

STRATEGIC ANALYSIS OF BRAZIL'S NATIONAL OIL COMPANY (PETROBRAS)



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ABSTRACT: *The establishment of Petrobras (PBR) was as a result of a popular campaign that started in 1946, in relation to “The oil is ours” slogan. The oil company played a monopolistic role in Brazil until 1997 when the government decided to allow other local and foreign players to come to the scene. With a vision to be one of the five largest integrated companies in the world, PBR has developed a sustainable development plan to aid its ambitions.*

This paper seeks to analyse PBR’ strategy with regards to its vision for 2020, and also focus on the company’s external and internal environments and its competitive advantage in the international market. The analysis will be made using the PESTEL, VRIN and SWOT strategic model. The strategic lenses model will be further used to analyse the corporate strategy of PBR. The paper shall conclude with recommendations towards how PBR could achieve its vision for 2020.

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TABLE OF CONTENTS

LIST OF FIGURES.....	3
LIST OF ABBREVIATIONS.....	4
1. INTRODUCTION.....	6
2. THE RISE OF PETROBRAS	7
2.1 Growth Trends (Reserve Capacity)	7
2.2 Revenue Size	8
3. PESTEL, SWOT AND VRIN ANALYSIS OF PETROBRAS.....	9
3.1 PESTEL Analysis	9
3.2 VRIN.....	12
3.3 SWOT	13
4. PETROBRAS`STRATEGY	14
4.1 Corporate Strategy	14
4.2 Analysis of Petrobras Strategy Using the Strategic Lenses	14
5. CONCLUSION AND RECOMMENDATION.....	16
BIBLOGRAPHY	17
APPENDIX.....	20

LIST OF FIGURES

Figure 1	9
Figure 2	14

LIST OF ABBREVIATIONS

ANP	National Petroleum Agency
Boe	Barrels of Oil Equivalent
CEBR	Centre for Economics and Business Research
FT	Financial Times
GDP	Gross Domestic Product
IOC	International Oil Company
Km	Kilometre
NOC	National Oil Company
PBR	Petrobras
UK	United Kingdom
USA	United States of America

TERMS OF REFERENCE

The objective of this research is to critically analyse the strategy of PBR and evaluate the key factors it requires to successfully achieve its vision for 2020. This paper will also focus on the external and internal environments of the company and its strategic competitive advantage in the international market.

1. INTRODUCTION

PBR is the leader of Brazil's oil industry, one of the biggest NOCs and the largest firm in terms of revenue in South America with its headquarters in Rio de Janeiro. The company has five main subsidiaries: Transpetro, Petrobras Distribuidora, Petroquisa, Petrobras Biocombustivel and Gaspetro (Petrobras, 2012). As at the end of year 2011, PBR's proven reserves had reached 15.706 billion barrels oil equivalent (boe) in Brazil while their foreign reserves hit 0.706 billion boe on the estimates of the National Petroleum Agency (ANP) in Brazil (Petrobras, 2012). The Reserve Replacement Index (RRI) was 152% while the reserve to production ratio stood at 19.2 years over the same period. The company currently has operations in 28 countries including Libya, Nigeria, UK and USA (Petrobras website). Besides exploring and producing oil, gas and petrochemicals (ethanol), the company is one of the biggest refiners in the world. The key words of the company's strategy are integrated growth, profitability and socio-environmental responsibility. These pillars served as the foundation of its 2020 Mission and Vision. Again this will be achieved through transparency and with attentive eyes on what is going on in Brazil and in the world" (Petrobras, 2009).

The aim of this paper is to analyse PBR's strategy with regards to its vision for 2020 and also focus on the company's external and internal environments and its competitive advantage in the international market. The paper is divided into five sections to achieve this aim: section two gives a description of the rise of PBR with regards to its growth trends and revenue size; section three analyses PBR using the PESTEL, VRIN which inform a SWOT analysis; and section four focuses on the analysis of PBR using the strategic lenses. The paper concludes in chapter five with recommendations towards how PBR could further achieve its vision for 2020.

2. THE RISE OF PETROBRAS

PBR was established in 1953 as a government-controlled NOC and is one of the largest in South America. PBR was incorporated for the purposes of managing the country's oil resources in order to implement and regulate the national oil policy. The company is engaged in exploration, production, refining, transportation and distribution of oil, gas and by-products. PBR now owns 132 production platforms (86 fixed and 46 floating), 16 refineries, 8,477 service stations and about 29,398 km pipeline (Petrobras, 2012).

For nearly forty-five years, PBR was the sole concessionaire of oil and gas Exploration and Development (E&P) until 1998, when the Brazilian Federal Government introduced the first round of competitive bids for new E&P concessions. This introduced other players into the Brazilian market (Deloitte, 2010). The entry of other players increased competitive pressure and helped rekindle production revolution within PBR. Royal Dutch Shell was the first IOC to start operations in Brazil in 2003 (Ernst & Young, 2011). The company's duty of implementation and regulation of the national oil policy was handed over to the ANP (National Petroleum Agency). Its establishment has since seen a series of transformation throughout its corporate life. As part of its strategic plans for the future, PBR have boldly declared that it "will be one of the five largest integrated energy companies in the world and the preferred choice among [its] stakeholders" (Petrobras, 2012). This section of the paper will thus analyse its growth trends and revenue size over the past few years.

2.1 Growth Trends (Reserve Capacity)

It is a rare success story among state-owned companies as PBR plays a growing role in the energy-hungry world (Moffett, 2007). With petroleum self sufficiency status attained in 2006, the company explored new ventures to increase its portfolio (Petrobras, 2010). In 2007, PBR discovered its first mega-field, the Tupi field (in the Santos Basin) which was considered the largest discovery in the Western Hemisphere within the last thirty years and was the first discovery of the company in the pre-salt layer. This field alone

increased Brazil's reserve capacity by approximately 60%. Another discovery in 2008 was said to have a similar size (5-8 billion boe) as Lula field. (Madden, 2012)

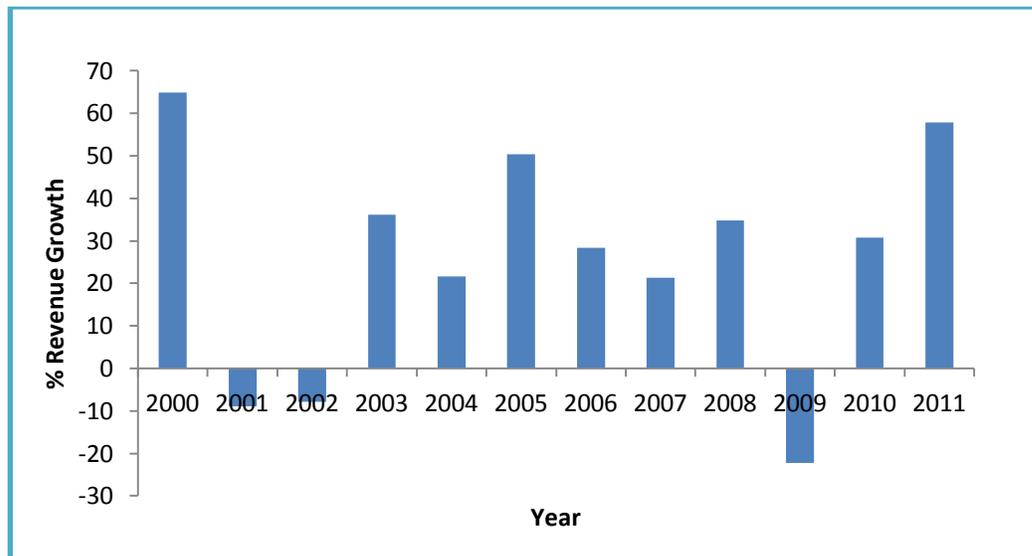
Even before its pre-salt finds, PBR was planning to increase its refinery capacity with four new oil refineries between 2010 to 2030 with a total nominal capacity of 950,000 bpd of oil in addition to new petrochemical refineries which had a total nominal capacity of 300,000 bpd of oil between 2010 to 2020 (Deloitte, 2010). The company reported recently that its oil, condensate and natural gas reserves reaches 16.41 billion boe in 2011 which represented an increase of 2.7% in the previous year (Petrobras, 2012).

According to Helen Torres, Contributing reporter for The Rio Times(2011) "Petrobras, the world leader in sub-salt oil extraction which is 54% directly owned by the Brazilian Government, is expanding its borders at sea with the deployment of self-sustaining platforms located far offshore which have been dubbed the 'floating cities'". This statement is evidence of PBR's growth strategy as highlighted in the 2020 vision statement.

2.2 Revenue Size

According to the Financial Times (2012), the company's revenue and annual profits increased by 5% in 2011 as compared to 2010. The figure below indicates the percent growth in revenue from year 2010 to 2011. The graph below shows that there were negative revenue growth rates in 2001, 2002 and 2009. The 2001 sequence was as a result of the explosion and subsequent loss of the P-36 oil platform. Operations for clean up required huge sums of investment hence the decline in that year. The effect on the company carried on till the end of 2002. Also the negative revenue growth experienced in 2009 was as a result of the global financial crisis which affected global markets.

Figure 1: Revenue Growth of PBR from 2000-2011



Source: Compiled by Author using data from PBR Website

3. PESTEL, SWOT AND VRIN ANALYSIS OF PETROBRAS

3.1 PESTEL Analysis

The PESTEL analysis is used in accessing the external environment in which an organisation operates. PESTEL provides a comprehensive list of influences on the possible success or failure of particular strategies adopted (Thomas, 2007). This analysis will help identify the political, economic, social, technological, environmental and legal impact of PBR on its external environment.

Political

The Brazilian oil industry is characterised by high levels of political influence and government intervention. Even though the company is partly owned (about 54%), the majority of the shares belong to the Brazilian government. This gives the government control over the company's finances and operations, and has also increased competition since local companies and International Oil Companies (IOCs) have the right of entry. Even though other oil and gas companies have the opportunity to enter the Brazilian market, the production sharing scheme provides PBR a minimum of 30% operating stake

in all new operating subsalt fields (Watkins, 2010). This notwithstanding, the stable geopolitical environment provides a conducive atmosphere for PBR to successfully operate (Ernst & Young, 2011). The political stability in Brazil is to PBRs' advantage due to the fact that the majority of global oil reserves are located in high political risk countries. The oil extraction industry is highly capital intensive and therefore requires significant investment. The impressive oil reserves located in Brazil coupled with political stability make PBR highly attractive in the international market.

In September 2011, the government of Brazil reduced the CIDE¹ tax on gasoline imports and sales by 16%. The reduction benefited PBR since it had absorbed the rising import cost generated by a 12% increase in depreciation of the Brazilian currency against the US dollar in that month. (Fenwick, 2011)

Economic

The main economic factors that could affect PBR include crude oil price volatility and foreign exchange rates. Hence a price appreciation will increase the company's profit margin and a sustained decline of the price will lead to reduced profit margins. In 2010 to 2011 financial year, PBR announced a 5% decline in annual profits (Financial Times, 2012). Although oil E&P is economically viable, the industry is very sensitive to external global factors such as the recent global recession. Apart from these odds, Brazil has about 40% sub-mature and frontier acreage including the pre-salt fields which are undeveloped (Brandon et al., 2011).

Oil revenues have played a significant growth in the GDP of Brazil, to the extent of becoming the sixth largest economy in the world at the end of 2011. Brazils' GDP increased from US\$ 2,090 billion in 2010 to US\$ 2,518 billion in 2011 overtaking the UK to the sixth position. (CEBR, 2011) See Appendix for tables 1 and 2.

¹ CIDE is a contribution charged on cross-border payments of royalties.

Social

According to the Financial Times (2012), the Brazilian government has put in place a policy of incorporating local content of up to 65% in the national oil services industry. This has created jobs for the local people of Brazil and has promoted the company's corporate image among the citizenry. Developing an appropriate corporate image that is responsive to the wider needs of the communities is a key factor for PBR's long term goals. In view of this, PBR has adopted the Corporate Image Monitoring System (Sismico) since 2000 (Petrobras, 2010). The objectives behind this approach are to measure and monitor the progression and development of its corporate image. This is highly indicative of the emergence of the high importance of social responsibility placed on oil companies by the society.

Technological

One key to Petrobras success is its superior technology. It has the most advanced deepwater and ultra deepwater technologies in exploration and production. This capability was developed domestically, building on existing industrial capability and shipbuilding expertise (Brandon et al., 2011). Petrobras has tripled spending on research and development over the past five years to \$700million in 2006 and its sprawling research centre develops technologies that are being adopted throughout the offshore industry (Moffett, 2007). However, the challenges facing the drilling and production of the pre-salt fields have been reduced by the use of equipment built with special alloys to resist corrosion caused by carbon dioxide in contact with water (Busquet, 2012). The recent discoveries of the deep and ultra deepwater oil fields present challenges for operational safety in technological development. The 2010 Gulf of Mexico spill has had a resounding impact on the importance of the operational know-how required for offshore drilling. (Ernst &Young, 2011)

Environmental

PBR reliance on future boe from deepwater drilling presents operational considerations, challenges as well as risks. For example this aspect of PBR's growth strategy has led to the creation of the Experimental Center for CO₂ Separation Technologies (Petrobras

Sustainability Report, 2010). Carbon capture is the latest in a series of industry regulation and greenhouse effect goals expected from oil companies. Such goals are financially draining as they often require the implementation of highly technical infrastructure to be put in place. The oil industry is still recovering from the reputational damage left behind by the Gulf of Mexico spill. PBR's discovery of offshore reserves will no doubt lead to protests from environmental activists. In order to ensure that the new offshore development does not compromise the environment, PBR has established a relationship with Applied Science Associates, Inc. (ASA) to help prepare an up-to-date emergency plan (El-Hillow, 2008).

Legal

PBR is bound by legislature from its regulators. With the recent Macondo World blow out in 2010 in the Gulf of Mexico, new legislation has been implemented regarding exploration in deepwater areas. Again health and safety laws also come into play in oil and gas operations since it's a high risk venture. The main regulator in Brazil is the ANP and their duties are to implement and enforce environmental regulations and also register, monitor and inspect activities under concession. (ANP, 2010)

3.2 VRIN

VRIN analysis is the basis of competitive advantage. This section considers the key areas where PBR's capabilities are assessed.

Value

In recent times, PBR has been very successful in increasing its domestic reserve base and production. During 2011 alone, PBR's proven reserves increased by 1.315 billion boe from the previous year (Petrobras, 2012). These reserves coupled with high technology refineries will increase PBR's portfolio.

Rarity

PBR's cutting edge technology, discovery in fields relinquished by peers and discoveries in deep water depth are the key elements that distinguishes PBR from the competition and creates establishes its unique strategy.

Inimitability

PBR has a greater presence offshore with a significant number of acreages. In addition to that it is recognised with a first mover advantage in the Brazilian offshore basins.

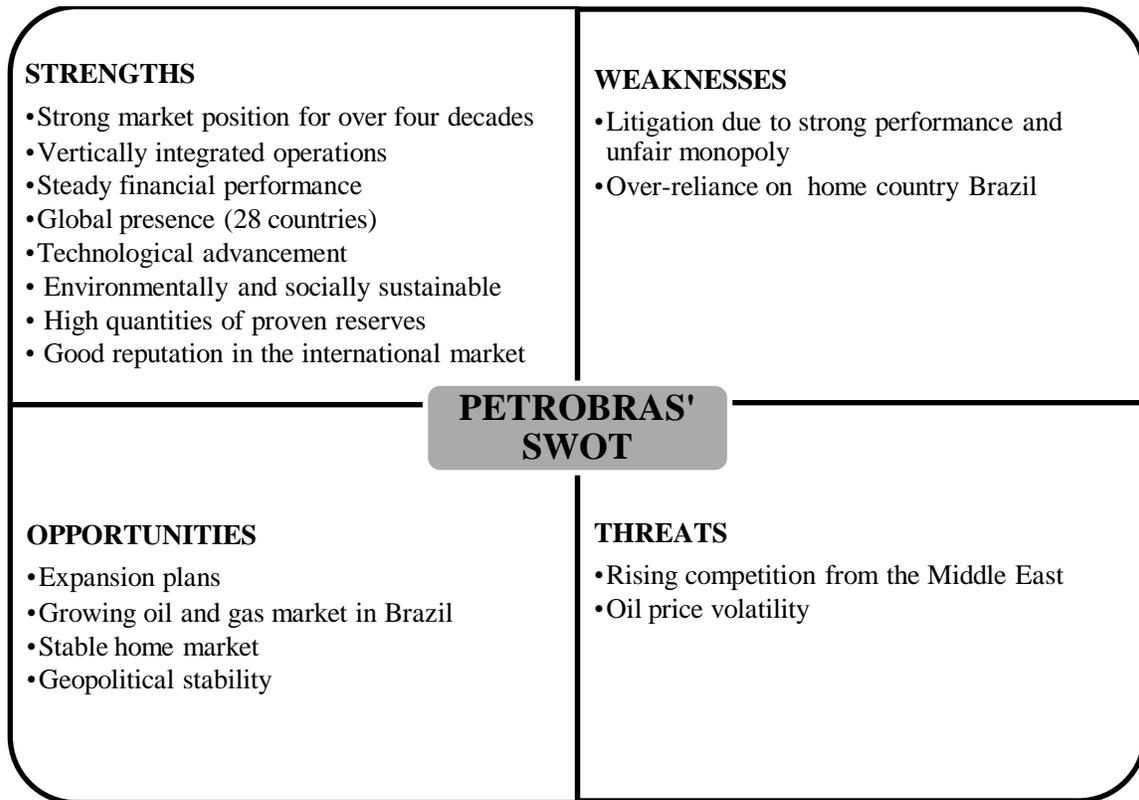
Non-substitutability

PBR's integrated approach allows it to participate in the full value chain in the petroleum industry. Therefore their operations in the exploration, trading, refining, marketing and service stations, positions it as a full and dominant company. This business structure is very strategic and often profitable and puts PBR in a non-substitutable position.

3.3 SWOT

SWOT analysis is used to evaluate an organisations strengths and weaknesses in relation to its environmental opportunities and threat. The PESTEL and VRIN analysis serve as the basis for the SWOT analysis below.

Figure 2: SWOT Analysis of Petrobras 2010



4. PETROBRAS` STRATEGY

4.1 Corporate Strategy

PBR` corporate strategy; *“Integrated growth, profitability, and socio-environmental responsibility are keywords in our corporate strategy. It is based on the performance on these three pillars that we built the 2020 Mission and Vision, transparently and with attentive eyes on what is going on in Brazil and in the world.”* (Petrobras, 2009)

4.2 Analysis of Petrobras Strategy Using the Strategic Lenses

There are four lenses through which the strategy of an organisation can be viewed, these include; strategy as design, strategy as experience, strategy as variety and strategy as discourse (Johnson et al., 2011). Taking a critical look at PBR`s achievement in the past

which has led it to its current market position, the experience lens will be used to elicit key achievements and practices that have been employed by PBR and can be leveraged on to achieve its integrated growth, profitability and socio-environmental responsibility by the year 2020.

PBR's adherence to requirements of the Dow Jones Sustainability Index (DJSI) and to São Paulo Stock Exchange (Bovespa) gave it a favorable ranking by these organisations. These indices are a parameter for investors to be able to analyse the economic, social and environmental issues. With them PBR is now recognised as one of the world's thirteen oil and gas majors and one of the most sustainable Brazilian companies. Sound practices of this nature will help PBR attain its 2020 goal. The company's dedication should continue to align with international social and environmental responsibility standards (Corporate Sustainability Index (ISE)), as this has made the Company even prouder and greatly enhanced the image.(Petrobras Sustainability Report, 2010)

The sound working capital management that has enabled it to attain financial success should be relied on and enhanced as required to enable it achieve its goal. Taking sound and strategic capital investment decisions that rely on previous investment experiences will assist in achieving the long term goals.

Finally, it is good to mention that PBR has achieved great success through its people. It needs to continue to provide an excellent working environment and good perks to build the future together.

5. CONCLUSION AND RECOMMENDATION

For PBR to achieve its strategy, the company needs to increase its capital to be able to acquire and merge with other strategic oil and gas companies that will allow them to compete or to be more dominant through the increase in the size of their proven reserves. This implies that PBR requires more capital to improve their balance sheet in order to acquire or partner other companies. This will increase its portfolio and help its ambition to become one of the five largest integrated energy companies in the world and the most preferred choice among its stakeholders. This report focused on the corporate strategy of PBR and its proposed vision for 2020.

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APPENDIX

Table 1: CEBR World Economic League Table 2010

Rank	Country	\$GDP (Billion)	Rank	Country	\$GDP (Billion)
1	United States	14,527	16	Netherlands	781
2	China	5,878	17	Turkey	735
3	Japan	5,459	18	Indonesia	707
4	Germany	3,286	19	Switzerland	528
5	France	2,563	20	Poland	469
6	United Kingdom	2,250	21	Belgium	468
7	Brazil	2,090	22	Sweden	459
8	Italy	2,055	23	Saudi Arabia	448
9	India	1,632	24	Taiwan	430
10	Russia	1,480	25	Norway	413
11	Canada	1,577	26	Iran	407
12	Spain	1,410	27	Austria	377
13	Australia	1,237	28	Argentina	370
14	Mexico	1,034	29	South Africa	364
15	Korea	1,014	30	United Arab Emirates	302

Table 2: CEBR World Economic League Table 2011

Rank	Country	\$GDP (Billion)	Rank	Country	\$GDP (Billion)
1	United States	15,065	16	Netherlands	858
2	China	6,988	17	Indonesia	834
3	Japan	5,855	18	Turkey	763
4	Germany	3,629	19	Switzerland	666
5	France	2,808	20	Sweden	572
6	Brazil	2,518	21	Saudi Arabia	560
7	United Kingdom	2,481	22	Poland	532
8	Italy	2,246	23	Belgium	529
9	Russia	1,885	24	Taiwan	505
10	India	1,843	25	Norway	479
11	Canada	1,759	26	Iran	475
12	Spain	1,536	27	Argentina	435
13	Australia	1,507	28	Austria	425
14	Mexico	1,185	29	South Africa	422
15	Korea	1,164	30	United Arab Emirates	358