

# **R**evenue sharing: The case of Brazil's ICMS

José Manuel Arroyo  
Juan Pablo Jiménez  
Carlos Mussi



NACIONES UNIDAS

CEPAL

---

## macroeconomía del desarrollo

# **R**evenue sharing: The case of Brazil's ICMS

José Manuel Arroyo  
Juan Pablo Jiménez  
Carlos Mussi



Economic Development Division  
Santiago, July 2012

This paper has been prepared at the request of the Dubai Economic Council, and formed part of a monograph on Revenue-Sharing Experiences around the World, edited by Ehtisham Ahmad.

The views expressed in this document, which has been reproduced without formal editing, are those of the authors and do not necessarily reflect the views of the Organization.

---

United Nations Publication

ISSN: 1680-8843

LC/L.3489

Copyright © United Nations, July 2012. All rights reserved

Printed in United Nations, Santiago, Chile

---

Member States and their governmental institutions may reproduce this work without prior authorization, but are requested to mention the source and inform the United Nations of such reproduction

## Contents

---

<b>I. Introduction .....</b>	<b>5</b>
<b>II. Characterization of Brazilian Fiscal Federalism and Tax System .....</b>	<b>7</b>
<b>III. Characterization of the ICMS and its revenue-sharing rules....</b>	<b>11</b>
A. The ICMS.....	11
B. ICMS Revenue Sharing.....	13
C. More developed municipalities vs. less developed municipalities: one of the problems with ICMS revenue sharing .....	16
<b>IV. Concluding remarks .....</b>	<b>17</b>
<b>Bibliography.....</b>	<b>19</b>
<b>Serie Macroeconomía del desarrollo: números publicados.....</b>	<b>21</b>

**Tables:**

TABLE 1	SUMMARY OF BRAZIL'S FISCAL REFORM PROPOSALS, 1997, 1999, 2000 AND 2007 .....	13
TABLE 2	ALLOCATION CRITERIA FOR ICMS MUNICIPAL REVENUE SHARING IN SELECTED BRAZILIAN STATES, 2011 (PERCENTAGE POINTS OF THE 25% OF THE TOTAL TRANSFERRED TO MUNICIPALITIES) .....	14

**Figures:**

FIGURE 1	TAX REVENUES BY LEVEL OF GOVERNMENT IN LATIN AMERICA - 2008, SELECTED COUNTRIES.....	8
FIGURE 2	BRAZIL: TAX REVENUE OF SUBNATIONAL GOVERNMENTS (AS % OF GDP), 1995-2010 .....	9

## I. Introduction

---

The ICMS represents the most important source of revenue for the Brazilian states and one of the most important taxes in Brazil. Unlike other VATs in the world, the ICMS is not collected by the central government. The ICMS is collected by the states (the intermediate level of government), which are able to fix the internal rates; a situation that reflects the fiscal autonomy of the different levels of government in Brazil. Similarly, the direct and unconditional transfers of 25% of the ICMS collection to the municipalities (the local level) show the high degree of autonomy at the sub-national level. However, fiscal autonomy is also a source of problems, particularly the “fiscal wars” that result from the different tax rates fixed by the states and its corresponding effects on transfers. To solve this and other problems related to Brazil's tax system various proposals have been made, but none of them has actually materialized.

The objective of this paper is to characterize Brazil's fiscal federalism and tax system, with an emphasis in the ICMS and its revenue-sharing rules. We also provide some concluding remarks regarding ICMS and its revenue sharing.



## II. Characterization of Brazilian Fiscal Federalism and Tax System

---

The Brazilian federation is composed of three levels of government with no subordination between them: the Union (central government), an intermediate level (27 states and the Federal District), and the local level (more than 5,000 municipalities). The taxes that are collected exclusively by the Union are the tax on income and earnings of any nature (IR), the tax on industrialized products (IPI), the rural land tax (ITR), the tax on credit, exchange and insurance operations or on operations related to securities or real estate (IOF), the tax on the export of national or nationalized products (IE), and the tax on the import of foreign products (II)<sup>1</sup>. The taxes that are only collected by the states are the tax on operations related to the circulation of goods, and the delivery of inter-state and inter-municipal transport services and communication services (ICMS), the tax on the ownership of motor vehicles (IPVA), and the tax on transfers at death and donations of any type of goods or rights (ITCMD). The taxes levied exclusively by the municipalities are the tax on real estate and urban territorial properties (IPTU), the taxes on services of any nature (ISS), and the tax on *inter vivos* transfers of goods and real estate, and of actual rights related to them (ITBI).

---

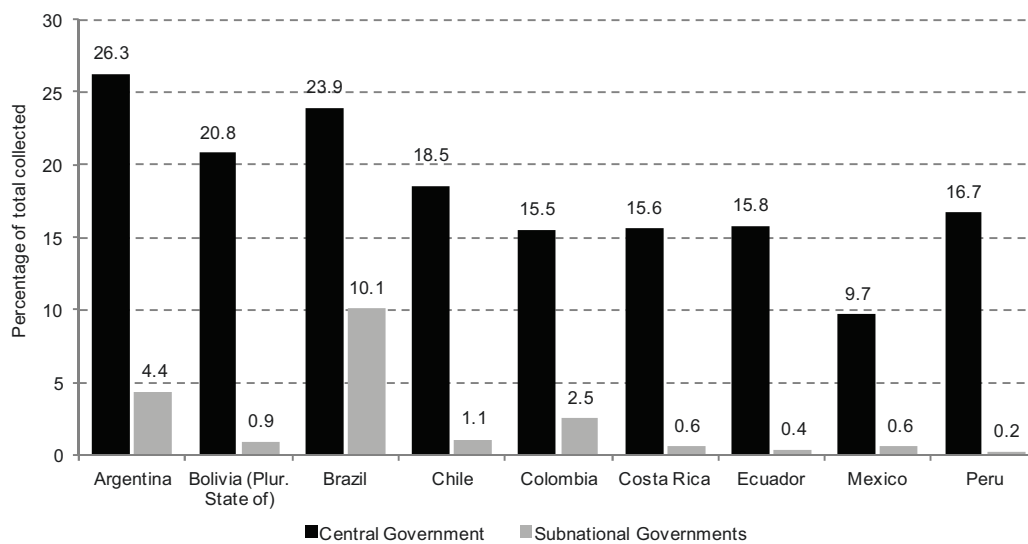
<sup>1</sup> Only the Union can collect social contributions such as on payroll, revenues, fuel sales and large profits. The funds obtained by these contributions are directed to expenditures such as the general retirement system, pensions, health, social assistance, income transfer programs and other social expenditures. With the exception of direct payments to persons, health, education and social assistance, funds are transferred to state and local governments according to specific legislation such as the one for the (Universal Health System).



The ample process of fiscal decentralization that Brazil has undergone in the last 40 years is reflected on the high level of participation of sub-national governments in tax collections, when compared to the rest of the Latin America countries (see Figure 1), especially after the enactment of the 1988 Federal Constitution which granted sub-national governments broad fiscal and administrative autonomy.

**FIGURE 1**  
**TAX REVENUES BY LEVEL OF GOVERNMENT IN LATIN AMERICA - 2008**  
**SELECTED COUNTRIES**

(Percentage of GDP and percentage of total)

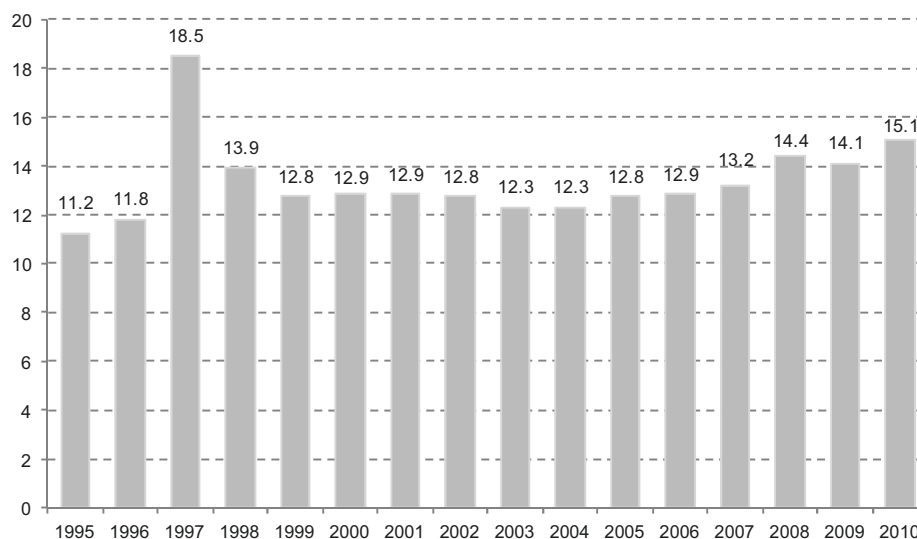


Source: Gomez Sabaini and Jiménez (2011), on the basis of official figures.

The expansion of the fiscal autonomy of sub-national governments was due to modifications to the pre-1988 tax system, mainly that: 1) the rates of the main state consumption tax (the ICMS) are effectively fixed by the states autonomously, although interstate rates are established by the Senate and rate changes should be agreed within the National Tax Council ( CONFAZ ); 2) the Union cannot grant tax exemptions when it comes to state or municipal taxes; and 3) there are no conditions or restrictions to the delivery and use of the resources distributed among the states and municipalities (Varsano, 1996, pp. 13–14)<sup>2</sup>.

<sup>2</sup> Other general characteristic of Brazilian public finance is a general earmarking for minimum expenditure on sectors, such as education and health. Estimates put these earmarking plus “obligatory” expenditures at near 85% of the total central government budget.

**FIGURE 2**  
**BRAZIL: TAX REVENUE OF SUBNATIONAL GOVERNMENTS, 1995-2010**  
 (As percentage of GDP)



Source: ECLAC with information from Brazil's Ministry of Finance.

The 1988 Constitution also introduced a system of unconditional intergovernmental transfers. Within this system there are two types of transfers (Ministério da Fazenda, 2002, pp. 6–9):

1. Direct transfers:

- a) 100% of the IR collection deducted at source from its employees and other payments is retained by states and municipalities.
- b) 50% of the ITR is transferred to the municipalities (according to the number of properties located in each of them).
- c) 50% of the IPVA is transferred to the municipalities (according to the number of vehicles licensed in their territories).
- d) 25% of the ICMS is transferred to the municipalities (at least 3/4 in the proportion of the value added by operations in their territories, and up to 1/4 according to the state law).
- e) 30% and 70% of the IOF-*Ouro*<sup>3</sup> is transferred to the states and municipalities where these transactions originate, respectively.

2. Indirect transfers (funds):

- a) Export Compensation Fund (FPEX): 10% of the collection of the IPI. It is distributed proportionally to the value of industrialized products exports (individual participation is limited to 20% of the fund).

<sup>3</sup> When gold is considered a financial asset.

- b) Participation Fund of the States and the Federal District (FPE): 21.5% of the collection of the IR and the IPI, which is in turn distributed in direct proportion to the population and the surface area, and in inverse proportion to the per capita income of the federal unit.
- c) Participation Fund of the Municipalities (FPM): 22.5% of the collection of the IR and the IPI, which is in turn distributed in direct proportion to the population of the municipality, while 10% is destined for the capital cities of the municipalities.
- d) Regional Funds: 3% of the collection of the IR and the IPI, which are in turn destined for development programs in the North, Central–West and Northeast regions.

In the following section we will elaborate on the features of the ICMS and its revenue sharing rules. Additionally, we briefly examine the disparities caused by ICMS revenue sharing at the subnational level.

### III. Characterization of the ICMS and its revenue-sharing rules

---

#### A. The ICMS

In 1967, Brazil became the first country to introduce a full-fledged VAT, the tax on operations related to the circulation of goods (ICM), which had uniform rates nationally. In 1989, the base of the ICM was broadened and it was renamed as the ICMS, which is collected by the states on goods and selected services. The ICMS is a general, non-cumulative, multi-stage, and credit invoice<sup>4</sup> VAT. It differentiates itself from most VATs in the world in that it is collected by the states, not the central government. The ICMS is not a broad-based tax since it is restricted to goods, and services such as transportation and communications, having no incidence on exports. It must be noted that over the years, the ICMS has become a more specific and complex tax.

The ICMS has different intra- and inter-state rates, and the tax liability is calculated on a tax-inclusive basis<sup>5</sup>, not on a tax exclusive-basis. The states are able to set internal rates, causing a wide dispersion of rates across Brazilian states<sup>6</sup>, and several states collect the ICMS at the production stage on the basis of the estimated tax liability for an average production chain in different sectors. The intra-state rates are set within a range determined by the Brazilian Senate:

---

<sup>4</sup> Sale-by-sale and purchase-by-purchase basis tracking.

<sup>5</sup> It includes the taxes owed in the tax base.

<sup>6</sup> There are more than 40 rates and 27 state legislations.

- Basic necessities: Exempt and zero-rated or 7%.
- Industrial sectors: 12–18%.
- Utilities and oil/fuels: 25%.
- Luxury and excisable goods: 30–35%.

The ICMS is mainly an origin-based tax<sup>7</sup>, not a destination-based tax, and it is due every time a good leaves the taxpayer's premises (even if it ends up in another premise of the same taxpayer); on the entry of goods imported from abroad; and on transportation and communications services. Although an origin-based tax, the ICMS has combined, in practice, both principles (origin and destiny), since poorer states –as net importers of ICMS-liable goods and services– have called for shifting collection to the destination, to compensate industrial and economic concentration in a few states, mainly those located in the Southeast.

The complementary law no. 87 –better known as Kandir Law– came into effect in 1996, mandating, among other things, ICMS exemption of exports of goods and services, with the intention of stimulating the exporting sectors. Those exemptions caused revenue losses to the exporting states of commodities, which were not quite compensated by the federal government due to unclear compensation rules, generating an impasse between the Union and the states. This has been the result of the partial values established by the Union for such compensation made through the federal budget. Brazilian states are then forced to compensate firms for the ICMS charged on inputs used for exports, and even though part of the compensation is made by the federal level of government, most of the time the firms' tax credits refer to an ICMS payable on inputs acquired in a different state, making it more difficult to establish adequate compensation levels.

The lack of uniformity in ICMS rules among states causes a complex and tedious administration process for tax payers as well as for the public sector, with high compliance costs due, among other things, to the existence of two different VATs (IPI –federal– and ICMS). As a result of the “dual” VAT system, Brazil faces excessive administrative and compliance costs, tax exporting and tax competition, which in turn has caused an inability of the less industrialized states to increase their tax collections to reasonable levels. Up to a certain degree, the ICMS is a cumulative tax, due to the difficulty of certain tax payers to take advantage of the fiscal credits<sup>8</sup> and the exclusion from the tax base of certain services<sup>9</sup>.

The broader tax base of the ICMS –when compared to its predecessor– also opened a space for fiscal wars. The tax benefits offered by the states distorted the location decisions made by economic agents and generated resistance against the adoption of the destination principle. The allocation of resources is based on tax costs, and not on the relative prices of the production factors, creating unfair advantages for the firms benefiting from fiscal incentives. Fiscal wars have also meant a significant loss of government revenue, with no chances of generating enough future revenue to compensate for current tax benefits in the case that firms decide to move away from their current location.

Some reform proposals related to the problems mentioned above have been made since the inception of the ICMS, however, none of them have actually come into effect. A summary of some of those proposals is presented in Table 1 below.

<sup>7</sup> Revenue accrues to the state where the good or service is produced.

<sup>8</sup> Owing to the tax authority's red tape and/or to the poor management structure of the tax payer.

<sup>9</sup> ICMS-exempt services are taxed by the municipalities (ISS).

**TABLE 1**  
**SUMMARY OF BRAZIL'S FISCAL REFORM PROPOSALS, 1997, 1999, 2000 AND 2007**

Proposal	Taxes to be eliminated	Taxes to be created
Proposal of the Executive Power October 1997	- IPI - ICMS - ISS - All sales and cascading taxes, with the exception of taxes on financial transactions.	- VAT administered at the national level - Federal tax on the consumption of goods and services - Tax on retail sales
Proposal of the Executive Power October 1999		- Federal VAT - State tax on consumption of goods and services - Municipal tax on retail sales
Proposal of special committee March 2000	- IPI - ICMS - ISS - All sales and cascading taxes, with the exception of taxes on financial transactions	- Dual VAT (coexistence of Federal and State VATs) - Municipal tax on retail sales
Proposal of non-elected Secretaries March 2000		- Dual VAT (coexistence of Federal and State VATs) - Non-cumulative tax on consumption
Proposal of the Executive Power August 2000	- IPI - ICMS - ISS	- Federal tax on goods and services - Uniformity of state VATs at the national level - Municipal tax on retail sales
Proposal of the Ministry of Finance March 2007	- IPI - ICMS - PIS/CONFINS - CIDE - ISS (partial)	- Dual VAT (state and federal) - State VAT by destination - ISS (municipalities) to be included in VAT

Source: Authors' elaboration based on the proposed laws. Note: The list is non-exhaustive.

## B. ICMS Revenue Sharing

As established by the Constitution of 1988, 25% of the ICMS has to be transferred by the states to the municipalities. Since each state has the ability to determine its own breakdown, the Complementary Federal Law no. 63 of 1990 and its amendments –a law that supersedes state legislations– established that at least 75% of the transfers have to be done considering the valued added content registered at each municipality and the other 25% by state law.

Two important issues are established by this law: 1) how to calculate the index which will determine the distribution of revenues, and 2) when and how these resources will be available for the municipalities. On the definition of the value added, Brazilian legislation considers the yearly net result of entry- and exit-goods of the municipality plus the value of services produced. It also considers the special case of the unified tax charge, such as the SIMPLES program<sup>10</sup>. In this last case, the value added to be considered is 32% of the gross revenue originating from the tax collected locally.

To calculate the shares to be allocated, the index considers the average participation of each municipality in the total value added of the State in the last two years. The index, then, will determine the amount to be paid by the State to the municipalities during the current year. Every year, by June 30, the state must announce the new index that will be implemented the following year, considering that it will already have calculated the share allocated to each municipality for the previous year. The corresponding share will be credited to each municipality on a weekly basis, in the second working day of the week, considering the amount of ICMS obtained by the state the previous week. The law also

<sup>10</sup> The SIMPLES program, which was created in 1996 and later expanded for micro and small enterprises, unifies federal and state taxes plus social contributions into one payment, according to the firm's total gross revenue.

establishes certain transparency requirements. Accordingly, local governments can obtain prompt and accurate revenue information from the State on ICMS revenues, so that public and bank managers can be penalized when they do not credit those funds in timely manner. Anyhow, a 1% monthly delay charge that is debited to the State is also established by law.

With respect to the other 25% of the ICMS shared-revenue that is transferred to local governments, or 6.25% of ICMS revenues, each state can allocate it with its own criteria. With the exception of the Federal District, which has no municipality, all 27 states have specific legislation on how the municipal shares are distributed. The destination of funds varies from just increasing the value added criteria described above (the federal law does not establish a ceiling) to other criteria such as per capita, education, environmental and population indicators, among others. For illustration purposes, we present, in Table 2 below, the allocation criteria of municipal revenue sharing for the six states with the higher ICMS collection in Brazil (São Paulo, Rio de Janeiro, Minas Gerais, Rio Grande do Sul, Paraná and Bahia)<sup>11</sup>.

**TABLE 2**  
**ALLOCATION CRITERIA FOR ICMS MUNICIPAL REVENUE SHARING**  
**IN SELECTED BRAZILIAN STATES, 2011**  
**(PERCENTAGE POINTS OF THE 25% OF THE TOTAL TRANSFERRED TO MUNICIPALITIES)**  
*(6.25% of total ICMS revenue)*

Criteria	São Paulo	Minas Gerais	Rio de Janeiro	Rio Grande do Sul	Paraná	Bahia
Value Added	1.00					
Population	13.00	4.70	6.94	7.0	6.00	10.00
Area		1.00	7.70		2.00	7.50
Minimum Quota	2.00	5.60	8.18		2.00	7.50
Agriculture	3.00	1.00		10.50	8.00	
Environment	1.00	1.35		7.00	5.00	
Education		2.00		1.00		
Health		2.00		1.00		
Fiscal Performance	5.00	1.90				
"Solidarity" Income/Economic Adjustment		4.14	2.18			
National Heritage		1.00				
Mining		0.01				
Prisons		0.10				
Consortium				0.50		
Sports and Tourism		0.20				
<b>TOTAL</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>

Source: Different state laws.

As shown by the table, some states have very few criteria when allocating municipal revenue sharing –Bahia established only three–, while others have many criteria –Minas Gerais established thirteen–. In the six states presented in Table 2 above, only population size was a general criterion, which is, in general terms, an important factor in the transfer amount received by capitals and other large cities. Although, in the case of the state of Rio de Janeiro, the original law did not include the capital in

<sup>11</sup> They represent over two thirds of total ICMS revenue in 2010.

its revenue sharing index. The Supreme Court had to intervene to include the city of Rio de Janeiro in this revenue-sharing mechanism. Another common criterion to some of the states presented in Table 2 above is (physical) area, which reflects the situation of large municipalities with low population and poor economic activity. Most of these municipalities are located in the hinterlands of the states considered in the sample.

The environmental criterion is one of the most publicized, and it is known as the “ICMS ecológico”, which is present in 14 states. In some cases, the “ICMS ecológico” is confused for a green tax, when it is really a form of earmarking in transfer allocations.

In general, to obtain its share of the ICMS revenue corresponding to the environmental criterion, the municipality must comply with certain conditions related to the environment. Some of them are of geographical nature, such as the area of water reserves or protected forest areas, while in other states, the municipalities must have some environmental-related policies, like selective waste collection and treatment, water and sewage treatment, and nature conservation units. In some states, the presence of aboriginal lands or programs to prevent deforestation and forest fires are criteria for this index<sup>12</sup>.

Education and health criteria reflect an effort to promote better management and results in the social policies related to their improvement. The calculation can be based on one indicator or a complex set of different indicators or policies. For example, in the case of education, it can be the percentage of children registered as students at elementary schools, or, in the case of health, the improvement on child mortality rate. In the state of Minas Gerais, the health indicator is municipal expenditure in that sector, especially with respect to specific programs. Minas Gerais also allocates ICMS revenue sharing based on other social and cultural characteristics, such as national heritage sites, municipalities with state prisons, sports and tourism.

Agriculture is the only productive sector to receive special attention. In states with important agricultural activity, such as Rio Grande do Sul and Paraná, the criteria of agricultural land use, agriculture, food production and productivity are also considered. It must be noted that in these two states, the agricultural sector criteria has the largest participation in ICMS revenue sharing. In Paraná, the proportion allocated to the agricultural criteria can be increased by the population criterion, since in that state, that criterion only considers rural population.

Fiscal criteria is not, in general terms, an important factor in the allocation of revenue sharing in the sample of states presented in Table 2 above. Among the fiscal criteria used by the states are: the increase of own revenues by each municipality, in the case of São Paulo and Minas Gerais, and the use of municipal consortiums to manage public infrastructure, which is rewarded in Rio Grande do Sul.

To make up for economic disparities, two compensation mechanisms are used. The most common mechanism is the minimum quota. This can be simply calculated by dividing a percentage of the shared-revenue by the number of municipalities. Rio de Janeiro uses an inverse ranking of municipal per capita income for its “economic adjustment” criterion. Minas Gerais has replaced, as of 2011, the additional “bonus” applied to the value added criterion for its “solidarity” criterion. This “solidarity” criterion is based on the size of ICMS revenue-sharing transfers. Thus municipalities with low participation in ICMS revenue sharing will be compensated with these funds.

It is important to note here, that the clash over the possibility to earmark tax receipts has reached revenue sharing mechanisms in Brazil. In the case of the ICMS, the Constitution allows for 25% of revenue-sharing transfers to be determined by the states, which leaves the states with many options, as we observed in the states presented in Table 2 above. The dispute for resources could reach minimum proportions, for example, in the case of Minas Gerais, some revenue-sharing criteria represent less than 1% of total ICMS revenues. However, Minas Gerais and São Paulo have a considerable number of

---

<sup>12</sup> For further information on environmental criteria for ICMS revenue sharing see [www.icmsecologico.org.br](http://www.icmsecologico.org.br), a website administered by different NGOs.



municipalities: 853 and 645, respectively. The high number of municipalities means the maintenance of a considerable administrative structure just to monitor criteria compliance.

### **C. More developed municipalities vs. less developed municipalities: one of the problems with ICMS revenue sharing**

ICMS accounts for approximately three quarters of the states' tax collection and 25% of this collection is transferred to the municipalities. It goes without saying that for the municipalities with more advanced economies these transfers represent an important amount of resources, while the less developed municipalities are more dependent upon other types of federal and state transfers.

In the case of the less developed municipalities, one of the unintended consequences is their incentive to surrender its power to tax because it is more convenient for them to receive the other transfers that they are entitled to by Constitutional mandate; hence encouraging the reduction of tax rates to gain electoral support, as pointed out by Da Costa Nunes and Peres Peres Nunes (2000, p. 151).

Aside from inhibiting tax collection, revenue sharing rules are also a source of inefficiencies in the allocation of resources, worsening the disparities existent among the different regions of Brazil. Since the ICMS is an origin-based tax, this allows local (state and municipal) governments to negotiate the terms of its collection with the firms, as indicated by Dos Santos Ferreira (2006, p. 134). As mentioned above the allocation of resources by the firms is not based on the relative prices of production factors, but rather on fiscal benefits.

## IV. Concluding remarks

---

Brazil is one of the few countries –of more than one hundred that have adopted VATs– where the value added tax is collected by the states.

Aside from the fiscal wars between Brazilian states, one of the problems with the ICM and its successor, the ICMS, has been exporters' tax credit accumulation. A few times, the federal government had to provide resources to the states for them to refund exporters. In 1988, with more autonomy granted to the states, the situation worsened for the exporters, since the states were now even more reluctant to make the credit transfers.

In order to prevent fiscal wars and to avoid the problem of exporters' tax credit accumulation, it has been proposed that the destination principle should be adopted for the ICMS. The states have also argued that the adoption of a federal ICMS would be tantamount to losing their fiscal autonomy, and the idea of a VAT collected by the central government was abandoned.

The debate on who will assume the possible revenue losses was one of the main reasons the above measures have not been adopted. Since not all of the states were willing to accept the distribution of the costs, the reform proposals did not prosper.

However, it must be noted that much of the literature on the ICMS agrees that fiscal wars would end if a) there is one law for all states; b) there is a uniform tax rate system in all of Brazil; and c) the destination principle is adopted.

The high volume of transfers by the central government to the sub-national governments has caused an increased dependence on federal transfers, particularly in the cases of the less developed states and municipalities. As such, revenue sharing has not been an efficient instrument to improve income distribution among sub-national governments neither has it advanced the economies of the less developed states and/or municipalities.

Thus fiscal reform should not only focus on a new tax structure, but also in revenue sharing mechanisms that ensure an enhanced distribution of resources that fosters fiscal autonomy at the sub-national level without compromising economic development.

## Bibliography

---

- Da Costa Nunes, Ricardo and Peres Peres Nunes, Selene, 2000, "Revenue Sharing: A Problem of Federalism in Brazil", *Brazilian Journal of Political Economy*, vol. 20, no. 4 (80), October–December.
- Dos Santos Ferreira, Marcos, 2006, "O ICMS e a reforma tributária", Rio de Janeiro, Dissertação apresentada à Universidade Estácio de Sá como requisito para obtenção do título de Mestre em Direito.
- Gómez Sabaini, Juan Carlos and Jiménez, Juan Pablo, 2011, *El financiamiento de los gobiernos subnacionales en América Latina: un análisis de casos*, Serie Macroeconomía para el Desarrollo 111, CEPAL–GIZ, Santiago de Chile.
- Jatobá, Jorge, 2005, *A coordenação entre as políticas fiscal e ambiental no Brasil: a perspectiva dos governos estaduais*, Serie Medio Ambiente y Desarrollo, No. 92, CEPAL, Janeiro.
- Jiménez, Juan Pablo, 2010, *A Brazilian subnational VAT: Problems, proposals for reform and prospects*, Presented at Forum of Federations: Making the 18th Amendment and NFC Award Work, October 2010, Islamabad.
- Ministério da Fazenda, 2002, *Sistema y Administración Tributaria en Brasil. Una visión general*, Brasilia, Agosto.
- Mora, Mônica and Varsano, Ricardo, 2001, "Fiscal Decentralization and Subnational Fiscal Autonomy in Brazil: Some Facts of the Nineties", IPEA Texto para Discussão, n° 854, Dezembro.
- Varsano, Ricardo, 1996, "A evolução do sistema tributário brasileiro ao longo do século: Anotações e reflexões para futuras reformas", IPEA Texto para Discussão, N° 405, Janeiro.





UNITED NATIONS

Serie

ECLAC

macroeconomía del desarrollo

## Números publicados

Un listado completo así como los archivos pdf están disponibles en

[www.cepal.org/publicaciones](http://www.cepal.org/publicaciones)

121. Revenue sharing: the case of Brazil's ICMS, José Manuel Arroyo, Juan Pablo Jiménez and Carlos Mussi (LC/L.3489), 2012.
120. Estimación de la recaudación potencial del impuesto a la renta en América Latina, Darío Rossignolo (LC/L.3484), 2012.
119. Imposición a la renta personal y equidad en América Latina: Nuevos desafíos, Juan Carlos Gómez Sabaini, Juan Pablo Jiménez y Darío Rossignolo (LC/L.3477), 2012.
118. Tax structure and tax evasion in Latin America, Juan Carlos Gómez Sabaini and Juan Pablo Jiménez (LC/L.3455), 2012.
117. Commodities, choques externos e crecimiento: reflexões sobre a América Latina, Ricardo de Medeiros Carneiro (LC/L.3435), 2012.
116. Fragilidad externa o desindustrialización: ¿Cuál es la principal amenaza de América Latina en la próxima década?, Roberto Frenkel y Martín Rapetti (LC/L.3423), 2011.
115. Desafíos e implicancias fiscales de la inversión en infraestructura baja en carbono, Martina Chidiak y Verónica Gutman (LC/L.3403), 2011.
114. La integración a los mercados financieros internacionales: consecuencias para la estabilidad macroeconómica y el crecimiento, Roberto Zahler (LC/L.3362), 2011.
113. Evaluando la equidad vertical y horizontal en el impuesto al valor agregado y el impuesto a la renta: el impacto de reformas tributarias potenciales. Los casos del Ecuador, Guatemala y el Paraguay, Michel Jorratt (LC/L.3347), 2011.
112. Macroeconomic challenges of fiscal decentralization in Latin America in the aftermath of the global financial crisis, Teresa Ter-Minassian y Juan Pablo Jiménez (LC/L.3337), 2011.
111. El financiamiento de los gobiernos subnacionales en América Latina: un análisis de casos, Juan Carlos Gómez Sabaini y Juan Pablo Jiménez (LC/L.3336), 2011.
110. La calidad del empleo en América Latina, Jürgen Weller y Claudia Roethlisberger (LC/L.3320 -P), N° de venta: S.11.II.G.39 (US\$10.00), 2011.
109. Trayectorias laborales de los jóvenes en Argentina: ¿Dificultades en el mercado de trabajo o carrera laboral ascendente?, Roxana Maurizio (LC/L.3302 -P), N° de venta: S.11.II.G.24 (US\$10.00), 2011.
108. Latin-STINGS: indicadores de crecimiento a corto plazo de los países de América Latina, Máximo Camacho y Gabriel Perez Quirós (LC/L.3292-P), N° de venta: S.11.II.G.14 (US\$10.00), 2011.

- Readers wishing to obtain the listed issues can do so by writing to: Distribution Unit, ECLAC, Casilla 179-D, Santiago, Chile, Fax (562) 210 2069, E-mail: [publications@cepal.org](mailto:publications@cepal.org).

Name: .....
Activity: .....
Address: .....
Postal code, city, country: .....
Tel.: ..... Fax: ..... E.mail: .....