

BRAZIL COMPETITIVENESS PROFILE

HIGHLIGHTS

INTRODUCTION

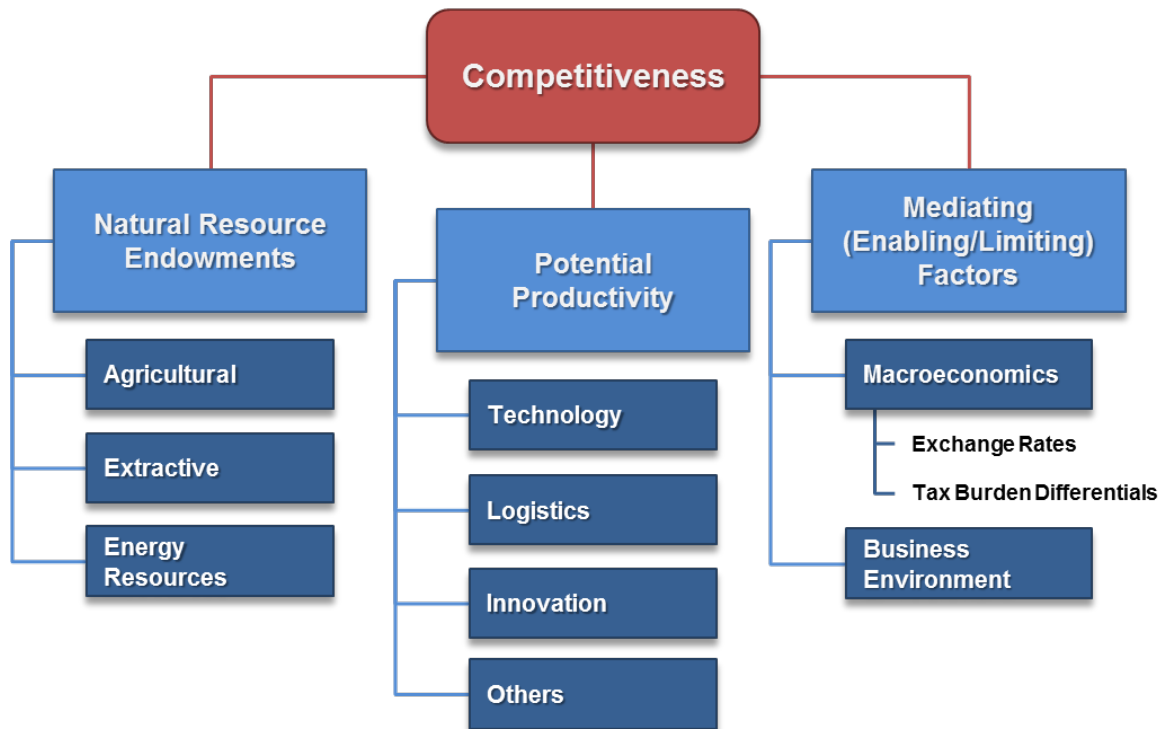
This report is a major, ongoing collaborative effort between FGV and the Financial Times. It provides the base for the implementation of a worldwide multiplatform initiative on the BRAZIL COMPETITIVENESS PROFILE that includes live events and a Financial Times Special Report.

The BRAZIL COMPETITIVENESS PROFILE is a detailed study about Brazilian's strengths and weaknesses. The facts and figures presented and discussed in this report are meant to guide foreign investors in making the right choices to optimize productivity and ease investment risks, while allowing Brazilian policy and decision-makers to track their progress over time and make the necessary choices that will keep the country on a sustainable growth path.

COMPETITIVENESS

What makes sectors and regions succeed in a competitive situation? Why does a city or a microregion attract high-value economic activity rather than its neighbors? Why are certain industries relatively robust in a country (like Brazil) while others fail to get started?

The answers to all these questions are related to competitiveness. This concept implies a potential, a latent ability to compete, but also the presence of circumstances that enable such a capacity to be actualized.



Competitiveness is a result of the interaction of different features, as depicted in the figure above. It presents the drivers that enable a region to be competitive. This project assesses each one of those drivers, and as a result, not only it provides a final ranking of competitiveness of Brazilian regions, but also presents interesting characteristics of the country.

ANALYTICAL FOCUS

This is the first study of its kind that combines macro and micro aspects of competitiveness, composing a coherent picture of Brazil at the regional economic level, taking into account local and national aspects

MICRO-LEVEL ANALYSIS

By micro-level, we mean assessing and comparing competitiveness at a local level, specifically, looking at Brazil's 558 micro-regions. This level of detail was chosen to provide a more nuanced view of local differences than the typical state-level analyses. For this purpose, FGV assembled a comprehensive dataset, unique in scope and quality, consisting of variables assembled from a variety

of public and private sources. This dataset is comprised by 224 indicators grouped across 14 dimensions, which, for ease of comprehension and analysis, have been organized into 6 key vectors of competitiveness (see below).

14 Dimensions		6 Vectors
1. BASIC EDUCATION	C O M P E T I T I V E N E S S	I. HUMAN CAPITAL
2. HIGHER AND VOCATIONAL EDUCATION		
3. SOCIAL INFRASTRUCTURE		
4. SUSTAINABILITY		II. QUALITY OF LIFE
5. HEALTH		
6. PUBLIC SECTOR PERFORMANCE		III. INSTITUTIONS
7. LOGISTICS		
8. BUSINESS SOPHISTICATION		IV. BUSINESS ENVIRONMENT
9. INNOVATION		
10. MARKET SIZE		
11. GOODS MARKET		V. MARKETS
12. LABOR MARKET		
13. ENERGY RESOURCES		VI. NATURAL RESOURCES
14. AGRICULTURAL AND EXTRACTIVE RESOURCES		

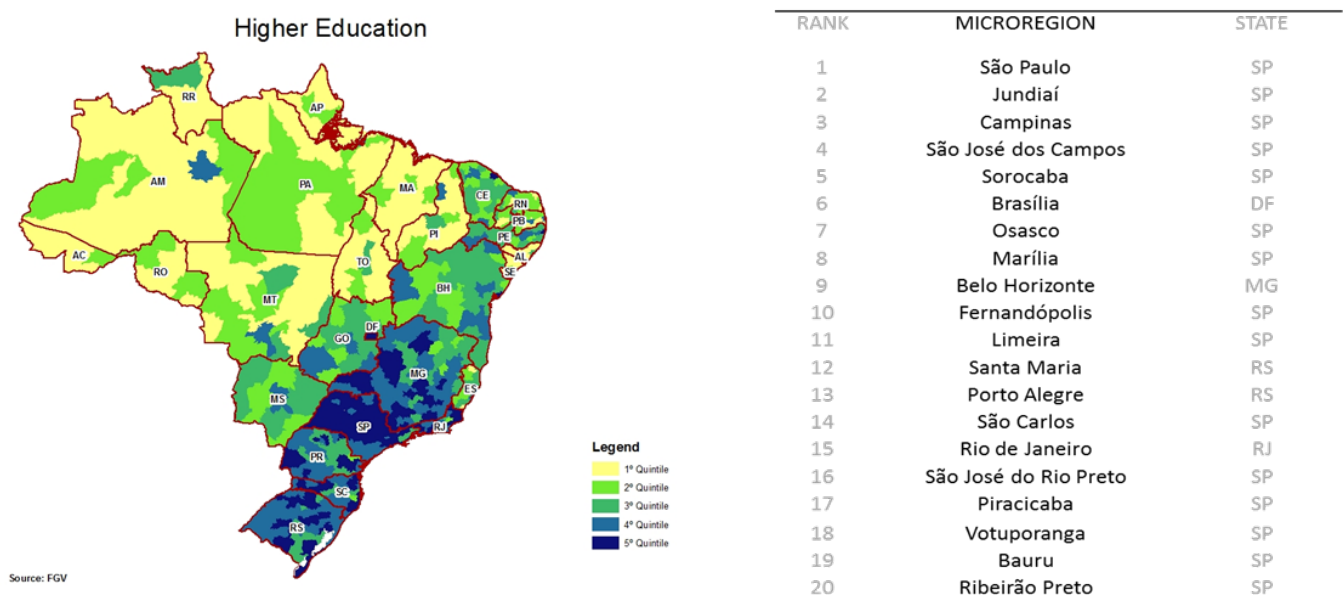
The 14 dimensions are considered key drivers of competitiveness in Brazil and have been defined based on economic theory, analysis of existing competitiveness indexes and the unique features of the Brazilian economy. Since economic competitiveness is determined by a number of interrelated factors, policies, and institutional capabilities, these 14 dimensions are highly interrelated and tend to reinforce each other.

The 6 vectors of competitiveness group the dimensions according to macro-enablers of economic competitiveness: institutions, human capital, markets, business environment, natural resources as well as quality of life, a concept that has gained momentum in the more recent debate on the relation between competitiveness and social and environmental sustainability.

In order to better characterize and compare regions, FGV produced synthetic indicators for each dimension and vector. The 558 micro-regions and 27 states could thus be ranked in terms of their performance regarding each dimension and vector, as well as comparing specific indicators among the original 224. The report presents per-state and per-microregion rankings and maps for the 14

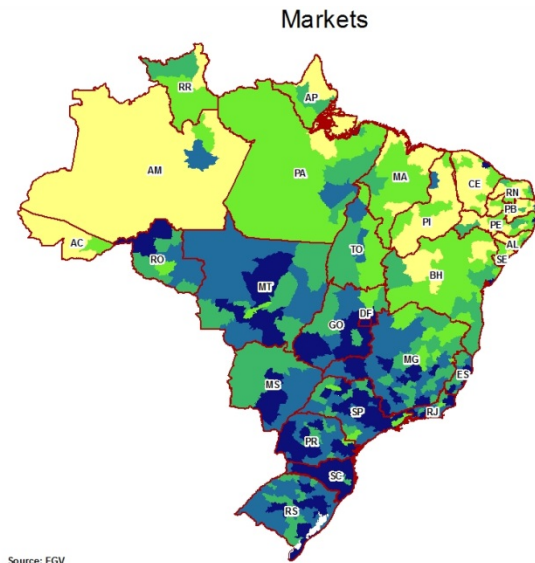
dimensions and 6 vectors, with accompanying discussions and analysis, as well as rankings for selected indicators deemed of particular importance.

For example, the dimension **Higher and Vocational Education** results are depicted below. It contains the microregion results map, the top 20 rank and a description of the main findings.



"Just as with basic education, 75% of the Top 20 regions in higher and vocational education provision are located in São Paulo, making the state Brazil's powerhouse of human capital generation. Once again, Manaus appears as a shining star in the otherwise poorly performing North. Interestingly, ten microregions* of the Top 20, all located in the state of São Paulo, also rank in the Top 20 of the basic education ranking, possibly indicating how good quality of primary and secondary schooling positively affects vocational and higher education performance."

In another example, below we quote from the ranking and analysis of the **Markets** vector.



Legend
 1st Quintile
 2nd Quintile
 3rd Quintile
 4th Quintile
 5th Quintile

RANK	MICROREGION	STATE
1	São Paulo	SP
2	Brasília	DF
3	Curitiba	PR
4	Joinville	SC
5	Itajaí	SC
6	Campinas	SP
7	Florianópolis	SC
8	Blumenau	SC
9	Guarulhos	SP
10	Osasco	SP
11	Porto Alegre	RS
12	Goiânia	GO
13	Rio de Janeiro	RJ
14	Santos	SP
15	São José dos Campos	SP
16	Belo Horizonte	MG
17	Vitória	ES
18	Itapequerica da Serra	SP
19	Maringá	PR
20	Londrina	PR

"With regard to market size and efficiencies (goods and labor) the majority of the Southern regions perform well, while many regions in the North and Northeast exhibit below-average performances, indicating that Brazil's good performance at the aggregate level is skewed by a few extremely well performing economies in this vector. This fact alone is a reason for further investigation."

The study also reports a number of **Interesting Phenomena**. Those are some less-than-obvious facts about Brazil that emerge from analyzing the dataset. One such phenomenon is presented below.

INTERESTING PHENOMENON

Brazil's "Nem-Nems"

Youth Unemployment (page 78) in Brazil goes hand in hand with the phenomenon of the "Nem-Nems" (Portuguese for "Neither-Nors"): youth neither in employment nor in school. The ranking below shows the five microrregions with the highest share of "Nem-Nems". Unsurprisingly, all are located in the North and Northeast:

1. Traipu, AL
2. Rio Negro, AM
3. Serrana do Sertão Alagoano, AL
4. Itapecuru Mirim, MA
5. Nordeste de Roraima, RR

The microrregions with the lowest share of "Nem-Nems" are Blumenau (SC), Lajeado-Estrela (RS), Gramado-Canela (RS), Rio do Sul (SC) and Guaporé (RS).

In order to gain a more synthetic understanding of regional competitiveness, a ***total competitiveness index*** was developed, aggregating all the vectors. This enables us to answer questions such as: What are Brazil's most competitive microrregions as a whole? What are these microrregions' success factors? What are the most competitive regions in each state?

As an example, below we present the descriptive, in-depth "dashboard" for the São Paulo micro-region, the Brazilian number 1 microrregion.

DASHBOARD TOP 10: São Paulo (1st)

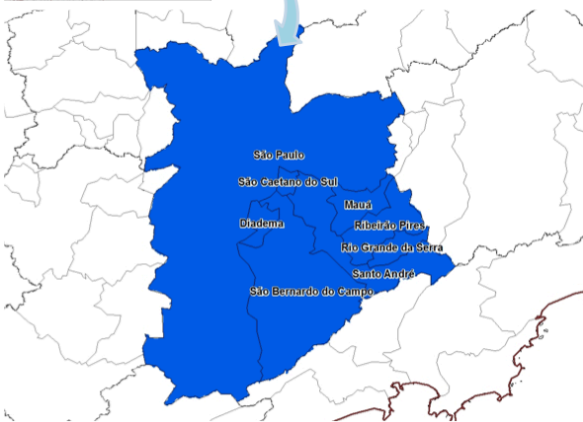
State: São Paulo

Number of Municipalities: 8

Size: 2,350 km²

Population: 13,958,229

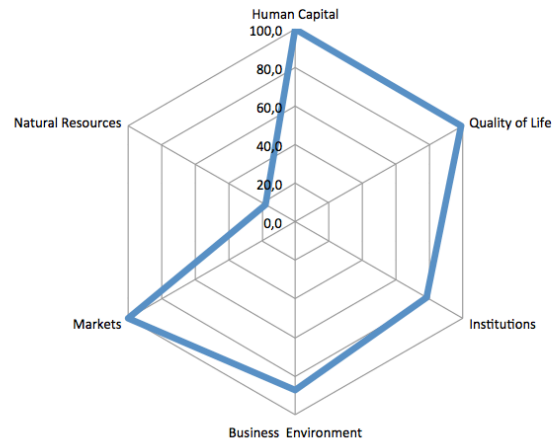
Density: 5,940 people per km²



VECTORS OF COMPETITIVENESS	RANK
Human Capital	1
Markets	1
Quality of Life	3
Business Environment	4
Institutions	105
Natural Resources	547



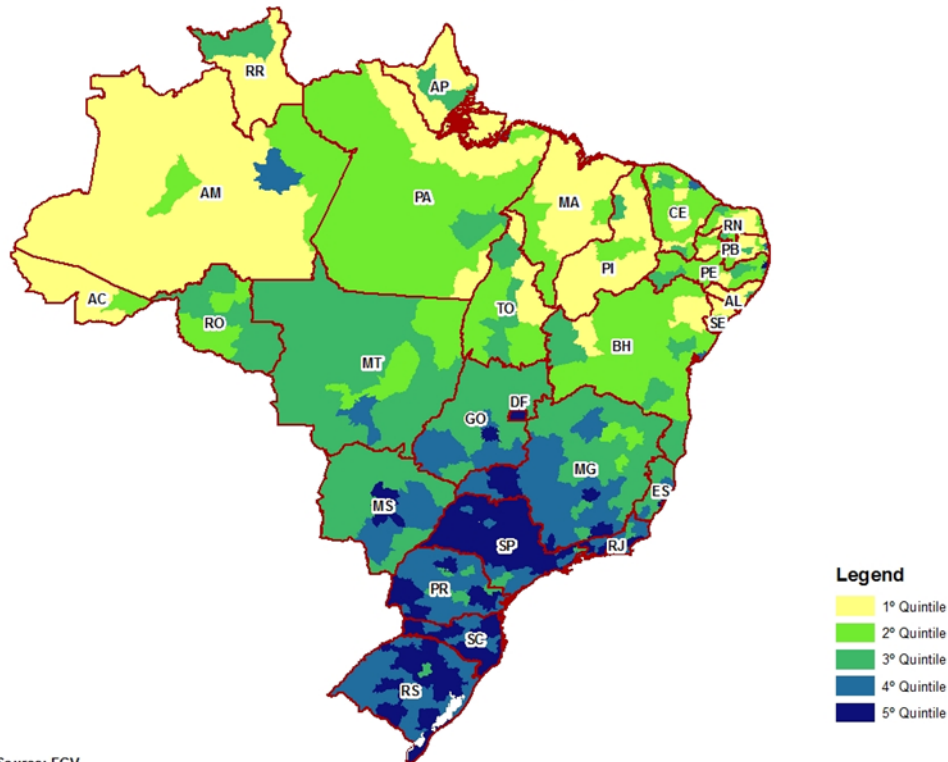
Vectors Competitiveness Scores



This dashboard is presented for the top 10 microrregions.

The final result presents the most competitive microregions of Brazil. This map is somehow intuitive, but presents some interesting aspects like the “soil belt” bringing competitiveness to Rondônia, Mato Grosso, and Tocantins.

Overall Ranking



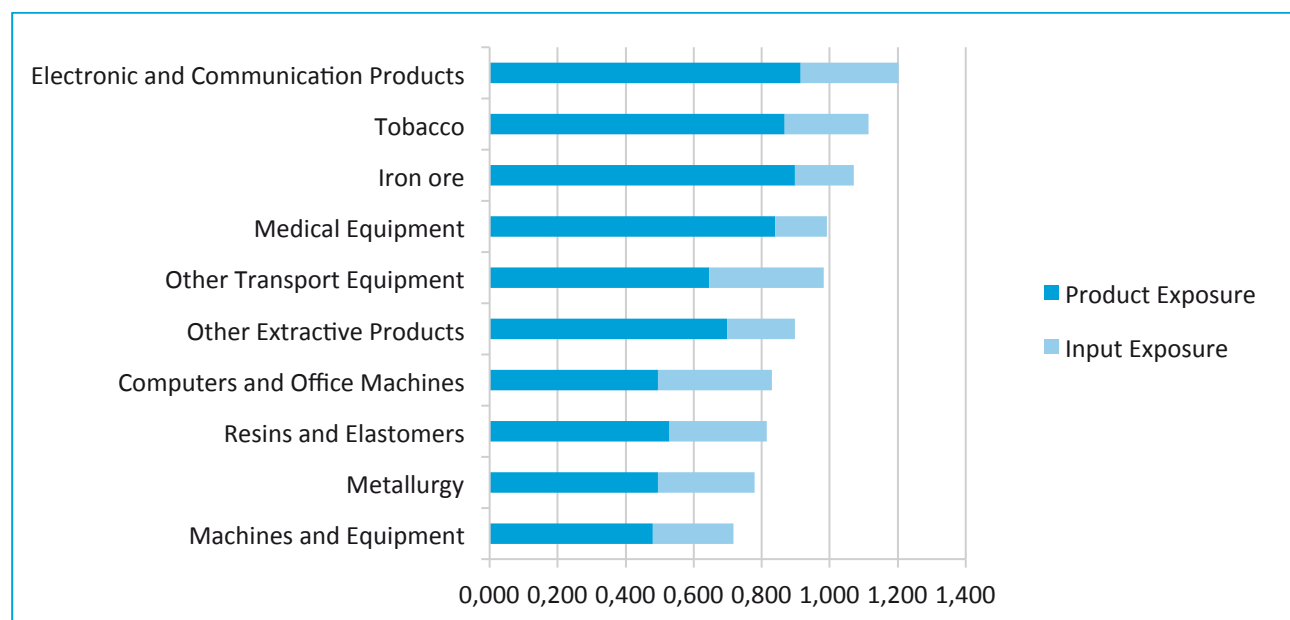
Source: FGV

MACRO-LEVEL

The macro-level analysis has the goal of presenting, for foreign investors, the level of vulnerability of each Brazilian 56 economic sectors to exchange rate fluctuations and the country's fiscal burden. These two variables were chosen due to their importance for foreign direct investment decisions.

The analysis is divided between direct effects, those related to the sector's output, and the indirect effects, related to the sector's inputs. The sectors are ranked by the total level of exposure as presented below:

Graph 1: Top 10 Economic Sectors most Vulnerable do Exchange Rate, (Total, Direct and Indirect Exposure)

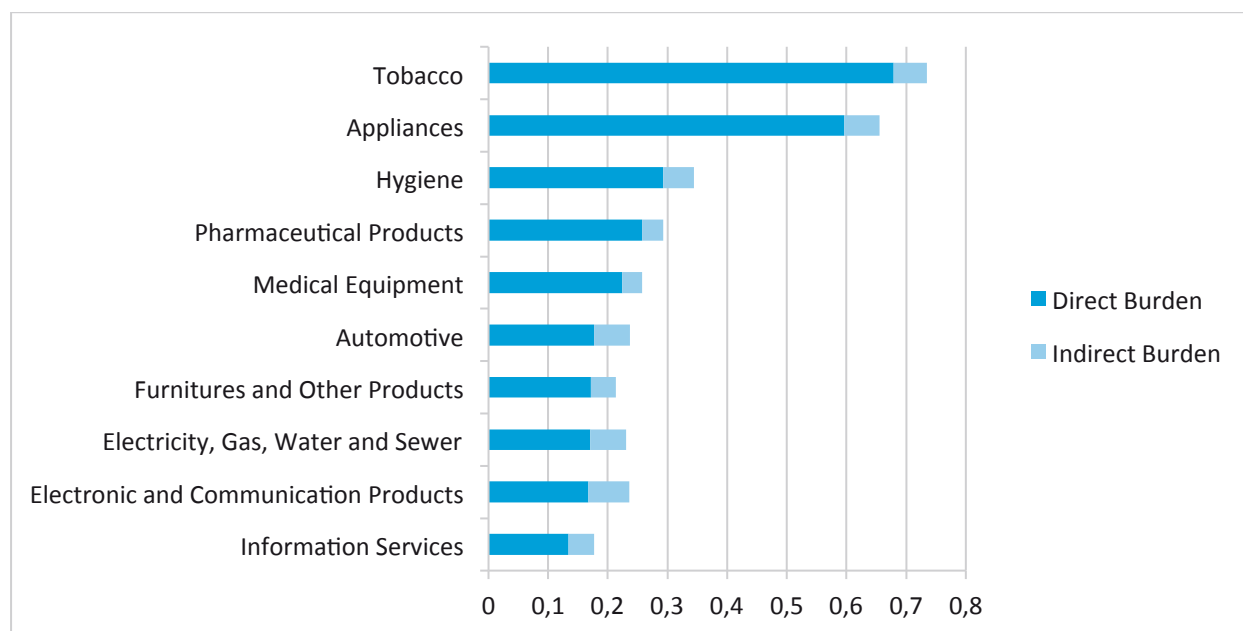


The sectors are presented from the most exposure to the last exposure. The graph above shows from the 10 most vulnerable Brazilian economic sectors to exchange rate. In other words, it present the sectors that will be most affected by a variation of the exchange rate.

The direct effect measures how much the output of this sector will be subjected to exchange rate variations while the indirect effect presents how much the inputs of this sector will be subjected to exchange rate variations.

The same analysis is built for the economic sectors exposure to fiscal burden.

Graph 2: Top 10 Economic Sectors most Vulnerable do Fiscal Burden, (Total, Direct and Indirect Exposure)



This graph depicts the 10 most vulnerable Brazilian economic sectors to fiscal burden.

In dark blue there is the Direct Burden, meaning the fiscal burden of the output of those industries. In light blue there is the Indirect Burden, the level of fiscal burden of the inputs used by the economic sectors.

CONCLUSION

This report is unique in providing a cohesive profile of Brazilian competitiveness, encompassing natural, technological, institutional, market and macroeconomic factors. It is also the first attempt to do so which goes beyond the traditional top-level views and reveals nuances in both the regional and sector levels. For those merits, it should prove a valuable source of information for decision-makers in the public and private sectors, both in Brazil and abroad.