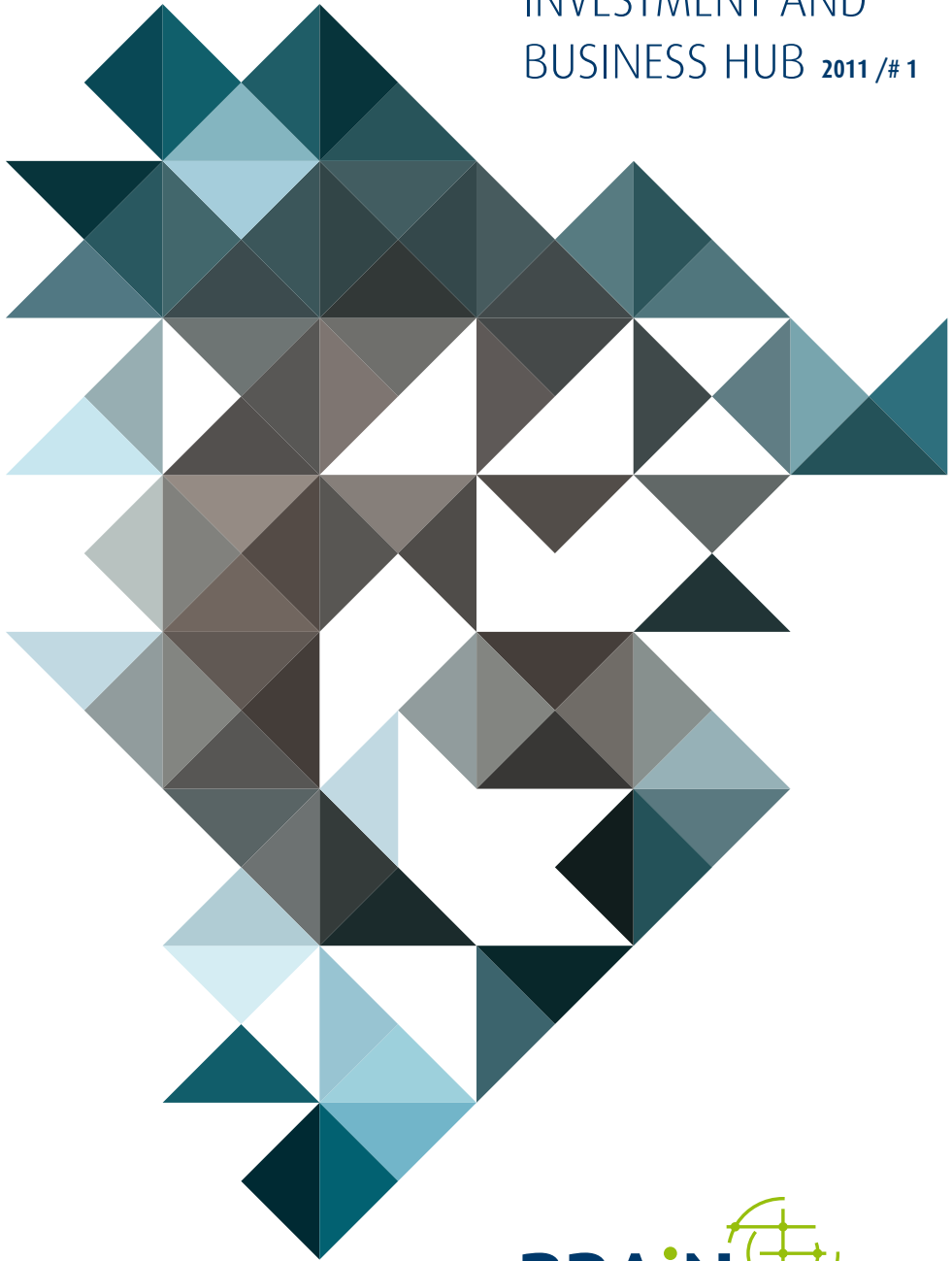


ATTRACTIVENESS  
OF BRAZIL AS AN  
INTERNATIONAL  
INVESTMENT AND  
BUSINESS HUB 2011 /# 1





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## PREFACE

Brazil's rise to a position as one of the world's economic powers is undeniable; no longer is Brazil the long promised "country of the future". However, the complete fulfillment of this promise requires that Brazil capture international recognition of its transformation into a service country and an investment and business hub.

This is the second document published by BRAiN (Brasil Investimentos e Negócios – Brazil Investments and Business) and is a continuation of the mapping effort kicked off in the report published in December 2010 and entitled: "Brazil as one of the hubs of Latin America's new business network". This report tries to shed new light on the attractiveness of Brazil as a new investment and business hub, identifying initiatives that will make the country even more attractive to investors, companies and business executives.

In preparing this material, BRAiN conducted an extensive research and analysis effort supported by The Boston Consulting Group, which included interviews and workshops with experts and opinion leaders in the public and the private sectors. The initial conclusions were submitted to businesses, industry associations, renowned experts and economists, and public entities and autarchies at the municipal, state and federal levels.

This document is a result of this effort and offers a detailed description of Brazil as a Latin American investment and business hub. It also provides indicators that can be used to dynamically track the position of the country, and lists next steps and initiatives that will foster the position it aspires to.

**Created in 2010, BRAiN's mission is to ensure the realization of a multisectoral vision for Latin America as a regional network of strongly connected businesses, in which Brazil should stand out as one of the prominent hubs.**

**BRAiN strives to generate consensus and action across multiple sectors of Brazil's economy around this very idea, and currently is supported by 13 members: ANBIMA, BM&FBOVESPA, FEBRABAN, Fecomercio, Banco Bradesco, Banco do Brasil, Banco Santander, Banco Votorantim, BTG Pactual, CETIP, Citibank, HSBC and Itaú-Unibanco.**

**Additional information about BRAiN and its vision is available at [www.brainbrasil.org](http://www.brainbrasil.org).**

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# EXECUTIVE SUMMARY

The starting point for this report were observations made in the course of preparing the first BRAiN publication (“Brazil as one of the hubs of Latin American’s new business network”), to the effect that all of the leading business hubs share common traits (see **Exhibit 1**). Based on this, BRAiN decided to complement this preliminary list with the pillars that are essential for defining the attractiveness of a hub.

This required extensive research and data analysis, as well as interviews and workshops with experts and opinion leaders in both public and private sectors to define and measure the attractiveness of Brazil as an investment and business hub. Such work was performed with the support and validation of businesses, associations, public entities and autarchies at the municipal, state and federal levels, as well as renowned economists and technical experts.

This effort defined seven pillars that constitute BRAiN’s vision of the fundamental requirements for the creation and excellence of an attractive investment and business hub (see **Exhibit 2**): the macroeconomic environment, the institutional environment, talent and human capital, physical infrastructure, financial infrastructure, connectivity and image of the country.

**1) Macroeconomic environment:** Steady economic growth and limited uncertainty regarding interest rates and the exchange rate are examples of the underlying conditions required for business development and increased investment in any country.

Many of the themes that make up the macroeconomic environment are quite positive in Brazil:

- Brazil is now the world’s 7<sup>th</sup> economy, and is expected to rise to the 5<sup>th</sup> position by 2030; some scenarios, such as the one reported recently by *The Economist*<sup>1</sup>, have this happening as early as 2025;
- The average annual growth rate went from 2% between 1996 and 2000, to 4.4% between 2006 and 2010, despite the impact of the global economic crisis. For comparison, China’s growth went from 8.6% a year to 11.2%, while the USA went from 4.5% down to just 1%;

<sup>1</sup> November 12th, 2009

## EXHIBIT 1

Requirements and distinctions of the main global hubs

Main lessons learned from case studies	NYC	LON	SGP	HKG	DUB	PAR
<b>REQUIREMENTS</b>						
Intensity of <b>trade</b> and macroeconomic <b>stability</b>	✓	✓	✓	✓	✓	✓
Developed <b>infrastructure</b>	✓	✓	✓	✓	✓	✓
Domestic and foreign <b>talents</b>	✓	✓	✓	✓	✓	✓
<b>Fluency in foreign languages</b> , particularly in English	✓	✓	✓	✓	✓	✓
<b>Public-private alignment</b> to develop the hub	✓	✓	✓	✓	✓	✓
<b>A proactive government</b>	✓	✓	✓	✓	✓	✓
<b>DISTINCTIONS</b>						
<b>Regulations</b> that favor business		✓	✓	✓	✓	
<b>Taxes</b> that are simple and, ideally, limited			✓	✓	✓	
<b>A safe haven</b> in a risky region			✓	✓	✓	
Focus on <b>innovation</b> as a competitive advantage	✓	✓				
Excellence in its <b>region</b> or <b>niche</b>			✓		✓	
Domestic market <b>growth rate</b>	✓					✓
Creation of an <b>offshore</b> zone					✓	

## EXHIBIT 2

An investment and business hub is supported by seven pillars



- The domestic market has been strengthened by the rise of economic segments that now have actual purchasing power. Socioeconomic classes A, B and C, which in 2002 accounted for 55% of the population, now account for 69%<sup>2</sup>;

- Inflation, which in past years was as high as 2,500% annually (at its peak in 1993), has dropped significantly since 1994, remaining in the single digit since 2003;

- Net public sector debt went from 60.6% of the GDP in 2002 to 40.4% in 2010. In addition, Brazil has been a net foreign creditor since 2007, with reserves and Brazilian credits abroad in excess of its foreign debt<sup>3</sup>;

- Brazil's country risk, which in 2002 was over 2,000 points as measured by the EMBI+, dropped to somewhere around 200 points in 2010, and by 2008 most international credit rating agencies considered Brazil to be investment grade.

Regardless of the progress made in this indicator, there are still opportunities for improvement to consolidate Brazil as an attractive investment and business destination. These include:

- Rationally increase the amount invested; between 2000 and 2009 investments in the country amounted to just 16.7% of the GDP, whereas China, India and Singapore invested 39.1%, 28.4%, and 24.9% of their GDP respectively<sup>4</sup>;

- Reduce and control inflation; the forecast for inflation in Brazil is 4.8% annually over the next five years, whereas in China it is only 4.0% annually, despite its accelerated economy;

- Increase domestic savings to more than the current 19%;

- Fully enforce the Fiscal Responsibility Law (enacted in 2000), fill its gaps and ensure it is properly interpreted, in particular regarding federal fiscal practices.

**2) Institutional environment:** A solid state of law, enabling economic agents to fully meet their obligations and transparent and efficient administrative processes are key elements if a country wants to qualify as a hub, in particular compared to other potential hubs.

Here Brazil stands out for the following reasons:

- It has been a solid democracy for over 20 years now; the World Bank's league table on political stability<sup>5</sup> places Brazil alongside countries such as the USA, France, and the United Kingdom;

- There are no ethnic or religious conflicts in Brazil, nor does the country have any existing or potential conflicts with its neighbors. The institutional markers that define the national borders are solid and were established peacefully;

<sup>2</sup> Source: Fundação Getúlio Vargas Center for Social Policy

<sup>3</sup> Source: Brazilian Central Bank

<sup>4</sup> Source: World Bank Data

<sup>5</sup> Source: Worldwide Governance Indicators – World Bank. Indicator: Political stability and the absence of [political] violence, 0 to 100; Scores: Brazil: 56; United Kingdom: 56; USA: 58; France: 61

- Recently it has made progress in the form of rules to reduce the number of cases pending trial in the courts, such as binding precedents, the principal of general repercussion (similar to a writ of certiorari in USA Law), limits on repeated special appeals, and increased use of special courts and arbitration chambers. In addition, the National Justice Council and computerized courts have contributed to a more transparent and efficient judiciary.

Nevertheless, Brazil still has room to improve along some of the dimensions of institutional environment. Specifically:

- Politics still influence some decisions regarding the structure of Government. This becomes evident in examples such as no fixed mandate for Central Bank Presidents, appointment criteria and political influence on regulatory bodies, the country's excessively large number of Ministries, and Ministries themselves that come and go;
- The complexity and length of the process to open and close a business;
- The proliferation of new laws - in 2009, Brazil issued 317 new laws each month, whereas in the USA and France this number was only 159 and 24 respectively;
- An excessively slow judicial system. A recent assessment by the World Bank estimates that it takes 616 days to resolve a commercial dispute in Brazil that would be resolved in 280 days in Hong Kong and 150 in Singapore;
- The negative impact of bureaucracy on business in Brazil is quite high (scoring 9 out of 10) in a survey by the IMD<sup>6</sup>, whereas in this same survey Hong Kong and Singapore scored 5.9 and 4.0 respectively;
- The large number of taxes and rules that continuously change, especially at the state and federal levels<sup>7</sup>, and the large number of ancillary<sup>8</sup> obligations, which imply in a lack of clarity as to how they apply and high cost of compliance<sup>9</sup>.

**3) Talent and human capital:** A talent pool that is adequate in both quantitative and qualitative terms, a strong alignment between what the job market is looking for and the academy, along with the possibility of attracting and bringing in experts from outside the country, are also some of the requirements that any location that aspires to be an international hub must fulfill.

Today Brazil stands out in only a very few of the dimensions that make up this pillar:

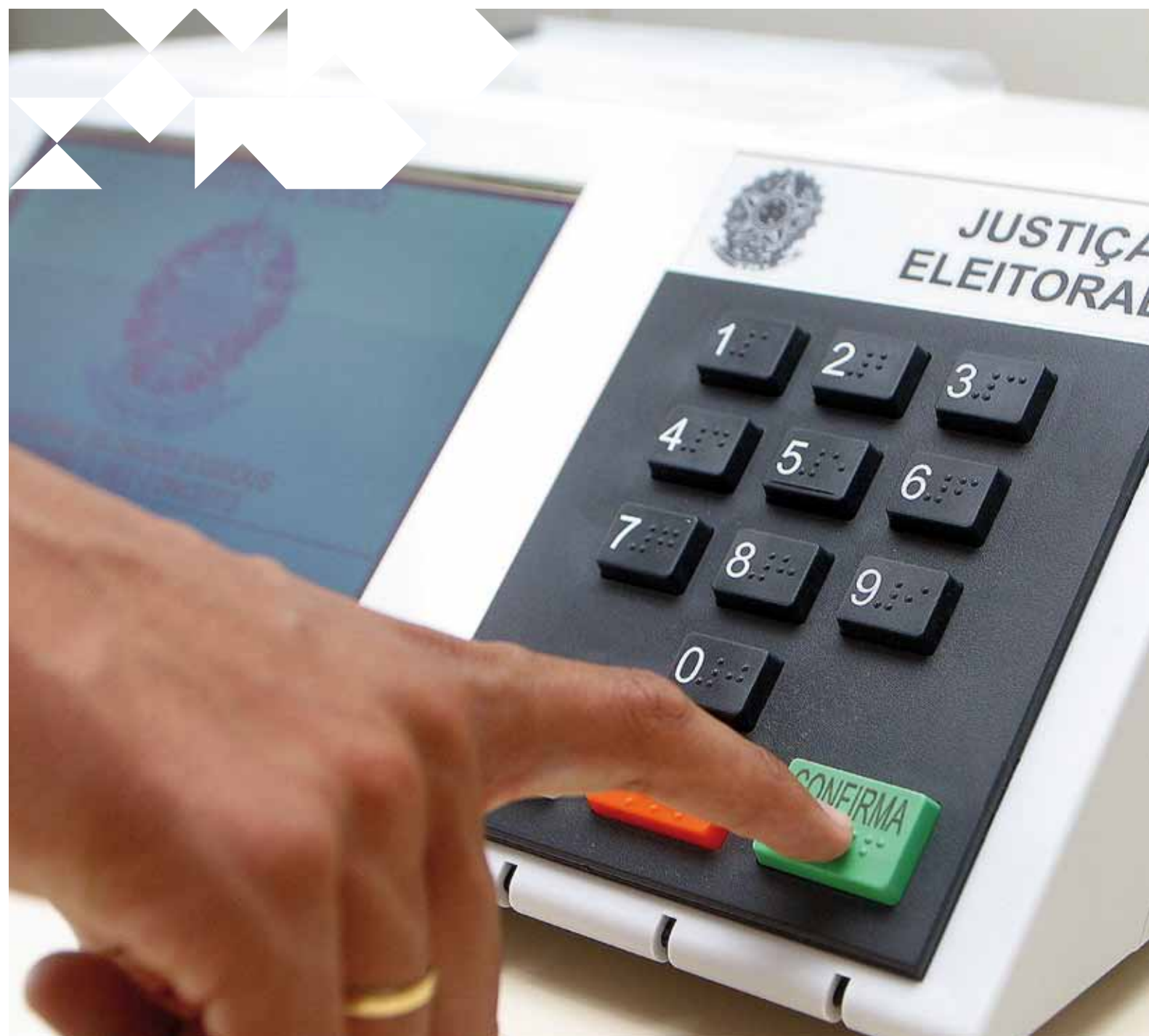
- Demographic availability of economically active population (EAP): Brazil is the largest economy where the economically active population is expected to grow fast enough to meet the expected increased demand for labor;

<sup>6</sup> International Institute for Management Development.

<sup>7</sup> On average, 13 new tax norms per state and 117 Federal, per month, since 1988. Source: Brazilian Tax Planning Institute.

<sup>8</sup> For ICMS alone there are 7 required bookkeeping books. Source: Clóvis Panzarini Associated Consultants.

<sup>9</sup> World Bank comparison of 183 countries using the same archetypical company ranks Brazil as # 1 in the hours it takes to calculate and pay taxes (2,600 hours/year). Source: World Bank.





## THE PILLARS OF ATTRACTIVENESS ARE: MACROECONOMIC AND INSTITUTIONAL ENVIRONMENTS, TALENT AND HUMAN CAPITAL, PHYSICAL AND FINANCIAL INFRASTRUCTURES, CONNECTIVITY AND THE IMAGE OF THE COUNTRY

- The number of students enrolled in primary schools has grown, and Brazil is quite close to offering universal primary education (93%)<sup>10</sup>.

Brazil must improve along a number of the dimensions of this pillar, such as:

- Enrollment in secondary school is only 77%<sup>10</sup>, far from universal levels;
- At the university level, enrollment is only 30%<sup>10</sup>, lower than the global average;
- The quality of teaching in the country is still poor, as shown in the low scores obtained in the international test known as PISA<sup>11</sup>;
- There is very little alignment between the teaching of foreign languages and what the job market needs (3.1 on a scale of 0 to 10);
- Brazil makes no attempt to attract international talents as a tool to train its own local talents;
- Lack of a policy for the coordinated management of the three million Brazilian expatriates;
- The alignment between academic output and the demands of the manufacturing, service and financial sectors is poor.

**4) Physical infrastructure:** Multimodal shipping options that enable flows into, out of and within the hub, and access to a communications network that is competitive in terms of both cost and performance are clearly some of the success factors for any business hub.

Brazil does fairly well along some of the dimensions of this pillar:

- Ample telecom coverage, especially in the urban centers;
- According to an IMD study, access to potable water and basic sanitation in Brazilian urban areas is comparable to developed nations;
- The Government's accelerated growth plan, or *PAC*, includes investments to rapidly close the existing gaps.

<sup>10</sup> Source: UNESCO – 2007 data.

<sup>11</sup> Program for International Student Assessment: a test applied by the OECD periodically to 15 years old students in 65 countries.

Nonetheless, the gaps are still quite considerable, some examples of which are:

- Infrastructure investments that went from 5.4% of the GDP in the 1970s to 2.1% in the 2000s, which according to numerous economists is only enough to maintain the current infrastructure, with nothing left to expand it;
- In terms of its infrastructure, Brazil is ranked only 28<sup>th</sup> out of the 59 countries assessed by the EIU<sup>12</sup>, and it is a known fact that its infrastructure shortcomings harm the country's logistics efficiency;
- Brazil's main airports are already operating above their ideal capacity;
- Telecom costs are three times the world average;
- Among the world's major urban centers, São Paulo has the 6<sup>th</sup> worst traffic index, and even by 2015 the city will have only 8 kilometers of subway line per million inhabitants, whereas Beijing expects to have 56;
- There is no clear and robust regulatory framework for public-private partnerships (PPPs).

**5) Financial infrastructure:** The existence of capable financial intermediaries, continuous access to several sources of funding and tools to mitigate risk all directly support the development of an investment and business hub.

Here Brazil stands out in a number of ways:

- The regulation of its financial system is considered a reference around the world;
- The availability of business funding, typically through the use of corporate credit and/or access to capital markets;
- A central negotiating model and registration of derivative transactions that is an international reference;
- Brazil has a strong and profitable financial system, which over the past five years has delivered one of the highest levels of shareholder value creation in the world.

There is still room for further development along the dimensions of this pillar, focusing on:

- Increasing the use of debentures as a financing vehicle, and enhancing the liquidity of the secondary derivatives market;
- Attracting more small and midsized businesses to the capital market;
- Encouraging the development of the insurance, reinsurance and commodity derivatives markets;
- Further developing its capacity for innovation in financial products.

<sup>12</sup> Source: The Economist Intelligence Unit (EIU)

**6) Connectivity:** Intense trade in goods and services, together with capital and people flows, are vital to continuously nurture an investment and business hub.

Below are some of the highlights of Brazil's and Latin America's current status regarding international connectivity:

- Brazil leads in attracting foreign direct investment in Latin America;
- There is already a free residence agreement, known as the Mercosur Free Movement and Residence Agreement, signed by Brazil, Argentina, Chile, Uruguay, Paraguay and Bolivia, and other countries may adhere.

Meanwhile, examples of areas that should be further developed are:

- Latin America still has only a small share of the global exports of goods (5%) and services (4%)<sup>13</sup>. Services in particular should receive more attention, given the importance of the service industry for any investment and business hub;
- Although their number is growing, "multilatin" companies still play a limited role worldwide. In the specific case of Brazil, Vale, the top ranked Brazilian company in terms of assets held abroad, is not among the world's top 100 when it comes to assets held outside the country of origin<sup>14</sup>;
- Limited regulatory alignment and no integration of systems or records between countries in Latin America make it harder for companies to operate internationally;
- Although in the past Brazil received large numbers of immigrants, and now has significant communities of their descendants, the number of foreigners living in Brazil today, whether from Latin America or elsewhere in the world, is small compared to the size of its population;
- Compared to other countries, Brazil's air travel network is not well connected to the rest of Latin America and the world.

**7) Image of the country:** A positive perception of what a country as a whole has to offer is an important asset to consolidate its position as hub, and especially to attract businesses and talents.

Brazil already has a positive image and stands out in the following attributes:

- Highly ranked in multiple cultural, tourism and hospitality assessments;
- In terms of the best cities for business in Latin America, São Paulo is ranked number three and Rio de Janeiro number five<sup>15</sup>;
- Brazil is becoming a more attractive venue for international congresses and conventions; in 2003, 62 international events chose Brazil as their venue, compared to 293 in 2009<sup>16</sup>;
- Brazil is ranked number three in the world in terms of the number of companies publishing annual sustainability reports.

Opportunities for improvement include:

- When it comes to the goods manufactured in the country, Brazil's image is below average;
- Only three Brazilian companies are among the 100 most sustainable, according to international league tables<sup>17</sup>;
- São Paulo and Rio de Janeiro are not considered good places to live, and are tied in 92<sup>nd</sup> place;
- The number of foreign visitors to Brazil is small compared to other hubs.

BRAiN created a dashboard (panel of indicators) for each pillar to enable the monitoring of progress over time and to make it easier to compare Brazil with other hubs. The resulting dashboards are included in the chapters on each one of the pillars, and in the final conclusion to this document.

Finally, based on an analysis of Brazil's current situation in each pillar, BRAiN has suggested, through a number of working sessions with its members, as well as interviews with experts and opinion leaders, to compile a set of initiatives that, once implemented, would raise Brazil to the same level of excellence as other world class hubs. The first working groups are already in place and concrete, positive results are expected in the very near future.

BRAiN welcomes all representatives or members of society interested in participating in future strategic dialogs or in working groups created to enhance the attractiveness of Brazil as an investment and business hub; interested parties should contact BRAiN at [contato@brainbrasil.org](mailto:contato@brainbrasil.org).

<sup>13</sup> Source: UNCTAD Stat

<sup>14</sup> Source: World Investment Report 2010 – UNCTAD. Data for 2008.

<sup>15</sup> Source: *América Economía*

<sup>16</sup> Source: International Congress and Convention Association

<sup>17</sup> Source: Corporate Knights – The World's Most Sustainable Companies 2010

# CURRENT STATUS OF BRAZIL'S ATTRACTIVENESS

**BRAZIL HAS A SUFFICIENTLY SOLID PLATFORM IN THE VARIOUS PILLARS THAT ARE ESSENTIAL TO POSITION THE COUNTRY AS AN INVESTMENT AND BUSINESS HUB. HOWEVER, REACHING ITS OBJECTIVES WILL REQUIRE ATTENTION TO A NUMBER OF THESE AREAS**

Brazil finds itself in a unique moment in its history. It is experiencing strong and steady economic growth and showed itself to be relatively resilient to the effects of the global economic crisis; it is now among the world leaders in the production and export of raw materials. The quality of life of its population has improved, which in turn has driven the growth of the domestic market. All of these are positive indicators that attest to Brazil's status at this time.

The progress the country has made has attracted the eyes of the world. Its economic growth and resilience to the recent crisis have been highlighted in the world's main economic forums and by the specialized press. Its politics have also been singled out, as Brazil elected its first ever female president. Brazil has also come of age in the sporting world, and has been selected to host both the FIFA World Cup in 2014 and the Olympic Games in 2016.

And by standing out in the global scenario, it also stands out in Latin America. Brazil has 40% of Latin America's territory and 35% of its population, and it is responsible for some 40% of the region's GDP. Brazil also stands out for its trade, capital and business flows, and is already recognized as one of the most important hubs in the region.

Brazil must seize the moment and consolidate its position, fostering increased economic integration with the region and the world. To do so, it must recognize and advertise its strengths and identify and effectively address its weaknesses.



If it succeeds, consolidating itself as a hub will bring significant direct benefits to its economy and population. Increased connectivity with its neighbors will also benefit other countries. A strong hub concentrating resources and attention from elsewhere in the world will radiate wealth to its regional partners through trade, capital and business flows. Clearly the entire region will experience the positive effects of this process.

### The concept of attractiveness as used in this report

The key factor that determines if a country has the potential to be a regional and international hub is its attractiveness to the regional and international agents with which it interacts, in other words, investors, businesses or intermediaries.

The attractiveness of a country may derive from the attractiveness of its social model, its culture or geography, a particularly dynamic economy, its diversity or stability, or even a set of more specific features such as the existence of a group of competent private enterprises, high levels of innovation or a favorable tax regime that capital finds inviting.

“Attractiveness” may have a different meaning or scope for the various economic agents involved. Attractiveness may relate to individuals, businesses, institutions or different combinations of these. Attractiveness, in the case of a country, may also be internal or external. For example, direct or indirect financial investors, international manufacturing or service groups and financial intermediaries may have a different assessment of a country’s characteristics based on the potential benefits they may reap.

For the purposes of this report the definition used is limited to a country’s attractiveness as an investment and business hub, yet it is broad in terms of the agents that are involved with, or interact with the hub. Within this scope, and to facilitate understanding, the concept of attractiveness has been decomposed into two main elements: (a) the intrinsic characteristics of a country, which make it attractive in and of itself and (b) a country’s connectivity or flows, which define the attractiveness of the network to which it belongs.

Intrinsic characteristics include a strong economy, the physical, financial, legal and regulatory infrastructure and a qualified population. On the other hand, what defines the strength of a country’s connectivity is the quality and quantity of its intra-regional connections and, simultaneously, the quantity and quality of its connections to other relevant hubs around the world. Together, these elements make up a country’s attractiveness as a hub and allow a nation to compete with other global hubs for resources for itself and for its region of influence (see *Exhibit 3*).

### BRAiN’s vision of the determinants of the attractiveness of a hub

Since its first publication in December 2010, entitled “Brazil as one of the hubs of Latin America’s new business network”, BRAiN has shown that the leading business hubs share common traits, as well as a number of distinctive characteristics that reinforce the role of each center as an international hub (see *Exhibit 1 on page 9*).

## EXHIBIT 3

Overall concept of what makes a hub attractive



Based on this observation, BRAiN embarked on this new phase to complement the preliminary list mentioned above, listing the pillars that must be in place to define a hub as attractive. The result of this listing and the subsequent grouping of these items resulted in a vision of the seven pillars that form the list of fundamental requirements for creating and excelling as an investment and business hub (see *Exhibit 2 on page 10*):

- **Macroeconomic environment:** Steady economic growth and limited uncertainty regarding interest rates and the exchange rate are examples of the underlying conditions required for business development and increased investment in any country;
- **Institutional environment:** A solid state of law, enabling economic agents to fully meet their obligations and transparent and efficient administrative processes are key elements if a country wants to qualify as a hub, in particular compared to other hubs;
- **Talent and human capital:** A talent pool that is adequate in both quantitative and qualitative terms, a strong alignment between what the job market is looking for and the academy, along with the possibility of attracting and bringing in experts from outside the country, are also some of the requirements that any location that aspires to be an international hub must fulfill;
- **Physical infrastructure:** Multimodal shipping options that enable flows into, out of and within the hub, and access to a communications network that is competitive in terms of both cost and performance are clearly some of the factors of success for any business hub;

- **Financial infrastructure:** The existence of capable financial intermediaries, continuous access to several sources of funding and tools to mitigate risk all directly support the development of an investment and business hub;
- **Connectivity:** Intense trade in goods and services, together with capital and people flows are vital to continuously nurture an investment and business hub;
- **Image of the country:** A positive perception of what a country as a whole has to offer is an important asset to consolidate its position as hub, and especially to attract businesses and talents.

### Measuring attractiveness

The analyses reported in this document provide a broad and detailed understanding of Brazil's situation *vis-à-vis* each of the seven pillars; in addition, dashboards have been developed to enable easy comparison between Brazil and other hubs. A number of dimensions are listed for each pillar and used to assess the country's situation compared to a group of selected hubs. Indicators were selected based on analyses and discussions between BRAiN members and public and private sector authorities and opinion leaders.

For each of these indicators, specific metrics were selected not only to enable an assessment of Brazil's current situation, but also to monitor how its attractiveness as an investment and business hub changes over time. These metrics take into consideration the quality of the source, the availability of data for different countries, and the possibility of continuous monitoring over time.

In defining the basket of countries for comparison measures were taken to include relevant examples. This basket includes reference developed nations, countries that are recognized investment and business hubs, and countries that are relevant for comparison purposes.

The remainder of the report analyzes each of the seven pillars of Brazil's attractiveness to demonstrate the development platform that is Brazil's starting point, and the areas in which the country must invest if it is to consolidate itself as an attractive investment and business hub.

**ATTRACTIVENESS IS COMPOSED OF TWO MAIN ELEMENTS: THE INTRINSIC CHARACTERISTICS OF A COUNTRY, WHICH MAKE IT ATTRACTIVE IN AND OF ITSELF, AND ITS CONNECTIVITY, WHICH DEFINES THE ATTRACTIVENESS OF ITS NETWORK**



# 01

## MACROECONOMIC ENVIRONMENT

A country's macroeconomic environment is one of the pillars that determine its attractiveness as an investment and business hub. Countries able to maintain sustained growth, promote stability and low levels of risk, and that simultaneously offer suitable financing terms, increase the strength of their businesses and create a virtuous circle for their economies as a whole.

In recent decades, Brazil has made great strides in the management of its macroeconomic policies. This maturing is not only recognized internationally, it is also witnessed internally by its citizens and by the companies that do business in the country. Its Gross Domestic Product (GDP) has shown consistent growth, and inflation has been kept under control, thus ensuring a measure of stability and reducing inequalities, driving up domestic demand. Financing terms in Brazil have also evolved very favorably and the country is quite well positioned, even compared to some of the world's largest economies.

Below is an analysis of Brazil's performance along three dimensions: growth, predictability and funding, pointing out the opportunities available to Brazil that it must seize if it is to become an international hub of reference.

### Growth

The size of a country's economy and conditions to ensure long term growth are essential for business expansion and for improving the quality of life of the population as a whole.

In the past decades Brazil has certainly stood out in the world economy. Even during the so-called "lost decade" (the 1980s) the country remained one of the world's ten largest economies<sup>18</sup> (see Exhibit 4). Today, Brazil is the world's seventh economy and, more importantly, it is expected to improve its rank by two positions, possibly passing countries that are extremely important in the world scenario such as France, the United Kingdom and Germany. In late 2009 The Economist reported that Brazil could become the world's fifth largest economy as early as 2025<sup>19</sup>.

<sup>18</sup> Source: The Economist Intelligence Unit Country Data

<sup>19</sup> November 12th, 2009

Some recent facts would seem to justify this expectation. Although growing at a slower pace than world powers such as China, Brazil's average growth rate has increased. Growth went from 2% per year between 1996 and 2000 to 4.4% between 2006 and 2010 (see Exhibit 4). More importantly, the country's economic growth has been more constant, and consequently more predictable. This makes it easier for businesses to plan their operations, an important point and one that should be highlighted.

One of Brazil's main challenges to continue along this favorable path is how to increase its investment capacity. Investment capacity as a percent of the country's GDP, otherwise known as gross fixed capital formation (GFCF), is essential to ensure continued and accelerated growth over the long term. Several economists believe Brazil has little

### EXHIBIT 4

A solid macroeconomic environment is key to a favorable business environment

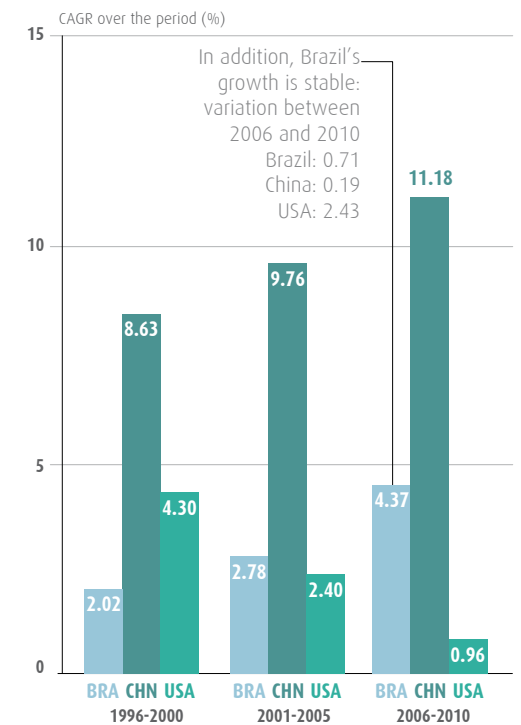
Brazil has improved its position and is expected to become the world's 5<sup>th</sup> largest economy by 2030

WORLD RANKING OF COUNTRIES BY GDP (US\$)<sup>1</sup>



In addition, growth rates are satisfactory and increasing

GROWTH OF SELECTED COUNTRIES 1996-2010



<sup>1</sup> Based on the nominal GDP of the countries in USA dollars using the average US\$ exchange rate for the year  
 Note: 2010 ranking based on PPP (EIU): USA, China, Japan, India, Germany, Russia, Brazil, United Kingdom, France, Italy, Mexico, South Korea, Spain, Canada and Indonesia  
 Source: EIU Country Data; BCG analysis



chance to grow at continuous rates in excess of 4 - 4.5% p.y. if investments do not reach levels close to 22% of the GDP. Between 2000 and 2009, investments in Brazil averaged 16.7% of its GDP<sup>20</sup>, well below the amount required to ensure and maintain growth.

This particular point merits attention, not only in terms of the percentage itself, but in particular because it has been dropping. In the 1980s and 1990s, on average investment in Brazil was around 21% and 18.2% of the GDP respectively. In this sense Brazil lags behind other fast growing countries that stand out in the international scenario. For example, investments in China and India have increased in recent decades, and between 2000 and 2009 averaged 39.1% and 28.4% of these countries' GDPs respectively.

In addition to the level of investment, other elements related to the long term growth of a country are the quality of life of its population and the distribution of income. Clearly faster growing countries will find it easier to distribute income, yet studies show that the reverse is also true: countries where income is better distributed and where the population enjoys a higher standard of living find it easier to maintain stable growth over time.

An analysis of Brazil's Human Development Index shows that, although it is improving, it is doing so more slowly than the rest of the world, so that Brazil is still ranked no better than 73<sup>rd</sup> out of 169 countries<sup>21</sup>. In addition, in terms of income distribution, Brazil today scores 0.55 on the Gini index, which goes from zero to one, with the higher scores indicating greater inequality. More developed nations such as Germany or France, or even developing nations such as China and India score quite a bit lower: 0.28, 0.33, 0.37 and 0.42 respectively<sup>22</sup>.

Although there is still a gap, income distribution in Brazil has improved, and consequently the purchasing power of its citizens has increased. The strengthening of the country's domestic market is clear when one looks at the increased percentages of people in socioeconomic classes A, B and C. In December 2002, only 12% of all Brazilians were considered to belong to class A/B<sup>23</sup> and 43.2% to class C<sup>24</sup>. Today 15.6% of Brazil's population is classified as class A/B, and fully 53.6% as class C, driving up the purchasing power and expanding the size of the domestic market<sup>25</sup>.

There is no doubt that Brazil is one of the stars of the world economy, and all indications are that it will only strengthen its position. However, if it is to advance further, it is important that the country foster conditions that will increase the investment rate and that it resolve issues related to development and the quality of life of its citizens.

### Predictability

In addition to growth, other macroeconomic factors are important to ensure the attractiveness of a country as a business hub. Predictability is critical to generate trust and facilitate business operations, which will increase the likelihood that economic agents will invest in the country.

In Brazil, the formal implementation of a system of inflation targets in 1999, the result of a long effort to ensure monetary stability, was a major milestone, and demonstrated to the world the country's commitment to predictability. Inflation, as measured by the IPCA<sup>26</sup>, has remained in the single digit since 2003. Even in the periods when inflation

<sup>20</sup> Source: World Bank Data

<sup>21</sup> Source: United Nations Development Program - Human Development Reports

<sup>22</sup> Source: Worldwide Competitiveness Yearbook - IMD

<sup>23</sup> Households with monthly earnings higher than R\$ 4,808

<sup>24</sup> Households with monthly earnings between R\$ 1,115 and R\$ 4,808

<sup>25</sup> Source: Fundação Getúlio Vargas Center for Social Policies. 2010 study entitled: *A Pequena Grande Década: Crises, Cenários e a Nova Classe Média* (The Little Big Decade: Crises and Scenarios and the New Middle Class)

<sup>26</sup> Broad Consumer Price Index. Source: IBGE



## THE DIMENSIONS OF MACROECONOMIC ENVIRONMENT ARE ECONOMIC GROWTH, MONETARY STABILITY, FISCAL SOLIDITY, EXTERNAL VULNERABILITY, ECONOMIC VOLATILITY, HUMAN DEVELOPMENT AND INCOME DISTRIBUTION

increased due to faster economic growth, the Central Bank kept close tabs on what was going on and used the basic interest rate (Selic) as a tool to keep inflation under control.

The forecast<sup>27</sup> is that Brazil's average inflation rate will remain around 4.8% per year over the coming years, putting it in a better position than other large emerging nations such as India and Russia, where the annual inflation rate is expected to be 5.3% and 6.7% respectively. However, Brazil can still improve along the growth/stability indicators. China, to take an example of a fast growing economy, expects inflation to remain at around 4% a year over this same period.

Still regarding the predictability, it is interesting to note that despite a floating exchange, the exchange rate has not fluctuated all that much in the past five years. Over this period the highest<sup>28</sup> USA Dollar exchange rate was R\$ 2.30 (during the global economic crisis), and the lowest R\$ 1.57. At no time in the past five years has this currency reached the heights of 2002, when one US Dollar was worth as much as R\$ 3.81.

Brazil's macroeconomic management has matured quite significantly and now reflects the elements normally sought in a stable investment and business hub. After all, the absence of predictability will not only keep new economic agents from entering a country, it can also disrupt existing markets and increase the risk and complexity of doing business in a country. It is essential that Brazil continue along this favorable path and ensure that progress made is not lost, but rather that it keep going forward.

### Financing terms

The financial health of a nation is extremely important for maintaining a healthy macroeconomic environment and thus for its attractiveness as a business hub. Inadequately balanced public accounts and poor management of State revenue and spending, for example, help drive up the cost of funding for investments as a whole, and also affects the operating costs of the companies that do business in the country. This section analyzes the macroeconomic conditions of supply and demand for the resources required to ensure healthy economic growth.

Demand for public sector funding is one of the most important levers affecting the funding terms for the economy as a whole. Regarding the stock of Brazil's public debt, the country's position has improved steadily over the past several years. The total net

<sup>27</sup> Source: The Economist Intelligence Unit (EIU) Countrydata

<sup>28</sup> Considering the average buy rate for the reference month, weighted by the number of business days. Source: Brazilian Central Bank

public debt<sup>29</sup> as a percentage of the GDP fell significantly between 2002 and 2010: from 60.6% of the GDP to 40.4%<sup>30</sup>. In addition, in 2006 Brazil settled its net public debt, and since then has been a net creditor to the rest of the world (see Exhibit 5).

Brazil's gross public debt has also come down in the past decade. After peaking in 2002, when it reached 79.9% of the GDP, it came down to 66.8% in 2010. The forecast for the coming years<sup>31</sup> is that Brazil will continue on this path, even improving its ranking compared to developed nations that are the site of business hubs. Brazil expects that by the end of 2015 its gross public debt will be 64.8% of its GDP, while the United Kingdom, France and Singapore expect to have gross public debts on the order of 80% of their GDPs, and the USA 110.7%.

An additional indicator of healthy public finances that impacts the macroeconomic environment is the public deficit. A comparison of 2010 numbers with those for the start of this decade shows that this indicator too is dropping, starting out at something around

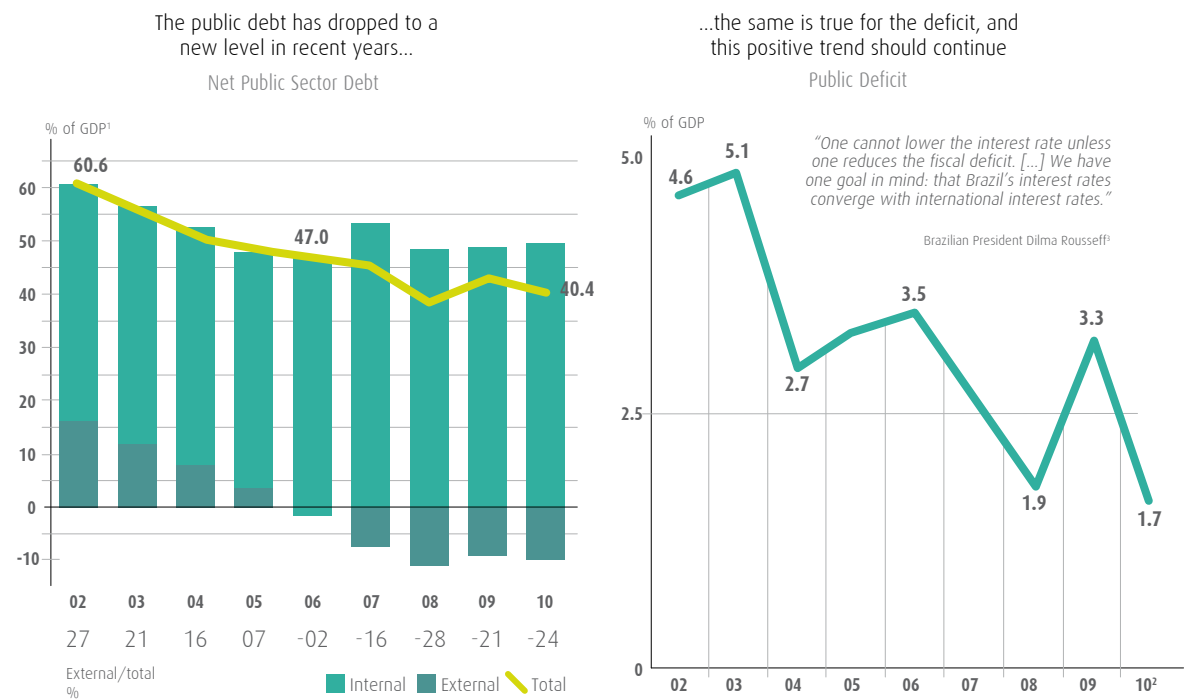
<sup>29</sup> Refers to the net debt from the non-financial public sector and from the Central Bank with the financial system (public and private), with the private sector, and with the rest of the world

<sup>30</sup> Position at year end.

<sup>31</sup> Source: International Monetary Fund (IMF)

## EXHIBIT 5

### Financing in Brazil evolves positively



1. Position at year end. Refers to the net debt from the non-financial public sector and from the Central Bank with the financial system (public and private), with the private sector, and with the rest of the world  
2. IMF estimates for this year only 3. Interviews published on the Federal Senate website at [http://www.senado.gov.br/senadores/liderancas/lidpfs/detalha\\_noticias.asp?codigo=88795](http://www.senado.gov.br/senadores/liderancas/lidpfs/detalha_noticias.asp?codigo=88795)  
Source: Brazilian Central Bank, IMF

4.6% of the GDP and ending at 1.7% (*see Exhibit 5*). In addition to important progress made as the result of enforcing the Fiscal Responsibility Law on state and municipal governments (*see Box A*), President Dilma Rousseff has underlined this theme, and recent statements by the President indicate a return to stronger measures to control fiscal policy, as the most recent global economic crisis, which demanded government stimuli, has come to an end<sup>32</sup>.

<sup>32</sup> For example, BNDES directed treasury loans for the private sector, among others.

## BOX A

### The contributions of the Fiscal Responsibility Law to Brazil's financial health

On May 4 2000, Brazil became the first emerging nation to enact a Fiscal Responsibility Law (Supplemental Law 101) to make state and municipal government spending transparent and limit the amount spent to the ability to collect. The law provides increased transparency for public finances and ends a practice long used by government administrators who would contract major works late in their mandates and leave behind significant debts for their successors.

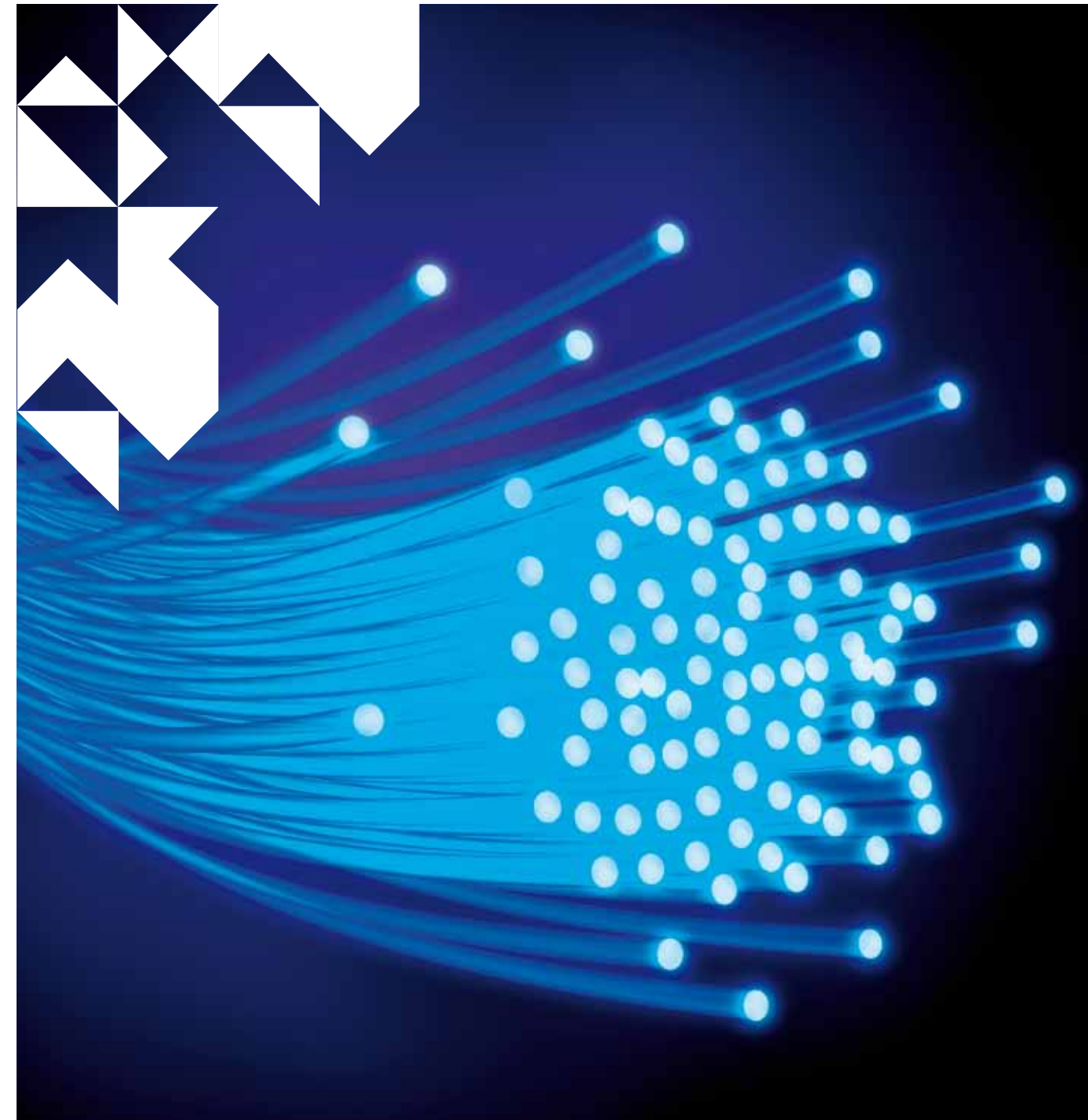
Brazil's Fiscal Responsibility Law was designed based on the country's reality, yet also used a number of important international references:

- The EU's **Maastricht Treaty** provided a framework for how to keep states independent, while at the same time including targets and penalties for deficits.
- The **International Monetary Fund (IMF)**, of which Brazil is a member, provided guidance on the transparency of public acts, spending planning and the disclosing and rendering of budgetary accounts;
- The USA **Budget Enforcement Act** illustrated how one may set surplus targets for states, as well as mechanisms for spending control such as sequestration and pay-as-you-go;
- New Zealand's **Fiscal Responsibility Act** contributed examples of how to manage state accounts so as to keep federal government accounts healthy, with a measure of flexibility for meeting short term targets if the long term targets are maintained.

Supported on four main axes (planning, transparency, control and accountability), the Fiscal Responsibility Law defines the parameters of fiscal organization in Brazil and, though not complied with in full by all states, has significantly enhanced the country's maturity on this topic. Despite major progress, 10 years after the law was enacted additional steps are necessary, such as congressional approval of the supplemental laws required to enforce fiscal responsibility, such as the creation of a Fiscal Management Board and the enforcement of limits on the federal public debt.

Another element of the Fiscal Responsibility Law that must be improved is the risk that the short term fiscal balance the law demands results in larger long term gaps, such as failure to invest in infrastructure to meet short term budget targets.

Source: Fiscal Responsibility Law; Federal Revenue Service; FGV Projects

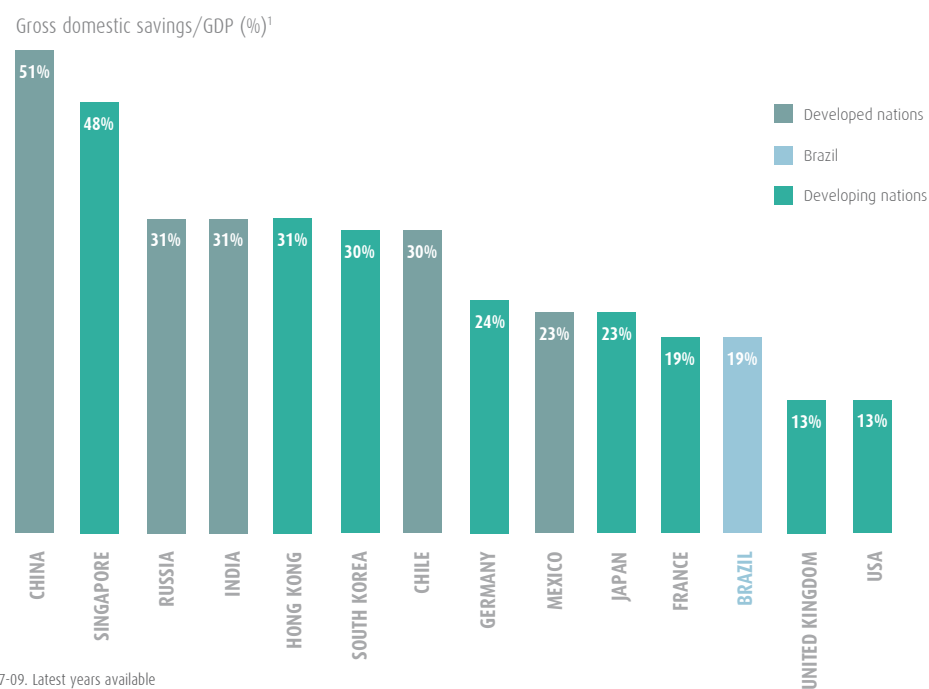


Better public finances have enabled Brazil to improve its risk ratings. After reaching more than 2,000 points on the EMBI+ scale in mid 2002, Brazil's country risk has consistently dropped ever since and, in May 2008, the country was granted *investment grade*. It is important to note that, despite the high risk rating in 2002, over the past 10+ years Brazil has never been considered as high risk as Argentina or Russia. The crises these countries faced took their risk ratings to the 6,000 point level, about three times Brazil's highest country risk in the past decade. Brazil's good position in this indicator reveals that the country is better perceived by the international community as a whole, making it easier to raise capital abroad to cover situations where domestic sources may be insufficient.

This is particularly relevant in the case of Brazil, given the low rate of domestic savings - one of the lowest in the world -, partly due to the nominal public deficit created by public accounts. At 19% of the GDP, the gross domestic savings rate in Brazil is far below other developing nations such as China (51%), India (31%), Russia (31%), Chile (30%) and Mexico (23%) (see Exhibit 6). This is important, as countries that save less find it harder to fund their growth using their own resources.

## EXHIBIT 6

Brazil has one of the lowest domestic savings rates



<sup>1</sup>Average for 07-09. Latest years available  
Source: World Bank

In short, Brazil has made important strides in managing its public accounts, as it has in all other macroeconomic issues. Nevertheless, it is important to make sure it stays on this path and does not backslide, especially in terms of fiscal issues and the public deficit; as if these are poorly managed the impact on the overall cost of funding the economy may be quite significant.

### Indicators

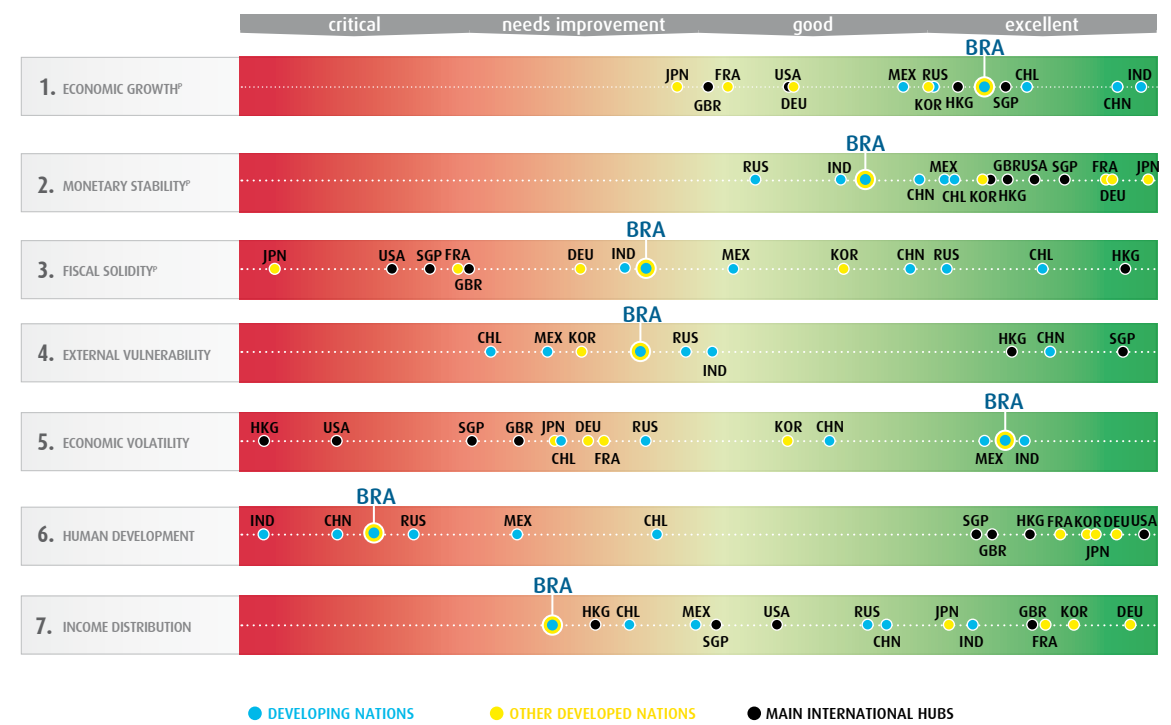
In the specific case of the macroeconomic environment pillar the indicators selected for continuous tracking were:

- **Economic Growth:** The faster a country's economy is expected to grow, the more attractive it will be for international agents. It is extremely difficult for a hub to attract investment and business unless its economic outlook is better than that of other hubs competing for capital;
- **Monetary Stability:** Monetary stability contributes to predictable economics for hub businesses and investments. Countries where there is the expectation of high inflation are less attractive, as international agents will be concerned lest the value of their investments and businesses erode together with the value of the local currency;
- **Fiscal Solidity:** If a country's fiscal policies are inadequate, the cost of funding in general will go up, thus increasing operating costs in the economy as a whole. Therefore, the more fiscally solid a country, the more attractive it will be.
- **External Vulnerability:** The availability of reserves to honor its foreign commitments is an indicator of a country's autonomy to ensure its global financial credibility and a measure of its dependence on funds from abroad;
- **Economic Volatility:** Short term interest rates on government bonds are a good indicator of the volatility of a country's economy and of the frequency with which it must make adjustments. Less volatile economies offer a more secure planning horizon for both businesses and families, fostering high levels of investment and growth;
- **Human Development:** The higher the human development index, the more attractive a country will be as a hub, since greater development means more talents, a larger domestic consumer market and better quality of life for its citizens;
- **Income Distribution:** Income distribution influences factors that are key for developing a hub, such as the availability of talents, the size and profile of the consumer market, the country's level of innovation and its quality of life. If the income is better distributed, these aspects will be more positive for the business hub.

The following exhibit shows how Brazil compares to other countries along dimensions of the macroeconomic environment pillar:



### MACROECONOMIC ENVIRONMENT



P: based on projected data

It is evident that Brazil stands out in terms of its economic growth and stability, even though it lags behind most of the countries used for comparison. Its fiscal solidity and external vulnerability are rated between “good” and “needs improvement”, primarily due to high spending levels, which should be reviewed and balanced against Brazil’s significant accumulated reserves. Human development and income distribution indicators, not surprisingly, show that socially Brazil remains at a disadvantage compared to the other nations included in the ranking.



## ECONOMIC GROWTH WITH INFLATION UNDER CONTROL AND FUNDING TERMS ARE ATTRACTIVE, BUT IT IS NECESSARY TO FOCUS ON STRENGTHENING FISCAL RIGOR AND ON INCOME DISTRIBUTION

### Conclusion

Brazil truly stands out in the macroeconomics pillar and its position in the world scene should only improve. The Brazilian economy is expected to continue to grow at an annual rate of 4 to 4.6% over the next five years, making it attractive as an investment and business hub.

Economic growth with inflation under control and funding terms compatible with the needs of the private sector are attractive characteristics for an investment and business hub, and Brazil has performed admirably along these dimensions. If it is able to maintain its high ratings and focus on improving especially its public accounts, it will advance and leverage not only itself, but the entire region as well.

Objectively, the two themes that require the most improvement are rationalized fiscal management and income distribution. The former has the potential to ensure low funding costs to continue to drive country growth. The latter will foster the continuous expansion of a consuming middle class, which in turn will boost economic growth and activity.



# 02

## INSTITUTIONAL ENVIRONMENT

A solid institutional environment that ensures the rules of the game are stable and that business may be conducted speedily and efficiently is a required condition for any hub to be attractive. Business will be fostered if investors can rely on the effectiveness of a country's legislation and where the processes used to modify or amend legislation are both predictable and reliable. In addition, efficient public processes, services and controls can act as catalysts, leading to swifter negotiations and more agile and less costly company operations.

Brazil has already reached important milestones in consolidating its political and institutional systems, but important challenges still remain, in particular related to legal security and bureaucracy. These are themes that Brazil must address to improve its attractiveness. This section analyzes Brazil's situation along each of these dimensions and looks at the next steps the country must take to build an environment that businesses will find attractive and stimulating.

### Political System

The political system is the foundation upon which all of a country's operating rules rest. Given its underlying importance, it is essential that the political system is configured to impede arbitrary decisions and that the organization and the role of the State are secular and not subject to indiscriminate change. The assurance that the core framework of a country will not suffer sudden ruptures is an absolute requirement for any business hub that wishes to remain attractive over the long term.

Brazil's current political system is quite sturdy. Following years of military regime, it has been a strong democracy now for over twenty uninterrupted years. The political system is a democracy with three independent powers, and the system stipulates that regular elections be held to elect representatives to the executive and legislative powers. Voting in Brazil is electronic and it has one of the safest, most modern electoral processes in the world (**see Box B**). The electoral system is multiparty and open to all. The Federative Agreement allocates responsibility and taxes to the municipal, state and federal level and all are responsible for enforcing public policies.

### BOX B

#### Electronic voting in Brazil is a world reference

In addition to consolidating its position as a democracy, Brazil has transformed its electoral process and technology. Since 1996, elections in Brazil have used electronic polling boxes, developed entirely using Brazilian technology. These significantly reduce the chance of fraud, which could cast suspicion on the outcome of the election.

In addition to providing security, these polling boxes have made the entire process very agile and votes are counted quickly and easily. In 2010 some 134 million Brazilians cast their vote in computerized federal elections and the outcome was announced less than 24 hours after the polling stations closed.

Thus Brazil has become a reference in electronic elections. For example, Brazil's Electoral Justice has been involved in elections at different federative levels in Paraguay, Argentina, Ecuador, Mexico, Costa Rica, Honduras, the Dominican Republic and Panama, and has even loaned its polling boxes. It has also received enquiries from countries like South Korea, interested in understanding the Brazilian system.

Brazil and India are the only developing nations using an electronic voting system. Among developed nations, only 15\* already use such a system.

\* Australia, Austria, Belgium, Canada, Denmark, Estonia, France, Germany, Ireland, the Netherlands, Norway, Portugal, Spain, Sweden, the United States of America and the United Kingdom. / Source: Brazilian Superior Electoral Court, 2010; Tiresias.org; press search

In addition, there are no signs of existing or potential conflicts between Brazil and its neighbors, and the institutional markers that define the national borders are solid and were established peacefully, ensuring an environment of international peace and political and economic collaboration. Brazil also stands out in that it has no ethnic, religious or any other type of internal conflict.

These characteristics, and the fact that they have been consistent over time, have given the country an image of political stability on a level similar to more developed nations whose political systems have been in place for much longer. According to the political stability index published by the World Bank, Brazil is in the same group as the USA, the United Kingdom and France, countries with democratic traditions that have endured for longer than Brazil's<sup>33</sup>.

Even in such a positive scenario, a number of examples show that there remains room for improvement, in particular when it comes to keeping issues of state segregated from political interests. A first example is the term of office of the President of the Central Bank (CB). While in countries like the USA and the United Kingdom the term of office of the central bank (or equivalent institution) president is fixed and does not coincide with that of the President, in Brazil this is not the case. While it is true that in recent years Central Bank

<sup>33</sup> Indicator: Political stability and the absence of [political] violence, 0 to 100; Scores: Brazil: 56; United Kingdom: 56; USA: 58; France: 61

Presidents have remained in office for longer – for example Henrique Meirelles, the CB President in the previous administration, held the position for eight consecutive years -, fixed terms, if implemented, would strengthen the Central Bank's independence to conduct the country's monetary policy (see Exhibit 7).

Another example of something that should change is the large number of ministries and the fact that new ministries are created and others extinguished at a rather fast rate. For instance, it is noteworthy that Brazil has more Ministries than the USA or France (see Exhibit 8), and turnover is also much faster.

Finally, the process of social change underway in the country may actually foster improvements in its political activity. Countries with more social capital invest more in education, and the quality of their political activity tends to be better, with clearer boundaries between issues of state and the interests of private enterprise. Brazil must continue to advance in this direction.

**Stable and clear laws**

In a country where legislation is predictable and the rules of the game are both clear and well understood, business risk is lower and agents will be more willing to invest and conduct the transactions that drive the economy and connect the hub to the rest of the world.

Brazil still faces challenges on this front. For example, it creates new laws at a much faster rate than other international centers. On average, in 2009, 317 new laws were enacted in Brazil each month<sup>34</sup>, while in France and the USA this number was only 159 and 24 respectively (see Exhibit 8). This type of legislative output clearly makes it much harder for businesses and investors to keep up with the rules they must follow and increases the level of legal insecurity.

<sup>34</sup> Average number of laws enacted each month between October 2008 and October 2010. Data only for the whole 2009 year not available. Source: Brazilian Tax Planning Institute

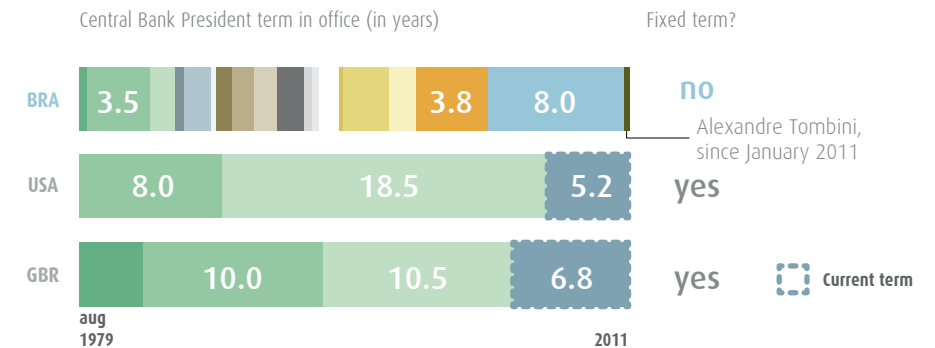
**THIS PILLAR INCLUDES POLITICAL STABILITY, QUALITY OF REGULATIONS, LEGAL SECURITY, LABOR MARKET FLEXIBILITY, EASE OF OPENING A BUSINESS AND HOW EASY IT IS TO PAY TAXES**



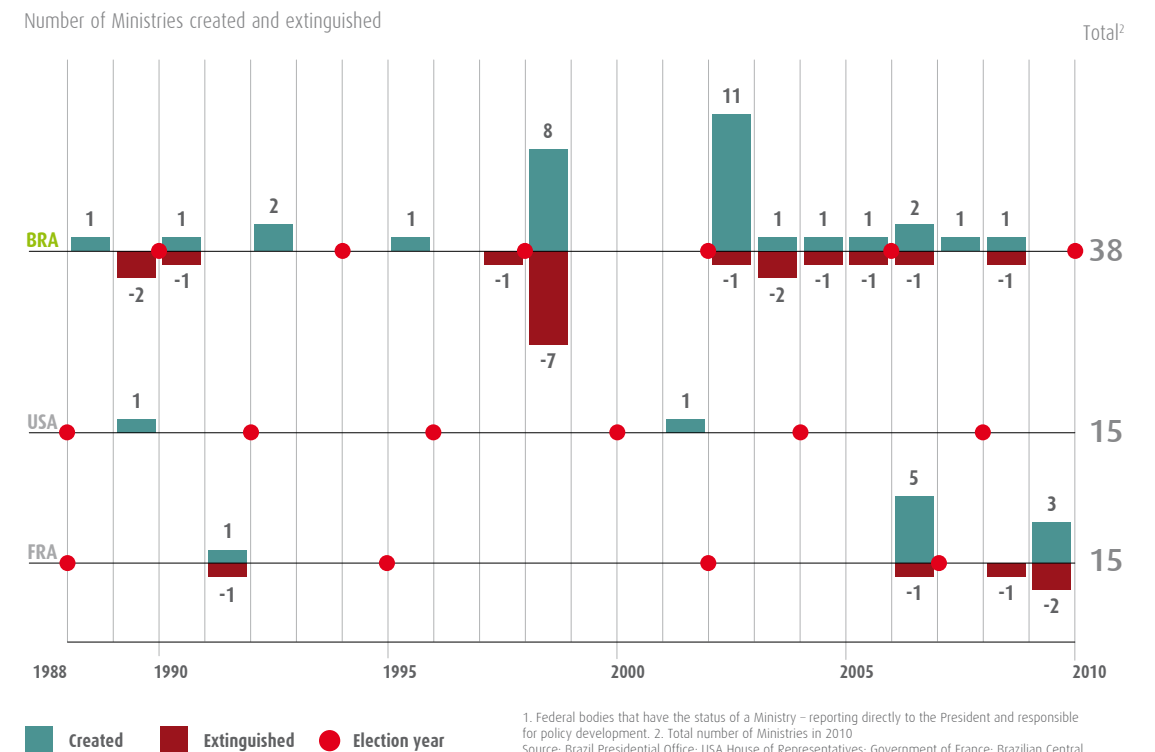
**EXHIBIT 7**

Examples show there is still room to improve the political environment

**Longer terms of office for Central Bank executives represent progress, but they are not fixed**



**The number of new Ministries created and extinguished<sup>1</sup> is still quite high**



**EXHIBIT 8**

There remain challenges in legislation that need to be addressed

Proportionately, the Federal level is responsible for issuing more laws

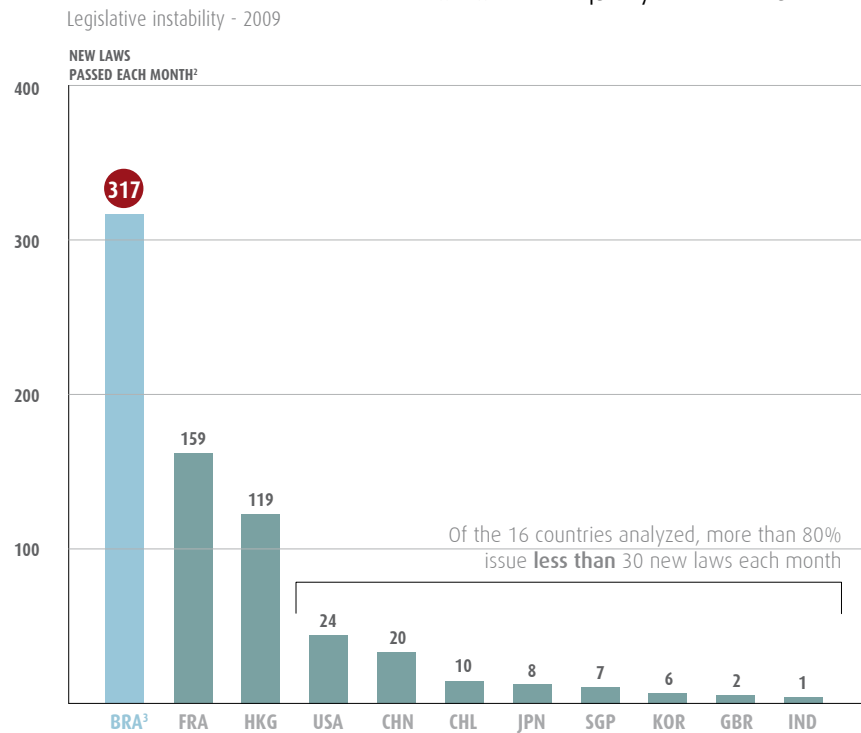
Laws issued since 1988

Level	Federal	State	Municipal	Total
Laws (k)	154	1,095	2,906	4,155
Laws (k)/unit	154	40	0.5 <sup>1</sup>	-
Laws/ business day-unit	29	8	0.1	-

“It’s hard to know what laws are applicable, even for a lawyer”

Partner in a Legal Firm

Brazil creates new laws more frequently than other countries



1. Based on the current number of Brazilian municipalities: 5,507 2. Number of new Federal laws in 2009 by country 3. Average number of laws issued each month between October 2008 and October 2010; data for the whole year of 2009 not available Source: IBPT; Brazilian government bodies; BCG analysis

In addition to legislative instability, the fact that some themes are neither clear nor transparent adds to institutional insecurity. Examples of this are 1) the Brazilian Senate’s practice of final rulings, whereby laws may be approved without being submitted to the plenary; 2) the large number of Provisional Measures used by the Executive to legislate, a practice that sometimes causes unpleasant regulatory surprises; 3) the lack of clarity in assigning regulatory and oversight responsibility over the private sector to Ministries and Regulatory Bodies.

**Legal Security**

Clear and stable laws are not enough; they must bring with them the certainty that they will be enforced. The effectiveness of rules and commitments ensures legal security and fosters an environment where there is trust between businesses, people and institutions. The impact of all of this on the cost of doing business is clear: increased legal security reduces expenses with lawsuits and contract interpretation, and also limits potential liabilities, which may also be costly.

A number of examples may be used to demonstrate that better/stronger institutions will directly benefit the citizenry and the businesses that operate in the country. An example would be lower interest rates on personal loans, which followed the creation and regulation of payroll loans, whereby loan installments are deducted directly from employee payrolls. On the heels of payroll loans the interest rate on loans granted by these same financial institutions to the same clients and for the same purposes came down. Since 2004, when the law regulating this new form of credit was passed, the interest rate on payroll loans has remained some 24.8 percentage points below the interest charged on traditional personal loans. Today payroll loans account for over 50% of all personal loans (see Exhibit 9).

Another clear example is the improvement in the business recovery rate following the enactment of the new “Business Recovery Law” (Law 11,101 / 2005), which replaced the old Bankruptcy Law. With the end of the so-called “concordatas” and the creation of what is known as judicial recovery, the number of bankruptcies in Brazil dropped dramatically. Increased legal security on assets at risk of liquidation and on guarantees has improved the recovery process: while in the past as many as 20.7 thousand requests for bankruptcy were filed each year (2003); since 2006, when judicial recovery was first enforced, this number has averaged only 2.7 thousand a year (see Exhibit 9).

Even with such good examples, some aspects still need improvement to increase the country’s legal security and reduce the associated costs. Indicators of perceived respect for laws place Brazil at a disadvantage compared to developed nations and other business hubs around the world. According to the World Bank Rule of Law indicator, which is based on analyses conducted by experts on the theme<sup>35</sup>, on a scale of 0 to 10, countries such as Germany, Singapore, the USA, Hong Kong and France, all of which are business hubs, score around 8.0, while Brazil lags far behind with a score of 4.6.

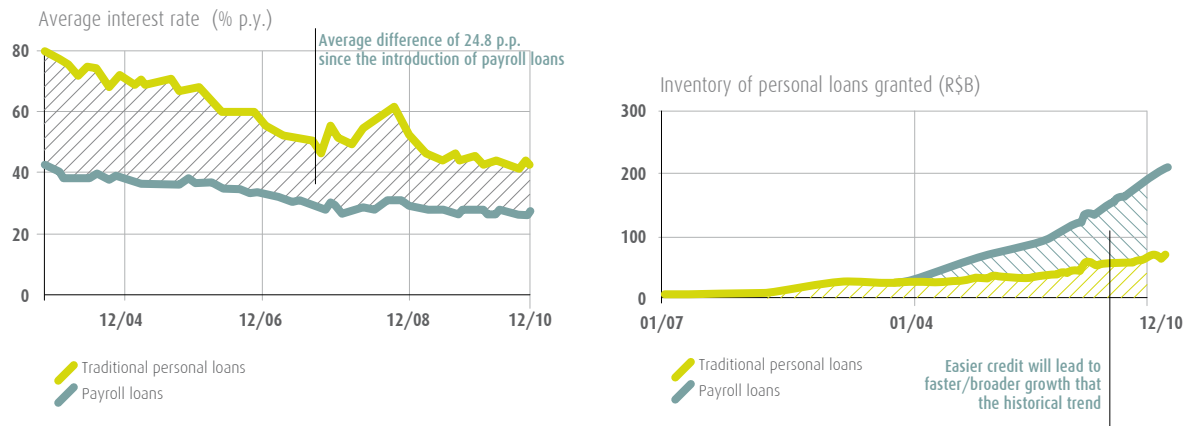
Some of the factors that explain this low score are the belief that the judiciary does not have a great deal of independence, and the fact that judges may find it hard to keep up with which laws are actually in effect, given the rate at which legislation changes in the Country. Regarding the former, the World Economic Forum indicator that measures executive perceptions of the independence of a country’s judiciary system from external

<sup>35</sup> Source: Worldwide Governance Indicators – World Bank

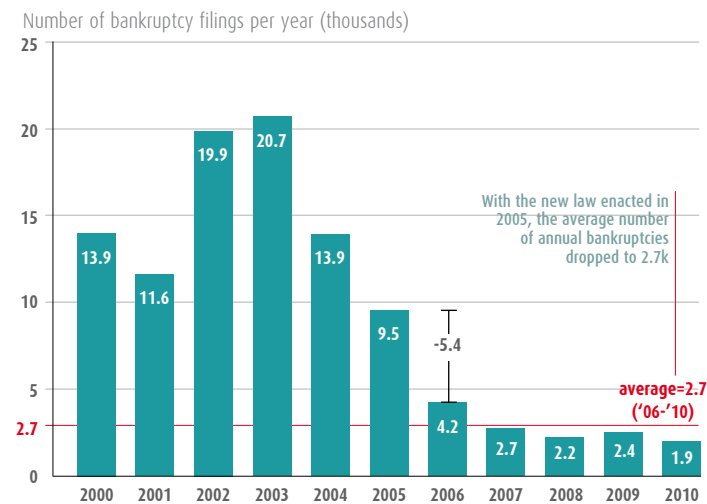
EXHIBIT 9

Ultimately, institutional reforms will have a positive impact on the population in general

Payroll loans<sup>1</sup> have allowed for lower interest rates and contributed to an overall credit increase



The new "Business Recovery Law"<sup>2</sup> helped cut back the number of companies terminating their business



MORE COMPANIES OPERATING COULD MEAN MORE JOBS AND INCREASED VALUE CREATION FOR SOCIETY AS A WHOLE

1. Law # 10,821/2003 and Decree # 4,840/2003 2. Law # 11,101/2005  
Source: Brazilian Central Bank; Serasa Experian; BCG analysis

influences once again shows Brazil far behind other business hubs. Regarding the difficulty to keep up with new and changing laws, the statement made by Paulo Mascaretti, the Chairman of the São Paulo Judges Association, says it all: "I graduated 30 years ago and since then there has been a major proliferation of new laws. [...] All of these changes make it hard for judges to take a stand and do their job."

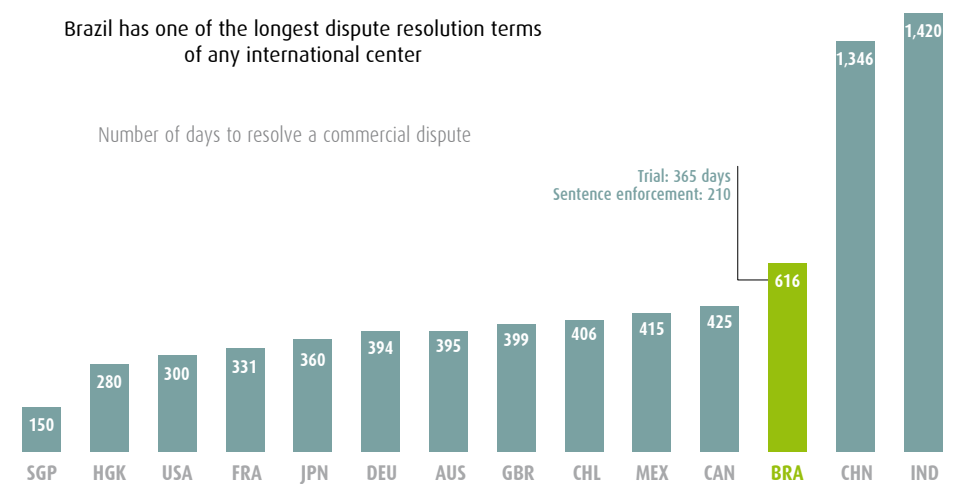
The long time it takes before a matter goes to trial, and again before a ruling is enforced also contributes to a greater degree of uncertainty regarding the proper operation of the country's system of justice. In a World Bank assessment of the time it takes to resolve a standard commercial dispute in different countries, Brazil is close to the bottom: 616 days, whereas the same dispute would be resolved in Singapore, also a hub, in 150 days. It is worth remembering the natural difficulty of comparing the metrics and procedures adopted in each country. (see Exhibit 10).

EXHIBIT 10

The lengthy process to resolve legal disputes increases the uncertainty related to the justice system

Brazil has one of the longest dispute resolution terms of any international center

Number of days to resolve a commercial dispute



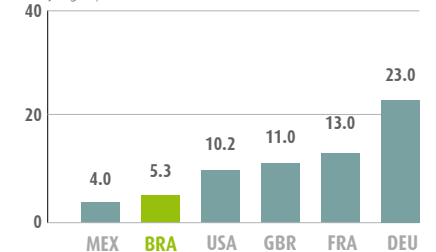
This situation arises due to a number of factors

Constantly changing laws make it harder for judges to analyse court decisions

The time it takes for a case to go through the court system contributes to the time it takes to resolve it:  
- The number of appeals is quite high  
- An overly detailed constitution contributes to the large number of cases taken to the Supreme Court

Too many cases per judge due to the small number of judges

Judges / 100 thousand inhabitants<sup>1</sup>



Note: The standard dispute used for this study is a transaction between two companies (buyer and seller) in which the buyer fails to pay for the received goods claiming that their quality did not meet the agreed quality standards. The seller then files lawsuit to collect the amount owed for the goods it sold  
1. Numbers reported for different years, depending on the country. 2002: Mexico and Brazil; 2001: United Kingdom, Germany and France; early 1990s: USA. The most recent statistic available for Brazil (2009) is that there are 8.4 judges for every 100 thousand inhabitants.  
Source: Doing Business, The World Bank - June, 2009; Report: Brazil - Making Justice Count - World Bank; BCG analysis

## BRAZIL HAS CONSOLIDATED ITS POSITION AS A STRONG DEMOCRACY AND CAN KEEP IMPROVING ITSELF BY USING ITS POLITICAL SYSTEM



The judiciary system used in the country and the rules governing civil and criminal process law are the main reasons behind the long time it takes for lawsuits to go through the courts. The possibility and use of numerous appeals and the level of detail of the Brazilian constitution mean that many cases are eligible for the Federal Supreme Court (Court of Appeals). In addition, studies show<sup>36</sup> that in Brazil, the number of judges compared to the total population is smaller than in countries with faster justice systems (see Exhibit 10). Thus it is likely that improvements would be possible by increasing the number of judges.

Nevertheless, over the past 15 years Brazil has steadily made important changes to its judiciary system - not only in terms of the procedures involved, but changes in its very structure. As a result, the speed and quality of the court system should also improve.

For example, the introduction of binding precedent and the principle of general repercussion in 2006 (Laws 11,417 and 11,418), along with limitations on repeated special appeals imposed in 2008 (Law 11,672) should reduce the backlog of cases to be submitted to the courts in Brazil. Other changes have impacted the structure and operation of the judiciary, such as the special courts created by Law 9,099/1995 and the arbitration chambers created by Law 9,307/1996. In addition, the National Justice Council (Constitutional Amendment 45, dated 2004) and computerized courts, consolidated in the form of Law 11,419/2006, are additional measures designed to improve the flow of cases through the judiciary.

Another theme that influences and embodies legal security is respect for property, including intellectual property. Property rights have been a constant on Brazil's agenda of laws and regulations ever since the National Institute of Industrial Property (INPI) was created in 1970. The INPI is the federal autarchy responsible for registering trademarks and patents in Brazil. The Brazilian Constitution, drafted in 1988, holds private property to be a principle of the national economic order and laws have been passed to ensure the protection of patents and copyright. In addition, in 2004 the National Council to Fight Piracy and Crimes Against Intellectual Property was created.

Despite all of these legal advances Brazil has yet to acquire the image of being a safe haven for property rights, and in this<sup>37</sup> it is ranked 72<sup>nd</sup> out of 139 countries. The reasons Brazil is ranked so poorly have to do with the slow and costly patent application process, which lasts seven years, compared to only three in the USA, and the fact that Brazilians are more comfortable buying pirate or counterfeit goods (see Exhibit 11). Yet in spite of this there have been improvements: In February 2011 Brazil was removed from the USA list of "notorious markets for pirate and contraband merchandise"<sup>38</sup> and in fact is the only BRIC country not on this list.

<sup>36</sup> Source: Brazil: Making Justice Count - World Bank

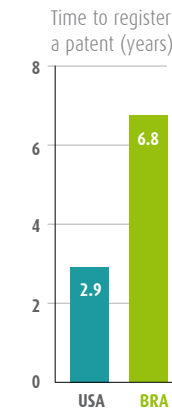
<sup>37</sup> 1. Calculated based on a score obtained in more than 13 thousand interviews with executives, 168 in Brazil. The questioned asked was: "How would you rate the protection of property rights, including financial assets, in your country? [1 = very weak; 7 = very strong]. Source: The Global Competitiveness Report 2010-2011 - WEF

<sup>38</sup> United States Trade Representation (USTR)

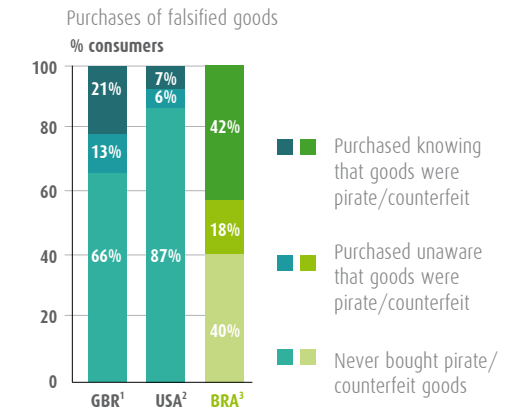
## EXHIBIT 11

Patent registration and piracy are challenges when it comes to safeguarding intellectual property in Brazil

It takes a very long time to register a patent



Piracy levels are also very high



1. IPTOC survey, 2005: DVDs, CDs, electronic games, apparel. 2. Gallup, 2005: operating systems, software, CDs, DVDs, alcoholic beverages, cigarettes, apparel, jewellery, auto parts and tools and legal drugs. 3. IBOPE, 2005: apparel, watches, handbags, glasses, perfume and electronic games  
Source: USPTO; Agência Brasil and JB on-line - interviews with the President of INPI; 2007 Global PC Software Piracy Study; BCG analysis

The enforcement of guarantees is another element of Brazil's legal security framework. In Brazil there are numerous hurdles for creating and enforcing guarantees, typically related to the rigidity of traditional guarantees, difficulty constituting guarantees and a slow judiciary.

Regarding the first point, the effectiveness of guarantees is diminished since in mortgages and pledge agreements both labor and tax creditors have preference over secured creditors. In addition, the fact that these guarantees must be discussed by the courts in an ordinary lawsuit before enforcement means that the debt itself is uncertain and there is absolutely no time horizon for receiving the guarantee<sup>39</sup>.

Registering secured creditor agreements is a complex and costly process. The documents required to register secured creditor agreements are not standard, thus registration is subject to the specificities and unique demands of each Registry Office, and to the degree of sophistication of the parties to the agreement.

Lastly, the slowness of the entire process, given that the Brazilian court system is excessively formal and detailed, ends up compromising the effectiveness of the guaran-

<sup>39</sup> A simple lawsuit discussion may take 2 to 5 years after the sentence is passed and no further appeal is possible

tees. According to a representative from Veirano Advogados, a legal firm, “the process law system must make sure that those who have a right do not fail to exercise this right because the system is so slow. In practice, having a right where there is no certainty of when it will be enforced is the same as not having a right at all”.

Thankfully there have been a number of improvements in the enforcement of guarantees, such as making the entire process more flexible and diversifying the instruments available, thereby increasing the degree of legal security that these rights will be enforced. An important example is the creation and expanded use of fiduciary property. The big advantage of this concept, both for chattel mortgages as well as fiduciary transfers, is that the assets and rights involved are not part of the assets of the borrower until such a time as the loan in question has been fully paid. Thus fiduciary guarantees are not subject to judicial recovery and other creditors do not have any preferred rights over them. In addition, fiduciary instruments may be enforced without the need for a prior ordinary lawsuit.

All of these improvements have contributed to increasing the legal security of established rights, and offer advantages to the end users of these very instruments, among them lower interest rates on loans due to the lower risk involved.

### Bureaucracy and business operations

There is a close, yet inverse relationship between the bureaucracy of a country and its attractiveness as a business hub. More efficient government and limited bureaucratic hurdles act as catalysts of economic development. In a more dynamic environment, opportunities are not lost because of slow transactions and business as a whole is more efficient and agile, contributing to lower operating costs for all those involved.

In Brazil, although bureaucracy does not actually impede business, it does create additional costs. In a league table<sup>40</sup> of countries ranked by the impact of bureaucracy on business, Brazil is at the bottom of the list of business hubs, worse even than other developing nations such as Mexico, China and Chile (**see Exhibit 12**). It is common sense that the cost of bureaucracy must be taken into account when deciding to make direct investments in any country. “Bureaucracy is not an impeditive as Brazil offers numerous opportunities, but it is an added cost that must be factored in” said a Pinheiro Neto Advogados, a legal firm, spokesperson.

Another consequence of excess bureaucracy is that it creates opportunities for corruption, as lengthier, more complex and costlier transactions create more room for the exchange of favors for speedier resolution. Reducing corruption is an additional advantage of reducing excess bureaucracy in a business hub.

While it is generally accepted that some level of corruption exists in any nation, whether developed or developing, the extent and depth of corruption are difficult to measure. Clearly corruption is not included in any official “country data”, but the extent to which it is hidden varies, depending on the culture of the nation, and can even vary

<sup>40</sup> Source: IMD – annual worldwide survey of top and middle managers in 58 countries. In 2010 there were 4,460 respondents

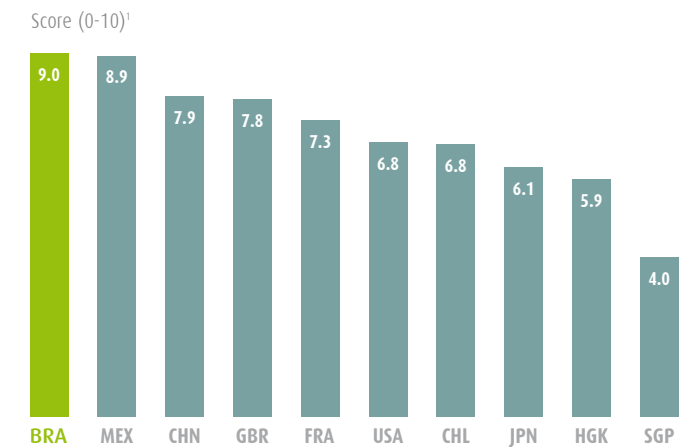
<sup>41</sup> Source: 2010 Global Corruption Barometer: % interviewees claiming to have paid a bribe in the past 12 months to officers in customs, education, the judiciary, land services, medical services, the police, permitting and registration services, tax authorities and public utilities.

<sup>42</sup> Source: Bribe Payers Index 2008

## EXHIBIT 12

The high cost of bureaucracy impacts business

Brazil is at the bottom of the list when it comes to the impact of bureaucracy on business



1. Survey of 4,460 middle and senior management in 58 countries who answered the survey between January and April 2010. Source: IMD

within the same country. An example of how difficult it is to measure corruption comes from Brazil itself. Only 4%<sup>41</sup> of the Brazilians interviewed by *Transparency International* in 2010 admitted they had paid some type of bribe, below the 31% in Mexico and 5% in the USA. In 2008, just two years prior, a survey conducted by the same institution found Brazil to be one of the worst countries in terms of corruption, ranked 17<sup>th</sup> out of 22<sup>42</sup>, with Mexico in 20<sup>th</sup> place and the USA in 9<sup>th</sup>. The fact that in two surveys conducted by the same organization just two years apart Brazil was close to the bottom in one, and close to the top in another, reflects the difficulty of measuring this dimension. Regardless where it ranks in terms of corruption, the fact remains that it is an undesired side effect of bureaucracy (there are others), and it must be fought on all levels as it increases the degree of insecurity for doing business.

Excessive bureaucracy is also found in the complexity of opening a business in Brazil. Many state capitals have processes that include numerous steps and take a long time.

Decentralized procedures are often used to justify slowness, and the number of entities involved confirms this perception (see Exhibit 13).

Although this is a problem in most Brazilian cities, numerous initiatives have demonstrated there is room for improvement and the entire process of opening a new business can be made more agile. In the state of Minas Gerais, a joint effort by the state government and the boards of trade, known as the *Minas Fácil* program, made great strides in simplifying the process of opening a new business. This program created a single touch point between businesses and the public entities and boards of trade involved, it also implemented the use of online communication channels and integrated IT systems. Not only did this cut down the time it takes to open a business, but it also improved the reliability of the information contained in the databases (see Exhibit 14).

In addition to the complexity of opening a business, the cost of compliance with tax requirements in Brazil should also be addressed. In a survey that shows how many hours are required to calculate and pay similar taxes across the globe, Brazil, represented by São Paulo, is at the bottom of the list. It takes about five times as long to calculate and pay taxes here than in the next to last hub on the list (see Exhibit 15). The most complex tax for businesses

is ICMS (a value added tax). It is important to point out that this is not an issue for portfolio investors, as in this case the financial agent is responsible for calculating and paying taxes.

The three major factors that contribute to this issue - difficulty paying taxes in Brazil - are the large number of taxes, continuously changing tax legislation and the number and complexity of ancillary obligations. According to an Ernst&Young report<sup>43</sup>, a business operating in Brazil pays about twelve different kinds of taxes, whereas in other business hubs such as Singapore and Hong Kong this number drops to three and one respectively (see Exhibit 15).

In addition, the number of new taxes created each month in all spheres of government is hard to keep up with, not to mention the fact that the various requirements to calculate taxes such as ICMS add even more layers of complexity. It is important to note that for manufacturing industries and non financial service providers ICMS is the major issue, whereas for financial institutions the main issue is calculating ISS, PIS and COFINS (respectively municipal tax on services, unemployment social tax and social security financing contribution, often referred to as invoicing taxes). All three taxes have grey areas that lead to increased bureaucracy and overall uncertainty about the process.

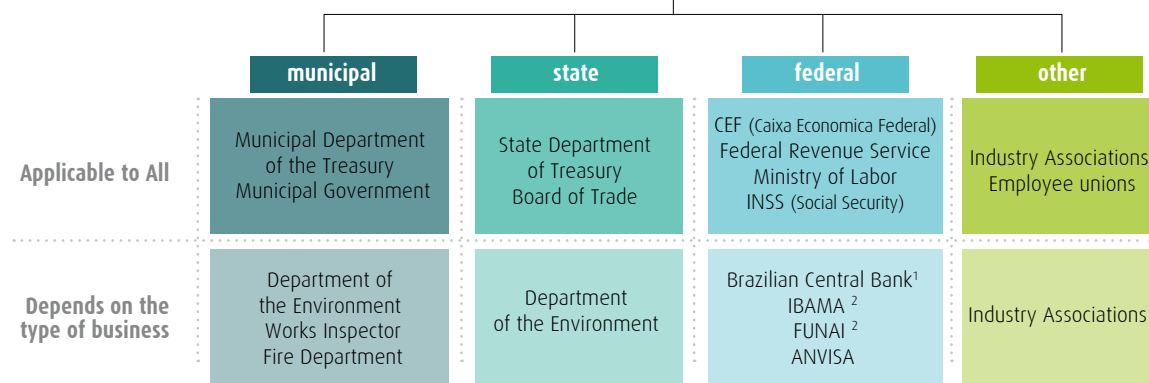
<sup>43</sup> Source: Worldwide Corporate Tax Guide 2009 - EY

### EXHIBIT 13

Opening a business involves several entities

A decentralized process is one of the problems most often mentioned

Entities involved in opening a new business in Brazil



“One simply cannot open a business by oneself in Brazil today. It would take six months.”

Attorney - Pinheiro Neto Advogados

“The process to open a new business is quite decentralized. A large number of government agencies is involved in the process and many of the exact same documents must be submitted to each one of them.”

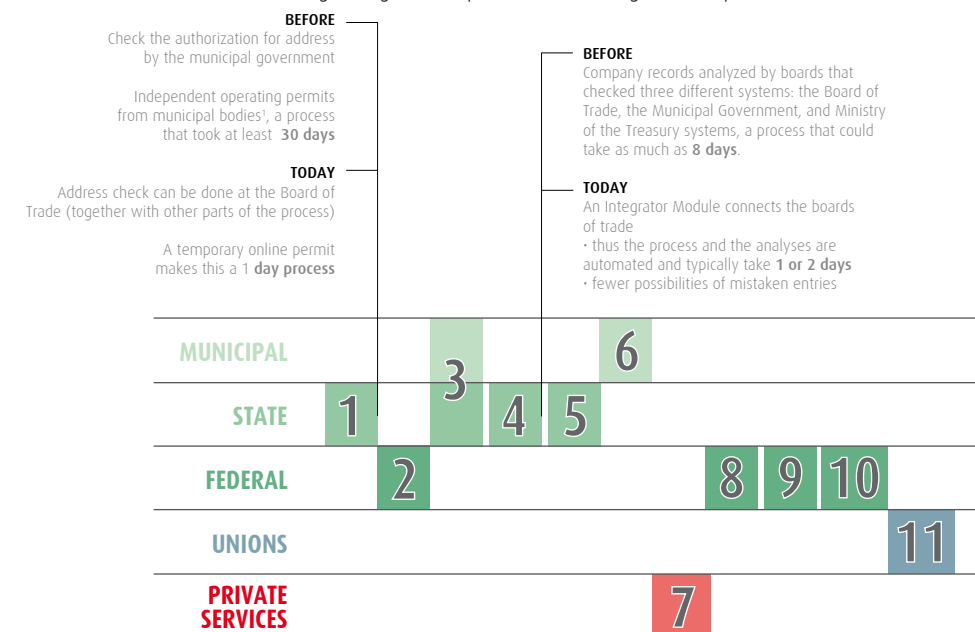
Legal Manager - Arab Banking Corporation Brasil

1. Foreign capital only 2. Applies only to businesses that will impact the environment  
Source: Doing Business - The World Bank; RFOR Advogados; BCG analysis

### EXHIBIT 14

Minas Gerais simplified the process to open businesses with a single touch point, integrated internal processes and online resources

The state of Minas Gerais has made progress by creating an interactive system with the municipal governments, organizing internal processes and using online capabilities

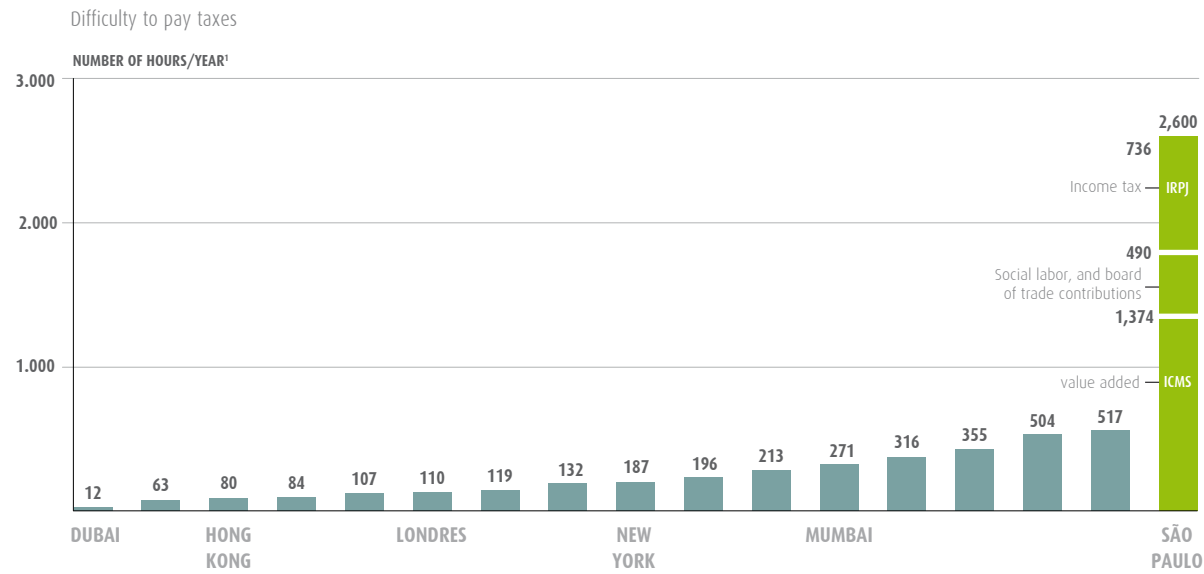


1. Required procedures and authorizations vary by municipal and are governed by the Land Occupancy Law. Government entities normally involved include the Department of the Environment, where one exists, the Works Inspector, Fire Department and Sanitary Vigilance  
Source: Doing Business - The World Bank; Interview with the *Minas Fácil* Project Director; BCG analysis

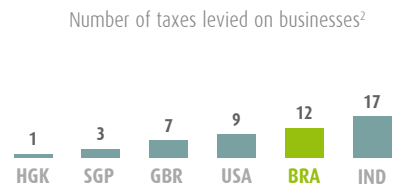
EXHIBIT 15

The complexity of paying taxes creates added cost to companies

The number of hours necessary to calculate and pay taxes is the highest in the world



MAJOR ISSUES:  
large number of taxes, changes in legislation and ancillary obligations



"For ICMS alone there are 7 required bookkeeping books."  
Clóvis Panzarini, tax expert<sup>4</sup>

1. Joint study with PwC based on an archetypical company in several countries 2. Total number of taxes described in the E&Y report 3. Average since 1988 4. Worked in the State of Sao Paulo Department of Treasury (for the past eight years has been the coordinator of tax administration); conceived and implemented PROMOCAT; was a special advisor to the 1988 Constitutional Assembly, and is also a tax consultant  
Source: Doing Business - The World Bank; Worldwide Corporate Tax Guide 2009 - E&Y; Brazilian Tax Planning Institute (IBPT); BCG analysis



The level of bureaucracy in Brazil today is nothing new, and over the past decades numerous initiatives have been taken to improve the country's situation, with some success. These initiatives include the creation of ENAP, the National School of Public Management, whose purpose is to develop competences in civil servants and improve the quality of public services, the National Program to Support Fiscal Administration in Brazilian States (PNAFE), which focuses on improving tax issues, and the Competitive Brazil Movement (MBC), an entity that, among other responsibilities, has programs to modernize public administration. In addition to these initiatives, increased use of digital technologies has contributed to speedier interaction between public and private enterprise, an example of which would be the SPED – the Government System of Digital Bookkeeping.

An example of a world reference would be the United Kingdom's *Better Regulation Executive*, an organization dedicated exclusively to driving through a program of activities to simplify regulation. Among them are improved information flows between public entities, a reduction in the number of registrations required and engaging civil servants in understanding public services and processes so as to disseminate best practices.

Another very important element to doing business in a country is the flexibility of its labor market. Brazil has one of the least flexible labor markets in the world, well behind Chile and the USA, for example, especially when it comes to hiring (see Exhibit 16). On the other hand, when it comes to letting people go, Brazil does not do badly. Care should be taken, however, lest this position be weakened (for example the possibility that ILO Convention 158 may be adopted<sup>44</sup>), so as to continue to be able to efficiently allocate people and pursue business.

Even though Brazil faces significant challenges in dealing with its bureaucracy, it is important to recognize past efforts, solidify current initiatives and follow the example set by successful business hubs. *Instituto Hélio Beltrão*, for instance, is a think tank about bureaucracy in Brazil, addressing several fronts such as support for the debureaucratization program, thoughts and analyses on the theme, seminars on the topic and suggestions submitted to the government, including some on how to debottleneck the courts. The institute is an independent organization and operates with no government support whatsoever.

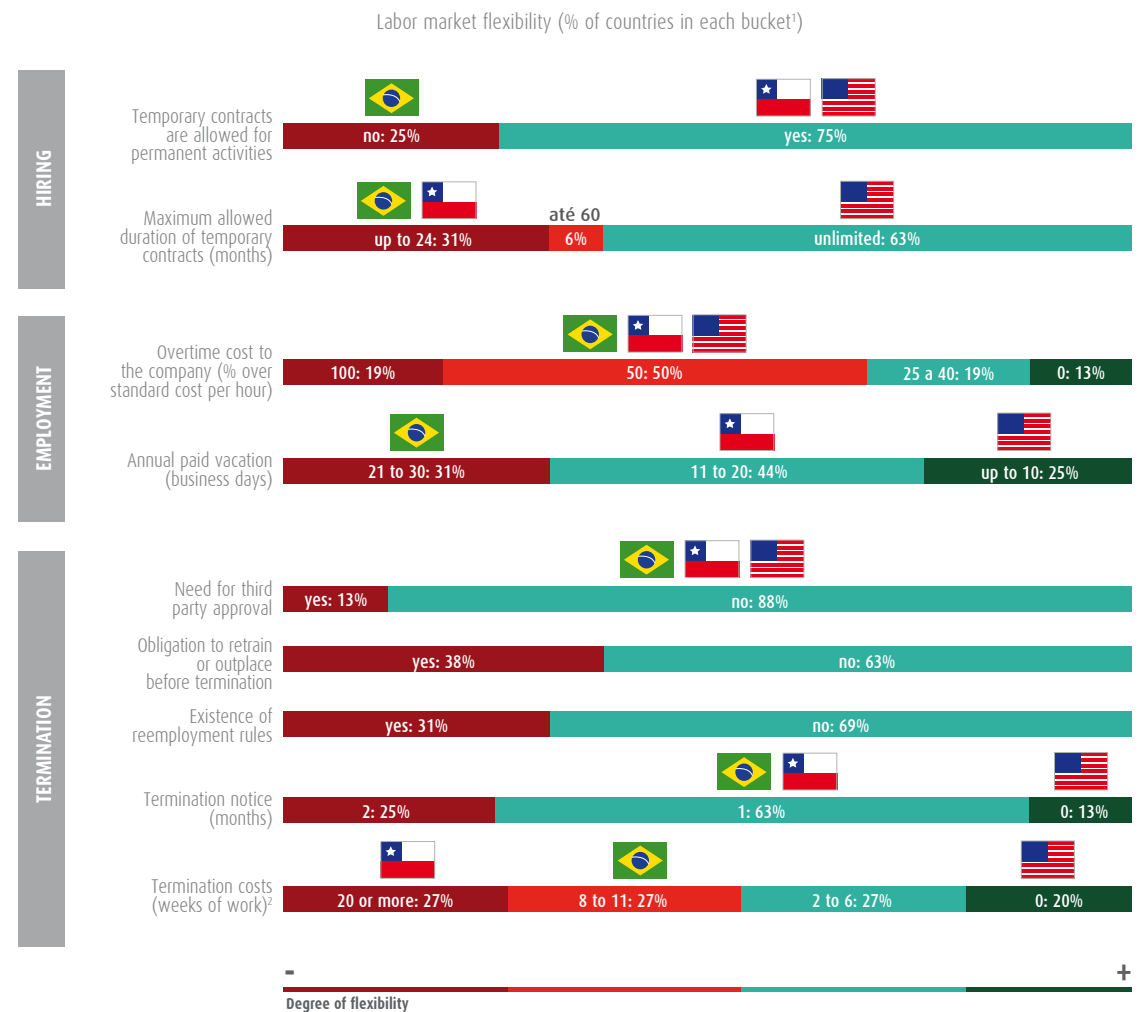
**Indicators**

The following dimensions were selected to assess the institutional environment pillar:

- **Political stability:** Normally the political situation has a major impact on the attractiveness of a country. Thus a country that is more stable and democratic, more free of political violence, will be more attractive;
- **Quality of regulations:** This indicator measures how clear a country's regulations are, and if there are clearly defined and understood roles for the regulators, with delegation of powers as needed;
- **Legal security:** This attempts to measure the certainty that the country's laws will be upheld; in other words, it measures the effectiveness of the nation's laws and rules. There is a direct relationship between legal insecurity and the cost to do busi-

<sup>44</sup> International Labor Organization Convention 158 makes the termination process more rigid and bureaucratic. If adopted its requirements include written justification as to why the employee is being let go submitted to the relevant authorities, the right to appeal the decision, the inclusion of unions in individual termination decisions, lawsuits in the event of disagreements. Only 35 of the 183 ILO member states have ratified the convention and only six of them are developed nations (Australia, Finland, Luxembourg, Portugal and Spain). Source: ILO

**EXHIBIT 16**  
Compared to other countries, Brazil does not score well in the flexibility of its job market



1. Countries included in the assessment: Brazil, Mexico, Chile, USA, United Kingdom, France, Germany, Singapore, Hong Kong, China, Japan, India, Russia, South Korea, Australia and Canada 2. Based on employees with at least 5 years tenure Source: Doing Business 2011 – The World Bank; BCG analysis

ness resulting from judicial disputes, dubious contract interpretation and the duration of lawsuits;

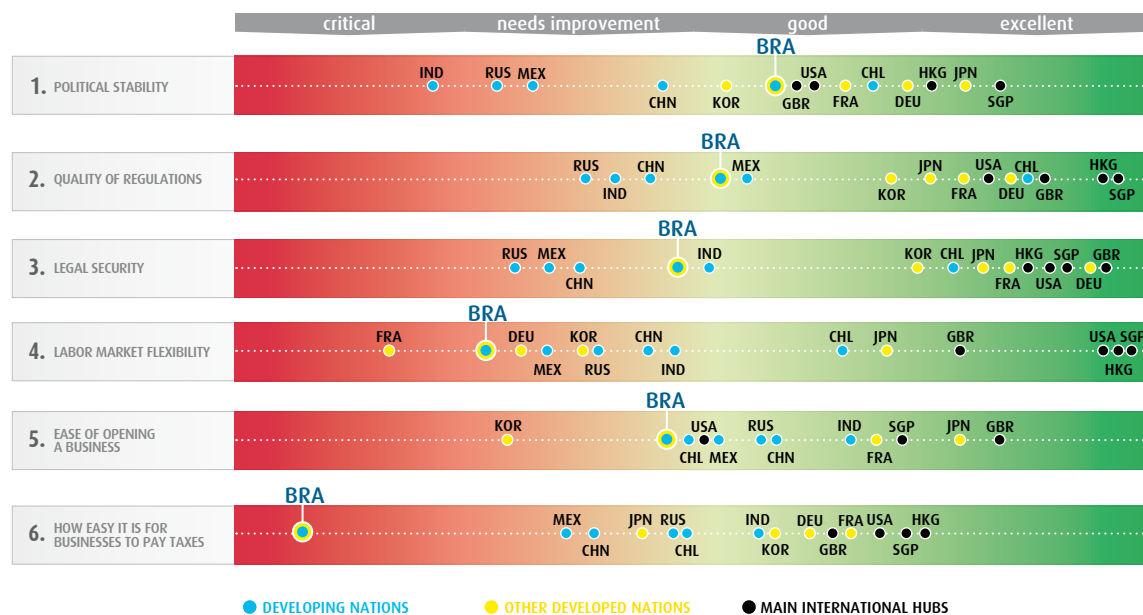
• **Labor market flexibility:** Hubs located in countries with flexible labor markets tend to be more dynamic, as labor supply and demand can quickly adjust and come into balance. For this to happen, companies must be able to quickly hire and fire at relatively low cost. In addition, flexible models, such as the possibility of contracting hourly employees, make a business hub more attractive;

• **Ease of opening a business:** This illustrates part of the bureaucracy of doing business in a country and takes into consideration not only the bureaucratic complexity of opening a business, but also the time required;

• **How easy it is for businesses to pay taxes:** This indicator calculates the hours required to pay value added taxes, taxes on industrial profit and income taxes for an archetypical company operating in different countries. Clearly the easier it is to pay taxes the less time is involved and the lower the cost to the business, thus reducing the level of exposure to involuntary non compliance.

The following exhibit shows how Brazil compares to other countries along the indicators in the institutional environment pillar:

The dimensions of this pillar reflect the fact that, although Brazil is a mature, politically stable democracy with little political violence, there are other dimensions it can





## THE COUNTRY FACES SERIOUS PROBLEMS WITH ITS LEGAL SYSTEM; ITS LAWS ARE NEITHER CONSTANT NOR CLEAR, AND IT MUST CONTINUOUSLY FIGHT EXCESSIVE BUREAUCRACY

improve to enhance its attractiveness. The quality of its regulations and its legal security are viewed as only fair, whereas the conditions that directly impact business development need improvement, such as the limited flexibility of its labor market, the difficulty of opening a business and the time it takes to pay taxes.

### Conclusion

A country's institutional environment is a determinant of the degree of economic development it can achieve, and thus of its attractiveness as a hub. Brazil has consolidated itself as a strong democracy and will continue to advance in the use of its political system to improve the country as a whole, minimizing party influences on policies that should be enduring State policies.

The Brazilian legal system faces a number of important problems. The instability and lack of clarity of its laws must be addressed, which requires the combined effort of all those involved in the country's legislative processes. At the same time, it must continue to implement improvements in its judiciary system so as to reduce insecurity, accelerate the resolution of lawsuits and other cases and improve dispute resolution in general.

Lastly, bureaucracy must be vigorously attacked. It is important to consider each of the aspects that affect business in the country separately, such as the payment of taxes and the opening of new businesses, and then actively pursue solutions. Something else that is very important is that Brazil modernizes its labor laws. More than this, however, the State must transform its mindset so that it truly becomes a provider of services to businesses and citizens, viewing them as its clients. Measures such as those suggested above can impart a new energy to doing business in Brazil, and promote even more the country as an attractive global investment and business hub.



# 03

## TALENT AND HUMAN CAPITAL

A business hub is based on several activities that support the economic interaction of the various agents. By its very nature, creating an investment and business hub necessarily requires that there be a structured, well developed talent pool that businesses can use as a source of manpower, and the technical knowledge required to perform all hub related activities.

Because it is based on a service based economy, such hub has an even greater demand for talent, as service companies demand the highest levels of qualification. In Brazil, 67% of those employed in the service sector have at least the equivalent of a secondary school education, and 25% have university degrees. In other sectors of the economy these percentages are only 43% and 9% respectively<sup>45</sup>.

The importance of talent has been reinforced as businesses demonstrate increased concern with access to a secure source of labor. A joint report by The Boston Consulting Group (BCG) and the World Federation of People Management Associations (WF-PMA)<sup>46</sup> revealed that some 24%<sup>47</sup> of the world's businesses would consider relocating in search of talent, a trend that follows the perception that talent will be an increasing scarce asset over the coming years.

The following section explores the current situation regarding talent in Brazil, along with opportunities the country has to solidify its talent pool so that it may successfully create a business hub. This analysis is based on the three main elements that go into creating a talent pool: demographics, education and training, and mobility.

Although Brazil has solid and positive demographics, its talent pool does not fare well when compared to other countries. On the contrary, Brazil ranks 25<sup>th</sup> out of 30 countries in the Heidrick & Struggles Global Talent Index<sup>48</sup> (see Exhibit 17). In addition, according to a survey published by HR consulting firm ManPower<sup>49</sup>, Brazil is next to last on a list of employer difficulty in hiring staff by country. These difficulties are due mostly to gaps in education and training, and mobility.

<sup>45</sup> Data refers to total formally employed in Brazil at the end of 1009. Source: RAIS-CAGED

<sup>46</sup> Source: World Federation of People Management Associations: Creating People Advantage: How to Address HR Challenges Worldwide through 2015

<sup>47</sup> Simple average of the percentages in the different regions

<sup>48</sup> Source: Heidrick & Struggles Global Talent Index

<sup>49</sup> Source: ManPower 2010 Talent Shortage Report

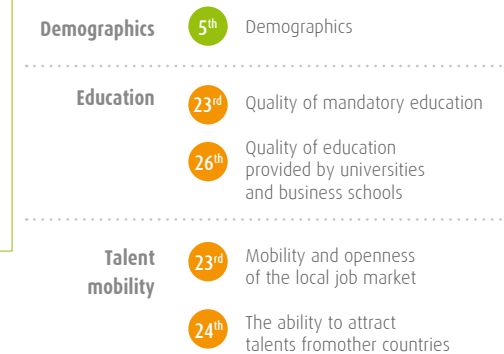
### Brazil ranks 25<sup>th</sup> out of 30 countries in the 2012 Global Talent Index

1. USA	16. Italy
2. United Kingdom	17. Ukraine
3. Canada	18. Russia
4. Netherlands	19. Mexico
5. Sweden	20. Greece
6. China	21. Argentina
7. Germany	22. Thailand
8. Australia	23. South Africa
9. France	24. Egypt
10. India	25. <b>Brazil</b>
11. Spain	26. Turkey
12. Malaysia	27. Saudi Arabia
13. South Korea	28. Nigeria
14. Japan	29. Indonesia
15. Poland	30. Iran

## EXHIBIT 17

Brazil's talent pool is rated 25<sup>th</sup> in a list of 30 countries

### The main gaps in Brazil are education and talent mobility



Note: In addition to the items listed, the ranking also takes into account the "Quality of the environment to generate and develop talents", where Brazil is ranked 19<sup>th</sup>, and the "Ability to attract foreign direct investment", where Brazil is ranked 18<sup>th</sup>.

Source: Global Talent Index Heidrick & Struggles

### Demographics

Demographics is the greater pool from whence a group of educated and trained talents may emerge, the size of the Economically Active Population (EAP) determines the raw material available for educating and training a country's labor force.

Demographically, Brazil has a significant structural advantage in that it is the largest economy in the world whose EAP grows sufficiently to cover the expected increase in the demand for labor<sup>50</sup>. A study published in early 2010 by BCG and the World Economic Forum (WEF)<sup>51</sup> reveals that in all economies larger than Brazil - the USA, China, Japan, Germany, France and the United Kingdom - the demand for labor will outpace supply (see Exhibit 18).

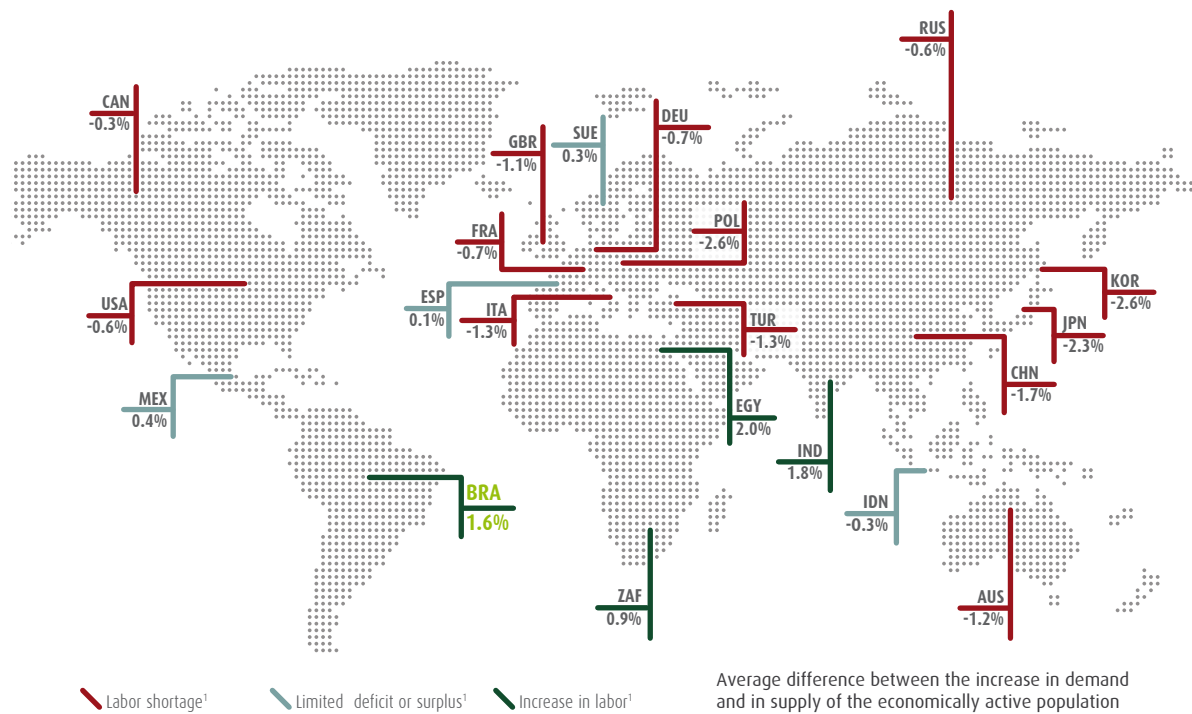
Given the outlook of a talent shortage, something already experienced by countries where the population has aged faster, businesses have stated they plan to depend less on local recruiting while expanding their international recruiting efforts. Many

<sup>50</sup> Supply and demand analyzed under demographics are merely quantitative, i.e. qualification is not considered

<sup>51</sup> Source: Stimulating Economies through Fostering Talent Mobility

EXHIBIT 18

Brazil is the world's largest economy that will have a surplus of economically active population (EAP)



1. The values presented are the result of calculating the annual increase in the demand for labor minus the annual growth of the economically active population. Average of economic scenarios including and excluding the effects of the financial crisis. Annual growth figures calculated between 2010 and 2020  
 Note: based solely on a quantitative analysis and does not reflect qualitative factors (e.g.: qualification)  
 Source: Stimulating Economies through Fostering Talent Mobility by BCG & WEF

would even be willing to relocate in search of a larger or better qualified talent pool (see Exhibit 19).

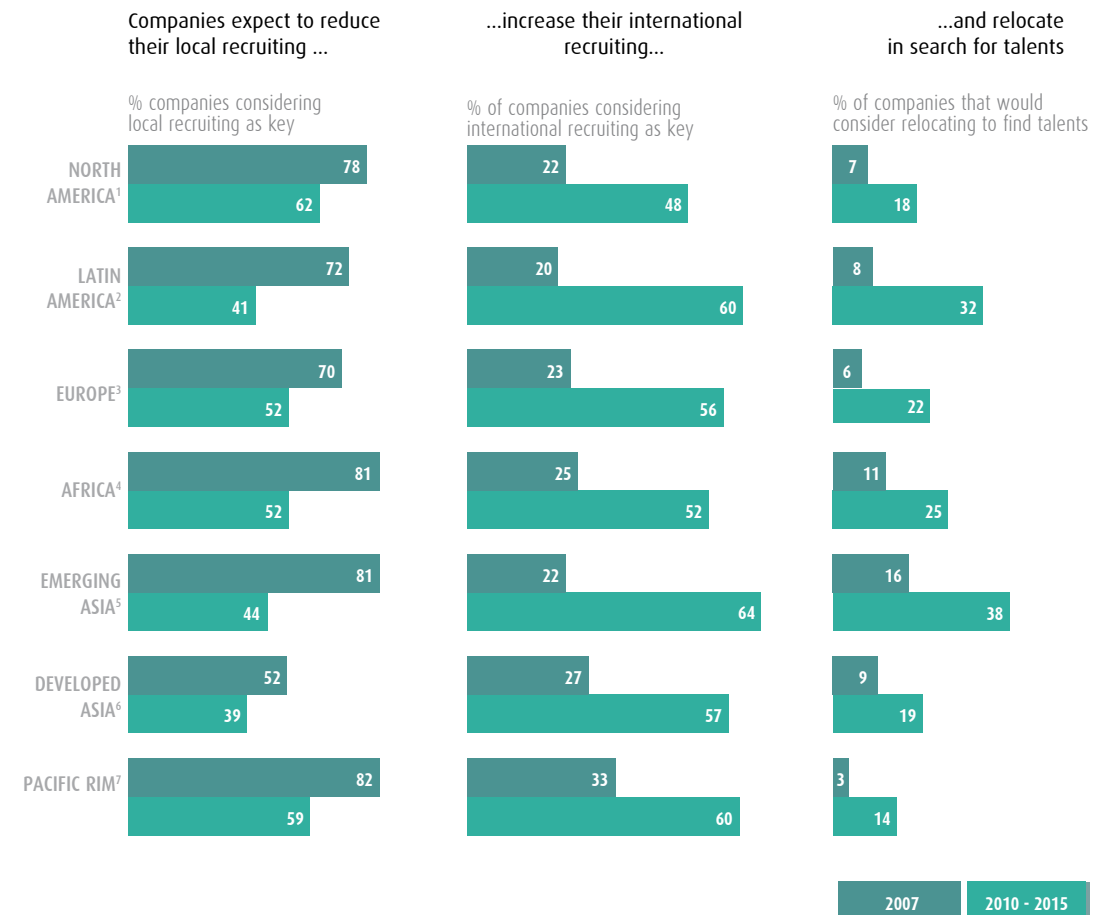
Starting from a demographic base that is not only favorable but unusual among large economies, Brazil has the capacity to attract businesses and make its talent pool one of the differentials offered by its business hub. However, this does not mean merely having enough people, the country must also ensure it is strong in the other two dimensions: education and training, and mobility. If it does not, the Brazilian talent pool may actually have the opposite effect: local businesses may find there is no talent as skilled people migrate abroad, attracted by companies expanding their international recruiting efforts.

QUALITY EDUCATION - PRIMARY, SECONDARY AND HIGHER - THAT HAS A SUITABLE INTERNATIONAL COMPONENT AND IS ALIGNED WITH MARKET DEMANDS IS NEEDED, ALONG WITH A FOCUS ON RESEARCH AND DEVELOPMENT



EXHIBIT 19

The search for talent will mold corporate strategy



1. USA and Canada 2. Brazil, Argentina and Chile 3. Germany, France, Russia, United Kingdom, Italy, Czech Republic, Denmark, Spain, Ireland, Netherlands, Switzerland, Belgium  
 4. South Africa 5. China and India 6. Singapore, Japan and South Korea 7. Australia  
 Source: BCG People Advantage Report - 2008 and 2010

### Education and training

A broad based education, which forms the basis upon which talents are developed and trained, is something recent in Brazil and, while important strides have been made, there remains significant room to improve the quantity, quality and alignment of the country's talents with the needs of the domestic and international markets.

Organized education in Brazil came rather late. It was not until 1930 that the Ministry of Education was created, making basic education compulsory, something the USA and Europe had already done in the 19<sup>th</sup> Century. Since then, education in the country has evolved a great deal; the schooling rate went from 9% to 86%, the literacy rate from 30% to 90% and the number of children enrolled in primary and secondary education increased from one million to 42 million.

Currently the net enrollment rate<sup>52</sup> in primary school in Brazil is 93%<sup>53</sup>, higher than the global average and very close to being universal. The net enrollment rate in secondary schools is 77%<sup>53</sup>, above the world average but far from universal. When it comes to higher education the enrollment rate in Brazil drops to 30%, lower than the world average of 38%<sup>53</sup>. Clearly the quantitative gaps in Brazil are at the secondary and higher education (university) levels (see Exhibit 20).

The gaps in education in Brazil are much larger in the quality dimension than in the quantity dimension. Although improving, Brazil's<sup>54</sup> PISA scores are still among the lowest. Looking at Brazil alone, the average *Prova Brasil*/*SAEB*<sup>55</sup> score of students in the public school system is at the lower end of the expected range in the basic education years, and below the range in the secondary school years (see Exhibit 21).

<sup>52</sup> Enrollment rate calculated based on the number of school aged children. According to Unesco, gross en-rollment in primary school in Brazil was 130% in 2007.

<sup>53</sup> Source: UNESCO - 2007 data.

<sup>54</sup> Source: Program for International Student Assessment: a test periodically applied by the OECD to 15 year olds in 65 countries.

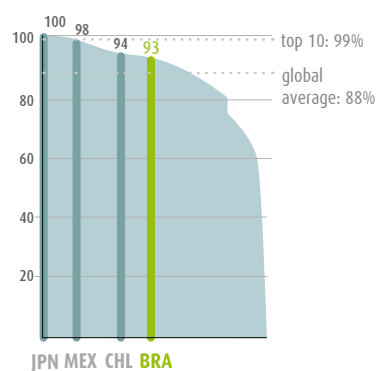
<sup>55</sup> Average scores in Math and Portuguese. SAEB (System to Assess Primary education) up to 2005, and the Prova Brasil (Brazil Test) applied to children enrolled in public school between 2005 and 2009. Data refers to the last year in each teaching cycle.

### EXHIBIT 20

Primary education is almost universal, but Brazil still has challenges to overcome, especially in secondary and higher education

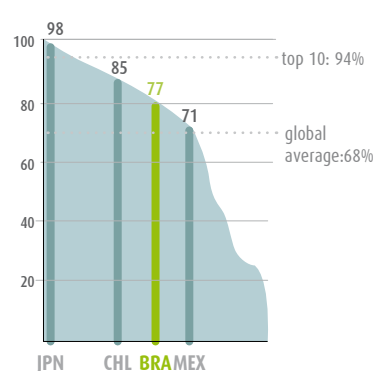
#### Primary education

Net enrolment rate<sup>1</sup> among school aged children - % in 2007



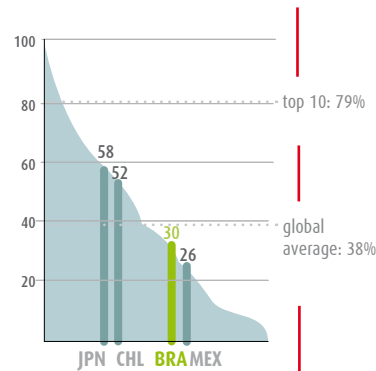
#### Secondary education

Net enrolment rate<sup>1</sup> among school aged children - % in 2007



#### Higher education

Total enrolment rate<sup>2</sup> among school aged children - % in 2007

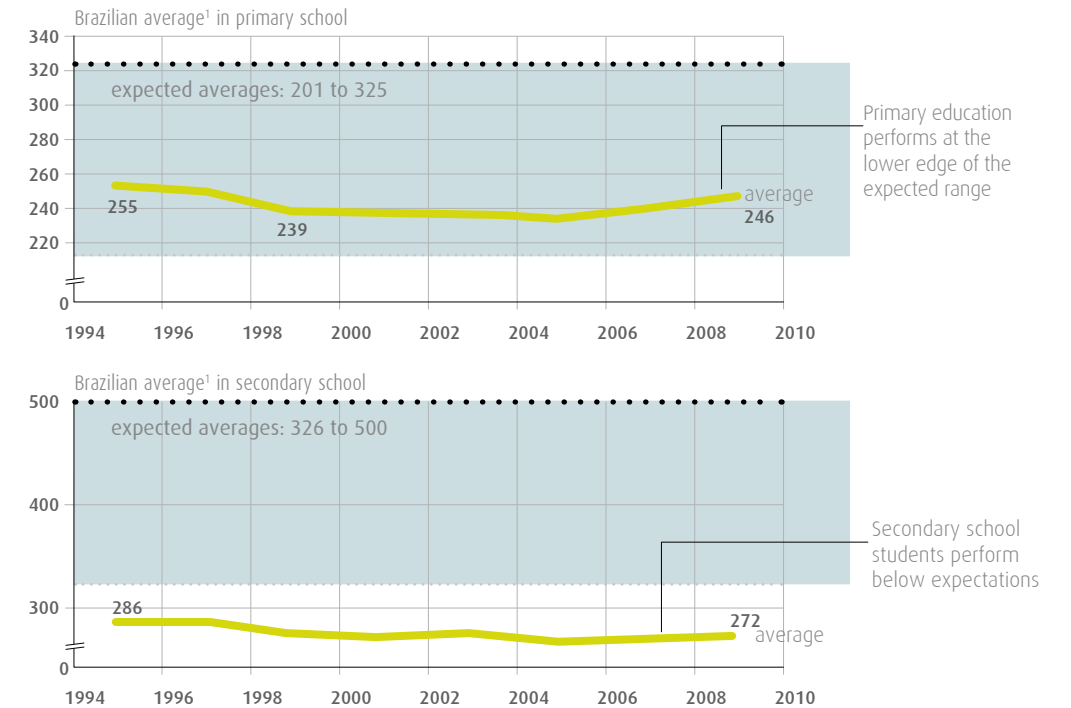


1. Does not include children held back a grade and individuals not of school age. 2. Includes children held back a grade and individuals not of school age  
Note: Primary education is defined as the first five years of schooling. Secondary education is defined as grades 6 through 9 and secondary school. Tertiary education includes technical and university education  
Source: UNESCO; BCG analysis

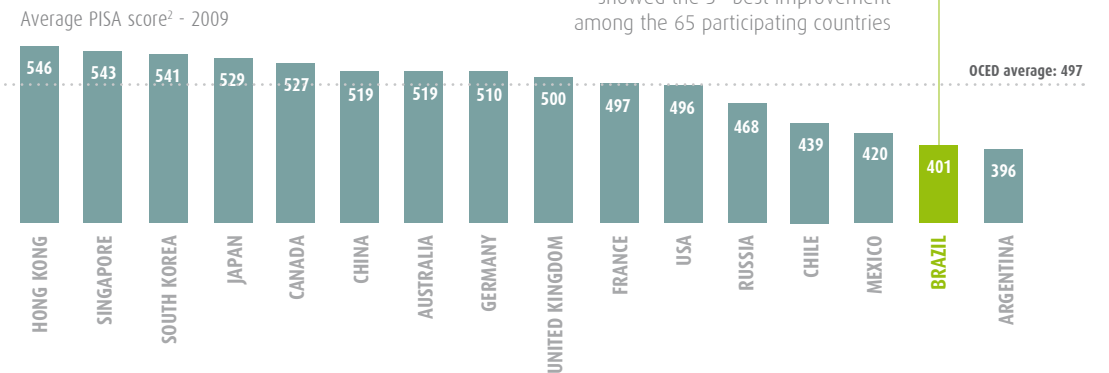
### EXHIBIT 21

The quality of the primary education in Brazil is critical

#### The performance of Brazil's primary and secondary education is poor



#### Brazil performed poorly in the international PISA exam



1. Average scores in Math and Portuguese. SAEB (System to Assess Primary education) up to 2005, and the *Prova Brasil* applied to children enrolled in public school between 2005 and 2009. Data refers to the last year in each teaching cycle. 2. Program for International Student Assessment - OECD applied to 65 countries in 2009 - OECD + guests.  
Source: *A Ignorância custa um mundo* (Ignorance costs a world) by Gustavo Ioschpe; Brazilian Ministry of Education; OECD; IMD; BCG analysis

Another area where Brazil leaves to be desired is the alignment between what its colleges and universities teach and what the market needs or wants. Brazil is the fifth worst of 58 countries in this regard, based on an IMD survey of executives<sup>56</sup>. An illustration of the extent of this misalignment is the Brazilian Bar Exam (OAB) approval rate: Fewer than 25% of the people who graduated from law school pass the exam in Rio de Janeiro and São Paulo, compared to 76% in Paris and 46% in New York, both with similar bar exams.

A third gap in the formation of Brazilian talents is their international experience. The alignment of the country's foreign language education and its international flow of students are below international averages (see Exhibit 22).

Initiatives underway show the possible pathways for improving primary education in the country, and these should be extended to education as a whole. Government initiatives such as compulsory secondary education as of 2016 (see Box C), FUNDEB, which ensures minimum funds for basic education, and "Prova Brasil", created to evaluate the quality of public education nationwide may, if properly designed, managed and sized, significantly improve the situation of education in Brazil.

At the same time, numerous other entities also contribute to improving the quality of education in the country, such as "Movimento Todos Pela Educação" (Everybody for Education Movement), the Ayrton Senna and Unibanco Institutes, the Bradesco Foundation and the "Amigos da Escola" (Friends of School) Project, as well as numerous other NGOs (non-governmental organizations) and institutes. The fact that Brazil has entered the demographic dividend phase means the school age population is no longer growing, thus reducing the pressure for investments in new schools or more education, and enabling a greater focus on better education. Brazil has a window of opportunity and the tools to improve the basic training it offers its citizens. It must now diligently pursue the proper strategy.

There are also a number of public and private initiatives underway to improve the quality of university level education and professional and vocational training. In São Paulo, over 199 thousand students are enrolled in *Centro Paula Souza*, an institution that manages technical schools run by the state government and considered a reference for education that is aligned with the needs of the market. The federal government has also taken steps to increase the number of openings in public technical schools and universities, opening new schools and also using a scholarship system that allows students to go to private schools. These programs are known as PRONATEC (technical education) and PROUNI (university education) (see Box C). In the private sector, companies such as Totvs, a Brazilian company, and Infosys, based in India, have moved closer to academia, contributing with lectures and structure for higher education. These companies see in this collaboration a chance to train students with the knowledge and skills their businesses need. Initiatives such as these should be expanded as they accelerate the creation of a pool of qualified people which the Brazilian business hub needs.

Brazil also lags behind in terms of the international dimension of the education it offers. In foreign language education, the government of Rio de Janeiro increased the number of years English and Spanish are required, anticipating the international sports events of 2014 and 2016. Also with these events in mind the Union of Independent Professionals in São Paulo has started to teach English to its members (e.g.: taxi drivers).

In terms of making education in Brazil more international, several of the country's colleges and universities, both public and private, are seeking international partnerships for student exchange. Erasmus, the European international student association is an example of an initiative that could create increased international integration of Brazilian students, especially within Latin America. Still on this topic, AIESE is an international organization present in Brazil, which provides students and recent graduates with the

<sup>56</sup> Source: International Institute for Management Development (IMD) Executive Opinion Survey.

## EXHIBIT 22

The international dimension of talent education in Brazil is limited and does not meet market needs



opportunity to work abroad as a form of complementing their education. These and other initiatives point the way, yet further effort along these lines is required to consolidate and promote excellence in Brazil's talents.

### BOX C

#### Government contributions to improve secondary, technical and higher education

Brazil is in a unique moment to enhance its secondary, technical and higher education levels.

- Primary education is almost universal and will enable focusing attention on the higher levels;
- More educated parents have contributed to increased awareness of the importance of higher education, even among the lower income segments of the population. As a result, almost 70% of Class C have more years of schooling than their parents;
- Secondary school education will be mandatory as of 2016, which will kick off discussions and actions to ensure there are openings for all of Brazil's young people;
- Businesses and the government are increasingly aware of the impact that a shortage of qualified talents has on the economy and are starting to take action, both alone and in concert, to increase the qualification of the economically active population in Brazil.

In response to the opportunity that presents itself, a number of important steps have been taken in the public sphere, and contributed to progress in this area:

- The government is talking about expanding secondary school education as it becomes compulsory in 2016, using a model that would combine it with technical education. To this end it must expand its network of technical schools and count on the entities of the so-called "Sistema S"<sup>6</sup>, focusing on the segments that maintain it;
  - PRONATEC (National Program to Foster Access to Technical School) was announced by the federal government early in 2011, and will give underprivileged technical students scholarships and stipends to attend private schools;
  - PROUNI (University Education for All), was created by the Federal government in 2004, and provides full and partial scholarships for students in households with income of less than three times the minimum wage so that they may attend private university. The program was responsible for more than 164 thousand scholarships in the first half of 2010.

The progress achieved by these public initiatives shows the path to be followed to improve and increase secondary, technical and higher education in Brazil, but it is not enough. The path to follow must be expanded and intensified.

<sup>6</sup>Private organizations created by different sectors in the economy (industry, trade, services, etc.) to train their workers, among other activities. They are: SENAI, SENAC, SESC, SENAR, SENAT, SEST, SEBRAE and SESCOOP

### Talent mobility

Talent mobility includes both foreign professionals coming to Brazil and Brazilian talents sent abroad for work or other activities. Such movements should become more



frequent as globalization progresses and the shortage of talent in the world's larger nations becomes more evident. Both movements, also known as brain gain and brain drain respectively, have advantages and disadvantages for a country but, if well managed, can lead to a quite positive overall balance.

The theme of international professionals coming to Brazil to work normally brings with it the preconceived and negative notion that these people are taking away jobs that rightfully belong to Brazilians. However, this type of immigration can be used to bring people with qualifications that may not exist in Brazil in the short term or, in other words, to cover temporary gaps in supply. The arrival of foreigners also has advantages in terms of increasing the amount of technical knowledge on new topics and issues of internationalization, and also contributes to improving Brazil's image abroad.

The departure of talents from Brazil in search of job opportunities abroad means fewer qualified people to fill positions in Brazil. While oftentimes unavoidable, this is something that can be managed and its impact mitigated by creating a domestic economy that will attract the country's talents and capture its benefits. Brazilian expatriates may also return to Brazil and bring with them knowledge and resources that will contribute to the country's development and enhance the image of Brazil abroad.

Brazil is not well positioned when it comes to attracting international talents or managing Brazilian talents abroad. Brazilian laws and the very image of the country do not favor the entry of foreign workers; its visa legislation is complex and the process to obtain documents is lengthy and costly, forcing companies in Brazil to keep positions open for a long time when there are no local resources qualified to fulfill them and they are unable to bring workers from abroad. Attracting international talent is therefore not something the Brazilian government uses effectively as a tool to develop the national talent pool.

In spite of its poor position on the talent attraction scale, Brazil is making progress and is starting to position itself as a potential destination for research and development professionals, for instance. The advantages of research funding and Brazil's leadership position in specific areas such as tropical medicine, bioenergy and plant biology have attracted international researchers. Along these same lines, large corporations such as General Electric, IBM and L'Oreal are building research and development centers in Brazil.

Brazil also does not perform well when it comes to managing its expatriates, of which there are more than three million. For example, there is no organized network to keep in touch with them and make sure they retain a link with their country of origin, which would increase the likelihood that they might return or invest in Brazil.

Countries such as Australia, Canada and the UK are successful examples of strategically attracting talent to build a national talent pool. Australia, for example, has programs to attract talents that include easier visas for all sorts of professionals for which there is a shortage. The list of required workers is continuously updated and available to the public. Canada and the United Kingdom have a points system for work visas, which balances the expertise of immigrants with what the country needs. In the case of Brazil, this would require mapping the short term gaps, proactively attracting the professionals it needs, and making the immigration process faster and simpler to enable bringing in professionals to close the gap.

To manage its brain drain Brazil could follow the example of India and Chile. Both of these countries have official networks that stay in touch with their expatriates and have reaped the benefits of returning expatriates and the investments they make.



## THE COUNTRY'S DEMOGRAPHIC ADVANTAGES CANNOT MAKE UP FOR THE NEED TO IMPROVE EDUCATION AND TRAINING, AND TALENT MOBILITY, TRANSFORMING TODAY'S POTENTIAL INTO TRUE GAINS FOR THE NATION

Historically, Brazil has always strived to protect its workforce, and does not perform well when it comes to managing people mobility, a key element for creating a strong talent pool. It is therefore necessary to kick off a national effort to secure progress in this direction.

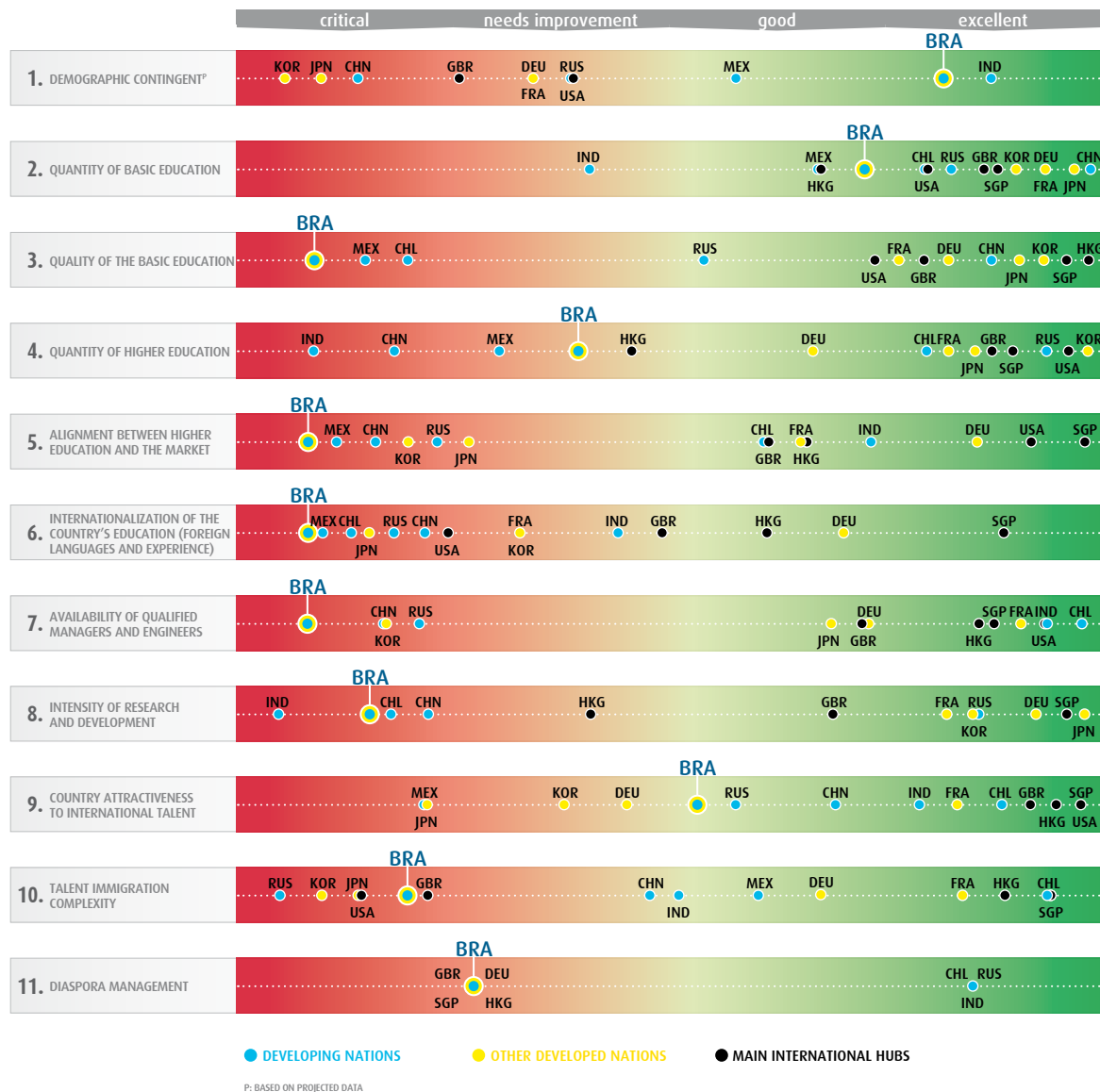
### Indicators

The dimensions selected to assess the talent and human capital pillar are:

- **Demographic contingent:** This is an estimate of the economically active population (EAP) compared to expected demand for labor in each country. This indicator will reveal if there are enough people (human raw material) to build a talent pool – the larger the surplus increase in the EAP compared to the expected demand for professionals, the better it will be for a hub;
- **Quantity of basic education:** This measures the initial level of qualification of a country's talent pool or, in other words, if everyone gets a primary education;
- **Quality of the basic education:** Education has no value if it is not a quality education. Therefore this indicator tries to measure the quality of the basic education offered;
- **Quantity of higher education:** This measures the next level in the qualification of the country's talent pool in the form of the enrollment rate in colleges and universities;
- **Alignment between higher education and the market:** This measures the extent to which the content of higher education, both technical and university, is aligned with what the market demands of professionals. The greater the degree of alignment, the more attractive the country;
- **Internationalization of the country's education (foreign languages and experience):** This indicator measures two components that go into making an education international – exchange between nations, and the alignment between the teaching of foreign languages and the needs of the market. A more international education and training will result in a talent pool that is better prepared and qualified to serve the needs of an international hub;
- **Availability of qualified managers and engineers:** This indicator measures if there are enough qualified managers and engineers, two types of professionals that businesses thinking of establishing themselves in the country will require;
- **Intensity of Research and Development:** This measures how much research and development is done in the country, and is also linked to creating intellectual capital, which in itself helps make a hub attractive. This is measured by the number of people working in research and development as a percentage of the total population;
- **Country attractiveness to international talent:** This indicator reveals the perception of executives in each country and is based on the results of a survey of how attractive the country is to international professionals;
- **Talent immigration complexity:** This measures how easy or difficult it is for foreign professionals to enter the country, bringing international knowledge and experience to the country, and also filling temporary gaps in specific qualifications within the domestic talent pool;

• **Diaspora management:** This shows if there are measures in place to manage the country's citizens dispersed throughout the world. For a hub, managing the diaspora is key, as expatriates are potential talents who could return to the country or promote their country of origin in the markets in which they are working.

The following exhibit shows how Brazil compares to other countries along the indicators of the talent and human capital pillar:



These indicators show Brazil in a relatively positive situation in terms of the availability of people for its talent pool and a satisfactory rate of enrollment in primary education. At the same time, it points out the numerous challenges the nation faces along all other dimensions, where Brazil is mostly rated critical or needs development.

**Conclusion**

The Brazilian talent pool, which is key for creating a business hub in Brazil, has a demographic advantage over other large nations. However, there are opportunities in improving the education and training of this pool and the mobility of its talents to transform what is today a potential into a true competitive advantage for the nation going forward.

The initiatives required are not unfamiliar; most of them already exist in Brazil and need only be improved and expanded to have the desired effect. Another component, especially regarding talent mobility, may be organized based on international examples. In addition, an initiative currently lacking could help improve the performance of the Brazilian talent pool: following the example of the United Kingdom and Australia, Brazil could create a body to coordinate the activities and track the development of the local talent pool. In the United Kingdom, the Sector Skills Councils are public-private organizations that map current and future domestic talent gaps, and take measures to close them, such as training talents in the areas desired or attracting international talents to fill the gap.

It is entirely possible for Brazil to transform its talent pool into a magnet for a business hub. Reaching this objective requires strategic planning and implementation of activities across all sectors of the economy, involving both public and private enterprise.



**TALENT MOBILITY MIGHT BE BASED ON INTERNATIONAL EXAMPLES. AN ENTITY TO COORDINATE THE ACTIVITIES OF BRAZILIAN TALENTS AND MONITOR THEIR DEVELOPMENT COULD BE CREATED**

# 04 PHYSICAL INFRASTRUCTURE

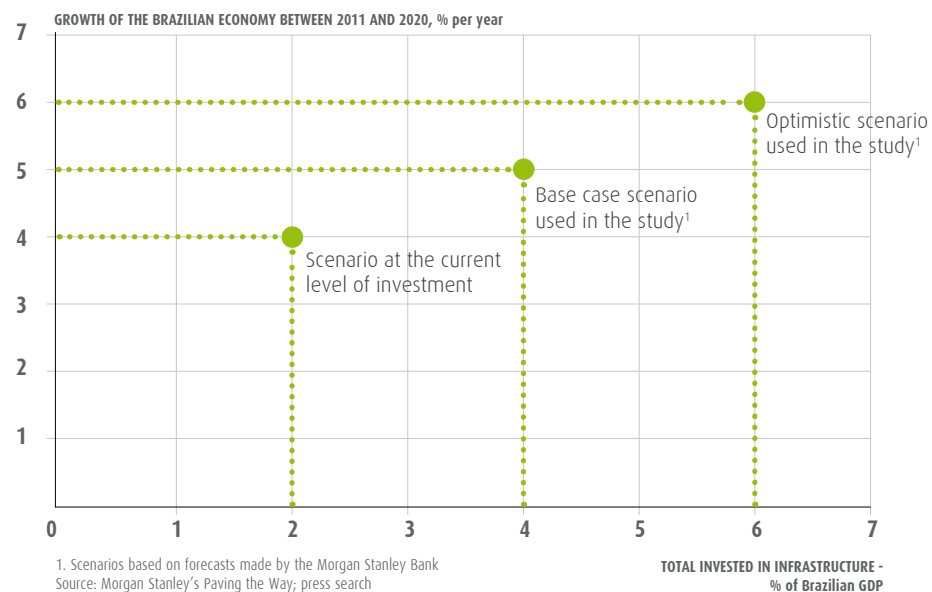
A well developed physical infrastructure is essential for creating a hub. In the specific case of Brazil, because of its current stage of development it is critical that it invests in infrastructure. Economists believe that every additional two percentage points in infrastructure investments will add one percentage point to the growth of a country's GDP (see Exhibit 23).

## EXHIBIT 23

Investments in physical infrastructure increase the growth potential of Brazil's economy

### Infrastructure has a measurable impact on Brazil's economic growth

Projected growth scenarios for Brazil's economy between 2011 and 2020<sup>1</sup> vary based on how much is invested in the country's infrastructure



THIS PILLAR INCLUDES URBAN MOBILITY, QUALITY OF AIR TRANSPORT, THE QUALITY AND COST OF TELECOMMUNICATIONS, POWER AVAILABILITY AND THE AVAILABILITY OF BASIC SERVICES TO THE URBAN POPULATION

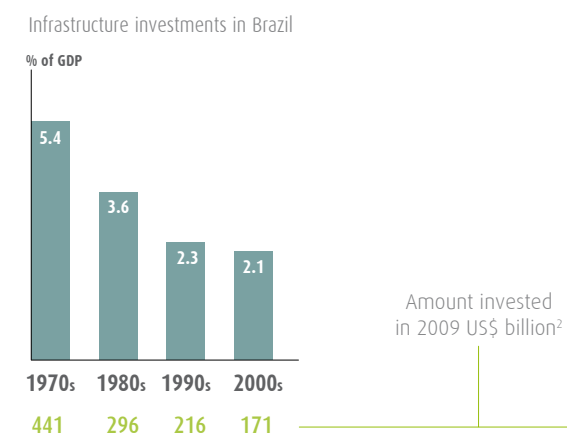
The importance of a suitable physical infrastructure is based on two main factors. First, its existence enables investment and business by providing the means for people, goods and information to move within the hub, as well as inward and outward flows between the hub and other locations, offering operational security and predictability, and saving time and resources. Second, physical infrastructure is an investment and business in and of itself, requiring domestic and international sources of funds, creating jobs and a demand for services, and delivering results – financial, technological and in the form of employment.

Following a wave of major infrastructure investments in the 1970s, Brazil slowly shifted its focus away from its infrastructure and today invests only enough to ensure it is able to maintain the existing structure (see Exhibit 24). The limited investments of

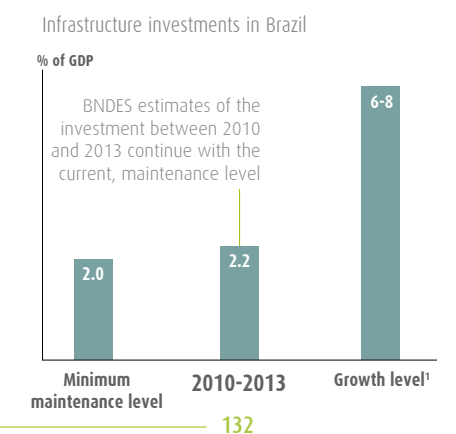
## EXHIBIT 24

Brazil has made only limited investments in its infrastructure over the past decades

### Infrastructure investments in Brazil have not kept up with economic growth...



### ...and current levels are only enough to maintain the existing infrastructure



1. World Bank estimate of what is required for Brazil to reach the level of South Korea, an infrastructure benchmark 2. Estimated based on the GDP for each decade and the percent investment disclosed by the Morgan Stanley Bank  
Source: Morgan Stanley's Paving the Way; EIU; USDA; BCG analysis

recent years are the reason behind Brazil's current structural gap, which is so often the subject of articles published in the local and international media. It also affects Brazil's international ratings, such as The Economist Intelligence Unit's league table where Brazil is the 28<sup>th</sup> out of 59 countries (see Exhibit 25).

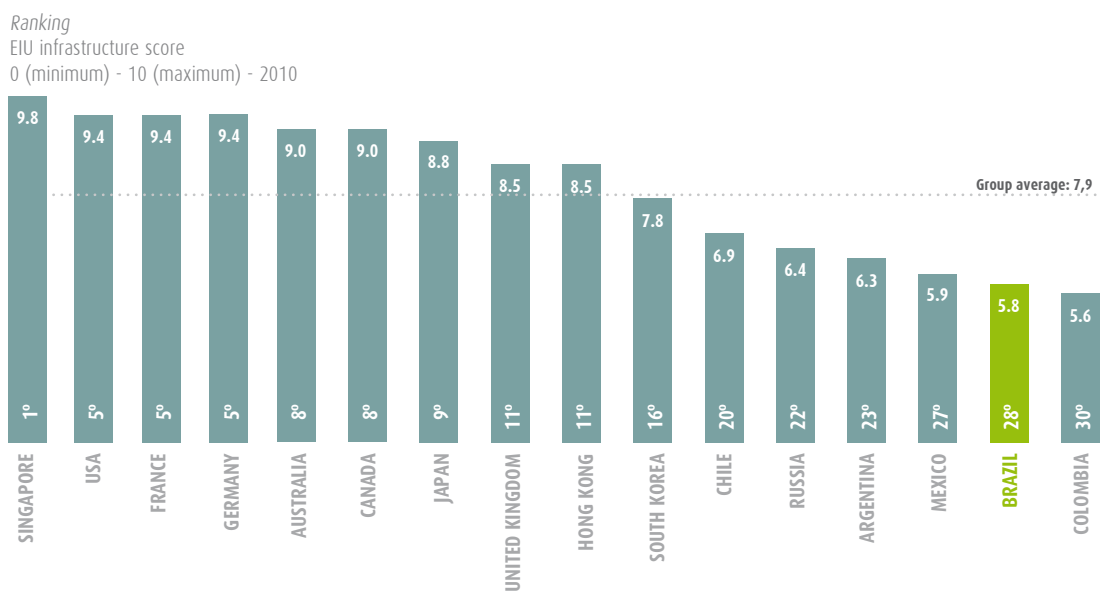
Limitations on the sources of funds available are one factor holding back public investments in infrastructure. For this reason funding options and mechanisms to share risk should be considered, such as Public-Private Partnerships (PPPs) (see Box D). Nevertheless, before it can take full advantage of this funding tool, the country must improve the regulatory framework that governs this type of investment.

In spite of the fact that investments remain low and of the existing gaps in its infrastructure, Brazil has shown it is aware of its shortcoming and is starting to make positive strides, such as the two federal investment plans known as the PACs (Accelerated Growth Programs). Between 2007 and 2010, the first PAC invested more than R\$ 440 billion in infrastructure (82% of the investment planned the period)<sup>57</sup>, most of it in transportation, power, sanitation, housing and water resources. PAC 2 was announced in 2010 and will invest R\$ 959 billion in infrastructure through 2014, this time focusing on urban development, housing, power, transportation and basic services, among others.

<sup>57</sup> Source: 11<sup>th</sup> PAC progress report, December 2010

## EXHIBIT 25

Brazil's physical infrastructure ranks 28<sup>th</sup> out of 59 countries



Note: Brazil's rank considers countries with the same performance to be ranked equally  
Source: EIU

## BOX D

Public-Private Partnerships (PPPs) as enablers of infrastructure investment in Brazil

Public-Private Partnerships, or PPPs, arose after the 1970s oil crisis when state owned companies lacked the financial ability to invest in major projects. This was particularly true for countries in which the government owned all or significant portions of major corporations, often the case in Europe and Latin America.

PPPs were gradually adopted by more and more countries: between 1985 and 2010 PPPs around the world funded 1,867 projects totaling US\$ 712 billion; US\$ 91 billion of which, or 274 projects, were in Latin America. In a PPP a temporary concession agreement assigns to the private entity the risk associated with designing, planning, building and operating an enterprise that is in the public interest. The State shares the risk inherent to the initiative and may guarantee a previously agreed rate of return on the investment. The assets built as a result of the PPP become the property of the State once the concession term has expired.

Together with concessions, where the government body needs not provide funds to execute or enable engineering works, PPPs are a viable option for Brazil, with increasing need for investments and a clear shortage of infrastructure.

There are numerous examples of successful PPPs around the world, such as the roads in Portugal, the intermunicipal roads in Chile and investments in water and sanitation in France. Also in Brazil there have been successful examples of this type of agreement:

- The state of São Paulo road concession program created in the late 1990s resulted in this state having nine of the country's ten best roadways;
- Brazil's telecom and rail activities are almost all controlled by private enterprise through concession agreements;
- Privately operated terminals in the country's largest ports already handle more than 50% of the cargo;
- In the power industry, concessions provide more than half of the distribution and 20% of the generation;
- In Minas Gerais, in addition to a highway program, the state is building the first prison to be managed by private enterprise, housing some 3,000 inmates.

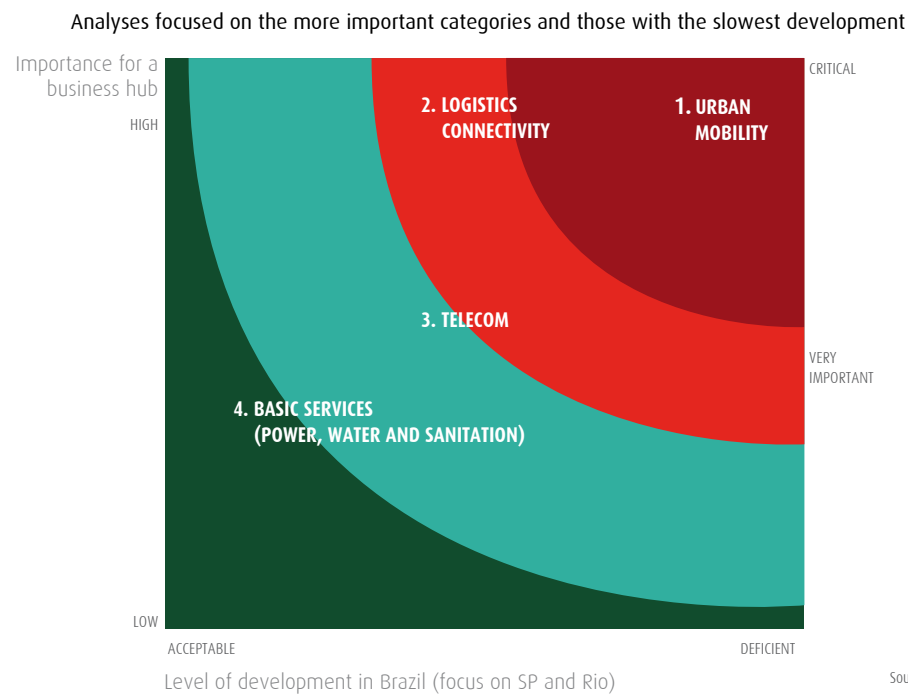
This is a time of great opportunity for the country to expand the number and scope of its PPPs and concessions. On the one hand, excess international liquidity and low interest rates in developed nations mean there is a large amount of capital looking for investment. On the other hand, countries like Brazil with structured internal demand and good conditions for growth are good destinations for this capital. A BCG study shows that about half of all the infrastructure works scheduled for the coming years will be mixed private-government initiatives and that this type of agreement could be rolled out to other economic sectors where they are hardly used, such as healthcare and education.

Source: 2010 International Survey of Public-Private Partnerships - Public Works Financing; BNDES; press search; BCG analysis

Within the scope of building an investment and business hub in Brazil, the infrastructure requirements can be split into four main themes: urban mobility, logistics connectivity, telecommunications and basic services. These are discussed below in decreasing order of importance to a business hub, and increasing order in terms of Brazil's current stage of development, based on the matrix in **Exhibit 26**.

**EXHIBIT 26**

Elements of physical infrastructure will be addressed based on their importance to the hub and their level of development



**Urban mobility**

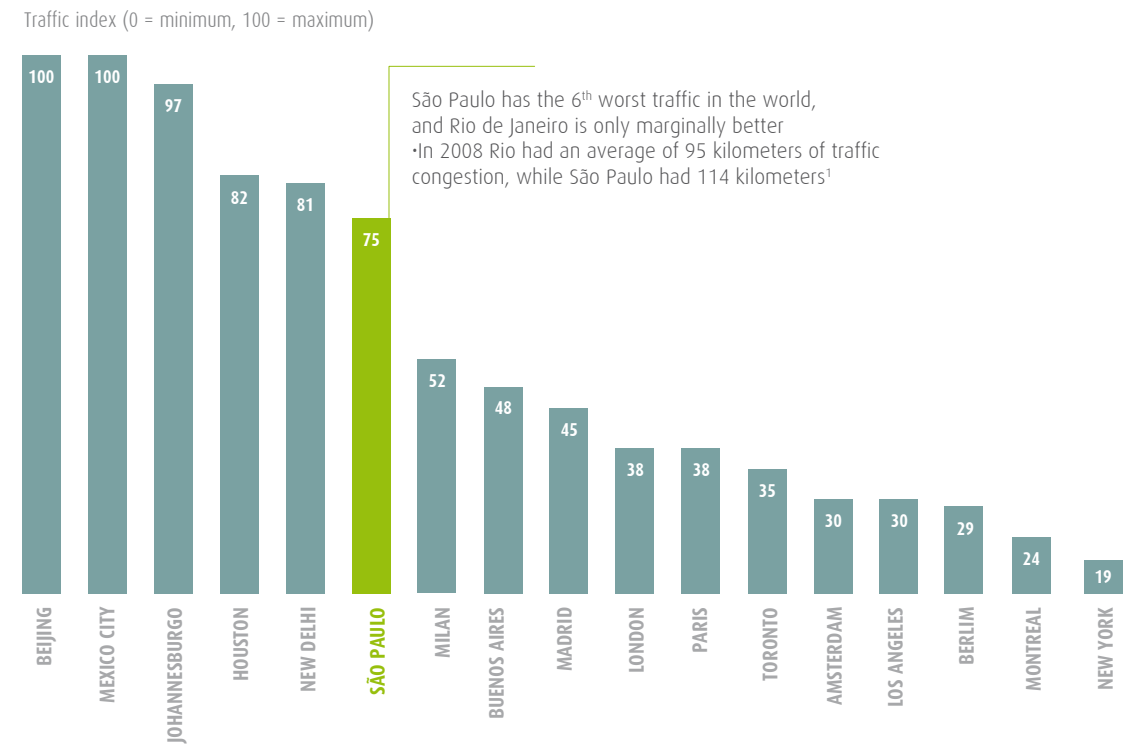
São Paulo and Rio de Janeiro, Brazil's two main business centers, have significant gaps in urban mobility. Every day the population in these cities faces serious road congestion. São Paulo is considered to have the world's 6<sup>th</sup> worst traffic, and Rio de Janeiro is only marginally better as measured by average kilometers of congestion during peak hours (**see Exhibit 27**).

The problem of urban mobility is worsened by the shortage of alternatives to using the city streets; the *per capita* subway network in São Paulo and Rio de Janeiro is less than a half of the size of the network in cities with similar population densities such as Beijing and Mexico City (**see Exhibit 27**).

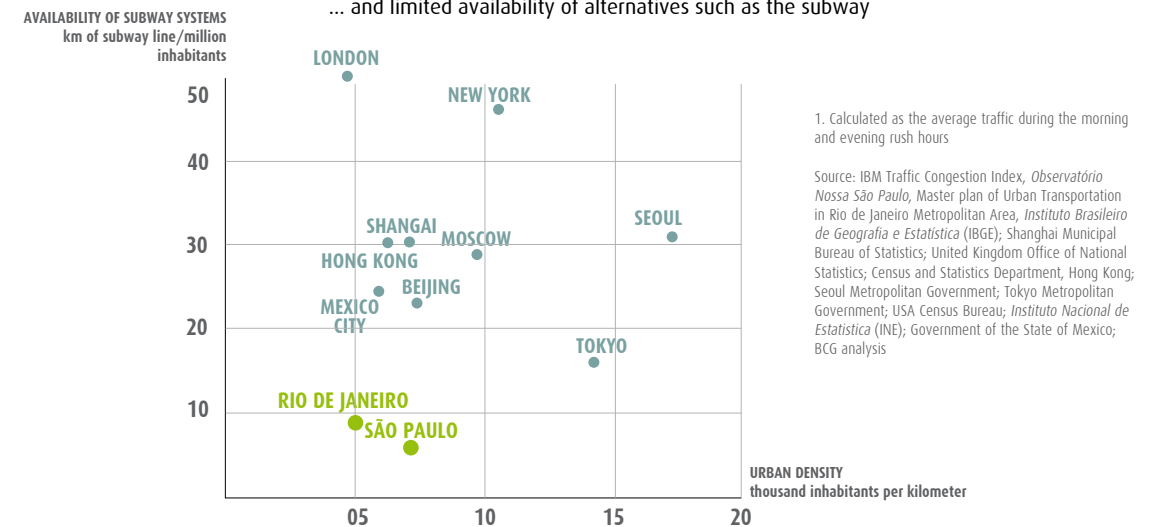
**EXHIBIT 27**

Rio de Janeiro and São Paulo have significant gaps in urban mobility

São Paulo and Rio have major traffic problems...



... and limited availability of alternatives such as the subway



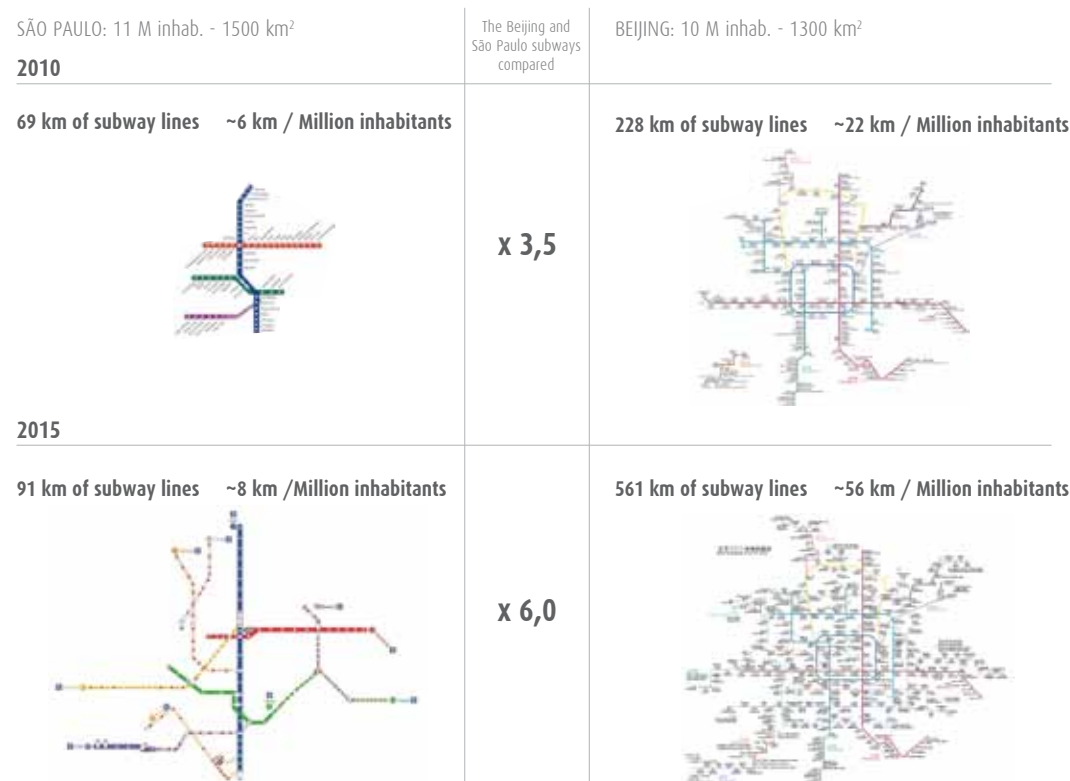
## BRAZIL HAS MAJOR BOTTLENECKS. URBAN MOBILITY IN THE BUSINESS CENTERS, LOGISTICS AND TELECOM CONNECTIVITY MUST RECEIVE SPECIAL ATTENTION IN ORDER TO ENSURE THE DESIRED LEVEL OF GROWTH

To help mitigate this situation, both cities have plans to improve the supply of public thoroughfares and mass transit. These plans are driven in part by the fact that Brazil has been selected to host the 2014 FIFA World Cup and the 2016 Olympic Games. Although the plans in the books are important, it is unlikely they will prove sufficient, especially when one looks at similar cities such as Beijing, which has plans to create a subway system some six times the size of the projected subway in São Paulo in 2015 (see Exhibit 28).

### EXHIBIT 28

Expansion plans of São Paulo's subway network will not reduce the gap compared to other major cities

#### São Paulo and its expansion plan lags behind the Beijing subway



Note: Maps of the subway lines are illustrative and do not reflect the scale of networks in each city

### Logistics connectivity

Logistics connectivity for a Brazilian investment and business hub, for simplicity represented here as the Rio-São Paulo axis only, includes connections between the cities and towns that form the hub and between them and the rest of the world. Analyses of logistics connectivity will focus on the four main means of transport: air, road, ports and rail:

- There is intense **air traffic** between São Paulo and Rio de Janeiro, and five main airports<sup>58</sup> serve the two metropolitan centers. Some 130 flights a day connect the two cities in a 45 minute flight. This is far more than the 70 daily flights between New York and Washington, for instance. In terms of international travel, an average of 1,100 international flights a week connect these two cities to the rest of the world, a number similar to cities such as Chicago, Beijing and Mexico City. However, the airports serving Rio and São Paulo are operating above capacity and the construction projects planned through 2014 may not be enough to meet the expected increase in demand, with the possible exception of the International Airport in Rio de Janeiro (see Exhibit 29). In addition, although Brazil is the world's 7<sup>th</sup> largest economy, none of its airports are among the world's 100 best<sup>59</sup>.

- An ample **road system**, for the most part in good shape, connects São Paulo and Rio de Janeiro to the rest of the country. Although the roads in this region share a number of maintenance problems with roads elsewhere in the country, São Paulo and Rio de Janeiro are ranked 1<sup>st</sup> and 4<sup>th</sup> in Brazil respectively in terms of the quality of their roads. A CNT<sup>60</sup> Road survey considered all of the roadways connecting these two states to the rest of Brazil to be good or excellent.

<sup>58</sup> Rio de Janeiro International Airport/Galeão - Antônio Carlos Jobim (IGJ), Santos Dumont Airport/Rio de Janeiro (SDU), São Paulo International Airport/Guarulhos - Governador André Franco Montoro (GRU), Congonhas Airport/São Paulo (CGH), Viracopos International Airport/Campinas (VCP)

<sup>59</sup> Source: Skytrax

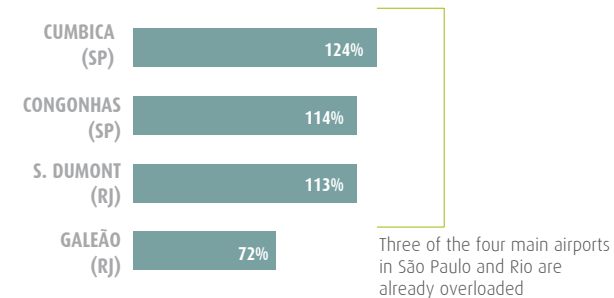
<sup>60</sup> Source: Confederação Nacional do Transporte (National Confederation of Transport)

### EXHIBIT 29

The airports in São Paulo and Rio de Janeiro are already overloaded and planned expansions may not be enough

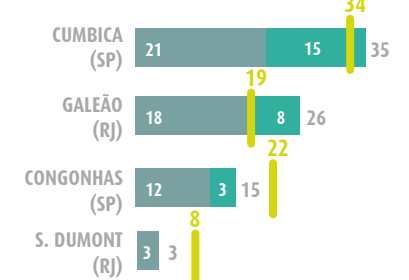
The main airports already operate above capacity...

Percent capacity utilization in number of passenger per year, %



... and the planned improvements may not be sufficient

Passenger capacity by 2014 - million



The plans do not include any buffer for peak hours and implementation has yet to start<sup>1</sup>

Planned additional capacity - 2014  
 Current capacity  
 Estimated demand by 2014 - /M<sup>2</sup>

1. 20 to 40% spare capacity is recommended to accommodate demand in peak hours 2. Total demand in Brazil has been calculated at 191 million passengers per year - demand breakdown by airport based on the current breakdown. This is not a final analysis but is merely a scenario simulation  
 Source: IATA; Infraero; Aviation Administration Federation; interviews; BCG analysis

• The **port** network serving São Paulo and Rio de Janeiro for ocean transport is made up of nine ports, including Santos, Brazil's largest public port. These ports have the same sort of cost and efficiency bottlenecks of the other ports in Brazil, yet in 2009 handled 48% of all container traffic in Brazil. Planned works include improvements and expansions of the existing ports in the near future, and the construction of additional facilities such as the two new ports planned for the state of Rio de Janeiro.

• The Brazilian **rail** network is rather limited in size and scope; it is seven times less dense than the rail network in the USA. Current expansion plans focus only on the states of Rio de Janeiro and São Paulo, yet will not be enough for these two states to be considered as having good rail connectivity. A high speed train between São Paulo and Rio de Janeiro is being discussed and, if approved, will add an important layer of connectivity to the hub, but will not solve the problem of connecting these cities to the rest of the country.

In short, Brazil's logistics connectivity has significant bottlenecks, especially for a business hub located along the Rio - São Paulo axis. Although there are projects to solve some of the current issues, success requires a long term strategic plan for the country's logistics infrastructure. In addition, it is important to monitor ongoing projects to make sure they are completed on time and delivered on spec.

**Telecommunications**

Mobile and fixed telephony services are available in one hundred percent of the states of São Paulo and Rio de Janeiro, with some small gaps in broadband internet coverage in the more remote regions. The real telecommunication gap in the two states is mobile data coverage, especially technologies such as 3G connectivity, currently concentrated in the major urban centers, as well as the quality of mobile services provided and the prices charged, which are among the highest in the world (see Exhibit 30).

Brazilian operators have plans to extend coverage using new technologies. Given the existence of these plans, it is important that they be monitored by the regulators to make sure that expansion does not take place at the expense of the quality and speed of existing services, for example. At the same time, increased competition and regulatory oversight should reduce the costs passed along to consumers.

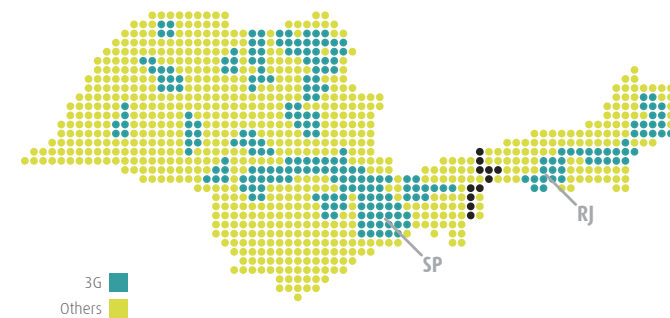
**Basic services**

Between 2000 and 2002 Brazil experienced power rationing and rolling blackouts because of poor planning of its energy needs. These shortages were caused in part by the lack of investments and in part by a longer than usual dry season, leading to insufficient power generation. This negative experience drove the country to increase its focus on planning for its energy needs, through auctions and new power plants built to generate power from hydro and thermal sources.

**EXHIBIT 30**

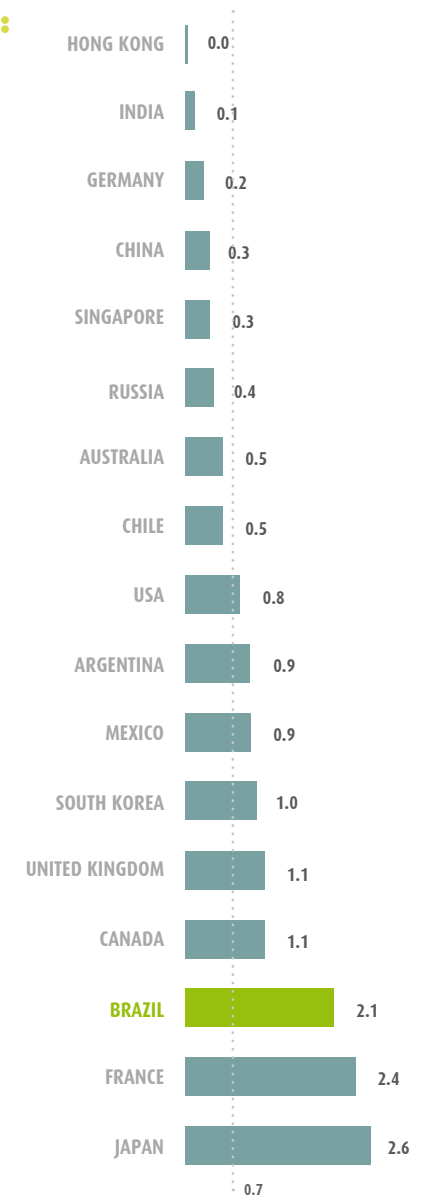
Brazil has a good telecom base and clear opportunities for improvement

Brazil's 3G coverage still needs to be expanded



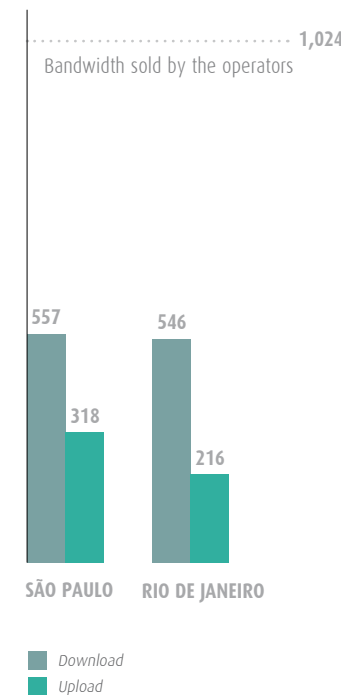
Brazilian mobile telephony costs are higher than the world average

Cost of a 3 minute local call during peak hours - US\$, 2008



Actual connection speeds are lower than what the operator sells

Data transmission speeds - Kbps



Source: Brazilian Telecom Atlas; ITU; Info Magazine; BCG analysis

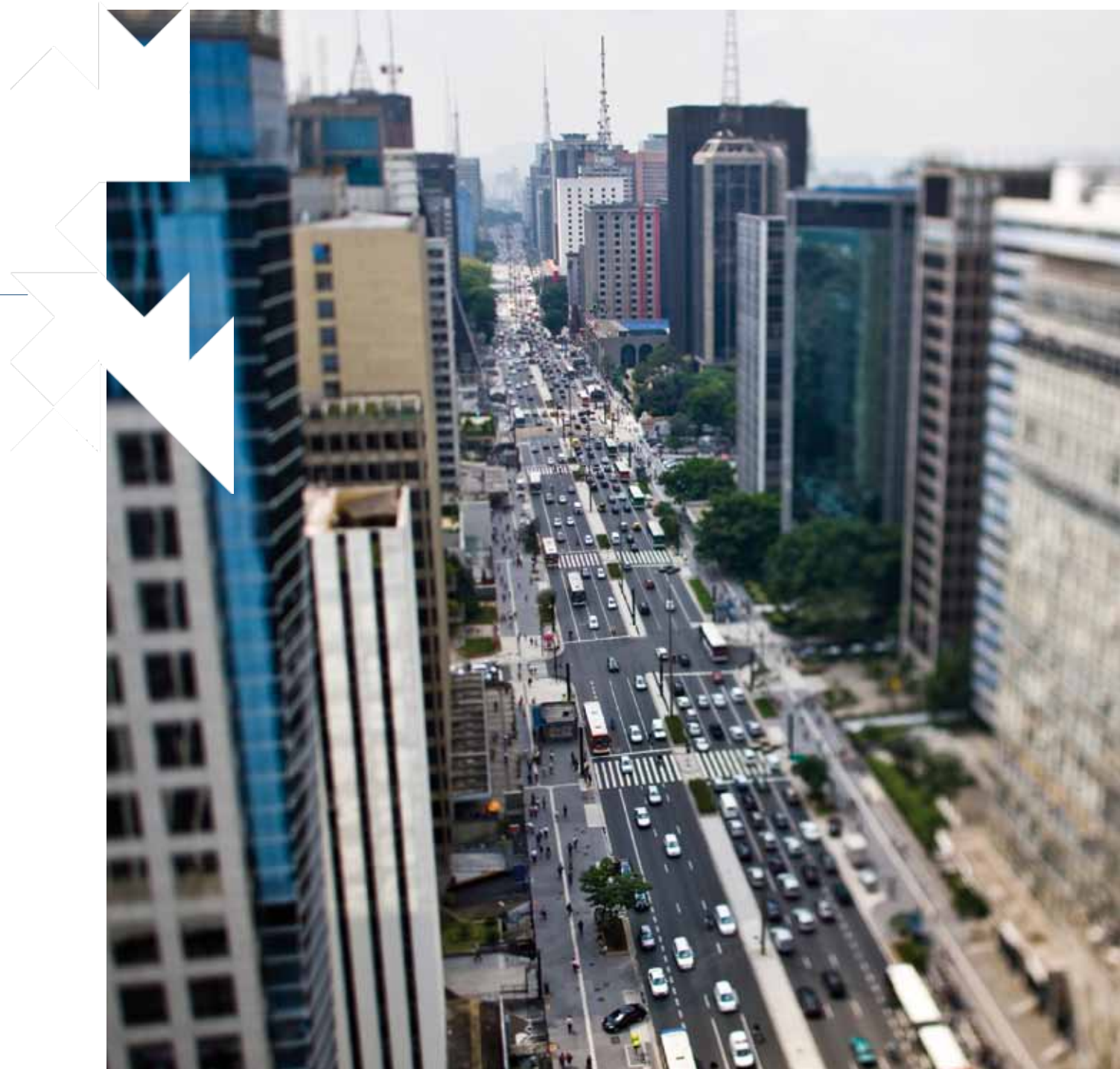
Access to basic services such as clean water and sanitation is satisfactory in the country's urban centers, and in terms of quantitative coverage Brazil is similar to developed nations, as revealed by the World Bank (see Exhibit 31).

### EXHIBIT 31

Access to clean water and sanitation in Brazil is close to benchmark levels



Source: IMD



### Indicators

The following indicators were selected to assess the physical infrastructure pillar:

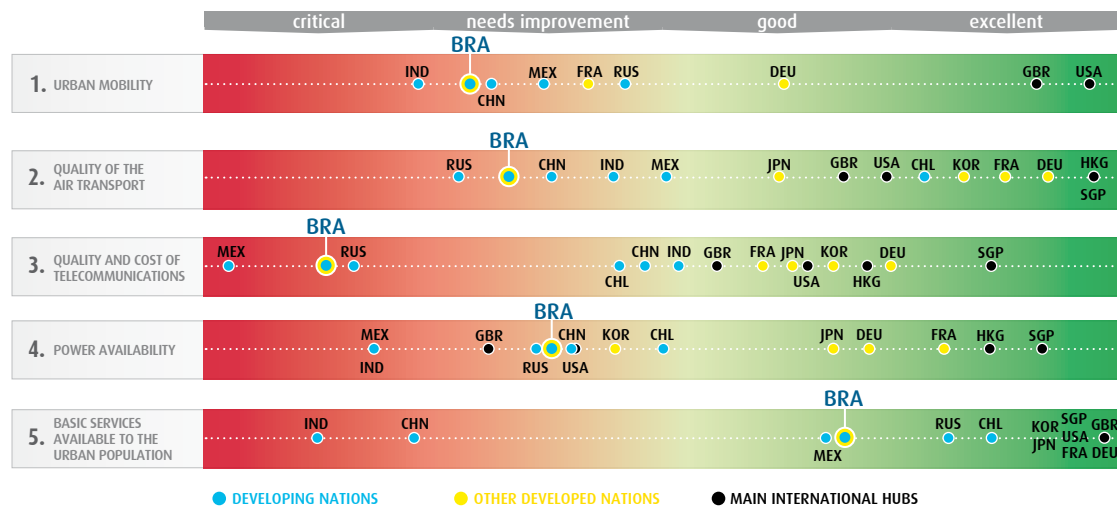
- **Urban mobility:** This measures the availability of transportation options in the major urban centers of a country as a combination of subway availability and traffic criticality;
- **Quality of the air transport:** This indicator measures the quality of the air transport in the country based on the opinions of executives;
- **Quality and cost of telecommunications:** Telecommunication services are key for any business hub, especially one focusing on the service industry. This indicator measures the evolutionary status of a country's telecommunications as a combination of its cost and quality;
- **Power availability:** The current and future availability of power based on the opinion of executives in each country;
- **Basic services available to the urban population:** The availability of basic services is partially responsible for defining quality of life, and is also an indicator of the level of development of a country and its consumer market.

The following exhibit shows how Brazil compares to other countries along the dimensions of the infrastructure pillar:



### KEEPING CLOSE TABS ON PUBLIC AND PRIVATE INITIATIVES TO IMPROVE THE COUNTRY'S PHYSICAL INFRASTRUCTURE MAY HELP ENSURE TIMELY COMPLETION AND THE EXPECTED QUALITY

Brazil has a physical infrastructure that is rated favorably in terms of the basic services it offers its urban citizens, yet leaves much to be desired along all other dimensions. The limitations of its transportation infrastructure are reflected in the country's poor scores in urban mobility and the quality of its air transport. In addition, Brazil's telecom services are poorly rated and power availability needs to be further enhanced.



### Conclusion

Because of insufficient investments in past decades, Brazil now has major gaps and bottlenecks in its physical infrastructure along all dimensions important to a business hub. Urban mobility, in particular in the major business centers, logistics connectivity and telecom all deserve special attention to make sure that the anticipated economic growth is actually achieved, and especially to make sure the country is attractive as a regional hub.

Fortunately, both public and private enterprise have plans underway that will improve each of these elements; public-private partnerships and public service concessions to private enterprise are examples of successful investment mechanisms. Keeping close tabs on these initiatives may ensure timely completion and the expected quality. In some specific cases, such as urban mobility and airports, it is also important to make sure that the improvement plans are sized appropriately and aligned with the expected demand over the long term.

# 05

## FINANCIAL INFRASTRUCTURE

A strong financial infrastructure is essential for making a country attractive and to enable creating an international investment and business hub. All segments of the financial industry – commercial and investment banks, capital markets, insurance and asset management – offer direct and indirect benefits that contribute to making an international hub and its region more attractive.

The basic objectives of a financial system, which are to fund the economy as a whole and to efficiently allocate risk to the various players in the market, are intrinsically linked to the attractiveness of a country. A strong financial infrastructure directly benefits a hub, either in the form of a banking system that offers credit, capital markets that can be used to issue stocks and thus raise funds, the existence of a derivatives market to manage risk, and even an insurance industry to mitigate operating risks, all essential for the development of Brazil's economy and the region. But more than this, with a broad and efficient offer of such services, the financial industry helps attract businesses and investors to Brazil, acting as a catalyst for creating an international business hub.

There are also numerous indirect advantages of a robust financial infrastructure. One of them is its ability to create jobs, drive growth and increase tax revenue. In addition, the level of sophistication and specialization that the financial industry requires fosters the development of high level professionals and a proliferation of related, highly specialized professional services such as auditing, legal counsel, information technology and management consulting.

**“[The concept that] the financial market contributes to economic growth is simply too obvious to be seriously discussed”**

Dr. Merton Miller, Nobel Prize in economics



In the financial infrastructure pillar, Brazil starts out ahead. Regulation of the country's financial system is recognized worldwide, ranking Brazil ahead of traditional hubs such as the USA and the United Kingdom in competitiveness league tables published by international organizations such as the World Economic Forum (WEF) and the IMD. Regulation and oversight of specific segments such as derivatives, where there is a centralized trading and registration system, are considered a reference by other nations (see Box E). In addition to being strong and resilient, the Brazilian financial system is also profitable, and in this regard also stands out compared to other nations (see Exhibit 32).

**BOX E**

Brazil as a reference of a solidly organized and regulated financial system

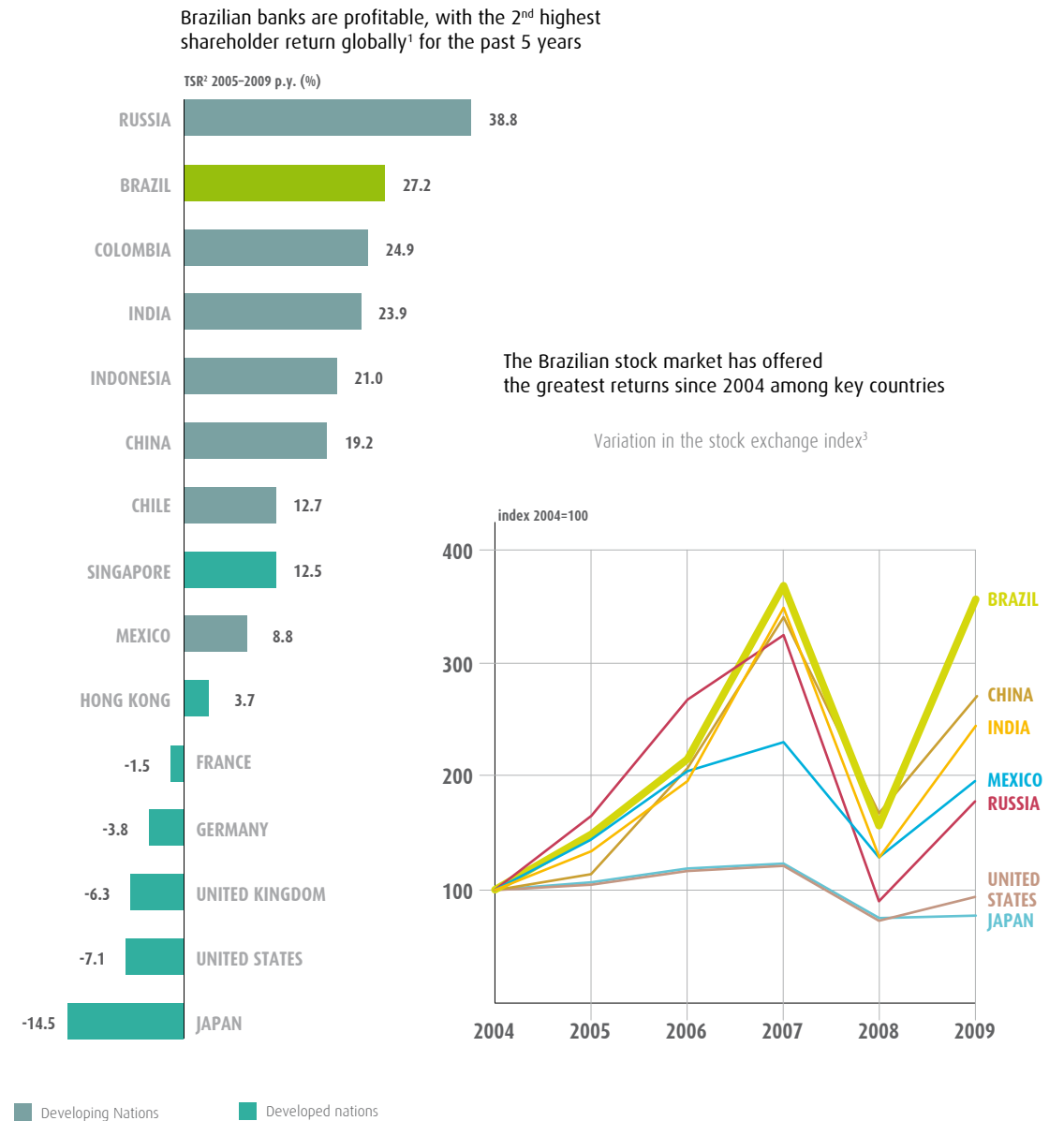
It is often mentioned that Brazil was one of the last countries to be affected by the global economic crisis, and one of the first to come out of it. This is very much related to the country's solid macroeconomics, but it is also due to the robust organization and regulation of its financial industry.

Brazil's financial industry has always been subject to rules designed to balance security and flexibility, having found a point of equilibrium with few parallels around the world, which is one reason it is considered a reference by other nations. Examples of the reference regulation in Brazil include:

- Financial transactions are registered in the name of the final beneficiary and not the intermediary, which ensures the security of the former should the latter becomes insolvent;
- Investment funds are required to disclose their positions to the regulator within at most three months. This means that fraudulent schemes such as the Madoff Ponzi scheme are simply not possible in Brazil;
- Internalization of orders is not allowed, which makes the central market more liquid and provides for a more accurate reflection of the actual market price of assets;
- All derivative transactions in Brazil are recorded in a central database known as CED or Derivative Exposure Central, which is controlled by the CIP (Interbank Payments Chamber). This means that duly authorized financial agents can have access to a company's current position before completing transactions, thus avoiding overexposure. Countries like the USA and UK have been trying to develop similar systems, but are still in the development or design phase;
- In Brazil, the transfer of funds to settle transactions is protected from the risk of insolvency of the intermediaries involved, as these payments use Central Bank reserve currency (settlement in central bank line), and the amounts involved are not included in the bankrupt estate even if they are still in the hands of the intermediaries;
- All stock exchange transactions in Brazil have a central counterparty, which ensures the security of the transaction for all those involved;
- The country demands that their banks have a Basel Index of 11%, higher than the 8% required worldwide. In addition, the Brazilian Central Bank has indicated it will move up implementation of Basel III, which ups the required index to 13%, to late 2011, two years before required internationally.

**EXHIBIT 32**

Brazil has a strong, profitable financial system that stands out worldwide



1. Among the leading banking systems included in the survey "Creating Value in Banking" 2. TSR: Total shareholder return, composed of capital gains and dividends 3. In US\$ / Note: All TSRs calculated in local currency Source: 2010 BCG report entitled "Creating Value in Banking"; EIU; BIS; World Bank; Standard & Poor's; World Federation of Exchanges

This report attempts to provide a more granular analysis of the existing strengths and opportunities to continue to enhance Brazil's already solid financial infrastructure and reap the direct and indirect benefits provided by a financial infrastructure, in particular as they relate to Brazil as an investment and business hub.

**Direct benefits of a financial infrastructure**

The direct benefits of a financial infrastructure have been split into two main groups: funding the economy and efficient risk allocation.

**Funding the economy**

When one considers the benefits a financial system can offer a country, funding of investments and consumption are often the first ones mentioned. Especially in the case of Brazil, funding is currently a theme very much in discussion, both because of a recent period of strong growth in the stock and credit markets, in particular consumer credit, as well as the country's major need for investment to support its expectations of strong, sustainable economic growth.

Looking at funding for business in particular, which is essential to attract businesses to the country and region and create an international hub, Brazil has evolved greatly in recent years (see Exhibit 33). Since 2004, both credit, much of which is BNDES directed credit, as well as the capitalization of traded companies, have experienced real annual growth in excess of 15%, more than doubling during the period. The main exception is the Brazilian market for private debt, with a stock of less than R\$ 20 million and annual growth of only 5%, a funding mechanism that is little used by businesses in Brazil.

Such growth is certainly healthy and valuable; however, when one compares the availability of funds in Brazil with some of the world's leading economies it is clear that sources of funds must continue to grow if Brazil is to reach a level compatible with global world references (see Exhibit 34).

The government is already taking measures to encourage more funding for businesses, such as the package of initiatives for "financial development and modernization" announced in December 2010. These initiatives were designed specifically to encourage loans for infrastructure, including the SPEs (*Sociedades de Propósito Específico* – Special Purpose Corporations) often created to invest in this segment, as well as the debentures market, with measures designed to expand and reduce the cost of liquidity.

The need to increase the available funding is even more important if one takes into consideration the expected upsurge in the demand for credit from programs such as the PACs (Accelerated Growth Programs) and the exploration of Brazil's pre-salt oil & gas reserves. Together, these two alone should cause a 70% increase in the demand for credit between 2010 and 2013, compared to 2005 and 2008. Therefore, measures to develop the three means of funding (credit, debentures, and stock market) must continue to expand and improve so as to drive growth and enable investment by all businesses seeking resources in Brazil, while bearing in mind the need to keep risks under control at all times.

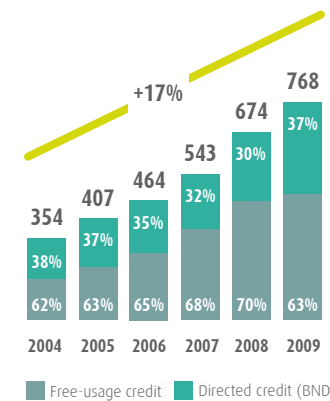
• **Credit:** The two main barriers for expanding credit are the relatively short terms, a basic interest rate that is quite high, and structural factors that result in large market

**EXHIBIT 33**

Business funding in Brazil has expanded significantly in recent years

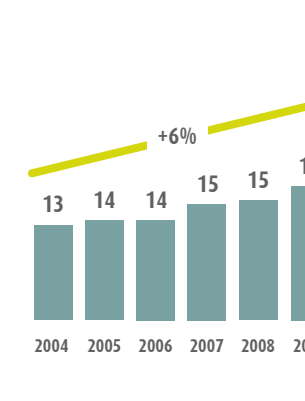
**Corporate credit has grown significantly in Brazil**

Stock of corporate credit in Brazil (R\$B<sup>1</sup>)



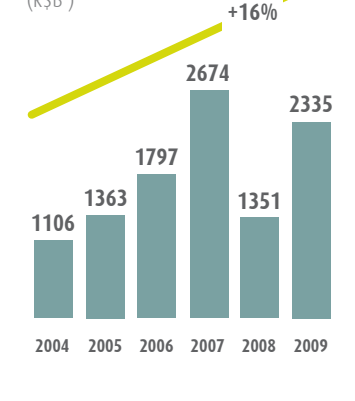
**As have debentures, but at a slower pace**

Brazilian stock of debentures (R\$B<sup>1</sup>)



**The stock exchange has also gone up rapidly, despite the 2008 crisis**

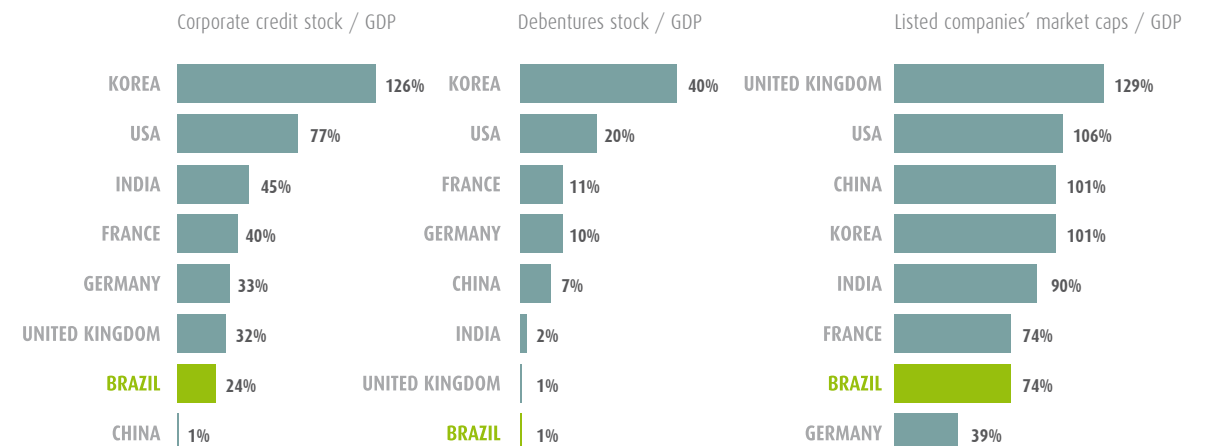
Market cap of the companies listed on the BOVESPA exchange (R\$B<sup>1</sup>)



1. Based on December 2009 values, adjusted using the IGPM (Brazilian inflation index)  
Source: Brazilian Central Bank; EIU

**EXHIBIT 34**

The different types of business funding in Brazil are still below world benchmarks



Note: based on the most recently available data for each country (2009 for debentures and shares, 2008 corporate credit in countries other than Brazil)  
Source: Brazilian Central Bank; BIS; Central Banks and other institutions in the individual countries; EIU

spreads (see Exhibit 35). The package of “financial development and modernization” measures is a move in the right direction as it encourages regulated long term funding and stimulates the public offering of bank treasury bonds. Another important measure is a system of positive credit ratings to enable proper measurement of the default rate, thus contributing to reducing the spread charged of those who pay back their loans on time (“good borrowers”). These steps, while important, are not sufficient to entirely resolve the issue of credit for businesses in Brazil. In addition to keeping track of the impact and effectiveness of these measures, and making adjustments or fine tuning them as necessary, it is also important to continue to debate new ways to stimulate long term credit, such as measures to reduce the cost of funding as well as loans with longer payment terms.

• **Debentures:** As shown in Exhibit 34, the debentures market in Brazil is still incipient. A structured, long term program is required, as well as sustained effort

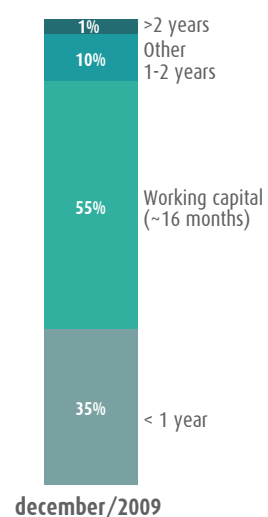
by the regulator and private enterprise to ensure a simple and efficient process to issue debentures, with a broader base of both investors and issuers in a more liquid secondary market. The government has recently announced a number of measures to this effect, including lower taxes on the secondary market, as well as a liquidity pools, created using part of the compulsory deposits (see Box F).

• **Stocks:** The market cap of Brazil’s stock market is about 75% of its GDP, almost on a par with some developed nations, such as France. Nevertheless, there remain opportunities to strengthen the different segments in this market so as to increase its importance and its contribution to creating a Brazilian hub. Trade in small business stock, for example, should be expanded. Currently, small Brazilian businesses issue

## EXHIBIT 35

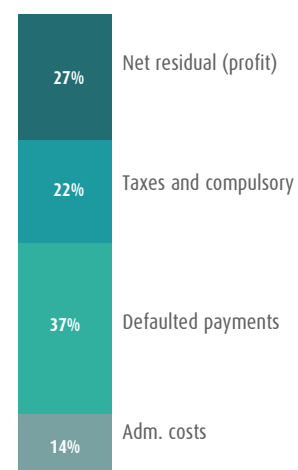
Terms and structural factors related to spreads limit credit

Breakdown corporate credit by loan term<sup>1,2</sup>



december/2009

Breakdown of the spread in Brazil<sup>3</sup>



2007

1. Dec/2009 Includes only credit for free usage – excludes BNDES, leasing, etc. 2. < 1 year: Secured Accounts, Vendor, Trade receivables discounting, AAE and other; 1-2 years: External transfers, import financing, loans for asset purchasing (and working capital); > 2 years: Mortgages 3. As per the Brazilian Central Bank 2007 study; it combines personal and corporate loans  
Source: Brazilian Central Bank

## BOX F

The case for encouraging liquidity in the secondary market for private debt in Brazil

In late December 2010 Brazil adopted Provisional Measure 517, an important step towards increasing the liquidity of the secondary debt bond market. This provisional measure reduces the regulatory hurdles for liquidity in the secondary private bond market by taking the following measures:

- Debenture coupons paid twice yearly will no longer be taxed twice;
- Reduces the tax rate on financial income of foreign investors who invest in private bonds in Brazil to zero;
- Waives the 30-day IOF (Tax on Financial Transactions) on private debt bond transactions;
- Allows issuers to buy back debentures for an amount larger than their face value in the event of appreciation;
- Allows concomitant issues of debentures by the same issuer to take advantage of windows of opportunity;
- Enables the fungibility of different issue bonds of similar characteristics and the same issuer;
- Private debt bonds may be monetarily corrected at the same interval as that stipulated for interest, even if this period is less than one year;
- Bonds may be issued in an amount higher than the share capital of the issuer.

The changes brought about by this provisional measure lift most of the regulatory obstacles to liquidity. Nevertheless, debentures may still be inhibited by the following:

- **Macroeconomic issues:** High interest rates continue to make private debt bonds less attractive than government debt bonds, as the spread from issuer risk is a much smaller share of the total interest investors receive;
- **Market practices:** Issuers, intermediaries and investors are not used to using debentures, and underwriting clauses are common, which influence the final price of these instruments.

less stock than similar sized businesses in other nations (see Exhibit 36). To this end BM&FBOVESPA's "BOVESPA Mais" initiative, which in 2007 created an organized over the counter market to trade in small business stock, may be followed by an even broader move to simplify and reduce the burden associated with issuing and trading in small business securities. Moreover, Brazilian listings of foreign transnational securities in all industries, such as the Banco Santander IPO in Brazil, the largest in the world in 2009, is another path that should be explored to increase the size and liquidity of the Brazilian stock market, as well as its ability to attract investors.

Because of the low rate of domestic savings in Brazil, ensuring suitable funding for its economy will require more than just easier access to funds available inside the country. It is absolutely critical that Brazil has greater access to international sources of capital, yet very little of the capital raised by Brazilian banks comes from abroad (see Exhibit 37).

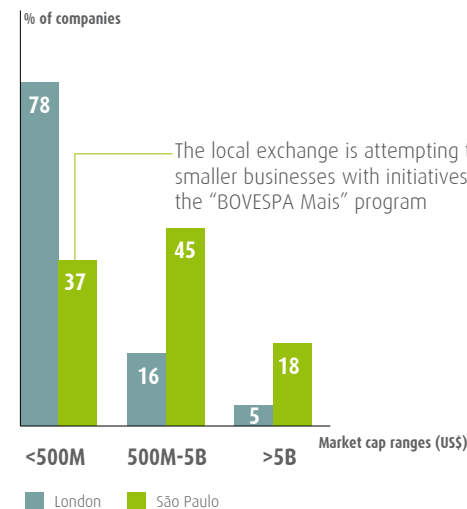
Brazilian businesses already have good access to international capital markets through stock markets. This access, however, is in the form of securities negotiated abroad (see Exhibit 37), especially ADRs<sup>61</sup>, issued on the NYSE, a channel that does nothing to increase the liquidity of the Brazilian stock market and in no way benefits companies whose stock is traded only locally. This reality repeats itself in all of the main Latin

<sup>61</sup> American Depository Receipts

### EXHIBIT 36

Few small businesses are listed on Brazil's stock exchanges

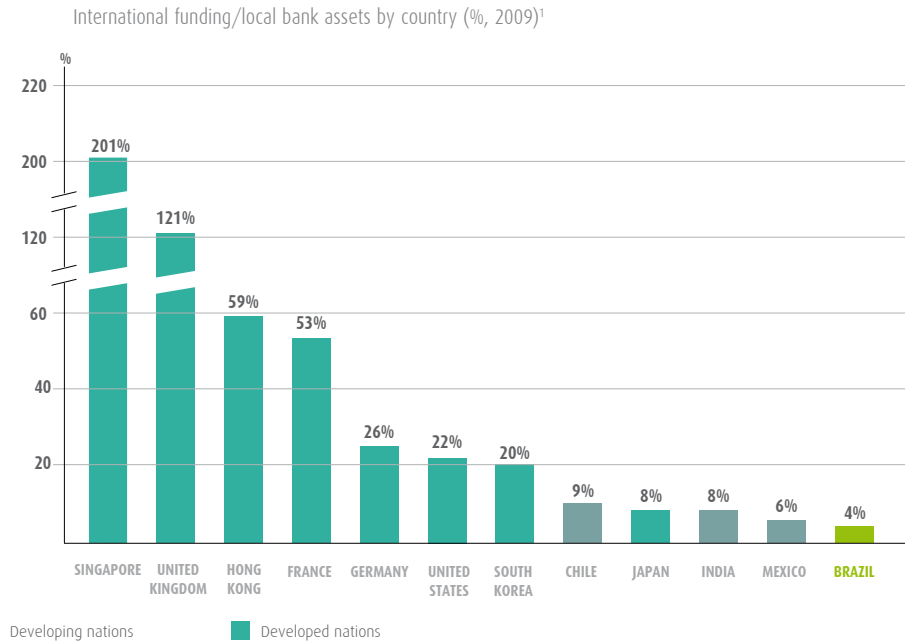
Distribution of traded companies by range of market cap<sup>1</sup>



1. Data for the first week of November, 2010  
Source: Bloomberg; BCG analysis

### EXHIBIT 37

Brazilian banks raise limited amounts of capital abroad compared to banks in other countries



1. Total liabilities abroad/total banking system liabilities (including shareholder's equity, retail and other funding). 2. Data for Mexico varies depending on the source: 35.9% - EIU calculation based on assets, other sources also indicate a high percentage, varying between 25 and 35%  
Source: Austin Asis; Bank for International Settlements; EIU; BCG analysis

American markets (see Exhibit 38), which suggests that measures to pool liquidity in Latin American markets, such as the alliance underway between the stock markets in Peru, Chile and Colombia, could help attract to regional markets some of the liquidity that local businesses currently leave in New York and other international hubs.

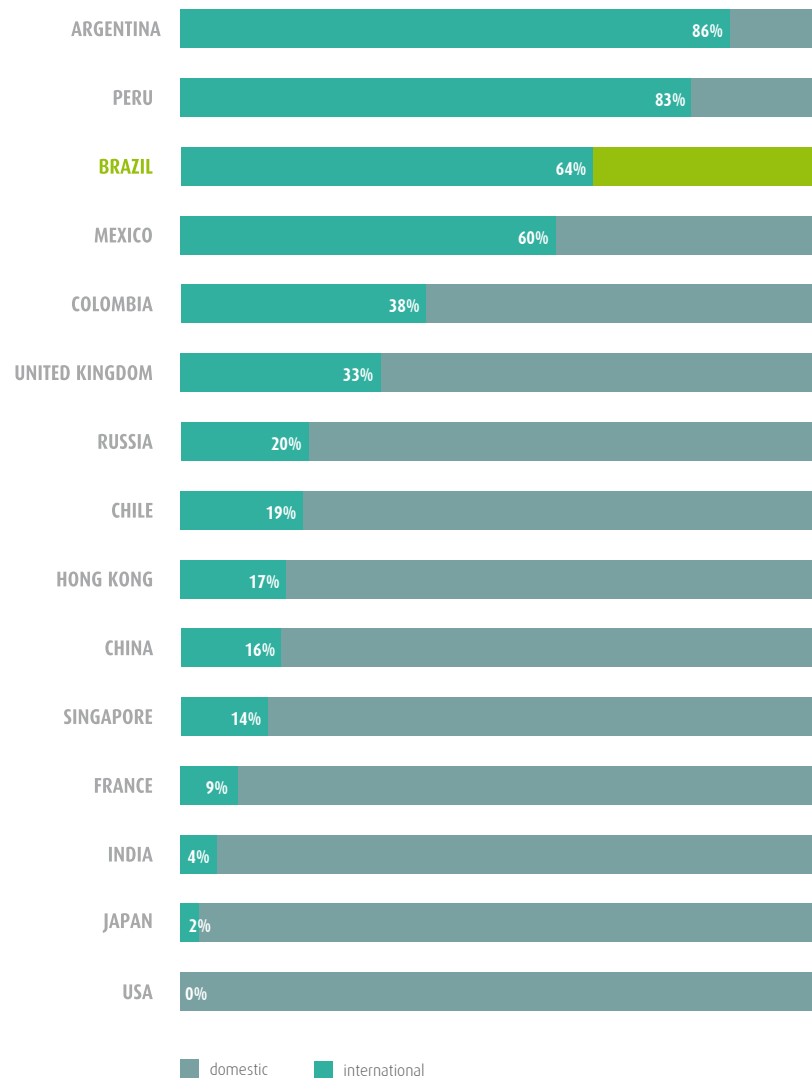
#### Levers of efficient risk allocation

In addition to funding the economy, another role of a strong financial system is the efficient allocation of the risk associated with the different sectors of a country's economy. There are numerous examples of the types of risk that can be mitigated: an exporter may mitigate the impact of exchange variations on its revenue, a contractor can take out insurance on the construction of an infrastructure project, a producer may reduce the risk of fluctuations in the price of its commodities, and a shipping company may insure its fleet and cargo against accident or theft. Therefore, all sorts of operational risks can be mitigated through the diligent use of derivatives or insurance.

### EXHIBIT 38

Latin companies “export” liquidity from their markets

% of volume of traded shares in the market of origin compared to volume traded in other countries by companies’ country of origin (2010)<sup>1</sup>



1. Volume traded (in US\$) in the market of domicile of the ultimate parent company of the traded company versus volume traded in other markets  
Source: Bloomberg; BCG analysis

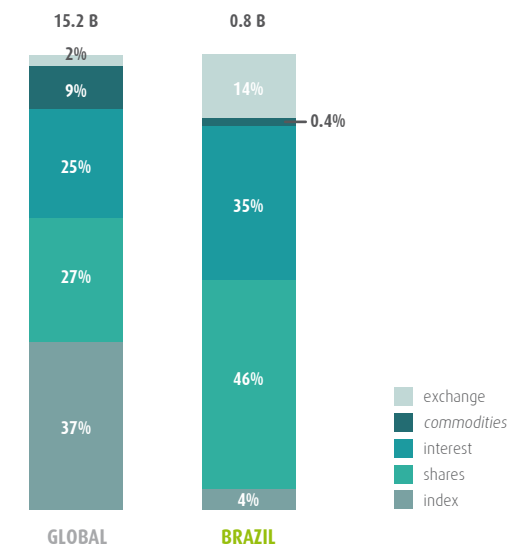
Compared to global levels, commodity and index derivatives in Brazil are a small share of the overall volume of securities traded (see Exhibit 39). This means there is an opportunity to expand the derivatives market, especially for commodities, given the size of Brazil’s agricultural output (for example, between 20 and 30% of the world’s soy, sugar and coffee are produced in Brazil) and the fact that there is really no significant market where producers, especially small farmers, can locally, simply and efficiently hedge their risks. Specific measures to strengthen the derivatives market could help Brazil’s companies and producers manage their risks more efficiently, and also lower the cost of financing their production.

There are also opportunities in the Brazilian insurance market, as penetration is low and it has the potential to as much as double before reaching the global standard for a country with its size of GDP (see Exhibit 40). In particular the reinsurance industry should see interesting times in the years to come as it undergoes a structural transformation, following the end of the IRB-Brasil Re (Brazilian Reinsurance Institute) monopoly in 2008. Reinsurance is vital for enabling the type of insurance that the major works the country will undertake in the next years will require.

### EXHIBIT 39

There is room in Brazil for commodity and index derivatives

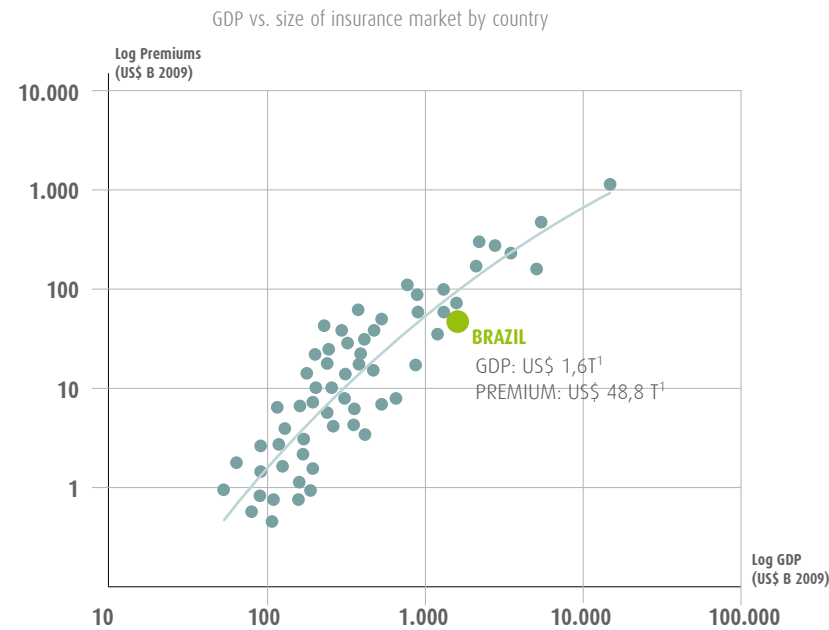
Negotiated derivative contracts by type, World vs. Brazil (2009)



Note: BM&F over-the-counter products (e.g. swaps, flex options) account for 0.8% of the total volume and were excluded from this analysis Source: Futures Industry Association (FIA); BM&FBOVESPA; BCG analysis

### EXHIBIT 40

There is ample potential for growth in Brazil's insurance



1. Absolute values only in the detail of information about Brazil, chart is log based  
Source: SwissRe; BCG analysis

#### Indirect benefits of a financial infrastructure

The benefits of a developed financial system go beyond the direct benefits of funding and efficient risk allocation. The financial industry constitutes an important foundation for the economy, generating jobs, increased economic activity and more tax revenue (see Exhibit 41).

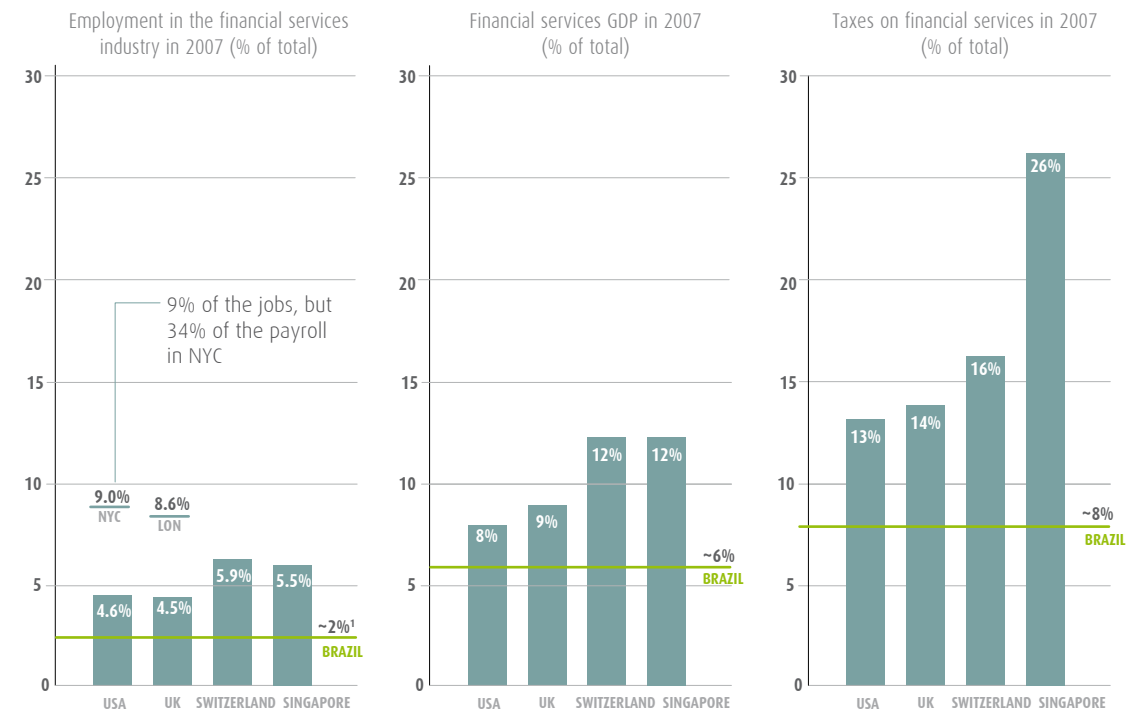
The number of jobs created in the Brazilian financial industry could exceed the current 2% of the total jobs in Brazil, reaching 5%, the average in more developed nations. In addition, it is important to remember that typically the financial industry requires, and helps train, professionals that are highly qualified and specialized, thus helping create a pool of more developed professionals that other industries may take advantage of as well.

Expanding these benefits does not depend merely on strengthening those sectors directly linked to funding and risk allocation. Sectors such as asset management and investment banking, or even retail banking help create jobs and income in the financial industry.

A stronger financial infrastructure also increases the demand for professionals and services in other industries. In other words, demand for qualified professionals will increase not only in the businesses linked directly to the financial system, such as auditing, management consulting, legal counsel and information technology, but in the supporting industries as well, such as hotels and air transport, as these grow and expand alongside the financial industry.

### EXHIBIT 41

The financial industry plays an important role in job creation, economic growth and increased tax revenue



1. Calculated based on the total number of formal jobs in Brazil (~37 million in 2007) / Source: USA Bureau of Labor; New York State Department of Labor; Federal Department of Finance (Switzerland); Ministry of Manpower (Singapore); City of London; press search; BCG analysis

#### Indicators

The following dimensions were selected to assess the financial infrastructure pillar:

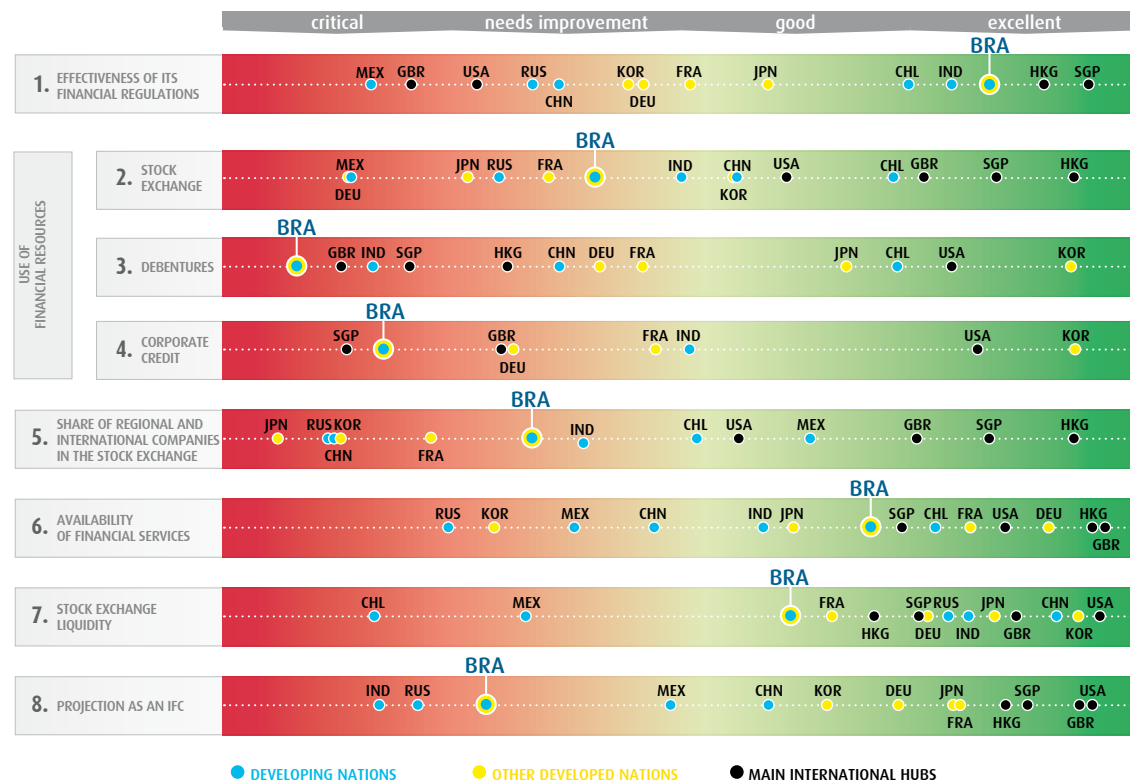
- **Effectiveness of the financial regulations:** the opinion of executives on the sufficiency and effectiveness of regulations governing the financial system of each country, which are required for creating a hub as it ensures a balance between operational security and flexibility.
- **Use of financial resources:** This can be split into three sub-dimensions: Stock exchange, debentures and corporate credit. Analyzing the combination of all three enables assessing the degree of maturity with which the different financial resources are used by businesses. However, each country may prefer a different mix and for this reason the analysis of each sub-dimension alone is less relevant.
- **Share of regional and international companies in the stock exchange:** This indicator measures the international component of the stock exchange in each country. A

more international exchange is more attractive to foreign businesses and is an indication that international business is more important for the country.

- **Availability of financial services:** This indicator measures the availability of financial services in each country based on the opinion of executives. The availability of financial services is important as it provides for funding needs and appropriate allocation of resources and risks.
- **Stock Exchange Liquidity:** The greater the liquidity of the stock exchange, the more dynamic the financial market of which it is a part, and the greater the opportunities for funding and for entering and exiting investments in the stock exchange.
- **Projection as an IFC<sup>62</sup>:** This indicator measures the recognition of a country's financial system as an international financial center. A higher score means a country's financial infrastructure is better prepared to support an investment and business hub.

The following exhibit shows how Brazil compares to other countries in the financial infrastructure pillar:

<sup>62</sup> International Financial Center



Brazil stands out for the effectiveness of its financial regulations and the availability of financial services. However, other important dimensions, such as the use of financial resources, the international component and liquidity of its stock and commodities exchange and its projection as an international financial center all need improvement.

### Conclusion

Financial infrastructure plays a vital role in making a country attractive, as it helps fund investments and growth, and manages the operating risk of a variety of industries. It also creates jobs and fosters growth and business in general.

Brazil's financial system provides the country with a solid platform made up of prudent regulation and financial institutions that are both solid and profitable. Nevertheless, funding, especially via long term bank credit and private debt bonds, must be reinforced if it is to continue supporting growth for the country. In addition, access to, and openness to international capital should be strengthened, as must the derivatives segment, especially commodity derivatives, and the insurance industry.

Therefore, the country has opportunities to continue to develop its financial infrastructure so that it becomes a tool to enhance the attractiveness of an investment and business hub in Brazil.

WHEN IT COMES TO ITS FINANCIAL SYSTEM, BRAZIL STARTS OUT IN A STRONG POSITION, WITH PRUDENT REGULATION AND SOLID FINANCIAL INSTITUTIONS. ACCESS TO INTERNATIONAL CAPITAL NEEDS TO BE STRENGTHENED, ALONG WITH THE DERIVATIVES AND INSURANCE SEGMENTS



# 06 CONNECTIVITY

By definition, a hub must be at the center of a network of connections or flows. The more connected a hub, the more attractive the hub will be and the more valuable will be its network to the agents with which it interacts. Traditionally, a hub has two types of connections: regional (intra-regional) and global (extra-regional), and both are essential for the development of an investment and business hub.

The first type of connections makes the entire region more cohesive and more attractive to the rest of the world. The second type connects the region, through the hub, to other hubs in the in the world and their respective regions. If a hub is unable to establish productive global connections the region as a whole may find itself on the fringes of the world's main economic flows.

A high level of connectivity not only contributes to making a hub attractive, but normally brings with it other benefits as well, not only for the hub but for the entire region. Typically these materialize in the form of economies of scale and scope, which reduce the transaction costs for the parties in a flow, be it intra or extra regionally.

Today Latin America is not well interconnected; there is no established *de facto* hub, although some countries stand out. Brazil already plays a leading role in several fronts, making it a natural candidate for an investment and business hub in the region. This being the case, a regulatory framework and infrastructures that simplify the exchange between Brazil and other Latin American countries, and between Brazil and the rest of the world is an absolutely essential condition for the country to become a hub.

Since it opened its market in the early 1990s, Brazil has made significant progress in its connectivity with Latin America and the rest of the world. Creation of the Mercosur in particular was an important step in bringing Brazil closer to its neighbors, despite the barriers that still exist and the continuous questions surrounding it. Nevertheless, integration between Brazil and Latin America and the world needs renewed impetus. Merely using broad, less effective agreements such as UNASUL<sup>63</sup> for example, is not enough to promote Brazil's regional and global connectivity. Specific initiatives are required that clearly focus on economics and business, and that lead to significant improvements in the quality of the connections between Brazil and the world.

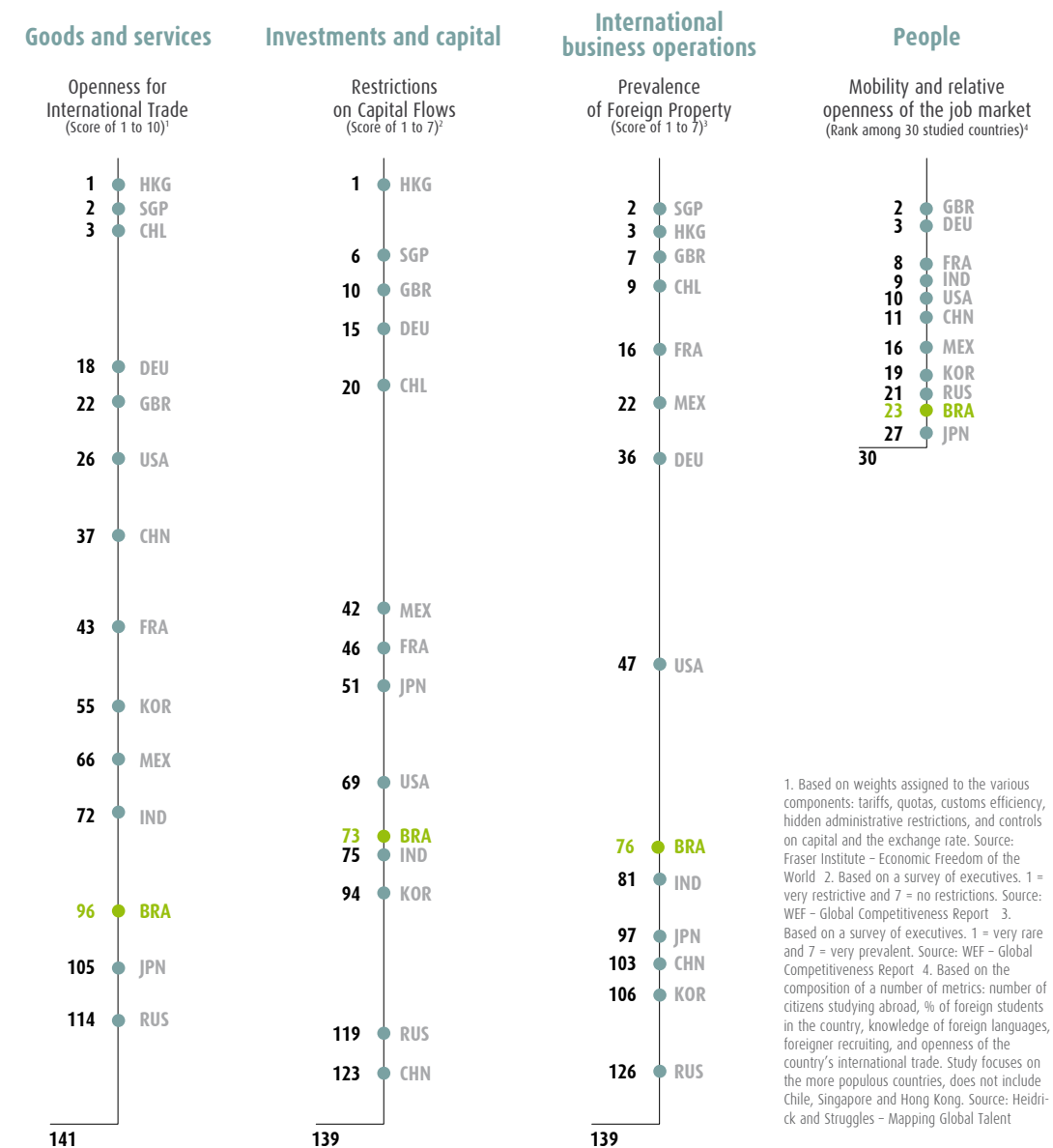
All of the league tables showing Brazil's position along the four key dimensions of connectivity - the trade in goods and services, investment and capital, international business operations

<sup>63</sup> Union of South American Nations

and people, show that there is significant room for progress. In all of the league tables analyzed Brazil is normally in the bottom half, whereas the other global business hubs are at the top (*see Exhibit 42*).

## EXHIBIT 42

Brazil is considered to have only limited openness along the dimensions of connectivity



1. Based on weights assigned to the various components: tariffs, quotas, customs efficiency, hidden administrative restrictions, and controls on capital and the exchange rate. Source: Fraser Institute - Economic Freedom of the World 2. Based on a survey of executives. 1 = very restrictive and 7 = no restrictions. Source: WEF - Global Competitiveness Report 3. Based on a survey of executives. 1 = very rare and 7 = very prevalent. Source: WEF - Global Competitiveness Report 4. Based on the composition of a number of metrics: number of citizens studying abroad, % of foreign students in the country, knowledge of foreign languages, foreigner recruiting, and openness of the country's international trade. Study focuses on the more populous countries, does not include Chile, Singapore and Hong Kong. Source: Heidrick and Struggles - Mapping Global Talent



## THIS PILLAR ANALYZES BRAZIL'S CONNECTIVITY ALONG TWO DIMENSIONS: CONNECTIVITY TO LATIN AMERICA AND TO THE REST OF THE WORLD

Below is a breakdown of Brazil's connectivity to Latin America and the world along these four dimensions. The objective is to analyze the country's current situation and understand where efforts should be expended to raise Brazil's rank and leverage the region as a whole within the global scenario.

### Trade in Goods and Services

A hub must have an environment that enables and encourages the international trade in goods, essential for the different productive sectors of the economy, opening up markets and enabling international supply chains. Large hubs such as London, Hong Kong, New York and Singapore were centers of trade long before they took on leading roles in the investment and business flows that characterize the globalized economy of recent decades.

In addition to the trade in goods, it is also important that an international hub enable the international trade in services, especially as the service industry worldwide has become more and more important over time. This is true for all sorts of services: highly specialized professional services such as management consulting, advertising, legal counsel and auditing, technical services such as engineering and construction, and outsourcing, which ranges from processes (BPO) through call centers.

International trade in goods and services has grown faster in Latin America, especially in Brazil, than global trade in the world as a whole. While the global trade in goods and services grows at an average annual rate of some 4.1% and 7.4% respectively, in Latin America the export of goods grows at an annual rate of 4.8%, and imports at a rate of 6.6%. Service exports and imports grow at a rate of 8.7% and 10.1% respectively. International trade in Brazil grows even faster, with exports and imports of goods growing at 6.6% and 14.5% respectively, and exports and imports of services at 14.7% and 17.8% (*see Exhibit 43*).

Despite this high growth, international Latin American and Brazilian trade flows are still only a small fraction of global trade, especially given the size of their GDPs. Latin America,

## EXHIBIT 43

Latin America and Brazil stand out for the development of their international trade



Note: All values are nominal. Latin America total includes Brazil  
Source: Unctad Online handbook of statistics; BCG analysis

for example, accounted for 7% of the world's GDP in 2009, but for only 5% of the trade in goods and 4% in services. The gap is even larger in the case of Brazil, which although responsible for some 3% of the world's GDP, has only 1% of the global trade in goods and services (*see Exhibit 44*).

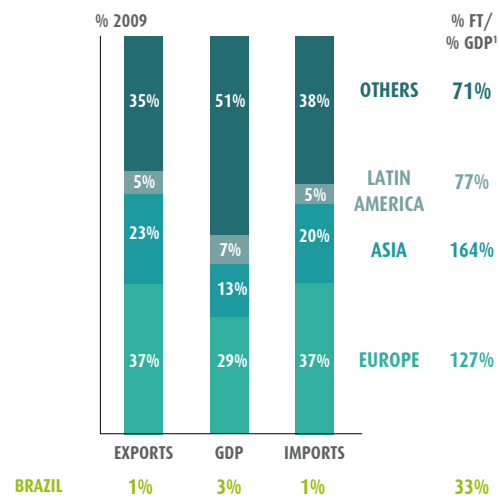
Another area to be developed in Latin America is intra-regional trade, both in terms of volume as well as a percentage of trade in general. Looking at the trade in goods, for example, one finds that in 2009 only 17% of the exports and 15% of the imports in Latin America were intra-regional. In the case of Asia the numbers are 42% and 48%, and in Europe 67% and 50% respectively.

EXHIBIT 44

Latin America and Brazil should grow their share of international trade

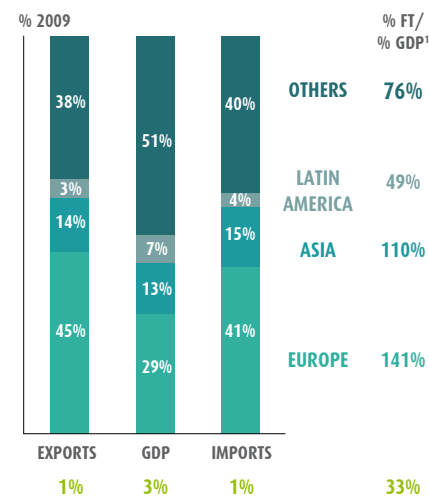
GOODS

Share of the GDP and international trade in goods



SERVICES

Share of the GDP and international trade in services



1. Average share of the % of exports and imports (foreign trade) over the share of the GDP / Note: All figures are nominal Source: Unctad Online handbook of statistics; BCG analysis

Although Brazil and Latin America have the potential to increase their share of the international trade in goods and services, they face two main hurdles: customs barriers and poor infrastructure. Regarding the former, according to the World Bank's "World Trade Indicators" (see Exhibit 45), Latin American countries have major restrictions on both the import and export of goods. This same report goes on to say that these countries are even less open to trading in services, and have the smallest number of service sectors with signed GATS<sup>64</sup> agreements (see Exhibit 46).

<sup>64</sup> The General Agreement on Trade in Services

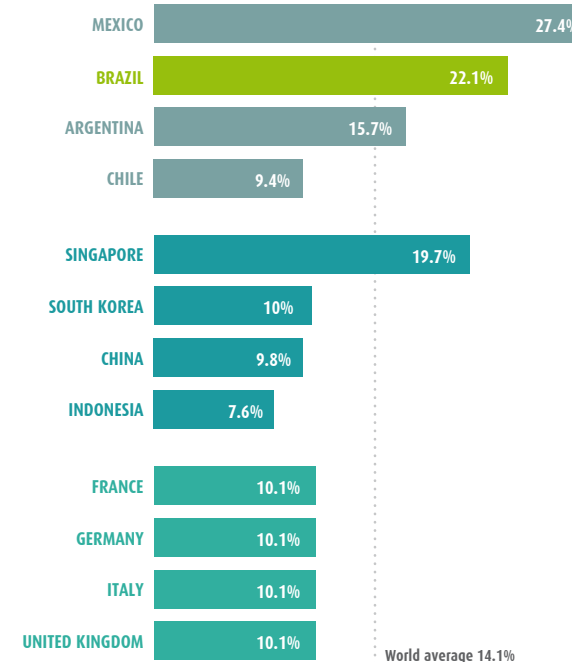
EXHIBIT 45

Latin American countries have the largest customs barriers to the import and export of goods

Equivalent import tariffs are the highest in Latin America

Restrictions on the import of goods<sup>1</sup>

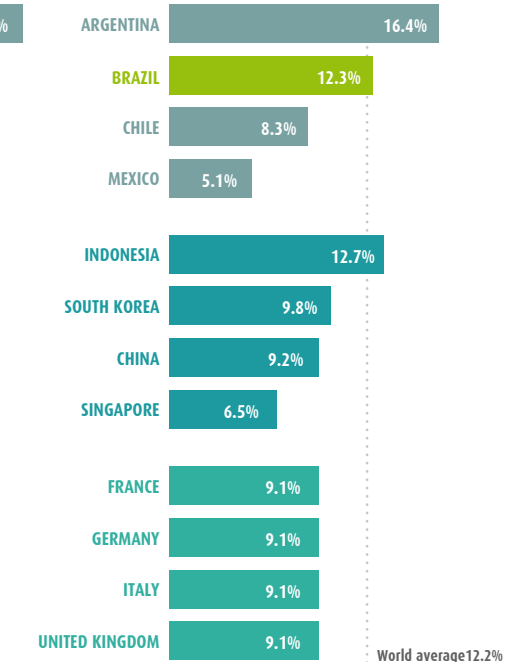
Equivalent tariff (tariffs + non tariff import restrictions)



Tariffs imposed to Latin American exports are also the highest

Restrictions on access to other markets<sup>2</sup>

Equivalent tariff (tariffs + non tariff restrictions on exports)



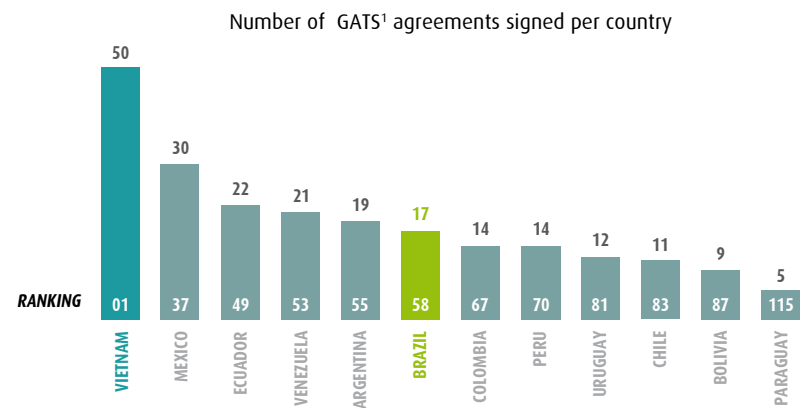
MORE RESTRICTIVE

MORE RESTRICTIVE

1. Reflects a uniform tariff that would keep domestic import levels constant 2. Reflects a uniform tariff that would keep the level of imports by the exporter's commercial partners constant Source: World Trade Indicators 2009/10 - World Bank

### EXHIBIT 46

Latin American countries could increase the number of international trade in service agreements signed



% agreements signed by sector<sup>2</sup>

	Financial services	Travel and tourism	Business services	Construction and engineering	Recreation and culture	Distribution	Telecom	Environmental services	Education	Transportation	Healthcare
VIETNAM	100%	100%	83%	100%	100%	80%	60%	100%	80%	100%	100%
MEXICO	100%	75%	83%	80%	0%	40%	60%	0%	80%	44%	50%
ECUADOR	67%	50%	67%	20%	60%	20%	20%	100%	0%	33%	25%
VENEZUELA	67%	75%	83%	100%	40%	0%	40%	0%	0%	22%	0%
ARGENTINA	100%	100%	50%	80%	0%	60%	40%	0%	0%	0%	0%
BRAZIL	67%	25%	33%	80%	0%	60%	20%	0%	0%	44%	0%
COLOMBIA	67%	50%	67%	80%	0%	0%	20%	25%	0%	0%	0%
PERU	67%	50%	50%	0%	40%	40%	20%	0%	0%	22%	0%
URUGUAY	67%	75%	67%	0%	20%	0%	20%	0%	0%	11%	0%
CHILE	100%	75%	50%	0%	0%	0%	20%	0%	0%	11%	0%
BOLIVIA	67%	50%	0%	0%	60%	0%	20%	0%	0%	0%	25%
PARAGUAY	67%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%

1. From the WTO page: "The General Agreement on Trade in Services (GATS) is the first and only set of multilateral rules governing international trade in services. It was developed in response to the huge growth of the services economy over the past 30 years and the greater potential for trading services brought about by the communications revolution." 2. Each sector has 3 to 9 sub-sectors that require specific commitments (e.g. financial services has 3 sub-segments - Insurance, Banking and other financial services)  
Source: WTO trade in services database



On the latter hurdle, especially in the case of Brazil, internationally there is a perception that its port infrastructure leaves much to be desired, especially when compared to other hubs around the world. On a scale of 1 to 7, international hubs such as Hong Kong, Singapore, the USA and the United Kingdom all score above 5.5, whereas Brazil scores only 2.9, slightly more than half. In parallel to the ports, there are limited overland connections between neighboring countries. The few roads that do exist are often interrupted and their quality is not always good; railroads have different gauges, are poorly maintained and congested. In the case of services, the region's telecom infrastructure, which is essential for providing global services such as call centers, is poorly interconnected. Several intra-regional data routes go through several countries, often outside the region, which cuts back on the speed of online services, worsens the quality of the connection and increases the risk of interruption.

### Capital and Investment Flows

Stimulating and channeling international capital flows is a vital component of any hub. Simpler processes to enable the inflow of international capital would greatly benefit the economy, increasing the availability of funding for all sectors, either through capital markets or its banking system. At the same time, making it easier to invest abroad increases the options available to domestic savers. In short, regulatory and institutional environments that facilitate the inflow and outflow of funds allow a country to act as a true hub, attracting investments from all over the world and allowing the hub to steer some of its investments to other countries in the region.

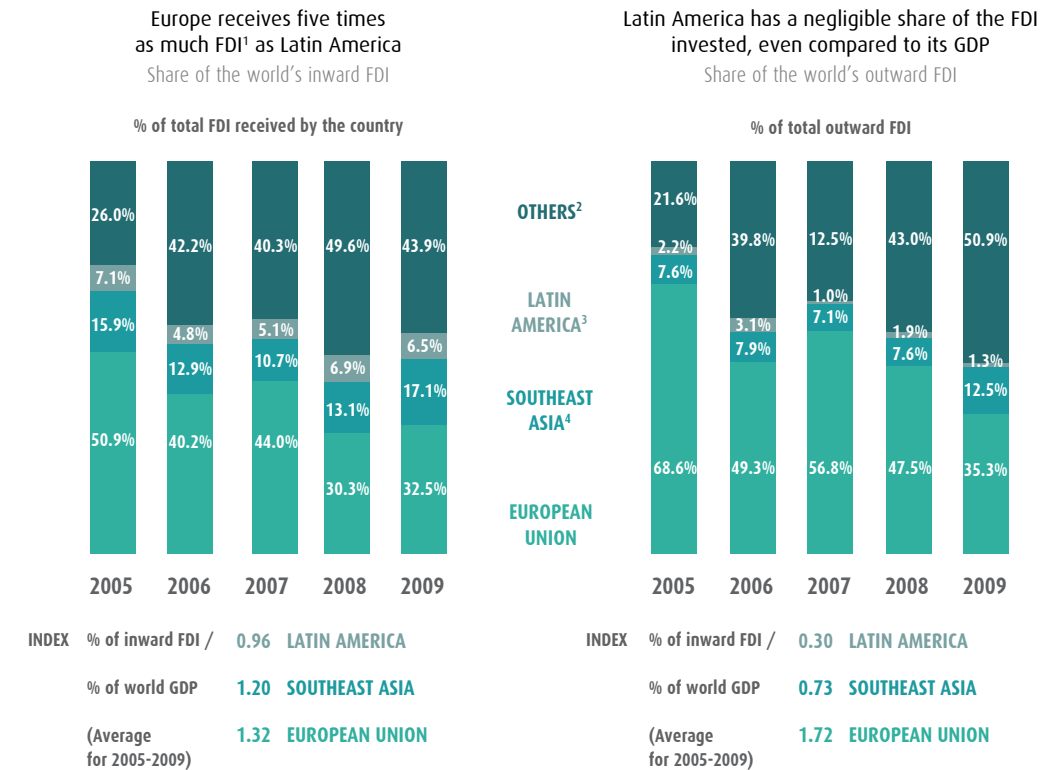
It is important to remember that an environment that facilitates capital flows will also simplify and stimulate direct investments. This favors the internationalization of a country's businesses and, at the same time, attracts multinational investments to itself and its region, creating jobs and strengthening the economy as a whole.

In absolute terms, over the course of the past five years Latin America has received only a small share of the world's total FDI (Foreign Direct Investment). The volume of FDI closely parallels the region's share of the world GDP (see Exhibit 47). Nevertheless, examples from other regions such as the European Union and Southeast Asia show that, when stimulated, either as a result of intrinsic economic characteristics or the regulatory environment, the volume of inward investment may be much larger than it would be if it were merely proportional to the GDP. The region's situation is even worse when one considers outward direct investment. Here what calls attention is the fact that the region's share of outward FDI is not only small in absolute terms, but also in proportion to its GDP (see Exhibit 47).

Brazil stands out in absolute terms in both inward and outward Latin American FDI, arising as the natural leader of these financial flows. Nevertheless, relative to the GDP, Chile is the regional leader, which only confirms that Brazil has room to increase its inward and outward FDI flows (see Exhibit 48). Integration with Latin American countries

## EXHIBIT 47

Latin America attracts FDI in proportion to its GDP, but its share of outward FDI is much smaller, both relatively constant in the past 5 years



1. Foreign Direct Investment 2. Includes the USA, Canada, Australia, Russia and tax havens, among others 3. Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, Guiana, Paraguay, Peru, Surinam, Uruguay, Venezuela, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama 4. Selected countries: Cambodia, North Korea, South Korea, China, Singapore, Philippines, Hong Kong, Indonesia, Laos, Macau, Malaysia, Myanmar, Thailand, Taiwan, Vietnam

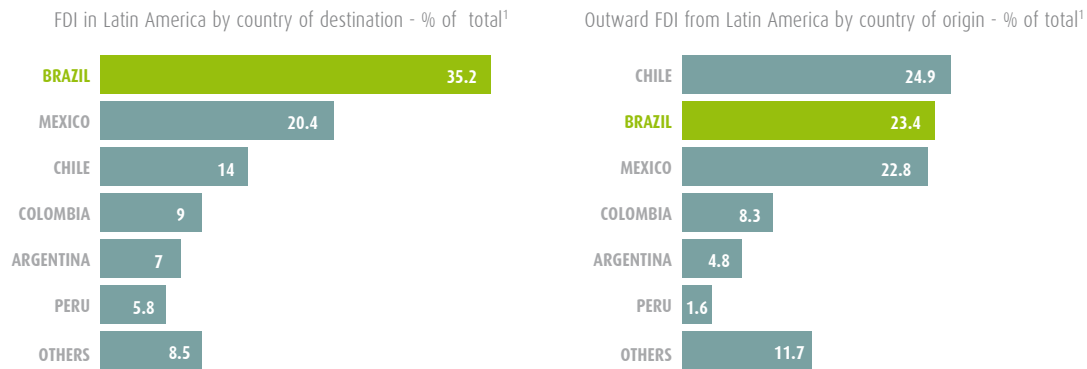
can also improve; looking at inward and outward flows from Brazil, the region accounts for less than 10% of the total, the larger flows being with partners in Europe and North America (see Exhibit 48).

One of the tools to promote greater regional integration and increase the importance of both Brazil and Latin America in the global scenario is to ratify bilateral investment

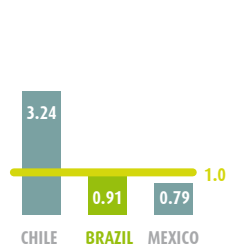
EXHIBIT 48

Despite overall intense flows of FDI into Brazil, Latin America's share of the world total is small

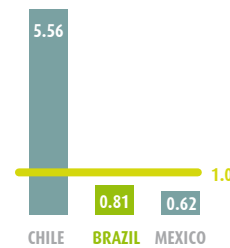
Within Latin America, Brazil leads in inward and outward FDI in absolute terms



Inward FDI weighted by the country's share of the regional GDP<sup>2</sup>

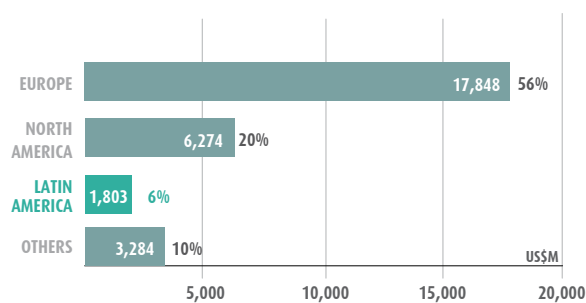


Outward FDI weighted by the country's share of the regional GDP<sup>3</sup>

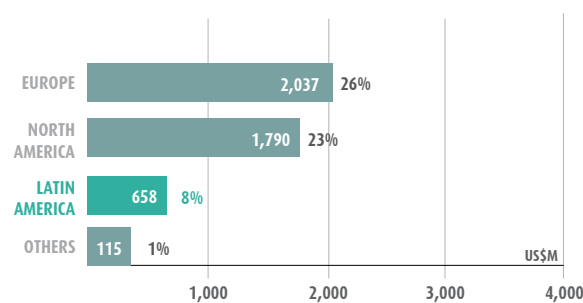


Latin America accounts for less than 10% of the inward and outward FDI for Brazil

Gross foreign investment received in Brazil by origin (2009)<sup>4</sup>



Gross foreign investment made by Brazil by destination (2009)<sup>4</sup>



1. Average for 2007 - 2009 2. Index (% of the total regional inward FDI / country GDP as a % of total region GDP) 3. Index (% of the total regional outward FDI / country GDP as a % of total region GDP) 4. Fiscal havens are not included explicitly, but account for 8% and 42% of Brazil's inward and outward FDI respectively  
Source: UNCTAD World Investment Report; UnctadStat; BCG analysis

THE SIZE OF BRAZIL AND OF ITS ECONOMY MAKE IT AN IMPORTANT CONNECTION HUB WITH THE WORLD, CAPABLE OF CONSOLIDATING ITSELF AND ATTRACTING BENEFITS TO THE ENTIRE REGION

agreements. To date, Brazil has signed only a small number of such agreements compared to, for example, Chile. While Brazil has agreements with 14 countries, all within Mercosur and none of them ratified, Chile has 51 signed agreements (almost four times as much as Brazil), 38 of which have been ratified, including agreements with countries such as the USA, Canada, Mexico and India.

These bilateral agreements make investments between the signatory countries easier and safer. In general, they involve equal treatment of foreign and domestic investors, protection and indemnification in the case of expropriations, no restrictions on the remittance of investment yields to the country of origin, and the stipulation that disputes will be resolved by international courts. In the case of Brazil, such agreements would facilitate not only the inward and outward flow of direct investments, but also portfolio<sup>65</sup> investment flows, contributing to the region's growth through the efficient matching of capital looking for investment opportunities and businesses looking for capital.

In addition to improving regulations governing capital flows per se, the exchange rate also deserves attention as it is an obvious element of intermediation between inward and outward flows. Brazil has refined its exchange regulation, promoting changes that have made processes simpler, lifting some of the restriction on the inward and outward flow of hard currency. Among these improvements are the International Capital and Foreign Exchange Market Regulation (RMCCI) coupled with the extinction of the former Consolidated Exchange Rules (CNC), both of which have modernized and simplified a number of antiquated rules that had been on the books, such as for instance the requirement for describing the purpose of the transaction. In addition, the Brazil-

<sup>65</sup> Portfolio investments are those that, unlike FDI, are not linked to any long lasting interest in the asset or effective management control of the business. They may range from the purchase of public debt bonds through stocks. In the latter case they are portfolio investments if they do not exceed 10% of the capital of the companies in which the investments are made.

ian Monetary Council's (CMN) Resolution 3,844 consolidated several exchange rules, reducing the multiplicity of documents required for exchange transactions. Changes such as these must continue.

Regarding the connections between Brazil and Latin America, and between Latin America and the world, there is room for initiatives to promote reforms and agreements that would contribute to a further increase in the inward and outward flow of investments. Despite its prominent position within the region, Brazil can develop along a number of dimensions regarding the ratification of investment agreements and advances in its exchange regulations. The topic of Latin American financial integration shall be further explored in a BRAiN report to be published during the course of 2011.

### International business operations

In order for a country to be truly integrated in a global business network, in addition to significant international flows it must also be the regional headquarters of multinational corporations. This means that domestic businesses must be able to become international, and that the country be able to attract not only business operations, but also regional, functional or even global decision making centers of companies originally from other nations. This not only attracts investments, but it especially creates high value added jobs in corporate functions that will strengthen the virtuous cycle of talent attraction and training.

In recent years there has been a major trend among Latin American businesses towards expanding their international activities. In a ranking of developing nations with the largest volume of assets abroad<sup>66</sup>, the share of Latin American businesses is increasing: in 2003 they owned 14.1% of all assets abroad, and by 2008 owned 17.2%<sup>67</sup>. This increase in position is the result of a 258.1% increase in assets held abroad in just two years, from US\$ 35 billion to US\$ 125 billion. In the past decade the flow of outward foreign direct investment (FDI) from Latin America to other parts of the world has also increased. In 2004 there was a more than threefold increase in outward FDI compared to previous year, and this amount should continue to increase (*see Exhibit 49*).

Although the region's businesses have strengthened significantly, they still have limited importance on a global level. Among the top 100 transnationals from developing nations<sup>68</sup>, only nine are Latin American, three of them Brazilian. In the ranking of the top 100 largest transnationals from the whole world, only one multilatin business is listed, appearing in 55<sup>th</sup> place (*see Exhibit 49*).

<sup>66</sup> Source: World Investment Report - UNCTAD

<sup>67</sup> The last year for which data is available

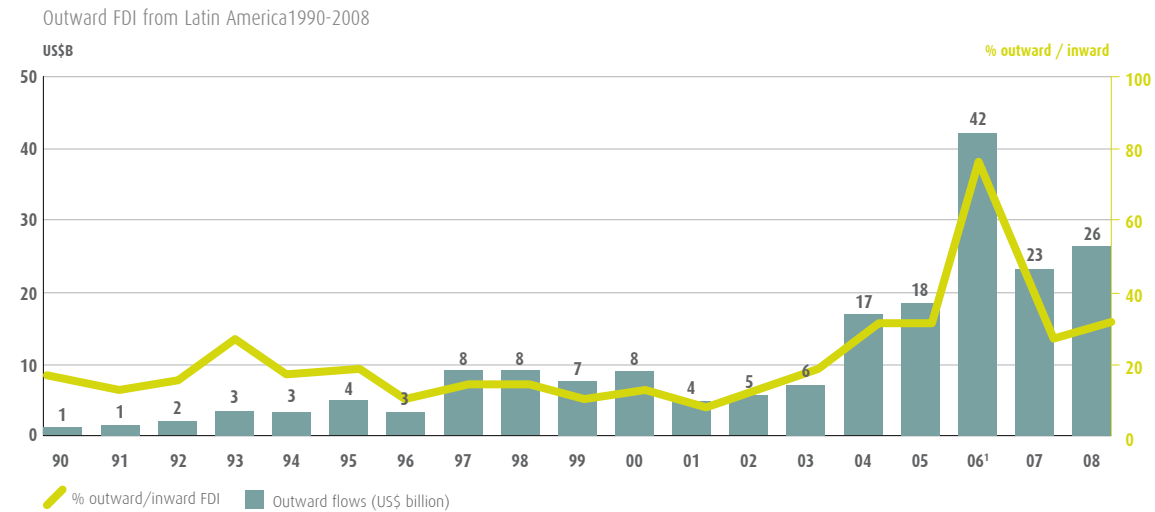
<sup>68</sup> Source: World Investment Report - UNCTAD



### EXHIBIT 49

Multilatinos are a growing force, but still of limited relevance on a global scale

Latin multinationals are a growing force...



...but they still have a limited share of global business

Latin American Companies in the top<sup>2</sup> 100 Transnationals from developing nations

COUNTRY	COMPANY	ASSETS ABROAD (US\$ B)	RANKING OF THE TOP 100 DEV. NATIONS	RANKING IN THE TOP 100 WORLDWIDE
HONG KONG	HUTCHINSON	70.8	1	25
CHINA	CITIC GROUP	43.8	2	48
MEXICO	CEMEX	40.2	3	55
BRAZIL	VALE	19.6	9	X
VENEZUELA	PDVSA	19.2	10	X
BRAZIL	PETROBRAS	15.1	16	X
BRAZIL	GERDAU	13.7	18	X
MEXICO	AMÉRICA MÓVIL	10.4	25	X
ARGENTINA	TERNIUM	7.0	36	X
MEXICO	TELMEX	3.9	68	X
MEXICO	FEMSA	3.5	77	X

The only Latin American company included in the world's top 100 companies (in 55<sup>th</sup> place)

X Not part of the top 100 worldwide

1. Vale purchased Inco for US\$ 18B 2. Ranking by assets outside the country of origin. Excludes financial institutions Source: World Investment Report - UNCTAD; BCG analysis

Although Brazil does not stand out in the list of the most international Latin American companies, it does stand out when it comes to attracting foreign businesses. Of all Latin American countries, Brazil has the largest presence of foreign businesses, considering the ten largest businesses by revenue from selected regions of the globe (see Exhibit 50).

### EXHIBIT 50

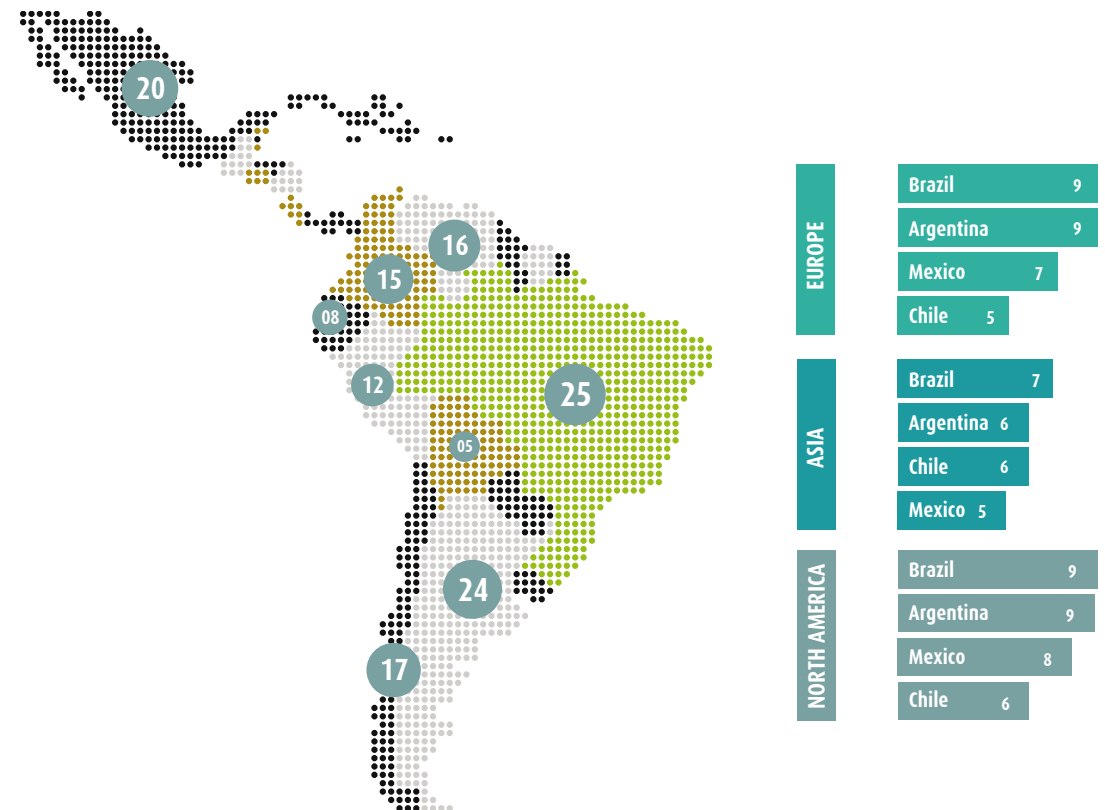
Brazil leads in Latin America when it comes to attracting companies from Europe, Asia and North America

Brazil is the Latin American country with the largest presence of foreign companies...

Latin American presence of the 30 largest companies in Asia, Europe and North America<sup>1</sup>

... And also leads in terms of international regions

Presence of the 10 largest companies of each region in countries in Latin America<sup>1</sup>



1. Ten largest companies in each region by revenue. North America includes Canada and the USA only. Data for Uruguay, Central America, the Caribbean, Paraguay, Guyana and Surinam removed from the map due to low significance Note: company presence may mean manufacturing facilities as well as sales rep offices, headquarters, etc. Includes all forms of activity Source: Forbes; Fortune; companies' websites; BCG analysis

The first hurdle faced by businesses wishing to operate in multiple Latin American nations is the regulatory framework. Aligned accounting, financial, tax and technical standards would make intra-regional operations more efficient. Fortunately, efforts to harmonize accounting rules by adopting IFRS (International Financial Reporting Standards)<sup>69</sup> and other positive moves in this direction are well underway. Colombia and Chile adopted IFRS in 2009, and Brazil and Argentina are adopting IFRS in 2011. In addition, the region has witnessed a number of moves designed to exchange experiences and organize the region to comply with IASB (International Accounting Standards Board) standards, which will provide greater strength and representation<sup>70</sup>.

In addition to issues of regulation, the use of common systems and databases would make it much easier for businesses to operate in multiple countries. For example, the registration of trademarks and patents, payments, credit and legal histories, customs and international trade information and the registration of businesses, people and licenses. This standardization could be implemented in phases, starting with automatic regional recognition of operations in other countries, moving on to integration and interconnection between systems for shared information, finally creating unified regional systems.

### People mobility

Business flows do not depend merely on goods, services, capital and businesses. It is essential that executives and decision makers in all sectors be able to easily enter and exit the hub, both to complete business transactions as well as to enable installing decision making centers and regional corporate centers. In addition, easier mobility and international hiring may contribute to balance the supply and demand for qualified professionals, which will help keep inflationary pressures on compensation at bay, for instance.

In order for this to happen, the country must first have adequate conditions for transit between itself and other hubs, not only global but also regional and local. To this end it is vital that the regulatory requirements for the entry and exit of professionals be modernized, avoiding extremes that make it harder for executives to come into the country or for international events and business to take place, and yet do little to strengthen national security. In addition, it is a fundamental requirement that there be good air transport connectivity, which includes a suitable airport infrastructure and frequent flights, as air transport is the most common way of transport in a globalized world.

Throughout its history, Brazil has had periods in which it welcomed large numbers of immigrants, and now has large communities of their descendants, such as the Japanese and Italians in São Paulo, and the Germans in the south of the country. However, currently the integration of foreigners in Brazil is limited compared to other global business hubs, the same being true for other Latin American countries. Even those countries that attract more immigrants to the region, such as Argentina and Venezuela, are far behind the main global economies such as the USA and the United Kingdom, where immigrants make up some 12% and 8% of the population respectively. Venezuela has the largest immigrant contingent in Latin America, yet they make up no more than 4% of the population (see Exhibit 51).

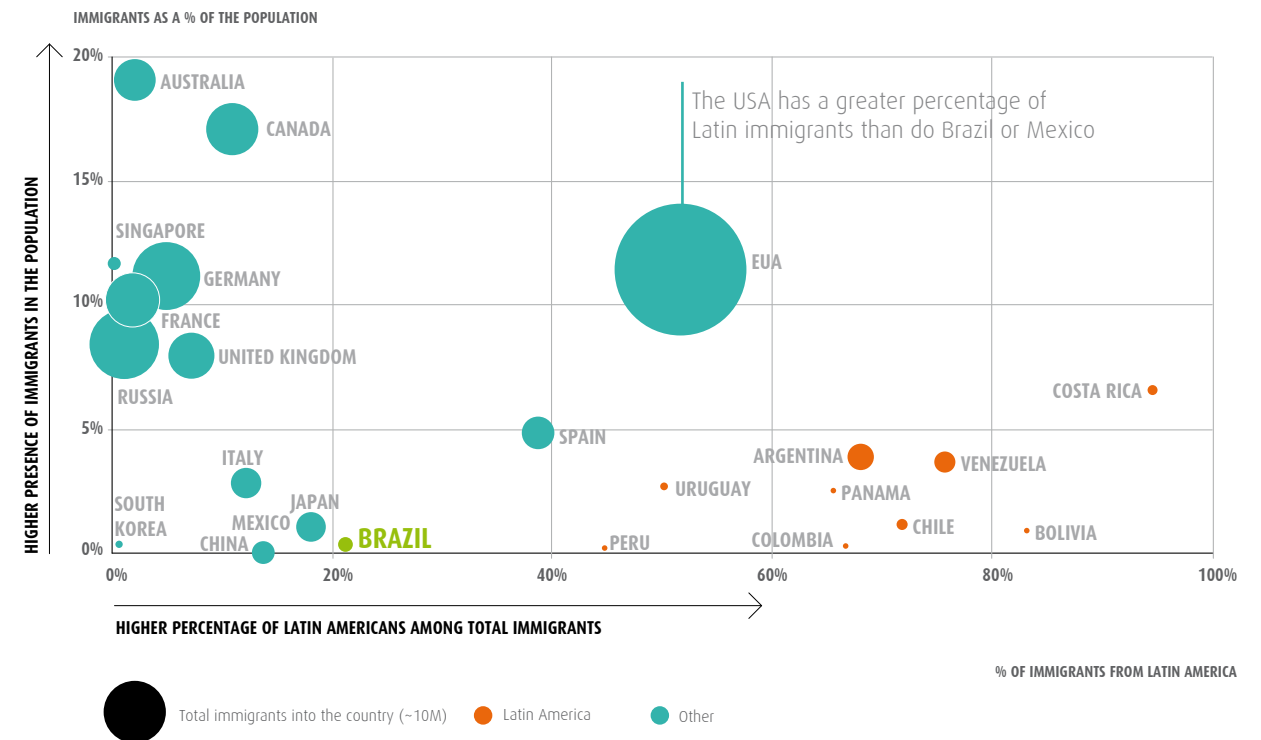
<sup>69</sup> International accounting standards published by IASB (International Accounting Standards Board). Since 2001 the IASB has led efforts to implement accounting standards to make it easier to compare and integrate the accounting information of companies in different countries

<sup>70</sup> In February 2011 a meeting was held between representatives of the bodies responsible for issuing the accounting rules for each country (Brazil, Argentina, Mexico, Chile and Venezuela) to discuss these objectives

## EXHIBIT 51

Even the Latin American countries that attract the most immigrants are far behind the main world economies

Attraction of immigrants both overall and from Latin American countries



Note: Most recent emigration data available on a global level, based on ~2000, compared to the global population in 2000  
Source: Development research centre on Migration, Globalization & Poverty; EIU

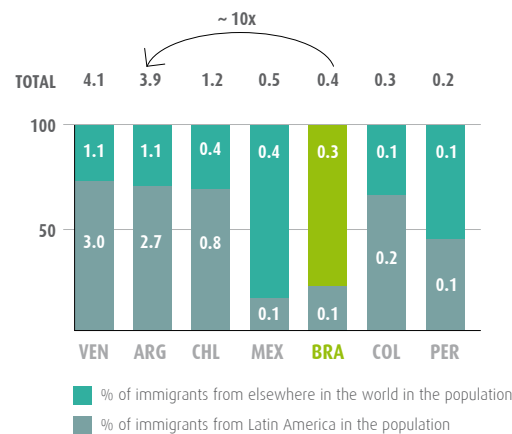
Brazil has a particularly low concentration of immigrants in its population, even compared to other countries in Latin America. While in Argentina immigrants make up 3.9% of the population, more than 70% of them from other Latin American countries, in Brazil this percentage is almost ten times smaller (0.4%), with few Latin Americans in the mix. The vast majority of immigrants currently residing in Brazil come from Europe, more than half from Portugal. Just as Latin Americans are not a major portion of the people entering Brazil, Latin American countries are not an important destination for Brazilian emigrants. Of the total Brazilians living abroad more than half are in Asia or North America (see Exhibit 52).

### EXHIBIT 52

Migratory movements into and out of Brazil focus on countries outside Latin America

#### Relatively limited presence of immigrants in Brazil, particularly Latin American immigrants

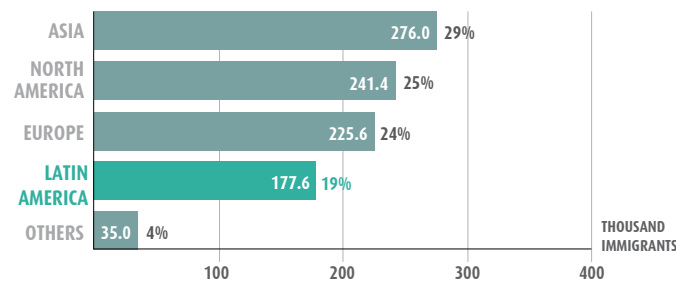
Immigrants from Latin America and other regions as a percentage of the total population<sup>1</sup>



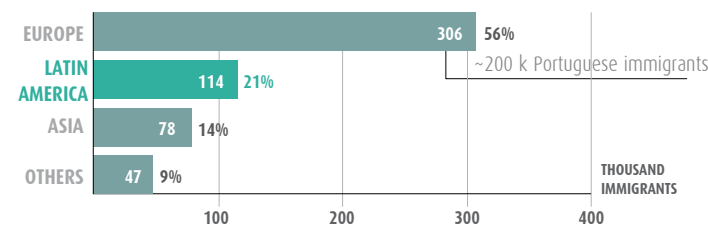
1. Legal immigrants only. Most recent emigration data available on a global level, based on ~2000, compared to the global population in 2000. Source: Development research centre on Migration, Globalization & Poverty; EIU

#### Emigration from Brazil is mostly to Japan and the USA, while most immigrants come from Europe

Brazilian emigrants by region of destination<sup>1</sup>



Immigrants to Brazil by country of origin<sup>1</sup>



It is interesting to note that Latin America's share of workers entering Brazil is decreasing. While in 2006 Latin Americans received 10% of all work visas issued by Brazil, in 2007 and 2008 they received only 9% of the visas, and only 8% in 2009. The same is not true if one looks at Latin American visitors as a percentage of total visitors entering Brazil. In absolute terms the number of Latin American visitors to Brazil has been constant in recent years, thus as a percentage they have increased as global travel to Brazil is down (see Exhibit 53).

One factor that contributes to the low numbers of immigrants in Brazil is the complexity and slowness of the process for authorizing the entry of foreigners into the country. In a recent IMD survey of executives around the world asking about the ease of entry of immigrant workers in different countries, Brazil received only 5 points on a scale of 1 through 10. By comparison, global nations such as Singapore and Hong Kong got scores of almost 7 (see Exhibit 54).

Complex immigration laws are the main cause of this. Brazilian legislation protects its domestic labor force, and with the exception of immigrants from Mercosur countries,

### EXHIBIT 53

Brazil attracts foreigners from Latin America, but not for work

#### Latin America's share of workers entering Brazil is falling

Number of work visas issued in Brazil each year by country of origin of worker

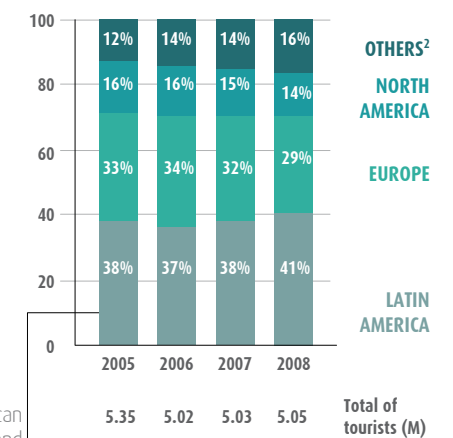


Total visas (k): 25.4 (2006), 29.5 (2007), 44.0 (2008), 42.9 (2009)

About half of the Latin American tourists are from Argentina, and about 50% of those go to destinations in Southern Brazil

#### Latin America's share of tourists to Brazil is the largest and stable

Tourists entering Brazil by country of origin



Total of tourists (M): 5.35 (2005), 5.02 (2006), 5.03 (2007), 5.05 (2008)

1. Number of tourists includes leisure and business. 2. Includes Asian nations. Source: Brazilian Ministry of Labor and Employment; Brazilian Ministry of Tourism

workers must show evidence of professional experience and secondary and higher education degrees, regardless of an individual's professional experience and the demonstrated need of companies trying to bring these workers into the country. The main inefficiencies foreigners point out in the entry process are the time it takes and the number of documents required. On average, the process takes two months and must be sponsored by an employer; visa renewal can also take up to two years.

Brazil should rethink the model it wants to use for its immigration policy and implement initiatives to make it simpler for workers to enter the country. In a globalized world that is increasingly connected, the ability to recruit freely from anywhere in the world is an important competitive advantage. This brings advantages not only for those who come into the country and for the businesses that hire them, but also for the country as a whole, integrating it with the rest of the world and contributing to the educational and cultural development of its citizens. In addition, such openness would help balance the supply and demand for labor, potentially dampening the inflationary effect of pressures on compensation.



**THE COUNTRY MUST SEEK ALIGNMENT WITH OTHER COUNTRIES IN THE REGION. INTEGRATION AND CONSOLIDATION OF THE PEOPLE, CAPITAL AND TRADE FLOWS WILL PROVIDE AN ATTRACTIVE HUB AND DYNAMIC BUSINESS**

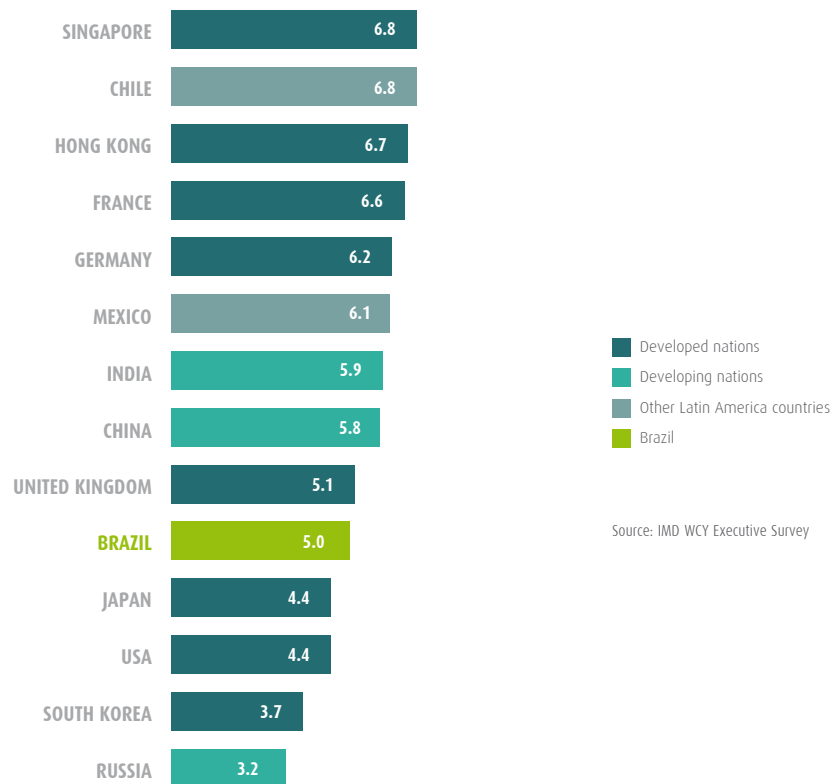
One of the paths for simplifying this process would be to expand the boundaries of the Mercosur Free Movement and Residence agreement (*see Exhibit 55*). In addition, regional databases of individuals and the integrated recognition of professionals are other areas to be pursued.

In parallel with regulatory issues, mobility between nations depends on the availability of a suitable physical infrastructure. Brazil is relatively well connected through international flights. Comparing the number of international destinations originating in Brazil, it is much better positioned than other Latin American countries. Most international flights departing from Brazil go to other Latin American cities, and the same is true

**EXHIBIT 54**

Brazil's executives feel it is hard for workers to enter

Ease of entry for immigrantworkers (score of 1 through 10, 2010)



**EXHIBIT 55**

Free residence agreements with Brazil could be reinforced and include more countries



**Citizens of member countries have a simpler process to establish residence in Brazil**

Citizens of member countries may enter Brazil freely

Once in Brazil, citizens of these countries have a simpler process to apply for a 2 year residence permit

After 2 years they may automatically be granted permanent resident status

**The Argentine program is even broader**

After 1 year foreign citizens can get Argentine documents giving them access to all of the country's public services

Some states allow these "naturalized" citizens to vote in local elections

The country's "Patria Grande" program, created in 2006 to legalize immigrants, has already legalized over 1 million persons

Source: Migration policy institute; press search

for other countries in the region. However, in terms of the number of seats available on international flights compared to its population Brazil fares far worse, and is at the bottom of the list compared to other countries in the region (see Exhibit 56).

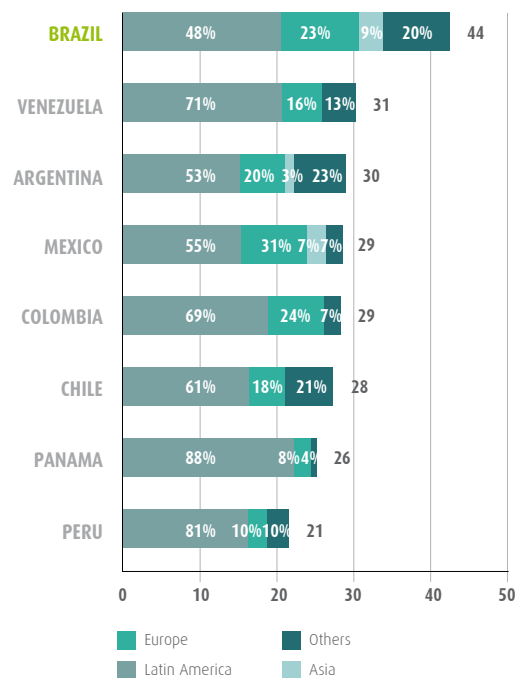
People mobility is key for consolidating a business hub. As shown, Brazil is still not well integrated with the rest of the world when it comes to the number of foreigners who reside or visit the country. To advance in this direction Brazil must accelerate improvements in the regulations governing the entry of foreign nationals and improve its infrastructure so that arriving and leaving is simple and easy.

### EXHIBIT 56

Brazil leads in the number of destinations of international flights, but has a low number of seats in proportion to its population

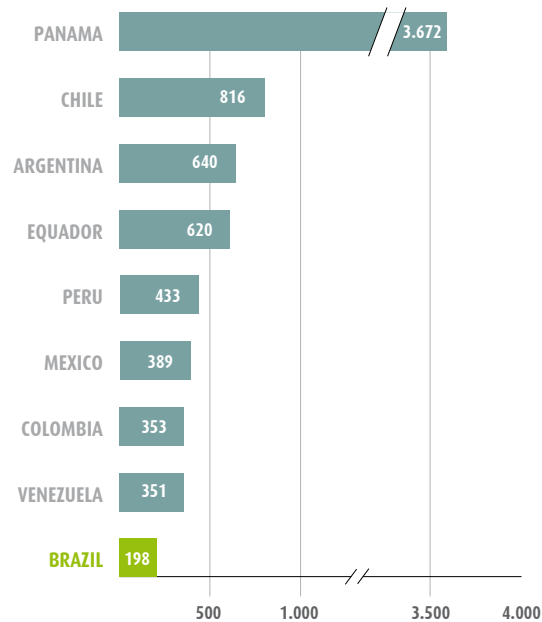
Brazil offers more international flight destinations than any other country in Latin America...

# of international destinations by country of origin (2010)



...however, the number of seats per capita is still low

Seats on international flights/day/million inhabitants<sup>1</sup> (2010)



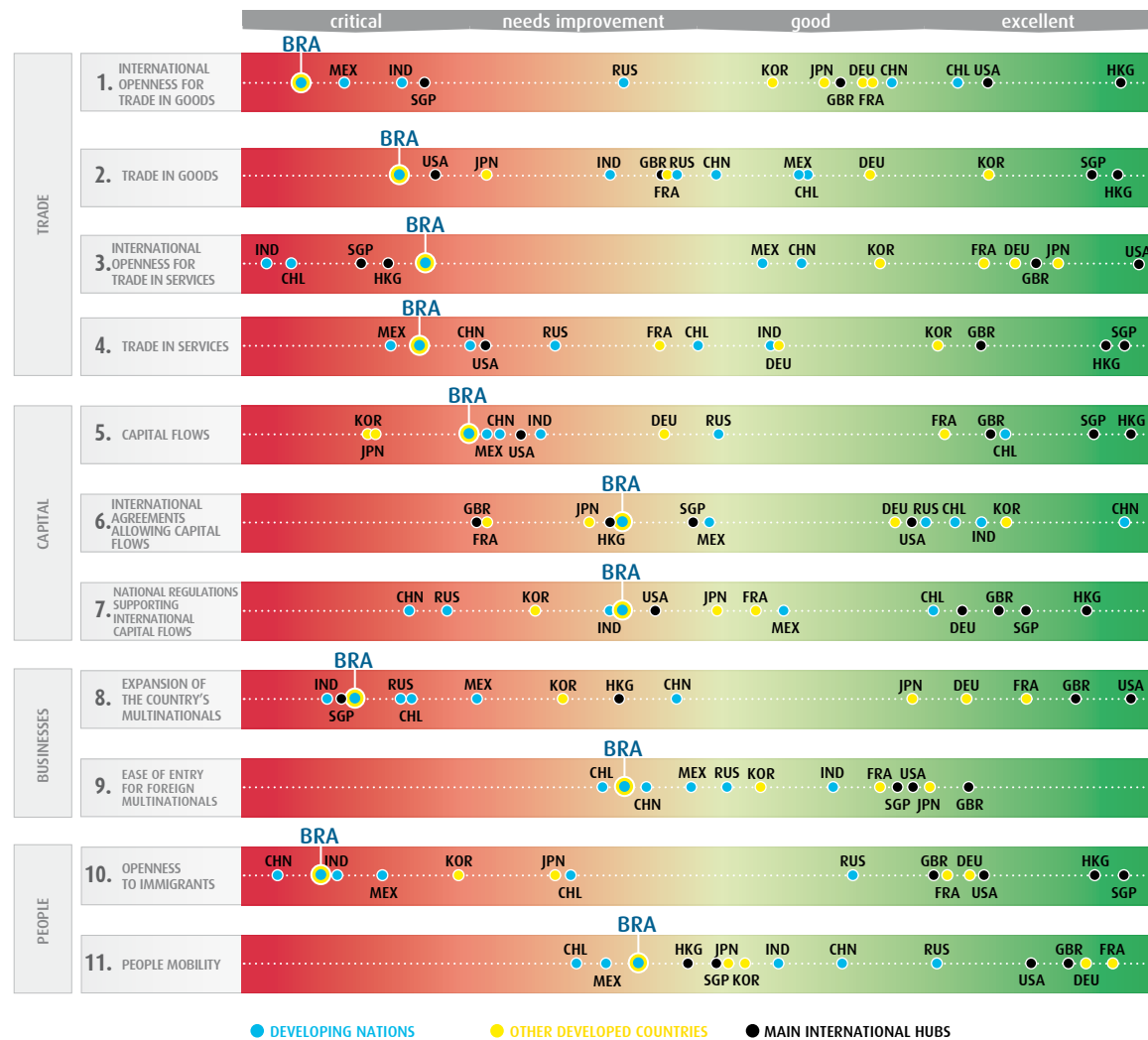
1. Does not include countries in the Caribbean and Central America  
 Note: Based on flights in the week of September 6, 2010. Departures only (~1/2 the total number of flights)  
 Source: OAG database; BCG analysis

### Indicators

The dimensions to assess the connectivity pillar are:

- **International openness for trade in goods:** Limited restrictions on the importation of goods, and little resistance on the part of other countries to its exports are evidence of a country's disposition for commercial connectivity;
- **Trade in goods:** Trade in goods is one of the most important activities for any business hub and is therefore something to be developed;
- **International openness for trade in services:** Being a signatory to international agreements for the trade in services is evidence of a country's disposition for connectivity in the trade in services;
- **Trade in services:** Trade in services has added importance when it comes to creating a service based business hub;
- **Capital flows:** Overall capital flows, both inward and outward, are a key indicator for an investment and business hub, as they enable funding domestic issuers and offer greater options for investing elsewhere in the world;
- **International agreements allowing capital flows:** Being a signatory to bilateral investment agreements demonstrates willingness to facilitate the entrance and exit of capital;
- **National regulations supporting international capital flows:** This helps measure the extent to which a country's regulation, in and of itself, facilitates capital inflows, based on the opinion of experts;
- **Expansion of the country's multinationals:** International projection of the country's multinationals and their ability to compete in the global arena provide an important means of connectivity for a hub, and can leverage other flows such as people and trade;
- **Ease of entry for foreign multinationals:** The readiness of a country's regulation to receive foreign businesses is a determining fact when it comes to their willingness to enter a country and leverages the country's economy and connectivity;
- **Openness to immigrants:** Immigrant share of the population of a country is evidence of its people connectivity to the rest of the world;
- **People mobility:** International people mobility, measured here by the number of flights to foreign destinations originating in the country, is a relevant point as it enables people to enter and leave a hub.

The following exhibit shows how Brazil compares to other countries along the indicators of the connectivity pillar:



In the connectivity pillar, Brazil still has a lot of room for improvement. With the exception of agreements and regulations for unrestricted capital flows, an area where Brazil is approaching the level of good, in all other indicators it is considered less attractive than a group of selected countries.

### Conclusion

Large international flows are one of the primary definers of a hub, and contribute to the economy of a country and its region by channeling, stimulating and radiating the flow of goods and services, capital, businesses and people. The size of Brazil and the vitality of its economy alone make it an important center for connection to the world. By focusing in improving the ease with which it welcomes businesses, investments and people, Brazil could further consolidate its position, which would have important advantages for itself and the region. This topic of connectivity will be further explored in another BRAiN report planned for publication in the second half of 2011.

In the trade dimension, few Latin American countries have any sort of global importance in the export and import of goods, thus it is important to make sure this area develops. Meanwhile, intra and extra-regional trade in services is even more incipient. To connect the region with the world and within itself even more one must focus on initiatives that will improve Latin America's infrastructure and its trade agreements.

Regarding the inflow and outflow of investments in the region, there is room for initiatives to further increase these flows. Brazil especially, although a leader within the region, could consolidate its position further by promoting investment agreements and reviewing its exchange system.

Latin American businesses are becoming stronger and there is no doubt that they have demonstrated significant international growth. However, with few exceptions they have yet to stand out globally. Sponsoring more aligned regional operations will not only allow businesses to stand out in the global arena, it will also bring additional direct investment to the region and further consolidate a Brazilian investment and business hub.

Lastly, regarding people mobility, Brazil is not yet well integrated with the rest of the world when it comes to foreigners living in or traveling through the country for reasons other than leisure. To advance in this dimension it is important to improve regulations governing the entry of foreigners, making it more flexible and enabling international hiring. Also the air transport infrastructure, which is the gateway to any hub, must be improved.

# 07

## IMAGE OF THE COUNTRY

Image of the country is a very important pillar for an investment and business hub, as it reflects and promotes all the other attractiveness pillars. The image helps shape the world's perception of the hub and, if well managed, can enhance its qualities and put its shortcomings into perspective.

Creating and managing a country's image is a complex task that depends on a number of elements that are interlinked and influence each other. For example, working on the cultural aspect of a country's image may influence its perception as a place to do business or as a travel destination. Moreover, a country's image is based on its reality, but is complemented by outside perceptions. Therefore, it is not possible to make significant and sustainable strides in image merely by influencing perception, as it must be backed by facts and reality.

This section does not analyze the intrinsic of Brazil as a investment and business hub, which were addressed previously in the discussion of the other individual attractiveness pillars, but rather it analyzes how the reality of the country is disclosed so as to assess international perception of the country. The discussion is split into the three dimensions that are essential to a hub's image: a place to do business, a place to live and a tourist destination. The current status of Brazil's image along each of these dimensions and the opportunities for improvement will be analyzed looking at how to transform the image of the country into a tool for building a business hub.

As a starting point, the 2010<sup>71</sup> *Nation Brands Index* places Brazil in a relatively good position, ranked 20<sup>th</sup> in a list of 50 countries. However, once broken down into its elements it becomes clear that Brazil performs better in tourism and culture, and worse in the areas related to business; this imbalance has a negative impact on the image one desires for an investment and business hub in Latin America.

### A place to do business

Given its objective of becoming an investment and business hub, ultimately Brazil must cultivate an image as being "a good place to do business". An attractive image

<sup>71</sup> The Anholt-GfK Roper Nation Brands Index

along this dimension will contribute to making the country more interesting to the various business agents, be they businesses, individuals or investors.

Brazil has a sizeable opportunity to take advantage of the moment and develop a business related image, given its recent projection as a strong and attractive economy. Efforts to advertise the country and strengthen this dimension are still limited, and for the most part are public-private road-shows such as BEST BRASIL, promoting Brazil's financial industry to foreign investors, and APEX, which promotes Brazil in the context of world trade.

The perception of Brazil as a source of ideas and goods, and even its institutional environment, are below the global average<sup>72</sup> (see Exhibit 57). International league tables and perception surveys, such as those published by the World Bank and IMD, also show that Brazil is ranked lower in the business attributes. Although these are based on genuine shortcomings, in some cases they could be improved through efforts to better inform and influence the perception of the world's opinion leaders. The limitations of such efforts means that it takes a long time for any progress made to reach the ears of the world and be incorporated into international consensus.

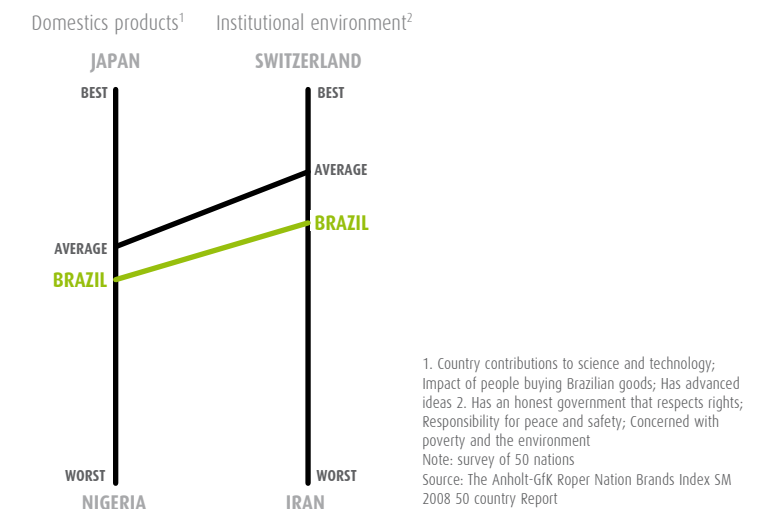
In spite of a less than positive image, the country is improving its position, as seen by the number of international congresses and conventions that have chosen Brazil as their venue. Since 2003, the number of such events held in Brazil has increased at an average rate of 30% per year, making Brazil the 7<sup>th</sup> ranked country in the world as a venue for such events in 2009<sup>73</sup> (see Exhibit 58).

<sup>72</sup> Assessment of 50 countries and published in the 2008 Anholt-GfK Roper Nation Brands Report

<sup>73</sup> Itinerant events of more than 50 participants held at fixed intervals. Source: International Congress and Convention Association

### EXHIBIT 57

Brazil's image for business starts from a lower level



At the same time, Brazilian cities such as São Paulo and Rio de Janeiro already stand out in the ranks of cities to do business in Latin America, rated 3<sup>rd</sup> and 5<sup>th</sup> respectively, behind Miami<sup>74</sup>, Santiago and Mexico City<sup>75</sup>. In other words, although there are still some gaps compared to the rest of the world, within Latin America Brazil is recognized as a business hub.

Another important point for developing Brazil's image as a business hub is the perception of its position in sustainability, a theme that is increasingly on corporate agendas. Relatively speaking, in this area Brazil does stand out; it is the third country in the number of businesses publishing annual sustainability reports using GRI (Global Reporting Initiative) guidelines, the model most often used for such reports according to a KPMG and Ernst & Young survey published in 2009 (see Exhibit 59). However, Brazilian corporate sustainability practices are not fully reflected in global sustainability league tables: of the 100 most sustainable businesses in the world according to Corporate Knights (see Exhibit 59), only three are Brazilian.

<sup>74</sup> Included in the survey due to its connection to Latin American culture

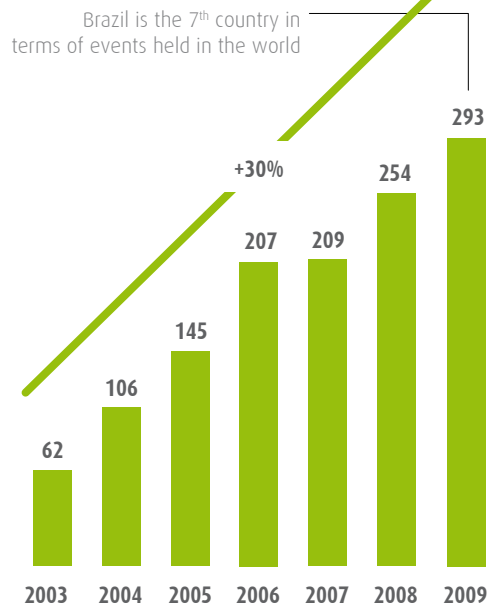
<sup>75</sup> Source: Ranking of places to do business published by *América Economía* in 2010, based on macro-economic, social, service, infrastructure, talent and brand aspects

### EXHIBIT 58

Brazil is starting to stand out as a place to do business

Brazil attracts an increasing number of conventions and congresses

# of international<sup>1</sup> events in Brazil



Brazilian cities are starting to stand out

RANK	CITY	COUNTRY
1 <sup>st</sup>	Miami	USA
2 <sup>nd</sup>	Santiago	CHILE
3 <sup>rd</sup>	São Paulo	BRAZIL
4 <sup>th</sup>	Mexico City	MEXICO
5 <sup>th</sup>	Rio de Janeiro	BRAZIL
6 <sup>th</sup>	Buenos Aires	ARGENTINA
7 <sup>th</sup>	Panama City	PANAMA
8 <sup>th</sup>	Bogota	COLOMBIA
9 <sup>th</sup>	San Jose	COSTA RICA

Ranking of the 37 best Latin American cities for doing business in 2010, based on macroeconomic and social aspects, services, infrastructure, talents and brand

1. Itinerant events of more than 50 participants held periodically Note: survey of 50 nations Source: *América Economía Magazine*, *International Congress and Convention Association*

### EXHIBIT 59

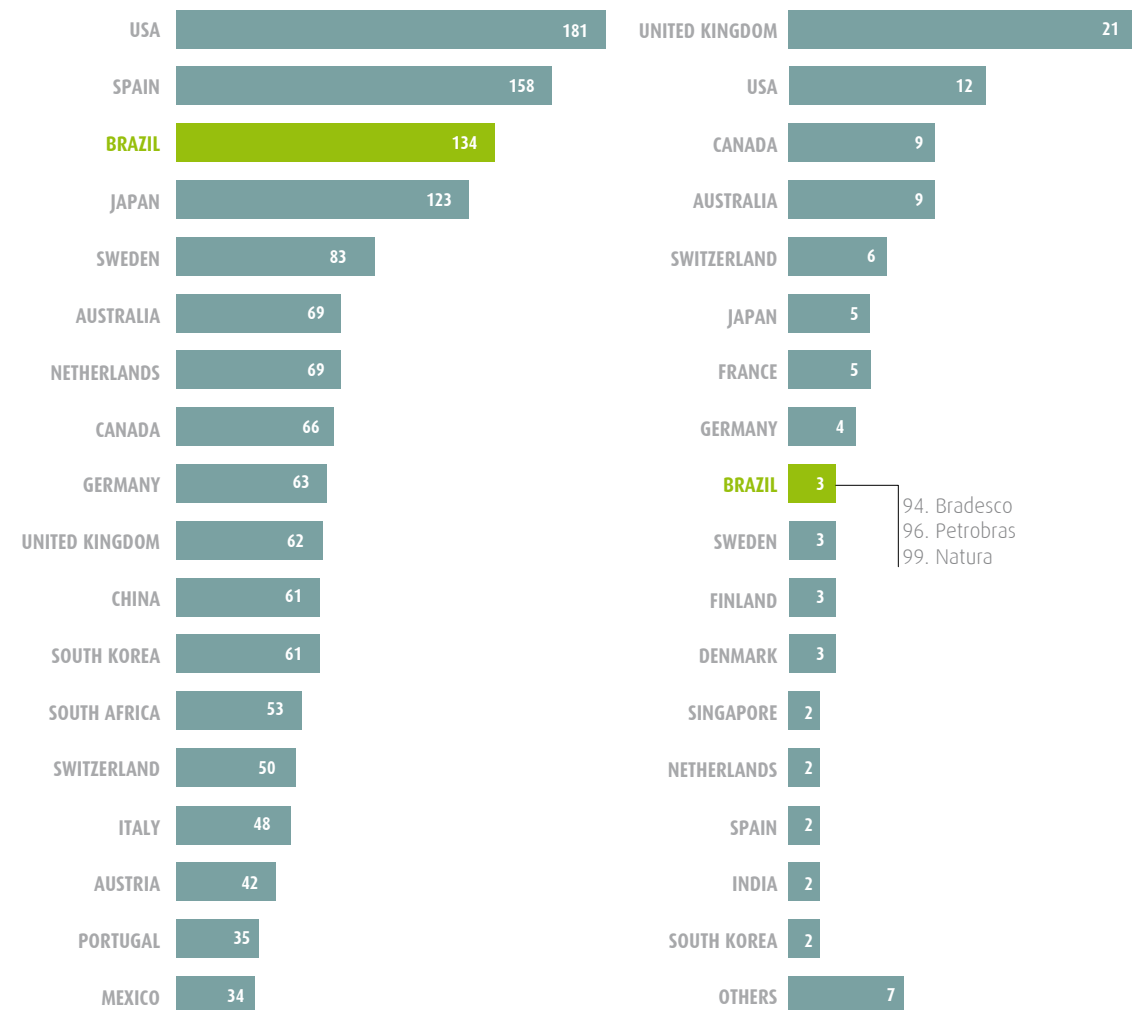
Brazilian businesses are quite concerned with sustainability, but this is not yet recognized internationally

Brazil is number 3 when it comes to reports published...

...but with only 3 companies in the global list of the top 100 most sustainable

# of companies that published sustainability reports<sup>1</sup> - 2010

# of companies among the 100 most sustainable: Corporate Knights "The World's Most Sustainable Companies" - 2010



1. Includes only companies publishing reports that comply with GRI (Global Reporting Initiative Guidelines), most commonly used according to a KPMG and Ernst & Young survey from 2009 Source: GRI; Corporate Knights; BCG analysis

The real progress the country has made and initiatives such as BEST BRAZIL and APEX, both of which were mentioned previously, are beneficial to developing the country's corporate image. However, more must be done, not only more efforts, but especially more coordination around the unified objective and strategy of transforming Brazil into a Latin American investment and business hub.

### A place to live

To help its image as a business hub, Brazil must also be seen as an attractive place to live. The ability to attract people is essential for creating a hub, and depends on a country's ability to provide good living conditions for its inhabitants.

Brazil is recognized worldwide for its hospitality and welcoming culture. In 2009 Forbes magazine<sup>76</sup> elected Rio de Janeiro as the happiest city in the world. Nevertheless, as a place to live Brazil does not fare well. This gap may be linked to very real factors such as traffic and relative lack of personal safety, but it is also largely due to a failure to disclose the positive points Brazilian cities have to offer, and almost no publicity that discusses the context and any progress made. All of these factors combined have resulted in São Paulo and Rio de Janeiro being tied in 92<sup>nd</sup> place in the EIU list of the 140 best places to live league table (see Exhibit 60).

It appears that at present there are no specific initiatives to promote Brazil as a nice place to live, which seems to be in line with the country's policy of not trying to attract foreign labor. As a result, Brazil must rely on other aspects such as its businesses, tourism, news about the country, its position on international league tables, and the flow of people into and out of the country to develop an image as a good place to live.

To improve this, Brazil must not only invest to improve its negative points, it must also find a way to disclose the progress it makes in a more structured way, either through the media, by working on the opinion of travelers to Brazil, or even through international campaigns. An example of something that is positive, yet has not been disclosed, is the fact that the homicide rate in São Paulo is now lower than the homicide rate in large metropolitan centers in the US. In 2009 São Paulo had an average of 11.23 homicides per 100,000 inhabitants, whereas Washington D.C. had 23.85 and Chicago 16.08.

### A tourist destination

Tourism benefits an investment and business hub as it attracts revenue and economic activities directly linked to tourism, and also because tourists advertise the country internationally when they return to their home country, which in turn makes more people interested in visiting the country.

<sup>76</sup> Source: Ranking "The World's Happiest Cities" Forbes magazine, September 2009

## EXHIBIT 60

Brazil does not have a very good image as a place to live

RANK <sup>1</sup>	CITY	COUNTRY
1 <sup>st</sup>	Vancouver	CANADA
2 <sup>nd</sup>	Viena	AUSTRIA
3 <sup>rd</sup>	Melbourne	AUSTRALIA
61 <sup>st</sup>	Buenos Aires	ARGENTINA
64 <sup>th</sup>	Santiago	CHILE
66 <sup>th</sup>	Montevideo	URUGUAY
92 <sup>nd</sup>	São Paulo	BRAZIL
92 <sup>nd</sup>	Rio de Janeiro	BRAZIL
105 <sup>th</sup>	Mexico City	MEXICO
118 <sup>th</sup>	Caracas	VENEZUELA
127 <sup>th</sup>	Bogota	COLOMBIA

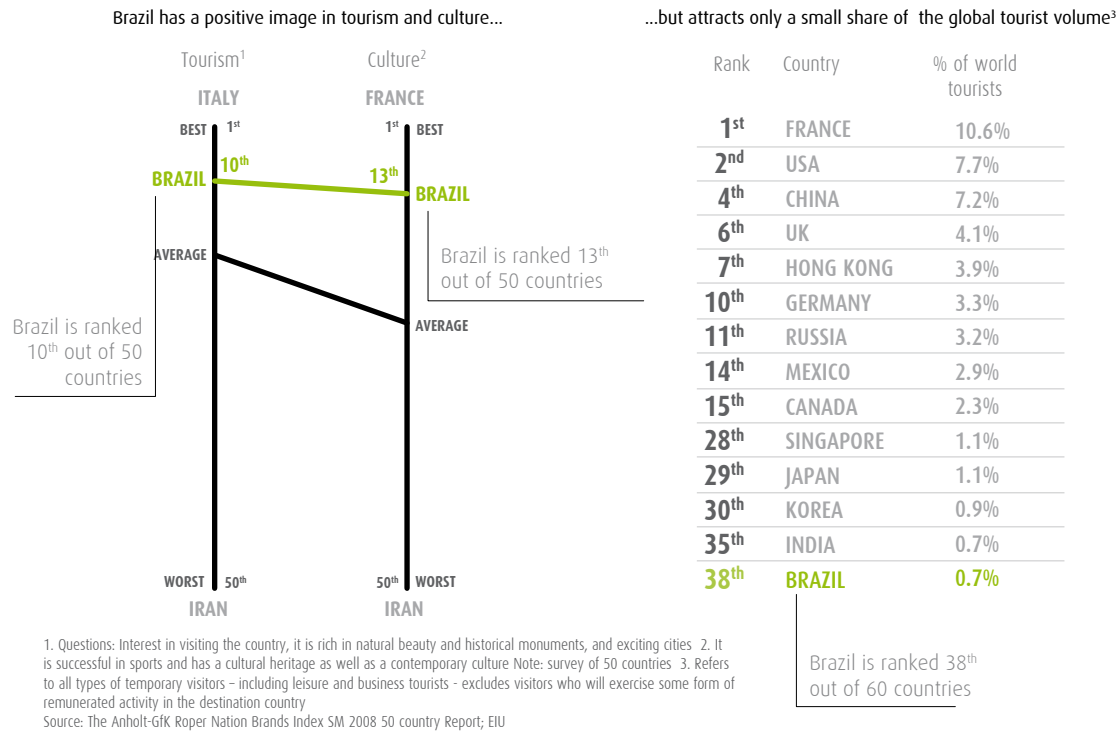
1. 2009 EIU ranking of the 140 best cities to live in, based on stability, healthcare services, culture and environment, education and infrastructure  
Source: EIU

Brazil has an internationally important image as a tourist destination, both for its natural attractions as well as the culture of its people. The country now has the opportunity to transform this strength into a springboard that will help shape the image of its investment and business hub, advertising the country's business image also through the tourists who visit the country. In other words, tourists who recognize that Brazil also has potential as an investment and business destination will help mold international opinion of Brazil as a hub.

Yet contrary to what its strong image as a tourist destination would suggest, Brazil is ranked only 38<sup>th</sup> on a list of the 60 countries receiving the most visitors in the world (see Exhibit 61). In fact, Brazil is the destination of less than 1% of all of the world's visitors. Rather than partaking in the growth of international travel worldwide, in Brazil the number of both business and leisure visitors has decreased (see Exhibit 62).

### EXHIBIT 61

Despite its good image, Brazil attracts less than 1% of the visitors worldwide



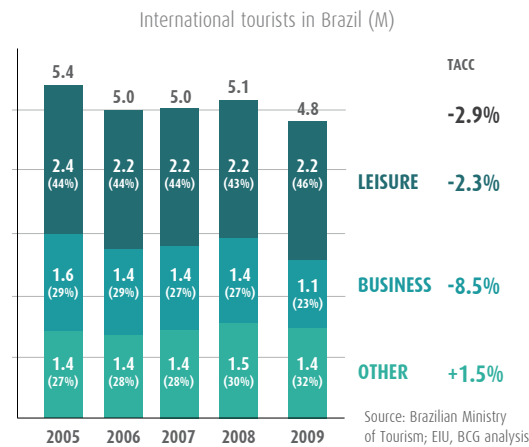
### EXHIBIT 62

The number of visitors to Brazil has not kept up with the global increase

The number of international tourists in Brazil has dropped in recent years



Both leisure and business tourists have decreased in Brazil



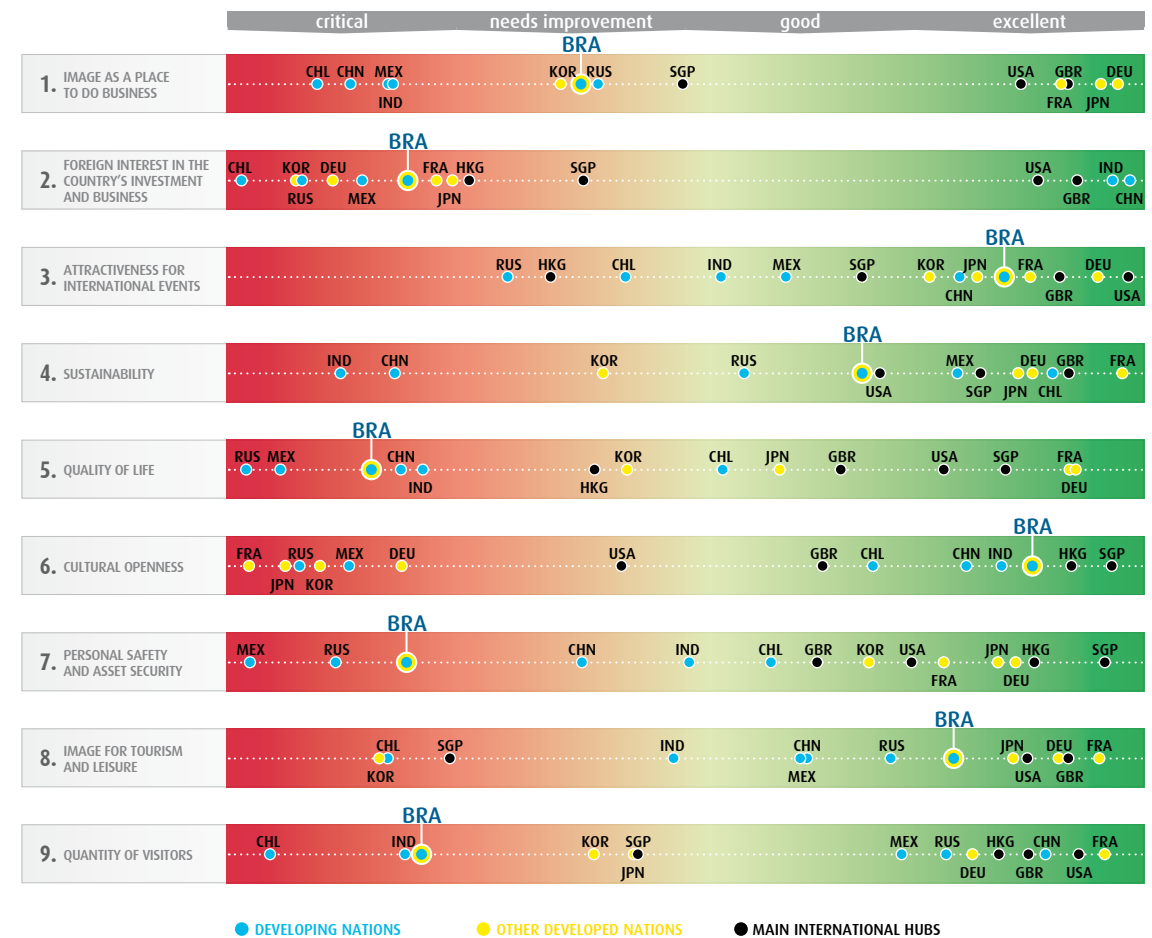
Clearly there is a need to take action and transform Brazil’s image so that more people choose the country as their tourist destination. Fortunately, initiatives to disclose Brazil as a tourist destination are frequent, especially those organized by the Ministry of Tourism and Embratur (the Brazilian Tourism Company). In addition, the 2014 FIFA World Cup and the 2016 Olympic Games are unique opportunities that Brazil can use to translate its positive image into a larger number of visitors. It is necessary to ensure that current efforts continue and generate an actual increase in the number of visitors to Brazil.

### Indicators

The dimensions used to assess the image of the country pillar were:

- **Image as a place to do business:** The hub must have a positive image in the business world if it is to attract businesses and investors in search of opportunities;
- **Foreign interest in the country’s investment and business:** Foreign interest in Brazil, measured here by the number of searches containing the country name and business related words, measures its international projection and therefore its potential for attracting foreign business;
- **Attractiveness for international events:** The number of international events held in a hub is a measure of how interesting it is to foreign businesses and investors, and contributes to creating a hub;
- **Sustainability:** A country’s attitude towards its natural resources defines its sustainability and contributes to its business image. It also influences its image as a place to live and as a tourist destination;
- **Quality of life:** Quality of life defines a country’s image as a place to live, and thus its attraction to international talents and businesses looking for locations around the world;
- **Cultural openness:** The cultural openness of a country means it welcomes business visitors and tourists, and also ensures its own citizens are welcome abroad, it is a key element for consolidating a hub with international ambitions;
- **Personal safety and asset security:** Together with quality of life, safety and security define the attractiveness of a hub as a place to live or travel to;
- **Image for tourism and leisure:** Leisure and tourism contribute directly to a hub as they generate business and, indirectly, help develop a country’s image abroad;
- **Quantity of visitors:** The number of visitors, as well as the country’s image in this regard, measures international interest in the country and helps disclose the hub’s international image.

The following exhibit shows how Brazil compares to other countries along the dimensions of the image of the country pillar:



In this pillar Brazil already stands out in a number of important dimensions such as attractiveness as a venue for international events, sustainability, cultural openness and its image in tourism and leisure. To consolidate its image as an attractive investment and business hub, the country must continue to develop and promote its image for business, elements that would raise foreign interest in business and investment in the country, its quality of life, personal safety and asset security and the intensity of its tourist trade.

### Conclusion

Brazil has an outstanding image in the world and should leverage it to promote its attractiveness as an investment and business hub. More specifically, it is important that it strengthen and balance the image of Brazil along the business and quality of life dimensions, which are some of the country's weaker points.

The good starting point provided by the country image, as well as initiatives underway to improve it and the disclosure of the real progress made may provide Brazil with the tools it needs to promote a strong image as a business hub. In addition, the international sports events in 2014 and 2016 will do even more to foster this unique moment in time for Brazil. Finally, coordination and disclosure of the progress made by the country is the most important strategy to improve the perception of Brazil abroad.



# DASHBOARD OF BRAZIL'S ATTRACTIVENESS AS AN INTERNATIONAL INVESTMENT AND BUSINESS HUB

This section consolidates Brazil's position along the 57 dimensions selected, which are grouped into the 7 pillars considered essential for the attractiveness of a hub. Each of these is an indicator used to compare Brazil to other countries. The objective of developing these indicators is to track Brazil's progress over the years and enable mapping the next steps required to enhance Brazil as an attractive investment and business hub.

It is important to take note of some points regarding the methodology used to create this dashboard:

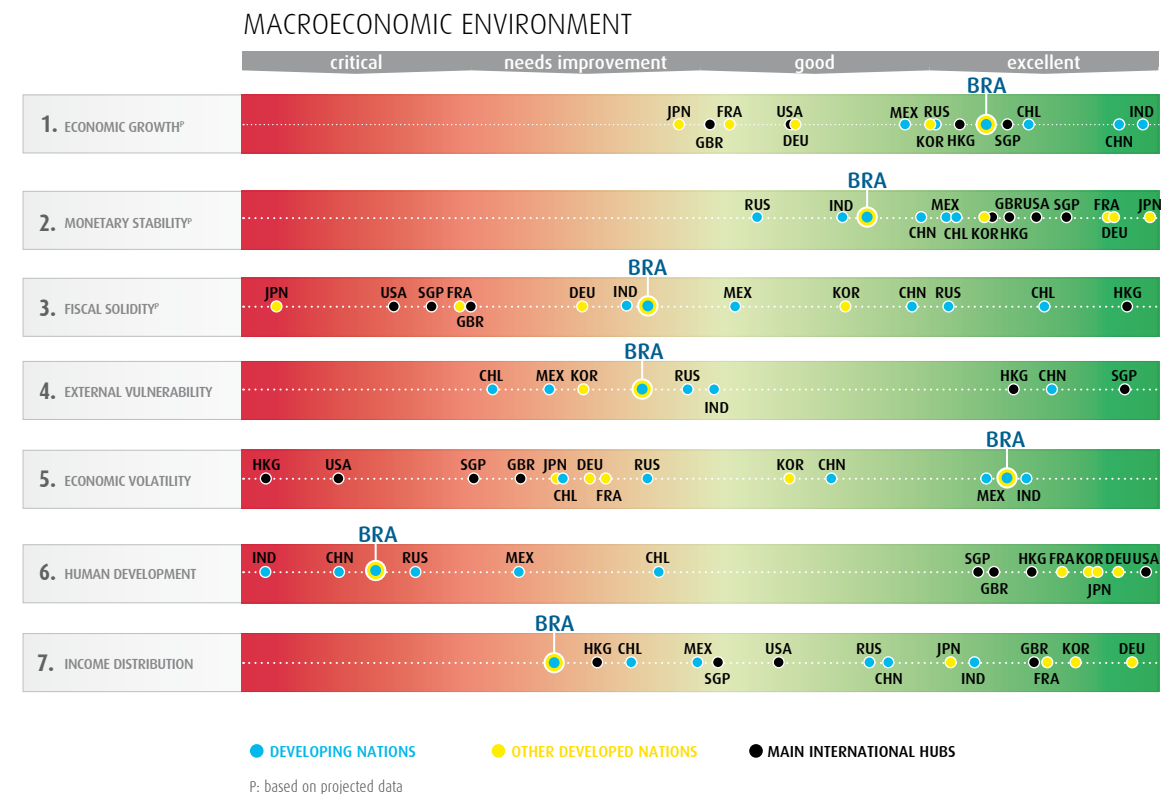
- For each pillar indicators or dimensions were selected based on analyses and discussions between BRAiN members and public and private sector authorities and opinion leaders. The metrics used to measure each of the indicators took into consideration the

quality of the source, the availability of data for different countries, and the possibility of continuous monitoring over time. Thus indicator selection respects the limitations imposed by data availability.

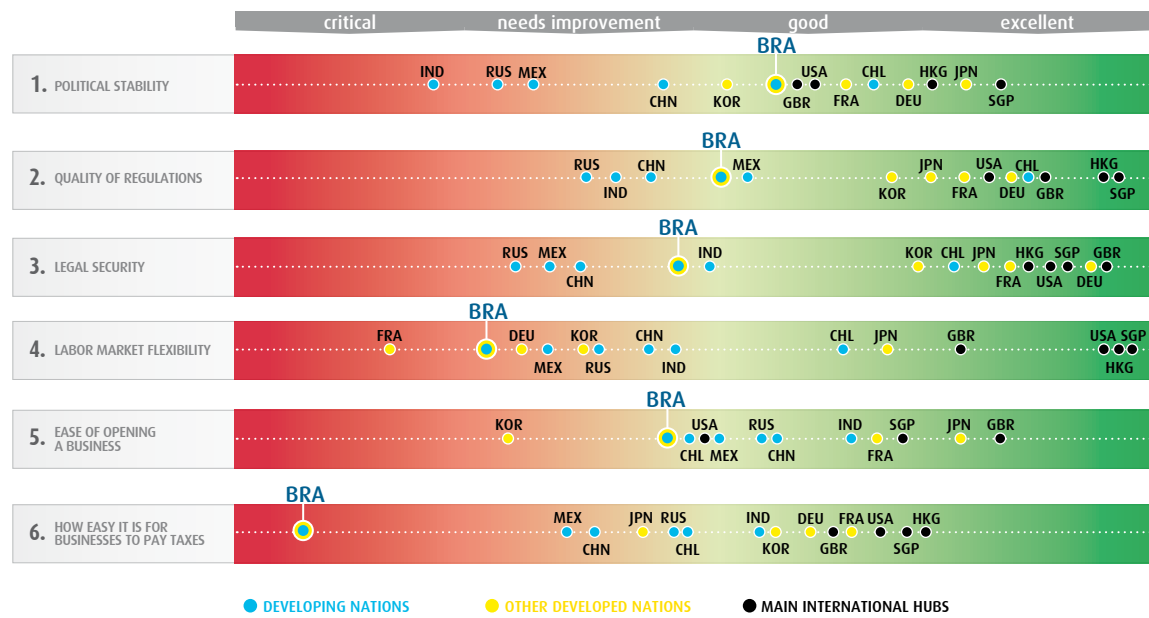
- Selecting the basket of countries for comparison was based on a search for relevant examples of developed nations, countries that are investment and business hubs, and countries that, as Brazil, are considered to be "developing nations".

- In order to assign countries to positions along each indicator scale, and to classify them as "excellent", "good", "needs improvement" and "critical" one of two rationales were used: (1) where available, a publicly established social, political or economic consensus; where no such consensus exists (2) a statistical rationale where the population average is the divider between the "good" and "needs development" levers, and a standard deviation above and below the average the divider between the "excellent" and "critical" levels respectively.

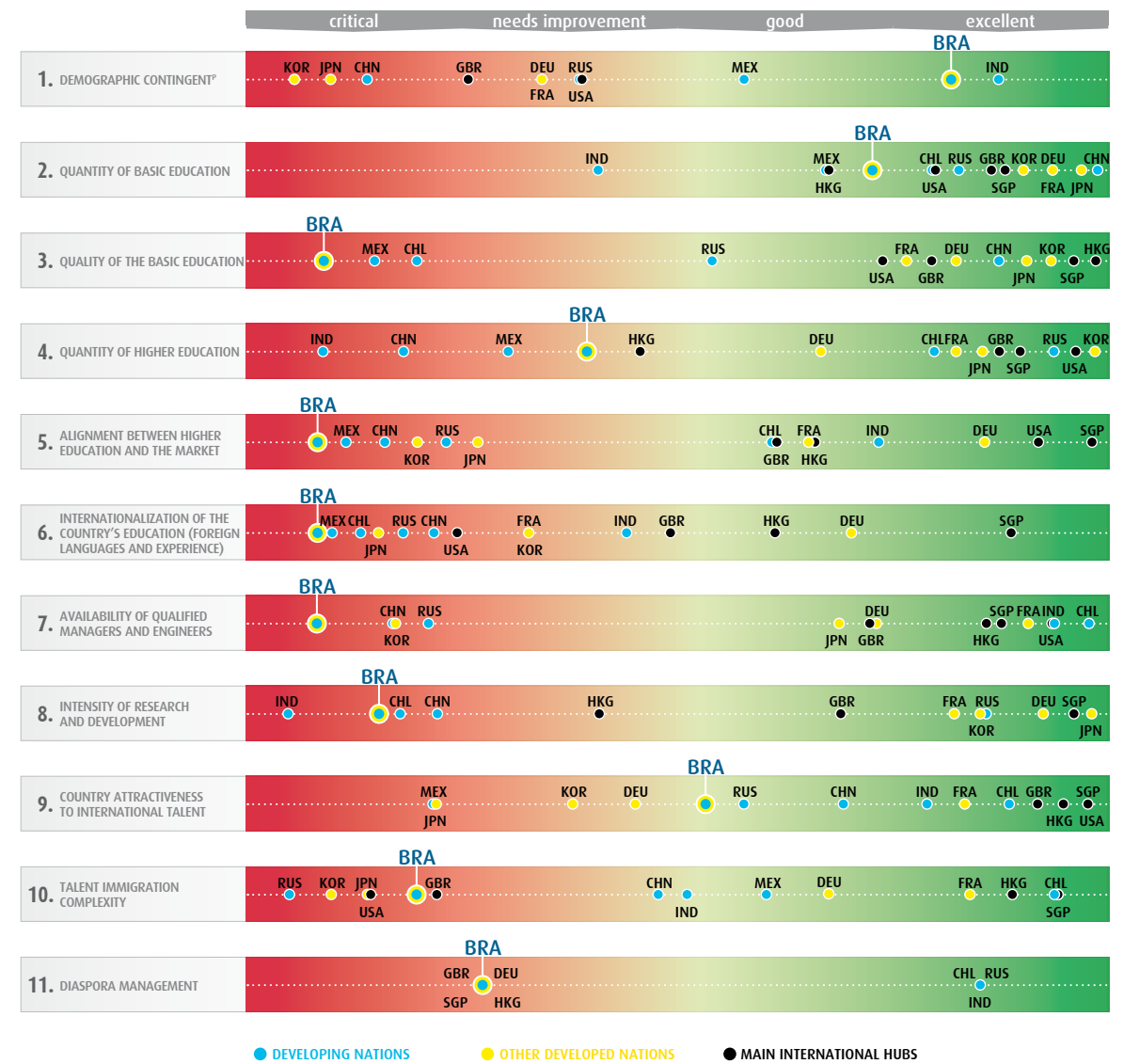
- Details regarding indicator sources and the criteria for allocating countries along each scale are available in the Appendix 2 of this report.



### INSTITUTIONAL ENVIRONMENT

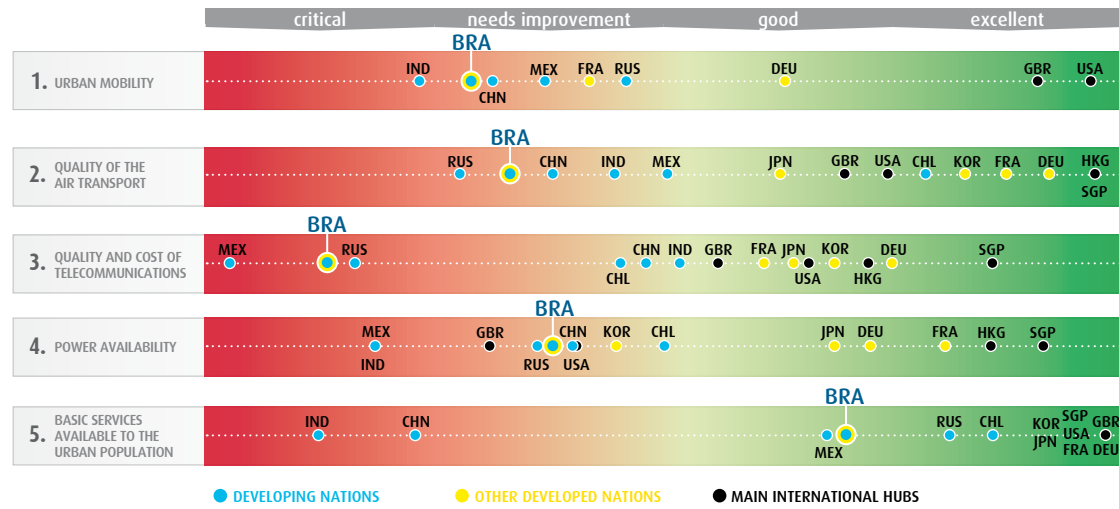


### TALENT AND HUMAN CAPITAL

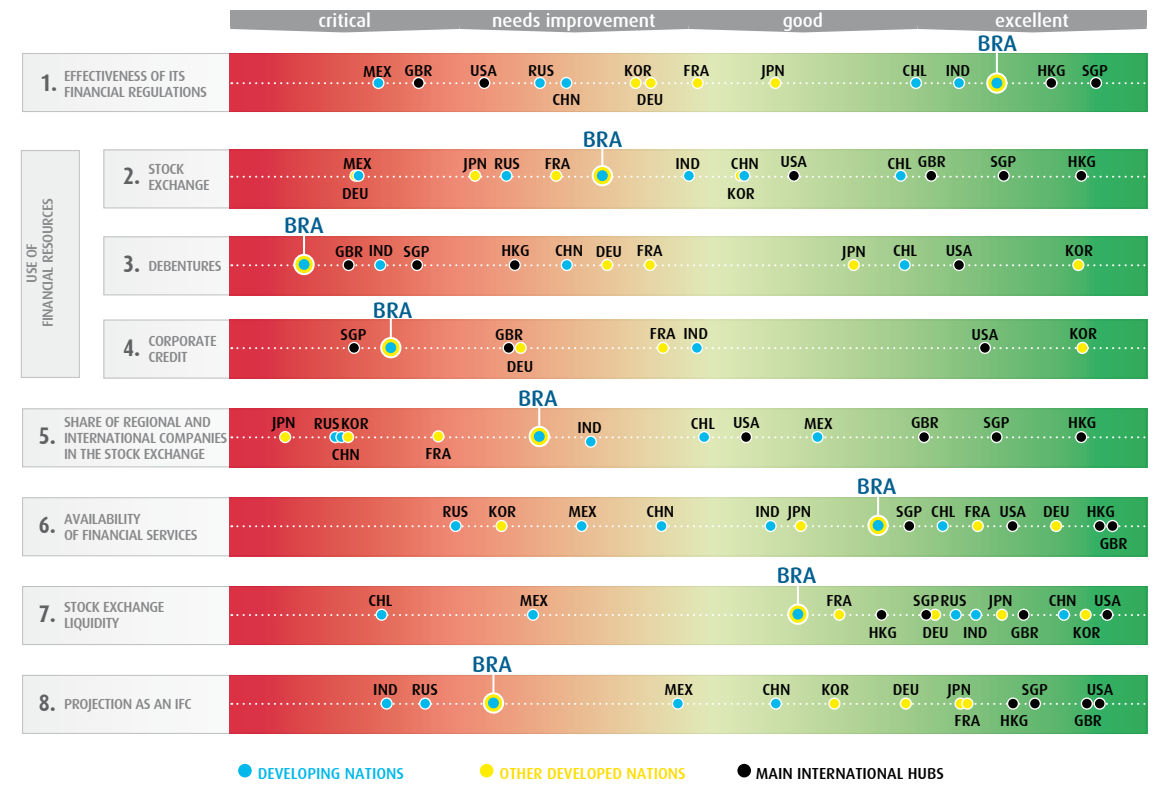


\* P: BASED ON PROJECTED DATA

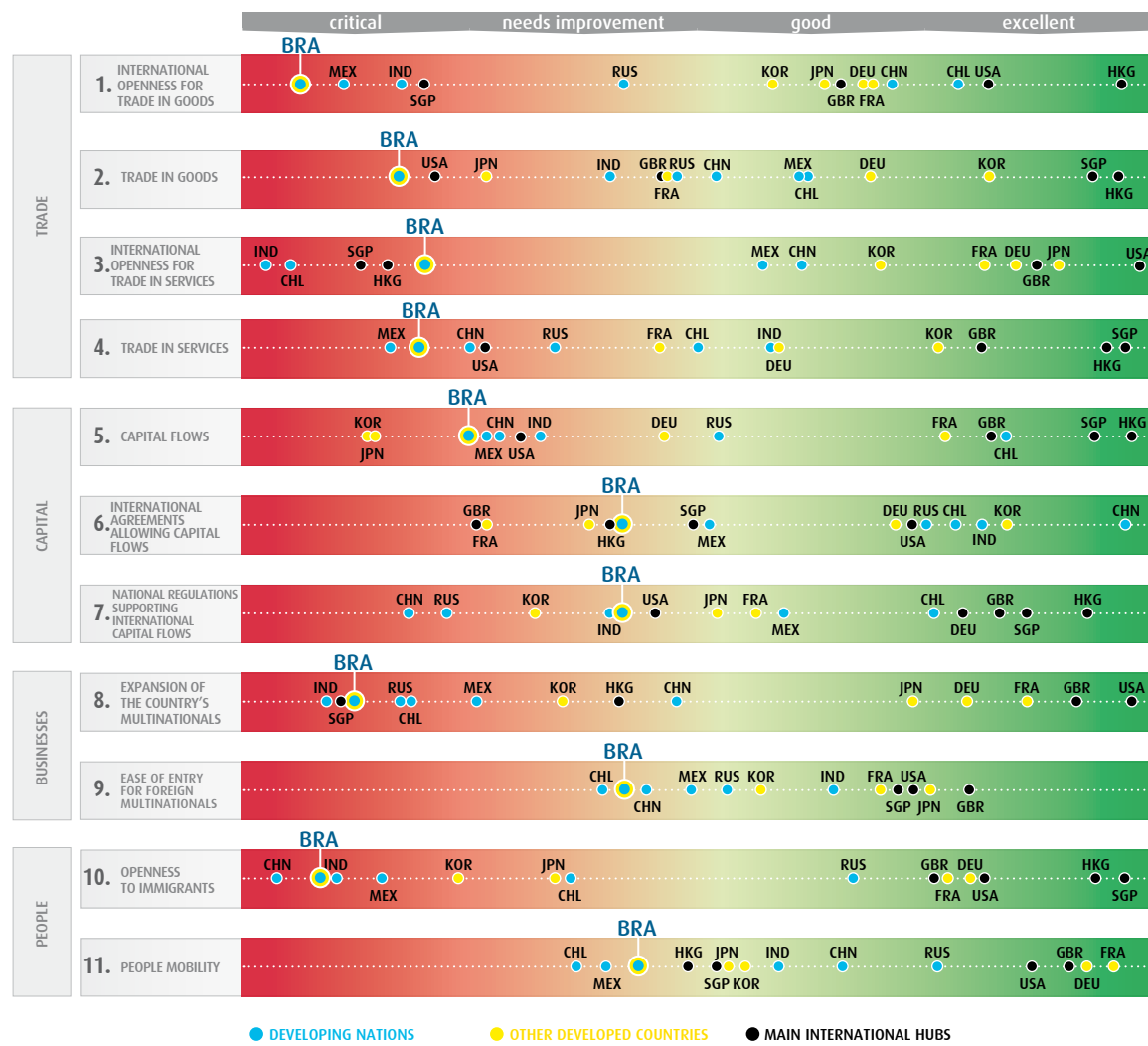
### PHYSICAL INFRASTRUCTURE



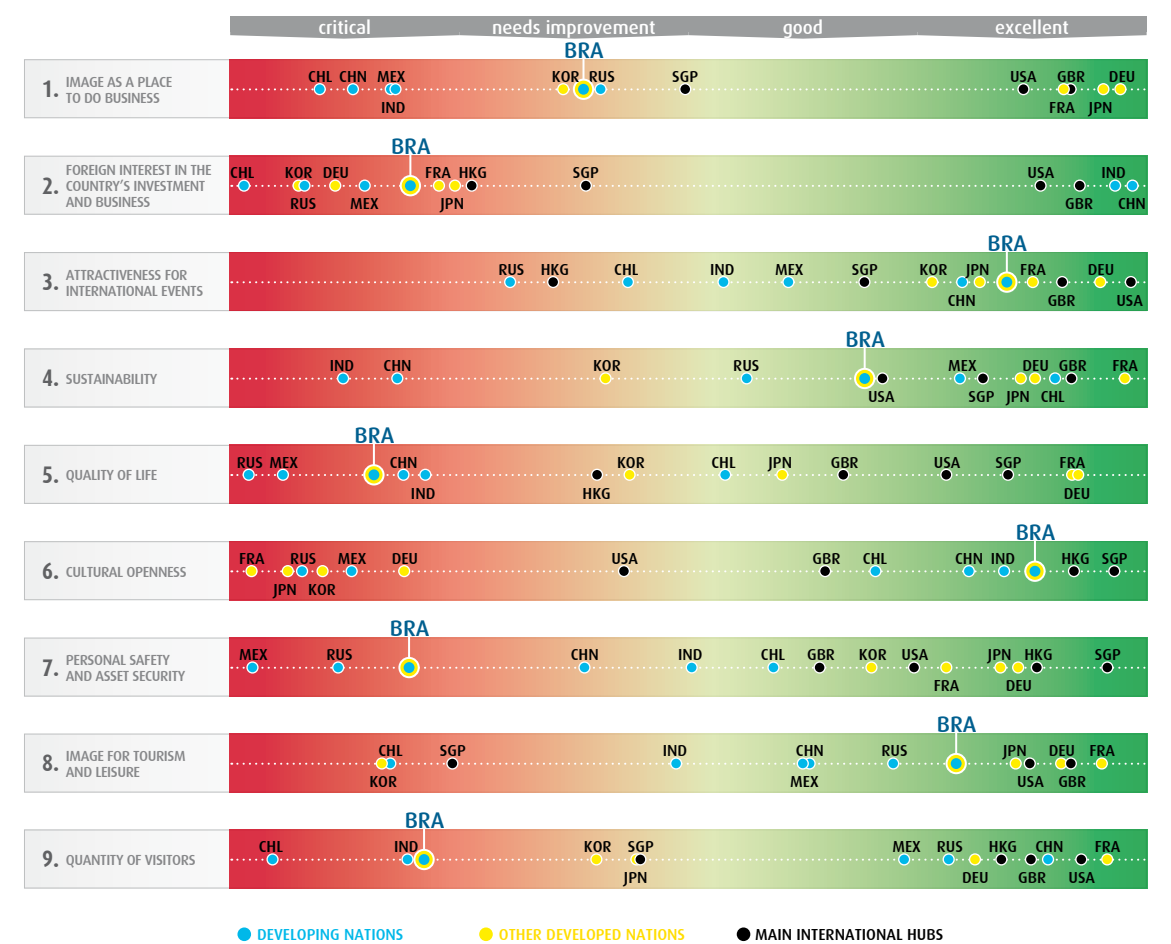
### FINANCIAL INFRASTRUCTURE



### CONNECTIVITY



### IMAGE OF THE COUNTRY



# CONCLUSION

An international investment and business hub fosters the development of a country and its region. Latin America needs a strong network of hubs, some of which must be global, and for this Brazil is one of the natural candidates.

Brazil has a number of qualities that make it suitable as a hub, such as a robust economy, a strong financial infrastructure and political and institutional stability. However, it also has several opportunities for improvement. The main purpose of this report is to be a source of Working Groups to make Brazil more attractive as an international investment and business hub with regional focus and global projection.

This report compares the performance of Brazil and 13 other countries along 57 dimensions, grouped into 7 pillars considered to be essential for the attractiveness of a hub. Based on these comparisons, BRAiN will select the priority opportunities for improvement and, where appropriate, will coordinate the creation of Working Groups, engaging both public and private sectors in Brazil and, in some cases, the region.

Some Working Groups are already up and running and several others will be created soon, seeking to streamline the regulation of private initiatives, simplify the bureaucracy associated with the entry of foreign talent, encourage airport expansions, expand programs to attract small and mid-sized businesses to the stock exchange, the ratification of free trade and service agreements, and ensuring coordinated efforts to promote the country's image, among other activities.

This report will be updated yearly to enable monitoring of the progress Brazil makes over time. In addition, in the coming months BRAiN will publish other reports: Talent and Human Capital, Connectivity, and Integration of Latin American Financial Systems. BRAiN will also produce a document listing the positive facts and improvement initiatives already underway in each of the 7 pillars.

All who realize the importance of creating an international investment and business hub in Brazil and Latin America are invited to participate.

Visit our site and find out how you can be part of the process: [www.brainbrasil.org](http://www.brainbrasil.org).



# APPENDIX 1: METHODOLOGY

BRAiN is aware that the assessment of a country’s attractiveness is a complex and subjective exercise. To validate the results shown in this report, the methodology developed was submitted to the experts and opinion leaders involved in the project.

## Measuring attractiveness

Since its first publication in December 2010, entitled “Brazil as one of the hubs of the Latin America’s new business network” BRAiN has shown that the leading business hubs share common traits and distinctions that reinforce the role of each center as an international investment and business hub (see Exhibit 63).

Based on this observation, BRAiN embarked on this new phase to complement the preliminary list mentioned above, listing the pillars that must be in place to define a hub as attractive. The result of this listing and the subsequent grouping of these items resulted in a vision of the seven pillars that form the list of fundamental requirements for creating and excelling as an investment and business hub (see Exhibit 64):

**1. Macroeconomic environment:** Steady economic growth and limited uncertainty regarding interest rates and the exchange rate are examples of the underlying conditions required for business development and increased investment in any country;

## EXHIBIT 63

Requirements and distinctions of the main global hubs

Main lessons learned from case studies	NYC	LON	SGP	HKG	DUB	PAR
<b>REQUIREMENTS</b>						
Intensity of <b>trade</b> and macroeconomic <b>stability</b>	✓	✓	✓	✓	✓	✓
Developed <b>infrastructure</b>	✓	✓	✓	✓	✓	✓
Domestic and foreign <b>talents</b>	✓	✓	✓	✓	✓	✓
<b>Fluency in foreign languages</b> , particularly in English	✓	✓	✓	✓	✓	✓
<b>Public-private alignment</b> to develop the hub	✓	✓	✓	✓	✓	✓
<b>A proactive government</b>	✓	✓	✓	✓	✓	✓
<b>DISTINCTIONS</b>						
<b>Regulations</b> that favor business		✓	✓	✓	✓	
<b>Taxes</b> that are simple and, ideally, limited			✓	✓	✓	
<b>A safe haven</b> in a risky region			✓	✓	✓	
Focus on <b>innovation</b> as a competitive advantage	✓	✓				
Excellence in its <b>region</b> or <b>niche</b>			✓		✓	
Domestic market <b>growth rate</b>	✓					✓
Creation of an <b>offshore</b> zone					✓	

## EXHIBIT 64

An investment and business hub is supported by seven pillars



**2. Institutional environment:** A solid state of law, enabling economic agents to fully meet their obligations and transparent and efficient administrative processes are key elements if a country wants to qualify as a hub, in particular compared to other hubs;

**3. Talent and human capital:** A talent pool that is adequate in both quantitative and qualitative terms, a strong alignment between what the job market is looking for and the academy, along with the possibility of attracting and bringing in experts from outside the country, are also some of the requirements that any location that aspires to be an international hub must fulfill;

**4. Physical infrastructure:** Multimodal shipping options that enable flows into, out of and within the hub, and access to a communications network that is competitive in terms of both cost and performance are clearly some of the factors of success for any business hub;

**5. Financial infrastructure:** The existence of capable financial intermediaries, continuous access to several sources of funding and tools to mitigate risk all directly support the development of an investment and business hub;

**6. Connectivity:** Intense trade in goods and services, together with capital and people flows are vital to continuously nurture an investment and business hub;

**7. Image of the country:** A positive perception of what a country as a whole has to offer is an important asset to consolidate its position as hub, and especially to attract businesses and talents.

In addition to offering both a broad and detailed view of Brazil's situation along each of these seven pillars, this effort also created a dashboard of indicators to enable easy comparison between the current situation of Brazil and other hubs. For each pillar a number of dimensions are listed, which may be used to assess a country's status compared to other selected hubs. Indicators were selected based on analyses and discussions between BRAiN members and public and private sector authorities and opinion leaders.

For each of these indicators metrics were selected not only to enable an assessment of Brazil's current situation, but also to monitor how its attractiveness as an investment and business hub changes over time. These metrics take into consideration the quality of the source, the availability of data for different countries, and the possibility of continuous monitoring over time.

Finally, the basket of countries for comparison was defined based on a search for relevant examples. This basket includes reference developed nations, countries that are recognized investment and business hubs and countries that are relevant for comparison purposes.

# APPENDIX 2: DETAILS OF THE INDICATORS USED

## MACROECONOMIC ENVIRONMENT

	DIMENSION	INDICATOR	SOURCE	RATIONALE FOR SELECTION	RANKING CRITERIA
1	ECONOMIC GROWTH*	Projected average annual GDP growth over the next 5 years	EIU CountryData	Coverage of 150 countries and 5-year projections for all countries	Critical: $\leq -1$ Needs improv.: $-0.9 - 1.5$ Good: $1.6 - 4$ Excellent: $\geq 4$
2	MONETARY STABILITY*	Projected average annual inflation over the next 5 years	EIU CountryData	Coverage of 150 countries and 5-year projections for all countries	Critical: $\geq 20$ Needs improv.: $8 - 20$ Good: $4 - 8$ Excellent: $\leq 4$
3	FISCAL SOLIDITY*	Projected Gross Public Sector Debt (% of GDP)	IMF – World Economic Outlook Database	Consistent assessments since 1984, and global coverage	Critical: $\geq 100$ Needs improv.: $50 - 100$ Good: $20 - 50$ Excellent: $\leq 20$
4	EXTERNAL VULNERABILITY <sup>1</sup>	International reserves/total external debt(%) <sup>2</sup>	EIU CountryData	Coverage of 150 countries	Critical: $\leq 0$ Needs improv.: $0 - 111$ Good: $111 - 276$ Excellent: $\geq 276$
5	ECONOMIC VOLATILITY	Variation coefficient of short term interest rate of government bonds <sup>3</sup>	EIU CountryData	Coverage of 150 countries	Critical: $\geq 0.59$ Needs improv.: $0.34 - 0.59$ Good: $0.10 - 0.34$ Excellent: $\leq 0.10$
6	HUMAN DEVELOPMENT	Human Development Index (HDI) <sup>4</sup>	UNDP - Human Development Reports	Data available for over 160 countries since 1970	Critical: $\leq 0.75$ Needs improv.: $0.76 - 0.80$ Good: $0.81 - 0.84$ Excellent: $0.85 - 1.00$
7	INCOME DISTRIBUTION	GINI index	CIA, The World Factbook	Global coverage	Critical: $\geq 58.8$ Needs improv.: $46.8 - 58.8$ Good: $34.9 - 46.8$ Excellent: $\leq 34.9$

P: based on projected data 1. Public + Private 2. Last 3 years 3. Last 5 years 4. Calculated based on healthcare, education and per capita income.

### INSTITUTIONAL ENVIRONMENT

DIMENSION	INDICATOR	SOURCE	RATIONALE FOR SELECTION	RANKING CRITERIA	
1	<b>POLITICAL STABILITY</b>	Political stability and absence of [political] violence (score)	World Governance Indicators, World Bank	Coverage of 230 countries since 1996	Critical: ≤ -1 Needs improv.: -1 - 0 Good: 0 - 1 Excellent: ≥ 1
2	<b>QUALITY OF REGULATIONS</b>	Quality of regulations (score)	World Governance Indicators, World Bank	Coverage of 230 countries since 1996	Critical: ≤ -1 Needs improv.: -1 - 0 Good: 0 - 1 Excellent: ≥ 1
3	<b>LEGAL SECURITY</b>	Rule of Law (score)	World Governance Indicators, World Bank	Coverage of 230 countries since 1996	Critical: ≤ -1 Needs improv.: -1 - 0 Good: 0 - 1 Excellent: ≥ 1
4	<b>LABOR MARKET FLEXIBILITY</b>	Labor Market Flexibility (score)	World Competitiveness Yearbook - IMD	Published consistently since 1989, current coverage of 58 countries	Critical: ≥ 45 Needs improv.: 28 - 45 Good: 11 - 28 Excellent: ≤ 11
5	<b>EASE OF OPENING A BUSINESS</b>	Ease of opening businesses for foreigners (score)	Investing Across Borders, World Bank	Initiative covering of 87 countries focusing specifically on FDI (Foreign Direct Investment)	Critical: ≤ 50 Needs improv.: 50 - 64 Good: 64 - 78 Excellent: ≥ 78
6	<b>HOW EASY IT IS FOR BUSINESSES TO PAY TAXES</b>	Hours required to pay taxes	Doing Business, World Bank	Detailed study of 183 countries since 2002	Critical: ≥ 532 Needs improv.: 282 - 532 Good: 32 - 282 Excellent: ≤ 32

### TALENT AND HUMAN CAPITAL

DIMENSION	INDICATOR	SOURCE	RATIONALE FOR SELECTION	RANKING CRITERIA	
1	<b>DEMOGRAPHIC CONTINGENT</b>	Gap between the CAGR of EAP and the CAGR of the demand for workers	"Stimulating Economies through Fostering Talent Mobility" a 2009 BCG and World Economic Forum publication	Reflects demographic sufficiency relative to economic development. BRAIN may calculate this indicator in future if BCG + WEF do not	Critical: ≤ -1% Needs improv.: -1% - 0 Good: 0 - 1% Excellent: ≥ 1%
2	<b>QUANTITY OF BASIC EDUCATION</b>	Average between the net enrollment rate in elementary and secondary school	UNESCO e World Economic Forum Competitiveness Report 2010-2011	Measures the percent of school aged children actually in school - published annually by UNESCO	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
3	<b>QUALITY OF THE BASIC EDUCATION</b>	Average scores in reading, science and mathematics in the international PISA test	OCDE	This test provides a unified vision of learning around the world, applied every three years to 15 year olds in 65 countries	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
4	<b>QUANTITY OF HIGHER EDUCATION</b>	Gross enrollment rate in higher education	UNESCO	Shows % of people of university age that are enrolled, information provided annually by UNESCO	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
5	<b>ALIGNMENT BETWEEN HIGHER EDUCATION AND THE MARKET</b>	Score given by executives regarding how well higher education is aligned with market needs	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
6	<b>INTERNATIONALIZATION OF THE COUNTRY'S EDUCATION (FOREIGN LANGUAGES AND EXPERIENCE)</b>	Average inflow and outflow of students going abroad to study, and score given by executives regarding the alignment of language education and market needs	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
7	<b>AVAILABILITY OF QUALIFIED MANAGERS AND ENGINEERS</b>	Assessment of the availability of qualified senior managers and engineers	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
8	<b>INTENSITY OF RESEARCH AND DEVELOPMENT</b>	Number of FTEs doing research and development per 1,000 inhabitants	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
9	<b>COUNTRY ATTRACTIVENESS TO INTERNATIONAL TALENT</b>	Score given by executives to the attractiveness of the country to international talents	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
10	<b>TALENT IMMIGRATION COMPLEXITY</b>	Score given by executives to the complexity for talent to enter a country	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
11	<b>DIASPORA MANAGEMENT</b>	Existence of programs or entities to manage the diaspora in each country	Qualitative BCG analysis based on country websites	There is no secondary data available for this assessment. BRAIN may continue the analysis of several countries in future years	Countries that manage their diaspora are positives, and those that do not are negatives

P: based on projected data

PHYSICAL INFRASTRUCTURE

DIMENSION	INDICATOR	SOURCE	RATIONAL FOR SELECTION	RANKING CRITERIA	
<b>1</b>	<b>URBAN MOBILITY</b>	Score is a combination of traffic (Commuter Pain Index) and subway availability in the main cities in each country	IBM Commuter Pain Index and domestic sources about size of subway network and population	Indicators reflect the urban mobility options available in the economic centers of each country	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
<b>2</b>	<b>QUALITY OF THE AIR TRANSPORT</b>	Opinions of executives about the air transport in each country	World Economic Forum Global Competitiveness Report Executive Opinion Survey	Annual survey of more than 15,000 executives in 139 countries	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
<b>3</b>	<b>QUALITY AND COST OF TELECOMMUNICATIONS</b>	Opinions of executives about the telecommunications infrastructure in each country	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
<b>4</b>	<b>POWER AVAILABILITY</b>	Opinions of executives about the current and future power situation in each country	World Economic Forum Global Competitiveness Report Executive Opinion Survey	Annual survey of more than 15,000 executives in 139 countries	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
<b>5</b>	<b>BASIC SERVICES AVAILABLE TO THE URBAN POPULATION</b>	Average % urban population with access to water and sanitation	World Bank	Indicator shows how much of the urban population is served by basic services	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation

Financial infrastructure

Dimension	Indicator	Source	Rationale for Selection	Ranking criteria		
<b>1</b>	<b>EFFECTIVENESS OF THE FINANCIAL REGULATIONS</b>	Score of 0 to 10 to the following survey statement "Finance and banking regulation is sufficiently effective"	World Competitiveness Yearbook - IMD	Annual report published annually based on primary data sources	Critical: < 4.0 Needs improv.: 4.0 - 5.0 Good: 5.0 - 6.5 Excellent: > 6.5	
<b>USE OF FINANCIAL RESOURCES</b>	<b>2</b>	<b>STOCK EXCHANGE</b>	Market cap of traded companies / GDP	World Bank Data	Data published annually based on primary data sources	Critical: < 60% Needs improv.: 60% - 90% Good: 90% - 120% Excellent: >120%
	<b>3</b>	<b>DEBENTURES</b>	Stock of private corporate debt bonds / GDP	Bank for International Settlements (BIS) and EIU	Data published annually based on primary data sources	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
	<b>4</b>	<b>CORPORATE CREDIT</b>	Corporate credit stock / GDP	Central banks in each country	Data published annually for most countries - primary data	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
	<b>5</b>	<b>SHARE OF REGIONAL AND INTERNATIONAL COMPANIES IN THE STOCK EXCHANGE</b>	Traded stock of companies headquartered abroad as a percentage of the total volume traded the local exchange	Bloomberg data analysis	Primary data disclosed in real time	Critical: < 5% Needs improv.: 5% - 10% Good: 10% - 25% Excellent: > 25%
<b>6</b>	<b>AVAILABILITY OF FINANCIAL SERVICES</b>	Score of 0-7 to the survey statement "Availability of financial services"	World Economic Forum - Global Competitiveness Report	Broad qualitative (survey) indicator of the availability of financial services in the country	Critical: <3.9 Needs improv.: 3.9 - 4.8 Good: 4.8 - 5.7 Excellent: 5.7 - 7.0	
<b>7</b>	<b>STOCK EXCHANGE LIQUIDITY</b>	Total traded volume during the year / total average market cap of listed companies during the same year	World Bank Data Primary source: Standard & Poor's	Indicator showing the vitality of the stock market in 119 countries, data available since 1990	Critical: < 23% Needs improv.: 23% - 54% Good: 54% - 85% Excellent: > 85%	
<b>8</b>	<b>PROJECTION AS AN IFC</b>	Relative position in 2 of the main IFC league tables	Global Financial Centers Index and The Banker International Financial Centers	Consistently published thermometer to the external perception of the country as an international financial hub	Critical: last quartile Needs improv.: 3 <sup>rd</sup> quartile Good: 2 <sup>nd</sup> quartile Excellent: 1 <sup>st</sup> quartile	

CONNECTIVITY

DIMENSION	INDICATOR	SOURCE	RATIONALE FOR SELECTION	RANKING CRITERIA	
1	<b>INTERNATIONAL OPENNESS FOR TRADE IN GOODS</b>	Average of tariffs to restrict imports and access to other markets in each country taking into account the country's tariff and non tariff barriers	World Trade Indicators, World Bank	Indicator published annually in public sources - calculated by a reputable source	Critical: > 12.5 Needs improv.: 11.0 - 12.5 Good: 9.4 - 11.0 Excellent: < 9.4
2	<b>TRADE IN GOODS</b>	Country share of international trade in goods / country share of world GDP	UNCTAD	Indicator published annually by public sources	Critical: < 0.5 Needs improv.: 0.5 - 1.0 Good: 1.0 - 1.5 Excellent: > 1.5
3	<b>INTERNATIONAL OPENNESS FOR TRADE IN SERVICES</b>	Participation in international agreements for the trade in services (GATS), in different sub-sectors	World Trade Indicators, World Bank	Indicator published annually in public sources - calculated by a reputable source	Critical: < 26.9 Needs improv.: 26.9 - 35.2 Good: 35.2 - 43.5 Excellent: > 43.5
4	<b>TRADE IN SERVICES</b>	Country share of international trade in services / country share of world GDP	UNCTAD	Indicator published annually by public sources	Critical: < 0.5 Needs improv.: 0.5 - 1.0 Good: 1.0 - 1.5 Excellent: > 1.5
5	<b>CAPITAL FLOWS</b>	Country share of international capital flows / country share of world GDP	UNCTAD Stat	Yearly data available for 207 countries since 1970	Critical: < 0.5 Needs improv.: 0.5 - 1.0 Good: 1.0 - 1.5 Excellent: > 1.5
6	<b>INTERNATIONAL AGREEMENTS ALLOWING CAPITAL FLOWS</b>	Number of bilateral agreements signed by the country	International Centre for Settlement of Investment Disputes (ICSID), World Bank	Includes 177 countries, based on official information reported by national governments	Critical: < 0 Needs improv.: 0 - 21 Good: 21 - 48 Excellent: > 48
7	<b>NATIONAL REGULATIONS SUPPORTING INTERNATIONAL CAPITAL FLOWS</b>	Indicators based on expert interviews, scores vary from 1 to 7	Global Competitiveness Report 2010-2011, World Economic Forum	Study published annually for more than 30 years, current methodology in place since 2005, covers 125 countries	Critical: < 3.8 Needs improv.: 3.8 - 4.6 Good: 4.6 - 5.3 Excellent: > 5.3
8	<b>EXPANSION OF THE COUNTRY'S MULTINATIONALS</b>	Countries represented in the list of 100 largest businesses by assets held abroad, considering the sum of all assets held outside the country of origin	World Investment Report, UNCTAD	League table published since 1991, with global coverage	Critical: Not in the list Needs improv.: In the list, but below the top 10 Good: Between # 6 and #10 Excellent: Among the top 5
9	<b>EASE OF ENTRY FOR FOREIGN MULTINATIONALS</b>	Index based on regulatory demands	Investing Across Borders - World Bank	Open source covering 87 countries	Critical: < 50.2 Needs improv.: 50.2 - 64.5 Good: 64.5 - 78.8 Excellent: > 78.8
10	<b>OPENNESS TO IMMIGRANTS</b>	Immigrants as a percent of the total population in each country	United Nations	Indicator published annually by public sources	Critical: < 1.5% Needs improv.: 1.5% - 3.1% Good: 3.1% - 9.2% Excellent: > 9.2%
11	<b>PEOPLE MOBILITY</b>	Number of international flight destinations from country per week	Analysis of OAG database information	Simple indicator of a country's air transport connectivity	Critical: < 10 Needs improv.: 10 - 39 Good: 40 - 69 Excellent: ≥ 70

IMAGE OF THE COUNTRY

DIMENSION	INDICATOR	SOURCE	RATIONALE FOR SELECTION	RANKING CRITERIA	
1	<b>IMAGE AS A PLACE TO DO BUSINESS</b>	Average score of national image related to business (domestic goods, macro environment, investment and immigration)	The Ankholt-GfK Roper Nation Brands Index	The best known international indicator of nations brands	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
2	<b>FOREIGN INTEREST IN THE COUNTRY'S INVESTMENT AND BUSINESS</b>	Number of internet search results in English using the country name and the "investment" and "business" keywords	Google	This represents the country's image in public opinion and is available at any time	Pool average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
3	<b>ATTRACTIVENESS FOR INTERNATIONAL EVENTS</b>	% of all international events held in each country	International Congress and Convention Association	Fairs and events reflect business interest in Brazil, published annually	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
4	<b>SUSTAINABILITY</b>	2010 Environmental Performance Index	Yale Center for Environmental Law and Policy (YCELP) and Center for International Earth Science Information Network (CIESIN)	Indicator reflects the ecological sustainability of each country based on the impact of all of its activities on the environment	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
5	<b>QUALITY OF LIFE</b>	Opinions of executives on the quality of life in each country	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
6	<b>CULTURAL OPENNESS</b>	Executive opinions of how open each country's culture is to foreign ideas	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
7	<b>PERSONAL SAFETY AND ASSET SECURITY</b>	Opinions of executives about personal safety and asset security in each country	World Competitiveness Yearbook - IMD	A report published annually based on primary data sources and a global opinion survey of executives with some 4,500 respondents	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
8	<b>IMAGE FOR TOURISM AND LEISURE</b>	Average of the country's business related image scores (tourism, culture and hospitality)	The Ankholt-GfK Roper Nation Brands Index	The best known international indicator of nations brands	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation
9	<b>QUANTITY OF VISITORS</b>	% world visitors going to each country	The Economist Intelligence Unit	This information is available annually and shows visitors interest in each country	Global average separates positives and negatives; Critical = average - 1 standard deviation; Excellent = average + 1 standard deviation







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