DILMA ROUSSEFF AND BRAZIL'S OIL SECTOR

An Americas Society and Council of the Americas Energy Action Group Issue Brief

by Susana Moreira[1]

March 2011

Executive Summary

New Brazilian President Dilma Rousseff comes to power with an extensive background in energy, having been Secretary of Energy of the State of Rio Grande do Sul (1993-1994, 1999-2002), Minister of Mines and Energy of Brazil (2003-2005), and President of the Board of Directors of Petrobras (2003-2010). While at Petrobras, she helped create Brazil's new oil regime, four pieces of legislation that were signed into law in December 2010. The new regime grants the state more control over the recently discovered pre-salt oil fields, as well as the distribution of billions of dollars in revenues. Rousseff has argued repeatedly that the oil income should be used by the state to address some of Brazil's major challenges: poverty, poor education, underdeveloped infrastructure, low quality public health care, and low investment in science and technology.[2] At the same time, she expects the oil discoveries will enable Brazil to develop a supplies and services industry that will add value to the oil sector and create jobs.

In order for oil to play a key role in Rousseff's development strategy for Brazil, Rousseff needs to finalize the new legal framework, first proposed by President Luiz Inácio Lula da Silva, for the unlicensed pre-salt areas. Oil revenue distribution is the primary issue

---

[1] Susana Moreira is a PhD candidate in Latin American Studies at the School of Advanced International Studies, Johns Hopkins University, Washington, DC.

[2] Lally Weymouth, "An interview with Dilma Rousseff, Brazil's President-Elect," *The Washington Post*, December 3, 2010.

Rousseff will need to resolve since many aspects of the new regime depend on royalties for funding. It is also the most complex issue and has generated a heated debate among the states, as well as between the states and the federal government. Despite the multitude of competing interests, Rousseff's vision is expected to prevail, allowing the federal government and Petrobras to assume greater control of Brazil's deep-sea oil wealth and limit the participation of foreign firms. As the new oil regime applies only to unlicensed pre-salt areas, however, foreign firms will be able to continue to operate under the pre-existing terms both offshore and, increasingly, onshore, where new discoveries point to substantial untapped potential.[3]

The New Regime

In 2007, following the discovery of promising new wells in the pre-salt area, Brazil removed 41 blocks near Tupi and in areas with similar geological traits from a pending auction of oil and gas properties.[4] Shortly thereafter, President Lula called for the establishment of a Senate committee to determine whether changes to Brazil's oil law were needed to protect the huge new oil reservoirs discovered in deep waters off the Brazilian coast.

The committee, led by Senator Aloizio Mercadante of the Workers' Party (PT), concluded that the current concession system had to be replaced. It had been designed in the mid-1990s when exploration risks were high, financing capacity was low, fields weren't large, and oil prices were averaging less than US$20 per barrel. By contrast, the context of the pre-salt cluster is one of low exploration risks, high financing capacity, large fields, high oil prices, and growing demand in emerging-market countries. According to the committee's logic, the new circumstances require a different approach, one that manages the resources "responsibly" and delivers greater returns to the government.

In August 2009, President Lula submitted to Congress an oil reform package consisting of four separate bills. The proposals put forth a mixed regulatory regime: existing

[3] Cristiane Ribeiro, "Petrobras Confirma Nova Descoberta de Petróleo na Amazônia," *Agência Brasil*, November 26, 2010.
[4] Please refer to the appendix for more detailed information on the pre-salt discoveries.

concessions awarded to private companies would be regulated by the 1997 Oil Law, while new laws would apply to previously unlicensed pre-salt areas and areas considered strategic.[5] One of the bills introduced production-sharing agreements (PSAs) to replace the existing concession regime and gave Petrobras exclusive rights to operate in the pre-salt region.[6] Another would establish a new state-owned company to administer the pre-salt acreage under government control. A third proposal would authorize the government to grant Petrobras exclusive access to barrels of pre-salt oil in exchange for shares in the company. This would enhance the borrowing and investment capacity of Petrobras while also increasing the government's holdings in the company. A fourth measure would create a social fund designed to absorb part of the foreign exchange earned from exports of pre-salt oil and use part of the profits to fund education, culture, science and technology, environmental sustainability, and poverty eradication programs.

In the summer of 2010, despite the opposition of the Democratic Party and the Brazilian Social Democratic Party, two of President Lula's proposals were signed into law: the government's assignment of pre-salt acreage to Petrobras in exchange for an allotment of shares in the company, and the creation of Pré-Sal Petróleo, a state company that would manage the Brazilian government's interests in the new production-sharing agreements. Approval, however, proved costly. Lula mustered the necessary votes only after agreeing to an expensive pension increase he had originally opposed.

Shortly after the capitalization was approved, the government declared that it was going to sell Petrobras the rights to 5 billion barrels of pre-salt oil valued at an average of US$8.50 per barrel. Minority investors reacted negatively to this move, concerned by the government's encroachment on their stakes. They were also unhappy with the price per barrel offered by the government, which they perceived to be too high. As a result, the value of Petrobras stock dropped to its lowest point in years. Concern circulated that Petrobras's ambitious September share issue would fail, thus jeopardizing its US$224 billion capital expenditure plan for the 2010-2014 period. The share issue, however, was successful: Petrobras raised US$70 billion. Government institutions – the Sovereign Fund of

[5] For more details on the proposals, please refer to the table in the appendix.
[6] A PSA is a contract between an oil company and a host government that outlines the percentage of oil/gas each party will receive after costs have been recovered. In a PSA the state is referred to as "owner" and the company as "contractor." PSAs usually last between 25 and 40 years.

Brazil, Brazilian Development Bank, and National Treasury – purchased 66 percent of the volume of stocks issued, resulting in an increase in the government's stake in the company from nearly 40 percent to 48 percent. Petrobras used US$42.5 billion of the money to pay the government for the rights to the 5 billion barrels of pre-salt oil. The remaining US$24 billion would support Petrobras's capital investments and bolster its balance sheet, allowing it to borrow by 2014 the US$32 billion it needs to ensure the exploration of the pre-salt region while keeping debt within a self-imposed limit of 35 percent of equity (regarded as necessary to preserve its investment-grade rating).[7] On December 2, 2010, with a vote of 204 to 66, Brazil's Congress approved the fund that is to receive a portion of the oil revenues and reinvest them in social programs. Congress also granted exclusive rights to Petrobras to operate in the pre-salt region as well as a minimum participation of 30 percent in all consortia that secure exploratory rights in the new blocks. Finally, Congress approved a new production-sharing regime to replace the existing concession system in all unlicensed areas deemed strategic by the government.[8]

Under the new production-sharing regime, the government will receive its share in oil. Pré-Sal Petróleo will then sell the government's oil to the market. Under the preexisting system, which will remain in place for areas outside the pre-salt, companies pay royalties on the oil they produce. They also pay special participation rights that fluctuate according to international oil prices (the higher the prices, the larger the government's take). The new regime continues the royalty payments but does away with the special participation rights. Under the concessionary system, the company that offers the highest upfront payment to the government (signing bonus) usually wins the concession. Under the new regime, the company that offers the government the most barrels of oil will likely be the winner.

On December 23, 2010, Lula signed the new regime into law. However, he vetoed the royalty distribution formula that Congress had designed and approved. This formula would have discontinued the system under which producing states like São Paulo and Rio de Janeiro are entitled to a higher share of royalties. Instead it sought to divide royalties

[7] *Reuters*, "Brazil's Petrobras Says to Borrow $32 bln by 2014," November 9, 2010.
[8] Leonardo Goy and Eduardo Simões, "Congresso Conclui e Aprova Novo Marco do Petróleo," *Administradores.com.br*, December 2, 2010.

equally among all the Brazilian states. President Rousseff, who expressed disapproval of the proposed royalty distribution scheme and declared her willingness to work with the states to find an alternative solution, now shoulders the responsibility for resolving the issue.[9]

Unfinished Business: The Royalties Discussion

To fulfill her main goal, poverty eradication, Rousseff will need to address the oil rents distribution system and secure resources for the social fund. At the same time, she will have to satisfy the states' demands for a share of the pre-salt revenues and maintain a competitive framework that attracts investment. The majority of states and municipalities believe that the current oil revenue distribution regime is unfair because it concentrates half of all revenues in a very limited number of "producing" coastal states and municipalities, selected, they claim, based on arbitrary geographic criteria. Moreover, the existing regime is criticized for being wasteful and prone to abuse. It is wasteful because the producing states are already amongst the richest in Brazil and because conditions have barely improved in the majority of municipalities that benefit from the current royalty distribution system. It is prone to abuse because weak institutions and a lack of federal oversight have allowed oil revenues to be siphoned off by state and local officials. To correct this situation, "non-producing" states and municipalities want a more equal distribution of the growing oil revenues based on the 1988 Constitution's notion that oil reserves found on- or off-shore belong to the Union.[10] This position was crystallized in the overwhelming Congressional approval of a new formula that would redistribute the royalties more equitably among all federal entities. Under this formula, existing entitlement funds – the States Participation Fund and the Municipal Participation Fund – would be used to distribute the royalties, and producing states would be compensated for their losses through cash transfers from the National Treasury.

---

[9] Tales Faria, "Dilma Pretende Vetar a Distribuição Igualitária dos Royalties do Petróleo," *Poder Online*, November 3, 2010.

[10] In 2008, special taxes on petroleum activity were valued at US$13.35 billion. Special taxes were only US$150 million 11 years earlier. More than 90 percent of petroleum tax revenue comes from offshore production.

The powerful states of Rio de Janeiro, São Paulo, and Espírito Santo vehemently oppose the "equitable" approach and want the existing oil revenue distribution regime to be preserved. Rio de Janeiro, the major beneficiary of the existing system, is particularly vocal in its opposition to the Congressionally approved formula, arguing that the future of its economy (and of events such as the 2014 World Cup, which will take place in Rio and cities across Brazil, and the 2016 Summer Olympics, to be held in Rio) depends on the continued flow of oil revenues to the producing states.

The Rousseff Administration prefers a revenue distribution system that is more centralized and benefits the Union as a whole rather than particular states. Rousseff believes the federal government is better suited to evaluate the macroeconomic implications of oil rents distribution and the opportunity cost of exploring the oil. She opposes having the National Treasury compensate states for the loss of expected income, as the royalties distribution formula approved by the Congress would do. Such compensation, according to the administration, would not only weaken the Treasury but also divert funds to what are now the richest states in Brazil. Finally, administration officials believe that a new oil rents distribution regime must have more stringent control mechanisms to minimize waste and corruption.[11]

President Rousseff will have to deal with the states' opposing views of royalty distribution while pursuing the federal government's own interests. As former President Lula's difficulties gaining Congressional passage of the new oil regime showed, alliances in Congress are difficult to sustain, even for a president with an approval rating near 80 percent. This is particularly true when resources are at stake, as they are a key ingredient to electoral success in a country where parties are weak and pork-barrel politics run rampant. President Rousseff will be successful only if she is willing and able to navigate around Congress. Concessions will be inevitable even after the strong showing of Rousseff's own party, PT, in the recent local and legislative elections, as local interests often trump party allegiance. Parties like the catch-all Brazilian Democratic Movement Party, in exchange for legislative support, often demand access to high-level positions or large local infrastructure projects in the states under their control.

[11] Ministry of Mines and Energy representative, interview with author, June 24, 2010.

What Lies Ahead

While dealing with the pending royalties issue, Rousseff's government will need to design and implement policies that effectively address the challenges and opportunities posed by the pre-salt reserves. Known for her results-oriented approach and support of a strong state role in the economy, Rousseff will likely favor policies that make use of the oil industry to support the improvement of Brazil's socioeconomic performance and the fulfillment of her poverty-reduction agenda.

The challenges before her are great, not least of which is the inflow of large sums of money, which may test Brazil's recent track record of responsible economic management and prudence. A case in point is the auction of part of the unlicensed pre-salt areas planned for the end of 2011.[12] The Libra field is expected to be the first to come up for auction.[13] Government officials believe that the auction will generate up to US$11.7 billion for the government, almost half of what they plan to invest in infrastructure development in 2011.[14] Such an influx of capital could put Brazil at risk for "Dutch Disease."[15] Rousseff believes the social fund will absorb excess liquidity while improving Brazilians' standard of living. Critics, however, are concerned about potential corruption and discontent at the state level because the federal government has exclusive control over the social fund.

Rousseff has also been criticized for her staunch support of Petrobras and its head, José Sergio Gabrielli.[16] These critics believe Petrobras should not have been given privileged access to the pre-salt riches that belong to all Brazilians because it is a mixed-ownership (public-private) company. Others are concerned that, under the new rules, Petrobras's privileged access to the reserves will cause the company to lose its competitive drive. There

[12] *Terra.com.br,* "Governo Fará 1º Leilão do Pré-Sal no 2º Semestre, Diz Lobão," January 3, 2011.
[13] According to Brazil's National Petroleum Agency (ANP), the Libra field has somewhere between 4 and 15 billion barrels of oil. See Assessoria de Imprensa/ANP, "Libra Pode Chegar a 15 Bilhões de Barris de Petróleo Recuperável," news release, October 29, 2010.
[14] *Folha.com,* "Marco do Pré-Sal Pode Dar a Dilma Caixa de R$ 20 Bilhões," November 15, 2010.
[15] "Dutch Disease" is the deindustrialization of a nation's economy that occurs when the discovery of a natural resource raises the value of the national currency, making manufactured goods less competitive and resulting in increased imports and decreased exports. The term originated in the Netherlands after the discovery of North Sea gas in 1959.
[16] Carla Simoes, "Rousseff Said to Keep Gabrielli as Petrobras Chief," *Bloomberg*, December 7, 2010.

is also the question of funding and personnel: to ensure operations in all of the blocks, Petrobras will need to make significant investments (at least US$600 million) in equipment and rapidly expand its workforce.[17] With a limited pool of local talent and funds, Petrobras's operating advantage could become a burden. Finally, there is some fear that private investors will hesitate to enter into a forced partnership with Petrobras, or to join a deep-sea drilling operation where bureaucrats call the shots. There are also questions surrounding the production-sharing regime and Pré-Sal Petróleo, particularly with respect to transparency and efficiency. If critics are right, and Petrobras and Pré-Sal Petróleo do falter, Rousseff's reputation will suffer.

In conclusion, Rousseff's active participation in designing the new regime, and her unrelenting support of it, mean that her political future is now dependent on its success. She will likely use the full scope of her powers as president to ensure the desired outcomes. If she succeeds, Rousseff may lift 14 million Brazilians out of poverty, and move Brazil that much closer to achieving its longstanding economic and political ambitions.

[17] ANP representative, interview with author, June 22, 2010.

Appendix

1. The Pre-Salt Reservoirs

Studies have been circulating in Brazil since the 1980s suggesting that the heavy oil of Brazil's Campos Basin was generated beneath a layer of up to 1.24 miles of salt, about 0.93 miles of upper post-salt sediment, and 1.24 miles or more of water. Doubts about the potential quality of the oil and natural gas below the salt, or the "pre-salt," and whether it could be accessed (and if it could, whether it would be commercially viable) were pervasive when the area became available in Brazil's second and third licensing rounds in 2000 and 2001. Few of the major oil companies showed strong interest, opening up space for small- and medium-sized companies like Portugal's Galp Energia and Spain's Repsol.

Between 2001 and 2004, the pre-salt area was the site of the most thorough study of seismic data anywhere. Petrobras surprised the world when, in November 2007, it announced the discovery of the Tupi field, in depths of up to 3.03 miles below the sea floor, through salt and rocks and in water depths of up to 1.9 miles. It was estimated to contain 5 to 8 billion barrels of sweet oil, making it the largest discovery in the Americas since 1976, and the most promising find since Kazakhstan's Kashagan field in 2000.

Since the announcement of Tupi, scores of test wells have been drilled off the coast of Brazil, resulting in additional discoveries in the Santos and the Campos pre-salt areas, including Carioca (BM-S-9), Caramba (BM-S-21), Jupiter (BM-S-24), Bem-Te-Vi (BM-S-8), Guará (BM-S-9), Iara (BM-S-11), Wahoo (BMC-30), Azulão (BM-S-22), Iguaçu (BM-S-9), Abare West (BM-S-9), Iracema (BM-S-11), Tupi Nordeste (BM-S-11), Iracema Norte (3-RJS-675A), Franco (ANP), Libra (ANP), and Pau-Brasil (ANP).[18] Dry wells, like Guarani (BM-S-22), have been rare.[19] The region's exploration success rate is now approximately 85 percent, which, according to a Petrobras executive, is significantly higher than the industry average of 30 percent.[20]

Experts believe that the pre-salt fairway extends from Espírito Santo to Santa Catarina, covering 57,530 square miles, an area half the size of Arizona. Of the 16,000 square miles, or 28 percent, of the pre-salt area under concession, Petrobras is a partner in 86 percent of the projects.[21] In several blocks, Petrobras is working in partnership with multiple companies, including Galp Energia, Shell, Repsol, BG Group, and Partex.

The discovery of several giant fields like Tupi and Libra, and the speculation that there is a great deal of contiguity between discoveries, has led some experts to estimate the pre-salt reserves to be somewhere between 50 and 110 billion barrels of high commercial value light oil, plus a large amount of associated natural gas.

The first pre-salt oil was produced in 2008 in Jubarte. Petrobras has since begun production in the Tupi field. In both instances, the volume of oil produced has been minimal, as the wells have largely been test wells. In August 2010, Petrobras announced that commercial production had started in the pre-salt region. Petrobras has declared that by 2020 the pre-salt area will produce a whopping 5.4 million barrels of oil per day.[22]

---

[18] Petrobras, "Pré-Sal e Marco Regulatório de Exploração e Produção de Petróleo e Gás," October 2009, 8-9.
[19] Angel Gonzalez, "Santos Dry Hole Highlights Risks of Brazil Offshore Oil," *Dow Jones Newswires,* July 8, 2009.
[20] Petrobras executive, Exploration and Production Department, interview with author, September 3, 2010.
[21] Joel Parshall, "Presalt Propels Brazil into Oil's Front Ranks," *JPT,* April 2010.
[22] Petrobras executive, interview.

2. The New Regime

Production-Sharing Agreement	The legislation determines that the government will be able to award contracts directly to Petrobras, or conduct public bids with the free participation of any company. Petrobras will operate all blocks under this regime. In areas in which Petrobras has exclusivity, the National Energy Policy Council (CNPE) will determine the percentage of "profit oil" to be paid to the Brazilian government.[23] In areas subject to public bids, Petrobras will have a guaranteed minimum interest of 30 percent with the right to participate in bidding processes to increase its interest in those areas. The winner of the bid will be the company that offers the highest percentage of profit oil to the Brazilian government. These companies would bear exploration risk and, in the case of success, be reimbursed in "cost-recovery oil" for their expenses, up to preestablished limits.[24] The payment of a signing bonus (which is not a criterion for the bid) will be defined on a case-by-case basis by CNPE, and royalty payments will follow the terms of the 1997 Oil Law.

Pré-Sal Petróleo	The legislation establishes a new, wholly state-owned company, Pré-Sal Petróleo, to manage development of pre-salt acreage currently under government control. Pré-Sal Petróleo will put up no risk capital, and it won't conduct upstream activities or act as an investor. It will instead grant acreage (with and without auctions), represent the state in unitization proceedings, and administer production-sharing contracts on behalf of the Ministry of Mines and Energy.[25] In order to maximize profit oil, Pré-Sal Petróleo will perform inspections to ensure operation costs remain low. The new company will also have half the seats on the board that oversees the operational committees, with voting rights and veto powers. Pré-Sal Petróleo will be headquartered in Brasilia, with an office in Rio de Janeiro.

[23] "Profit oil" is the amount of produced oil that is divided between the parties and the host government per the production-sharing agreement after cost-recovery oil has been deducted.
[24] "Cost-recovery oil" is the share of produced oil that the operator uses to recover exploration, development, and production expenses as specified in a production-sharing agreement.
[25] "Unitization" is when multiple wells are combined to produce from a specified reservoir. In this case, unitization proceedings have to do with adjacent fields, such as Tupi and Iara, that extend beyond the boundaries of current exploration blocks into areas now controlled by the government.

Petrobras Capitalization	The government can grant Petrobras the right to explore and produce (E&P) hydrocarbons in unlicensed pre-salt areas. To do so, the government must first delineate the unexplored areas believed to hold the amount of reserves it wants to allocate to Petrobras and then hire a third-party expert to certify the volume of oil. The government will then conduct an appraisal of the value of that oil using factors such as production costs, tax rates, and estimates of future oil prices. It will then negotiate the price of the oil with Petrobras, which will pay for the E&P rights with cash or federal bonds. Funding for this exchange will be generated by an issue of new shares in Petrobras. The government will pay the same amount to purchase new shares as Petrobras will pay the government for the rights to the oil. Minority shareholders, however, will have to pay cash to avoid diluting the total percentage of their holdings in the firm, thus providing Petrobras with additional funds. Such a transaction would enhance Petrobras's balance sheet and investment capacity. It would also allow Petrobras to borrow without risking its investment grade, while increasing the government's holdings in the company given that not all private shareholders would exercise their prerogative to acquire new shares in a new issuance. Petrobras will explore and produce oil from the fields with no private partners and pay royalties only on the oil pumped from those fields (Petrobras is exempt from the special participation tax of up to 40 percent).

Social Fund	Income generated by the pre-salt and other strategic oil and gas areas will contribute to a social fund controlled by the federal administration. The fund will finance programs on poverty eradication, education, culture, science and technology, and environmental sustainability.

Americas Society is the premier forum dedicated to education, debate, and dialogue in the Americas. Its mission is to foster an understanding of the contemporary political, social, and economic issues confronting Latin America, the Caribbean, and Canada, and to increase public awareness and appreciation of the diverse cultural heritage of the Americas and the importance of the inter-American relationship.

Council of the Americas is the premier international business organization whose members share a common commitment to economic and social development, open markets, the rule of law, and democracy throughout the Western Hemisphere.

Energy Action Group (EAG) The Americas Society and Council of the Americas EAG brings together the public and private sectors to develop strategic energy policies for the Americas. The EAG hosts forums in cities across the Americas and publishes working papers and recommendations on key energy and climate topics.

Americas Society and Council of the Americas are grateful to The AES Corporation, Chevron, Corporación Andina de Fomento, and Inter-American Development Bank for supporting the EAG.

Uniting opinion leaders to exchange ideas and create solutions to the challenges of the Americas today.
www.as-coa.org