

Doing Business: a Global Overview

Since 2004, the World Bank (WB) publishes its *Doing Business* (DB) annual Report. The study attempts to measure the quality of the business environment in many countries around the world, through an extensive research that assesses the performance of a group of microeconomic indicators. In this Report, we will highlight the findings of the Bank's last Report, analyzing Brazil's relative rank in the world. In the next one, we will select two topics where we were worst ranked to illustrate the difficult reality of our business environment. Towards the end, we conclude with a few remarks on how this theme affects our investment decisions here at Dynamo.

In the 12th edition of the series, *Doing Business 2015 – Going Beyond Efficiency*, the World Bank aimed to describe the business 'ethos' around the world, analyzing ten different areas: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.

The Bank's basic assumption is that a favorable atmosphere for business activity is in the public's best interest. An economy where laws and regulations facilitate creativity and entrepreneurship, allows individuals to freely develop their potential, and promotes growth, prosperity, and well-being for society. Therein lies WB's objective of fostering regulations that stimulate the development of the private sector, starting from the evaluation of day-to-day business reality, the state of the "nuts and bolts" of economies around the world.

The Report represents an enormous investigative effort. The survey collects and compares data from no less than 189 countries and their economies. For each of the items mentioned above, there are several sub-items. For example, the criterion "starting a business" considers the time spent, the cost, and the number of procedures required for an entrepreneur to formally start and operate a commercial or industrial business. In Brazil, it takes 102.5 days to overcome the 12 identified procedures – registration with the Commercial Registry, obtaining a national entity registration code (CNPJ), obtaining an operating license, registration and payment of the establishment inspection fee, registration with the employers' association, among others. To each of these procedures,

the WB estimates the time and costs associated with it. In order to obtain comparable data across all countries, each topic is subjected to a standard methodology. For example, well-defined attributes are assumed for companies and their shareholders in the "starting a business" item¹. This delimits a few parameters defining a common basis for data collection over all countries surveyed.

With this standardized methodology, the Report believes to reach comparable results across such distant latitudes and realities. The final work is a ranking where countries are ordered according to the atmosphere of their business environment, i.e. if it is more or less welcoming to the germination of new business initiatives.

Of course, the Report receives its share of criticism. For example, when delimiting the scope of the item 'registering property' to small properties, the study misses the reality of large real estate transactions. But this is the inevitable trade-off of wide-ranging research. By definition, this type of research is based on sampling. Furthermore, the Report does not intend to cover important aspects of public policies such as security, health, education, quality of the workforce, corruption and bribery, among others.

Translating complex realities of everyday life over such disparate cultures to a simple ranking of countries is an enormous challenge. This is both the challenge and the unique value of the Report, to represent multifaceted realities in a quantifiable structure. Aware of such obstacles, the Bank has been developing enhancements, such as the concept of 'Distance to Frontier' (DTF), which attempts to estimate over each topic how much each country needs to improve in order to reach the benchmark of best performance. This indicator measures not only the relative position of each country, but captures a sense of absolute performance, by tracking each country's performance every year.

¹ We can list the following main assumptions about the company and business: type of activity, restricted to foreign transactions, not subject to special tax regimes, devoid of tax incentives, and not owning property. And regarding its corporate structure: limited partnership, 5 local partners holding 100% of the capital, reaching 10 to 50 employees after one month from the start of activities, revenues of at least one hundred times the per capita income of the country, among others.

Table 1
Brazil - Ranking in Doing Business Report - World Bank

AREAS	Ranking 2015	Ranking 2014	Change 2015/2014
Getting Electricity	19	19	0
Protecting Minority Investors	35	35	0
Resolving Insolvency	55	60	5
Getting Credit	89	86	-3
Enforcing Contracts	118	118	0
Trading across Borders	123	126	3
Registering Property	138	137	-1
Starting a Business	167	160	-7
Dealing with Construction Permits	174	171	-3
Paying Taxes	177	175	-2

The Report generates a comprehensive database that has been the basis of a promising frontier of empirical research. Since its first edition, there have been news of over two thousand articles in academic journals and over five thousand working papers discussing how the business regulatory environment affects different micro and macroeconomic results in the countries studied, from productivity, employment, trade, and investment, to growth, access to capital, informality, among many others.

Considering all the limitations, we believe the document is both relevant as well as timely. To our knowledge, almost all empirical comparative studies between countries analyzes their macroeconomic policies, perhaps simply because the statistics are already consolidated and easily available. Here at Dynamo, we are interested in the day-to-day reality of companies and their businesses, so we very much welcome this type of effort from the WB.

In this last version of the Report, Brazil ranks 120th among the 189 countries, just after Nicaragua, practically maintaining the same ranking from previous editions. Observing our position on each of the various topics measured can be even more interesting than the global ranking.

What draws our attention in Table 1 is the dispersion of our classification. In fact, Brazil is one of the countries with the highest standard deviation over the many items measured. We are relatively well ranked on three topics: getting electricity (19th), protection of minority investors (35th) and insolvency resolution (55th). The following four criteria, getting credit (89th), enforcing contracts (118th), international trade (123th) and registering property (138th) more closely reflect our position in the general table (120th). In the last three criteria, starting a business (167th), obtaining construction permits (174th) and paying taxes (177th) we are in an uncomfortable region at the end of the ranking. Just to illustrate, countries

that hold these respective positions in the global ranking are Burkina Faso, Liberia and Myanmar, with per capita income of US\$ 670, US\$ 410 and US\$ 869, respectively².

In economic literature, GDP and income growth are traditionally explained by increase in the stock of physical capital, expansion and improvement in the quality of the workforce, technological progress – innovation and its impact on productivity, quality of the institutional and political environment – rule of law, respect for the rules of the game, and macroeconomic stability. Econometric studies using the data generated by the Doing Business Reports began to test whether the reforms in the business environment could also help explain the economic performance of countries. The results seem promising.

Gillanders and Whelan (2010) tested a number of instrumental variables – rule of law, degree of openness, education, geography – and found that the DB indicators emerged as **the main** explanatory variable for the level of per capita income (emphasis added). They concluded that policies that encourage a healthy business environment affect both short and long-term growth. Haidar (2012) used the data from World Bank and other institutions to investigate the impact of business regulatory reforms on economic growth among 172 countries for five years (2006-2010). With significant statistical evidence, he concluded that economic growth indeed reacts to reforms in the business environment. Messaoud and Teheni (2013) investigated 162 countries in

² Our downgrade in future issues may be looming as the World Bank is looking to enhance the topic where we are rated the highest. In the criterion “getting electricity”, the Bank will start to consider not only access to electrical networks, but also the energy supply reliability, with the traditional frequency and duration of supply interruption metrics. The mistakes we made in energy planning in recent years, overloading operations, stressing transmission systems, causing us to flirt with rationing, may lead us to lose some positions in this criterion (cfr. Doing Business 2015, page 29).

the period 2007-2011 and found the same results: a robust positive correlation between improvements in business regulation and economic growth rates.

Through less sophisticated ways, we also sought to investigate the evidence. Using data from the Report, we drew a graph where we plotted the 'Distance to Frontier' (DTF) on the vertical axis and Gross National Income per capita (GNIpC) on the horizontal axis for all 189 countries. To recall, the DTF reflects how much a country must advance to reach the highest position. The World Bank publishes data series for both the general DTFs and for each of the measured sub-topics. In the general DTF, Singapore is the leader, with a score of 88.27. Australia is in 10th, with 80.66 points, Chile in 41st, with 71.24, and Brazil in 120th, with 58.01. Eritrea occupies the last position with only 33.16 points.

Figure 1 shows a positive trend line, suggesting that improved conditions in the business environment are associated with higher income levels. The direction of causality is also clear, identified in econometric studies mentioned above. We also noted a few exceptions. Some countries with good regulatory environment – high levels of DTFs – are still achieving relatively low levels of income per capita, such as Georgia, Macedonia, Thailand, Rwanda, Peru, Armenia and Bulgaria. They all seem to be small and less populated countries, facing restrictions of physical and human capital.

Looking at the relative position of Brazil, we see that the vast majority of countries with GNIpC close to ours show higher DTFs. Similarly, countries with DTFs close to ours present lower GNIpC. As a curiosity, we plotted a similar graph replacing GNIpC with the HDI index, which captures a broader socio-economic dimension, and found similar

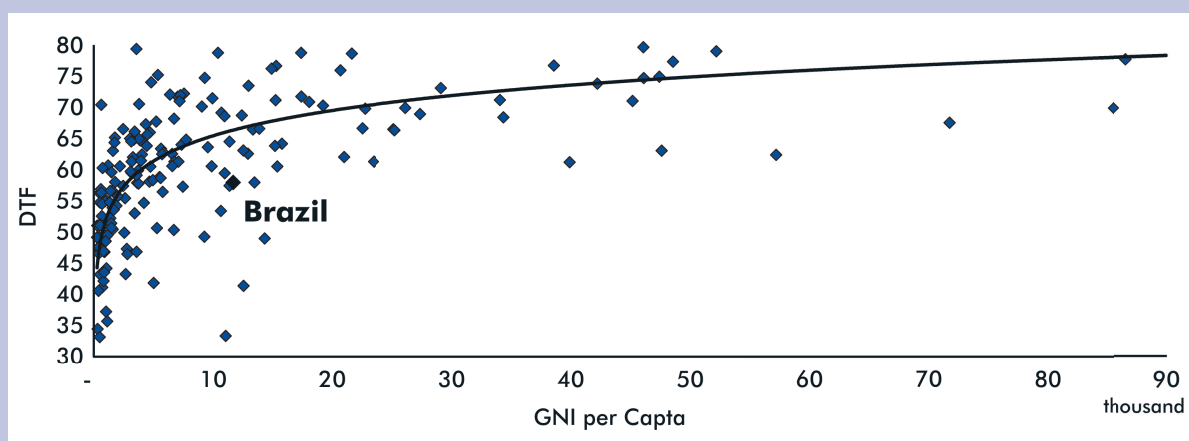
results. The countries with a per capita income level close to Brazil and lower DTFs are: Libya, Venezuela, Suriname, Equatorial Guinea, Gabon and Argentina, not exactly places to envy.

We find ourselves below the trend-line, suggesting that our income levels are better than the state of our regulatory environment. We venture an explanation for the phenomenon, which preserves the merits of the empirical results. We arrived here by traditional routes of economic growth: continental dimension, successful exploitation of natural resources and abundant factors of production, including labor, under a generous base of the population pyramid. The country became urbanized and industrialized, taking advantage of the years of a 'forced march'. Since then, we have no experience of any sustainable growth. To make things worse, we expect the demographic bonus to end in ten years. Our country is getting older and more leverage than never. The bloated State drains savings and underinvests. The ninth largest economy, but with a per capita GDP that has practically stagnated for seven years³. The previous model seems to show signs of exhaustion.

This new set of empirical evidences suggests a route and an agenda for the country. Instead of dreaming with large institutional rearrangements that are increasingly difficult to coordinate in modern democracies, surgical reforms in the business environment can help us once again retrieve the track of healthy growth.

3 With the expected fall in GDP in 2015, we shall return to the same levels of GDP per capita from 2008.

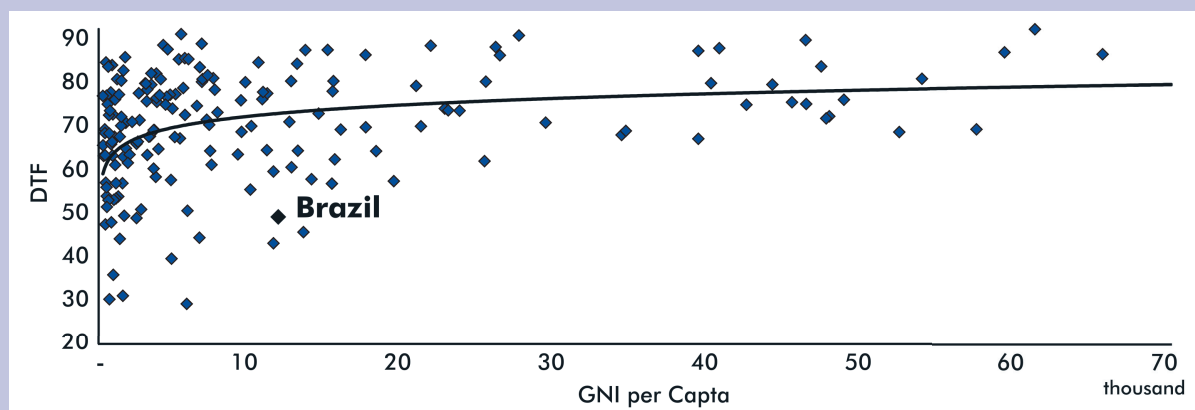
Chart 1 – Doing Business Report 2015
Distance to Frontier (DTF) x Gross National Income (GNI) per Capta



Source: World Bank database, elaboration Dynamo.

Chart 2 – Doing Business Report 2015

DTF “Dealing with Construction Permits” x Gross National Income (GNI) per Capta



Let us return to the graphs. We selected the two criteria in which we are rated worse: “obtaining building permits” and “paying taxes”. These will be the objects of our analysis hereinafter, in both the remainder of this and (mainly) in the next Report. We plot the same graph as the one above, now using the specific DTF for each topic on the vertical axis.

Here in Figures 2 and 3, our departure from the trend line is even clearer. We find the business environment in flagrant mismatch with our level of income. Or perhaps a unique opportunity for a positive agenda of public policies.

Econometrics aside, our daily work allows us to verify *in loco* the effects of over-regulation on companies, the cells from which national wealth stems and the aggregate output is built. What do we see? A daily struggle of companies facing a bureaucracy prone to increasingly interfere in the

business environment. Let us start with our worst grade of the World Bank report.

The criterion ‘paying taxes’ is our national embarrassment. We achieved the 177th place in a ranking of 189 countries, flanked only by the following sorts: Eritrea, Ivory Coast, Algeria, Benin, Nigeria and Gambia. Here too, in order to standardize its methodology, the World Bank defines a series of parameters for the typical company responsible for the filling and payment of tax liabilities: limited partnership of 60 employees, initial capital of 102 times the per capita income of the country, loss in the first year, and gross margin before tax of 20% and so on. The three measured sub-items – number of payments per year, the total tax rate and number of hours spent in complying with tax obligations – are given equal weight. In the latter sub-item, we were ranked in last, by a wide margin. The methodology of the World Bank found that a total of 2,600

Chart 3 – Doing Business Report 2015

DTF “Paying Taxes” x Gross National Income (GNI) per Capta

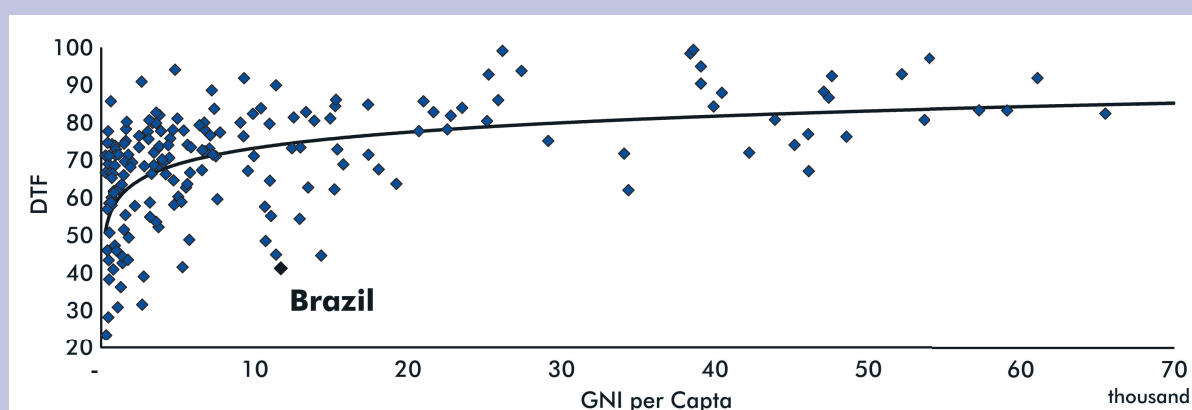
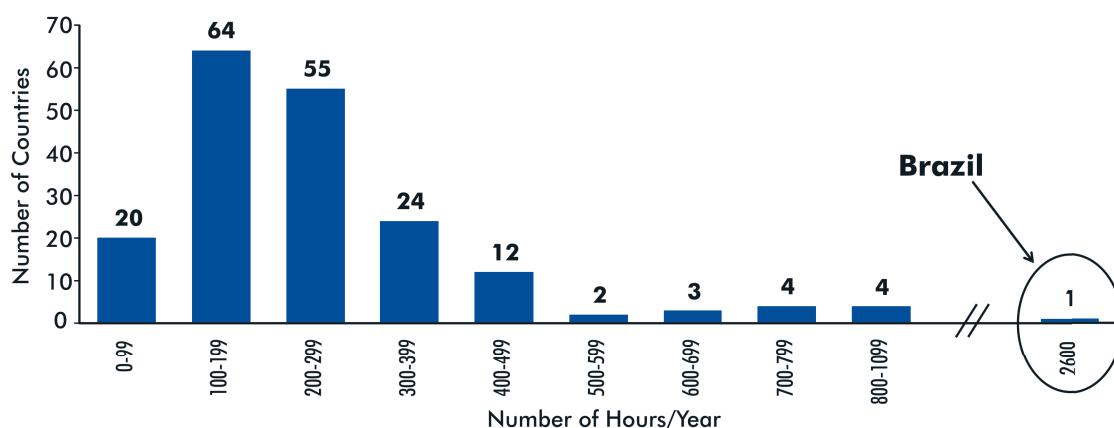


Table 2 – Doing Business Report 2015
Number of Hours per Year to Prepare, File and Pay Taxes



Source: World Bank database, elaboration Dynamo.

hours are required per year for employees of the model-company in Brazil to prepare, fill-in and pay all of its tax obligations. The histogram (Table 2) shows the distribution of the hours needed for each country.

The ICMS tax (a per-transaction tax similar to VAT) emerged as the unequivocal villain in the Report, comprising more than half the time needed for the fulfillment of our tax obligations. The history of this tax is already well known. Originally a Federal tax and later on transferred to the jurisdiction of the states, modified over time, becoming an instrument and source of federal conflicts, protagonist of the infamous “fiscal war”. Its regulatory framework consists of diverse sources such as provisions in the Constitution, general rules in supplementary laws, Confaz agreements, state regulatory acts, that is, an entanglement of laws, decrees, ordinances, resolutions, normative instructions, detailed rulings, etc. Depending on each circumstance there is a multitude of different tax rates, as well as countless differentiated tax regimes, base reductions, presumed credits, special regimes differentiated by type of product and economic activity. Not to mention the infamous “*substituição tributária*” (forward tax substitution mechanisms). All this, moving according to the whims of the budgetary situations of each of the 27 states.

The ‘paying taxes’ criterion was introduced in the DB Report in 2006. Since then, we occupy the worst place in the ranking in this sub-item, with the same estimate of 2,600 annual hours needed. In that year (2006) eight other countries needed more than a thousand hours to comply with their tax obligations. In 2015, only Brazil (2,600) and Bolivia (1,025) remain above this mark. Many countries implemented reforms to improve the situation for their companies. Ukraine, for example, was placed just above Brazil with 2,185 hours in 2006. In 2015, it occupies the 108th

place with ‘only’ 350 hours. They introduced simplifications to their tax legislation, a unification of social contributions and, in particular, the implementation of electronic procedures for the completion and delivery of tax and labor obligations. Indeed, in this period of nine years, 38 countries have introduced or improved systems of online tax recording.

In Dynamo Report 61, from the first quarter of 2009, we already called attention to Brazil’s uncomfortable situation in the Doing Business ranking, in particular in this topic of taxes. At that time, our interest was precisely in describing the then incipient effort of the government to establish an electronic platform which was able to handle all the necessary accounting and tax documents of companies. Our view was that the implementation of SPED (Public Digital Bookkeeping System), the expedient of tax relief and the spread of electronic invoice

Dynamo Cougar x IBX x Ibovespa *Performance up to July 2015 (in R\$)*

Period	Dynamo Cougar	IBX	Ibovespa
60 months	100.5%	0.6%	-24.7%
36 months	42.3%	4.1%	-9.3%
24 months	31.5%	6.9%	5.5%
12 months	18.8%	-7.2%	-8.9%
Year to date	17.0%	2.7%	1.7%

NAV/Share on July 31 = R\$ 534.3011

DYNAMO COUGAR x FGV-100 x IBOVESPA

(Performance – Percentage Change in US\$ dollars)

Period	DYNAMOCOUGAR*		IBOVESPA***	
	Year	Since Sep1,1993	Year	Since Sep1,1993
1993	38.8%	38.8%	7.7%	7.7%
1994	245.6%	379.5%	62.6%	75.1%
1995	-3.6%	362.2%	-14.0%	50.5%
1996	53.6%	609.8%	53.2%	130.6%
1997	-6.2%	565.5%	34.7%	210.6%
1998	-19.1%	438.1%	-38.5%	91.0%
1999	104.6%	1,001.2%	70.2%	224.9%
2000	3.0%	1,034.5%	-18.3%	165.4%
2001	-6.4%	962.4%	-25.0%	99.0%
2002	-7.9%	878.9%	-45.5%	8.5%
2003	93.9%	1,798.5%	141.3%	161.8%
2004	64.4%	3,020.2%	28.2%	235.7%
2005	41.2%	4,305.5%	44.8%	386.1%
2006	49.8%	6,498.3%	45.5%	607.5%
2007	59.7%	10,436.6%	73.4%	1,126.8%
2008	-47.1%	5,470.1%	-55.4%	446.5%
2009	143.7%	13,472.6%	145.2%	1,239.9%
2010	28.1%	17,282.0%	5.6%	1,331.8%
2011	-4.4%	16,514.5%	-27.3%	929.1%
2012	14.0%	18,844.6%	-1.4%	914.5%
2013	-7.3%	17,456.8%	-26.3%	647.9%
2014	-6.0%	16,401.5%	-14.4%	540.4%

2015	DYNAMOCOUGAR*		IBOVESPA***	
	Month	Year	Month	Year
JAN	-2.7%	-2.7%	-6.4%	-6.4%
FEV	0.1%	-2.7%	1.7%	-4.8%
MAR	-6.1%	-8.6%	-11.0%	-15.3%
ABR	10.4%	0.9%	17.8%	-0.2%
MAI	-4.9%	-4.0%	-11.6%	-11.8%
JUN	2.4%	-1.7%	3.1%	-9.1%
JUL	-6.8%	-8.4%	-12.4%	-20.4%

Average Net Asset Value for Dynamo Cougar
(Last 12 months): R\$ 2,228,406,907

(*) The Dynamo Cougar Fund figures are audited by Price Waterhouse and Coopers and returns net of all costs and fees, except for Adjustment of Performance Fee, if due. (**) Index that includes 100 companies, but excludes banks and state-owned companies. (***) Ibovespa closing.

(NF-e), among other things, could cause a major change in the business environment in the country which was traditionally characterized by informality and tax evasion. Indeed, since then the electronic bookkeeping advanced rapidly in our business environment, to the point in which the NF-e is practically universalized. The impacts of the decline in informality and improvement in the competitive environment for formal companies were felt, validating business models willing to benefit from this trend⁴. The digital bookkeeping is advancing. At the moment, the second generation of the electronic invoice (NF-e 2G) is being implemented. It aims to provide a central repository with a detailed record of all the events in the life cycle of the digital document. At the same time, other modules continue to be developed, such as labor obligations, the Social EFD (eSocial) and bookkeeping of services (NFS-e).

If Brazil also improved significantly over the years, establishing a robust platform of digital records, why did we not progress one millimeter even in the DB ranking? How can we reconcile the actual reality of electronic data collection with the same unshakable "2,600 hours"?

We take a quick break so that our reader, taking a deep breath, may accompany us in search of the solution to another of Brazil's unique "jabuticaba"-mysteries, only found in Pindorama⁵.

Rio de Janeiro, August 25, 2015.

4 Some of which we mentioned on that occasion.

5 Pindorama, an early denomination for Brazil, is the name given to the mystical place of the tupi-guarani Indians, the original inhabitants of our territory.

Please visit our website if you would like
to compare the performance of
Dynamo funds to other indices:

www.dynamo.com.br

This report has been prepared for information purposes only and it is not intended to be an offer for sale or purchase of any class of shares of Dynamo Cougar, or any other securities. All our opinions and forecasts may change without notice. Past performance is no guarantee of future performance. According to the Brazilian laws, investment funds are not guaranteed by the fund administrator, nor by the fund manager. Investment funds do not even count for any mechanism of insurance.

DYNAMO

DYNAMO ADMINISTRAÇÃO DE RECURSOS LTDA.

Av. Ataulfo de Paiva, 1235 / 6º andar. Leblon. 22440-034. Rio. RJ. Brazil. Phone: (55 21) 2512-9394. Fax: (55 21) 2512-5720