



## Juan Carlos Boué assesses the importance of recent Brazilian oil discoveries to the global petroleum industry

In recent years, the Brazilian upstream sector has become the focus of intense interest on the part of petroleum industry observers. Amidst sharp output declines in many basins that have been key bulwarks of the oil and gas markets (Mexico, Alaska, the North Sea), the Brazilian deepwater offshore had arguably been one of the brightest spots for worldwide exploration activities in terms of discoveries and additions to reserves, even before the announcement of hitherto unsuspected and seemingly gigantic fields in structures located underneath enormous autochthonous salt layers deposited in Cretaceous times.

For Brazil, the discovery of this subsalt oil province seems to have come at a particularly auspicious time. The country's economy, already on the ascendant before the Global Financial crisis of 2008, shrugged off the effects of this event, and continues going from strength to strength (not least because Brazil is by a long distance the largest recipient of direct foreign investment in Latin America). Brazilian energy policy has been an important contributor to this success story. Over a period of time when many countries worldwide have had to struggle with high oil and gas prices as well as serious concerns over security of supply, Brazil managed not only to reduce its very large oil import bill but actually to

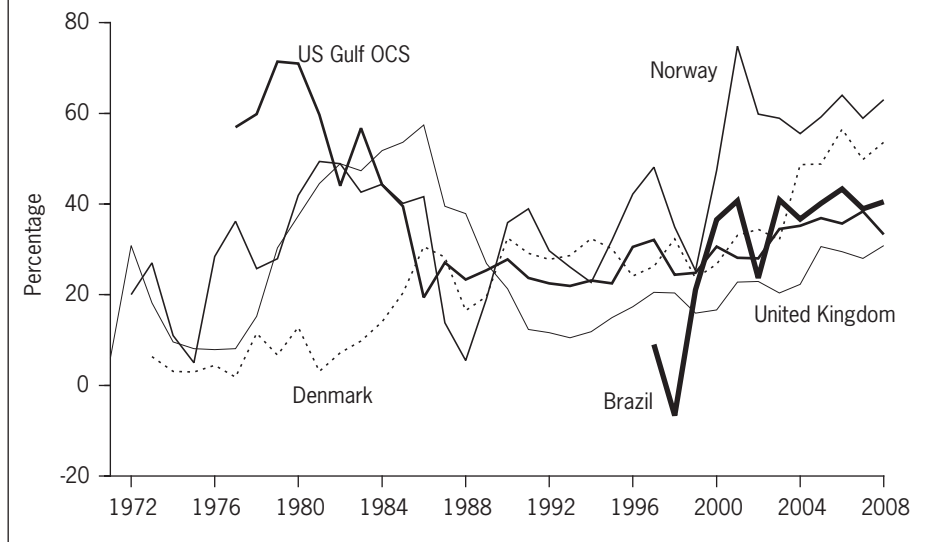
become a significant net oil exporter. Furthermore, high oil prices (not to mention the emergence of global warming as a policy problem) appear to have vindicated in full the costly strategic initiatives that the Brazilian state steadfastly clung to even during times of abundant oil supplies, notably the massive biofuels and deep water exploration programmes. Indeed, at this point in time, Brazil looks to be standing just below the cusp of a development promontory whose climbing has been both long and difficult, and whose surmounting is expected to lead to alleviating (if not ending) the abject poverty which still afflicts the majority of Brazilians. Crucially, in the eyes of the administrations of presidents Lula da Silva and Rousseff, Brazil's oil resources (and, more specifically, its pre-salt fields) are nothing less than the golden ticket that may open the gates of the promised land, not least because they are expected to allow Brazil to join the club of major oil exporters.

As important as the outlook of the Brazilian upstream is to Brazilians, a lot is also riding on it as far as the global petroleum industry is concerned. For one thing, international oil companies view Brazil as a privileged destination for their investment funds, in light of its excellent prospectivity, its openness towards foreign upstream investment (quite lacking in many otherwise attractive places), its enormous domestic market, its seemingly stable institutional framework and its favourable fiscal regime. For their part, global oil consumers are counting on the aggressive development of Brazilian oil and gas resources to take at least some of the edge off the very high prices that have materialised in the wake of production declines elsewhere, and hopefully to curb the market power of OPEC nations (and Russia). Finally, the management of Petrobrás is very eager to fulfill these expectations, seeing in them the chance to turn the company into one of the international super majors, even if this implies carrying out a massive development programme, the likes of which would strain the management and financial resources of the very largest among its peers.

Notwithstanding the rather fanciful nature of the Brazilian reserves estimates that have been banded about thus far (especially by *Agência Nacional do Petróleo, Gás Natural e Biocombustíveis* ANP), there can scarcely be any doubt that Brazil will be a major player in the oil industry in years to come. Having said that, the near universal bullishness about Brazilian upstream prospects seems overdone, not least because what questioning there has been regarding the likelihood of the various Brazilian oil output scenarios (and there has been very little of that), has involved strictly technical aspects, mostly having to do with geology. In other words, it has tended to assume that the binding constraint for the development of new Brazilian fields will come in the form of underground factors. This is remarkable, given that over the past ten years or so, it has been overground (i.e. political and institutional) factors that have been behind the slowing down (or even the reversal) in the rate of output expansion in countries such as Russia and Venezuela. In economic terms, the tangible manifestation of these overground factors has been a grossly asymmetrical distribution of upstream proceeds between host governments (in their capacity as representatives of the owners of the natural resources being exploited), on the one hand, and the firms exploiting the resources, on the other. This imbalance became increasingly intolerable as oil prices rose, leading to the outcome that the governments involved devoted (and in places like Kazakhstan, continue to devote) most or all of their scarce expertise and manpower to restructuring legacy projects, as no new project can offer a better payoff than levying more reasonable taxes on indefensible contracts. This focus on restructuring (and its almost inevitable sequence, litigation) will, in the foreseeable future and in quite a few places, continue to snarl up the smooth flow of investment capital, which is a prerequisite for lower volatility and fair and sustainable prices.

These reflections are very pertinent to the case at hand because Brazil appears to exhibit many if not all of the

**Figure 1: Government Take as a Percentage of Upstream Income in Selected Offshore Petroleum Provinces 1971–2008**



economic symptoms that have triggered contract restructurings in places like Venezuela. As Figure 1 shows, on the basis of figures compiled for the period 1971–2008, it is difficult to avoid the conclusion that Brazil is a relatively undertaxed petroleum province, whose fiscal regime produces outcomes in terms of government take that resemble those of provinces where fiscal income considerations are not very important (notably the US Outer Continental Shelf and the UK Continental Shelf). This is not very surprising, given that the Brazilian upstream fiscal regime was designed at a time when the country was still a very substantial oil importer, and maximisation of domestic production was a weightier strategic imperative than fiscal revenues. Having said that, there are distinct indications that the Brazilian government is not completely happy about the behaviour of its petroleum fiscal income, notably the partial or total cancellation of two out of the last three acreage bidding rounds (the 8th and 10th), and its desire to adopt a completely new fiscal and contractual regime for pre-salt fields. Moreover, the institutional situation in Brazil seems particularly fraught because at its very centre is the Brazilian national oil company, Petrobrás, majority owned by the government. Quite apart from whatever organisational diagrammes

might purport to say, the *de facto* licensing agency for the Brazilian upstream - particularly at the level of determining the rate of extraction and depletion of Brazilian hydrocarbons resources - is Petrobrás (rather than the ANP). Furthermore, one of the key roles for Petrobrás has been that of controlling its home government and majority owner. Thus far, the company has excelled at this particular function, as witnessed by the way in which it managed, firstly, to convince the government to make it (on a statutory basis) the preferred operator in the presalt; secondly, to adopt a contractual form and fiscal regime for the presalt which are likely to diminish further the government's per barrel take (if precedent from other countries is anything to go by), and, last but by no means least, to transfer to it (as an equity contribution in exchange for shares) title to a very large amount of reserves at an extremely advantageous price. However, Petrobrás flawless past performance is no guarantee of future performance, which should give observers of the Brazilian oil industry pause for thought, not least because outright conflicts involving governments, on the one hand, and their national oil companies, on the other, have culminated in especially messy outcomes (nowhere more so than in Venezuela).