CHAPTER ONE

Brazil

The "B" Belongs in the BRICs

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Brazil's economy has yet again become an object of fascination and speculation for international investors, academics, pundits, and policymakers in the United States and Europe. As a country replete with natural resources, endowed with a large internal market, and home to dynamic and increasingly global corporations, Brazil has been famously anointed as a "BRIC"—thus identified along with Russia, India, and China as one of the four very large, rapidly emerging economies that are key growth engines of the global economy.[1] Yet, coming only months after the International Monetary Fund provided a large loan to stabilize Brazil's economy in 2003, Brazil's inclusion alongside China and India in the BRICs was initially greeted with skepticism. Five years later, in April 2008, as the scholars who produced this volume gathered to debate Brazil's prospects, the world's major credit-rating agencies promoted the country's sovereign debt to investment grade, an assessment that would be tested later that year by financial turmoil emanating from the United States and Europe. In Brazil itself, the confluence of strong global demand for the country's major products, global successes for its major corporations, and steady results from its economic policies have strengthened confidence and even revived dreams of *grandeza*—the greatness that has proven elusive in the past. These dreams have been dampened

1. Goldman Sachs (2003).

somewhat by the global economic crisis, but many experts believe that Brazil will be one of the engines that will help pull the global economy out of recession in the coming years.

Brazil's economic potential has been on display in the past. Between 1947 and 1962, the country grew at an average rate of 6 percent annually and was seen as one of the brightest stars in the world economy.[2] During the so-called Brazilian miracle period (1968–73), the country enjoyed economic growth of more than 10 percent a year—among the highest in the world. Its industrial sector grew at almost 10 percent a year, and its agricultural exports almost doubled between 1962 and 1971.[3] Yet the country's star faded with the debt crisis in 1982 and the "lost decade" of the 1980s. Years of macroeconomic instability and high inflation followed.

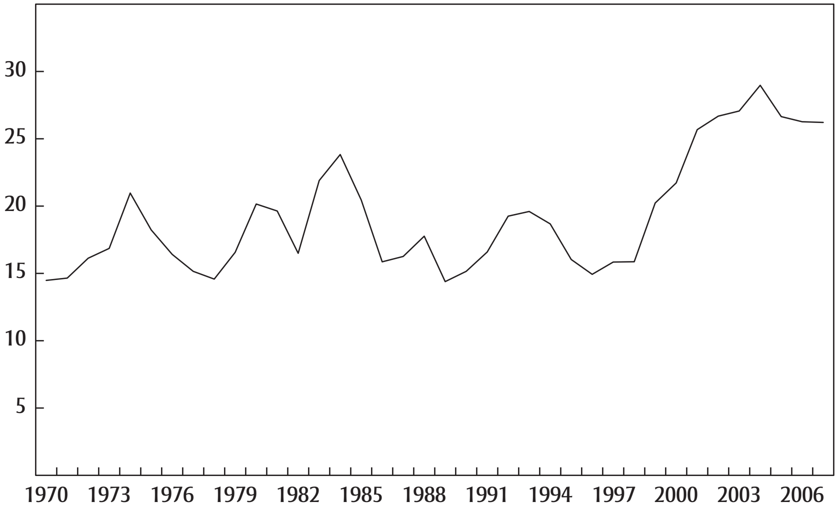
In comparison with the Brazilian miracle of the 1970s, the country's bright prospects appear to rest on a more solid foundation this time around. The country is now a stable, vibrant democracy—not a military dictatorship. It has enjoyed a sustained period of low inflation and conservative macroeconomic management, in contrast to the external-debt-fueled 1970s. The 2002 election and the subsequent leadership of President Luiz Inácio Lula da Silva have demonstrated that a left-wing candidate can win the presidency, navigate a sound macroeconomic course, and open the country's economy to global trade and investment. Today, Brazil is more deeply integrated with the global economy than at any time in the past forty years. As figure 1-1 shows, trade now accounts for 25 to 30 percent of Brazil's national income, up significantly from the 15 to 20 percent share of previous decades.

Brazil's status among the world's rising economic powers emanates from an auspicious conjuncture of external forces and internal strengths. The entry of hundreds of millions of people into the middle class in China and India has boosted demand for many of Brazil's key agricultural and commodity exports, and Brazil's resource wealth appears destined to grow with new oil finds. In parallel, a growing premium on reducing and sequestering carbon emissions to mitigate the adverse effects of climate change is increasingly favoring Brazil's biofuel and hydropower sectors and may ultimately generate major transfers to preserve its environmentally crucial rainforests.

However, Brazil is not only benefiting from historically high commodity prices, which have proven to be fleeting. It is also benefiting from

2. Baer (2001, 63).
3. World Bank (1973, 2).

FIGURE 1-1. Brazil's Trade in Goods and Services as a Percentage of Gross Domestic Product, 1970–2006



Source: Ipeadata (www.ipeadata.gov.br).

its sustained commitment to sound macroeconomic policies; from the strength of its corporations, which are achieving global success across a variety of sectors; and from the legacies of its policies on alternative energy and agricultural self-sufficiency, which were put in place in the 1960s and 1970s but are now delivering unanticipated benefits. For Brazil to capitalize on these advantages both during and beyond the current global financial crisis, it will need to address two main challenges. The first is to ensure that the benefits from its natural resource wealth translate into effective investments in education, infrastructure, and technology that will enable it to establish a foundation for sustained long-term growth. The second is that to achieve continued growth, it will need to steer a more consistent course on economic integration and on the governance of international markets. Brazil's ambivalence on these issues manifests itself in an inconsistent and uneven position, especially on trade policy, which limits its ability to influence global rules and institutions in its favor.

External Forces: Climate and Commodities

Brazil's growing economic heft in part reflects its ability to capitalize on two long-term global trends: strong commodity demand, driven by the swelling ranks of the global middle class; and the imperative of stabilizing the Earth's climate. In recent years, commodity prices have soared, reflecting a combination of increased demand for food and raw materials from China and other emerging economies, strong energy demand from the United States and other advanced economies, and medium-term supply constraints. Brazil has emerged as a major exporter of many of these commodities, including soy (where Brazil has a global market share of almost 40 percent), chicken (30 percent), coffee (30 percent), beef (20 percent), orange juice (80 percent), and tobacco (20 percent).[4] Brazil is also benefiting from the rising prices of iron ore and steel, because it is a leading producer of both, and it is poised to take advantage of rising energy prices.

Though commodity prices have softened in the current global financial turmoil, experts project strong demand over the horizon for the medium term. According to projections by the Brookings economist Homi Kharas, the ranks of the global middle class will swell by as many as 1.8 billion people over the next twelve years, so that by 2020 just over half the world's population will enjoy greater disposable income than the previous generation.[5] As more and more people adopt a middle-class lifestyle, sustained demand will be generated for those commodities and manufactures for which Brazil has a competitive edge, ranging from beef to regional aircraft.

In parallel, the imperative to stabilize the Earth's fragile climate means that the world will increasingly put a premium on carbon-efficient energy sources and carbon sequestration. Brazil is well positioned to capitalize on this trend, with the continued evolution of its biofuels industry, and its vast rainforests may become a magnet for significant international transfers when given their justly high value in a post–Kyoto Protocol climate framework.

Brazil is well positioned to benefit from these two medium-term trends, in part due to a favorable resource mix. The country contains the world's largest and most biodiverse rainforests and has one of the largest renewable reserves of freshwater. Its vast territory and varied climate allow for livestock farming and commercial agriculture on a large scale. Its mineral wealth is also considerable, particularly in iron ore. And if its recently discovered offshore oil and gas fields meet expectations, it will become one of the world's largest producers of hydrocarbon fuels.

4. These numbers are from the Economist Intelligence Unit (2008), and from chapter 3, by André Nassar, in the present volume.

5. Naím (2008).

Internal Choices: The Policy Legacy

Yet, sustained growth and ascension to the ranks of the global economic powers has eluded many resource-rich countries. Why might Brazil succeed where others have failed? One possible answer is that the country is reaping the benefits from its legacy of policies that were intended to advance its self-sufficiency and autonomy from international markets but are now paradoxically conferring important advantages for engaging with the world economy as its leadership seeks to seize opportunities in globalizing capital, product, and energy markets.

The state has historically loomed large in Brazil's economy. The country had one of the largest public sectors outside the former Communist bloc. In 1985, Brazil's public sector accounted for just under half of the net assets of its 8,000 largest firms, for about a quarter of their sales, and for a fifth of their total employment.[6] As late as 1990, before the administration of Fernando Henrique Cardoso began to privatize state-owned assets, 38 of Brazil's 100 largest firms were still government owned.[7]

Also prominent was the state's role as business manager and economic planner. As manager of state-owned businesses, the Brazilian state has a mostly typical record, but one punctuated by prominent successes, especially in aircraft manufacturing, biofuels, and petrochemicals. In sectors such as informatics, the state played the role of what Evans calls a "midwife," trying "to assist in the emergence of new entrepreneurial groups or to induce existing groups to venture into more challenging kinds of production."[8] This role was facilitated by a range of instruments, including protective tariffs, subsidies, targeted credit, and government help for local entrepreneurs negotiating with foreign investors.

For Brazil's leaders, starting with Getulio Vargas in the 1930s, the animating motivation for state-led development policies was the drive to make the country self-sufficient and independent. In the manufacturing sector, the drive for autonomy was motivated by the idea that any country destined for modernity had to develop an indigenous capacity in certain industries, particularly in the heavy manufacturing and chemical sectors. In agriculture and energy, the oil and food price shocks of the 1970s provided an urgent impetus to diminish reliance on foreign

6. Baer (2001, 281).
7. Baer (2001, 291).
8. Evans (1995, 13).

suppliers. During this time, Brazil's military government saw the drive toward self-sufficiency as a national security imperative, as a way of protecting the country in a world perceived as dangerous and uncertain.

The state-led development project came at considerable cost to the public purse and introduced ultimately debilitating economic distortions. The massive public financing of key sectors contributed to chronic inflation, which for decades would be the scourge of Brazil's poor and middle classes. The state's import-substitution industrialization strategy also involved extensive foreign borrowing, which created balance-of-payments pressures and often resulted in duplicative or excess investment. In the process of developing new products and technologies, the costs of failed experiments were often "socialized" and passed on to the public. The overall net cost of these policies, though difficult to quantify, was considerable.

Starting in the late 1980s, the Brazilian government began to dismantle many elements of the import-substitution industrialization policy framework.[9] Trade was liberalized in a series of rapid, unilateral tariff reductions in the period 1988–89, and the removal of nontariff barriers followed in 1991–93. Average nominal tariffs fell from 57 percent in 1987 to 32 percent in 1999.[10] At the same time, the Cardoso administration began a major privatization drive. Between 1991 and 2001, the government sold about $110 billion worth of assets, including the giant telecom Telebrás, and Brazil was dubbed "privatization's poster child."[11] Nonetheless, the state has retained an important foothold in the economy; 13 of the top 100 firms are still state owned, including the largest company, Petrobrás.[12]

Although Brazil's past state-led development policies to promote self-sufficiency were costly and counterproductive in many ways, the legacy of some of these policies is now paradoxically providing a strong foundation for the country's current generation of outward-looking political and business leaders as they pursue its global competitiveness. Policies put in place in the 1960s and 1970s helped to stimulate the agribusiness and biofuels sectors and to develop strengths in selected manufacturing areas. Through entrepreneurial vision, a number of Brazilian producers have been able to translate this policy legacy into competitive advantages in

9. On this policy shift, see Amann and Baer (2005).
10. See chapter 5, by Pedro da Motta Veiga, in this volume.
11. Smith (2001).
12. *Exame Melhores e Maiores,* July 2008.

global markets now that the country’s policy orientation has turned outward and global demand has shifted favorably.

Technological Capacity

Several chapters in this volume highlight the notable involvement of the Brazilian state in technological development through investments in research centers and institutions. In chapter 4, for example, the University of São Paulo economist Geraldo Barros notes the importance of the Brazilian Agricultural Research Company (Embrapa), established in the 1970s, in contributing to develop the technologies that have helped Brazilian agribusiness double its total factor productivity since the 1975 and take advantage of new opportunities in global markets for agricultural products.[13] In chapter 7, Northwestern’s Ben Ross Schneider credits two centers of engineering research and training (the Aeronautics Technology Center, or CTA, and the Aeronautics Technological Institute, or ITA) with setting the foundations for Embraer’s commercial success in aircraft manufacturing. In chapter 8, Edmund Amann of the University of Manchester highlights the role of the Petrobrás in-house research center, CENPES, in helping the company develop the offshore oil exploration and production technologies that are likely to make Brazil a leading oil producer.[14] More broadly, these research centers are underpinned by a wider network of publicly funded state and federal universities and research institutes. However, it is difficult to know whether globally competitive producers would have emerged in these or other sectors that have proven less successful if the market had determined investment allocations.

From Self-Sufficiency to Export Strength in New Sectors

A second legacy came from the Brazilian government’s deliberate attempts to push firms into sectors they might not otherwise have entered, perhaps most importantly the energy sector. In response to the oil price shocks of the 1970s, the Brazilian government put in place a series of policies to pursue higher levels of energy self-sufficiency. As Ricardo Sennes and Thais Narciso of Prospectiva Consultoria put it in chapter 2, “It was not merely the case of adjusting the national economy to the international price shock; it was also an effort to render the development and security strategy sustainable within an increasingly hostile international

13. See chapter 4, by Geraldo Barros, in the present volume.
14. See chapter 8, by Edmund Amann, in the present volume.

environment where energy was vital. So crucial was the country's strategy of development and industrialization to national security that it justified a thorough political, financial, institutional, and technological mobilization."[15]

As a result, the government invested heavily in hydroelectric power and undertook the Programa Nacional do Álcool (the Pro-Alcohol Program) to harness Brazil's plentiful sugarcane harvests to the production of an indigenous, renewable, and relatively inexpensive energy source. These initiatives succeeded in significantly reducing Brazil's reliance on oil imports and, over time, allowed the country to develop a qualitatively different energy matrix compared with those of countries belonging to the Organization for Economic Cooperation and Development (OECD) and other developing economies. Today, Brazil derives 46 percent of its energy from renewable sources, compared with a world average of 13 percent and an OECD average of just 6 percent.[16] It also has the world's largest infrastructure for the production and commercial distribution of ethanol. The unintended consequence of this policy originally designed to protect Brazil from oil-price shocks was to give the country a singularly strong comparative advantage in the production and export of sugarcane-based ethanol, a commodity now in high demand in a world of expensive oil and environmentally costly carbon emissions.

Triumphs and Limitations

A key question is what Brazil's firms and sectors are doing and will do with this policy legacy and these corporate strengths. Here, experts highlight both the triumphs and limitations of the country's key productive sectors. On the triumphalist side, Schneider applauds the former state-owned mining giant Vale for leveraging its legacy of scale and competent management to diversify geographically and along product lines after its privatization in 1997. Amann explains how Odebrecht, a construction services conglomerate, has used its innovative internal organization to mount a successful internationalization strategy. More broadly, in chapter 3 the Institute for International Trade Negotiations' director-general, André Nassar, illustrates how Brazilian agribusiness has leveraged its legacy of investments in productivity to penetrate world

15. See chapter 2, by Ricardo Sennes and Thais Narciso, in the present volume.
16. See chapter 2 in the present volume.

markets,[17] while Sennes and Narciso explain how Petrobrás has mobilized its legacy of deepwater exploration and production technology to mount a major international strategy with operations in twenty-six countries.

Yet important obstacles remain. In agriculture, Brazil faces challenges from poor transportation infrastructure, inadequate ethanol pipelines, and an uncertain legal framework governing genetically modified crops and land ownership. Amann worries about the country's ability to continue building on its technological legacy at a time when government spending on science and technology is at its lowest level in more than a decade and the private sector is not increasing its own spending to fill the gap. As a percentage of gross domestic product, Brazil's investments in science and technology now trail behind those of other emerging economies, including China, Russia, and South Korea.

Challenges of Deeper Integration

Brazil's future role in the global economy will in large measure depend on whether and how it chooses to integrate further into world markets. This choice, in turn, depends centrally on the country's domestic politics, which reflect its enormous ambivalence on the question of openness and contribute to a posture on trade that many agree is shortchanging its economic potential.

In chapter 6, Mauricio Mesquita Moreira of the Inter-American Development Bank highlights three dimensions of Brazil's trade policy that are inconsistent with the country's economic self-interest.[18] First, Brazil's emphasis on South-South trade agreements with countries like India and South Africa rather than on trade deals with major developed economies makes little sense from an economic standpoint. These South-South deals are of little economic consequence, whereas trade agreements with major developed economies would deliver far greater economic benefits to Brazil. Second, Brazil's leaders have tended to oversell the benefits of Mercosur while showing reluctance to address its major flaws, which are undermining its political support. Third, Brazil's high transportation and regulatory costs, along with its high tariff barriers, especially on capital goods—on average triple the level in rival emerging markets—harm the country's competitiveness.

17. See chapter 3, by André Nassar, in the present volume.
18. See chapter 6, by Mauricio Mesquita Moreira, in the present volume.

How can one make sense of these incoherent trade policies? Moreira points to the resilience of entrenched groups in key sectors that were protected during the period of import-substitution industrialization. Successful lobbying by these groups may explain why islands of hardened protectionism remain in Brazilian trade policy, even while the country overall has moved toward greater openness. The momentum of liberalization will be maintained only if powerful export interests emerge and mobilize in favor of greater openness. These "liberalizers" are most likely to appear in the dynamic agribusiness sector.

There is also another, more ideological, reason for the resilience of trade protectionism in Brazil. As Pedro da Motta Veiga, the director of the Centro de Estudos de Integração e Desenvolvimento, argues in chapter 5, the "national-developmentalist" paradigm of the 1960s still has a powerful hold on how Brazilian policymakers think about deepening integration. Its central tenets are that (1) trade policy should be subordinate to the political objectives of foreign policy, (2) international economic policy should be conducted in a way that maximizes the degree of autonomy and "policy space" available for industrial and other national development policies, and (3) international economic policy should be conducted so as to "neutralize" external factors that might jeopardize national economic development and the consolidation of domestic industrial capacity. The prominence of this paradigm receded during the Cardoso administration but has returned with the Lula administration.[19]

In practical terms, the continued influence of these principles can be seen in at least two important tenets of Brazil's trade policy. First, the country retains a "zero tolerance" position on linking trade with labor and environmental issues in trade negotiations, and it has adopted a minimalist approach to international disciplines in services, investment, and procurement. Second, it has downgraded trade negotiations with the European Union and the United States—including negotiation of a Free Trade Area of the Americas—while vigorously pursuing a South-South trade agenda. Bilateral negotiations with the major Northern economies are shunned as a potential source of vulnerability, in favor of a focus on multilateral negotiations through the World Trade Organization and regional and bilateral negotiations with other developing economies. However, Brazil's current trade policy strategy is not simply a return to the consensus of the 1960s. Veiga points out that, for the first time, the

19. See chapter 5, by Pedro da Motta Veiga, in the present volume.

strategy includes a significant "offensive" component: the quest to open some of the world's largest agricultural markets to Brazilian agribusiness. As it enjoys growing competitiveness in global markets, Brazilian agriculture is challenging the confines of the country's traditional policy framework and political economy.

Ensuring Broadly Shared Prosperity and Opportunity

Brazil's deeper integration into the global economy is creating social dislocation and tension, which are likely to escalate as global economic conditions deteriorate. Less competitive industries and firms are shrinking, workers are being laid off and require retraining, and income has often grown more unequal. Social investment and the creation of robust social safety nets are therefore critical ingredients for ensuring that the country's economic opening delivers benefits broadly, particularly given its highly unequal social structures.

In assessing Brazil's recent record in chapter 9 of this volume, the Fundação Getulio Vargas economist Marcelo Neri concludes that the country's income policies have had a beneficial effect on income distribution. Targeted income policies have resulted in significant and sustained reductions in poverty and inequality, particularly between 2001 and 2004. This is especially notable because inequality had remained extremely high and stubbornly persistent in previous decades, even during periods of positive economic growth.[20]

However, Neri argues that there is still room for strengthening income policies. The new generation of well-targeted conditional cash transfer programs—including the well-known Bolsa Família—exists side by side with a relatively ineffective set of income policies inherited from the past, which should be phased out. In addition, Neri recommends rethinking Bolsa Família's redundant conditionalities, whereby the government is paying recipients to do what they were doing without cash transfers.

Brazil as an Economic Superpower?

What can we conclude about Brazil's role in the global economy? Is it already an economic superpower? Will it become one? Naturally, this depends on what we mean by "economic superpower." In sheer size

20. See chapter 9, by Marcelo Neri, in the present volume.

and growth, Brazil today ranks among the world's ten largest economies in nominal gross domestic product, narrowly beating Russia for ninth place.[21] According to projections by Goldman Sachs, Brazil would have to grow by about 4 percent a year from 2005 through the middle of the century to become the world's fourth-largest economy. Whether these growth rates will come to pass will depend, among other things, on whether Brazilian firms are able to capitalize on new opportunities in the global economy and Brazilian policymakers pursue deeper global economic integration. The hill will become steeper for Brazil with commodity prices stabilizing and, in some cases, declining.

If by "economic superpower" we mean a country that can exert significant influence in the global economy—one that is a significant force as a rule maker, not just a rule taker—then Brazil is already well on its way. It already has the necessary material conditions to have economic influence globally, and it is a dominant player in many commodity markets and can exercise market power in some of them. Its role in energy markets—as a producer of ethanol and, eventually, oil and gas—is large and growing. Its vast rainforests and high utilization of renewables, such as sugarcane-based ethanol and hydropower, put it in a strong position to be a major player on climate change.[22] And its leading companies are aggressively investing abroad, tapping new markets and acquiring assets and technologies. This phenomenon may accelerate as Brazilian companies venture abroad and acquire cheap, crisis-affected foreign assets and companies.

Finally, Brazil has influential roles in some of the world's most important established and emerging bodies for economic decisionmaking. It was the designated leader for the finance Group of Twenty when that body convened at the leaders' level for the first time in October 2008. It plays a leadership role in the Group of Twenty caucus of developing economies in the World Trade Organization, and it enjoys growing voting weight on the International Monetary Fund's executive board. Brasília is also pursuing seats in other influential global forums, including the OECD and the Organization of the Petroleum Exporting Countries, and it has been joining new forums, such as the India–Brazil–South Africa initiative.

Whether Brazil is able to exercise more influence in global economic governance will depend on whether it can leverage its growing economic

21. Goldman Sachs (2008).
22. Sotero and Armijo (2007).

weight to set agendas and shape the debate in key international forums in collaboration with other emerging economies. But in areas ranging from climate change to trade, Brazil's ability to exercise leadership internationally will also depend centrally on whether its political leaders are able to build domestic support for outwardly oriented strategic policies.

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