policy can be defined as a government intervention to change the resources allocation in the economy. The existence of industrial policies throughout the world is per se a denial of dogmatic beliefs in the virtues of purely market-led progress.

Japan's economic development has demonstrated that there is not necessarily a dichotomy between state and market. Rather, the market and the state and their interaction are a complex product of the forces that are exerted upon them. An effective state is central to economic and social development. Its role is fundamental to the formation and implementation of an industrial policy.

The economic transformation of Japan after 1945 offered the most spectacular example of sustained modernization in these decades, not only becoming the second most powerful economy in the world, but also providing a model for emulation by the other Asian countries. A self-sustained growth was achieved due to a high degree of personal and corporate savings, investments in science and technology, the balance of payments equilibrium, the low interest rates policy and the use of financial resources for investment purposes. The industrial and taxation policies has enabled the country to enjoy now a unique and very favorable position in the global and power-political order.

It was not in the international market, but in the enlarged domestic market that Japan developed. During the rapid growth era, exports accounted for roughly 10 percent of the GDP, a percentage lower than in most industrialized countries.

Brazil has, since the beginning of the 1990s, liberalized international trade, privatized state-owned enterprises, liberalized capital movement and maintained high interest rates. There is a lack of a comprehensive industrial policy, and FDI inflows became fundamental for the current strategy. One of the problems associated with the present policies is the unbalanced external sector, with the accumulation of current account deficits.

The purpose of this thesis is not to elect Japan as a model from which Brazil has diverged or which it could simply imitate, but to highlight some of the government policies that propelled Japan into an era of fast growth and development. The comparison is between Brazil in the 1990s and Japan during the rapid growth era (1955-73). The democratic reforms of the Supreme Commander of the Allied Power (SCAP) in the postwar period are also covered, inasmuch as they can be considered as a prerequisite for Japan's rapid industrialization.

Needless to say, peculiarities of which country should be taken into consideration when formulating new policies. Furthermore, it should be pointed out that Japan adopted its policies in the postwar period and may have benefited from the Cold War. Brazil faces the post Cold War period and the Washington Consensus era, a different historical time.

The comparison is based on a statistics analysis. The figures were collected preferably from official sources of Brazil and Japan, e. g. ministries, government agencies, secretariats, statistics institutes. Secondary data is used when the primary ones are not available.

After 1973 Japan has faced many challenges and crises typical of a highly developed country. As Brazil has not achieved such a stage of development, it is difficult to draw any lesson from that period.

On top of the comparison, recommendations are made for a tax reform in Brazil and for new macroeconomic policies that propel Brazil to an era of self-sustained development.

Chapter 1 analyzes the Japanese economy in the postwar era, emphasizing the mechanisms of growth. A brief overview of the democratization reforms of the occupation forces is included. Amongst the macroeconomic policies of the rapid growth era, special attention is paid to industrial policies and capital control. The chapter ends with a brief conclusion and lessons for Brazil.

Chapter 2 is dedicated to the postwar changes in Japan's tax system, how it shifted from being regressive and unfair to becoming highly progressive. As part of the broader industrial policy, the tax policy for capital accumulation is studied. The chapter also investigates the present tax structure and the composition of tax collection in terms of incidence and taxable object.

Chapter 3 is about the Brazilian economy in the 1990s. The external sector deserves attention, being the weakest point of the present macroeconomic policies. The implementation of the Real Plan, the balance of payments, the lack of a comprehensive industrial policy and the FDI are described. Finally, a comparison is done between Brazil and Japan's macroeconomic policies, followed by recommendations for new policies.

Chapter 4 studies the Brazilian taxation system. An international comparison is made concerning tax rates and taxable object. The present tax structure and tax collection are described, as well as the problems faced by the system, such as the regressivity, the existence of cumulative taxes and the complicated VAT system. In addition, the reasons why the present tax policy hinders economic growth, a comparison with Japan's system and recommendations for a tax reform is contained here.

CHAPTER 1

POSTWAR JAPAN'S ECONOMY

1) RECONSTRUCTION

In the aftermath of World War II, Japan was partially destroyed. Approximately one quarter of the national's wealth was devastated during the conflict. Despite the losses suffered, still Japan emerged technologically and economically as the strongest country in Asia. For instance, in steel, in machine tools and in other machinery made from steel, Japan had, in workable conditions, considerable facilities.

In 1945, Japan was for the first time in its history occupied by foreign forces. The occupation powers, under the command of Gen. MacArthur and led by the USA, implemented a series of reforms in the Japanese economy and society, that we understand were indispensable for the postwar rapid economic growth era.

1.1) Land reform

In spite of the rapid modernization and industrialization that started after the Meiji Restoration, the land property in Japan remained partially feudalistic. In the immediate postwar period about two-thirds of the farmers rented at high cost the land they cultivated.

The objective of the land reform of the Supreme Commander of the Allied Power (SCAP) was to redistribute land to those who worked on it. This objective was achieved. The proportion of land cultivated by the owners increased from 54 to 90 percent. The compensation paid to the former landlords was symbolic, being far below the market price. Landlords lost economic and political power, as well as the "right" to rule over tenant farmers.

One of the effects of the land reform was a rapid increase in the productive capacity. In addition, "In terms of the economy as a whole, the technological advances and income increases in rural areas in due course also caused an expansion of domestic markets." (Nakamura 1995, p. 30)

1.2) Zaibatsu dissolution

The zaibatsu (familial conglomerates) groups cooperated closely with the Japanese military imperial system in the war efforts. From the partial invasion and occupation of China (1931) until 1945, these powerful groups fulfilled an increasing number of requests from the Imperial Army, e.g. weapons, vehicles, aircraft, ammunitions, uniforms, fuel, food.

The SCAP, after assessing the situation, concluded that the great control of the zaibatsu over the economy was responsible for low wages, for hindering the upsurge of a middle class and for the consequent aggressive and expansionist policy in search for markets. The intention of their dissolution was to destroy the power of Japan's military and to enhance the domestic market.

To dissolve the zaibatsu, the first step was to break up the holding companies. The Holding Company Liquidation Commission (HCLC) at first designated, in February 1948, 325 companies to be deconcentrated. However, with the deepening of the Cold War and the advance of the communist forces in China, this policy was reversed. The USA decided to promote Japan as a "bulwark against communism" and this resulted in a change in the policies of the SCAP.

With the aim of fostering Japan's development, the reparations of war were stopped. The actual removal of equipment was only 6 percent of the original proposal. And from the original list of 325 companies, only 9 were effectively deconcentrated before the end of the application of the anti-monopoly law.

Some of the old zaibatsu (e.g. Mitsubishi, Mitsui, Yasuda, Sumitomo), reemerged after the war, although with a different structure. The new groups are not necessarily controlled by a single family, but are consolidated in relationships of interdependence that include financing by a single, central bank, intercorporate stock ownership, joint technological development, and internal business transactions.

In spite of the change in the occupation policies towards the zaibatsu (later called keiretsu), a fierce competition in all industries was assured. Japan's companies started an era of dynamic search for new production and management techniques, contributing to the rapid economic growth. The largest firms became

competitors in the domestic and world market instead of monopolists in the internal market.

1.3) Labor democratization

Before World War II, workers were submitted to low wages and precarious working conditions. In addition, no free trade unions existed. This situation worsened during the war efforts (1931-1945), when the Japanese working class was subjected to semi-slavery.

In the postwar period, workers were allowed to organize free trade unions. In 1949, the proportion of workers affiliated in labor unions had increased from zero to approximately 60 percent, a high percentage for international standards. Laborers also gained the right to strike, and exercised it, at least in the immediate postwar period. The collective bargaining, which later came to be known as the “Spring Offensive”, enabled the trade unionists to effect sharp and significant improvements in their real wages.

Higher wages expand the domestic consumption and accelerate development of the economy as a whole. Individually, however, capitalists are always reluctant in conceding higher salaries to their employees, inasmuch as it would cause a decrease in their profits. Therefore, the pay hikes could not have been achieved without the bargaining power of the trade unions.

1.4) Brief comments

The democratization reforms intended to create in Japan a strong middle-class. The occupation forces considered that, without a developed domestic market, Japan’s ruling class could, in the future, start a new war in search of markets for over production.

Nowadays Japan’s income distribution is one of the fairest in the world.² It can be attributed to the democratization reforms described above and to the taxation system (explained in detail in chapter 2), with the tax on concentrated wealth

² In the average of 1980-94, the ratio of income earned by the richest 20 percent to the poorest 20 percent in Japan was 4.3, which was the lowest amongst industrialized countries with available data. For the USA, the ratio was 8.9. (United Nations 1999, p. 149)

(charged as a lump sum) and the highly-progressive and effective income tax and inheritance tax.

1.5) The Korean War

The Korean War, which devastated the Korean Peninsula and was fought between June 1950 and July 1953, was a turning point for Japan's economic recovery. The sudden demand of the US military for support supplies caused an order of great quantity of manufactured products from Japan's companies.

Japan's automobile manufacturing had enhanced its early development due to orders by US forces for repairing military vehicles in Korea. A large amount of clothing was required by the American troops, and the textile industry rapidly increased its production capacity. Iron and steel industries enlarged their production, operated existing plants at full capacity and announced ambitious plans of plant and equipment expansion.

The conflict on foreign soil alleviated the problem of foreign currency shortage. The "special procurements", by which the US Army and military personnel paid for the products bought from the Japanese, were paid in US dollars, and in 1952 amounted to as much as 62 percent of Japan's dollar inflow. Suddenly Japan doubled its level of imports, allowing key industries that depended upon the import of raw materials to double their production.

An average rise of 23 percent of the prices of world exports was brought about by the war. Corporate profits of Japan's firms soared due to increases in production volume and in exports prices. Higher profits caused further investments in plant and equipment and enabled domestic companies to import technology from abroad.

2) THE RAPID ECONOMIC GROWTH ERA

2.1) MITI and the industrial policy

Industrial policy is the intervention by a government to change allocations of resources in the economy. Japan's industrial policy was directed by the MITI (Ministry of International Trade and Industry) and included tax laws for capital accumulation (discussed in the next chapter), intervention in financial markets to direct investment funds into favored sectors, subsidies to certain industries, recommendations to firms, intervention in the mergers market to obtain firms large enough to gain economies of scale.

A single exchange rate of 360 yen to the dollar was set up in 1949. The undervalued currency, specially taking into consideration the postwar productivity gains on the Japanese side, undoubtedly helped exports. It was only in 1971 that the yen was revalued upwards to 308 yen to the dollar.

Administrative guidance was an indirect control widely employed by government agencies and ministries that consisted of recommendations, requests to individual firms to follow the policies considered to be beneficial for the country. Tsuru (1994) describes administrative guidance as a "paternalistic" method, which enabled industries to strike a happy balance between competition at home and government support for sales abroad raising their productivity markedly in the course of events through innovation and the scale economy while improving the quality as well. (p. 82)

Industries selected by the government were provided with subsidies and low-interest finance and were given priorities in import allocations. Economic reconstruction prioritized as key industries electric power, steel, shipbuilding, and coal. Later on machinery, heavy electrical equipment, chemicals, petrochemicals, and automobiles industries, were added.

The "desired" industries that should be encouraged had to meet the following criteria: 1) those that could be symbols of industrial "might", that had already been developed by countries more advanced than Japan; 2) those that had a certain size, whose development would draw popular attention.

Through the foreign exchange allocation system, imports had to be authorized by the government. It had the double role of limiting the total volume of imports and protecting national industry. The government also had control of technology import (patent and know-how licensing – see section 2.1.2). In addition, MITI limited the quantity of royalties that could be paid for each project: a project whose royalties were considered to be too high was not approved.

The change in the industrial structure (also see section 2.1.2) led to an alteration in export composition. Before the Second World War textile sales abroad were an essential source of foreign currency, but in the postwar era its share in Japan's exports decreased steadily, from about half in 1950 to 5 percent in 1975. According to the achieved technological level, different industries had momentum in international trade, with the tendency of shifting the production to higher value-added goods with a lower requirement of raw materials.

Table 1 Export component ratios of Japan

| | Food | Fuel & raw materials | Chemical products | Machinery & transport equipment | Textiles | Steel |
|-------------|------|----------------------|-------------------|---------------------------------|----------|-------|
| 1955 | 6.8 | 6.1 | 4.7 | 12.3 | 37.3 | 24.0 |
| 1960 | 6.7 | 4.2 | 4.2 | 23.2 | 22.8 | 34.2 |
| 1965 | 4.1 | 3.3 | 6.5 | 31.2 | 13.5 | 15.3 |
| 1970 | 3.4 | 2.1 | 6.4 | 40.5 | 9.0 | 14.7 |
| 1975 | 1.4 | 2.0 | 7.0 | 49.2 | 5.3 | 18.3 |

Source: Bank of Japan. Extracted from Nakamura (1995, p. 67).

2.1.1) Study case: automobiles industry

Automobile protectionism included:

- a) protection from direct investment by foreign firms and from imports of foreign vehicles;
- b) permission to import foreign technology under favorable terms;
- c) supply of low interest rate loans and of subsidies.

Despite the protectionist measures, the car industry did not stagnate and improved qualitatively and quantitatively during the rapid growth period. Technical innovation, scale economy, domestic competition and government incentives for exports worked out properly. In 1980 Japan surpassed the USA as the world's largest manufacturer of automobiles.

Table 2 Production, exports and imports of passenger cars

Units: Number of cars

| | Production(A) | Exports(B) | Imports | (B)/(A)(%) |
|-------------|---------------|------------|---------|------------|
| 1957 | 47,121 | 410 | 6,179 | 0.9 |
| 1960 | 165,094 | 7,013 | 3,450 | 4.2 |
| 1967 | 1,375,755 | 223,491 | 14,352 | 16.2 |
| 1974 | 3,931,842 | 1,727,396 | 42,218 | 43.9 |

Source: Tsuru (1994, p. 83).

2.1.2) Investments in science and technology

The war-oriented economy of the 1930s and 1940s shifted Japan's industrialization from light to heavy industry. In 1938, for the first time, output of heavy industry exceeded that of light industry. Chemical and heavy industries substituted light industries (especially textiles) and their war technological development formed the basis of postwar industrialization. Factories that previously supplied the Imperial Army converted their installations to produce consumer goods. "The facilities, technology, and skills acquired during the war exerted a tremendous influence on the subsequent direction of the economy." (Nakamura 1995, p. 18)

In the early 1950s, the Ministry of International Trade and Industry (MITI) chose industries that would have incentives for technological innovation, and those that would be relegated by the government. The MITI underpinned its policy through the foreign trade control, an important instrument that gave it almost total control over imports and exports. Trade control and administrative guidance enabled MITI to direct imported technology and financial resources to selected industries. These were changed according to the technological progress accumulated. Prior to World War II textile industries were hegemonic, subsequently heavy industries prevailed (electric power, coal and steel, marine transport, petrochemical and chemical, electronics, automobile).

Investment in R&D and technology imports were the two pillars of the rapid industrial modernization of Japan. Technical cooperation with foreign firms was fostered with the enactment in 1949 of the Foreign Exchange Administration Order and in 1950 of the Foreign Investment Law (see section 2.3). Through technical cooperation substantial technology was imported, and agreements with foreign firms soared. Imported technology was readily assimilated, partly due to

the skills and experience developed during the prewar and wartime periods. Japan could not immediately develop a high technology on its own, but it was able to combine existing techniques to create low cost production systems.

Table 3 Introduction of industrial techniques

| Year | 1949-50 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | TOTAL |
|--------------------|---------|------|------|------|------|------|------|------|------|------|-------|
| Total of Contracts | 76 | 188 | 243 | 236 | 213 | 185 | 310 | 254 | 242 | 378 | |
| Year | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 13228 |
| Total of Contracts | 588 | 601 | 757 | 1137 | 1041 | 958 | 1153 | 1295 | 1744 | 1629 | |

Source: *Economic Statistics Annual, 1967 and 1970*, published by Bank of Japan. Extracted from Takayanagi (1975, p. 66).

Note: Contracts were subjected to Law Concerning Foreign Investment, Foreign Exchange and Foreign Trade Control Law.

Introduction of foreign technology through licensing agreements played a fundamental role in Japan's modernization and in the development of skilled-intensive industries, such as chemicals, petrochemicals and electronics.

The MITI enacted in 1957 the Electronics Industry Promotion Temporary Measure Act, aimed at specifying the type of product and of R&D that should be developed in this field. Firms that followed the guidelines of this law could receive grants for experimental research subsidies and long-term low interest loans from the Japan Development Bank, on top of favorable tax treatment (see chapter 2). By 1973, the end of the rapid growth era, Japan had achieved a very favorable position in terms of industrialization and technological progress.

- It held the leading position in the world market for most types of advanced consumer electric appliances.
- Its steel industry was the world's third largest and the most efficient, though it depends almost completely on imports of iron ore and coal.
- Its shipbuilding industry was the world's largest.

2.1.3) Economic plans

During the rapid growth era, Japan's government intervention was also characterised by the existence of six medium or long-term national economic plans. Their main objectives were:

- a) Five-Year Plan for Economic Self-Support (56-60): economic self-support; full employment;
- b) New Long-Range Economic Plan (58-62): maximum growth; improvement of living standard; full employment;

- c) National Income Doubling Plan (61-70): same as the previous plan;
- d) Medium-Term Economic Plan (64-68): correction of economic distortions;
- e) Economic and Social Development Plan (67-71): development toward a balanced and enriched economy and society;
- f) New Economic and Social Development Plan (70-75): establishing a humane economy and society through balanced economic development.

2.1.4) The low interest rates policy

Key industries needed funds to expand their activities, and the bank system was vital as an intermediary to assure the necessary supply of financing. They had the role of channeling private savings to companies (indirect financing). Lending from financial institutions was a major source of supply of funds.

The interest rates were not left to the “vagaries” of the market (the balance between supply and demand). In a period when the demand for funds was extremely high, interest rates were artificially kept at low levels by government authorities. Funds were channelled to the Bank of Japan, Japan Development Bank, Treasury Investments and Loan Authority and major commercial banks.

The Japan Development Bank (JDB), as a policy-based financial institution, was founded in 1951 and had the important role of supplying key industries with low-interest funds for plant and equipment.

The “window guidance” was a kind of administrative guidance in the financial sector. With it a specific ceiling was imposed on the aggregate lending of each bank; this was made on the form of “suggestions” from the Bank of Japan, but was usually accepted. Not only the total amount of lending was controlled by the Bank of Japan, but it also gave specific instructions of loans that should be refused, such as those for speculative purposes.

2.1.5) Brief comments

Due to the great role of the government in the direction of the economy, analysts and critics call Japan state-led capitalism, Japan Inc., and so on. The government utilized various tools to change market allocation of resources. Japan was far away from being a free-market economy without government role.

Its economic growth was an example of state intervention in a capitalist economy.

2.2) The balance of payments

One of the features of Japan's macroeconomic policies during the rapid growth period was the extreme concern with the balance of payments equilibrium. Economic growth was constrained by import capacity. Therefore, to expand production and fixed investment Japan had to increase exports. It explains the importance of the Korean War and the "special procurements" for the Japanese economy (see section 1.5).

In 1949, the Foreign Exchange and Foreign Trade Control Law was implemented. It aimed at assuring the most beneficial use of the then scarce hard currency and to control foreign trade, in order to maintain a balance of payments equilibrium (see section 2.1).

Imports are a function of GDP, and so a high increase in the national output would lead to a rise in importation, which in turn should be financed by exports. The latter does not necessarily rise with an increase in output (exports are constrained by the productive capacity of the exporting country and by international demand). Macroeconomic policies and the growth pattern will determine whether an accelerated growth causes a deterioration in the balance of payments.

Japan overcame the balance of payments constraint through a shift in its comparative advantages. Prior to World War II Japan mainly exported less sophisticated goods, like textiles. However, this state of affairs changed drastically, due to a rise in labor productivity in heavy and chemical industries.

As a result, the composition of Japan's trade was modified. Traditional commodities gave way to new products, which were dynamic in the international market and contained more aggregate value. As a matter of fact, since the Meiji Restoration Japan had had a policy goal to catch up with the West, which implied developing manufacturing industries as advanced as those of the USA and Europe.

Balassa & Noland (1988) made an extensive study of shifts in revealed comparative advantages for Japan's exports, during the 1967-83 period. The export index of "revealed" comparative advantage is defined as the ratio of a country's share in the exports of a particular commodity category to the country's share in total merchandise exports. The study shows a shift in Japan's comparative advantage from unskilled labor to skilled-intensive products. It also demonstrates that Japan gained a comparative advantage in research-intensive products.

What is important for the purposes of our research is that a country should not be constrained by its present factor endowment when formulating an industrial policy. Comparative advantages may be changed in the international arena, depending on the achievements of development strategies. The industrial policy promoted by MITI undoubtedly achieved its desired goals.

The ratio of annual imports to GDP remained constant, around 10 percent. What allowed Japan to have a rapid economic growth without a balance of payments imbalance was the increase in exports and the change in its composition. Assuming that an economic expansion would lead to a rise in imports of raw materials, a steady increase in exports was necessary for a self-sustained economic growth.

Table 4 Ratio of imports and exports to GDP and annual percent growth

| | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | Average |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| Imports (% of GDP) | 10.86 | 9.26 | 9.84 | 9.65 | 9.10 | 9.00 | 9.41 | 8.98 | 8.95 | 9.52 | 8.99 | 8.27 | 10.01 | 9.4% |
| Imports (annual % growth) | 26.40 | -1.15 | 19.53 | 13.73 | 5.57 | 12.20 | 22.71 | 12.15 | 13.70 | 22.87 | 7.05 | 10.50 | 24.33 | 14.3% |
| Exports (% of GDP) | 9.26 | 9.42 | 9.02 | 9.48 | 10.50 | 10.56 | 9.64 | 10.10 | 10.54 | 10.81 | 11.71 | 10.58 | 10.04 | 10.1% |
| Exports (annual % growth) | 5.25 | 17.15 | 6.98 | 21.70 | 23.69 | 17.01 | 6.72 | 23.92 | 20.79 | 17.50 | 16.00 | 4.12 | 5.24 | 14% |
| GDP growth (annual %) | 12.04 | 8.91 | 8.47 | 11.68 | 5.82 | 10.64 | 11.08 | 12.88 | 12.48 | 10.71 | 4.70 | 8.41 | 8.03 | 9.7% |

Source: World Bank (1999). Calculation made by the author.

2.3) The FDI

Inward foreign direct investment played a minor role in Japan's growth. The limited amount can be explained by the highly restrictive policy practiced by the Japanese government.

In 1950, the Foreign Investment Law was enacted, with the purpose of "Limiting the introduction of foreign investment to that which will contribute to the self-support and sound development of the Japanese economy and to the improvement of the international balance of payments..." (Article 1)

Shares in already established Japanese enterprises were limited by law to a maximum of 15 percent. To acquire substantial managerial participation in Japan, the only possibility for foreigner participation was the establishment of joint ventures with Japanese partners. Even then, in the manufacturing sector, foreign ownership or managerial participation could not exceed 50 percent. Other restrictions: the president of the company should be Japanese; strategic decisions should remain on the Japanese side; the Japanese participation should not be decreased, in the case of a capital increase.

Liberalization of FDI started in 1967. Since then, capital inflows have had the tendency of increasing. Government authorities analyzed that Japan was in a position to welcome increasing foreign investment. The foreign capital deregulation gradually took place. It was not a full capital liberalization, though. Some industries were open to unrestricted FDI, others received approval of up to 50 percent of foreign ownership.

Table 5 Introduction of foreign direct investment in Japan

In current thousands US\$

| Year | GDP | FDI | FDI as percentage of GDP |
|------|-------------|-----------|--------------------------|
| 1950 | 25,840,743 | 3,150 | 0.01% |
| 1951 | 32,419,958 | 13,326 | 0.04% |
| 1952 | 36,769,397 | 10,123 | 0.03% |
| 1953 | 39,827,952 | 5,002 | 0.01% |
| 1954 | 42,608,904 | 3,970 | 0.01% |
| 1955 | 46,614,504 | 5,101 | 0.01% |
| 1956 | 51,960,786 | 9,520 | 0.02% |
| 1957 | 58,217,532 | 11,490 | 0.02% |
| 1958 | 63,196,812 | 11,350 | 0.02% |
| 1959 | 70,029,999 | 27,031 | 0.04% |
| 1960 | 80,929,440 | 74,151 | 0.09% |
| 1961 | 93,335,850 | 116,142 | 0.12% |
| 1962 | 101,491,383 | 164,668 | 0.16% |
| 1963 | 113,664,332 | 185,262 | 0.16% |
| 1964 | 130,211,730 | 84,845 | 0.07% |
| 1965 | 138,352,706 | 83,331 | 0.06% |
| 1966 | 158,070,528 | 126,735 | 0.08% |
| 1967 | 181,819,455 | 159,936 | 0.09% |
| 1968 | 213,146,085 | 670,008 | 0.31% |
| 1969 | 250,425,141 | 2,462,897 | 0.98% |
| 1970 | 295,818,075 | 1,542,228 | 0.52% |

Sources: *Economic Statistics Annual, 1967 and 1970*, published by the Bank of Japan [extracted from Takayanagi (1975, pp. 62-3)]; *The Penn World Tables* (University of Toronto); calculation made by the author.

Note: include reinvestments

Together with the first measures for capital deregulation, MITI issued in 1967 guidelines for foreign investors, which were known as “MITI’s Ten Commandments”. They were composed of 10 different rules that foreign investors should follow while developing economic activities in Japan. Those specific standards were used for the screening and validation of applications.

It was only in 1973 that Japan (officially) liberalized capital inflows completely, with the exception of a few industries. By that time most of the domestic industries were strong enough to withstand competition with foreign investors.

In spite of all the government pledges, liberalization of FDI is limited and frequently exists only formally. Obstacles for foreign investors remain enormous. The keiretsu system, with its well-established relationships of cooperation in production and distribution, is a real barrier that has to be overcome by newcomers.³

³ see Tsuru (1996)

3) Conclusion and lessons for Brazil

Japan's industrial policy was successful and fundamental for rapid economic growth, and was facilitated by both a long-term tradition of a strong and interventionist government and a favorable international environment. A pure and simple applicability of those policies for the present Brazilian situation would not be possible or advisable. Nevertheless, some lessons can be taken into consideration while formulating new macroeconomic policies:

1. The importance of choosing strategic sectors for the country to develop and to compete in the international market. It is not possible to be self-sufficient or to have comparative advantages in all economic sectors, but the country should specialize in selected economic activities with high-value added giving it favorable terms of trade;
2. A country does not need to constrain itself by its present factor endowment when formulating an industrial policy. Comparative advantages may be changed in the international arena, depending on the achievements of development strategies. The industrial policy promoted by MITI caused Japan to shift its comparative advantages from textiles to machinery, automobiles, electronics and so on.
3. Incentives should be given preferably to chosen economic activities, rather than to certain regions. If there are regional disparities, they have to be eased through government investment in infrastructure and basic services. One cannot expect all the country's regions to have the same factor endowment or similar development pattern. Comparative advantages of the regions should be taken into consideration when formulating a development strategy. Nowadays Hokkaido does not have heavy industries, but it is Japan's largest food producer, and it is also home to the forestry industry, as well as fishing and mining. To adopt Kanto's area industrialization pattern in this Northern island would be very costly and counterproductive.
4. Common sense says that capital liberalization and introduction of foreign technologies are positively correlated. That was not the case of Japan, though. Capital inflows and outflows were strictly controlled, which did not

prevent the import of substantial intellectual property. It can be explained by the guidance of the MITI and its industrial policies. Amongst the Special Depreciation Measures, two were concerning technological innovation: the Special Depreciation for R&D and the Special Depreciation for Innovative Tools and Equipment (for more details, see chapter 2, section 3). In addition, through the foreign currency allocation system the MITI selected industries and technology, it allocated the scarce hard currency according to the government's policy goals. Royalty payments were also restricted.

5. There seems to have been common objectives, aspirations and goals amongst government, businesses, political parties, workers, in regards to developing Japan's economy, promoting national interests and surpassing Western economic powers. Those common aims would not be easily transplantable to Brazil.
6. Japan's rapid economic growth era was not accompanied by capital liberalization. The government started to liberalize FDI in 1967, and further liberalization occurred in 1973. The year of broader capital liberalization coincides with the end of the rapid growth era. It shows that it is possible to have a strategy of development that enhance the domestic market and protect national industries, while maintaining a balance of payments equilibrium.

CHAPTER 2

JAPAN'S TAX SYSTEM

1) Introduction

Japan's tax system has change substantially since the Meiji Restoration. Before 1868, land revenue accounted for more than 80 percent of the total revenue.

Rapid economic development during the Meiji period caused a significant change in the tax system. Revenues from land decreased steadily as a proportion of the total collection. Until 1908, it was the main source of tax revenue. After this turning point, indirect taxes became predominant, up to the end of World War II.

The change in Japan's tax system in the postwar period is part of the democratization reforms that were prerequisites for the successful reconstruction and accelerated growth. In the previous taxation policy, the burden of taxes (mainly indirect) usually fell on the general public. The later system took into consideration the contributive capacity of the individual, redistributed wealth and contributed to enhance a strong domestic market.

2) Tax reforms of the occupation forces and Shoup recommendations

Justice and equity were two major concerns of the Supreme Commander of the Allied Power (SCAP) when reforming Japan's system. The pre-war tax structure was seen as highly regressive, with the great burden of tax falling on those least able to pay. Also, the lack of autonomy of local governments, dependent on the central authorities for maintaining their activities, was criticized.

The redistribution of the national income came through the introduction in 1946 of a net wealth worth tax. It was levied on those who owned more than 100,000 yen. Its tax rates were extraordinarily progressive, ranging from 25 percent to 90 percent. The most affected were the royal family and the zaibatsu. On the other hand, a highly progressive personal income tax was implemented, with the top bracket achieving 85 percent.

After the establishment of the initial reforms by the occupation forces, Carl S. Shoup, a professor of Columbia University, in 1949 headed a mission of tax

specialists to Japan in charge of making recommendations for the restructuring of the Japanese tax system. Due to the Shoup reforms, Japan's tax burden shifted from indirect to direct taxation. A particular emphasis was given upon the equity principle of taxation.

Still now, at the end of the century, the report Shoup submitted after the completion of his mission is taken as a reference for tax reforms in Japan. That is the case of the introduction of the Japanese consumption tax.

The main points of his recommendations were:

- Making individual income tax and corporation income tax the centerpiece of the whole tax structure. The highest tax rate of personal income tax was 55 percent;
- Introduction of a Value Added Tax, at the local level; it had the purpose of strengthening of local autonomy; the law was enacted in 1950, but its enforcement was postponed several times, and it was finally repealed in 1952, without having been put into operation; it was later implemented, in 1989;
- Implementation of Asset Revaluation System: revaluation of land and fixed capital according to the war-time and postwar inflation;
- Institution of a net worth tax, levied by the national government on persons with large incomes from property. The tax rates ranged from 0.5 percent to 3 percent, on their net worth.
- Introduction of an accessions tax

The net-worth tax was implemented by the Japanese government at a rate of 1.6 percent. It was abolished in 1953. The reasons were the high administrative cost and the horizontal inequality, the latter because real property owners whose net worth is easily identified bore the full brunt while others escaped to some extent.

The personal income tax was adopted at rates varying from 20 percent to 55 percent. Its top bracket later raised, in 1953, to 65 percent, and increased again to 70 percent, in 1957, and to 75 percent, in 1962. However, its real burden decreased in the 1950s, because basic exemption was raised and income class intervals got wider.

The corporate income tax rate stood at 42 percent in 1952. It was later reduced: in 1955, to 40 percent for large firms and 35 percent for small companies, and in 1958, from 40 to 38 percent for large firms, and from 35 to 33 percent for small firms.

The accessions tax was divided into inheritance tax and gift tax, with tax rates ranging from 15 percent to 70 percent.

As a result of the reformulation of the tax system, the share of direct and indirect taxes in the total tax collection changed.

Table 6 Revenue from national taxes in terms of incidence (%)

| | 1934-36 | 1950 | 1955 | 1960 | 1970 | 1980 | 1990 | 1995 | 1997 |
|----------------|---------|------|------|------|------|------|------|------|------|
| DIRECT TAXES | 34.8 | 55 | 51.4 | 54.3 | 66.1 | 71.1 | 73.7 | 66.1 | 63.8 |
| INDIRECT TAXES | 65.2 | 45 | 48.6 | 45.7 | 33.9 | 28.9 | 26.3 | 33.9 | 36.2 |

Sources: Shibata (1990, p. 104) for 1934-36; National Tax Administration of Japan (1997, p. 8) for other years.

3) Tax policy for economic growth

Japan's taxation policy after World War II had distinct but interconnected features in accordance with the macroeconomic policies of the central government.

The Ministry of International Trade and Industry (MITI) played a significant role in the formulation of special tax measures. The MITI collected suggestions from business organizations, evaluated them and formulated a set of proposals, which were then transmitted to the Tax Bureau. The final proposals to be included in the budget are the result of negotiations between the MITI, the Tax Bureau and the Tax Advisory Commission.

As a tool for social policy, the tax system was centered in the high progressive income rate. As an instrument of the broader industrial policy, capital accumulation was privileged. Investment and technological innovation were necessary to promote capital accumulation.

The growth rate is defined by the Harrod-Domar model as the ratio of the gross saving ratio (α) and the capital-output ratio ($K/Y = \beta$) minus the depreciation of fixed assets (δ). So,

$$G = (\alpha/\beta) - \delta \quad (2.1)$$

By equation 2.1 it can be concluded that a high rate of savings is essential to sustain rapid growth.

One of the features of the postwar Japanese economy was precisely its high rate of savings in relation to the GDP. Japan's personal savings were unusually high in comparison with other advanced countries.

Table 7 Average propensity to save in selected countries (1950-60)

| | |
|--------------|------|
| Japan | 16.2 |
| USA | 7.4 |
| West Germany | 13.2 |
| France | 6.1 |
| UK | 2.9 |
| Canada | 7.6 |
| Holland | 10.2 |

Source: extracted from Komiya (1966, p. 175).

Income tax disincentive savings. The disposable income of today

$$(1 - t)Y \quad (2.2)$$

where t = tax rate

Y = pre-tax income,

can be utilized for consumption or savings ($C_1 + S$), so

$$C_1 + S = (1 - t)Y \quad (2.3)$$

Savings plus interest rate earned are equal to consumption in the following period. Thus,

$$C_2 = (1+r)S \quad (2.4)$$

But if interest rates are taxed at a rate s ,

$$C_2 = (1-s)(1+r)S \quad (2.5)$$

Therefore, income tax on interest rates result in less consumption in period 2. The result is that individuals and companies are less willing to save.

How did the Japanese taxation policy encourage personal savings?

The Special Taxation Measures Law was first enacted in 1952, with the declared aim of promoting economic growth.

Some measures adopted were:

- Separate taxation of interest income from other incomes. The former was taxed at a flat rate of 10 percent, substantially lower than the ordinary income brackets. Interest income was tax-free during the period 1955-59. Its taxation resumed in 1960. In 1963-64, the tax on interest income was reduced for two

years from a flat 10 percent to a flat 5 percent. Interest income continued to be given special treatment throughout the 60s;

- Exemption, up to a certain limit, of postal savings interest tax; the exemption limit increased, from 30,000 yen in 1950 to 500,000 yen in 1962;
- Special provisions for dividend income; reduced from 15 percent to 10 percent in 1955-59, and the exemption for that period was increased from 25 percent to 30 percent; in 1963-64, again its rates were reduced to a flat 10 percent and the exemption raised to 30 percent; dividend income continued to be given special treatment during the rapid growth era; those measures were taken in the view that they would help industries to endure international competition that would come with the coming trade liberalization;
- Tax exemption for capital gains; Professor Shoup recommended a consolidated income tax; capital gains were exempted from 1953 to 1969.

Savings within the business sector are also important for capital accumulation. Allowance of higher depreciation rates and special depreciation measures were important instruments of Japan's tax policy to foster firms' internal savings. Accelerated depreciation tends to be more effective than reduction in corporate income tax to promote capital accumulation. The first reduces the tax amount on gross income profits, but produces a nominal decline in net profits after tax and depreciation, thus discouraging external profits distribution and encouraging internal savings; the second increases net profits (after tax), encouraging profit distribution amongst shareholders.

On account of that, special measures laws, rather than reduction in tax rates, were extensively utilized as a way to enhance companies' internal savings, promote industrial modernization, specially in strategic sectors, and increase exports.

The Enterprise Rationalization Promotion Law, established in 1952, introduced a special depreciation system, allowing higher rates of depreciation for plant and equipment modernization. Using higher depreciation rates, firms could reduce their pre-tax profits and consequently tax payment.

Moreover, in order to promote corporate retaining earnings, two measures were taken: a general reduction in the corporate tax on retained earnings of corporations and the introduction of various tax-free reserves or allowances within the corporation.

The table below shows us that Japanese firms extensively used the Special Tax Measures.

Table 8 Utilization of the Special Tax Measures by major corporations

| | (% of gross income) | | | | | | | | | |
|---|---------------------|----------|-----------------|-------|------------|-------|---------------------------------|----------|----------------|---------|
| | Mining | Spinning | Chemical fibers | Paper | Fertilizer | Steel | Electric Machinery & appliances | Commerce | Electric power | Banking |
| Gross Income | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Tax-exempt income from staple products, capital increase, dividends, export, etc. | 0.6 | 24.1 | 114.4 | 3.4 | 45.1 | 18.4 | 4.7 | 27.1 | 17.6 | 4 |
| Reserve funds of all kinds | 66.8 | 6.7 | -26.4 | 41.5 | 0.8 | 8.5 | 14.3 | 14.2 | 22 | 29.2 |
| Inclusions for expense account losses | -4.2 | | | -5.3 | -5.4 | | | -1.7 | -1.2 | -0.9 |
| Special depreciation | 4.9 | 5.7 | 3 | | | 13.2 | 11.3 | | | 0.3 |
| Taxable income | 31.9 | 63.5 | 9 | 60.4 | 59.5 | 59.9 | 69.7 | 60.4 | 61.6 | 67.4 |
| Estimated effective tax rate | 17.8 | 31.2 | 4.4 | 29.8 | 29.3 | 29.5 | 34.3 | 29.8 | 30.4 | 33.2 |

Source: Tax Bureau survey. Extracted from Nakamura (1995, p. 49).

Exports were promoted, in order to solve the problem of the balance of payments constraint. The Export Deduction System was introduced in 1953, by which firms were allowed to subtract from pre-tax income part of the revenue earned through exports. Companies could deduct 3 percent of their gross sales abroad, up to 80 percent of their net operating income from exports. Moreover, a system of reserves against export losses was set up.

Other special measures laws:

- Special Depreciation for Research and Development (1952)
- Special Depreciation for Innovational Tools and Equipment (1958)

Those two systems allowed the companies to recover in a short period funds invested accordingly. The outcome was positive: the ratio of research expenditures to plant-and-equipment investment in the manufacturing industry increased from 4.7 percent in 1957 to 8.1 percent in 1960.⁴(Komiya 1966, p. 54)

⁴ For more information about R&D, see chapter 1, section 2.1.1.

Another tax measure that, in the view of Sei Fujita (in Komiya 1966, pp. 32-59) contributed to economic growth was the delay in the application of a commodity tax on new durable consumption goods until their domestic market expanded to a sufficient large scale. “These preferential tax measures toward those new durable goods whose price-elasticity of demand is high undoubtedly contributed to rapid growth by enhancing the firms’ expansion as well as cost reductions, which in turn led to further industrialization of the country and a rise in Japanese exports.” (p. 45)

As shown in table 6 it can be seen a momentary reversal in the shift of tax burden from indirect to direct taxes. In 1950 (before the special laws) the percentage of direct taxes in the national tax revenue was 55 percent, higher than in 1955 and 1960. In spite of that, indirect taxes never exceeded direct taxes after the implementation of the SCAP tax reforms.

Broadly speaking, Special Taxation Measures tend to harm the equity principle of taxation, at least temporarily. Corporate internal savings are privileged in relation to social welfare. In the case of Japan’s growth, however, tax benefits for corporations did not withstand workers well being. It may be explained by the fact that ownership is separate from managerial position. Managers in Japan were more concerned with the growth of the firm rather than with profit making, and the firm’s growth was distributed fairly amongst the population.

Since 1952 the amount of income and reserve funds exempted from payment of corporate income tax increased steadily. In 1960 it totaled 1,016 billion yen, against the 822 billion yen collected in indirect taxes by the national government in that year. (National Tax Administration of Japan 1997, p. 8 and Yamamura 1967, p. 146)

Table 9 Amount of income and reserve funds exempted from corporate taxes
In current billion yen

| | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| Income exempted | 7 | 12 | 18 | 33 | 51 | 81 | 52 | 47 | 49 | 69 | 37 | 58 |
| Deduction for reserve funds | 90 | 191 | 301 | 405 | 531 | 628 | 720 | 834 | 967 | 1,108 | 1,195 | 1,137 |
| Total | 97 | 202 | 319 | 439 | 582 | 709 | 772 | 881 | 1,016 | 1,177 | 1,232 | 1,195 |

Source: Japan Tax Research Association; extracted from Yamamura (1967, p.146).

A study by the Tokyo Metropolitan Government calculated that, in 1974, the overall corporate tax relief due to Special Taxation Measures Laws was 23.6 percent of the actual corporate income tax paid. The same study estimates that the average percentage of tax relief was 4.5 percent for the smallest firms, against 42.1 percent for the biggest corporations. (Tsuru 1994, p. 107)

It matches with a report of the Tax System Commission, according to which the effective rates of the corporate taxes was 31.3 percent in 1963 for large firms and 38 percent for small firms .(Yamamura 1967, p. 148)

Other research of Pechman & Kaizuka (in Patrick & Rosovsky 1976) concluded that “Large corporations derive greater benefit from the special tax measures than small ones...special depreciation accounted for only 3.5 percent of the depreciation reported by the small corporations and 16.5 percent of the depreciation reported by the largest corporations.” (pp. 357-8)

The results described above are due to the fact that companies with high profits (usually large companies) could enjoy more the accelerated depreciation.

The table below shows us that tax benefits for capital accumulation produced the desired effects.

Table 10 Fluctuations in plant and equipment investment by industry

| | In current billion yen | | | | | | | |
|----------------------------------|------------------------|-------|-------|-------|-------|-------|-------|-------|
| | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 |
| Total for key industries* | 177 | 225 | 253 | 213 | 228 | 351 | 482 | 518 |
| Total including other industries | 439 | 496 | 617 | 530 | 599 | 1,026 | 1,265 | 1,279 |
| Percentage for key industries | 40.3% | 45.4% | 41.0% | 40.1% | 38.1% | 34.2% | 38.1% | 40.5% |

Source: extracted from Nakamura (1995, p. 47). Table organized by the author.

*Key industries here referred are steel, marine transport, electric power and coal.

From the implementation of the first special taxation measures and up to 1958, investment in plant and equipment increased steadily. The percentage utilized by key industries remained constant, around 40 percent.

From 1951 to 1973, plant and equipment investment grew at an annual rate of 22 percent (Nakamura 1995, p. 55).

4) Present tax structure

Taxes are levied by national and local (prefectural and municipal) governments. The figures mentioned here are related to the fiscal year 1997.

The main taxes are:

a) The income tax system

- Taxes on corporate income

The corporate income tax produced in 1997 the second largest amount of tax revenue in the national tax collection. Tax rates for ordinary corporations vary from 28 percent to 37.5 percent. Family corporations are subjected to an additional special tax on retained profits exceeding a prescribed level.

The Prefectural Inhabitants tax and the Municipal Inhabitants tax both have as tax basis the corporation tax before tax credits. The tax rates of the former range from 5 percent to 6 percent, and the later has brackets from 12.3 percent to 14.7 percent. Therefore, the total local income tax may vary from 17.3 percent to 20.7 percent. In addition, a per capita tax rate is charged by prefectures (from 20,000 yen to 800,000 yen) and by municipalities (from 50,000 yen to 3,600,000 yen).

The Prefectural Enterprise Tax is levied on corporations engaged in business and having an office in Japan. The tax base is almost the same as for the national corporation tax. The tax rates for ordinary corporations range from 6 percent to 12 percent

- Taxes on personal income

Income tax is the main source of revenue for the central government. Its tax rates range from 10 percent (annual income under 3,300,000 yen) to 50 percent (annual income over 30,000,000 yen). There are numerous tax credits and exemptions, aimed at taking into consideration the contributive capacity of the individual.

Individuals are also subjected to payment of Prefectural and Municipal Inhabitants Tax. The tax basis is the previous years' income. Prefectures charge a per capita tax of 1,000 yen per annum and tax rates on the taxable income of 2 percent and 3 percent. Municipalities levy a per capita tax of 2,000 yen to 3,800 yen and tax rates on the taxable income of 3 percent to 12 percent.

Prefectures levy enterprise tax on individuals engaged in certain types of business or professions. The tax base is the income earned minus necessary expenses. Tax rates range from 3 to 5.5 percent.

- The cooperation system of Japanese income tax

As we can observe, taxation on income in Japan is extremely interconnected, with local governments depending on the national assessment for calculating their own taxable income.

The cooperation system of Japan's income tax is an example of how cooperation can work to reduce taxpayer's burden and increase efficiency of tax collection.

There is an official assessment for local inhabitants tax. The local governments have to file returns based on the taxpayers' previous year income. The national government sends a copy of the file returns of income tax to local governments for them to assess the inhabitants tax. Inhabitants tax depends on the national tax collection, on the national withholding system.

Prefectural and municipal governments are usually cooperative. For instance, they receive individual income tax returns.

Local governments receive assorted information from the national government and provide information likewise.

The described system saves a great deal of work for taxpayers. They have only to file returns for the national government.

b) Taxation on Property

- Inheritance tax (National)

The tax base is the total value of all properties acquired through inheritance or bequest, less liabilities and funeral expenses. Tax rates range from 10 percent (taxable amount of each heir not over 8,000,000 yen) to 70 percent (taxable amount of each heir over 2,000,000,000 yen).

- Gift tax (national)

The taxable amount is gift properties acquired in a calendar year. Tax rates vary from 10 percent (taxable amount of each heir not over 1,500,000 yen) to 70 percent (taxable amount of each heir over 100,000,000 yen).

- Property tax (municipal)

Taxable assets are land, houses and tangible business assets that are depreciable for individual and corporate income tax. The standard rate is 1.4 percent and the ceiling rate is 2.1 percent.

c) Taxes on consumption

- The Japanese Consumption Tax

In 1949, Prof. Shoup recommended Japanese government to adopt a VAT as a local tax (see section 2). Although the VAT law was approved in the Diet, it was never implemented. It was repealed in 1952.

Recently, there were two failed attempts to implement the VAT in Japan, in 1980, named general consumption tax, and in 1986, named sales tax. Consumption tax was finally introduced as a result of the tax reforms of fiscal year 1989.

When it was established, the tax rate was 3 per cent. In 1997, the tax rate of Japanese consumption tax increased to 4 percent for the national consumption tax and 1 percent for local (prefectural) consumption tax (the last corresponds to 25 percent of national consumption tax, as defined by law).

The tax basis for consumption tax on transfers of taxable assets shall be the price amount received for the transfers of taxable assets.

Local governments have no administration costs. The National Tax Administration has to make all the necessary calculations and transfers to local government.

To avoid the accumulation of taxes imposed at the stage of production and distribution an input tax credit system is applied (consumption tax on purchase shall be deducted from those on sale).

The efficiency of the Japanese consumption tax is impressive. Despite the low rate, in 1997 it was third largest source of revenue in Japan and was responsible for 11 percent of the total tax collection.

Small and medium enterprises may deduct a fixed portion of their sales from their purchase tax amount. It is the **simplified tax system**, by which enterprises whose taxable sales (net after taxes) during the base period are less than 200 million yen may choose to regard a defined percentage of taxes on sales as tax on taxable purchases.

The deemed purchase rates are as follows:

- Wholesalers: 90 percent
- Retailers: 80 percent

- Manufacturers: 70 percent
- Others: 60 percent
- Service industry: 50 percent

The simplified tax system was instituted as a compromise, due to the opposition of part of the society against the implementation of the consumption tax itself. It is a negative point of Japan's VAT system, owing to the lack of scientific calculation of the deemed purchase rates.

Table 11 Tax revenues in Japan (1997)

| TAX ITEM | Amount | Classification of taxes | In billion yen | |
|--|---------------|-------------------------|---------------------|------------------------|
| | | | % of national taxes | % of total tax revenue |
| NATIONAL TAXES (total) | 59,492 | | | 61.6% |
| Direct Taxes (total) | 37,927 | | 64% | |
| Income Tax | 20,882 | I | 35% | 22% |
| Corporate Tax | 14,432 | I | 24% | 15% |
| Inheritance Tax and Gift Tax | 2,461 | P | 4% | 3% |
| Land Value Tax | 152 | P | 0% | 0% |
| Indirect Taxes (total) | 21,565 | | 36.2% | |
| Consumption Tax | 9,813 | C | 16.5% | 10.2% |
| Liquor Tax | 2,063 | C | 3.5% | 2.1% |
| Tobacco Tax | 1,062 | C | 1.8% | 1.1% |
| Gasoline Tax | 1,956 | C | 3.3% | 2.0% |
| Liquefied Petroleum Gas Tax | 16 | C | 0.0% | 0.0% |
| Aviation Fuel Tax | 88 | C | 0.1% | 0.1% |
| Petroleum Tax | 535 | C | 0.9% | 0.6% |
| Bourse Tax | 42 | T | 0.1% | 0.0% |
| Securities Transaction Tax | 351 | T | 0.6% | 0.4% |
| Motor Vehicle Tonnage Tax | 839 | T | 1.4% | 0.9% |
| Customs Duty | 1,093 | C | 1.8% | 1.1% |
| Tonnage Due | 9 | T | 0.0% | 0.0% |
| Stamp Revenue | 2,019 | O | 3.4% | 2.1% |
| Local Road Tax* | 280 | C | 0.5% | 0.3% |
| Liquified Petroleum Gas Tax* | 16 | C | 0.0% | 0.0% |
| Aviation Fuel Tax* | 16 | C | 0.0% | 0.0% |
| Motor Vehicle Tonnage Tax* | 280 | C | 0.5% | 0.3% |
| Special Tonnage Duty*(s) | 11 | T | 0.0% | 0.0% |
| Customs Duty on Oil(s) | 67 | C | 0.1% | 0.1% |
| Promotion of Power Resource Development Tax(s) | 353 | T | 0.6% | 0.4% |
| Gasoline Tax(s) | 657 | C | 1.1% | 0.7% |

LOCAL TAXES

In billion yen

| TAX ITEM | Amount | Classification | % of Prefectural Taxes | % of total tax revenue |
|--|---------------|----------------|------------------------|------------------------|
| PREFECTURAL TAXES (total) | 16,071 | | 100.0% | 16.7% |
| Direct Taxes (total) | 12,518 | | 77.9% | |
| Prefectural Inhabitants Tax | 4,228 | I | 26.3% | 4.4% |
| Enterprise Tax | 5,677 | I | 35.3% | 5.9% |
| Real Property Acquisition Tax | 909 | T | 5.7% | 0.9% |
| Automobile Tax | 1,689 | P | 10.5% | 1.8% |
| Mine-Lot Tax | 1 | P | 0.0% | 0.0% |
| Hunters' License Tax | 2 | T | 0.0% | 0.0% |
| Prefectural Property Tax | 12 | P | 0.1% | 0.0% |
| Indirect Taxes (total) | 3,554 | | 22.1% | |
| Local Consumption Tax | 1,003 | C | 6.2% | 1.0% |
| Earmarked Taxes** | 2,078 | T | 12.9% | 2.2% |
| Prefectural Tobacco Excise Tax | 247 | C | 1.5% | 0.3% |
| Golf Course Utilization Tax | 97 | C | 0.6% | 0.1% |
| Special Local Consumption Tax | 129 | C | 0.8% | 0.1% |
| MUNICIPAL TAXES (total) | 20,943 | | 100.0% | 21.7% |
| Direct Taxes (total) | 18,516 | | 88.4% | |
| Municipal Inhabitants Tax | 9,541 | I | 45.6% | 9.9% |
| Property Tax | 8,680 | P | 41.4% | 9.0% |
| Light Vehicle Tax | 111 | P | 0.5% | 0.1% |
| Mineral Product Tax | 2 | T | 0.0% | 0.0% |
| Special Landholding Tax | 114 | P | 0.5% | 0.1% |
| Transitional revenue from repealed taxes, and others | 69 | O | 0.3% | 0.1% |
| Indirect Taxes (total) | 2,427 | | 11.6% | 2.5% |
| Municipal Tobacco Excise Tax | 815 | C | 3.9% | 0.8% |
| Earmarked Taxes*** | 1,612 | T | 7.7% | 1.7% |

Source: NTA Japan

*Distributed to the local governments

**Include Automobile acquisition tax, Light-oil Delivery Tax, etc. Because this item includes several taxes, there is no precise classification for it, but most of the taxes are indirect and on Transfer of Goods

***Include Bathing Tax, Business Office Tax, Urban Planning Tax, etc. Also most of those taxes are indirect and on transfer of goods

Classification:

I: Taxes on Income

P: Taxes on Property

C: Taxes on Consumption

T: Taxes on Transfer of Goods

O: Others

Base on the data of the table 11, we have:

Table 12 Classification of taxes (1997)

| In billion yen | | | |
|-----------------------------------|---------------|-------------------------------|--------------|
| IN TERMS OF INCIDENCE | Amount | % of total tax revenue | % GDP |
| TOTAL TAX REVENUE | 96,507 | 100.0% | 24.4% |
| TOTAL DIRECT TAXES | 68,961 | 71.5% | 17.4% |
| TOTAL INDIRECT TAXES | 27,546 | 28.5% | 7.0% |
| IN TERMS OF TAXABLE OBJECT | Amount | % of total tax revenue | % GDP |
| TOTAL TAXES ON INCOME | 54,760 | 56.7% | 13.8% |
| TOTAL TAXES ON CONSUMPTION | 20,232 | 21.0% | 5.1% |
| TOTAL TAXES ON PROPERTY | 13,219 | 13.7% | 3.3% |
| TOTAL TAXES ON TRANSFER OF GOODS | 6,208 | 6.4% | 1.6% |
| OTHERS | 2,088 | 2.2% | 0.5% |

Calculation made by the author, based on the data of the table 11 and other information of Japan's NTA

Social Security revenue, which was equivalent to 13.8 percent of Japan's GDP, is not included in the estimation.

Direct taxes are strongly predominant in Japan's tax collection. Numbers differ from table 6, where only national taxes are included.

The share of taxes on income and on property is according to international standards (for an international comparison, see chapter 4).

CHAPTER 3

BRAZILIAN ECONOMY IN THE 1990s

1) Brazil and the MERCOSUR

Brazil's GDP was in 1997 US\$ 800 billion. Presently it is the most powerful country in Latin America. It is the leader of the MERCOSUR (Southern Cone Common Market), an economic bloc also comprised of Argentina, Uruguay and Paraguay as effective members. Since it was set up, in 1991 trade within MERCOSUR members has increased substantially. It reached US\$ 4 billion in 1990, US\$ 12 billion in 1994, US\$ 14 billion in 1995 and US\$ 17 billion in 1996.

Members of the MERCOSUR continue efforts to deepen and widen their integration scheme. The establishment of a MERCOSUR development bank has been announced to finance integration-related investment projects, as well as a secretariat, with headquarters in Montevideo, which is to provide administrative support to the integration process. In 1996, MERCOSUR signed a free trade agreement with Chile and Bolivia. With the incorporation of these two countries as associate members of the MERCOSUR, the subregion has taken the first step in plans to create a much wider integration scheme. The area of free trade that will emerge from these agreements incorporates half of Latin America's population and almost 60 percent of its GDP. MERCOSUR has also entered into expansion talks with the Andean group (Colombia, Ecuador, Peru, Bolivia, Venezuela). An agreement between members of the two blocs could establish an area of free trade encompassing virtually all of South America.

One of the challenges faced by the MERCOSUR is the lack of macroeconomic policy coordination. Argentina has its currency strictly pegged to the US dollar, while Brazil let the "real" fluctuate after facing a deep financial crisis. The currency problem, along with a tax competition for new FDI between the two countries, have put in jeopardy plans for further integration.

In terms of new investments, worth noting are:

1. External investments in the automobile sector;

2. External investments in the financial services sector, mainly in Argentina, but also in Brazil;
3. Investments, external and local, related to the privatization of public services;
4. Investments recently made in the Argentine mining industry.

2) The inflation trend and the implementation of the Real Plan

Prior to the 1980s, most developing countries favored a stronger government role in economic development and maintained trade restrictions and control of capital movements. This situation began to change in the early 1980s, particularly with the emergency of the governments of Ronald Reagan and Margaret Thatcher. Trade and capital liberalization, deregulation, privatization of state-owned enterprises, became a framework of new economic policies that would be suggested or enforced in developing countries. These sorts of economic measures are called “**Washington Consensus**” policies. International organizations, such as the International Monetary Fund (IMF) and the World Bank, have provided new loans with the proviso that borrowers implement “structural adjustment” programs.

With this new international environment, Brazil was suffering from a hyperinflation process. In order to wipe out price hikes, the Brazilian Government implemented the “Real Plan”, in 1994. Inflation was effectively controlled, at least in the short run. However, the strategy used by the Brazilian government was to appreciate the national currency and to anchor it to the dollar.

Apart from the overvaluation of the “Real”, other measures adopted were:

- a) Decrease of customs duties and liberalization of international trade; in 1990, the average tariff on importation was 32.2 percent. In July 1995, it had decreased to 12.6 percent.⁵ In the same period, all the non-tariff barriers were eliminated;
- b) Rise of interest rates;
- c) Privatization of state-owned enterprises;

⁵ Source: Secretariat of International Trade - Ministry of Development, Trade and Industry. Extracted from Lyra (1996, p. 9).

d) Liberalization of capital inflows and outflows.

Free trade and appreciation of the national currency reduced import prices. The trade balance worsened, which caused sharp increases in current account deficits. These deficits can only be financed by foreign capital. To attract capital from abroad, Brazil's government kept domestic interest rates at a very high level for international standards. As a result, internal debt skyrocketed. On top of the harmful effects to public finances, high interest rates tend to shrink the aggregate investment in the economy.

Table 13 Federal internal securities debt

| In current R\$ million | | | | | | |
|------------------------|-------|--------|---------|---------|---------|---------|
| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| 164 | 4,988 | 61,782 | 108,486 | 176,211 | 255,509 | 302,601 |

Source: Central Bank of Brazil (1998).

Note: As of December each year; 1998: August

In terms of economic growth the indexes show a decrease in real per capita GDP from 1987 to 1992, and a relative recovery from 1993 to 1997. However, per capita income in 1998 was only 3.8 percent higher than in 1987.

Table 14 Real per capita GDP

| Real index 1998=100 | | | |
|---------------------|------|------|-------|
| 1987 | 96.3 | 1993 | 91.1 |
| 1988 | 94.5 | 1994 | 95.0 |
| 1989 | 95.8 | 1995 | 97.7 |
| 1990 | 90.5 | 1996 | 99.0 |
| 1991 | 90.0 | 1997 | 101.2 |
| 1992 | 88.1 | 1998 | 100.0 |

Source: IBGE (Brazilian Institute of Geography and Statistics).

3) The balance of payments and the external debt

Table 15 Balance of payments (1991 to 1998)

In US\$ million

| Itemization | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Trade balance – FOB | 10 579 | 15 239 | 13 307 | 10 466 | -3 352 | -5 554 | -6 848 | -6 591 |
| Exports | 31 620 | 35 793 | 38 563 | 43 545 | 46 506 | 47 747 | 52 990 | 51 120 |
| Imports | 21 041 | 20 554 | 25 256 | 33 079 | 49 858 | 53 301 | 59 838 | 57 711 |
| Services (net) | -13 542 | -11 339 | -15 585 | -14 743 | -18 594 | -20 483 | -26 284 | -28 798 |
| Interest | -8 621 | -7 253 | -8 280 | -6 338 | -8 158 | -9 173 | -10 390 | -11 948 |
| Other services ¹ | -4 921 | -4 086 | -7 305 | -8 405 | -10 436 | -11 310 | -15 894 | -16 850 |
| Unrequited transfers | 1 556 | 2 243 | 1 686 | 2 588 | 3 974 | 2 900 | 2 216 | 1 778 |
| Revenues | 1 599 | 2 315 | 1 792 | 2 751 | 4 225 | 3 168 | 2 542 | 2 221 |
| Expenditures | 43 | 72 | 106 | 163 | 251 | 268 | 326 | 442 |
| Current transactions | -1 407 | 6 143 | - 592 | -1 689 | -17 972 | -23 136 | -30 916 | -33 611 |
| Capital | -4 148 | 25 271 | 10 115 | 14 294 | 29 359 | 33 868 | 25 882 | 20 232 |
| Investment (net) | 170 | 2 972 | 6 170 | 8 131 | 4 663 | 15 540 | 20 662 | 20 759 |
| Reinvestment | 365 | 175 | 100 | 83 | 384 | 531 | 151 | 124 |
| Financing | 2 026 | 13 258 | 2 380 | 1 939 | 2 834 | 4 307 | 19 619 | 20 695 |
| Foreign | 2 125 | 13 191 | 2 625 | 2 389 | 3 513 | 4 518 | 20 185 | 23 449 |
| New inflows | 2 125 | 1 608 | 1 435 | 2 389 | 3 513 | 4 518 | 20 185 | 23 449 |
| Refinancing | - | 11 583 | 1 190 | 0 | 0 | 0 | 0 | 0 |
| Brazilian | -99 | 67 | - 245 | - 450 | - 679 | - 211 | - 566 | - 2 755 |
| Amortizations | -7 830 | -8 572 | -9 978 | -50 411 | -11 023 | -14 419 | -28 714 | -33 587 |
| Paid | -7 830 | -7 147 | -9 268 | -11 001 | -11 023 | -14 419 | -26 021 | -33 587 |
| Refinancing (including Paris Club) | - | -1 425 | - 710 | -39 410 | 0 | 0 | -2 693 | 0 |
| Long and medium- term loans | 3 997 | 14 975 | 10 790 | 52 893 | 14 736 | 22 841 | 28 870 | 41 673 |
| Brazilian banks | 0 | 294 | 0 | 5 752 | 0 | 0 | 0 | 0 |
| New inflows | - | 294 | - | 0 | 0 | 0 | 0 | 0 |
| Refinancing | - | - | - | 5 752 | 0 | 0 | 0 | 0 |
| Foreign commercial banks | 0 | 7 703 | 834 | 38 758 | 1 737 | 814 | 2 434 | 5 752 |
| New inflows | - | 603 | 834 | 2 034 | 1 426 | 565 | 2 434 | 5 752 |
| Refinancing | - | 7 100 | - | 36 724 | 311 | 249 | 0 | 0 |
| Intercompany | 308 | 871 | 1 064 | 632 | 1 133 | 1 578 | 3 062 | 6 656 |
| Others ² | 3 689 | 6 107 | 8 892 | 7 751 | 11 866 | 20 449 | 23 374 | 29 265 |
| Short-term capital | -3 033 | 2 602 | 869 | 909 | 18 834 | 5 358 | -18 929 | -27 333 |
| Other capitals | 157 | - 139 | - 216 | 750 | -1 069 | - 290 | 4 224 | -2 099 |
| Errors and omissions | 876 | -1 386 | -1 119 | 334 | 2 093 | -1 715 | -2 811 | -3 906 |
| Surplus (+) or deficit (-) | -4 679 | 30 028 | 8 404 | 12 939 | 13 480 | 9 017 | -7 845 | -17 285 |
| Financing | 4 679 | -30 028 | -8 404 | -12 939 | -13 480 | -9 017 | 7 845 | 17 285 |
| Assets (- = increase) | 369 | -14 670 | -8 709 | -7 215 | -12 919 | -8 666 | 7 907 | 7 970 |
| Liabilities – IMF | -590 | - 406 | - 495 | - 129 | - 47 | - 72 | - 34 | 5 |
| Short-term liabilities | 4 900 | -14 952 | 800 | -5 595 | - 514 | - 280 | - 28 | - 14 |
| Arrears | 5 621 | -14 253 | 1 133 | -5 653 | - 510 | - 286 | 0 | 0 |
| Others | -721 | - 699 | - 333 | 58 | - 4 | 6 | - 28 | - 14 |
| Exceptional financing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 324 |

Source: Central Bank of Brazil (1997 and 1999).

Notes: ¹ Includes reinvested earnings.

² Includes bonds, commercial paper and fixed/floating rate notes.

Table 16 Services (1993 to 1998)

| In million US\$ | | | | | | |
|----------------------------------|---------|---------|---------|---------|---------|---------|
| Itemization | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| Total (A+B) | -15 585 | -14 743 | -18 594 | -20 483 | -26 284 | -28 798 |
| Revenues | 5 273 | 6 662 | 8 708 | 10 377 | 11 889 | 13 222 |
| Expenditures | 20 858 | 21 405 | 27 302 | 30 859 | 38 173 | 42 020 |
| A-Interest | -8 280 | -6 338 | -8 158 | -9 173 | -10 390 | -11 948 |
| Revenues | 1 049 | 1 802 | 2 485 | 3 591 | 4 020 | 3 895 |
| Expenditures | 9 329 | 8 140 | 10 643 | 12 764 | 14 410 | 15 843 |
| B-Others | -7 305 | -8 405 | -10 436 | -11 310 | -15 894 | -16 850 |
| Revenues | 4 224 | 4 860 | 6 223 | 6 786 | 7 869 | 9 327 |
| Expenditures | 11 529 | 13 265 | 16 659 | 18 096 | 23 763 | 26 178 |
| International travel | - 799 | -1 181 | -2 419 | -3 598 | -4 377 | -4 146 |
| Revenues | 1 043 | 1 051 | 972 | 840 | 1 069 | 1 586 |
| Expenditures | 1 842 | 2 232 | 3 391 | 4 438 | 5 446 | 5 732 |
| Transportation | -2 090 | -2 441 | -3 011 | -2 755 | -3 509 | -3 259 |
| Revenues | 1 637 | 1 702 | 1 716 | 1 431 | 1 407 | 1 865 |
| Expenditures | 3 727 | 4 143 | 4 727 | 4 186 | 4 916 | 5 124 |
| Insurance | - 46 | - 132 | - 122 | - 63 | 74 | 81 |
| Revenues | 161 | 142 | 186 | 237 | 412 | 390 |
| Expenditures | 207 | 274 | 308 | 300 | 338 | 309 |
| Profits and dividends | - 46 | -2 483 | -2 590 | -2 374 | -5 597 | -7 181 |
| Revenues | 161 | 400 | 911 | 1 467 | 910 | 488 |
| Expenditures | 207 | 2 883 | 3 501 | 3 841 | 6 508 | 7 669 |
| Reinvested earnings | - 100 | - 83 | - 384 | - 531 | - 151 | - 124 |
| Government | - 345 | - 327 | - 339 | - 303 | - 350 | - 385 |
| Revenues | 54 | 91 | 130 | 203 | 501 | 548 |
| Expenditures | 399 | 418 | 469 | 506 | 851 | 933 |
| Sundry services | -2 094 | -1 758 | -1 571 | -1 686 | -1 984 | -1 837 |
| Revenues | 1 109 | 1 474 | 2 308 | 2 607 | 3 570 | 4 451 |
| Expenditures | 3 203 | 3 232 | 3 879 | 4 293 | 5 553 | 6 288 |
| Related to production factors | -1 543 | -1 617 | -1 270 | -1 458 | -1 842 | -1 579 |
| Revenues | 897 | 1 212 | 2 144 | 2 108 | 3 173 | 3 957 |
| Expenditures | 2 440 | 2 829 | 3 414 | 3 566 | 5 015 | 5 536 |
| Nonrelated to production factors | - 551 | - 141 | - 301 | - 227 | - 142 | - 258 |
| Revenues | 212 | 262 | 164 | 500 | 397 | 494 |
| Expenditures | 763 | 403 | 465 | 727 | 539 | 752 |

Source: Central Bank of Brazil (1999).

In tables 15 and 16, we can observe that:

1. Trade balance

Brazil previously had an enormous surplus on its trade balance. It was US\$ 10.6 billion in 1991, US\$ 15.2 billion in 1992, US\$ 13.3 billion in 1993, and US\$ 10.5 billion in 1994. Nevertheless, this state of affairs changed dramatically. Since

1995 Brazil has been facing trade balance deficits. It became one of the few countries in the world that has a trade deficit with the United States.

2. Services

A country does not necessarily need to have balanced trade. However, Brazil has always had huge deficits in the services account. In the last few years, the services deficit has soared. The negative result was US\$ 14.7 billion in 1994, US\$ 18.6 billion in 1995, US\$ 20.5 billion in 1996, US\$ 26.3 billion in 1997, and US\$ 28.8 billion in 1998.

3. Unrequited transfers

Unrequited transfers result has been stable, and has contributed to the alleviation of current transactions deficits.

4. Current transactions

The worsening in the trade balance and in the services account caused increasing current transactions deficits. It totaled US\$ 1.7 billion in 1994, and jumped to US\$ 18 billion in 1995, US\$ 23.1 billion in 1996, US\$ 30.9 billion in 1997, and US\$ 33.6 billion in 1998. The last result is approximately 4.5 percent of the GDP.

5. Capital

Capital account had positive results from 1992 to 1998. On the one hand, inflows of foreign capital have financed current transactions deficits, on the other, they have contributed to an increase in external liabilities.

6. Long and medium-term loans

We can see a sharp increase in long medium-term loans (LMTM). Brazil is accumulating more external debt and postponing payment. LMTM totaled US\$ 4 billion in 1991, US\$ 15 billion in 1992, and as much as US\$ 52.9 billion in 1994 and US\$ 41.7 billion in 1998.

7. Short term capital

Short term capital (STC) inflows were especially high in 1995 (US\$ 18.8 billion) and 1996 (US\$ 5.3 billion). The years 1997 and 1998 saw high outflows of STC (US\$ 18.9 billion and US\$ 27.3 billion), presumably because the reliance of foreign investors in the country's repayment capacity started to erode. The STC

that previously entered into Brazil increased its total amount substantially due to the high interest rates practiced domestically.

8. FDI and portfolio investment: see section 4

New foreign loans have caused Brazil's foreign debt to soar. Further increases can be expected in amortization and interest rate payments in the coming years.

Table 17 Total external debt

| In million US\$ | | | |
|-----------------|-----------|-------------|-----------|
| 1990 | 123 438.5 | 1994 | 148 295.2 |
| 1991 | 123 910.4 | 1995 | 159 256.2 |
| 1992 | 135 948.8 | 1996 | 179 934.5 |
| 1993 | 145 725.9 | 1997 | 199 997.5 |

Source: Central Bank of Brazil (1998). Table organized by the author.

Note: as of December each year

Current account deficits can only be financed by inflows of foreign capital. They may be temporarily sustainable, so long as they are utilized for increasing investments in the productive capacity of the country, preparing it for possible reversals in the capital movement. Brazil received large capital inflows in the 1970s and in most of the 1990s. In the 1980s, when foreign capital fled the country, Brazil faced a financial crisis accompanied by recession. During the 1998/99 crisis, once again capital outflows were greater than inflows. Accumulated current account deficits proved not to be sustainable, and the government had to request an IMF-led US\$ 41.6 billion bailout.

The will of foreign investors will determine whether current account deficits can be financed by foreign savings or not. The Mexican crisis (1994), Asian and Russian crisis (1997) and the Brazilian crisis (1998/9) have shown us the risks associated with this strategy.

4) FDI

Table 18 Composition of investments in Brazil (Direct/Portfolio)
In million US\$

| Itemization | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total Investments | 6 170 | 8 131 | 4 663 | 15 540 | 20 662 | 20 759 |
| Brazilian | -1 094 | -1 037 | -1 559 | 56 | -1 569 | -3 398 |
| Revenue | 456 | 469 | 1 369 | 1 733 | 807 | 2 173 |
| Expenditure | 1 550 | 1 506 | 2 928 | 1 677 | 2 377 | 5 572 |
| Foreign | 7 264 | 9 168 | 6 222 | 15 484 | 22 231 | 24 157 |
| Inflows | 16 546 | 27 648 | 29 929 | 36 043 | 58 144 | 60 448 |
| Currency | 16 306 | 27 498 | 29 616 | 35 721 | 57 430 | 58 176 |
| Portfolio | 15 352 | 25 142 | 24 838 | 26 078 | 39 552 | 31 830 |
| Direct | 954 | 2 356 | 4 778 | 9 644 | 17 879 | 26 346 |
| Merchandise | 20 | 12 | 6 | 29 | 50 | 100 |
| Conversion | 220 | 138 | 307 | 292 | 663 | 2 171 |
| Outflows | 9 282 | 18 480 | 23 707 | 20 559 | 35 912 | 36 290 |
| Portfolio | 8 702 | 17 862 | 22 544 | 20 038 | 34 252 | 33 682 |
| Direct | 580 | 618 | 1 163 | 520 | 1 660 | 2 609 |

Source: Central Bank of Brazil (1999).

It can be seen that a great increase in foreign investment to Brazil has occurred, both portfolio and direct, in the period 1993 – 1998. On the other hand, Brazilian investment abroad is meager. It totaled US\$ 5.6 billion in 1998, against US\$ 26.3 billion of FDI in Brazil.

One of the logic consequences of the augmenting FDI in Brazil has been the rise of profits and dividends remittances.

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|-----------------------------------|-------|-------|-------|-------|--------|--------|
| FDI | 954 | 2 356 | 4 778 | 9 644 | 17 879 | 26 346 |
| Profits and dividends remittances | 2 051 | 2 883 | 3 501 | 3 841 | 6 508 | 7 669 |

Source: extracted from the tables 16 and 18

In spite of a significant increase in value, FDI's long run contribution for economic growth is meager. Current FDI is concentrated in the production of durable consumption goods for the domestic market and requires massive importation of machinery, parts and raw materials, thus not contributing to ameliorate the trade balance.⁶

During this decade a reduction is observed in the share of domestic parts in the final consumer durable goods, with the substitution of national for foreign suppliers. This fact limits the possibility of a self-sustained economic growth, inasmuch as the balance of payments constraint remains unsolved: rise in the

⁶ These are conclusions of the paper presented by Laplane & Sarti (1999).

industrial output is accompanied by an increase in the imports of raw materials and parts, which in turn worsens the trade balance result.

One of the consequences of FDI inflows is the denationalization of the Brazilian economy. For instance, in 1996, 32.8 percent of the FDI corresponded to acquisitions of companies' shares or to mergers. In many cases change of ownership was financed by the Brazilian National Bank of Economic Development (BNDES).

Table 19 Share in total sales of the 500 biggest companies (%)

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|-------------------------|------|------|------|------|------|------|------|
| State-owned enterprises | 26.2 | 26.6 | 27.0 | 24.8 | 24.0 | 23.1 | 20.2 |
| Domestic capital | 42.7 | 42.4 | 41.7 | 40.2 | 44.0 | 43.6 | 35.7 |
| Foreign capital | 31.1 | 31.0 | 31.3 | 35.0 | 32.0 | 33.3 | 44.1 |

Source: *Maiores e Melhores – Exame Magazine*; extracted from *Laplane & Sarti (1999, p. 27)*.

5) Industrial policy

There is a lack of a comprehensive industrial policy in Brazil. The government tries to offset it by attracting FDI.

Part of the national and local governments' strategy resulted in the tax competition for new investments (see chapter 4). The other part comprises of tax benefits for regional development.

5.1) Tax benefits for ZFM

Incentives for the Zona Franca de Manaus (ZFM - Free Trade Zone of Manaus), located in the Northern part of the country, have failed to bring about technological and regional development. The ZFM presented the following results in 1996:⁷

- Imports of US\$ 4.4 billion and exports of US\$ 0.1 billion.
- Meager tax collection (most of the goods imported or industrialized are tax free).
- Most of the goods “made in ZFM” are not produced there, but just assembled.
- There is a tendency towards substitution of domestic for foreign parts. In 1990, domestic parts were 81 percent of the total used by ZFM, in 1996 53.1 percent.

⁷ Figures here mentioned were extracted from Wasilewski (1998).

- The number of direct jobs generated diminished from 80,000 in 1990 to 50,000 in 1996.
- Lack of investments in Research and Development.

5.2) Study case: the machinery industry

Table 20 Machinery industry

| In US\$ billion | | | | | | | | | |
|-----------------|------------|---------|---------|-------------------------------|----------------------|--|---|---|--|
| Year | Production | Exports | Imports | Trade balance in the industry | Domestic consumption | Ratio of imports in the domestic consumption | Share of the industry in Brazil's exports | Share of the industry in Brazil's imports | Average employment in the year (thousands) |
| 1990 | 21.87 | 2.03 | 2.43 | -0.40 | 22.27 | 10.91% | 6.5% | 11.8% | 331.9 |
| 1991 | 18.11 | 2.10 | 2.42 | -0.32 | 18.43 | 13.13% | 6.6% | 11.5% | 267.4 |
| 1992 | 16.34 | 2.33 | 2.44 | -0.11 | 16.45 | 14.83% | 6.5% | 11.9% | 234.3 |
| 1993 | 16.03 | 2.76 | 2.62 | 0.14 | 15.89 | 16.49% | 7.2% | 10.4% | 210.9 |
| 1994 | 18.41 | 3.20 | 4.17 | -0.97 | 19.38 | 21.52% | 7.4% | 12.6% | 211.3 |
| 1995 | 18.66 | 3.37 | 6.16 | -2.79 | 21.45 | 28.72% | 7.3% | 12.3% | 218.2 |
| 1996 | 16.23 | 3.54 | 6.82 | -3.28 | 19.51 | 34.96% | 7.4% | 12.8% | 192.1 |
| 1997 | 16.07 | 3.90 | 8.99 | -5.09 | 21.16 | 42.49% | 7.4% | 14.6% | 180.9 |
| 1998 | 15.10 | 3.73 | 8.35 | -4.62 | 19.72 | 42.34% | 7.3% | 14.5% | 171.2 |

Source: *Abimaq (Associação das Indústrias de Máquinas e Equipamentos – Association of Machinery Industry)*. Calculation made by the author.

By the data of the table 20 we can observe that:

- The ratio of imports in the total domestic consumption has been increasing. It was 10.91 percent in 1990 and 42.34 percent in 1998.
- The domestic production has been decreasing. It was US\$ 21.87 billion in 1990 and 15.1 billion in 1998.
- The net loss of jobs in the machinery industry was approximately 160,000 between 1990 and 1998.
- Domestic consumption has not increased. What has happened is that machinery that used to be produced domestically is now imported. Lower domestic production has worsened the industry's trade balance, contributing to aggravate the current account deficit.

Amongst the reasons for the decline in domestic production are:

- a) The reduction and in some cases elimination of customs duties;
- b) The gap of domestic and foreign interest rates; foreign interest rates are much lower, causing financing to be much cheaper when the machinery is imported;
- c) The appreciation of the national currency. Imports became cheaper, and domestic goods more expensive.

6) A comparative assessment with Japan during the rapid growth era

Here is a comparison of some features of Japan's policies during the rapid economic growth era with Brazil in the 1990s. Detailed explanations about the assertions below are in the contents of chapters 1 and 3.

- The first difference is that Japan passed through democratization reforms in the postwar period. Land reform and zaibatsu dissolution deconcentrated the economic power, and labor reform broadened workers' rights. As a result Japan has the fairest income distribution amongst industrialized nations. On the other hand Brazil remains with a large wealth concentration in urban and rural areas, and its income distribution is one of the worst in the world.
- Japan's industrial policy during the rapid growth was based on the development of strategic sectors, and was successful to a great extent. Brazil prioritizes regional development and FDI inflows.
- FDI in Japan was severely controlled up to 1973, when national enterprises were strong enough to withstand foreign competition. FDI in Brazil is liberalized.
- There were huge formal and informal trade barriers in Japan. Customs duties were very high. Brazil's international trade was almost completely liberalized.
- Japan's government practiced a low interest rates policy. It provided cheap financing for strategic sectors. Brazil has maintained high interest rates, in order to attract foreign capital. Costly financing is one of the reasons for the loss of competitiveness of domestic companies.
- Japan's industrial policy achieved the goal of strengthening national enterprises, which could then endure the fierce competition in the world market. Brazil's has weakened domestic corporations, which are losing the domestic market and not effecting positions in the world market.
- Science and technology was encouraged by Japan's government. It chose the industries that had incentives to modernize and the industries that were relegated. Investment in science and technology soared during the rapid growth era. Technology imports and technical cooperation with foreign firms

played important roles in Japan's modernization. Brazil has had scanty investments in this field. Transnational corporations are introducing new industrial techniques, but they have not been assimilated by Brazil's individuals, companies and universities.

- The MITI, with its administrative guidance, played a fundamental and recognized role in directing resources for selected industries. The Brazilian government chose the free market and liberalization strategy. Brazil's Ministry of Development, Trade and Industry (MDCI) has a limited role.
- Japan had an extreme concern with the balance of payments equilibrium. Imports and investments were financed by exports. Economic growth was constrained by the import capacity. The foreign currency allocation system was an efficient instrument of import rationalization. Brazil adopted the policy of financing current account deficits with foreign savings. The last financial crisis demonstrated the risks associated with this policy.
- The old zaibatsu in Japan were controlled by a single family. The zaibatsu dissolution assured fierce competition in all industries. The new groups are now not necessarily commanded by a single family. Ownership and management of firms became quite separated in Japan, which probably induces managers to pay more attention to growth rather than to profit distribution. In Brazil the great conglomerates are owned by a single family. Privatization and liberalization of FDI has not challenged monopolistic and oligopolistic positions of these groups, rather strengthened them.

7) Recommendations for new policies

7.1) In the short run

1. Lower interest rates, which would slow down the rate of increase in public debt and provide firms with cheaper financing. High interest rates have hampered aggregate investment. This point is closely linked with the balance of payments situation. In order to attract foreign capital, interest rates have been kept in a very high level by the Central Bank of Brazil. Capital inflows have been necessary to sustain the huge current account deficits Brazil has

faced. Interest rates can be lowered, provided that measures are taken to equilibrate the current transactions account.

2. Measures to avoid sudden capital outflows. The volatile capital that entered Brazil was inflated by high interest rates practiced domestically and by sharp gains in stock markets. The present volatile capital stock in Brazil is difficult to quantify, but is surely much higher than the foreign reserves level. Administrative or tax measures have to be taken to avert unexpected capital outflows that could jeopardize the international liquidity of the country.

7.2) As middle term policies

1. In relation to incentives for regional development. Tax incentives should be given temporarily, and not as a permanent concession. When tax incentives are granted perpetually capitalists have no pressing need for investing in process and product innovation. More than 30 years of tax expenditures for regional development have not narrowed the gap between poorer and richer regions. Targets shall be accomplished in terms of job creation, technological development, export volume, production process, nationalization of parts, tax collection. The outcome of tax incentives for regional development in any of these fields is satisfactory. On the other hand, the government has to do its part investing in human capital and improving the infrastructure of the poorer areas.
2. A policy for Research and Development. Research and Development is closely related to the introduction of new technologies. Without previous R&D, there is no soil for a proper internalization and assimilation of technology from abroad. Introduction of foreign technology is closely related to the production system. Japan did not simply import foreign techniques (mainly from the USA), its investments in R&D later enabled it to achieve a top position in terms of product innovation. Due to meager investments in R&D, foreign technologies implemented across Brazil have not been assimilated and internalized.
3. FDI. FDI should be welcomed, but under government close monitoring. Due to the precarious external sector, new FDI projects should be approved in

proviso that foreign investors accept a local content (a percentage of national parts of the final products that shall be accomplished) and export targets. Joint ventures with Brazilian companies should be encouraged, so that they could learn new techniques and production processes. The lack of a comprehensive industrial policy led to a tax competition for new investments (see chapter 4, section 7), in which all government levels are losers.⁸ FDI policy of the central government should resolutely oppose the use of tax benefits to attract new investments.

4. Balance of payments: Brazil has to achieve current account equilibrium in the short run. Moreover, the target in the mid-term shall be a current account surplus, inasmuch as the external debt has to be repaid. Assuming that the services account will remain negative, a large trade balance surplus is essential. This can be achieved through: discouraging imports of consumer goods and imports of machinery that can be produced domestically; an active industrial policy that promotes a change in export composition.

For other lessons from Japan and recommendations, see chapter 1, section 3.

⁸ One recent example of the harmful effects of tax competition and the lack of a policy in relation to FDI is the new Ford Motor's factory. There was a fierce dispute among states to host the plant. State governments offered tax incentives, infrastructure for the sole use of that company, and loans to be amortized without monetary actualization. In the end, the central government intervened in favor of one state, which "won" the contention. The outcome was:

- a) Generous tax benefits were granted from the state and central governments;
- b) No agreement was signed with the company in terms of local content, job creation, or length of stay in that state (which opens the possibility for the factory to be moved to another state when the present tax incentives expire).
- c) Relations with other MERCOSUR members soured, since they considered the tax benefits offered by the central government as a violation of MERCOSUR rules.

CHAPTER 4

THE BRAZILIAN TAXATION SYSTEM

1) Introduction

The origin of the present tax structure goes back to the years 1965-67, when a tax reform modified the tax system implemented with the 1946 Constitution. Amongst the changes introduced were:

- a) Centralization of the ability to tax in the hands of the central government;
- b) Introduction of the withholding tax system;
- c) Implementation of the federal tax on industrialized products, state tax on the circulation of merchandises, and municipal tax on services;
- d) Centralization of taxes on international trade;
- e) Introduction of a tax revenue sharing system.

The 1988 Constitution brought about a relative decentralization of revenue receipts, due to an increase in transfers from the federal government to states and municipalities and from states to municipalities.

In Brazil, the three government levels are central, state (26 + the Federal District) and municipal governments (approximately 5,500). All of them have political, administrative and financial autonomy, the latter including the ability to tax.

2) Brazil's tax burden

The tax burden in Brazil is around 25 percent of the GDP, not high for international standards. A diminution in the tax burden should not be discussed at this moment, since the Union, the states and the municipalities are facing chronic fiscal deficits, and social services badly needed by the poorest part of the population are in a precarious state.

Table 21 Total Fiscal Burden in selected countries

| COUNTRY | FISCAL BURDEN (% GDP) | COUNTRY | FISCAL BURDEN (% GDP) |
|---------|-----------------------|---------|-----------------------|
| Brazil | 25.8 | Japan | 38.2 |
| France | 62.1 | Sweden | 70.4 |
| Germany | 57.0 | USA | 36.5 |

Sources: *Revenue Service of Brazil for Brazil; National Tax Administration of Japan (1997, p. 11) for other countries.*

Years: 1997 for Brazil and Japan; 1994 for other countries.

Note: Fiscal burden is defined as tax plus social security burdens.

It may be argued that countries with high-income levels may bear a higher tax burden. One counter-argument is that a common feature of developing countries like Brazil is the existence of widespread poverty. Most of its population have to rely on social security for basic needs that are not provided by the market (market failure). It cannot be expected that private hospitals and schools would offer free health care and education for the poorest part of the population. In doing so, all the three government levels in Brazil need substantial revenue. The problem that will be discussed in this chapter is not the tax burden itself, but the quality of the taxation.

3) The income tax system

3.1) The income and substitution effects of income taxes in Brazil

Stiglitz (1988) defines two distortionary effects of wage taxation: the income and the substitution effect. By the former, the imposition of the tax would induce the taxpayer to work more, in order to maintain the same level of consumption as the pre-tax income. By the latter, the lower return for work (the after-tax wage) would be a disincentive to work. The taxpayer would chose to work less and to have more time for leisure.

Those two effects may match with the reality of some developed countries (Japan and the USA, where the rate of unemployment is low). However, in the case of Brazil, where the unemployment and underemployment are high and soaring, we can, without fear, neglect the deadweight loss of the substitution effect: if it really occurs, it would not harm the economy as a whole, owing to the labor supply being plentiful.

Even in countries with a shortage of labor supply, it is difficult to prove that progressive income tax is a disincentive for individuals to work. One of the problems is that the substitution effect and the income effect have opposite trends: by the first the demand for leisure would increase, but by the second the demand for labor would be raised.⁹

⁹ "There is no evidence that these relatively high marginal rates have any effect on the working habits of persons who are subject to them. Anybody who observes business life in Japan cannot

3.2) Personal and corporate income taxes

The article 145, Paragraph 1 of the Constitution of the Federative Republic of Brazil establishes that

Whenever possible, taxes shall have an individual character and shall be graded according to the economic capacity of the taxpayer, and the tax administration may, especially to confer effectiveness upon such objectives, with due respect to individual rights and under the terms of the law, identify the property, the incomes and the economic activities of the taxpayer.

Nevertheless, taxes in Brazil do not follow the above principles.

The income tax was modified, through the tax laws 9249/95 and 9250/95, with the declared aim of simplifying its legislation. It is argued that high marginal tax rates lead to an increase in tax evasion and economic distortions (the substitution effect explained in section 3.1).

In accordance with that thought, the marginal tax rates decreased:

- Personal income tax, from 35 to 27.5 percent;
- Corporate income tax, from 43 to 25 percent.

Dividend payments were exempted, on the presumption that they were already taxed at the corporate side. Adopted was the fiction theory of legal entity.¹⁰

To compensate the fall in tax collection, the tax basis was enlarged. Allowed deductions, such as medical expenses, educational expenses, dependents, and others were reduced or eliminated. In addition, since the mentioned laws were approved, there has been no monetary actualization of the basic exemption and of the brackets, which has caused a real increase in the taxation for low and middle income taxpayers. Moreover, the tax rate for middle income taxpayers increased from 25 to 27.5 percent.

The result was the amplification of the tax basis and taxable taxpayers. Low and middle income taxpayers were penalized, the tax burden for wealthier taxpayers

fail to be impressed by the tempo of hard work that seems to be characteristic of virtually all members of the economic community." (Joseph A. Pechman & Keimei Kaizuka in Patrick and Rosovsky 1976, p. 363)

¹⁰ Under the fiction theory, all income of a corporation is interpreted as belonging to its shareholders.

was reduced. The justification was the “simplification”, “harmonization” and “neutrality” of the tribute. The income tax system is gradually distancing itself from taking into consideration taxpayers’ individual situation.

An international comparison shows us that Brazil’s marginal tax rates of personal and corporate income are low for international standards.

Table 22 Highest brackets of taxes on income in selected countries

| Country | Corporate income tax (%) | Personal income tax (%) |
|-------------|--------------------------|-------------------------|
| Argentina | 35 | 35 |
| Brazil | 25 | 27.5 |
| Canada | 38 | 29 |
| Spain | 35 | 48 |
| USA | 39 | 39,6 |
| France | 33 1/3 | 54 |
| Italy | 37 | 46 |
| Japan | 37.5 | 50 |
| Mexico | 35 | 40 |
| Netherlands | 35 | 60 |
| Paraguay | 30 | NC |
| Portugal | 36 | 40 |
| Uruguay | 30 | NC |
| Venezuela | 34 | 34 |

Sources: *Inter-American Center of Tax Administrations (CIAT)*; *National Tax Administration of Japan*; *Revenue Service of Brazil*. Table compiled by the author.

Local taxes on income are not included on the calculation

NC: Not charged

We may compare the highest tax rates with:

- Members of the Mercosur (economic bloc comprised by Brazil, Argentina, Uruguay and Paraguay);
- Countries with similar per capita income (e.g. Argentina, Mexico, Venezuela, Uruguay);
- High-middle or high-income countries.

And we can conclude that there is scope for a rise in the corporate and personal income tax rates in Brazil.

4) Classification of Brazilian tributes

Table 23 Tax collection and classification of Brazilian tributes

NATIONAL GOVERNMENT

In current million US\$

| YEAR | | | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|--|------------------------------------|----------------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|
| (GDP) | | | 405,679 | 387,295 | 429,685 | 543,087 | 705,449 | 775,409 | 804,080 |
| | Direct(D) or indirect (I) | Type of taxation* | AMOUNT | AMOUNT | AMOUNT | AMOUNT | AMOUNT | AMOUNT | AMOUNT |
| CENTRAL GOVERNMENT | | | 60,460 | 59,895 | 70,342 | 101,717 | 124,084 | 132,516 | 137,155 |
| TAX COLLECTION | | | 26,895 | 27,192 | 31,760 | 43,463 | 51,160 | 51,330 | 52,987 |
| INCOME TAX (IR) | D | I | 13,353 | 13,794 | 15,500 | 19,704 | 27,733 | 28,765 | 29,059 |
| Personal (IRPF) | | | 623 | 568 | 913 | 1,454 | 2,194 | 2,304 | 2,426 |
| Corporate (IRPJ) | | | 2,779 | 4,483 | 3,974 | 6,579 | 8,460 | 10,834 | 9,728 |
| Withheld at source (IRRF) | | | 9,951 | 8,743 | 10,613 | 11,671 | 17,078 | 15,627 | 16,905 |
| TAX ON INDUSTRIALIZED PRODUCTS (IPI) | I | C | 9,026 | 9,189 | 10,382 | 11,505 | 14,157 | 14,980 | 15,148 |
| CREDIT OPERATIONS TAX | I | O | 2,510 | 2,472 | 3,466 | 3,661 | 3,432 | 2,820 | 3,495 |
| TAX ON FOREIGN TRADE (II and IE) | I | O | 1,781 | 1,578 | 1,915 | 2,755 | 5,245 | 4,167 | 4,735 |
| RURAL TERRITORIAL TAX (ITR) | D | P | 77 | 13 | 29 | 12 | 106 | 196 | 225 |
| TEMPORARY TAX ON FINANCIAL OPERATIONS (IPMF)** | I | O | | | 316 | 5,604 | 149 | | |
| FEDERAL FEES | D | O | 147 | 146 | 151 | 223 | 339 | 401 | 324 |
| SOCIAL SECURITY | | | 31,703 | 30,903 | 37,510 | 54,051 | 68,633 | 77,044 | 80,747 |
| SOCIAL SECURITY CONTRIBUTION | D | SC | 18,827 | 18,349 | 22,397 | 28,473 | 37,663 | 43,494 | 40,960 |
| COFINS (Contribution for the Financing of Social Security)** | I | C | 5,468 | 3,924 | 5,749 | 13,152 | 15,721 | 17,109 | 17,012 |
| CPMF (Temporary Contribution on Financial Operations)** | I | O | | | | | | | 6,409 |
| CSLL (Social Contribution on the Net Profit) | D | I | 1,166 | 2,846 | 3,303 | 4,971 | 6,008 | 6,151 | 6,672 |
| PIS (Social Integration Program)** | I | C | 4,342 | 4,218 | 4,883 | 5,764 | 6,321 | 7,098 | 6,727 |
| CIVIL SERVICE SECURITY CONTRIBUTION | D | SC | 490 | 273 | 359 | 1,184 | 2,252 | 2,568 | 2,396 |
| OTHER SOCIAL CONTRIBUTIONS | D | SC | 1,411 | 1,293 | 819 | 507 | 669 | 623 | 572 |
| OTHER CONTRIBUTIONS | | | 1,862 | 1,800 | 1,072 | 4,203 | 4,291 | 4,141 | 3,420 |

LOCAL GOVERNMENTS

In current million US\$

| YEAR | | | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|--|------------------------------------|----------------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
| | Direct(D) or Indirect (I) | Type of taxation* | AMOUNT | AMOUNT | AMOUNT | AMOUNT | AMOUNT | AMOUNT | AMOUNT |
| STATE GOVERNMENTS | | | 29,686 | 28,743 | 28,192 | 42,145 | 54,839 | 60,182 | 60,492 |
| TAX ON THE CIRCULATION OF MERCHANDISES AND SERVICES (ICMS) | I | C | 27,886 | 26,761 | 26,270 | 39,318 | 50,622 | 55,453 | 55,272 |
| AUTOMOBILE TAX (IPVA) | D | P | 333 | 541 | 557 | 913 | 2,635 | 3,108 | 3,564 |
| INHERITANCE AND DONATION TAX (ITCD) | D | P | 23 | 74 | 80 | 117 | 191 | 201 | 247 |
| AIR | D | I | 275 | 373 | 130 | 5 | 8 | 7 | 0 |
| SOCIAL SEC. CONTRIB. | D | SC | 1,168 | 993 | 1,155 | 1,791 | 1,383 | 1,413 | 1,409 |
| MUNICIPALITIES | | | 4,781 | 3,804 | 3,298 | 5,156 | 9,313 | 9,499 | 9,695 |
| TAX ON SERVICES (ISS)** | I | C | 1,364 | 1,232 | 1,490 | 2,263 | 3,559 | 4,329 | 4,115 |
| URBAN REAL ESTATE TAX (IPTU) | D | P | 1,853 | 1,228 | 637 | 1,116 | 2,961 | 2,542 | 2,875 |
| PROPERTY TRANSFER TAX (ITBI) | D | P | 547 | 361 | 258 | 451 | 693 | 770 | 764 |
| FEES | I | O | 776 | 713 | 546 | 932 | 1,767 | 1,763 | 1,843 |
| OTHERS | I | O | 241 | 271 | 366 | 393 | 333 | 94 | 98 |
| TOTAL TAX COLLECTION | | | 94,926 | 92,442 | 101,832 | 149,019 | 188,236 | 202,197 | 207,341 |
| TOTAL OF INDIRECT TAXES | | | 55,256 | 52,158 | 56,455 | 89,550 | 105,597 | 111,954 | 118,274 |
| TOTAL OF DIRECT TAXES | | | 39,670 | 40,284 | 45,375 | 59,467 | 82,641 | 90,239 | 89,067 |
| PERCENTAGE OF INDIRECT TAXES | | | 58.21% | 57.42% | 55.44% | 60.09% | 56.10% | 55.37% | 57.04% |
| PERCENTAGE OF DIRECT TAXES | | | 41.79% | 43.58% | 44.56% | 39.91% | 43.90% | 44.63% | 42.96% |
| *I = income; C = consumption and circulation; P = property; SC = social contribution; O = others | | | | | | | | | |
| **Cumulative taxes | | | | | | | | | |

Source: Revenue Service of Brazil. Table translated and organized by the author. Classification of tributes according to criteria of the author

In terms of share of each tribute in the total fiscal collection we have:

Table 24 Percentage of Brazilian tributes in the total fiscal collection

| YEAR | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| CENTRAL GOVERNMENT | 63.69 | 64.79 | 69.08 | 68.26 | 65.92 | 65.54 | 66.15 |
| TAX COLLECTION | 28.33 | 29.42 | 31.19 | 29.17 | 27.18 | 25.39 | 25.56 |
| INCOME TAX (IR) | 14.07 | 14.92 | 15.22 | 13.22 | 14.73 | 14.23 | 14.02 |
| Personal (IRPF) | 0.66 | 0.61 | 0.9 | 0.98 | 1.17 | 1.14 | 1.17 |
| Corporate (IRPJ) | 2.93 | 4.85 | 3.9 | 4.41 | 4.49 | 5.36 | 4.69 |
| Withheld at source (IRRF) | 10.48 | 9.46 | 10.42 | 7.83 | 9.07 | 7.73 | 8.15 |
| TAX ON INDUSTRIALIZED PRODUCTS (IPI) | 9.51 | 9.94 | 10.2 | 7.72 | 7.52 | 7.41 | 7.31 |
| CREDIT OPERATIONS TAX | 2.64 | 2.67 | 3.4 | 2.46 | 1.82 | 1.39 | 1.69 |
| TAX ON FOREIGN TRADE (II and IE) | 1.88 | 1.71 | 1.88 | 1.85 | 2.79 | 2.06 | 2.28 |
| RURAL TERRITORIAL TAX (ITR) | 0.08 | 0.01 | 0.03 | 0.01 | 0.06 | 0.1 | 0.11 |
| TEMPORARY TAX ON FINANCIAL OPERATIONS (IPMF) | 0 | 0 | 0.31 | 3.76 | 0.08 | 0 | 0 |
| FEDERAL FEES | 0.15 | 0.16 | 0.15 | 0.15 | 0.18 | 0.2 | 0.16 |
| SOCIAL SECURITY | 33.4 | 33.43 | 36.84 | 36.27 | 36.46 | 38.1 | 38.94 |
| SOCIAL SECURITY CONTRIBUTION | 19.83 | 19.85 | 21.99 | 19.11 | 20.01 | 21.51 | 19.75 |
| COFINS (Contribution for the Financing of Social Security) | 5.76 | 4.24 | 5.65 | 8.83 | 8.35 | 8.46 | 8.2 |
| CPMF (Temporary Contribution on Financial Operations) | 0 | 0 | 0 | 0 | 0 | 0 | 3.09 |
| CSLL (Social Contribution on the Net Profit) | 1.23 | 3.08 | 3.24 | 3.34 | 3.19 | 3.04 | 3.22 |
| PIS (Social Integration Program) | 4.57 | 4.56 | 4.8 | 3.87 | 3.36 | 3.51 | 3.24 |
| CIVIL SERVICE SECURITY CONTRIBUTION | 0.52 | 0.3 | 0.35 | 0.79 | 1.2 | 1.27 | 1.16 |
| OTHER SOCIAL CONTRIBUTIONS | 1.49 | 1.4 | 0.8 | 0.34 | 0.36 | 0.31 | 0.28 |
| OTHER CONTRIBUTIONS | 1.96 | 1.95 | 1.05 | 2.82 | 2.28 | 2.05 | 1.65 |
| STATE GOVERNMENTS | 31.27 | 31.09 | 27.68 | 28.28 | 29.13 | 29.76 | 29.17 |
| TAX ON THE CIRCULATION OF MERCHANDISES AND SERVICES (ICMS) | 29.38 | 28.95 | 25.8 | 26.38 | 26.89 | 27.43 | 26.66 |
| AUTOMOBILE TAX (IPVA) | 0.35 | 0.59 | 0.55 | 0.61 | 1.4 | 1.54 | 1.72 |
| INHERITANCE AND DONATION TAX (ITCD) | 0.02 | 0.08 | 0.08 | 0.08 | 0.1 | 0.1 | 0.12 |
| AIR | 0.29 | 0.4 | 0.13 | 0 | 0 | 0 | 0 |
| SOCIAL SEC. CONTRIB. | 1.23 | 1.07 | 1.13 | 1.2 | 0.73 | 0.7 | 0.68 |
| MUNICIPALITIES | 5.04 | 4.12 | 3.24 | 3.46 | 4.95 | 4.7 | 4.68 |
| TAX ON SERVICES (ISS) | 1.44 | 1.33 | 1.46 | 1.52 | 1.89 | 2.14 | 1.98 |
| URBAN REAL ESTATE TAX (IPTU) | 1.95 | 1.33 | 0.63 | 0.75 | 1.57 | 1.26 | 1.39 |
| PROPERTY TRANSFER TAX (ITBI) | 0.58 | 0.39 | 0.25 | 0.3 | 0.37 | 0.38 | 0.37 |
| FEES | 0.82 | 0.77 | 0.54 | 0.63 | 0.94 | 0.87 | 0.89 |
| OTHERS | 0.25 | 0.29 | 0.36 | 0.26 | 0.18 | 0.05 | 0.05 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Revenue Service of Brazil

With the data of the tables 23 and 24, and according to criteria of the author, Brazilian taxes were classified according to the tax basis.

Table 25 Classification according to the tax basis (taxable object)

In current million US\$

| YEAR | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| INCOME | 14,794 | 17,013 | 18,933 | 24,680 | 33,749 | 34,923 | 35,731 |
| % TAX BURDEN | 15.58% | 18.40% | 18.59% | 16.56% | 17.93% | 17.27% | 17.23% |
| % GDP | 3.65% | 4.39% | 4.41% | 4.54% | 4.78% | 4.50% | 4.44% |
| CONSUMPTION | 48,086 | 45,324 | 48,774 | 72,002 | 90,380 | 98,969 | 98,274 |
| % TAX BURDEN | 50.66% | 49.03% | 47.90% | 48.32% | 48.01% | 48.95% | 47.40% |
| % GDP | 11.85% | 11.70% | 11.35% | 13.26% | 12.81% | 12.76% | 12.22% |
| PROPERTY | 2,833 | 2,217 | 1,561 | 2,609 | 6,586 | 6,817 | 7,675 |
| % TAX BURDEN | 2.98% | 2.40% | 1.53% | 1.75% | 3.50% | 3.37% | 3.70% |
| % GDP | 0.70% | 0.57% | 0.36% | 0.48% | 0.93% | 0.88% | 0.95% |
| SOCIAL SECURITY | 21,896 | 20,908 | 24,730 | 31,955 | 41,967 | 48,098 | 45,337 |
| % TAX BURDEN | 23.07% | 22.62% | 24.29% | 21.44% | 22.29% | 23.79% | 21.87% |
| % GDP | 5.40% | 5.40% | 5.76% | 5.88% | 5.95% | 6.20% | 5.64% |
| OTHERS | 7,317 | 6,980 | 7,832 | 17,771 | 15,556 | 13,386 | 20,324 |
| % TAX BURDEN | 7.71% | 7.55% | 7.69% | 11.93% | 8.26% | 6.62% | 9.80% |
| % GDP | 1.80% | 1.80% | 1.82% | 3.27% | 2.21% | 1.73% | 2.53% |

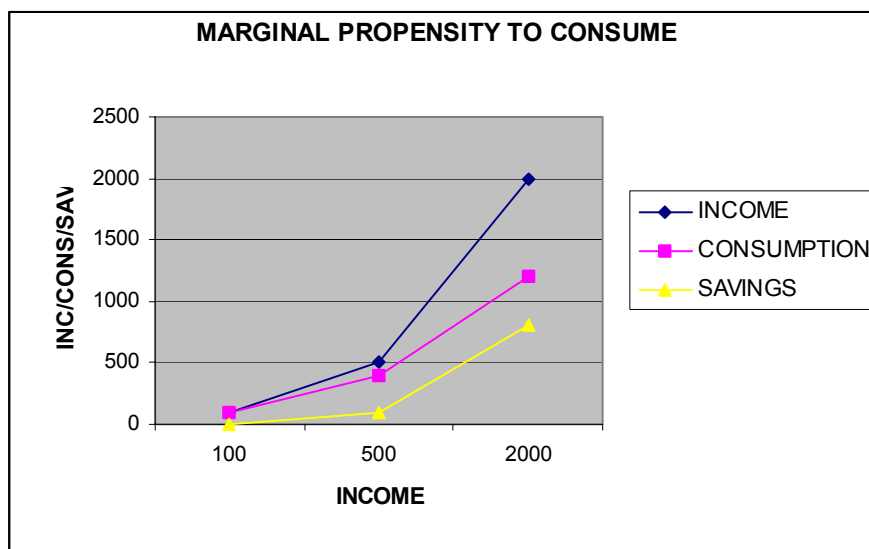
In terms of incidence, in 1997, 57 percent of the total revenue was from indirect taxes/contributions and 43 percent direct.

The large share of indirect taxes is in accordance with Brazilian income distribution.¹¹ Indirect taxes are regressive (the ratio of tax paid to income falls as income rises). It can be proved in many ways, one is the following:

The marginal propensity to consume (MPC), given by $\Delta c/\Delta Y$ (variation of consumption with variation in income) tends to be close to or higher than 100 percent amongst low income individuals, and tends to diminish with a rise in earned income.

$MPC_P > MPC_M > MPC_R$, where P = poor, M = middle-class and R = rich.

¹¹ Brazil is perhaps the country with the highest concentration of purchasing power in the world. In the average of 1980-94, the ratio of income earned by the richest 20 percent to the poorest 20 percent was 32.1, which was the highest amongst the countries with available data. (United Nations 1999, pp. 146-8)



The MPC may be represented by the graph above. Savings are an increase function of the earned income.

Real Burden Rate of Indirect Taxes¹²

| | INCOME | MPC (%) | CONSUMPTION | SAVINGS | VAT(15%) | REAL BURDEN OF IT |
|---------------|--------|---------|-------------|---------|----------|-------------------|
| LOW INCOME | 100 | 100 | 100 | 0 | 15 | 15% |
| MIDDLE INCOME | 500 | 80 | 400 | 100 | 60 | 12% |
| HIGH INCOME | 2000 | 60 | 1200 | 800 | 180 | 9% |

Moreover, nowadays domestic savings can be easily consumed or deposited abroad, which represents a loss of resources for the country.

Looking at tables 23, 24 and 25 we can see that taxation over consumption of goods and services is very high in Brazil. This harms the principle of equity, owing to the fact that consumption taxes are indirect (and therefore regressive).

The taxation on income and property is very low in Brazil. There is a large scope for increases in those two categories of tributes:

- The tax on large fortunes (IGF) may be instituted by the central government, under the terms of a supplementary law. However, due mainly to lack of will on the part of government authorities and composition of the National Congress, dominated by conservative forces, it has never been

¹² Note: all numbers mentioned in the table above are hypothetical. There are numerous estimations demonstrating the regressiveness of indirect taxes, which are not the scope of this thesis. See Stiglitz (1988).

implemented. We have to point out that it was Fernando Henrique Cardoso, current Brazilian President and then Senator of the Republic, who elaborated a bill to regulate the IGF, about 10 years ago. Now, he is against its implementation;

- The Rural Territorial Tax (ITR) has a collection close to nil, and this in a country characterized by the existence of large underdeveloped rural estates;¹³
- The collection of corporate and personal income taxes is meager. The latter is charged especially over part of the wage-earners middle-class.

Making an international comparison we can figure out that taxes on income and property may easily be increased:

Table 26 Share of taxes on income in the total fiscal collection (%)

| | | | |
|----------------|------|----------------|------|
| Australia | 54.2 | Italy | 34.3 |
| Austria | 22.7 | Japan | 36.2 |
| Belgium | 37.0 | Luxembourg | 38.4 |
| Brazil | 17.2 | Netherlands | 27.6 |
| Canada | 43.8 | New Zealand | 56.8 |
| Czech Republic | 24.7 | Norway | 34.7 |
| Denmark | 57.5 | Poland | 30.6 |
| Finland | 40.9 | Portugal | 25.8 |
| France | 17.7 | Spain | 27.6 |
| Germany | 29.4 | Sweden | 42.1 |
| Greece | 16.2 | Switzerland | 39.6 |
| Hungary | 20.5 | Turkey | 29.7 |
| Iceland | 33.3 | United Kingdom | 35.6 |
| Ireland | 40.3 | USA | 44.6 |

Sources: National Tax Administration of Japan; Revenue Service of Brazil; Revenue Statistics, OECD, Paris, 1996, for other countries.

Years: 1997 for Japan and Brazil, 1995 for other countries. Calculation made by the author for Brazil and Japan

Notes: a) share of personal plus corporate income taxes;
b) fiscal collection means tax collection plus social security.

The international comparison shows us clearly the extremely low share of taxes on income in Brazil's tax collection.

¹³ Underdeveloped here means failing to use the land according to its potential. In 1995, the area utilized for crops (permanent and temporary) was 41.8 million ha, equivalent to 4.9 percent of the country's territorial area (854.7 million ha). Land concentration may explain the land underdevelopment. Establishments with less than 100 hectares, representing 89.3 percent of the total units, controlled only 20 percent of the total area. At the other extreme, that of establishments with 1,000 ha and over these units - just 1 percent of the establishments - controlled about 45.1 percent of the area in establishments. The total area of establishments was 353.6 million ha. [Census of Agriculture 1995-6, Brazilian Institute of Geography and Statistics (IBGE)]

Table 27 Taxes on property of selected countries (% GDP)

| Country | Year | % |
|--------------|------|------|
| USA | 1993 | 3.31 |
| Japan | 1997 | 3.34 |
| Canada | 1989 | 3.15 |
| UK | 1992 | 2.77 |
| Australia | 1994 | 2.99 |
| Argentina | 1990 | 1.21 |
| Venezuela | 1994 | 1.33 |
| Bolivia | 1993 | 1.41 |
| Brazil | 1997 | 0.95 |
| Israel | 1993 | 2.26 |
| South Africa | 1994 | 2.06 |

Sources: Revenue Service of Brazil; National Tax Administration of Japan; IMF: Government Finance Statistics Yearbook 1995 for other countries.

Table organized by the author. Calculation effectuated by the author for Brazil and Japan.

Analyzing the table 27, we can see that the taxation on property in Brazil:

- Is lower than in countries with less or similar per capita income (e. g. Bolivia, Venezuela, South Africa);
- Is lower than in other continental countries, like itself (e. g. Canada, USA, Australia);
- Is lower than in a member of the Mercosur (Argentina);
- Is lower than in many developed countries.

5) Cumulative taxes

Social contributions levied on the companies' turnover have been charged extensively by the central government, due to the fact that they are of easy collection and there is no need to make transfer of them to states and municipalities.

Of the taxes mentioned in tables 23 and 24, four are cumulative (the tax due in each transaction cannot be compensated by the amount charged in previous transactions): the municipal tax on services (ISS), and the federal COFINS, PIS and CPMF.

Indirect taxes are pernicious in terms of equity, and the **cumulative** ones are particularly harmful for the productive sector (there is no mechanism to compensate what is paid in one stage of production by the previous). National

enterprises lose competitiveness against foreign companies, in the domestic and in the international market, because:

- 1) domestic production costs increase;
- 2) those taxes are levied over export products, but not over importation.

Indirect taxes can be implemented under the **origin** or the **destination principle**. Under the former, the tax is imposed on all taxable products (goods and services) that are produced domestically; under the latter, the tax is imposed on all taxable products that are consumed domestically.

In the case of the cumulative taxes COFINS, PIS and CPMF, domestic producers bear the burden of tax. In the international market, Brazilian products suffer double taxation: in the origin and in the destination (import countries impose VAT and/or other consumption taxes); in the domestic market, national goods compete against foreign products not levied by those tributes.¹⁴

6) The complicated VAT system

The Value Added Tax (VAT) is usually characterized by having a very simple system of calculation and collection, especially compared to income tax. Simplicity is one of the reasons why many countries in the world adopt the VAT. However, in the case of Brazil the VAT system is very complicated. Therefore, in Brazil difficulties are presented in its administration. The problems are:

- a) the imposition of value added taxes (VATs) by both national and state governments;
- b) the existence of different tax rates in interstate and internal transactions;
- c) the existence of a different tax basis for national and state VAT.

Although the central government of Brazil levies a VAT, the base of the central VAT is much smaller than that of the state VAT. Also, the administration of the two taxes is not coordinated.

¹⁴ Imports are levied by VATs in the final stage of production/consumption, whereas national producers pay cumulative taxes in each stage of production in addition to VATs. Domestically it also creates unfairness: large companies that are vertically integrated do not pay cumulative taxes, since there are no transactions in each stage of production.

The national government charges tax on transactions of industrialized products (IPI). The IPI has different tax rates, according to the type of industrialized product, which are unified in all the national territory.¹⁵

The dominant state tax is on transactions relating to the circulation of goods and services (ICMS), responsible for more than 90 percent of the states' own tax collection (see tables 23 and 24). The ICMS is an extremely complex tax, having different tax rates according to the type of good or service or to the state of origin or destination. Each state is a separate entity and may decide its internal tax rates. The rates that apply to interstate transactions and rendering of services are established by a resolution of the Federal Senate, and vary depending on the per capita income of the state.

With 26 states plus the Federal District in Brazil, one product may have 27 different internal tax rates throughout the country, in addition to various interstate brackets. This complicated system creates an environment that facilitates tax avoidance and tax evasion.

We could say that the state VAT has a restricted origin principle (it is taxable partly at the origin and partly at the destination). So far, Brazil has developed an extremely complicated system of differential rates, depending on the destination of trade within the country, and compensating payments between states. The Brazilian system is perhaps one of the most complicated VAT systems in the world.

Another consumption tax in Brazil is the municipal Tax on Services (ISS). It is cumulative, and is also characterized by a high degree of variety of tax rates from one city to the other. Each municipality (approximately 5,500) has autonomy to define its own tax rates.

The ISS is levied on services not included in the tax basis of the state tax on the circulation of merchandises and services.

¹⁵ With the exception of tax benefits for regional development

7) Tax competition for new investments

We can define the so used (and misused) world “globalization” as the liberalization of movements of capital and the increasing integration of world economies, all of that facilitated by the advent of world technologies of information and communications.

The new economic environment eases the integration of activities of transnational corporations (TNCs), which when deciding the location of the new investment may reduce costs in many fields, including tax costs. It is a kind of blackmail adopted by enterprises against national and local governments: if the latter two do not provide tax incentives (which is equal to tax savings for the TNCs), the former would not invest in certain country, state or municipality.¹⁶

Brazil is a country characterized by a great inequality in the income distribution, not only between the poorer and the richer inhabitants, but also amongst different states and municipalities. The richest state has a GDP per capita seven times higher than the poorest.

In order to attract new direct investment and to diminish the gap in the wealth distribution, the poorer states and municipalities started offering tax benefits, mainly since the beginning of the 1990s. However, the wealthier states and municipalities followed suit, creating tax competition within the country. As a result, the overall tax collection has been affected. Solely national and foreign businesses have benefited from increasing tax incentives.

The present VAT system, which allows states to determine the internal tax rate and to concede exemptions and deductions, led to a predatory competition for new investments. There is a committee comprised by state tax administrations (CONFAZ), which debate tax rates and tax competition, but does not have power to impose unified tax laws or prevent fiscal wars.

¹⁶ As a matter of fact, top multinational corporations are now more powerful than many governments, including some with high or middle per capita income. In 1997, General Motors' total sales were higher than the total GDP of Thailand and Norway; Ford Motor, Mitsui & Co and Mitsubishi had higher total sales than Poland's and South Africa's GDP (United Nations 1999, p. 32).

Losses for governments are not limited to tax expenditures: several states and municipalities have provided infrastructure for sole use of new investors, and even loans to be amortized over several years without monetary actualization. Most of the tax benefits have been given to national and multinational companies that would invest in Brazil, in any case.¹⁷ The only variable is the location of production, in which state or municipality they would install the venture. Unfortunately, the central government has not withstood fiscal wars in Brazil. Without a national law prohibiting it, this pernicious situation tends to remain unchanged. It must be part of the reformulation of the Brazilian VAT system, as will be argued later.

8) Why Brazil's tax policy hinders economic growth?

- **The existence of cumulative taxes and taxation on the origin**

Indirect taxes are pernicious in terms of equity, and **cumulative** tributes and taxation on the origin are harmful for national industry (see section 5).

- **A very complicated system; a system that stimulates fiscal wars**

A very complicated system that is troublesome for taxpayers and/or tax administrations and facilitates tax evasion and tax avoidance may also obstruct economic growth. That is the case of Brazil's VAT system, described in section 6. Furthermore, the Brazilian VAT, which allows states to determine the internal tax rate and to concede exemptions and deductions, led to a predatory competition for new investments (see section 7).

Deficits in central and local public finances due to tax competition hinder economic growth, inasmuch as governments lose the capability to invest and may have to issue public bonds, crowding out private investment.

- **Low taxation on underdeveloped properties**

Brazil is a country characterized by the existence of large underdeveloped rural estates and vacant urban estates. Both are often used in speculation. In spite of that, taxation on underdeveloped properties is very low or is not assessed. A

¹⁷ See Varsano (1997)

system that does not penalize the speculative use of properties hampers economic growth.

- **High taxation on consumption**

Taxes on the circulation of goods and services are harmful not only in terms of equity, they penalize the national productive sector (which is taxed domestically in the production chain) and favor foreign competitors (which are only taxed in the final consumption).

Moreover, taxes on consumption concentrate savings in the hands of the richest strata of society (their tax burden is lower). Nowadays, those savings may be invested abroad (displacement effect), causing a net loss for the country.

9) A comparative assessment of Brazil and Japan's tax system. Lessons from Japan

Figures referred here are related to the tax collection of the year 1997.

In Japan, revenues from direct taxes were 71.5 percent of the total tax collection, far greater than in Brazil (43 percent).

Japan's fiscal burden (38.2 percent of the GDP) is higher than Brazil's (25.8 percent of the GDP).

In Japan, the centerpiece of the whole tax system is taxes on income (corporate and individual) whereas in Brazil it is taxes on consumption.

In Japan, tax rates on income and property are higher than in Brazil

For example:

Highest tax rates for selected taxes (%)

| | Japan | Brazil |
|-------------------------|-------|--------|
| Personal income tax* | 50.0 | 27.5 |
| Corporation income tax* | 37.5 | 25.0 |
| Inheritance tax | 70.0 | 8.0 |

*Not included prefectural and municipal taxes on income, in the case of Japan.

As a result, the share of taxes on income in the total fiscal collection is 36.2 percent in Japan and 17.2 percent in Brazil. And the total taxation on properties is 3.34 percent of the GDP in Japan is 0.95 percent of the GDP in Brazil.

On the other hand, Japan's consumption tax has an exceptionally low rate (5 percent) compared to up to 25 percent of the Brazilian state VAT. The share of

taxes on consumption is far greater in Brazil (47.4 percent) than in Japan (21 percent).

Japan's consumption tax has various other distinctive features that differs from the Brazilian VAT. The differences are mainly due to the purpose of simplifying the system and making filing and payment easier for enterprises and individuals. Simplicity is the first difference to be pointed out in Japanese consumption tax. The existence of a single tax rate makes it a transparent tax and difficult tax avoidance and evasion.

Another significant characteristic of the Japanese consumption tax is its broad-based nature. Even books and newspapers are included in the VAT base in Japan, but excluded in Brazil. Also, the Brazilian VATs pursue various reductions of the basis for calculation, presumed credit, postponements, exemptions, etc., causing extreme complexity with restricted-base.

Also an important distinctive characteristic of Japan's tax system is the lack of autonomy of states and municipalities to define their own tax policy. Tax rates are unified all over the country. This hinders fiscal wars.

Learning from Japan it can be pointed out:

- The measures for redistribution of the national income ("punish the rich") in the aftermath of World War II;
- The system centered in taxes on income; a particular emphasis was given upon the equity principle of taxation; the new system took into consideration the ability to pay;
- The shift of tax burden from indirect to direct taxes. This happened ahead of the rapid industrialization, while Japan was still recovering from the war, showing that a country may have a progressive tax system even before becoming developed;
- The positive outcome of tax policies for capital accumulation during the rapid economic growth era;
- The simplified and efficient consumption tax system;
- The non-existence of tax competition for new investments;

- The cooperation system of income tax, as an example of how cooperation can work to reduce the taxpayer's burden and increase the efficiency of tax collection.

10) Conceptualization of a new taxation system

As discussed in section 2, a tax reform in Brazil should not effectuate a diminution in the total tax burden, but bring improvement in the quality of taxation. Some important points that should be included in the reform:

a) Shift of tax burden from indirect to direct taxes, in order to enhance the equity of the taxation system and to promote its modernization. This can be done through:

- Decrease in taxation over consumption (presently nearly 50 percent of the total tax burden);
- Increase in taxation on income, by means of increase in the marginal tax rates of corporate and personal income taxes and resuming taxation on dividends payments, along with improvement in their assessment. As argued previously, the "substitution effect" should not be considered when formulating a new income tax policy (see section 3.1).
- Increase in taxation on property. It should include the regulation of the tax on large fortunes (IGF); effective assessment of the Rural Territorial Tax (ITR), specially on large underdeveloped rural real estates; increase in the tax rates and in the progressiveness of the state Inheritance and Donation Tax (ITCD) and in the municipal Urban Real Estate Tax (IPTU). The latter should be heavily levied on vacant urban estates.

b) Elimination of cumulative taxes, in order to improve the competitiveness of the productive sector.

Amongst the indirect taxes, the most detrimental to the national economy are the cumulative ones. The Contribution for the Financing of Social Security (COFINS), the Social Integration Program (PIS) and the Temporary Contribution on Financial Operations (CPMF), as Federal tributes, should be immediately extinguished. The Tax on Services (ISS), as the main source of revenue for

municipalities, would remain as the only cumulative tax in the Brazilian system, but with a single unified rate all across the country.

c) Reformulation of the VAT system

As described previously, the Brazilian VAT system is troublesome for both tax administrations and taxpayers, it facilitates tax evasion and tax avoidance and stimulates fiscal wars for new investments.

The simplest form of a VAT would certainly be the introduction of a federal VAT with a single flat rate. However, Brazil has peculiarities that we have to take into consideration while proposing a tax reform.

1. In Brazil, the revenues from indirect taxes are far greater than that from direct taxes. Taxes on consumption predominate in the taxation system. Hence, taxpayers would certainly oppose a proposition of taxing basic and luxury goods at the same tax rate. One intermediate solution could be the introduction of three tax rates: zero or reduced rate for basic goods, standard for ordinary goods and higher for luxury goods.

2. The states of Brazil, having administered the state VAT (which is much more important than the federal VAT) since its inception in the late 1960s, are likely to withstand a proposition that contemplates its extinction.

Therefore, the proposition is to:

- Uniform definition of the base of the federal and state VATs.
- Uniform administration of the federal and state VATs.
- The tax rates (internal and interstate) shall be determined by the Federal Senate and shall be uniform all across the country.
- The federal and state VAT shall be selective, based on the essentiality of the product.
- The exemptions, deductions and other tax expenditures shall be determined by law and shall be uniform across national territory.
- Extinction of the IPI (Tax on Industrialized Products) and ICMS (Tax on the Circulation of Merchandises and Services).

- Provide the national committee of tax administrations (Conselho Nacional de Administracoes Fazendarias – CONFAZ) with powers to enforce unified tax laws across the country, as a way to prevent fiscal wars.

CONCLUSION

This paper analyzed two countries, Brazil and Japan, which presented similar stages of development in different historical periods.

Japan's defeat in World War II precipitated radical changes in the economic and political structure. The old order, characterized by the excessive economic power of the zaibatsu, the political power of the military, the landlords rule over tenant farmers, the workers' low wages and lack of rights, was changed for a modern state, catalyst of the high-speed growth era.

Vested interests were wiped out due to the hardships the population was facing. Urban and rural properties were democratized, workers gained the right to strike, wealth was deconcentrated. A transformation and modernization of a country will always encounter opposition from parts of the society, and it could not have been different in Japan. However, what mattered was not the individual interests of every citizen, but the interests of the country as a whole.

Japan's experience has demonstrated that a country does not need to postpone a real change in the tax structure until it achieves a high stage of development. Rather, a modern system can stimulate economic growth and enhance the domestic market. During the reconstruction period (1945-55), Japan already had a progressive system, whose centerpiece was taxes on income, and whose taxation on consumption was meager.

It is difficult to convince the Brazilian society about the urgency of a radical change in the tax system. While discussing tax reform in Brazil, the center of the debate is frequently the tax burden, which is considered to be too high; the need for a simpler system, in which every member of the society, e.g. capitalists, workers, landlords would gain. There would be no losers in the new taxation system.

The receipt for the failure is to attempt to please everybody. The system must be changed not because the tax burden is high (in fact, it is low), not only because it is complicated, but mainly because it is regressive and unfair.

By their very nature, direct taxes make taxpayers feel their tax burden onerous. It is not an easy task to persuade taxpayers of the fairness and reliability of direct taxes, though they are fairer and more transparent than indirect taxes. When income or property taxes are levied on wealthy individuals, there is a loudly outcry against taxes. On the other hand, when taxes on consumption are responsible for more than 90 percent of the states' collection, there is no opposition against it.

The actual difference between Brazil's and Japan's system lies in who pays the taxes. Japan charges high taxes on income and property. The central and local governments base their tax collection on direct taxes. Conglomerates, wealthy individuals and proprietors bear most of the burden of taxes. In spite of the high marginal tax rates, tax evasion and tax avoidance are very low, which indicates that high brackets do not necessarily cause high tax evasion and tax avoidance. The consumption tax, even at a low rate of 3 percent, was gradually implemented due to fierce opposition from the public opinion.

In Brazil, on the contrary, low-income taxpayers bear most of the tax burden. Taxes on consumption and on circulation of goods, rather than on income and on property, predominate in the system. In addition, the system is inefficient, due to the chaotic VAT system and the existence of cumulative taxes.

There is scope for a rise in the brackets and in the collection of taxes on income and on property in Brazil. Direct tax rates are remarkably low for international standards. Wealthy individuals pay little tax. The effective taxation on underdeveloped urban and rural properties is meager. Large national and foreign companies can bear higher taxes. The tax competition for new investments, a suicide strategy whose outcome is higher fiscal deficits and nil results in terms of productive capacity, is a further reason for the pressing need for an effective tax reform.

The principle of ability to pay must be emphasized when proposing a tax reform. Brazil has abundant reasons for a fairer distribution of wealth. It is beyond belief that in a country with such resources, half of the population lacks the essentials of a decent life. Wealthy families send their children to study abroad, while public

schools and hospitals are deteriorating. The middle-class build urban bulwarks to protect against robbery, hence the lawlessness syndrome is part of everyday life. There are no religious or ethnic conflicts. However, a silent civil war is in course between the haves and the have-nots, where the main victims are the have-nots. Hopefully, Brazilian society will increase its awareness about needs for changes.

International organizations, e.g. the International Monetary Fund, assert that progressive taxation is outdated. Following these policies, the USA reformulated its system in the 1980s, having in mind just revenue collection. The result was a deeper gap between the rich and the poor. In spite of the so-called economic success of the 1990s, the number of people living below the poverty line has increased.

During the rapid economic growth era, other macroeconomic policies were coordinated with Japan's tax reform. Through the administrative guidance and foreign exchange control, investments in R&D, the low interest rates policy, strict control and restrictions on the entrance of foreign investments, balance of payments equilibrium, Japan broadened the domestic market and became a high-developed country. Public and private sectors were not antagonists, rather they worked together in the growth pattern dictated by the state.

Brazil has yet to find its own development path. Liberalization of international trade, high interest rates, privatization of state-owned enterprises, liberalization of capital inflows and outflows, have resulted in rising unemployment, higher internal and external debt, denationalization of the economy, increasing urban violence. At the end of the decade, a very pronounced financial crisis materialized, meaning more hardship for Brazilians.

Although having predominated in the 1990s, the Washington Consensus policies are not the single form of market economy. Japan's experience, which was to a certain extent emulated by other Asian countries, has shown that Brazil and other developing countries can adopt alternative economic policies leading to a self-sustained economic development.

Recommendations for Brazil, comparisons with Japan and lessons from Japan are in the contents of chapters 1, 3 and 4.

In chapter 1, section 3 (“conclusions and lessons for Brazil”), some lessons are taken for Brazil: the importance of choosing strategic sectors when formulating an industrial policy; the possibility of shifts in the comparative advantages of the country; the non-correlation between capital liberalization and introduction of foreign technology and rapid economic growth, in the case of Japan; and others, described in that chapter.

Chapter 3, section 6, contains a comparative assessment of Brazil’s policies during the 1990s and Japan’s during the rapid growth era. In section 7, recommendations for new policies are included, divided in the short run (lower interest rates, measures to avoid sudden capital outflows) and middle term policies (in relation to incentives for regional development, a policy for Research and Development, in relation to FDI and to balance of payments).

Chapter 4, section 8 expresses reasons why Brazil’s tax policy hinders economic growth (the existence of cumulative taxes and taxation on the origin, the complicated VAT system that stimulates fiscal wars, low taxation on underdeveloped properties, high taxation on consumption). Section 9 presents a comparative assessment of Brazil’s and Japan’s tax system and lessons from Japan. Section 10 conceptualizes a new tax system (shift of tax burden from indirect to direct taxes, elimination of cumulative taxes, reformulation of the VAT system).

BIBLIOGRAPHY

- 1) Balassa, B, & Noland, M. (1988). *Japan in the world economy*. Washington: Institute for International Economics.
- 2) Central Bank of Brazil. (1997). *Boletim do Banco Central do Brasil, February 1997*. Brasilia: Internet issue.
- 3) ---. (1998). *Suplemento estatístico outubro 1998*. Brasilia: Internet issue.
- 4) ---. (1999). *Boletim do Banco Central do Brasil, January 1999 and August 1999*. Brasilia: Internet issue.
- 5) Federative Republic of Brazil. (1997). *Constitution of the Federative Republic of Brazil 1988*. Brasilia: The Federal Senate, Special Secretariat for Printing and Publishing.
- 6) Letto-Gillies, G. (1992). *International production: Trends, theories, effects*. Cambridge: Polity Press.
- 7) International Monetary Fund. (1995). *Tax policy handbook*. Washington, D. C.: Fiscal Affairs Department.
- 8) Komyia, R. (1966). *Postwar economic growth in Japan*. Berkeley: University of California Press.
- 9) ---. (1990). *The Japanese economy: Trade, industry, and government*. Tokyo: University of Tokyo Press.
- 10) Krugman, P. R. & Obstfeld, M. (1997). *International economics: Theory and policy*. Reading, Massachusetts: Addison Wesley Longman, Inc.
- 11) Laplane, M. & Sarti, F. (1999). *Investimento direto estrangeiro e o impacto na balança comercial nos anos 90*. Brasilia, D. F.: IPEA
- 12) Lyra, F. T. (1996). *A política industrial brasileira: mudanças e perspectivas*. Brasilia, D. F.: IPEA
- 13) McClure Jr., C. E. (1998a). *The tax assignment problem: Conceptual and administrative considerations in achieving subnational fiscal autonomy*. California: Stanford University.

- 14)---. (1998b). *Protecting dual vats from evasion on cross-border trade: An addendum to bird and gendron*. California: Stanford University.
- 15)Ministry of Finance of Japan. (1989). *Japan: National consumption tax law (An English translation)*. Sydney: CCH International.
- 16)---. (1997). *An outline of Japanese taxes*. Tokyo: Printing Bureau of the Japanese Ministry of Finance.
- 17)Nakamura, T. (1995). *The postwar Japanese economy*. Tokyo.
- 18)National Tax Administration of Japan. (1997). *An outline of Japanese tax administration*. Tokyo.
- 19)Okita, S. (1992). *Postwar reconstruction of the Japanese economy*. Tokyo: University of Tokyo Press.
- 20)Patrick, H. & Rosovsky, H. (1976). *Asia's new giant*. Washington, D.C.: The Brookings Institution.
- 21)Reischauer, E. O. (1998). *Japan: The story of a nation*. Tokyo: Charles E. Tuttle Co.: Publishers.
- 22)Revenue Service of Brazil. (1994). *Sistema tributario: Caracteristicas gerais, tendencias internacionais e administracao*. Brasilia, D. F.: Escola de Administracao Fazendaria.
- 23)Rodrigues, J. J. & Santos, S. (1997). *Carga fiscal no Brasil 1997*. Brasilia, D. F.: COGET (Coordination of Economic Studies, Revenue Service of Brazil).
- 24)Shibata, T. (1990). *Public finance in Japan*. Tokyo: University of Tokyo Press.
- 25)Sigurdson, J. (1995). *Science and technology in Japan*. London: Cartermill Publishing.
- 26)Stiglitz, J. E. (1988). *Economics of the public sector*. New York: W. W Norton & Company.
- 27)Tait, A. A. (1988). *Value added tax: International practice and problems*. Washington, D. C.: International Monetary Fund.
- 28)Takayanagi, S., & Miwa, K. (1975). *Postwar trends in Japan*. Tokyo: University of Tokyo Press
- 29)The Tokyo Metropolitan Government. (1998). *Guide to metropolitan taxes for 1998 (English version)*. Tokyo

- 30)Tsuru, K. (1996). *The Japanese market economy system: Its strengths and weaknesses*. Tokyo: Simul International, Inc.
- 31)Tsuru, S. (1994). *Japan's capitalism: Creative defeat and beyond*. Cambridge: Cambridge University Press.
- 32)United Nations. (1999). *Human development report 1999*. Washington, D. C.
- 33)Varsano, R. (1997). *A guerra fiscal do ICMS: Quem ganha e quem perde*. Brasilia, D. F.: IPEA .
- 34)Wasilewski, L. F. (1998). *Zona Franca de Manaus: Resultados e perspectivas*. Brasilia, D. F.: COGET (Coordination of Economic Studies, Revenue Service of Brazil).
- 35)---. (1999). *Brazilian VATs and the Japanese consumption tax: A comparative study*. Tokyo: National Tax Administration.
- 36)World Almanac Books. (1998). *The world almanac and book of facts 1998*. Mahwah, New Jersey: K-III Reference Corporation.
- 37)World Bank. (1999). *World development indicators 1999*. Washington, D. C.
- 38)Yamamura, K. (1967). *Economic policy in postwar Japan*. Berkeley: University of California Press.