AMENDMENTS TO THE BRAZILIAN PETROLEUM TAX LEGISLATION: FEDERATIVE CONFLICTS AND IMPACTS ON INDUSTRY

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ABSTRACT: The present research paper examines the implications for the oil industry of some proposed changes to Brazilian legislation with the advent of the reserves discovered in the pre-salt layer. It seeks to demonstrate the extent to which changes in the sharing of revenues – from government participation in the production – affect the volume of taxes paid by oil companies. The paper begins by describing the national tax system and its federal, state and municipal taxes. Then it analyses the forms of government participation in production and how such revenues are shared between federal entities. It ends with an analysis of the level of government intake and proposals for amending the oil law, concluding that the loss of revenues from the producing states and municipalities will impact, albeit indirectly, on the level of taxes paid by industry.

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# ABBREVIATIONS

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<tr>
<td>ANP</td>
<td>National Agency of Petroleum (Agência Nacional do Petróleo)</td>
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<td>CF</td>
<td>Federal Constitution (Constituição Federal)</td>
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<td>E&amp;P</td>
<td>Exploration and Production</td>
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<td>PSC</td>
<td>Production Sharing Contract</td>
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1 INTRODUCTION

Brazil is a federative republic composed of three levels of government. Its tax system is a reflection of such an institutional design, comprising the existence of federal taxes for the union, state taxes, destined for the member states, and local taxes, for the municipalities.

Besides the impact of taxes on three levels, the oil industry also supports the payment of government participation in production. This participation represents a considerable source of revenue for states such as Rio de Janeiro and Espírito Santo, and their neighbouring municipalities in fields of exploration.

With the discovery in 2006 of elephant fields in the pre-salt layer, which is located on the continental shelf of the south-eastern coast of the country, a political movement was started, led by lawmakers from non-producer states and municipalities, in order to seek a portion of the resources that are obtained from the vast reserves and distribute such proceeds to the entire national territory.

As a reflection for industry, if the adoption of a proposed amendment succeeds, an increase is expected in the tax rates of those producer entities that are directly affected in order to equate their budgets.
2 THE BRAZILIAN TAX SYSTEM

The Brazilian tax system reflects the particular political and administrative constitution of the country, which is a federation composed of three different entities, each one with its respective competence and using different categories of taxes to finance its activities.

Precisely because of this, Brazil creates a system of collection and distribution of resources that seeks to give independent budgets to its members in order to avoid – through economic subjugation – undue intervention of the union in states and of states in municipalities.

The country is geographically divided into 26 states and 1 federal district. Each one, in turn, is divided into several municipalities, totalling 5,561. To harmonize such an extensive and plural system, the Federal Constitution and the National Tax Code define specifically a category of tax that each entity may establish, forbidding one federative entity from taxing activities of the other and also the same triggering event from being used by different entities, to avoid double taxation.

2.1 Federal Taxes

The union's competence to tax is established in Article 153 of the Constitution, giving to the federal government revenues from import and export tax; income tax and earnings of any nature; industrialized products tax; tax credit transactions, foreign exchange and insurance, or bonds or securities; and tax on rural property. We must also mention the fact that the union charges a social contribution to net profits of 8%, known as CSSL.

The import tax has a taxable event in the entry of a foreign product into the national territory, i.e. all goods produced in another country that have Brazil as the final destination – and are

3 Law No. 5.172, 1966 (entered into force 8th Oct. 1988)
4 Decree-Law No. 37, 1966 (entered into force 18th Nov. 1966)
not just passing through – will suffer the impact of the tax. Its primary function is a stimulating function, i.e. to regulate foreign trade by raising or lowering tax rates – which are on average\(^5\) 13.7% – within the range established by the Mercosul common external tariff.

Also, having the function of stimulating or discouraging the sending of goods produced in the country abroad, the export tax\(^6\) is levied on all products in Brazil and those that have been imported into the country but later benefited or processed again for the exterior. Its normal rate\(^7\) is 30%, except that the Executive Branch increases it to 150% or even reduces it to 0, as with the present tax rate on exports of crude oil.

The income tax, whose triggering event is asset increases achieved by providing any income, is levied on individuals and corporations. It provides the revenue from pensions, for example, and income is the revenue earned on capital and labour. Its rate for corporations\(^8\) is 15% and tax losses may be carried forward indefinitely, but not more than 30% of taxable income in any period may be offset by tax loss carry-forwards. For individuals\(^9\) it varies progressively from total relief up to the maximum range of 27.5% according to the economic capacity of the taxpayer.

All products modified or improved for the consumer pay the so-called value-added federal excise tax on manufactured goods, i.e. those that have been benefited, processed, assembled, packaged or renovated. Its rate is selective, being greater when the good is considered superfluous (cigarettes, beverages and cosmetics) and lower when it is deemed essential (food and medicine), focusing also on imported goods but not on products for export. It cannot be collected on sales of oil and gas.

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7 Art. 3, Decree-Law No. 1578, op. cit.


Another federal tax that deserves mention is the tax on financial operations, whose rates vary according to the type of transaction,\(^{10}\) respecting the following limits: local borrowings – 1.5%; foreign exchange transactions – 25%; insurance – 25%; securities transactions – 1.5%.

Finally, the tax on rural property levied by the federal government focuses on property located in the countryside, i.e. outside the city – regardless of whether this area is devoted to agricultural, industrial or residential use. Its rate\(^ {11}\) varies according to the size and degree of use of the property, being 0.03% for small properties with a high yield and 20% for large buildings with very low productivity, for example.

### 2.2 State Taxes

The ability of states to tax is established in Article 155 of the Constitution, giving the government of each member state tax on revenue inheritance and the donation of any property and rights; transaction tax on the movement of goods and on the provision of services of interstate and inter-municipal transportation and communication, and property tax on motor vehicles.

The tax on transfer by death focuses on the inventory of property of a person who dies, that is, the amount of movable and immovable property left as a legacy, and has a maximum rate\(^ {12}\) set at 8%. This value, however, varies from state to state. In São Paulo and Rio de Janeiro, the most populous and wealthy parts of the country, it applies a rate\(^ {13}\) of 4% on the base. The tax also falls upon the donations of inexpensive properties, with the same rates of tax on inheritance.

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The most important tax levied by states is the tax on the circulation of goods and services, known by the acronym of GST. It is actually generated from the movement of goods destined for mobile commerce and from transport services and communication, and is usually the basis for calculating the value of the transaction or service. As with the federal tax on industrialized products, the rates of GST are selective according to the essentiality of the goods or service.

Liquor, cigarettes, weapons and ammunition are taxed at 25% in São Paulo, since meat and wheat flour are taxed at 12%. Land transport of passengers by bus, for example, has a rate of 12% and communications, such as mobile phones, 25%. Goods for export are exempt from tax.

Another state tax is levied on the ownership of motor vehicles, which must be paid annually, and the base of calculation is the value of the vehicle each year. The rates vary selectively, as in the case of São Paulo, where agricultural machinery is exempt but 1.5% is paid for vehicles with a load capacity exceeding 1 ton and 6% in the case of passenger cars powered by diesel.

2.3 Municipal Taxes

The power of municipalities to tax is established in Article 156 of the Constitution, giving the governments in each county revenue from property tax and urban land tax, regarding the inter vivos transfers of property by onerous acts, and tax services of any kind.

The property and urban land tax covers all the land and existing buildings within the city limits and its rate varies according to the location and use of the property. Residential buildings in the city of São Paulo, for example, are taxed annually at a rate of 1% of their value, while commercial buildings, industrial facilities and vacant land are taxed at 1.5%.

Any transfer of ownership of real property made by way of sale is also subject to the payment of a municipal tax. Taking the tax laws of São Paulo as an example, there is a rate\(^\text{18}\) of 2% on the value of the property being sold. There are exceptions to the scope of the tax, which is not imposed on goods incorporated into the assets of the corporation in carrying out capital nor on the transfer of assets and rights resulting from consolidation, merger, division or dissolution of the corporation.

Similar to the state tax, tax services tax is levied on all other activities that provide services except transport and communication, which are objects of taxation for GST. The taxable event is the usual provision and is paid by the business or individual service whose basis will be the price charged and will focus on the ratio\(^\text{19}\) of 2% to 5% – building on the city of São Paulo – depending on the type of activity.

\(^{18}\) Id.

\(^{19}\) Id.
3 PETROLEUM TAXATION

The Constitution\textsuperscript{20} ensures for the country participation in the result of oil exploration in the territory, continental shelf, territorial sea or exclusive economic zone. Regulating such a command, the Petroleum Act\textsuperscript{21} established four sources of income arising from the activity, including payment for area occupation or retention, signature bonus, special participation and royalties.

These resources, together with taxes on the activity, determine the overall value of the government’s take, representing with geological and political risks a main factor in the decision making about the viability of investments.

3.1 Onshore and Offshore Fields

As with special participation, royalties also make a differentiation concerning the geographic location of the production, i.e. there are different rules for onshore and offshore fields. However, this differentiation is not related to the percentage paid by the oil company, but to the amount collected that will be redistributed among the entities of the federation.

This reflects directly in the discussions under a new regulatory framework of the pre-salt oil, since nowadays the concession areas of great potential are all situated in the continental shelf, leaving only mature fields and small reserves in onshore basins.

\textsuperscript{20} Art. 20, Federal Constitution, op. cit.
\textsuperscript{21} Law No. 9478, 1997 (entered into force 6th Aug. 1996)
The way that resources are shared impacts directly on the political, economic and social dynamic of the federation. An unfair distribution of resources creates conflicts between federative entities, especially when it comes to the allocation of resources for municipalities and state producers or non-producers.

Oil exploration in Brazil began with terrestrial sedimentary basins, and its exploitation prevailed until the 1970s, when offshore reserves were discovered, and since then they have emerged as the suppliers of the oil produced in the country.

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Currently, over 90% of the oil is extracted from the continental shelf, as it appears in the chart above.

### 3.2 Royalty

The main function of royalty, in the way it is applied in Brazil, is to compensate financially and indemnify federative entities that suffer exploratory action and degradation of the environment, and to invest in infrastructure, supporting all the other social costs such as health, education, security and transport.

Unlike special participation, which varies in percentage across the concession contract, the royalties established at the bidding round do not change, being constant even in cases of large variations in production or in the international price of the barrel.

Its value corresponds to 10% of oil production – in exceptional cases it can be up to 5%, taking into account the geological risk and the expected production – to be paid monthly, in the national currency, on the date of commencement of commercial production from each

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23 Id.  
field.\textsuperscript{25} The correct calculation is given by multiplying the volume of oil extracted by the rate established in the concession contract and the reference price in the month.\textsuperscript{26}

The distribution of resources depends on the location of the producing fields. Onshore wells obey a criterion of sharing:\textsuperscript{27} from the amount corresponding to the statutory minimum of 5%, producing states receive 3.5%, producing municipalities 1% and municipalities where the boarding and unloading oil facilities are located 0.5%. The portion that exceeds 5% is distributed as follows: 52.5% of the amount for the producing state, 15% for the producing municipality, 7.5% for municipalities affected by the operations of boarding and unloading and 25% for the union, through the Ministry of Science and Technology.

In the case of fields located on the continental shelf, the criteria for the 5% of the statutory minimum are 1.5% for producing states, 1.5% for the producing municipality, 0.5% for the municipalities affected by the operations of boarding and unloading, 1% for the union by the Brazilian Navy and 0.5% for a fund that distributes its resources among all the other states and municipalities.

The portion that exceeds 5% is distributed\textsuperscript{28} as follows: 22.5% of the amount for the producing state, 22.5% for the producing municipality, 35% for the union, through the Brazilian Navy and the Ministry of Science and Technology, 7.5% for the municipalities affected by the operations of boarding and unloading and 7.5% for a fund that distributes its resources among all the other states and municipalities.

Although the Act allows royalties between 5% and 10%, the Campos Basin – which accounts for more than 80% of all the domestic oil production – has an average rate of 9.9% royalties on its contracts.\textsuperscript{29}

\begin{itemize}
\item \textsuperscript{25} Art. 47, Law No. 9.478, op. cit.
\item \textsuperscript{26} Art. 7 and 8, Decree No. 2.705, 1998 (entered into force 3rd Aug. 1998)
\item \textsuperscript{27} Art. 27, Law No 2.004, 1953 (entered into force 3rd Oct. 1953)
\item \textsuperscript{28} Art. 49, Law No. 9478, op. cit.
\end{itemize}
3.3 Special Participation

This is an extraordinary financial compensation established for fields with a high production volume or profitability, levied on the income derived from the productivity of exploration. The distribution of resources takes place as follows: 30% for the union, through the Ministry of Mines and Energy and the Environment Ministry, 40% for the producing states and 10% for the producing municipalities.

Their tax rates are progressive from 10% to 40% in that which exceeds the exemption limit. The exemption limit for onshore fields is 10,000 bbl/d, in shallow water offshore fields 20,000 bbl/d and in deep and ultra-deep water offshore fields 31,000 bbl/d.

The calculation of its payment is made on the gross revenue from production, minus royalties, finding costs, operating costs, depreciation and taxes under the laws in force.

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30 Art. 50, paragraph 2, Law No. 9478, op. cit.
31 Decree 2.705, op. cit.
32 Art. 50, paragraph 1, Law No. 9.478, op. cit.
33 Regra, A., Participações Governamentais e de Terceiros na Lei do Petróleo. In Brazil 10th Round - Oil & Gas Bidding Rounds, SPG/ANP.
3.4 Other Taxes

The other two forms of government participation in oil production are the payment for area occupation or retention and the signature bonus, which constitute a financial source for the National Petroleum Agency and are fixed in the concession contract.

The first is determined by a value over a square kilometre of the surface area occupied and varies throughout the stages of exploration and production. It cannot be confused with a payment of 0.5% to 1% of oil production, to which the landowner where a well is located is entitled.

At the exploration phase, it is US$5 to US$250, and if the period is extended, it increases by 200% over the amount originally established. During development, it is US$10 to US$500 and in the production phase US$50 to US$2,500.

The latter corresponds to a payment offered in the concession tender and must be paid on the contract signing.

34 Art. 52, Law No. 9.478, op. cit.
35 Art. 46, Id.
In 2007, after the discovery of the Tupi field, Brazil announced to the world the beginning of its exploration and production of oil in the pre-salt layer. Everything that relates to the theme has colossal proportions, starting with the estimates of the elephant fields discovered. Only one of them, with reserves estimated at between 5 and 8 billion barrels, is forecast to produce 100,000 bbl/d.\textsuperscript{36}

Efforts to exploit the reserves are also amazing. Tupi, for example, which lies at a distance of approximately 270 kilometres from the coast, has a depth of water around 2,000 metres and

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Brazil's_Santos_Basin_subsalt_oil_projects.png}
\caption{Brazil's Santos Basin subsalt oil projects}
\end{figure}

\textbf{Source: Reuters}\textsuperscript{37}


another 5,000 metres of rocks and salt. According to Petrobras’s\textsuperscript{38} estimations, in 2020 the country will reach a production of 3.9 million bbl/d and the estimated reserves will exceed 30 billion barrels, putting Brazil in a similar position to countries like Qatar, Canada, Kazakhstan and Nigeria.

The amount of resources that will be managed and the resulting amount of taxes and government participations also bring challenges of looking for old claims from states and municipalities that are not part of the producing regions. The political wrangling that began in the Congress and the public position of governors and mayors point to a delicate process of federative conflicts that may disrupt the scenario of security and reliability achieved by the country.

4.1 Federative Entities: Producer vs. Non-producer

As already noted, the absolute majority of the current reserves of oil in Brazil are located on the continental shelf. According to the Federal Constitution,\textsuperscript{39} the existing resources there are considered the property of the union, and provided to states and municipalities besides the union is the participation in oil operating results.

Therefore, the oil legislation has established forms of sharing resources, allocating most resources to state and local producers, i.e. those considered adjacent to production fields and places of boarding and unloading oil. Only a small amount was intended for a national fund that redistributes resources to other localities.

This occurred due to the understanding that these resources would be financial compensation for the settlement producer infrastructure operating as well as for environmental damage resulting from exploration, and therefore must focus on those who are actually affected by the activity of the oil industry.


\textsuperscript{39} Art. 20
This understanding led to a framework concentrating resources in the southeast, as the Brazilian reserves are mostly on the coast of Rio de Janeiro and Espírito Santo. The region also has the biggest population and is the wealthiest, with the largest share of the gross domestic product.\(^\text{40}\)

![Graph 1: Regional Distribution of GDP and Population](source:Fonson, 2001)

In contrast, the northeast region – which has the second-largest population – is only the third in economic dynamism, enhancing the regional differences in the country. The current model of petroleum resources’ distribution could be contributing to spreading such differences and going against one of the fundamental goals of the Federative Republic of Brazil,\(^\text{41}\) which is to reduce regional inequalities.

### 4.2 Ibsen Amendment

In one bill sent to the Congress by the Executive Branch, in order to amend the regulatory framework of the pre-salt petroleum to change from a concession to a PSC regime, the Congressman Ibsen Pinheiro has submitted an amendment also changing the sharing system of the resources coming from the government participation in oil production.

The main argument is that it seeks to promote a federative balance, allocating resources from the continental shelf to the whole country, the reason being that it is considered the property

\(^{40}\) Afonso, J. (2001) Brazil: Fiscal Federalism, Tax Modernization and Consumption and Production Taxes. Rio de Janeiro, Brazil, BNDES.

\(^{41}\) Art. 3, paragraph III, Federal Constitution, op. cit.
of the union and therefore could not be intended solely for the producing states and municipalities. Under the proposal, the revenue from royalties of more than 5% would be divided into 50% for a state fund and 50% for a municipal fund that redistributes the values to all the counties, without discriminating between producers and non-producers.

A great uproar arose from the amendment, caused mainly because the proposal reached concession agreements already signed, affecting budget revenues already provided by producer entities. The governor of Rio de Janeiro is emphatic that the amendment seems more like a booty, a federative disrespect and a threat to what has already been tendered and would be the revenue of the states. He agrees with changes in the distribution rules for future contracts, but not in the current concessions.

The Secretary of Finance of Rio de Janeiro, Joaquim Levy, reckons that the proceeds from oil are very modest compared with the national GDP and its division is not the panacea that will solve regional inequalities.

‘In fact, it's always good to remember that the current production of 2 million bbl/d is estimated at most US$50 billion per year, which means less than 3% of GDP. Even with the pre-salt resources – assuming that Petrobras will quickly develop the reserves it has received, leading the production to 5 million bbl/d – we would be talking about 5% of GDP today or 3% of GDP in 2020’.

Apart from the political conflicts arising with the proposal, the amendment also increases the royalties’ value for new contracts under the PSC regime in pre-salt area, which will impact on the overall level of government take.

42 Chamber of Deputies of Brazil (2009) Draft Bill No. 5.938-A
4.3 Government Take

The level of government take, considering all forms of government participation and tax, fits within a normal international range, settling between 50% and 52% of the net revenues from oil companies.\textsuperscript{45}

For the new pre-salt fields, the proposal is to increase the royalties from the current minimum of 5% and maximum of 10% to a single rate of 15%. According to Jorge Cargo, the president of the Brazilian unit of Norway's StatoilHydro ASA, the government is entitled to increase its take after the Tupi discovery but the rule changes should not go too far or apply to existing contracts: "We hope that the new rules will be created respecting previous contracts. The current system has served both Petrobras and foreign firms well".\textsuperscript{46}

Aside from such a reasonable prospect of an increase in the royalties level for future endeavours in the pre-salt layer, another factor that may trigger an indirect increase in terms of expenditures of industry is an increase in the tax rates of producer states and municipalities to compensate for their losses of revenue arising from the Ibsen amendment.

Within the constitutional powers and fences, the states can raise taxes on the movement of goods – not over the crude oil itself, which enjoys exemption – but over all sorts of products purchased by industry. Likewise, municipalities can increase their rates over services of any nature, affecting all the services contracted by companies.


5 CONCLUSION

Brazil has a complex tax system that, at first glance, seems to be extremely counterproductive and a factor of major spending by the oil industry due to its three levels of taxes, which cover all kinds of triggering event. However, the legislation establishes a clear division of competences that avoids the phenomenon of double taxation.

Likewise, the government participation in oil production – which is covered by charging royalties, special participation, signature bonuses and rate of use of the surface – and its share between the three levels of government suggest a complex payment system and a large government take over the net revenue.

However, the total government take is reasonable and one single box receives these resources, namely the National Treasury, which then redistributes the values to other federative entities. Such a variety of tax species just reflects the outlines of a federate state rather than a unitary state.

The challenge that has arisen with the oil in the pre-salt layer gives to the government the possibility of improving the legislation and the potential increase in 5% of the royalties’ level. However, political conflicts encountered by the Ibsen amendment will also bring a side effect because of the demand for the restoration of budget losses, which may increase the value of some taxes paid by industry to states and municipalities.
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