Tax Structure and Tax Burden in Brazil: 1980–2004

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This chapter describes and illustrates the main features of the Brazilian tax system from 1980 to 2004. During this period, the Brazilian economy experienced a faulty economic growth process in the presence of very high rates of inflation.and a significant upward movement of the total tax revenue collected by the central, state and local governments from a level of 25 percent of GDP to an all-time high of 32.8 percent in 2004. This effort to raise additional revenue occurred in the 1990s and is primarily explained by social security expenditures and by interest payments on public debt.

The data collected also indicate that the tax system is dominated by indirect forms of taxation. The use of taxes on goods and services represented nearly 50 percent of the total tax revenue for most of the period.

The chapter also identifies the key changes in the tax laws in the period and the current problems of design and administration of the tax system.

Finally, the macroeconomic context is presented, and an attempt is made to relate the ups and down in the rates of economic activity and inflation to tax revenues and internal and external debt.

Tax Structure

The 25-year period 1980–2004 was characterized by significant changes in the Brazilian tax structure and in the amount of money that the three levels of government diverted from private use through taxation.

The tax system that had been in place in the early 1980s was designed as part of a tax reform program implemented from 1965 to 1967[2]. This reform promoted major changes, the most important being the introduction of value-added taxation. This new mode of taxation came to replace two cumulative taxes: the tax on sales and consignments (IVC), which was the backbone of the states' revenue, and the misnamed federal "consumption" tax, which in reality taxed all sales within the industrial sector and imports in general. In addition, the 1965–1967 tax reform revitalized, or perhaps more appropriately, truly instituted income taxation in Brazil with the implementation of modern tax administration procedures. [3]

During the late 1960s, the Brazilian public sector raised revenues equivalent to 25 percent of GDP with the use of a dozen taxes and three contributions.[4] This picture changed as time progressed, however. The tax system of the 1980s had essentially remained unchanged from the system implemented in the late 1960s. New demands for expenditures, mainly in the social area, however, led to a new federal contribution, FINSOCIAL, in 1982. In addition, a new state tax (IPVA) was created in 1986, based on ownership of automobiles and other means of transportation.[5]

In 1988, the picture shifted even further, as Brazil enacted a new constitution. Even though the constitution was successful in terms of the construction of democratic values and institutions, it failed to develop an effective tax system. It should be recognized, however, that the constitution improved the taxation of goods and services by eliminating federal excises on fuel, electricity, minerals, communications, and interstate transportation, and by incorporating the corresponding tax bases in the Tax on the

Circulation of Goods and Services (ICMS) (a VAT that is the main source of revenue of the states).

To summarize briefly, the new constitution reinstated the tax structure that existed in 1988[6] and added four new taxes and contributions: a local tax on the retail sale of fuels, a state personal income tax, a federal wealth tax, and a federal social contribution on profits (CSLL). With the exception of CSLL, the other new taxes were abandoned in a few years for a variety of reasons.

In 1994 the federal government introduced a (provisional) bank debit tax with the purpose of raising some extra revenue for that particular fiscal year. This revenue source reemerged in 1996 as a contribution (Provisional Contribution on Financial Transactions — CPMF) to finance heath care. In 2002, the Brazilian government implemented a federal fuel tax (a contribution earmarked for road maintenance and construction).

Given these changes the main taxes and contributions collected in 2004 by the federal government, states, and municipalities are shown in Table 7.1.

Table 7.1. Main Taxes and Contributions in Brazil, 2004

Level of Government and Taxes	R$ million	% GDP	% Total
FEDERAL GOVERNMENT	**442,280**	**22.78**	**69.72**
FISCAL BUDGET	**155,855**	**8.03**	**24.57**
Income Tax	110,308	5.68	17.39
IPI (VAT Industry)	22,538	1.16	3.55
Import Tax	9,181	0.47	1.45
IOF (Loans, foreign exchange, and insurance tax)	5,209	0.27	0.82
ITR (Rural Property)	245	0.01	0.04
CIDE (Fuel Tax)	7,816	0.40	1.23
Others	558	0.03	0.09
SOCIAL SECURITY BUDGET	**246,466**	**12.69**	**38.85**
Social Security Contribution	93,765	4.83	14.78

COFINS (VAT)	77,593	4.00	12.23
PIS/PASEP (VAT)	19,417	1.00	3.06
CPMF (Financial Transactions)	26,340	1.36	4.15
CSLL (Contribution on Net Profits)	19,575	1.01	3.09
Others	9,776	0.50	1.54
NON CLASSIFIED	**39,959**	**2.06**	**6.30**
FGTS (Workers' Retirement Fund) payroll	28,269	1.46	4.46
Others	11,690	0.60	1.84
STATES GOVERNMENTS	**165,324**	**8.52**	**26.06**
ICMS (VAT)	138,275	7.12	21.80
IPVA (Vehicles)	8,910	0.46	1.40
ITCD (Inheritance Tax)	710	0.04	0.11
Others	17,429	0.90	2.75
MUNICIPALITES GOVERNMENTS	**26,786**	**1.38**	**4.22**
ISS (Services)	9,682	0.50	1.53
IPTU (Urban Property)	8,965	0.46	1.41
ITBI (Property Transfer)	1,851	0.10	0.29
Others	6,288	0.32	0.99
TOTAL	**634,390**	**32.77**	**100.00**

Source: IBGE/FRS.
Note: GDP (2004): R$ 1.9 trillion = US$ 663.6 billion.

The data reveal that the federal government raised 69.72 percent of Brazil's total revenue, while the states collected 26.06 percent and the municipalities raised the smallest fraction, 4.22 percent.

Taxes and contributions collected by the federal government are divided to finance two independent budgets: the fiscal and the social security budgets.[7] The fiscal budget's main source of revenue is the income tax (personal and business). Other major sources of revenue include IPI, a value-added tax centered in the industrial sectors, an import tax, IOF (a tax on loans, the purchase of foreign exchange, and insurance

premiums), and CIDE (a recently created federal fuel contribution tied to road repair and construction).

The social security budget[8] is fed by five contributions: (1) contributions of employees and employers, a 30 percent rate on payroll (20 percent paid by employers and 10 percent by employees); (2) COFINS – Contribution to Finance Social Security, a turnover tax created in 1982 that was converted to a VAT in 2004; (3) PIS, a contribution on turnover created in 1970 that was converted to a VAT in 2002; (4) CPMF, a contribution created in 1996 to finance health care (its rate of 0.38 percent to be applied to bank debit entries of current and savings accounts and other similar transactions); and **(5)** CSLL (contribution on net profits).

This brief description reveals that Brazil has not one, but four VATs. The states have one VAT, and the federal government has three. All considered, this mode of taxation raised 13.3 percent of GDP in 2004.

The primary source of revenue for the states is the ICMS—a broad-based consumption-type VAT that produced revenue of 7.81 percent of GDP in 2004 and is the most important tax collected in the country.

The states also raise revenues with two other levies: a tax on ownership of vehicles (IPVA) and an inheritance and donation tax (ITCD). The municipalities tax certain services (ISS) and urban property (IPTU).

The FGTS contribution (workers' retirement fund) is not an item of revenue of the federal treasury. It was created in 1996 to reduce labor market rigidities, and its proceeds are deposited in individuals' accounts. Sums can be withdrawn in the case of unmotivated dismissal, retirement, or death of the beneficiary.

BOX 7.1. Tax Bases and Tax Rates

FEDERAL TAXES AND CONTRIBUTIONS

PERSONAL INCOME TAX
Annual Taxable Income
Under R$ 12,696 - exempted
From R$ 12,696 to R$ 25,000 - rate of 15.0% (-) R$ 1,904

Above R$ 25,380 - rate of 27.5% (-) R$ 5,076

BUSINESS INCOME TAX
Annual Taxable Income (profits)
Basic rate: 15%
Additional rate (annual profits above R$ 240,000): 10%

IPI - Tax on industrialized products
A value added tax with differentiated rates in the industrial sector, wholesale and imports. 54% of the tax revenue is derived from the sales of liquor & beverages, automobiles, tobacco, and imports by industry.

SOCIAL SECURITY CONTRIBUTIONS
(a levy based on payroll)
Employees pay a 10% rate
Employers pay a 20% rate

SOCIAL CONTRIBUTION ON PROFITS
The tax base is the same as the one used in the business income taxes. The rate is 9%.

PIS AND COFINS
Pis and Cofins are earmarked taxes and have the same tax base. For small firms the common base is gross revenue and the rates are, 0,65% and 3,0% respectively. For large firms the common base is value added (computed using the subtraction method) with rates of 1,65%

CPMF. Taxes debit entries of current & saving accounts at a rate of 0,38%.

FGTS. The tax base is payroll and the tax rate is 8%.

CIDE is a specific tax on fuel.

STATE TAXES

ICMS
Rates on value added, computed using the rax-credit method:
Internal rates (within the State) : 17% - 18% - 25%
Interstate commerce : 7% - 12%
Exports : Non–taxable (zero debit rate and creditation in full).

IPVA. Taxes the market value of vehicles at a rate of 2% to 4% depending on the state.

ITBI. A inheritance tax based on the value of bequest at a rate of (frequentily) 4%.

MUNICIPALITIES

TAX ON SERVICES. A tax based on the value of a well defined (nationally) list of services with a flat tax rate of 2% and a maximum rate of 5%.

URBAN PROPERTY TAX. Modal rates are: 0.25% on buildings and 2.0% on bare land.

Sources: Elaborated by the authors from different sources.

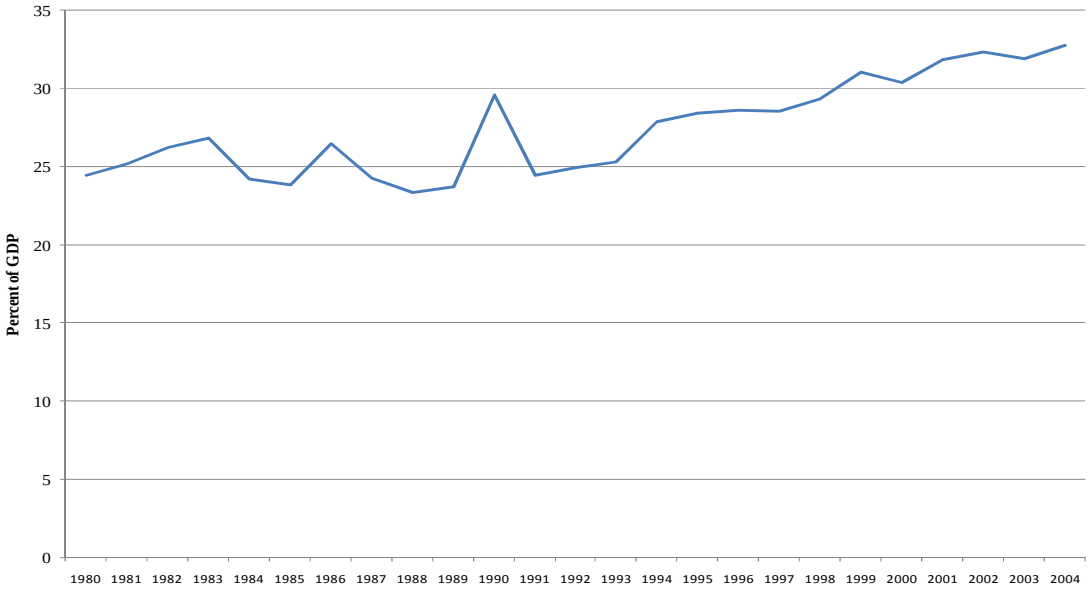
The Evolution of the Tax Burden (Central Government, States, and Municipalities)

In 1947, when the first national account statistics were published in Brazil, the overall tax burden corresponded to 13.8 percent of GDP. In the late 1960s, the ratio was pushed to 25 percent, as a result of a comprehensive tax reform. The 25 percent ratio, with some fluctuations, prevailed through the 1970s and even until 1989, as shown in Graph 7.1. In the troubled years of 1990 to 1993, however, the ratio reached a record level of 29.6 percent in the presence of very high rates of inflation and a stagnant economy. The ratio was subsequently restored to its historical level of 25 percent in the following years.

A new benchmark was established in 1994 when the tax burden corresponded to 27.9 percent of GDP. In that year, inflation was brought down to manageable levels as a result of a successful set of policies known as the Real Plan. (For a discussion of the Real Plan, see the Appendix to this chapter.)

Graph 7.1. Total Tax Revenue

(As a percentage of GDP)



Source: IBGE. Data available at IpeaData, elaborated by the authors.

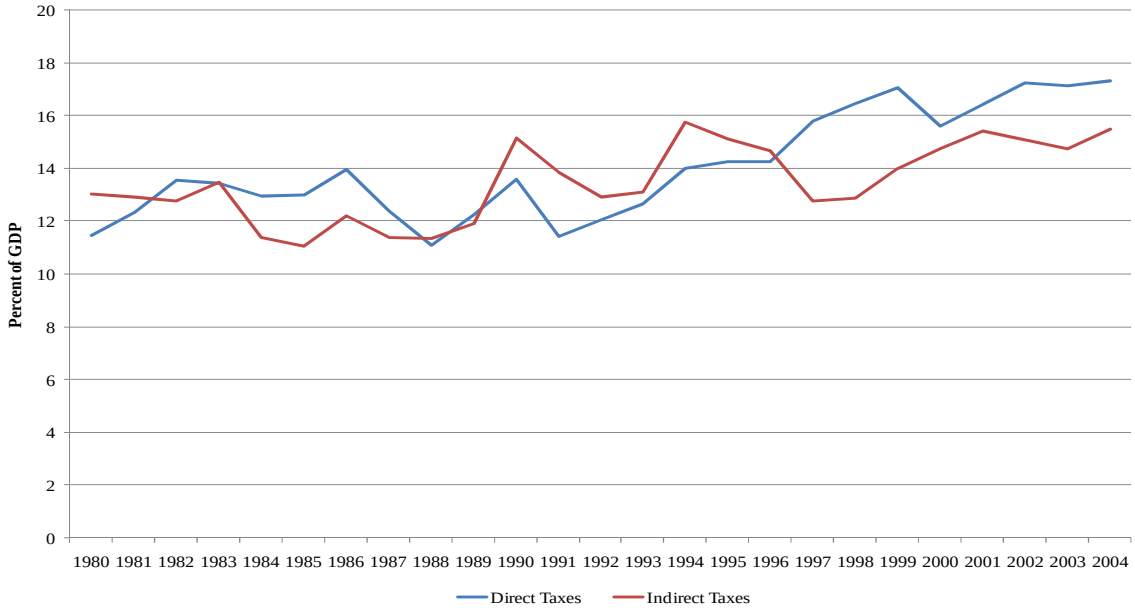
Remarkably, in the period from 1993 to 2004, the ratio increased eight percentage points, moving from a 25 percent ratio in 1993 to its present level of 33 percent.

At this juncture, it is natural to ask why such an effort was made and how it was made. The short answer to the first question is that additional revenue was needed to sustain social expenditures (primarily pensions and health care), as determined by the new constitution, and to bring the public deficit under control. The mechanisms used were the traditional ones: rate increases and new taxes.

Direct and Indirect Taxes

Table 7.A.2, which can be found in the Appendix to this chapter, shows the several levies collected under the usual titles of direct and indirect taxes; Graph 7.2 exhibits some of the results.

Graph 7.2. Direct and Indirect Taxes, 1980-2004



Source: IBGE and Varsano and Others (1998), elaborated by the authors.

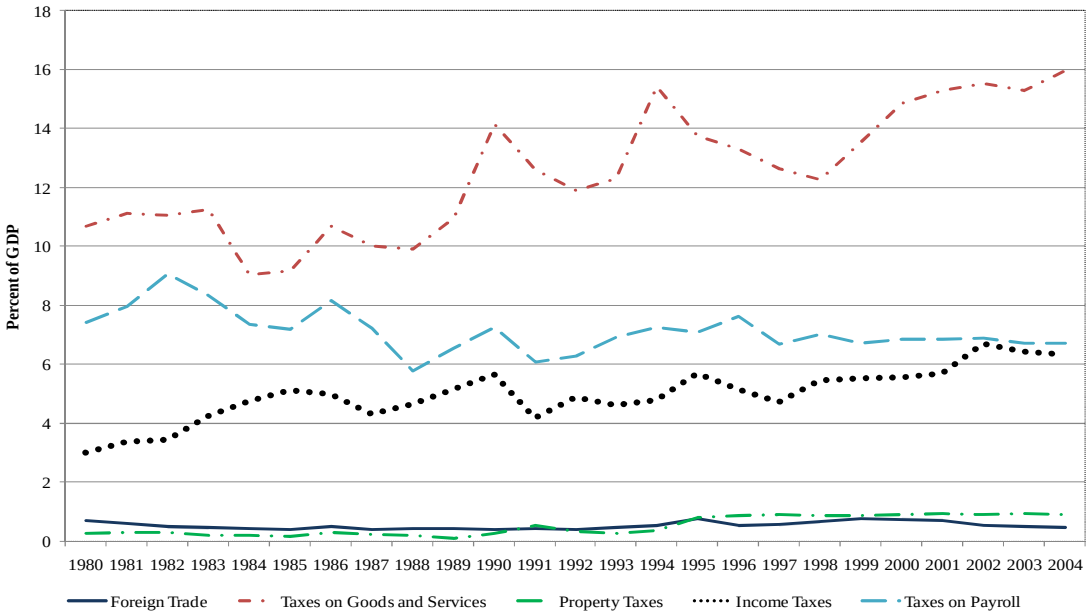
For most of the 1980s, an almost fifty-fifty partition prevailed between direct and indirect taxes.[9] In the 1990s, indirect modes of taxation dominated, owing to the creation and rate increases of social contributions (FINSOCIAL, PIS, and CPMF). More recently, since 1997, the old parity has been restored, with the direct taxes prevailing.

Tax Categories

To shed further light on the evolution of the tax system in Brazil, we can break down the tax burden into five categories, as presented in Table 7.A.3 of the Appendix. The categories are: taxes on foreign trade, goods and services, property, income, and payroll. As shown in Graph 7.3, taxes on goods and services dominate the picture. Contributions

based on payroll occupied a distant second place throughout the period, though income taxes have closed in on this category recently.

Graph 7.3. Tax Categories, 1980-2004



Source: IBGE and Varsano and Others (1998), elaborated by the authors.

As shown above, property and import taxes have not been important in the formation of total revenue of the public sector in Brazil. More specifically, import taxes, which raised 50 percent of the federal government's revenue in the 1920s, have lost ground since the 1940s and continue to decline.

From 1980 to 2004, the total tax burden in proportion to GNP grew eight percentage points. Of this increase, almost five percentage points were the result of increases in taxes on goods and services—mostly contributions to finance social security. The remaining increase of three percentage points was due to an increase in income taxation.

The data reveal how social security expenditures have increased in the last 15 years. In 1989, the revenues that sustained the fiscal and social budgets as a percentage of GDP were 7.4 percent and 5.2 percent, respectively. In 2004, the proportions changed significantly—12.7 percent of GDP was allocated to social security versus 8.0 percent to the fiscal budget.

Contributions on payroll listed in Table 7.A.3 do not represent the only economic impact resulting from governmental intervention in labor markets in Brazil. Other legal provisions, associated with the hiring (and firing) of workers, are also relevant for economic analysis. In fact, payroll taxes represent only 35 percent of the total burden imposed by legal obligation on hiring workers. The wedge that exists between take-home pay and the wage paid by employers is around 100 percent. It seems that Brazil is, by far, the country that imposes the heaviest load on hiring workers in the world (Table 7.2).

Most analysts agree that this fact has contributed to an increase in informal labor relations and unemployment.

Table 7.2. Hiring Costs: Social Security and Other Costs (Selected Countries)
(As a percentage of total payroll)

Brazil	103.46
France	79.70
Argentina	70.27
Germany	60.00
England	58.30
Italy	51.30
Netherlands	51.00
Uruguay	48.06
Belgium	45.40
Paraguay	41.00
Japan	11.80
Denmark	11.60
Asian Tigers (average)	11.50
USA	9.03

Source: Pastore (2005) p. 49.

Taxation of Mineral Resources

Brazil is a country rich in natural resources; it is a big exporter of iron ore and aluminum, and a self-sufficient producer of petroleum. The mineral industry is exempted from the federal tax on industrialized products (IPI) and is taxed by the states' VAT (ICMS). In addition, it pays a financial compensation (royalties) to the federal government and to the state and municipality where the extraction process takes place.

By far, financial compensations for oil production are more significant compared to those for other minerals. On this account, in 2004, oil producers paid R$ 11.1 billion (0,63 percent of GDP) to the federal government, states, and municipalities.[10] In the same

year, non-oil mineral producers paid financial compensation amounting to R$ 326.0 million.

International Comparisons

Table 7.3, based on the work of Tanzi and Zee (2000), indicates that Brazil has a tax revenue to GDP ratio equivalent to that of a developed country and a tax structure that combines elements found in the tax structures of both developing and developed countries.

We can conclude from Table 7.3 that Brazil has the biggest tax burden among developing countries (the block “other countries” in the lower right-hand side in the table). The data seem to indicate that tax revenue in OECD countries rests on three pillars of almost equal size: income (14.2 percent), consumption (11.4 percent), and social security (9.5 percent). The proportion of income to consumption taxes in OECD countries is close to 1.2, while in Brazil, the ratio is about 0.6. With respect to social security taxes, Brazil exhibits a GDP ratio very similar to the ratio of OECD countries and well above that of other developing countries.

Table 7.3. Composition of Tax Revenue by Regions, 1985-1997

(As a percentage of GDP)

	1985 – 1987								1995-1997							
	Income			Taxes on Consumption				Social Security	Income			Taxes on Consumption				Social Security
		Of which:			Of which:					Of which:			Of which:			
	Total	Business	Personal	Total	General	Selective	International Trade		Total	Business	Personal	Total	General	Selective	International Trade	
OECD Countries[1]	13.9	2.8	11.3	11.3	6.0	3.8	0.7	8.8	14.2	3.1	10.8	11.4	6.6	3.6	0.3	9.5
America	14.0	2.5	11.4	7.6	3.4	2.2	0.6	5.8	15.4	3.0	12.3	7.0	3.7	2.0	0.3	6.1
Pacific	17.1	3.9	13.2	7.5	2.3	3.7	0.8	2.8	16.3	4.3	11.4	8.4	4.3	2.6	0.6	3.5
Europe	13.3	2.7	11.0	12.4	6.8	4.0	0.7	10.1	13.7	2.9	10.6	12.4	7.3	4.0	0.3	10.8
Other Countries[2]	4.9	2.8	1.7	10.3	2.3	2.6	4.2	1.2	5.2	2.6	2.2	10.5	3.6	2.4	3.5	1.3
Africa	6.3	2.9	3.1	11.7	3.2	2.3	5.7	0.4	6.9	2.4	3.9	11.6	3.8	2.3	5.1	0.5
Asia	5.7	3.6	2.1	9.5	1.9	2,5	3.6	0.1	6.2	3.0	3.0	9.7	3.1	2.2	2.7	0.3
Middle East	4.7	4.3	1.0	9.1	1.5	2,4	4.4	1.2	5.0	3.2	1.3	10.3	1.5	3.0	4.3	1.1
Western Countries	3.7	1.8	10	106	2.6	3.0	3.7	2.4	3.7	2.3	1.0	10.6	4.8	2.3	2.6	2.5
Brazil	**5.2**	**2.0**	**3.2**	**8.8**[3]	**7.4**	**0.9**	**0.5**	**8.3**	**5.2**	**2.2**	**3.0**	**9.4**	**8.1**	**0.7**	**0.6**	**9.2**

	Income/Taxes on Consumption		Business Income/ Personal Income		Fiscal Extraction - % of GDP		
	1985-1987	**1995-1997**	**1985-1987**	**1995-1997**		**1985-1987**	**1995 – 1997**
OECD Countries[1]	1.2	1.2	0.2	0.3	OECD Countries[1]	36.6	37.9
America	1.8	2.2	0.2	0.2	America	30.6	32.6
Pacific	2.3	1.9	0.3	0.4	Pacific	30.7	31.6
Europe	1.1	1.1	0.2	0.3	Europe	38.2	39.4
Other Countries[2]	0.5	0.5	1.6	1.2	Other Countries[2]	17.5	18.2
Africa	0.5	0.6	0.9	0.6	Africa	19.6	19.8
Asia	0.6	0.6	1.6	1	Asia	16.1	17.4
Middle East	0.5	0.5	4.3	2.5	Middle East	16.5	18.1
Western Countries	0.4	0.4	1.8	2.3	Western Countries	17.6	18
Brazil	**0.6**	**0.6**	**0.6**	**0.7**	**Brazil**	**23.45**	**29.03**

Source: Tanzi, V and Zee H. H. *Tax Policy for Emerging Markets: Developing Countries*. IMF Working Paper, March 2000.

[1]Excluding Czech Republic, Hungary, Korea, Mexico and Poland.

[2]A sample of 8 African Countries, 9 Asian Countries, 7 of Middle East and 14 Western Countries.

[3]Considers only ICMS and IPI.

Revenue Sharing

To understand how revenue sharing is carried out in Brazil, one must consider the country's institutional organization. Brazil is composed of 26 states, 1 federal district and nearly 5,600 municipalities. Together, these entities collect 35 percent of total revenue and incur a similar percentage of public sector expenditures. The regional governments have an equal legal footing with the central government, and they form a decentralized federation.[11] From the early days of the republic (1889) and more intensively since the 1930s, there have been increased calls for the decentralization of expenditure capacity through mandated revenue-sharing mechanisms.

The constitution determines that 21.5 percent of the revenue of IPI and income tax (personal and business) must be distributed in favor of the states and 22.5 percent of the same sources in favor of local governments. Another proviso states that an additional 3 percent of those taxes must be reserved for regional development programs. This implies that almost half (47 percent) of the total revenue of IPI and income tax are allocated to regional governments. Constitutional rules also mandate that 25 percent of ICMS revenue, the states' VAT, and 50 percent of IPVA (vehicles tax) be given to their respective local governments.

Table 7.4 indicates that mandated revenue sharing has increased the states' and local governments' share of total disposable tax revenue since 1980, while the federal government has had its share reduced to 58.9 percent. In terms of revenue raised, the

federal government has been losing ground—75.1 percent in 1980 compared with 67.9 percent in 2004.

Table 7.4. Revenue by Level of Government: The Role of Revenue Sharing, 1980 – 2004

	% of GDP				% of Total			
	Federal	**States**	**Local**	**Total**	**Federal**	**States**	**Local**	**Total**
Revenue Raised								
1980	18.50	5.40	0.70	24.60	75.1	22.0	2.9	100.0
1988	15.81	5.94	0.65	22.40	70.6	26.5	2.9	100.0
2004	24.96	9.81	1.99	36.76	67.9	26.7	5.4	100.0
Disposable Revenue (after transfers)								
1980	17.00	5.50	2.10	24.60	69.2	22.2	8.6	100.0
1988	14.00	6.00	2.40	22.40	62.3	26.9	10.8	100.0
2004	21.56	9.03	6.05	36.64	58.9	24.6	16.5	100.0

Source : Khair et al. (2005).

Earmarking and Other Budgetary Constraints

Brazil uses revenue earmarking extensively, particularly at the federal level. It has been estimated that about 80 percent of federal tax revenues were earmarked in 2003 against less than 60 percent in 1988.[12] This includes mandated revenue sharing in favor of states and municipalities, as well as special-purpose funds. Revenue sharing accounts for about 15 percent of federal tax revenues and is concentrated on the income tax and IPI, which are the federal government's most income-elastic taxes.

Efforts to increase federal revenue net of mandated transfers to the regional governments have resulted in greater reliance on contributions whose revenues are earmarked to social security but not shared with regional governments.

To mitigate this problem, a provisional arrangement to withhold federal earmarked revenues has been in place since 2000. A constitutional amendment now permits the federal government to hold back 20 percent of all federal revenues (net of intergovernmental transfers), thereby reducing the extent of de facto revenue earmarking at the federal level.

In addition, there are significant expenditure rigidities at the federal and regional government levels. The constitution requires all levels of government to earmark a share of their revenues (18 percent for the federal government and 25 percent for state and municipal governments) to finance education. Moreover, the states and municipalities are required to earmark 12 percent and 15 percent of their revenues, respectively, to finance health care.

Key Changes in the Tax Laws

Opening Up to International Trade

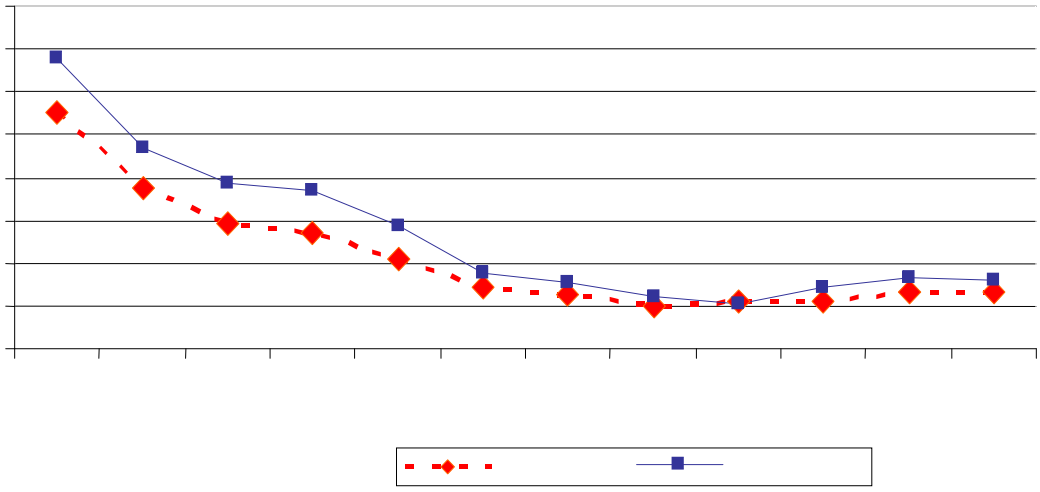
Brazil has a long history of utilizing tariff and non tariff barriers to promote its industrialization and growth. This policy can be considered successful, given the creation of a broad and diversified industrial sector in the second half of the twentieth century and the GDP growth rates observed for more than 50 years up to 1980.

Despite these results, based on short- and long-run considerations, in the late 1970s, the social costs of protection appeared excessive to analysts and government officials. Consequently, legal (nominal) and effective tariff rates have been substantially

reduced since 1988. Average nominal tariff rates were brought down from 55 percent in 1987 to 13.4 percent in 1998. The same path was followed by the effective rate, which was reduced from 67.8 percent in 1987 to its present level of 15 percent (see Graph 7.4).

The process of eliminating trade barriers may be considered successful. The levels of imports and exports observed in 1987 (US $15 and US $26.2 billion, respectively) increased fourfold by 2004 (US $62.7 billion and US $96.4 billion), and there are strong indications that imports of capital goods contributed to the modernization and productivity gains in the economy as a whole.

Graph 7.4. Nominal and Effective Tax Rates[1]



Source: Kume et al. (2003).
[1]Weighted by value added.

Taxation of Small Businesses (SIMPLES)

In 1996, the federal government enacted a law to meet the recurring demands of small businesses for lower taxes, simplification, and reduced compliance costs.[13]

For this segment, tax rates on sales vary from 3 to 7 percent, progressively, and this payment substitutes for the payment of six federal taxes and contributions: the business income tax, social contribution on profits, PIS, COFINS, IPI, and the employer contribution to social security.

Taxation of Capital Goods under ICMS

Until 1996, capital goods were taxed under ICMS without the benefit of a tax credit. ICMS was then a gross-income VAT. With new national legislation (law 87/1996), however, a tax credit is permitted in 48 monthly installments, thus at least partially correcting an important distortion of the tax.

Taxation of Exports under IPI and ICMS

The rules and regulations of both IPI and ICMS distinguish two types of non taxed products: the exempted or zero-rated and the immune ones. The former is a tax status that can be changed by ordinary legislation (laws and decrees), whereas the immune type is a constitutional provision.

Typically, for both taxes, the seller of an exempted or zero-rated product in the domestic market do not have the benefit of a tax credit. Of course this rule has negative consequences when the zero rate occurs in the intermediate stages of the productive process, in the form of cascading effects in the later stages of production and distribution.

The treatment of exports is a different matter. In the case of IPI, since its inception in 1967, sales abroad have a zero rate and producers can recoup the tax paid on raw materials, domestically produced or imported. The same rule applies to exports under ICMS after 1996. Before that date only industrial goods had the right to full tax credit while exports of agricultural products were taxed (at a 13 percent rate).

It was the law 87/1996 that corrected this problem by granting tax immunity to all exports and the benefit of full tax credit.

Transformation of Federal Turnover Taxes in Value-Added Taxes

Beginning in January 2002, the federal contribution known as PIS was tentatively converted in a VAT. As a turnover tax, it had a 0.36 percent rate and was replaced by a 1.65 percent VAT rate. Subsequently, in 2004, the federal government transformed COFINS, also a turnover tax, in a sort of VAT with a 7.6 percent rate.

PIS and COFINS are earmarked taxes (to social security) and have the same tax base. For small firms the common base is gross revenue, and the rates are, 0.65 and 3.0 percent, for PIS and COFINS respectively. For large firms the common base is value-

added (computed using the subtraction method) with rates of 1.65 and 7.6 percent, respectively.

The conversion of PIS and COFINS in the VAT cannot be seen as a definite improvement in the direction of eliminating cascading effects. Indeed, the option of taxing value-added is only open to large firms (mainly exporters). These firms pay the tax, computing value-added by using the subtraction method (sales – value of inputs and materials used). Small and middle-size firms collect the tax based on their monthly turnover. On both counts, it can be said that the cumulative or cascading effects are still present.

The Creation of CPMF in 1994

CPMF (Provisional Contribution on Financial Transactions), a tax earmarked for health expenditures, is a tax on certain financial transactions levied on withdrawals from and other debits to bank accounts.

According to Coelho (2001), a bank-debit tax was first introduced in Argentina in 1983 and was later implemented in Peru (1989), Brazil (1994), Venezuela (1994), Colombia (1998), Australia (1998), and Ecuador (1999). In all cases, the tax was introduced on a temporary basis, though in the case of Brazil, successive extensions have given it a permanent status. At present, only Brazil, Colombia, and Ecuador continue to enforce the tax, while the other countries have abandoned the experiment.

Overall, Coelho (2001) considered CPMF to be the most successful example of this mode of taxation in Latin America. It has been generating revenue of 1.5 percent of GDP, a level that has been sustained for several years (see Table 7.A.2).

Coelho (2001) points out that there is evidence that CPMF altered financial and investment behavior, especially in the wake of its reintroduction at the end of January 1997. In summarizing their analysis, the authors recommended that such taxes should be avoided; if they are to be used, they should only be levied at low rates, and the base should be defined so as to exclude, among other things, transactions in securities markets.

Current Problems of Design and Administration of the Tax System

Construction of a better tax system in Brazil will require a profound revision of certain expenditure patterns that have developed during the last 15 years. Ultimately, it was this upward surge in public expenditures that created the demand for new resources.

Most analysts consider a 33 percent tax burden oppressive, and some even consider it abusive. Regardless of which description is more accurate, the percentage attained in 2004 is high for a developing country, according to international standards. Making matters worse is that this increase in the tax burden has been followed by a deterioration in public services at both federal and regional levels.

The underlying cause of deterioration in public services can be traced to the increase in current expenditures since the early 1990s. Such increases are due to social security concessions and to interest payments on public debt, which have increased

twofold since 1994 (interest payments in 2004 represented 6.4 percent of GDP). In other words, the necessary fiscal adjustment has been accomplished primarily by increasing taxes and by compressing public investment. The greatest challenge now is to reconcile the need for continued fiscal consolidation with that of alleviating a high tax burden.

In the short run, progress can be made if interest rates can be reduced at a more rapid pace than that intended by the monetary authorities. In the long run, progress will demand more reforms of Brazil's public pension system. Currently, the public pension system costs 9 percent of GDP (above the OECD average); the system is unjust and expensive, and drains resources away from other strategic areas such as health, education, and infrastructure.

Complexity

The most common criticisms of the Brazilian tax system are that there are too many types of taxes and that the tax laws and regulations in effect are overly complex and difficult to control and comply with. Both criticisms are accurate.

Regressive Distribution of Tax Burden

A study by Vianna et al. (2000) reported incidence estimates for the Brazilian tax system. The results indicated that the tax system is highly regressive. Despite the fact that direct taxes are progressive, the final result is dominated by highly regressive indirect taxes.

Earmarking

A great amount of earmarking is embedded in the different taxes and contributions. In the case of the federal government, as noted earlier, earmarking is an especially serious problem. The obvious consequences of the phenomenon are the loss of budget flexibility, as well as the inefficient use of public money.

Tax on Payroll

Regulation of the labor market and taxation of payroll more than double the private cost of hiring labor. This fact seems to explain a significant part of the informal economy, which is a manifestation of disguised unemployment (Box 7.2).

The Move to Reform ICMS

After an unsuccessful attempt to create a single VAT that would consolidate most of the indirect taxes in Brazil, the call for simplification of the tax system was directed toward creation of a single VAT legislation for all states. At present, Congress has set the basic rules of the VAT, and the states have a high degree of autonomy in setting internal rates. Congress also has been discussing new legislation with far-reaching implications, the most important being a provision that subtracts from the states the prerogative to legislate and regulate the tax.

BOX 7.2 - The Informal Economy in Brazil

The Brazilian Institute of Geography and Statistics (IBGE) conducted two surveys of the urban informal sector, known as ECINF 1997 and ECINF 2003. Based on the 2003 survey, IBGE reported that the informal sector in urban areas was comprised of 10.5 million small businesses, half of which had no legal registration.

According to the 2003 survey, the annual revenue of those firms was R$ 217.5 billion, which corresponded to 14% of GDP. The investments they made were R$ 7.2 billion, equivalent to 2.3% of total investment registered in the national accounts. The most common economic activities in the informal economy were retail trade and repair (33%), construction (17%), and manufacturing and extraction (16%). The survey also registered that 31% of the owners of informal firms declared that they opened the business because they could not find any job and 17.6% because they needed to improve their family's income.

IBGE has estimated that between 1997 and 2003, employment in the formal sector increased 4% while the urban informal sector increased by 8% (from 12.9 to 13.9 million workers). This last graph corresponded to 26% of the labor force and, of the total employed, only 6% had social security registration.

Concern with the informal sector in Brazil is important because of job precariousness and its social consequences (e.g., lack of unemployment compensations, retirement income, access to financial services, etc). A substantial share of Brazil's

workers is without legal registration (60%) and approximately the same percentage (62%) of private sector workers have not been contributing to social security.

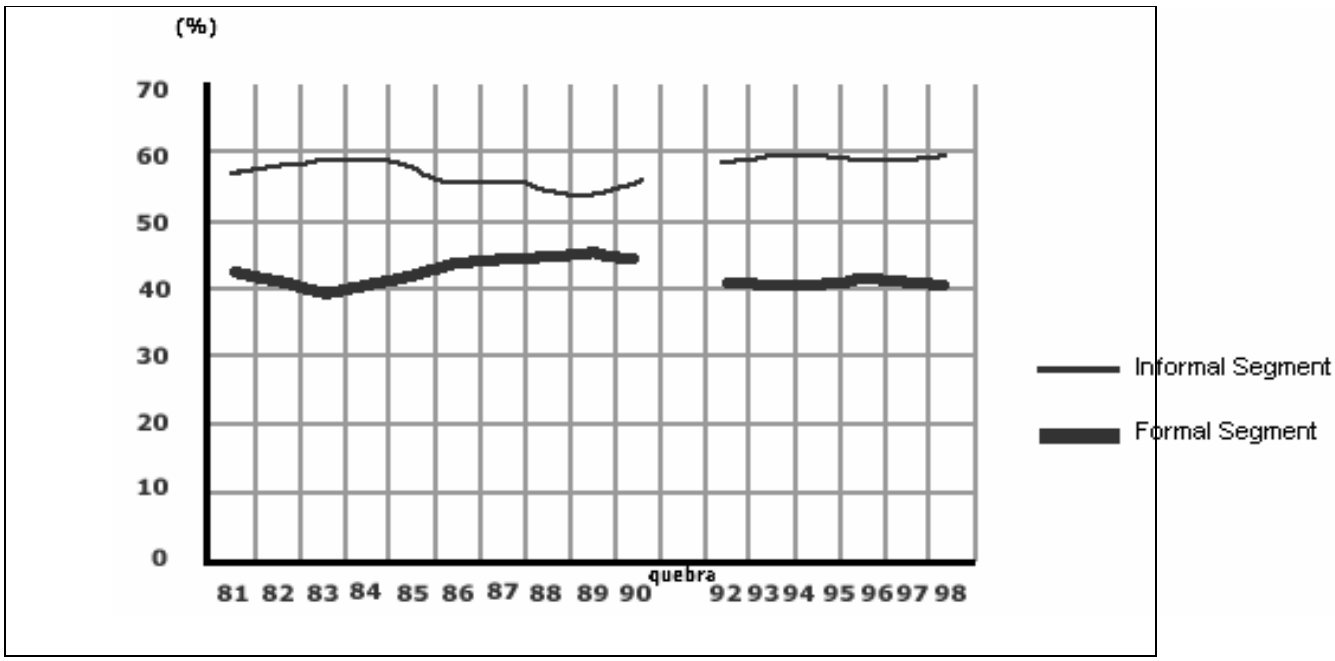
The graph below contains data collected by Cardoso Jr & Fernandes (2000) in which occupied workers are classified according to legal status in the 1980s and 1990s.

The formal segment of the labor market is comprised of workers with legal registration in the private sector and public employees (civil and military). The second group is comprised of those workers without legal registration, the self employed, and workers without pay.

The data indicate the dominance of informal labor relations in both periods. In addition, the data show an increase in informality in the 1990s, which seems to be independent of GDP cyclical behavior in contraposition to the (cyclical) behavior observed in the 1980s.

Barrros (1993) and Amadeo & Camargo (1996) provide empirical results supporting the hypothesis that labor market regulations and payroll taxes are the main factors behind the high degree of informality in the Brazilian labor market.

Graph 7.5. Occupied Workers According to Legal Status, 1981-1998



Source: Cardoso Jr. & Fernandes (2000).

Tax Administration: Methods and Experiences

In the last decade Brazil has made significant progress in tax administration and in reducing tax evasion . These developments deserve additional attention and are presented below.

Technological Advances

Most Brazilian taxes and contributions are self-assessed, with the exception of property taxes and CPMF (tax on financial transactions). For this reason, tax administrators in Brazil try to monitor physical transactions among taxpayers by tracking invoices and accounting books. Such activities are increasingly accomplished through the use of information technology.

Internet Tax Filings

According to Bill Gates,[15] several countries, including the United States and Australia, allow the electronic filing of taxes. Brazil, however, was the first country to enable large-scale tax filings electronically. This solution was implemented on March 30, 1997, and was made available to the public during the month of April, the last month required for an individual's income tax filing (business filings are due at the end of May). In 2002, 100 percent of businesses and 95 percent of individual taxpayers filed electronic returns in Brazil.

SISCOMEX

Another important development in tax administration was the creation of SISCOMEX in 1993. This system integrates the activities of registration, follow-up, and control of foreign trade in such a way that all federal agencies that play a role (including taxation) in the control of imports and exports operate exclusively using the data source provided by SISCOMEX. The benefits of such a system are represented by a paperless

environment, the reduction of red tape, and the sharing of information among agencies and the private sector.

SINTEGRA

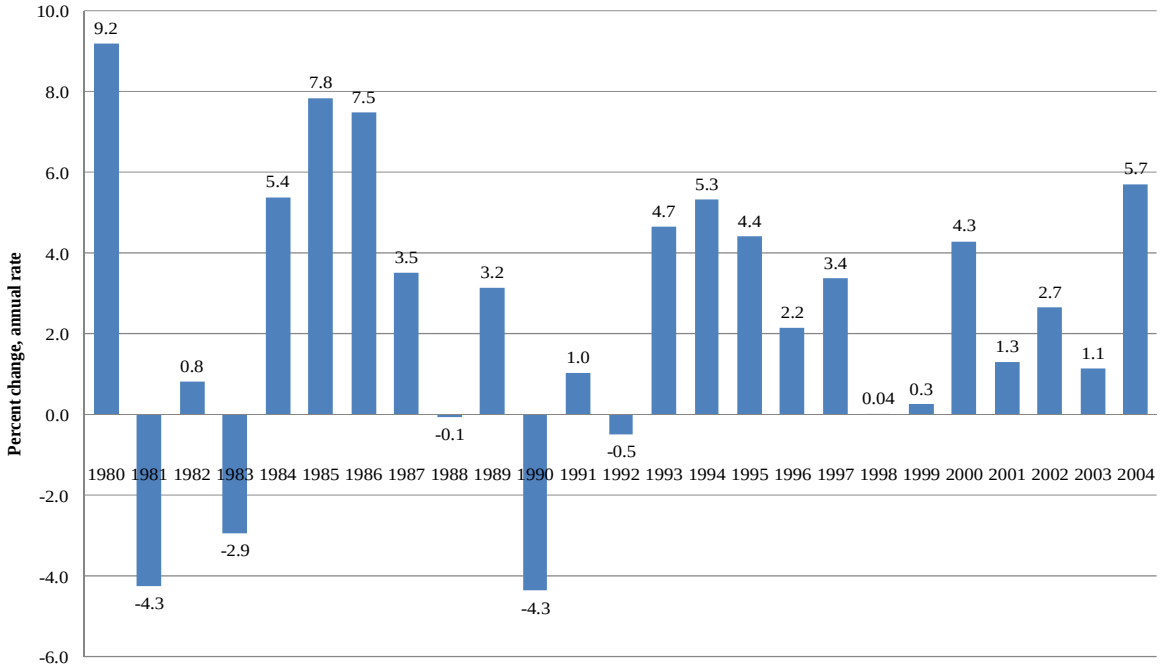
In the area of control, the creation of SINTEGRA in 2000 deserves attention. SINTEGRA is a system that allows for the electronic exchange of information of the states' VAT (ICMS), linking databases of the states as a mean of controlling interstate trade and standardizing procedures. The system also contains a portal where taxpayers can check data on suppliers, ensuring that they are active taxpayers in the cadastres of each state. This is important because the amount of ICMS due is the result of a debit/credit calculation on multiple stages of the economic chain. SINTEGRA is based on the experience of the European VIES–VAT information exchange system (see http://europa.eu.int/comm/taxation_customs/databases/viesen.htm), and it has resulted in gains of scale due to the shared collection, treatment, and storage of information.

Appendix

The Macroeconomic Setting: 1980–2004

The story of the Brazilian economy during the last 25 years can be deduced from GDP growth rates, as exhibited in Graph 7.A.1. The fluctuation of these rates resembles that of a faulty engine. After 50 years of steady growth, averaging 6.5 percent per year, GDP growth in Brazil has almost ground to a halt, averaging only 2.4 percent a year from 1980 to 2004.

Graph 7.A.1. Real GDP Growth 1980-2004



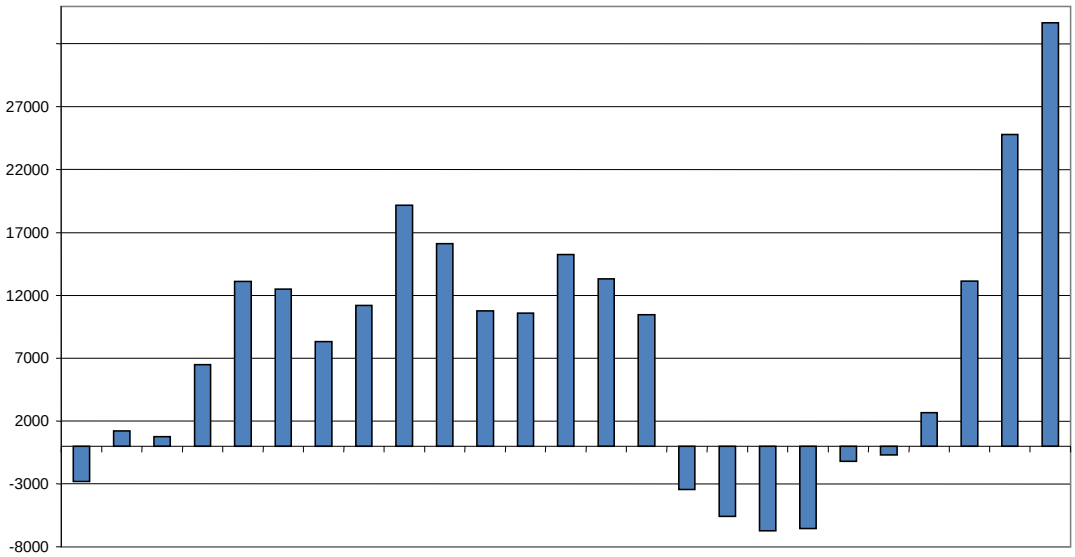
Source: IBGE. Data available at IpeaData, elaborated by the authors.

Brazil entered 1980 facing a macroeconomic situation that combined high inflation rates, high external debt, and a critical situation in its external accounts. In 1980

the inflow of external resources (US $9.6 billion) was insufficient to cover the current account deficit of US $12.7 billion. This graph was the result of the trade balance deficit (US $2.8 billion) and, more importantly, of resources sent abroad to service external debts.[16] In 1980, the country's gross external debt was US $64.3 billion (27 percent of GDP), and the annual inflation rate was 110.2 percent.

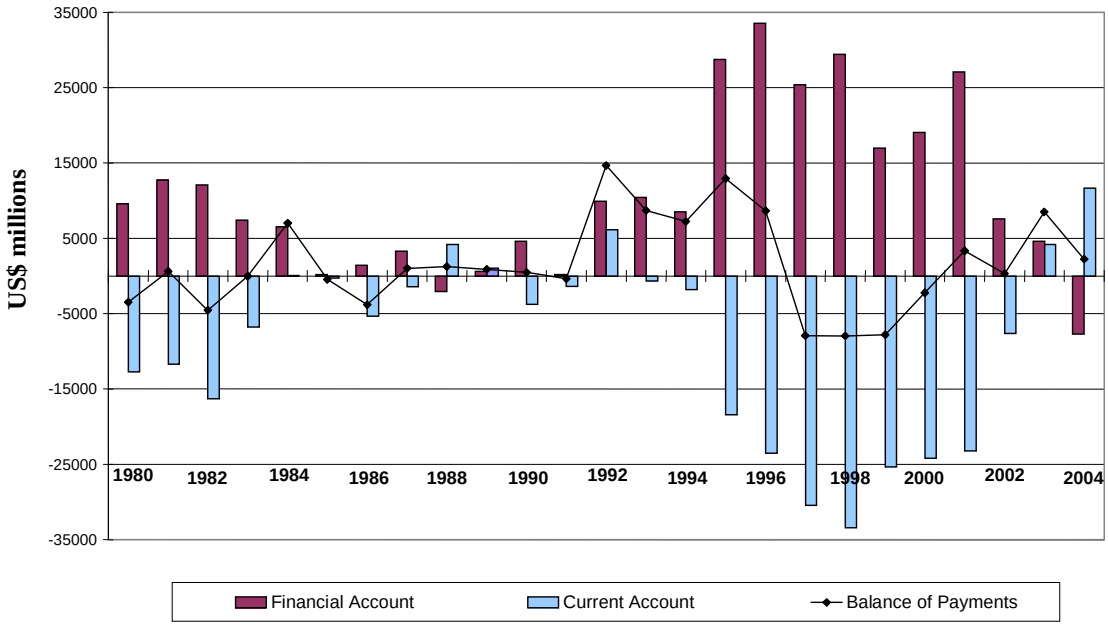
From 1981 to 1983, Brazil faced a period of contraction in its economy, with GDP growth dropping to an average rate of 2.16 percent per year. This situation was the result of a restrictive monetary policy (high real interest rates) aimed at two objectives: redirect internal production to exports by reducing internal demand and attract foreign capital to overcome the balance-of-payments imbalance. The initial results of this policy came in the form of small trade surpluses in 1982 and 1983; however, these surpluses were not sufficient to cover the balance-of-payments deficit. In 1982, after a significant loss of international reserves, Brazil signed an agreement with the International Monetary Fund and raised US $4.2 billion in loans.[17] In 1983, the government promoted another 30 percent devaluation of the exchange rate and obtained good results. The restrictive monetary policy, assisted by the maturation of investments carried through the II National Development Plan,[18] resulted in an increase of the trade balance and a BP surplus in 1984. Also, in 1984, a promising recovery of economic activity was observed, with a real growth in GDP of 5.4 percent.

Graph 7.A.2. Trade Balance, 1980-2004



Source: BCB. Elaborated by the authors.

Graph 7.A.3. Balance of Payments, 1980-2004

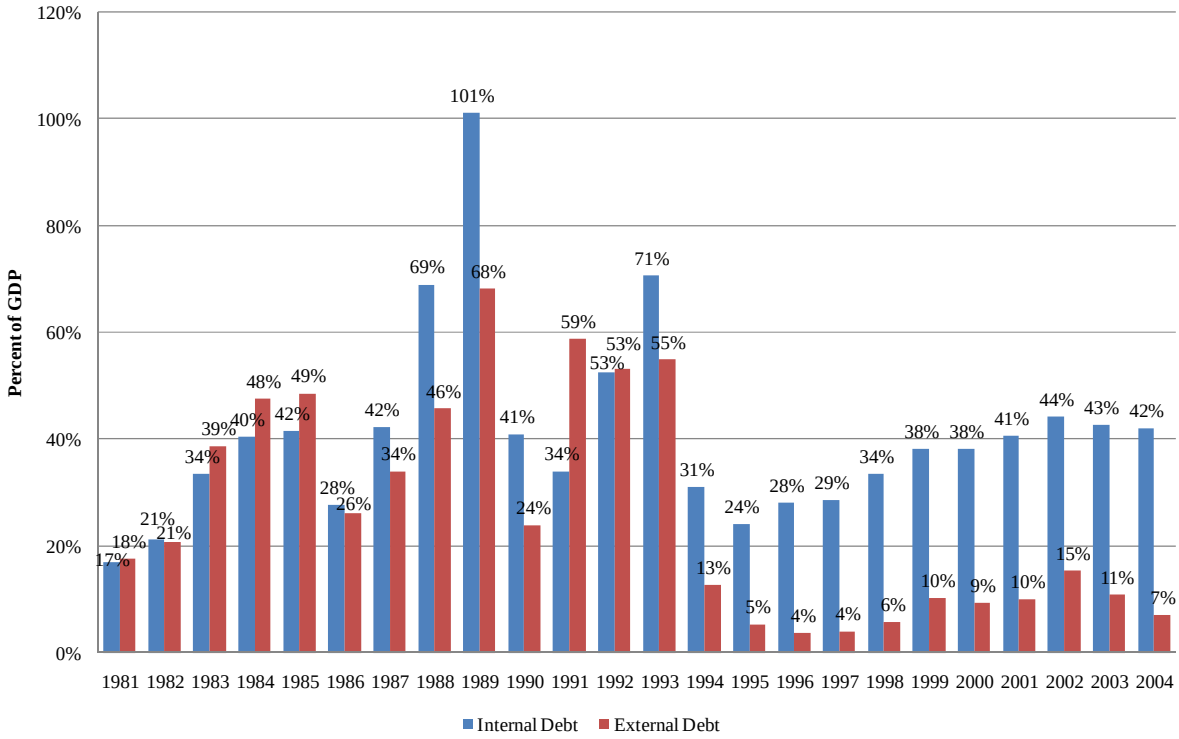


Source: BCB, elaborated by the authors.

The adjustment of the external accounts was painful; the ratio of external debt to GDP increased in the early 1980s, reaching its highest level in 1984 and representing 54 percent of GDP (Graph 7.A.6). Brazil was confronted with the fact that the external debt was predominantly public but the commercial surplus was private.[19] This worsened the internal fiscal problem, resulting in a higher public deficit, since the government was unable to obtain sufficient tax revenues to pay the costs of this indebtedness. However, the public external debt was not only the result of budget deficits accumulated over the years, but also the outcome of a government process that converted a significant share of the external private debt into internal public debt.[20]

During the 1980s and the first half of the 1990s, the external debt played an important role in forming the net public debt.[21] With the renegotiation of external debt and the implementation of the Real Plan, internal debt took the dominant position (Graph 7.A.4). This development was related to monetary policy. High interest rates attracted foreign capital that was converted into domestic currency, expanding the monetary base. At the same time the government, concerned with inflation, issued public bonds to sterilize the monetary base increase.

Graph 7.A.4. Net Public Debt - Consolidated Public Sector 1981-2004



Source: BCB. Data available at IpeaData, elaborated by the authors.

The price level throughout the 1981–1984 period increased at an accelerated pace. In 1981, annual inflation was 95.2 percent, followed by 99.7 percent in 1982, 221 percent in 1983, and 223.8 percent in 1984 (Graph 7.A.5).

In 1985, democratic elections were restored after two decades of military dictatorship. At that time inflation—its causes and cures—was at the center of the national economic debate.[22]

In 1985, the inflation rate was 235.1 percent, and the trade balance registered a surplus (US $12.5 billion). However, this result, though aided by the inflow of foreign capital, was unable to cover the current account deficit. Interest payments alone

represented a diversion of resources of US $11.6 billion. Remarkably, GDP grew 7.8 percent in 1985.

In 1986, the government implemented the first of five stabilization plans designed to bring inflation under control. The Cruzado (1986) along with other plans—Bresser (1987), Verão (1989), Collor I (1990), and Collor II (1991)—identified the generalized indexation of contracts—a process in which contracts are adjusted according to past inflation in an attempt to recover real income lost with the rise of the price level[23]—as the main cause of inflation. The principal instrument adopted to solve the inflationary problem was the use of price control mechanisms. In all cases, the results were very poor.

Table 7.A.1 indicates the period that price control lasted in each stabilization plan, as well as its results. Looking at Graph 7.A.5, we can observe that price controls generally were not effective. The only exception was the Collor I Plan, which managed to reduce inflation from a rate of 81.3 percent in March 1990 to levels around 20 percent per month until the adoption of the Collor II Plan (April 1991).

Table 7.A.1. Price Control Effectiveness

Stabilization Plan	**Begin**	**End**	**Duration (in months)**	**Accumulated Inflation (%)**		
				Before	During	After
Cruzado	March 1986	November 1986	9	11.1	10.3	14.5
Bresser	June 1987	August 1987	3	15.4	21.6	16.5
Verão	January 1989	May 1989	5	27.3	100.8	37.6
Collor I	March 1990	June 1990	4	72.8	71.1	18.3
Collor II	January 1991	April 1991	4	18.3	41.1	21.1
		Mean	**5**	**28.8**	**44.4**	**21.6**

Source: Franco (2005).
Note: "Before" refers to the last month before the price control was introduced. "After" means the sixth month after the end of price controls. The mean for "during" considers the duration of the price control.

Under the Cruzado and Bresser plans, the economy continued to grow: 7.5 percent in 1986 and 3.5 percent in 1987. However, use of restrictive fiscal and monetary policies reduced GDP growth to –0.1 percent in 1987. In 1989, with the Verão (summer) Plan, the economy grew 3.2 percent, but in 1990, GDP contracted 4.3 percent. This was the result of a severe monetary base reduction promoted by the Collor I Plan, which seized, for a period, all financial funds over 50,000 Cruzados Novos (approximately US $1,310).

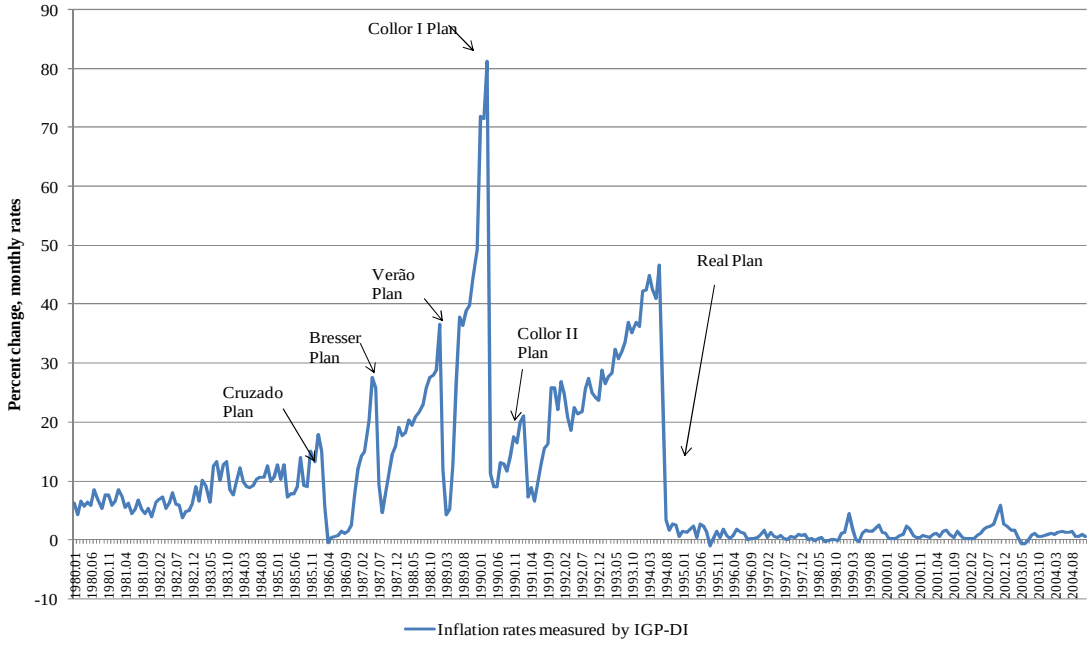
The crawling-peg exchange rate system that had been in effect since 1968 was also affected by the stabilization plans.[24] The Cruzado Plan established a monetary reform that substituted the old currency Cruzeiro (Cr$) for the Cruzado (Cz$) at the rate of Cr$ 1,000.00 four Cz$ 1.00. The exchange rate was fixed at the value prevailing the day before the adoption of the plan, and the crawling-peg system was abandoned. However, new inflationary pressures provoked the overvaluation of the domestic currency and led the government to reinstitute the crawling-peg mechanism. In 1987, the Bresser Plan devaluated the domestic currency by 9.5 percent and kept the crawling-peg mechanism. In 1989, the Verão Plan also promoted an almost 18 percent devaluation of the exchange rate and a monetary reform that replaced the Cruzado with a new currency called the Cruzado Novo. The value of the Cruzado Novo was fixed against the dollar at the rate of one to one. In 1990, the Collor I Plan adopted a floating exchange rate regime following the opening up of the Brazilian economy to external competition. However, this was a “dirty” floating since the Central Bank frequently interfered to reduce exchange rate volatility.

The Cruzado Plan was also characterized by a default on foreign debt. In 1986, a BP deficit of US $3.8 billion and the low level of foreign reserves (US $6.7 billion)

forced the government to suspend payment on external debts as of January 1987.[25] In January of the following year, this anomalous situation ceased, but the thorny issue was only solved in 1992 with the Brady Plan.[26]

The small GDP growth (1 percent) in 1991 was not even repeated in the next year. In 1992, Brazil suffered a political crisis that ended with the impeachment of President Fernando Collor. Although the balance of payments registered a surplus of US $14.7 billion, high interest rates and the political crisis led to a fall of 0.5 percent in GDP. The country's economy recovered only in 1993, when the GDP growth was 4.7 percent. Inflation accelerated again after the failure of the Collor I and II plans, reaching 480.2 percent in 1991, 1157.8 percent in 1992, and 2708.2 percent in 1993. Of course, this state of affairs was unsustainable and, at last, in 1994, the government implemented an extraordinary set of policies entitled the Real Plan.

Graph 7.A.5. Inflation Rate, 1980-2004



Source: FGV. Data available at IpeaData, elaborated by the authors.

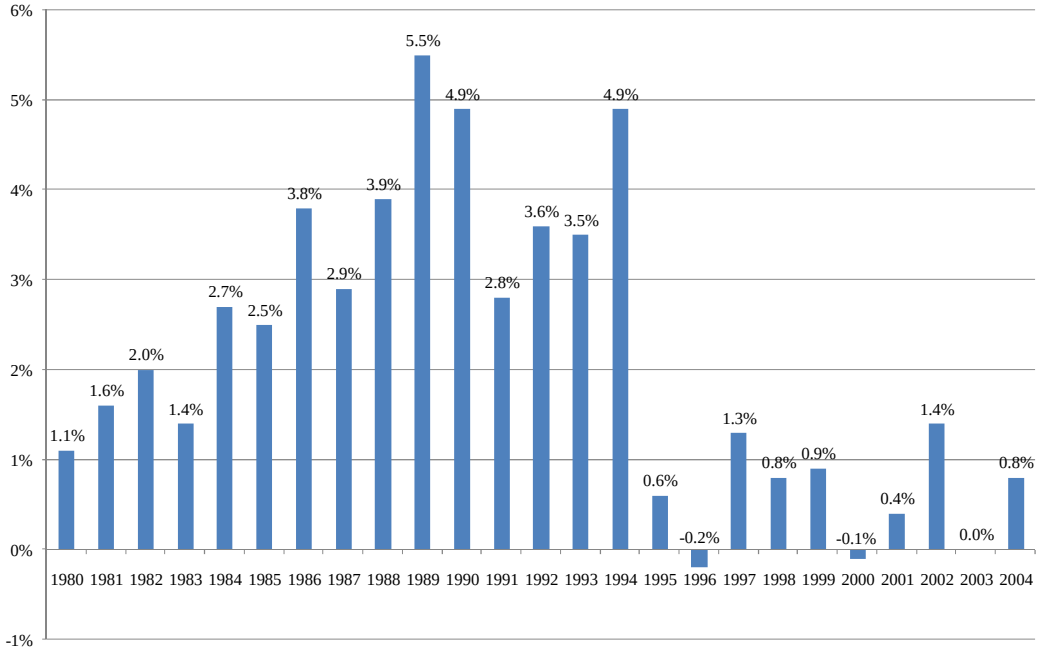
This time, inflation was brought down rapidly and remained low. In contrast with previous plans, price controls were not applied. Inertial inflation was eliminated through the complete indexation of the economy, followed by a monetary reform that created a new currency—the Real. At first, the stabilized prices were guaranteed by a combination of an overvalued exchange rate and high interest rates. The overvalued exchange rate allowed the use of imported goods to prevent local producers from raising their prices, and the high interest rates attracted short-term resources to ensure a balanced BP.[27]

The results of those policies were immediately evident. Along with lower inflation rates, there was a reversal in the trade balance results (Graph 7.A.2). After successive surpluses from 1981 until 1994, the economy suffered consecutive deficits during the period when the exchange rates anchor was in effect. The deficit in the current account was compensated by the inflow of foreign capital, mainly short-term resources. In 1995, from the resulting US $28.7 billion in the financial account, US $9.2 billion were portfolio investments and US $8.2 billion were short-term commercial credits. In 1996, the amount of foreign capital used to buy stocks and bonds increased: with a US $33.5 billion financial account surplus, US $21.6 billion were portfolio investment, and only US $11.3 billion were represented by direct investment.

BOX 7.3 - Seignorage

Given the very high rates of inflation observed in the 1980s and early 1990s, one should note the behavior of seignorage revenue[1] during this period. Following Rocha & Saldanha (1992), seignorage as a percent of GDP was calculated and the results shown below.[2]

Seignorage Revenue as % of GDP (1980 -2004)



Source: Data available at IpeaData, elaborated by the authors.

As it should be expected, seignorage revenues were significant during the period 1988-1994 when annual inflation rates were above 1000% (in 1993 it reached 2708%). After the Real Plan (1994), when inflation was brought under control, seignorage as a percent of GDP was reduced significantly.

[1]"The amount of real purchasing power that [a] government can extract from the public by printing money." (Cukierman, 1992)

[2] Seignorage as % of GDP (S_t) was calculated using following definition:

$S_t = \frac{H_t - H_{t-1}}{Y_t} = \frac{\pi_t H_{t-1}}{Y_t} + \frac{H_t - (1+\pi_t)H_{t-1}}{Y_t}$. Where:

H_t = monetary base at the end of *t*, π_t = rate of inflation between *t*-1 and *t* and Y_t = nominal GDP in *t*.

In the first three months of the Real Plan, the exchange rate followed a free floating system; however, negative results in the trade balance and the valuation of the exchange rate led the government to intervene. In March 1995, the government adopted a crawling band system, in which the Central Bank established a minimum and maximum value for floatation of the exchange rate. For the brief period between March and June of 1995, these limiting values remained fixed.

In the late 1990s, the Asian financial crisis and the Russian default caused a drop in the inflow of foreign resources to Brazil. This led to a deficit in the balance of payments (Graph 7.A.3) and difficulties in financing the successive current account deficits that reached US $33.4 billion in 1998. Thus, in January 1999, despite some desperate measures and a US $42 billion loan from the IMF, the Brazilian government was unable to defend the currency and a new devaluation took place. As a result, the government boldly reoriented its monetary policy through the adoption of inflation targeting and implemented a floating exchange rate regime.[28]

GDP behavior since the Real Plan has been frustrating. Initially, price stability enabled growth, due to gains in the real purchasing power of the poor. In 1994, GDP grew 5.3 percent and in 1995, 4.4 percent. However, the government's attempt to attract foreign capital through the adoption of high interest rates adversely affected GDP growth, which was 2.2 percent in 1996, 3.4 percent in 1997, and only 0.04 percent in 1998, a year in which the basic interest rate (Selic) reached 40 percent per year. Again, in 1999, high interest rates resulted in a GDP growth of only 0.3 percent. Despite the GDP growth of 4.3 percent in 2000, the next two years exhibited low rates of growth—1.3 percent in 2001 and 2.7 percent in 2002—due to conservative interest rate policies.

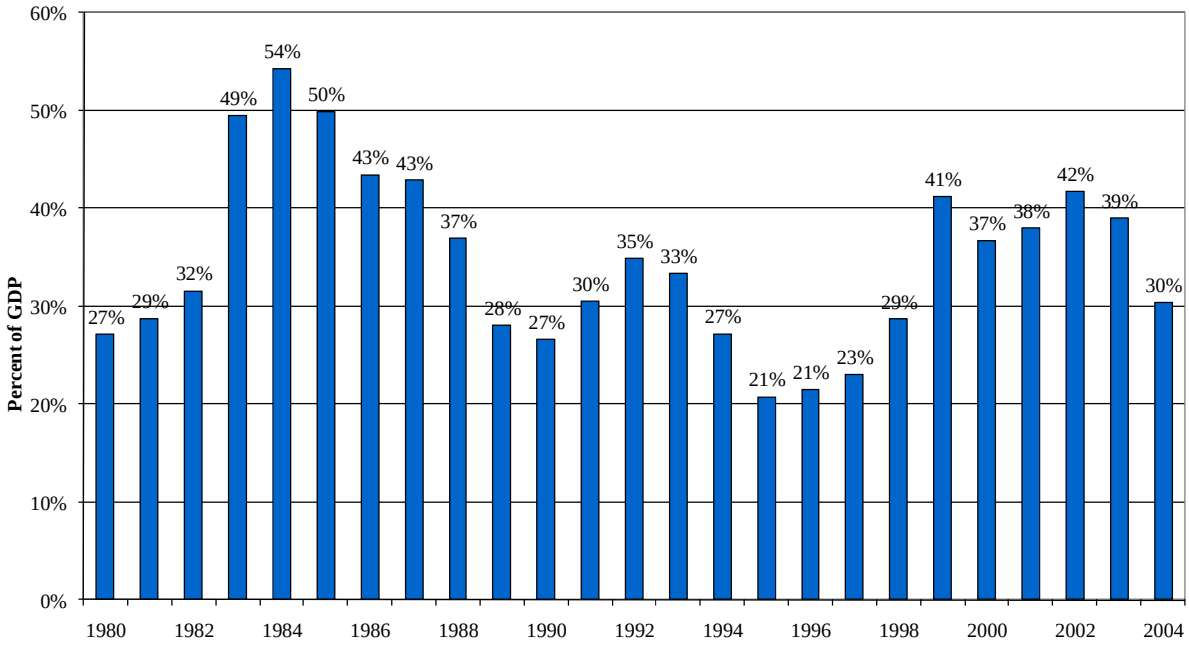
The year 2002 saw the election that brought a leftist party to the presidency. The fact that candidate Luiz Inácio Lula da Silva was leading in the polls caused instability in the financial markets, which provoked a new devaluation of the Real and entrance into a new agreement with the IMF. In 2002, the annual inflation rate reached 26.4 percent against 10.4 percent in 2001. To ensure the stability of the price level and to affirm to the financial markets a commitment to low inflation rates, the newly elected president tightened monetary and fiscal policies. The result was a small GDP growth of 1.1 percent in 2003 and an inflation rate of 7.7 percent.

One very important development in the Brazilian economy after the adoption of a flexible exchange regime in 1999 has been the continuous improvement in the trade balance and in the balance of payments.

In 2004, the excellent performance of the trade balance, due to a 32 percent growth in exports compared to 2003, surpassed the deficit in the financial account and

guaranteed a BP surplus of US $2.2 billion. The expansion of the exporting sector stimulated GDP growth (5.7 percent), and the annual inflation rate was 12.1 percent.

Graph 7.A.6. Gross External Debt, 1980-2004
(As a percentage of GDP)



Source: BCB. Data available at IpeaData, elaborated by the authors.

Since 1980, Brazil has endured great economic difficulty. As a result, the country continues to search for a new paradigm that will enable a new path of sustained economic growth. The result of this search has been a transition from a model that relied heavily on public investments and initiatives favoring import substitution to a more liberal approach with less government intervention.

Economic liberalization began in 1990 with the Collor reduction of tariff and non tariff barriers and the privatization of state-owned companies. The government of Fernando Henrique Cardoso continued this trend toward liberalization by eliminating the state monopoly in telecommunications and oil and by privatizing utilities and public service state-owned companies.[29] Most recently, it appears that the Lula administration has kept things on track. Still, there continues to be intense debate on the best means of using newly conquered price stability and a comfortable position in Brazil's external accounts to achieve sustained economic growth.

Table 7.A.2. Direct and Indirect Taxes, 1980-2004

(% do PIB)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total Tax Revenue	24.51	25.26	26.32	26.96	24.35	24.06	26.18	23.77	22.43	24.13	28.78	25.25	25	25.78	29.77	29.39	28.92	28.58	29.33	31.07	30.36	31.87	32.35	31.90	32.77
Direct Taxes	11.47	12.33	13.55	13.45	12.93	12.99	13.96	12.37	11.08	12.22	13.6	11.4	12.05	12.65	14	14.24	14.24	15.80	16.44	17.06	15.60	16.42	17.26	17.14	17.32
Income tax	3.01	3.37	3.46	4.24	4.76	5.13	5.01	4.31	4.67	4.94	5.13	3.9	4.18	3.85	3.83	4.78	4.3	3.89	4.68	4.84	4.78	4.98	5.81	5.47	5.30
ITR (Federal rural land tax)	0.02	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	-	-	0.02	-	0.01	-	0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02
Social Security Contribution	4.66	4.99	6.05	5.45	4.91	4.73	5.18	4.74	4.4	4.63	5.11	4.37	4.41	5.19	4.82	4.89	5.13	4.70	4.76	4.52	4.72	4.69	4.81	4.75	4.83
FGTS (Workers' retirement fund)	2.32	2.49	2.52	2.4	2.01	1.92	2.46	1.94	0.86	1.41	1.46	1.29	1.28	1.25	1.78	1.51	1.5	1.38	1.71	1.63	1.59	1.62	1.52	1.47	1.30
Contribution for education	0.22	0.26	0.25	0.22	0.2	0.26	0.23	0.24	0.22	0.21	0.32	0.08	0.26	0.15	0.27	0.36	0.38	0.32	0.27	0.24	0.21	0.24	0.24	0.22	0.19
IPVA (Vehicles tax)	-	-	-	-	-	-	0.14	0.1	0.06	0.05	0.09	0.15	0.13	0.11	0.18	0.37	0.4	0.48	0.45	0.42	0.45	0.48	0.47	0.46	0.46
IPTU (Urban property)	0.25	0.29	0.29	0.22	0.2	0.16	0.17	0.13	0.14	0.07	0.18	0.37	0.22	0.15	0.21	0.41	0.45	0.38	0.39	0.43	0.44	0.42	0.42	0.46	0.43
CPMF (Financial transactions)	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	1.06	-	-	0.74	0.83	0.75	1.23	1.32	1.38	1.36	1.36
Contribution on Net	-	-	-	-	-	-	-	-	-	0.21	0.54	0.28	0.73	0.79	0.97	0.91	0.85	0.82	0.79	0.69	0.79	0.72	0.90	0.99	1.05

Profits																									
Others	0.99	0.90	0.95	0.91	0.84	0.78	0.76	0.9	0.72	0.7	0.77	0.94	0.84	1.08	0.88	0.99	1.2	3.07	2.54	3.52	1.36	1.93	1.69	1.96	2.38
Indirect Taxes	13.04	12.93	12.77	13.51	11.42	11.07	12.22	11.4	11.35	11.91	15.18	13.85	12.95	13.13	15.77	15.15	14.68	12.78	12.89	14.01	14.77	15.44	15.09	14.76	15.50
Import tax	0.7	0.59	0.49	0.45	0.41	0.4	0.48	0.4	0.43	0.43	0.39	0.42	0.4	0.45	0.52	0.76	0.54	0.55	0.67	0.74	0.72	0.70	0.54	0.48	0.47
IPI (Vat industry)	2.19	2.2	2.2	2.11	1.4	1.84	2.17	2.43	2.17	2.21	2.4	2.14	2.32	2.44	2.22	2.07	1.96	1.79	1.67	1.55	1.60	1.49	1.34	1.16	1.18
IOF (Loans tax)	0.94	1.16	1.14	0.72	0.86	0.55	0.67	0.57	0.35	0.16	1.3	0.59	0.62	0.8	0.69	0.5	0.37	0.40	0.36	0.46	0.27	0.28	0.27	0.26	0.27
Federal excise on fuel	2.12	2.16	1.87	2.11	0.29	0.16	0.14	0.31	0.31	0.04	0.02	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal excise on energy	0.21	0.25	0.26	0.25	0.23	0.21	0.22	0.18	0.16	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal excise on minerals	0.08	0.08	0.08	0.08	0.11	0.09	0.09	0.07	0.07	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COFINS (VAT)	-	-	0.27	0.61	0.57	0.62	0.71	0.67	0.77	1.1	1.54	1.55	1	1.37	2.56	2.43	2.3	2.04	1.91	3.02	3.38	3.56	3.54	3.50	4.08
PIS (VAT)	-	-	-	-	-	-	-	-	0.4	0.64	1.14	1.05	1.08	1.16	1.07	0.91	0.95	0.81	0.77	0.92	0.85	0.88	0.87	1.02	1.03
Fed. contributions on maritime freight	0.14	0.16	0.13	0.17	0.24	0.19	0.19	0.17	-	0.10	0.14	-	-	-	-	-	0.06	-	-	-	-	-	-	-	-
ICMS (VAT)	4.87	4.95	5.08	5.03	5.29	5.44	6.35	5.49	5.34	6.41	7.24	6.76	6.42	6.04	7.33	7.3	7.15	6.35	6.22	6.37	6.98	7.24	7.13	7.02	7.10
ISS (Services)	0.26	0.32	0.14	0.36	0.29	0.28	0.32	0.31	0.33	0.33	0.43	0.44	0.41	0.35	0.43	0.51	0.56	0.51	0.50	0.47	0.53	0.53	0.50	0.54	0.54
IVVC (Retail sale of fuel)	-	-	-	-	-	-	-	-	-	0.03	0.06	0.06	0.06	0.06	0.07	0.03	-	-	-	-	-	-	-	-	-
CIDE (Federal fuel tax)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	0.44	0.39
Others	1.53	1.06	1.11	1.62	1.73	1.29	0.88	0.8	1.02	0.43	0.52	0.82	0.64	0.46	0.88	0.64	0.79	0.33	0.78	0.47	0.44	0.77	0.41	0.34	0.44

Table 7.A.3. Tax revenue by Category, 1980-2004

(*% do GDP)*

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total Tax Revenue	24.51	25.26	26.32	26.96	24.34	24.06	26.18	23.77	22.43	24.13	28.78	25.25	25	25.78	29.77	29.39	28.92	28.58	29.33	31.07	30.36	31.87	32.35	31.90	32.77
Foreign Trade	0.7	0.59	0.49	0.45	0.41	0.4	0.48	0.4	0.43	0.43	0.39	0.42	0.4	0.45	0.52	0.76	0.54	0.55	0.67	0.74	0.72	0.70	0.54	0.48	0.47
Import tax	0.7	0.59	0.49	0.45	0.41	0.4	0.48	0.4	0.43	0.43	0.39	0.42	0.4	0.45	0.52	0.76	0.54	0.55	0.67	0.74	0.72	0.70	0.54	0.48	0.47
Taxes on Goods and Services	10.67	11.12	11.04	11.27	9.04	9.19	10.67	10.03	9.9	10.95	14.13	12.61	11.91	12.29	15.43	13.75	13.29	12.64	12.26	13.54	14.84	15.30	15.52	15.30	15.96
ICMS (VAT)	4.87	4.95	5.08	5.03	5.29	5.44	6.35	5.49	5.34	6.41	7.24	6.76	6.42	6.04	7.33	7.3	7.15	6.35	6.22	6.37	6.98	7.24	7.13	7.02	7.10
IPI (Vat industry)	2.19	2.2	2.2	2.11	1.4	1.84	2.17	2.43	2.17	2.21	2.4	2.14	2.32	2.44	2.22	2.07	1.96	1.79	1.67	1.55	1.60	1.49	1.34	1.16	1.18
IOF (Loans tax)	0.94	1.16	1.14	0.72	0.86	0.55	0.67	0.57	0.35	0.16	1.3	0.59	0.62	0.8	0.69	0.5	0.37	0.40	0.36	0.46	0.27	0.28	0.27	0.26	0.27
COFINS (VAT)	-	-	0.27	0.61	0.57	0.62	0.71	0.67	0.77	1.1	1.54	1.55	1	1.37	2.56	2.43	2.3	2.04	1.91	3.02	3.38	3.56	3.54	3.50	4.08
PIS (VAT)	-	-	-	-	-	-	-	-	0.4	0.64	1.14	1.05	1.08	1.16	1.07	0.91	0.95	0.81	0.77	0.92	0.85	0.88	0.87	1.02	1.03
CPMF (Financial transactions)	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	1.06	-	-	0.74	0.83	0.75	1.23	1.32	1.38	1.36	1.36
ISS (Services)	0.26	0.32	0.14	0.36	0.29	0.28	0.32	0.31	0.33	0.33	0.43	0.44	0.41	0.35	0.43	0.51	0.56	0.51	0.50	0.47	0.53	0.53	0.50	0.54	0.54
IVVC (Retail sale of fuel)	-	-	-	-	-	-	-	-	-	0.03	0.06	0.06	0.06	0.06	0.07	0.03	-	-	-	-	-	-	-	-	-
Federal Excises[1]	2.41	2.49	2.21	2.44	0.63	0.46	0.45	0.56	0.54	0.07	0.02	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-
CIDE (Fuel Tax)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	0.44	0.39
Property Taxes	0.27	0.32	0.32	0.23	0.21	0.17	0.32	0.24	0.21	0.12	0.27	0.54	0.35	0.27	0.39	0.8	0.88	0.89	0.86	0.88	0.91	0.93	0.91	0.93	0.91
IPTU (Urban property)	0.25	0.29	0.29	0.22	0.2	0.16	0.17	0.13	0.14	0.07	0.18	0.37	0.22	0.15	0.21	0.41	0.45	0.38	0.39	0.43	0.44	0.42	0.42	0.46	0.43
IPVA (Vehicles	-	-	-	-	-	-	0.14	0.1	0.06	0.05	0.09	0.15	0.13	0.11	0.18	0.37	0.4	0.48	0.45	0.42	0.45	0.48	0.47	0.46	0.46

tax)																								
ITR (Rural Land	0.02	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	-	-	0.02	-	0.01	-	0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02
Income Taxes	3.01	3.37	3.46	4.24	4.76	5.13	5.01	4.31	4.67	5.15	5.67	4.18	4.91	4.64	4.8	5.69	5.15	4.71	5.47	5.52	5.57	5.70	6.71	6.46	6.36
Personal and Business	3.01	3.37	3.46	4.24	4.76	5.13	5.01	4.31	4.67	4.94	5.13	3.9	4.18	3.85	3.83	4.78	4.3	3.89	4.68	4.84	4.78	4.98	5.81	5.47	5.30
Contribution on Net Profits	-	-	-	-	-	-	-	-	-	0.21	0.54	0.28	0.73	0.79	0.97	0.91	0.85	0.82	0.79	0.69	0.79	0.72	0.90	0.99	1.05
Taxes on Payroll	7.44	7.98	9.09	8.36	7.37	7.18	8.16	7.21	5.77	6.56	7.25	6.07	6.28	6.93	7.27	7.1	7.62	6.70	7.01	6.72	6.85	6.86	6.90	6.72	6.73
Social Security Contribution	4.66	4.99	6.05	5.45	4.91	4.73	5.18	4.74	4.4	4.63	5.11	4.37	4.41	5.19	4.82	4.89	5.13	4.70	4.76	4.52	4.72	4.69	4.81	4.75	4.83
FGTS (workers retirement fund)	2.32	2.49	2.52	2.4	2.01	1.92	2.46	1.94	0.86	1.41	1.46	1.29	1.28	1.25	1.78	1.51	1.5	1.38	1.71	1.63	1.59	1.62	1.52	1.47	1.30
Contribution for education	0.22	0.26	0.25	0.22	0.2	0.26	0.23	0.24	0.22	0.21	0.32	0.08	0.26	0.15	0.27	0.36	0.38	0.32	0.27	0.24	0.21	0.24	0.24	0.22	0.19
Public servants	0.24	0.24	0.27	0.29	0.25	0.27	0.29	0.29	0.29	0.31	0.36	0.33	0.33	0.34	0.4	0.34	0.61	0.3	0.27	0.33	0.33	0.32	0.33	0.29	0.41
Others	2.43	1.87	1.89	2.39	2.55	1.98	1.52	1.59	1.46	0.93	1.02	1.43	1.14	1.18	1.31	1.22	1.38	3.4	3.3	4.0	1.8	2.7	2.1	2.3	2.8
Others direct	0.76	0.65	0.65	0.6	0.59	0.51	0.45	0.62	0.44	0.4	0.36	0.61	0.5	0.72	0.43	0.58	0.53	3.1	2.5	3.5	1.4	1.9	1.7	2.0	2.4
Others indirect	1.67	1.22	1.24	1.79	1.96	1.47	1.07	0.97	1.02	0.53	0.66	0.82	0.64	0.46	0.88	0.64	0.85	0.33	0.78	0.47	0.44	0.77	0.41	0.34	0.44

Table 7.A.4. Tax Burden, 1980-2004
(As a percentage of GDP)

YEAR	RATIO (%)	YEAR	RATIO (%)
1980	24.45	1993	25.30
1981	25.18	1994	27.90
1982	26.24	1995	28.44
1983	26.84	1996	28.63
1984	24.19	1997	28.58
1985	23.83	1998	29.33
1986	26.50	1999	31.07
1987	24.25	2000	30.36
1988	23.36	2001	31.87
1989	23.74	2002	32.35
1990	29.60	2003	31.90
1991	24.43	2004	32.77
1992	24.96		

Source: IBGE. Data available at IpeaData, elaborated by the authors.

Notes

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[2] Detailed information regarding the 1965–1967 tax reform can be found in Giambiagi and Além (2000), pp. 242–246.

[3] Income taxation was formally introduced in Brazil in 1923.

[4] In the Brazilian tax system, contributions are a type of federal tax; the revenues raised from these contributions are earmarked to a specific destination.

[5] The Brazilian constitution authorizes governments to impose three types of levies: taxes, contributions (social and others), and user charges. The legal distinction between a contribution and a tax is that the contribution is raised to finance a specific governmental activity (mostly social security), whereas the proceeds of taxes are used for general purposes.

[6] The 1967 law that established the new tax system was modified over the subsequent years so that by 1988 the tax structure had changed.

[7] Public budgets in Brazil are submitted to the legislature annually, in a single piece, containing all expenditures and sources of revenue. Budgets also contain the investment projects of state enterprises which need to be approved by the legislators.

[8] Social security in Brazil encompasses pensions, health care, unemployment insurance, and social assistance. Private pension schemes are very limited, and the public sector is the main provider of pensions and of health care in the country.

[9] In the table direct taxes are those based on income, property, payroll, and inheritance taxes, and indirect taxes are those based on transactions of goods and services.

[10] Financial compensations in the oil industry have two main components: royalties—up to 10 percent of the gross value of production and an additional compensation – called special compensation – that is paid by good-quality, high-productivity oil wells as a percentage of net income (profits) with rates varying from 10 to 40 percent. Detailed information regarding financial compensation in the oil industry can be found at http://www.anp.gov.br.

[11] Explanation and analysis of fiscal federalism in Brazil, see Afonso and Mello (2000), Serra and Afonso (1999), and Shah (1990; 1994).

[12] Ministry of Planning and Budget (2003).

[13] In 2004 “small” businesses were defined to be those businesses with annual sales up to R$ 1.2 million.

[15] From the site:

http://www.microsoft.com/billgates/speedofthought/additional/brazil.asp.

[16] The balance-of-payments data are from Banco Central do Brasil (Brazilian Central Bank), available at www.bcb.gov.br.

[17] Hermann (2005), p. 110.

[18] An analysis of the II PND’s roll in the 1983–1984 external adjustment can be found in Castro and Souza (1985).

[19] Giambiagi and Além (2000), p. 136.

[20] Ibid.

[21] The concept of net public debt is the result of assets held by the public sector and the Central Bank minus their liabilities. In this concept the monetary base is included.

[22] A characterization of the inflation debate can be found in Castro (2005).

[23] For the theory of inertial inflation, see Lopes (1986).

[24] A discussion of the crawling-peg exchange rate system can be found in Zini (1992).

[25] *Source:* Brazilian Central Bank. Available at www.bcb.gov.br.

[26] A detailed analysis of the Brady Plan conditions for Brazil can be found in Portella, F. P. (1994).

[27] For a description of the Real Plan, see Castro (2005). An analysis of the origins of the Real Plan can be found in Franco (1995).

[28] An analysis of the inflation-targeting system and its results can be found in Fachada (2001) and Fraga, Goldfajn, and Minella (2003).

[29] For an analysis of the reform of the state and the privatization of state-owned companies, see Giambiagi and Além (2000).

References

[AU: the highlight indicates items found in the chapter.]

Afonso, J., and Mello, L. (2000). "Brazil: An Evolving Federation." Presented at the IMF/FAD Seminar on Decentralization in November 2000. (Mimeo).

Afonso, J., and Ramundo, J. C (1995). "The Brazilian Federation: Main Features and Indicators." (Mimeo).

Afonso, J., Ramundo, J. C., and Araujo, E. (1999). "Breves Notas sobre o Federalismo Fiscal no Brasil." (Mimeo).

Afonso, J., Varsano, R., Ramundo, J. C, Araujo, E., Pessoa, E., and Silva, N. L. (1997). "Tributação no Brasil: Características Marcantes e Diretrizes para a Reforma." (Mimeo).

Amadeo, E., and Camargo, J. M. (1996). “Instituições e o mercado de trabalho no Brasil.” In *Flexibilidade no Mercado de Trabalho no Brasil*, J. M. Camargo (ed.), cap. 2. Rio de Janeiro: Fundação Getúlio Vargas.

Araújo, C. H., and Siqueira Filho, G. B. (2002). “Mudanças de Regime no Câmbio Brasileiro.” Banco Central do Brasil, Working Paper no.41. Brasília: Banco Central do Brasil.

Arbache, J. S., and Corseuil, C. H. (2001). “Liberalização Comercial e Estruturas de Emprego e Salário.” Texto para Discussão n. 801. Rio de Janeiro, Brasil: Instituto de Pesquisa Econômica Aplicada (IPEA).

Barros, R. P., Mello, R., and Pero, V. (1993). “Informal Labor Contracts: a Solution or a Problem?” Texto para Discussão n. 291. IPEA.

Cardoso Júnior, J.C.P., and Fernandes, S. (2000). “A Informalidade Revisitada: a Evolução nos Últimos 20 anos e mais uma Hipótese para Pesquisa.” Mercado de Trabalho: Conjuntura e Análise, 5/14: 41–49.

Castro, A. B. ,and Souza, F. E. P. (1985). “A Economia Brasileira em Marcha Forçada.” Rio de Janeiro, Brasil: Paz e Terra.

Castro, L. B. (2005a). “Esperança, Frustração e Aprendizado: as Histórias da Nova República.” In *Economia Brasileira Contemporânea (1945–2004)*, F. Giambiagi et al. (eds.). Rio de Janeiro, Brasil: Elsevier.

_____ (2005b). “Privatização, Abertura e Desindexação: a Primeira Metade dos Anos 90;” In *Economia Brasileira Contemporânea (1945–2004),* F. Giambiagi et al. (eds.). Rio de Janeiro, Brasil: Elsevier.

Coelho, I., Ebrill, L., and Summers, V. (2001). “Bank Debit Taxes in Latin America: An Analysis of Recent Trends.” *IMF Working Paper 01/67*. Washington, DC: International Monetary Fund (IMF).

Cukierman, Alex. (1992). “Central Bank Strategy, Credibility, and Independence: Theory and Evidence.” Cambridge, MA: MIT Press.

Fachada, P. (2001). “Inflation Targeting in Brazil: Reviewing Two Years of Monetary Policy 1999–2000,” Banco Central do Brasil, Working Paper no. 25. Brasília: Banco Central do Brasil.

Fraga, A. Goldfajn, I., and Minella, A. (2003). **“**Inflation Targeting in Emerging Market Economies.” Banco Central do Brasil, Working Paper no.76, Brasília: Banco Central do Brasil.

Franco, G. (1995). “O Plano Real e Outros Ensaios.” Rio de Janeiro, Brasil: Francisco Alves.

_____ (2005). “Auge e Declínio do Inflacionismo no Brasil.” In *Economia Brasileira Contemporânea (1945–2004)*, F. Giambiagi et al. (eds.). Rio de Janeiro, Brasil: Elsevier.

Giambiagi, F., and Além, A. C. (2000). “Finanças Públicas: Teoria e Prática no Brasil.” 2nd ed. Rio de Janeiro: Campus.

Hermann J. (2005). “Auge e declínio do Modelo de Crescimento com Endividamento: o II PND e a Crise da Dívida Externa.” In *Economia Brasileira Contemporânea (1945–2004)*, F. Giambiagi et al. (eds.). Rio de Janeiro: Elsevier.

Khair, A., Araujo, E., and Afonso, J. R. (2005, July). “Carga Tributária—Mensuração e Impacto sobre o Crescimento.” *Revista de Economia & Relação Internacionais*, 4, no. 7, 27–42. São Paulo: FAAP.

_____ (2005). “Quanto e Como Cresceu a Carga Tributária em 2004,” Caderno n. 58, NEPP (Núcleo de Estudos de Políticas Públicas). São Paulo: UNICAMP.

Kume, H., Piani, G., and Souza, C. F. (2003). “A Política Brasileira de Importação no Período 1987–98: Descrição e Avaliação.” In *A Abertura Comercial nos Anos 1990:*

Impactos sobre e Emprego e Salário, C. H. Corseuil and H. Kume (eds.). Rio de Janeiro: MTE/IPEA.

Lemgruber-Viol, A. (2004). "A Guideline for Tax Administration Reform: Using Information Technology to Modernize the Traditional Way We Pay Taxes in Developing Countries." (Mimeo).

Lopes, F. (1986). "O Choque Heterodoxo—Combate à Inflação e Reforma Monetária." Rio de Janeiro: Campus.

Mello, L. (2005). "Estimating a Fiscal Reaction Function: The Case of Debt Sustainability in Brazil." Economics Department, Working Paper no. 423. OECD, Paris.

Ministry of Planning and Budget (2003). "Vinculações de Receitas dos Orçamentos Fiscal e da Seguridade Social e o Poder Discricionário de Alocação dos Recursos do Governo Federal." Brasília: Secretaria de Orçamento Federal.

Monteiro, J., and Assunção, J. "O Impacto da Lei do Simples sobre a Formalização das Firmas." (Mimeo).

Neri, M. C. (2000). "Decent Work and the Informal Sector in Brazil." (Mimeo).

Pastore, J. (1997). “Encargos Sociais: Para onde o Brasil quer ir?” 1st ed. São Paulo: LTR.

_____ (2005). “A Modernização das Instituições do Trabalho.” São Paulo: LTR.

Portella, F. P. (1994). “Plano Brady: da Retórica à Realidade.” *Estudos Econômicos*, 24, no. 1, pp. 55–105. São Paulo.

Rocha, R. R., and Saldanha, F. (1992). “Fiscal and Quasi-Fiscal Deficits, Nominal and Real: Measurement and Policy Issues.” *WPS n. 919*. Washington, DC: World Bank.

Serra, J., and Afonso, J. R. (1999) “O Federalismo Fiscal à Brasileira: Algumas Reflexões.” *Revista do BNDES*, 6/12: 3–30. Rio de Janeiro.

Shah, A. (1990). “The New Fiscal Federalism in Brazil,” *World Bank Discussions Papers no. 124*. Washington, DC: World Bank.

_____ (1994). “The Reform of Inter-governmental Fiscal Relations in Developing and Emerging Market Economies.” *World Bank Policy and Research Series Paper no.23*. Washington, DC: World Bank.

Soares, S., Servo, L. M., and Arbache, J. S. (2001). “O que (não) Sabemos sobre a Relação entre Abertura Comercial e Mercado de Trabalho no Brasil.” *Texto para Discussão n.843*. Rio de Janeiro: IPEA.

Tanzi, V., and Zee, H. H. (2000). “Tax Policy for Emerging Markets: Developing Countries.” *IMF Working Paper*. Washington, DC: IMF.

Ulyssea, G. (2005). “Informalidade no Mercado de Trabalho Brasileiro: uma Resenha da Literatura.” *Texto para Discussão no. 1070*. Rio de Janeiro: IPEA.

Varsano, R. (1996). “A Evolução do Sistema Tributário Brasileiro ao Longo do Século: Anotações e Reflexões para Futuras Reformas.” *Texto para Discussão n. 405*. Rio de Janeiro: IPEA.

Varsano, R., Pessoa, E., Silva, N., Araujo, E. and Ramundo, J. C. (1998). “Uma análise da Carga Tributária do Brasil.” *Texto para Discussão n. 583*. Rio de Janeiro: IPEA.

Vianna, S., Magalhães, L. C., Silveira, F., and Tomich, F. (2000). “Carga Tributária Direta e Indireta sobre as Unidades Familiares no Brasil: Avaliação de sua Incidência nas Grandes Regiões Urbanas em 1996.” *Texto para Discussão no. 757*. Brasília: IPEA.

Zini , A. A. (1992). “Taxa de Câmbio e Política Cambial no Brasil.” EDUSP/BM&F.