



China, Brazil and Petroleum

The Role of China in
Brazil's Transformation
into an Oil Power

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To my family.

PREFACE

This book is an adaptation of my PhD thesis at the School of International Studies of Renmin University of China, in Beijing, where I researched Brazil-China energy relations, with a focus on oil. Those were very pleasant and rewarding years of my life, when I could delve into Chinese culture, society, economy, politics, landscape, and energy-related policies. Linguistically speaking, those were also challenging days. It was not easy to follow courses in Mandarin and to write a thesis in the same language. Difficulties were finally overcome and this book is a proof of that.

This manuscript somehow also reflects my 14 years of experience working with China. Since my first days at the Ministry of Foreign Affairs in 2010, I have been directly involved with China-related issues, spending time between Brasilia and Beijing. It has been a period with a lot of learning and experience, during which I got a chance to meet specialists from the public and private sectors and from different areas and fields of study. One of them once told me that to understand China is not an easy task, the more you study about it, the less you know it. He told me the phrase that became a catchphrase among sinologists: if you spend some time in China, you can write a book; if you spend several years in the country, you will possibly not be able to write an article. I am one of the researchers who “broke” this rule and tried to put on paper some of the knowledge accumulated over time. After some articles published here and there, I decided to write this book.

I hope that this publication can also be a contribution to Brazil-China studies. Academic interest and personal curiosity on China are on rise in Brazil, elsewhere alike. There is equally a growing scholarship on Brazilian studies in the PRC. I am increasingly surprised by new generations of Brazilian and Chinese researchers, who are proving to be professionally skillful and linguistically capable. The mounting numbers of Confucius Institutes in Brazil and Portuguese language courses in Chinese universities are definitely helping in this process.

China is a relatively new phenomenon in Brazil, so it is its widespread presence in Brazilian academy. It is fair to say that the opposite is also somehow true. Research on Brazil has risen remarkably over the last few years. The number and the quality of works growing day by day notwithstanding, there is still plenty of room for innovative and pioneering articles and books. The small amount of research on Brazil-China energy relations motivated me to embark on this journey to explain the role that China is playing in transforming Brazil into an oil power after the discovery of the pre-salt.

Beijing, China

Pedro Henrique Batista Barbosa

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I believe that there are many more than two hands behind any publication and mine is not an exception. Directedly or not, any author is unexceptionally influenced by people that he has talked or read. Naturally, these impressions and different perspectives are reflected on paper. Thankfully, contacts with professionals in the oil and gas sector gave me necessary knowledge to advance my research and without which this book would not have achieved their objectives. Any errors and inaccuracies are my sole responsibility and not those of the experts directly or otherwise quoted in this text.

It is not an easy task to list all people that I consider important to be named here. As a way to avoid omissions, I decided to implement a different approach and only mention the institutions that these specialists are affiliated to. Therefore, I am immensely grateful to Renmin University of China (RUC), Brazilian Ministry of Foreign Affairs (MRE), Brazilian Ministry of Mines and Energy (MME), Global Development Policy Center (GDPC, Boston University), China-Mexico Research Center (Cechimex, Autonomous University of Mexico), Inter-American Dialogue, Brazilian Petroleum and Gas Institute (IBP), China-Brazil Business Council (CEBC), Brazilian Center for International Relations (CEBRI), Observa China, IPEA, Petrobras, University of Brasilia (UnB), Chinese Academy of Social Sciences (CASS), Brazilian Electricity Regulatory Agency (Aneel), and National Agency of Petroleum, Natural Gas and Biofuels (ANP).

INTRODUCTION

November 8, 2007 was a milestone in the recent history of Brazil's oil sector. Petrobras' technicians began to present, at an extraordinary meeting of the National Energy Policy Council (CNPE), the details of discovery of petroleum deposits in an area until then nearly unknown the so-called: "pre-salt". Prospects of new reservoirs located far from the coast and very deep into the ocean indicated an abnormal potential for recoverable oil of good quality, of the order of 5 to 8 billion barrels equivalent, which at the time represented nearly 50% of the country's oil reserves. Further estimates elevated these projections to up to 50 billion barrels of recoverable oil. These numbers would make Brazil have one of the largest oil reserves on earth. Local analysts and enthusiasts have started to call the breakthrough as the Brazilian new "black gold" (Cardoso 2008) and "El Dorado" (TribunadoNorte 2009).

Expectations and optimism were high not only in Brazil, but also abroad. The pre-salt was regarded as a brand-new frontier to be explored off the Brazilian coast and possibly in other countries' deep waters. At that time, international oil reserves were shrinking and few new oil discoveries' announcements were being made. Global consumption was on the rise, especially in emerging Asian markets, with China in the lead.

What was unknown at the time was that the future of the pre-salt exploration would be directly linked to China. The Asian country was already a heavy consumer of Brazilian agricultural goods and minerals, but petroleum was not a significant part of its import basket at that

time. The pre-salt discovery changed this equation. Over the last two decades, the evolution of both countries' oil sector has brought the two economies closer together and has catapulted bilateral oil trade, investments, infrastructure services and financing. While the People's Republic of China (PRC) was consolidating its position as one of the world's largest consumers and importers of crude oil, Brazil was gaining ground among the largest producers and exporters of the commodity.

Besides the circumstantial complementarity of two oil sectors, both China and Brazil fit well in each other's energetic strategic plans. The PRC has historically confronted the challenge of matching its energy domestic demand, which expanded at a much faster pace than national production over the last decades. The result of this equation was booming imports, which recently accounted for closely 70% of the internal needs. This situation has always highlighted the necessity of a continuous quest for petroleum abroad. The Asian country needed not only to guarantee continuous inflows of petroleum, but also to diversify supply sources as a way to avoid risks. Under this condition, Brazil has begun to play an increasingly important role in China's energy security calculations and import diversification plans after the pre-salt discovery. Over the last years, the country which experienced the fastest growth of Chinese imports among China's top crude suppliers was Brazil.

The pre-salt layer exploration has brought to Brazil a different challenge from that of China. Mounting national production numbers were far outpacing domestic consumption and the external market was the natural destination of these exceeding figures. By 2023, for instance, almost half of Brazilian crude output was sold abroad. Nonetheless, the pre-salt discovery coincided in time with the shale revolution in the United States. The United States, then the world's largest consumer and importer of petroleum, was increasingly looking inwards to satisfy its energetic needs and was gradually less reliant on external suppliers. The US was Brazil's main oil buyer, thus new destination markets needed to be found. That is when China started to play a relevant role in Brazilian oil companies' export strategies.

Over time, the bilateral relationship went beyond trade ties. A number of Chinese oil companies, service providers and financial institutions have landed in Brazil and strengthened ties with local players.

In the wake of a booming trade, Chinese oil investments have multiplied and all China's major oil companies disembarked in Brazil. The pre-salt was a new, promising frontier accessible to new players, foreign or

not, and whose exploration was regulated under market-oriented, stable and strong regulatory rules. Differently from other fields in major oil countries, whose production was already dominated by local or other traditional oil corporations, the pre-salt was open to international competition and thus emerged as a new El Dorado. Consequently, through either acquisitions or partnerships with local firms in public auctions, Chinese oil firms have entered in various E&P projects and increased their production. In a short space of time, they have come to occupy the third position among the largest national crude producers, with the prospect of continued expansion in the future.

These oil companies have been followed by other service providers, who have been grabbing a growing share of the Brazilian oil sector's supply chain. Remarkably, Chinese shipyards have been the biggest beneficiaries of Petrobras' plans to build drilling platforms, especially FPSOs. Brazil's fleet expansion program has been the largest in the world in recent years.

China's development, commercial and multilateral financial institutions were behind many of these pre-salt oil extraction activities, offering loans at crucial moments. Brazilian oil firms needed sponsors for their new E&P endeavors and Chinese banks had the financial capacity to fund the exploration of the then unexploited submerged wealth. Over time, for example, these financial organizations became one of the biggest financiers of Petrobras, the company that received the overwhelming majority of Chinese credit lines.

These burgeoning Sino-Brazilian petroleum ties notwithstanding, the role that China is playing in transforming Brazil into an oil power after the discovery of the pre-salt is a phenomenon that is still little studied and little known. Similarly, the increasing Brazilian protagonism in the PRC's energy security and global investment strategies has not received the desirable attention. This book aims to fill this gap. It seeks to study the bilateral oil relationship from the perspective of its four pillars: trade, investment, infrastructure projects and finance.

The first two chapters aim to describe the evolution of both countries' oil sectors over history. The first one explains how China evolved from a condition of self-sufficiency to increasing reliance on external markets to match its domestic needs. It analyses how energy security concerns, which involved increasing crude imports, have driven Chinese firms towards a continuous quest for new and diversified suppliers and for novel global investment opportunities. The second chapter depicts the expansion of

the Brazilian oil sector and its changing global roles: from an importer of crude oil to the achievement of self-sufficiency, to booming exports and thus to the continuous emergence as an oil power.

The third chapter focuses on the first pillar of Sino-Brazilian oil ties—trade—and explains, in a historical perspective, how the discovery and further exploration of pre-salt provinces approximated both countries' oil firms. Besides the complementary structure of the oil sectors—China as an importer and Brazil as an exporter—this section debates other factors and circumstances that possibly influenced the bilateral trade figures. Among these, it aims to examine the apparent impacts of the relationship of Chinese private refineries—known as “teapots”—with their Brazilian counterparts, the “shale revolution” in the United States, the US-China trade war and the military conflict between Russia and Ukraine.

Chapter 4 presents a broad picture of the investment part of the bilateral relationship. It shows when, which ways and segments and how much Chinese oil corporations have invested in Brazilian oil projects. It also shows how the increasing presence of these firms in pre-salt exploration ventures has helped them to climb positions in the national ranking of crude producers.

Chapter 5 focuses on the participation of Chinese service providers in construction projects throughout the Brazilian petroleum supply chain. Singular attention is given to the role of Chinese shipyards in Petrobras' FPSO expansion plans—the largest ones in the world—and it is shown how most of the oil firm's platform building projects ended up in Chinese waters.

Chapter 6 deals with the involvement of Chinese banks in funding pre-salt exploration projects and details how these financial institutions became the main financial backers of Petrobras over time. It describes their importance not only in backing the continuous expansion of production plans, but also in presenting a countercyclical role when financing the Brazilian biggest oil firm in moments of financial distress. Some characteristics of Chinese loans are studied, such as energy-backed models and Chinese content clauses.

Chapter 7 introduces a historical view of the Sino-Brazilian oil ties in their four pillars and divides them in four phases. Considering all national and global factors that have influenced the bilateral development over the years, the section breaks down moments in time that started to display new dynamics in the bilateral petroleum relationship. The pre-salt discovery was one of these historical landmarks, which changed

the previous pattern of low intensity in bilateral exchanges. Another milestone was Chinese firms' participation in the two largest pre-salt auctions—Libra and Buzios.

Chapter 8 discusses upcoming trends in China and Brazil oil relationship. It predicts that, under current circumstances and future projections, no major setbacks are expected in each of the four pillars. In the short and middle terms, Brazilian oil output and exports are poised to grow as Buzios field, among other pre-salt ones, reaches its production maturity. Chinese shipyards will continue to have a strategic role in pre-salt future plans. Almost all to be newly-added FPSOs in Brazil will be partially or entirely built in Chinese dockyards. The timely completion of these projects will be crucial to Brazilian corporations' expansion plans and thus the consolidation of Brazil as an oil power.

Lastly, the book wraps up with brief concluding remarks. This part is conducive and reinforces the argument that, over recent history, structural and circumstantial, short and long-term, market and strategic issues have all somehow directed the development of the bilateral oil relationship. The last section underscores the belief that, as in the past years, Brazil and China will probably continue to be unavoidable players in the global petroleum sector and thus mutually important parts of each country's future oil development plans.

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