A translation of competitiveness and its global implications:
Comparison of Brazil and Mexico under the lens of the Global Competitiveness Report.

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ABSTRACT:

The importance of the tasks performed by international organizations is increasing at the global level and the discourse used is the one of progress and development. The aim of this thesis is to introduce a new approach regarding the discussions of development in terms of competitiveness and transnational governance by discussing these subjects within the same framework. The empirical findings are focused on the main organizations contributing with different translations of competitiveness and the tools used to measure it, such as nation rankings. In addition, findings stress how within development theory, the concept of competitiveness has become quite popular in media and among policy makers, presidents, prime ministers, scholars and the like. Some of these actors use the term quite loosely and without a further and deeper understanding of the concept, while others endeavor on contributing with different definitions. The World Economic Forum and its Global Competitiveness Index has become if not the most, one out of the two more mentioned and used indexes measuring competitiveness of nations. The GCI is used in this paper to compare two economies in the Latin-American region: Brazil and Mexico, since for a long time Mexico was depicted as a more competitive economy, but in the latest years Brazil has managed, within the GCI perspective, to be depicted as more competitive. The final result of the comparison and what nations should do to be more competitive within the Latin American region is in line with what academics have already discussed. But the main contribution of this thesis is the analysis of the popularity of rankings developed by international organizations, and at the same time, what traits of transnational governance can one identify in such trend, being these rankings an attractive tool to spread free-market ideologies in order to develop a global order.

Keywords: Competitiveness, development, transnational governance, Mexico, Brazil, ranking, world economic forum, global competitiveness report.
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And to you Vanda, you have been by my side all the way and have brought a whole new meaning to my life, thank you for making each second the best I ever had.
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<tr>
<th>ACRONYMS</th>
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<tr>
<td>BRIC</td>
<td>Brazil, Russia, India and China.</td>
</tr>
<tr>
<td>CEPAL</td>
<td>ECLAC – Economic Commission for Latin America and the Caribbean</td>
</tr>
<tr>
<td>CIA</td>
<td>Central Intelligence Agency (U.S.A.)</td>
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<td>GCI</td>
<td>Global Competitiveness Index</td>
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<tr>
<td>GCR</td>
<td>Global Competitiveness Report</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GNI</td>
<td>Gross National Income</td>
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<td>GO</td>
<td>Governmental Organizations</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<td>HDR</td>
<td>Human Development Report</td>
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<td>HPI</td>
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<tr>
<td>IMD</td>
<td>Institute for Management Development</td>
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<td>MBA</td>
<td>Master in Business Administration</td>
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<td>NGO</td>
<td>Non Governmental Organizations</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>PPP</td>
<td>Purchasing Power Parity</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
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<td>WCY</td>
<td>World Competitiveness Yearbook</td>
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<td>WEF</td>
<td>World Economic Forum</td>
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1. Introduction

Silent battles are held every day between countries. But these combats do not involve bullets or hard weapons; this is the battle to finally become a first-world developed country. Most of the countries in the world belong to the category of developing countries. Among these, different strategies, reforms and actions are used by local governments in order to find their way for a steady growth and development. Throughout this journey, global, governmental and non-governmental organizations step forward to evaluate, guide, rank, support, monitor, etc., such as United Nations, World Bank, International Monetary Fund, Amnesty International, Transparency International, World Economic Forum, Organisation for Economic Co-operation and Development and an almost endless list of other type of organizations. The emergence of these institutions is what many scholars have categorized as Transnational Governance. Additionally, a relevant topic in our present days is this constant struggle that countries engage in, rough times known as economic crisis are big stones found in the way. National policies have to be implemented to avoid and surpass these big challenges. Having these under consideration, this thesis will then focus in its first stage on the work of one of these global organizations, assessing two particular developing economies which have been in the eyes of many economists and scholars due to their vast future potential within the Latin-American region, these are: Brazil and Mexico. And in a second stage, I will discuss in a broader manner the implications of this particular ranking in the context of the politics at the global level: transnational governance.

1.1 Background

As part of the first stage, and since the GCI (Global Competitiveness Index) is a metric, it is required to mention that among hundreds of hard measures on nations that one can find, Gross Domestic Product (GDP) is still the most relevant and used. Nations measure it and forecast its GDP growth all year round, and global organizations pay also special attention to measure and rank countries to illustrate progress and development based on this metric. Within Latin-America, few countries have managed to put up to this GDP race. And when one go and search into global rankings, developed by these organizations, Brazil, Mexico, Chile and Argentina are the countries that often perform better, under the lens of these organizations. Mexico had for many years been able to attract most of the attention in this region, perhaps because of its geographical location which is close to the United States. But in the latest years, Brazil has achieved a constant growth when speaking about GDP, consequently, the introduction by Goldman Sachs of the well-known term BRIC, referring to the most promising developing countries in the world, Brazil, Russia, India and China, the spotlight has changed towards Brazil within the Latin American region.
In addition to their geographical location, Mexico and Brazil become interesting subjects of study in Latin America because of other similarities. Both countries have huge human and natural resources, and can be seen as the few nations which have managed to grow faster than other developing countries, but also have an enormous inequality in income distribution and poverty (Maddison, 1992). Moreover, the size of their internal market, workforce capabilities, and both states being middle-income economies, below developed countries, but over average of most Latin-American, Asian and African nations (ibid.) are additional factors supporting its resemblance.

Further similarities at a macroeconomic level can be seen between Brazil and Mexico. Estimations of the CIA Factbook (2009) show that inflation rates for Brazil were 5.9% and 4.2% in 2008 and 2009 respectively. Similarly, Mexico also had 5.1% and 5.3% for 2008 and 2009. Both states also poses a great amount of international reserves, Brazil with 53 billion USD, and Mexico with 74 billion USD by the end of 2005, as presented by the World Development Indicators database of the World Bank (2010). Furthermore, both economies look quite similar in the percentage of value added contribution of the service sector compared to GDP, Brazil with 65% and Mexico with 59%. On the negative side, also some similarities can be drawn, such as Brazil has 26% of the population below the poverty line, while Mexico 18.2%, according to CIA Factbook.

Moreover, some fundamental changes undergone by these countries also illustrate how alike they are. Both countries engaged in a transformation towards liberalization, trying to boost its potential in late 80’s and early 90’s. Strategies were focused on giving the private sector a much more important role in the growth and capital accumulation of the nation, and also letting in capital inflows, once before blocked by central governments, which would accelerate development. But such openness to globalization drove these two countries to extremely harmful crises. (Danby, 2002)

Consequently, similarities in crisis periods can also be drawn, and without the intention of going into a deep economic analysis, one can notice the resemblance in the currency devaluation – Mexican Peso in 1994 and Brazil’s Real in 1999. As Gruben and Welch (2001) discusses it, in both scenarios, governments kept a policy of a limited exchange rate, regardless of the increase in inflation. These led to an overvalued currency. This attracted foreign short-term investments, and also supported by attractive interest rates. Some theories support the idea that the crises were due to this short term fled of capital, while other theories aim on the symptoms previous the crises, which could easily prevent disaster. On both countries free flotation exchange rate and on-time devaluation was required, but not executed by central banks and governments (ibid.).

Additional general figures to illustrate further parallelisms between these two countries, regarding performance on GDP growth are: from each respective year when these nations went through their devaluation crises, Mexico in 1994 and Brazil in 1999, they have performed quite similar on the average growth per year until 2008; Brazil with a 3.34% and Mexico with a 2.95%
(UN Statistics Division 2009). However, what turns out to be interesting, if only the past 5 years are analyzed, Brazil managed to keep the previous trend, while Mexico was not able to keep up.

Computing UN figures from 2005 until 2008 with estimates from CIA Factbook for the year 2009, regarding GDP growth per annum, Brazil average performance is 3.62% and Mexico 1.09% within this 5 year period.

Although both countries were (and still are) affected by current crisis, Mexico was severely debilitated by the current economic crisis, accounting for a -7.1% decrease on its GDP, while Brazil managed to a modest 0.1% (CIA Factbook 2009).

So far, the intention of the background section is to present a set of figures, which have been collected from several known sources, which can help to put in perspective, to some extent, the work of international institutions monitoring and keeping track of performance of countries. After having this under consideration, the next step is to further analyze the tools used by these institutions assessing and scrutinizing nations. Such analysis, as presented in the introduction section, falls in the area of transnational governance since the work of global organizations has an ultimate purpose and it is not the one of serve as statistical databases, but to “communicate and share” best practices towards development.

In sum, similar nations, performing roughly in the same way in macroeconomic measures - mainly in GDP annual growth - and which also share a large population and natural resources, happen in just a brief period of time to perform so different under the lens of international organizations. What is then a feasible explanation for such difference in performance? What factors or variables are important to grow faster or not? What kind of tools can one use to find such factors? Then, the motivation of this research is based on this questioning, centered on explaining such phenomena, complemented by the examination of dynamics of global interactions.

### 1.2 Problem Discussion

Several economic theories on development have been elaborated and discussed by several researchers. The process is still ongoing and some organizations such as United Nations, try to spread, share and suggest possible strategies to pursue improvement in a number of areas. For instance, some of these broad areas are summarized in the Corporate Strategy (UNIDO, 2003) such as improvement insights or focus on which nations should emphasize efforts: Productivity and income distribution, financial volatility, demography, environment policies, trade, industrialization, education, among others.
Consequently, numerous measures on each of these areas are developed and constantly monitored by international organizations, as mentioned in the introduction section. For instance, in the earlier mentioned World Economic Indicators of the World Bank, one can find national economic measures on almost every quantifiable aspect, a lot of them derived from GDP. This particular trend is in line with some researchers’ approaches (e.g. Djelic & Sahlin-Andersson, 2006), depicting the natural growing trend of international regulation and monitoring, as a result of open market economies demanding some degree of reliability when trading with other economies.

For example, in order to have a successful comparison, according to Brunsson (2010) one should compare similar things and under the same parameters. It then becomes quite relevant to compare nations which share common traits or qualities, such as Mexico and Brazil, illustrated in the background section. Following such line of thought, business people, politicians and media all around the world are aware and eager to know how their country is perceived and ranked by prominent global organizations. Then, a significant comparison between two nations should be done within the same criteria, or in other words, under the lens of the same organization.

Therefore, the intention of this thesis is to tackle and endeavor on such journey. This is to analyze and compare, with an exploratory purpose at a secondary level, one of these international rankings, and with any luck find out if this ranking can actually give a reasonable answer about the different performance achieved by similar subjects. Further questions will arise such as how can one interpret such differences? Or to what extent are the results of the index supported by the work of previous scholars and researchers?

Lately, media, governments and business associations are using, sometimes quite loosely, the term of competitiveness. The concept is often associated with how the industry or private sector is performing, or how government structure and policies are being developed in the global context. As a result, an important international organization, the World Economic Forum (WEF), started several years ago, the task of “measuring” competitiveness of nations, which is finally stipulated in their annual Global Competitiveness Report. Their methodology leads them to “translate” competitiveness into 12 areas or pillars, which is their particular contribution on explaining the level of productivity of a country (GCR, 2009): institutions, infrastructure, macroeconomic stability, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size, business sophistication and innovation.

On this overview, the Global Competitiveness Index accomplishes to address the most important development areas which countries often focus their short, medium and long economic and politic strategies. But still, these 12 pillars are still too broad to research, and additionally, and according to the background information presented for Brazil and Mexico, a lot of similarities are expected between these two countries among these areas or pillars. The comparison analysis
will then try to find the one or more pillars which stand out and can help to give an answer on the different performance showed by these countries in the latest years.

1.3 Research Question

Restating the thought of the previous section, the main question to be answered by this thesis, is, to find the one area or factor that can best explain the better performance in the past years by Brazil over Mexico. Secondary but still to a certain extent important questions will then arise such as, how important or influencing is the WEF ranking in the global context? Or what are the implications of this ranking, and other similar rankings developed by international organizations, in the ultimate task to encourage development and world order?

- What is the one, or more factors (pillars) that can explain the difference in performance by Brazil and Mexico within the Global Competitiveness Report ranking?

1.4 Aim and Purpose

My intention in this research is to contribute to the current competitiveness and transnational governance theory. In order to accomplish so I will be using a specific ranking, developed by a known international organization, and comparing two countries, in order to find a feasible answer for the research question. The ultimate purpose is to make a pause in what other scholars have developed regarding these topics, and set these two concepts together – competitiveness and transnational governance – contributing with a new perspective on how future studies can be initiated. On the other hand, a parenthesis in such explanation is required, as to delimitate what is not the intention of this research. We could easily engage in a thorough analysis and comparison of all possible an available measures build up by international organizations, from economic, environmental, transparency (corruption), criminality and the like. Even though such research would give a deep understanding on the performance of these two countries in all the measurable areas, the final result would mainly lead to a huge list of figures and possibly and endless discussion of what prestigious researchers have already addressed. As mentioned before, the aim and optimistically contribution of this particular study is to center on the popular concept of competitiveness, and within this framework make use of one of the available “tools”, in this case the WEF’s ranking condensed in the annual Global Competitiveness Index, which in turn is an excellent illustration of a global trend of rankings and monitoring by governmental international organizations.
An additional motivation for the present research is that when searching for information about
development comparisons between these two countries, only isolated and specific comparisons
were found. However, one of this is a well structured analysis and study performed by Angus
Maddison (1992) endorsed by the World Bank, but this piece of work only covers the time
period from 1950 until 1980. Thus, by doing the research proposed in previous lines and
sections, a small, but hopefully valuable contribution in this type of analyses will be expected to
be the result, and also add new knowledge from which further work can be built upon.
2. Research Design and Strategy

The aim of this thesis requires delimitating a sound research design and strategy. In the following sections, the selected approach will be explained. Additionally, criticism as well as validity and reliability issues will be addressed. Prior to that, some epistemological and ontological considerations of the study will be introduced.

The nature of this study requires deviating from the positivism position. The path to follow then is that one of interpretivism. According to Bryman and Bell (2007), interpretivism endeavors on the task of seizing more subjective meanings out of the social interactions. Particular phenomena are then the object of understanding. The competitiveness concept hereby addressed, falls into the field of interpretation, at first place, by one institution, which at the same time, relies on the interpretation of the concept by a specific group of stakeholders (e.g. business people)

The particular measures on which the data collection will be based on, requires the ontological consideration of constructivism. Bryman and Bell (2007) most relevant contribution is that a specific part of the reality is presented by the researcher, instead of using a definitive one. Furthermore, these authors state that, under constructivism, social phenomena are in a regular state of revision, or in other words, evolution and change. Having these insights in consideration, the next step is to select the appropriate structure on the present work.

2.1 Research Design

From the several research designs available for researchers, the most suitable for this work is a comparative design. This particular design, as stipulated by Bryman and Bell (2007) suits best for cross-cultural or cross-nation studies. Also in these authors’ words, such design based on comparison, can best help to understand social phenomena by contrasting cases or subjects under the same situations or contexts.

The nations under scrutiny, Subject A and Subject B will be compared among a set of criteria within the same context (Global Competitiveness Report) and within the same time period. A general overview is presented in Fig 1.

This design’s outcome will lead to focus on outlier or outstanding different values/figures from which this study aim and purpose was started. Or in Bryman and Bell (2007) words the final outcome of such approach is to identify unique characteristics between the compared subjects, and allow this uniqueness to be the starting point for further theoretical reflections and interpretations.
2.2 Research Strategy

Among the traditional options of research strategy, quantitative and qualitative, the latter is more suitable for this kind of investigation. Qualitative methods, according to Ghauri (et al. 1995) are not just differentiated from quantitative in terms of “quantification”, but in reflecting on different perspectives, such as behavior, events, interactions, relationships among others.

Additionally, Bryman and Bell (2007) emphasize on the characteristic of qualitative strategies which focuses on the individuals’ interpretations of their social world, and this reality, in line with the constructivism ontological branch, is in constant evolution.

As Ghauri (et al. 1995) explains, the usefulness of this type of strategy is of more importance when researchers’ aim is to uncover and understand particular phenomena, from which little knowledge is available. This study requires a fragmentation and understanding of a unique measure, looking for a feasible and specific explanation on the different performance of similar subjects of study.

Another important aspect of Qualitative research is its emphasis on words instead of large quantification (Bryman and Bell, 2007). Furthermore, such research approach entices different research methods, allowing a wider margin where researchers can move and adapt in order to generate their unique knowledge contribution. Moreover, this method focuses on accounting comparisons of features/characteristics within determined contexts of organizations or individuals (Ghauri, 1995).
2.3 Theory Strategy

Qualitative research forces to some extent to the use of a specific theory strategy: inductive theory, in contrast to the traditional deductive approach. However, extreme distinctions should not be made between these two types of practices, since each one implies reciprocal features on each other (Bryman and Bell, 2007). In other words, an inductive approach implies, to some extent a deductive one, since a revision of existing theory at the end of the whole process from which the study was started is required.

Inductive theory, or reasoning, will help us from the starting point of particular facts (like the measures mentioned in Chapter 1) and the consequent analysis of these, will lead us to a general conclusion.

2.4 Data Collection

Regarding data collection, the traditional dichotomy is between primary and secondary data. Since the origin of this research is the analysis and comparison of two states under the same criteria, this is, the particular ranking developed by the World Economic Forum, the Global Competitiveness Index, the chosen method for data collection has to be secondary data. Despite of what traditional researches commonly use, primary data, secondary data is of great help on management and business research. Advantages of secondary data, according to Ghauri (et.al. 1995) are that it allows a considerable amount of saved time and money. Moreover, it can give a broader opportunity or set of options from where researchers can choose in order to have more tools to deal with a research problem (ibid.).

Ghauri (et.al. 1995) also addresses the traditional issue on secondary data, which is that data might have been collected with a different purpose, thus biasing the study at stake. In this study, the data collected by WEF is actually intended to measure competitiveness, delimited of course by its own perception of the concept.

In addition, due to the importance of the Global Competitiveness Report, another characteristic of secondary data illustrated is that is of high-quality. It also will give the opportunity to analyze two subgroups from such data, fulfilling a third characteristic or advantage on secondary information, stipulated by Bryman and Bell (2007).

However, secondary data on this research is not constrained by the sole analysis of the GCI. Additionally, relevant articles and journals discussing competitiveness issues will be gathered, as well as information from other international organizations addressing the subject. This is in line also with Bryman and Bell (2007) highlighting the importance of looking at other researchers’
work.

2.4.1 Criticism on Data Collection

On the other hand, some concerns should be mentioned regarding the type of data recollection to be implemented hereby. One should be extremely cautious on gathering the information. Ghauri (et.al 1995) suggests that is completely the researcher job to verify on the accuracy and relevance of the data collected. If any inaccuracies exist, the data is not to be blamed. What could actually present some difficulties is the understanding and familiarity with the data collected. This is indicated by Bryman and Bell (2007), addressing that a familiarization time frame is necessary to get acquainted with the information. Furthermore, these authors also highlight the issue of complex data, thus leading to problems handling it. The last but not the least, data quality is an important concern. WEF’s Global Competitiveness Index is based on hard data (national statistics) and survey data. Hence, the accuracy of the hard data depends extremely on the reliability of national statistic offices in the subject states chosen, and the survey data might be biased by factors of nationality/culture or even mood of participants at the time of responding.

2.5 Validity and Reliability

The term trustworthiness pinpointed by Bryman and Bell (2007) adequately stresses the importance on 4 key factors on qualitative research; these are credibility, transferability, dependability and confirmability, which are the parallelism and adaptation with validity and reliability, usually associated with quantitative research.

In order to accomplish credibility, this research has to follow a comprehensive and structured approach as suggested by Bryman and Bell. Triangulation, as explained by these authors, is a useful tool to cover this point. In other words, different sources (e.g. other rankings or researchers’ opinions) will be scrutinized in order to match, if possible, the final result. In second place, transferability is also a target in this study. We highly expect that the final results can also be applied in different contexts such as similar countries in different regions. Regarding dependability, Bryman and Bell refer to it as a process of auditing. Researchers should then be aware of having accurate records throughout the entire research process. In this research I have kept close track of data sources to avoid mixing information or figures which could mislead the final result. At last, confirmability refers to the issue of compromised objectivity of the researcher (ibid.) In this work, I have put special attention in the empirical chapter to present the information as objectively as possible, as presented in the main sources, and also centering the discussions on finding key differences among the subjects of studies, and not solely depicting a subject performing better than other. Hopefully, such approach will help avoid lack of objectivity and act in good faith.
3. Theoretical Framework

In Chapter 1, some main concepts were mentioned, such as GDP (and its derived metrics), inflation and terms like liberalization, development, competitiveness and the like. Even though these are quite common subjects of study and discussion nowadays, it is essential to introduce and present the background where these ideas emerged from. Regarding development, many theories and strategies exist for states to follow. These ideas become of more interest for those countries catalogued as emerging or developing economies, as they struggle to catch up with those more developed states. The spreading of these theories also follows an interesting process. The purpose of this section is in first place to give a brief overview on development theory, and bring all the initial concepts to the same scenario and context. Secondly, the trends of the spreading of these mainly free-market/neoliberal theories are addressed in the form of transnational governance. And finally in the third section, relevant theory regarding competitiveness of states and its implications will be emphasized.

3.1 Brief overview on development of states and the world divide.

The research question of this study is positioned in a very specific point, the comparison of two similar countries under the WEF competitiveness ranking. However, it is required to explain what is this ranking measuring and what type of ideals it is encouraging and fostering. Thus, to briefly understand competitiveness and development, it is worth mentioning the ground from which these concepts have grown and became a matter for this study. The concept of development has been under constant contestation, but as a common ground we can identify two broad branches of economic systems. The most popular after the end of Cold-War were capitalism and socialism. Capitalism based on the market economy, where means of production and its ownership relies mainly on the private sector and its main emphasis is made on the principle of self-driven economic activities, which in the long run will benefit the society (Morrison, 2006). On the other hand we have socialism, which as of today, few examples exist, such as Cuba, China or North Korea, but which are in their way to have open economies in line with capitalism, or Asian capitalism (ibid).

Capitalism was the result of the trend in previous centuries of industrialization, where already differences among states were taking place, making a divide of those focused on industrial production, and those providing the first ones with raw materials, food, and in second place buying the goods produced by the industrial states. (Dicken, 1998) Additionally, the post second world war period, brought up in consequence the starting of the world order. Transnational organizations were formed mainly to keep peace and security (United Nations) and to help
rebuild the harmed economies (International Monetary Fund, World Bank and World Trade Organization). (ibid.)

Divergent from capitalism, socialism was centered on a planned economy with the purpose of overcoming the volatility of market economies (Eichengreen, 2007). Governments were in charge of administering means of production, but an inefficient investment, the only focus on few industries, lack of major reforms among others, were some of the main causes to hamper the continuity of this economic model. (ibid.)

But in order to put development research on perspective it is required to address previous discussions on the matter. Adelman & Morris (1997) mention two specific branches of development economists: the modern pioneers and the neoclassical theorists. The latter did not put specific attention on technological and institutional obstacles to reallocation of factors of production, while the former had the opposite understanding, this is, that there are rigidities or hindrances for such reallocation. For instance, these areas were: investment maturity, inadequate infrastructure, incorrect forecasts and imperfect or undeveloped markets. (ibid.)

These authors also summarize the neoclassical approach based on international trade. This branch accentuates the importance of foreign trade as a substitution for low internal aggregate demand. Under this scenario, governments should focus on eliminating all barriers to commodities international trade (Adelman & Morris, 1997). But there were others who stressed that trade was not the only answer. In order to trade to be effective, some minor initial protectionism should be implemented, within some specific criteria and just in some economic areas (ibid.).

Additionally, the contribution of Adelman & Morris (1997) is on making a brief on 4 different development paths in world economic history: the first one is the independent exportation-driven industrialization path; then the government-driven and domestically oriented industrialization; a third one is called the balance-growth, example of an opened state economy with minor government intervention; and finally the agricultural, primary-export oriented. However, some other classifications can be found in literature, for instance Potter (et.al. 1999, p45) pinpoint also 4 broad development areas: the classical-traditional approach, the historical empirical approach, the radical-political economy dependency approach, and finally the bottom-up and alternative approach. Particularly the latter approach stresses the importance of self-reliance and highlights the importance of sustainable development.

Finally, within the paths of development which Adelman & Morris (1997) discussed, they identify structured and reliable institutions as key factors which make a difference between those that succeeded on attaining development and those who have not. The relevance of this, authors say, relies on their role of encouraging development and accelerating rate of growth.
Taking notice about the world divide, some interesting theories and researches were built upon these differences among states, and the correspondent strategies to diminish such differences. One of the most important, within the Latin-American context was developed by the Argentinean economist Raúl Prebisch, called the dependence theory. His main thought, as summarized by Frankenhoff (1962) was that technical progress was not similar within countries, thus fostering a clear division between central and peripheral actors. This opened the door for entrance of alternative economic approaches, opposite to “laissez-faire”. Some of these were associated with the Keynesian school, claiming for government intervention, mainly monetary (ibid.).

Then, the proposal for closing this persistent difference or gap was the development of industry. This thought did not exclude leaving behind agricultural-driven economies, but to use both approaches, industrialism and agricultural to strengthen the overall economy (Frankenhoff, 1962). But the main Prebisch’s thesis is that the relation between center and periphery, is the capacity of the former on retaining its own productivity outputs (savings) on around 10-15%, in contrast with the periphery states which consume almost everything they produce, thus leaving a small margin for saving, around 4-5%. (ibid.)

Aligned with these thoughts, Prebisch’s suggestions were emphasized on protectionism within a common market. In other words, that the Latin-American states should foster and protect a regional economy, presenting the example of U.S (back in the 1950’s) which nurtured the local market and kept tariffs in certain areas to let the internal market growth and benefit from its own productivity (Frankenhoff, 1962). Prebisch was against the idea, within the Latin-American context, that free market forces were the solution for closing the gap between the center and periphery (ibid.).

Because of the failure of traditional development theories, which had been successful in developed countries but did not fit the Third World reality, Escobar (1995) also highlights the particular dependency theory mentioned earlier. He summarizes the CEPAL’s solution proposal as giving countries, within Latin America, the opportunity to adapt the industrialization to their existing situations and environments. In other words, as a consequence of low savings and investment this in turn would permit to buy capital goods abroad, but since this was not the case, the strategy of a “domestic industrialization” (Escobar, 1995, p80) was required, translated into the well-known import substitution industrialization.

So far, Adelman & Morris (1997), Potter (et.al 1999), Escobar (1995) as well as Frankenhoff’s (1962) opinion on Prebisch’s thesis, help us to establish the scenario where the relevance of development comes from. Regarding this concept, they concur on the idea that there are many policies, models and strategies which states searching to reach a sustainable development can use. Thus, states have to be aware of its own reality, as to which fits best their current status of institutions and infrastructure in order to make the selected policy to actually function, and help towards a sustainable development.
3.1.1 Development in the Latin-American context.

Following the previous ideas, a brief insight into the development within a Latin-American context is also needed, in order to understand the realities of the subjects to be scrutinized in this research: Brazil and Mexico. One piece of work by Devlin & Moguillansky (2009) developed for the Economic Commission for Latin America and the Caribbean – ECLAC - (CEPAL for its abbreviation in Spanish) one of the regional commissions of the United Nations, addresses some 10 main characteristics, which under their point of view, are the hindrances for the development in the region.

Devlin & Moguillansky (2009) in first place mention the volatile growth rates since 1960. This volatility is the result of many factors such as low demand, financial aspects, fixed exchange rates, lagged law and ruling framework. Authors also add this volatility has a side effect on the strategies, focusing on short and medium terms, while politicians fail on taking risks on longer time periods.

Low dynamism in investment and productivity is a second hindrance presented by Devlin & Moguillansky (2009). Savings have been low for a long period of time, and summed to the low investment rates, it gives as a result difficulties to incorporate technological innovations thus generating low productivity (ibid.).

A third characteristic is the low participation on the industry sector. Relative contribution to total value in the region is lower than in the past. This might be the effect of cheaper labor costs in countries in Asia. In addition, this decrease of the industry sector contribution, in terms of the GDP, swayed the economies to emphasize again on the primary sector (Devlin & Moguillansky (2009).

The fourth feature is that there is also a decrease of the industrial sector involving high-tech usage, and low investment in research and development, rounding below world average. The exception they mention, is Brazil regarding they have invested above Latin-American average.

Regarding exports, Devlin & Moguillansky mention 4 characteristics. One is that there is an insufficient growth in exports, weak positioning of the export market, followed by a lack of diversification in production and exports and, scarce technological characteristics of the exported products (ibid.).

The ninth characteristic in the Latin American contexts is high inequality. Mexico, Colombia and Brazil have managed to a low extent to handle inequality just a bit better than their neighbors. The authors mention that inequality might hamper taking advantage of human capital and lead to social disturbances and political uncertainty (ibid.).
And the last improvement area Devlin & Moguillansky address is competitiveness. Regardless of their perspective is that rankings might be inadequate, they highlight the relative position of Latin American states within the Global Competitiveness Index developed by the World Economic Forum. They also stress the low scores obtained in education global tests, applied by an OECD programme, evidencing the low quality on education systems within the region.

So far, we have undertaken an overview on the surface of development history and broad branches of development paths. It has also been mentioned the different level of actors that have been involved from the industrialization era, all the way through globalization, and passing through the systems of capitalism and socialism. Since many years ago, these actors seem to be stable, but still central and peripheral states co-exist in the global economy, as highlighted by Prebisch’s thesis almost 60 years ago. Then, special emphasis in this brief description has been made on the Latin-American development context, with the aim of giving the reader a better understanding of the hindrances and challenges this special area in the world is facing day to day. Still, in order to understand the broader scenario where development takes place, a brief discussion regarding globalization will be made.

3.1.2 Insights of the Global Economy

The several development paths discussed earlier and which are mostly related to capitalism, ended up in the present era, known as the globalization era. Development and globalization are closely linked. The capitalism, within all the paths mentioned before, led to market economies, encouraging states to trade with each other at all levels, thus opening the doors for multilateral agreements between states, developed or developing.

Potter (et.al. 1999) summarizes the positive side of globalization as allowing countries to be flexible, opened and embracing differences, among others. And in the negative side, globalization has been the cause of development inequality, mainly among third world countries.

In the same tenor, Frieden (2006) mentions that similarities attached to globalization, such as trade without barriers, gold standard and new technologies (especially in communications) fostered a highly efficient market. He continues with the argument that based on these similarities, an immense opportunity was settled for those states which were specialized in certain industries – (e.g. Western Europe and its high tech equipment or Argentinean/Australian economies focused on farming). However, this author also mentioned the failures of globalization for development in the third world, blaming both on “local rulers and avaricious foreigners” (ibid, p104).

In spite of the common understanding of globalization and neoliberalization that literature might lead us to, a complementary view is depicted by Tickell and Peck (2003) introducing a bifurcation on these concepts. These authors understand globalization as an “array of politically mediated forms of integration into a complex and changing global economic system” (ibid,
p164), which consequently implies that globalization is a negotiated arena. In the other hand, they describe neoliberalization as a process of change in a given economic system. Tickell and Peck enumerate a set of characteristics for neoliberalization, such as: trade, financial and foreign capital liberalization, privatization, deregulation, secure property rights, competitive exchange rates, fiscal discipline, tax reform, among others, traits strongly attached to market economies, predominant in our era. Their core contribution is that neoliberalism is in constant evolution and that it is primarily politically-driven.

Coe (et.al. 2003) endeavor on a different appreciative level on globalization. Restating Dicken’s (1998) discussions, they distinguish the numerous interactions in the global field, which at the same time are defined by institutional, corporate and market structures (Coe et.al. 2003, p59). Their final remarks encourage academics to focus research in areas such as transnational networking in practice, the main networks that construct the rules in the global arena and key transnational corporations.

In sum, globalization could be translated as the new capitalism on our present era, which presents both benefits and challenges to all involved actors. Particularly the contribution of Coe (et.al. 2003) regarding the interactions and networking which characterizes globalization, sets the scenario to analyze in the following section, a parallel phenomenon behind the practices taking place at the transnational level, which is a result of the openness of countries in the globalized world: the transnational governance.

### 3.2 The invisible hand of Transnational Governance.

A somehow new and growing area of study is the one engaged on the understanding of the dynamics of Transnational Governance. Also previously mentioned, the period after the World War II placed the roots for the birth of several international institutions which main goals were to help rebuild the harmed economies and keep peace in the world. United Nations, World Bank, International Monetary Fund among others became and still are, the main actors at the transnational level, “guiding” other countries towards development, under particular circumstances. Since our research is based on the work of one of this type of global organizations, the World Economic Forum, hereafter, some thoughts regarding this trend are relevant to mention. It is also vital to highlight the importance of these organizations for political, social and economic decisions which states implement within their borders.

Held and McGrew (2007) refer to this trend as “global politics” (ibid p.20) emphasizing the current shift from the traditional view and practices of local/domestic policies to a more global/international approach. Additionally, politics at the international level have an immediate impact on individual states and regions. International organizations (governmental and non-
governmental) help constructing these policies and also propagate international models, contributing to shape a world culture (Meyer et.al. 1997).

Djelic and Sahlin-Andersson (2006) summarized the work of other researchers in 4 main forces which to a large extent rule and provide some common ground when studying the dynamics of transnational governance. These forces encompass and shape interactions which states have with each other. These authors enumerate the areas of scientization, marketization, formal organizing and virtue and virtuosity. The latter refers to the trend of assessing the trustworthiness of individuals and organizations in the increasing interactions at a global level (Boli, 2006).

Developed by Drori & Meyer (2006) scientization is depicted as a major force since in present days, society faces the issue of a lack of a world government, or strong regulation, thus a substitute has come to play a major role. Scientization takes the role of guidance and to some extent a ruling on these interactions. The increasing number of organizations is their first support, and at the same time, these organizations look promptly to adhere to international standards (Accounting, environmental, business, ISO, etc.) or closely follow how are they depicted in rankings such as the one developed by the WEF, center of this research. Accordingly, these standards come from a rationalized scientific knowledge. Another interesting point discussed by these authors, is that scientization compels actors to acquire a role of self accountability and self-monitoring, supported by the profound embeddedness scientization has in western societies.

The force which best illustrates the trend in a global world is marketization, identified and discussed by Djelic (2006). Even though important since many decades ago, this force has become of greater influence since the 1980’s. The main idea discussed by Djelic in this force is that the market ideology claims itself as the best tool “to allocate resources and producing wealth…” (ibid.) via a higher order as well, searching for social and political progress for those states adopting such approach. But Djelic’s key finding is about diffusion of the market theory. Market thinking found a fertile soil in international organizations (GO, NGOs, universities, scientific networks, etc.) which in their daily activities generate suggestions and rankings. Furthermore, the diffusion of these ideas is both coercive and voluntary through international governmental organizations, making quite difficult for private states not to follow the suggestions (ibid).

A third force, shown by Ahrne and Brunsson (2006) is formal organizing, as more and more organizations follow the same criteria on structuring themselves, interactions in the transnational arena become easier and it provides a mean of communication and interaction, among members of international organizations. Ahrne and Brunsson continue their discussion pointing at standard setting. Their believe is that based on the importance or area to which these standards belong (e.g. environmental, economic, etc.) the voluntary adherence may have an invisible coercive hand behind it. In the other hand, meta-organizations, meaning, organizations whose members are not individuals, but other organizations, are a second way of global order, and they are as
important as the weight of its members, thus becoming quite relevant on setting trends, or creating elites to which other organizations may want to adhere in order to be recognized. (ibid)

It can then be said that standard setting finds in rankings the best spreading mean. An intriguing example is presented by Hedmo (et.al. 2006) discussing accreditation and ranking in management education (MBA) throughout the world. Rankings, as Hedmo (et.al 2006) analyze it, originated from both private purposes (e.g. Financial Times looking to increase market share) and the demand of world universities to be assessed, also to attract more international students. Today several university rankings exist, with different structures as of how are they built. These authors identify the common ground of these rankings in following the U.S. models of higher education, thus becoming in “prototypes to be imitated” (ibid. p327) and making programs around the world look quite similar. Universities then work towards complying with the criteria used by these rankings in order to advance up in these education scales.

A final interesting point of discussion for this section is the work of Held and McGrew (2007). Their overall perception is that actually global politics is characterized by a generalized institutionalization, “elevating the governance issue to the top of the international economic agenda” (ibid p.139) Held and McGrew explicitly highlight that international organizations where to a large extent governance relies, exist only with the purpose of protecting interests of those leading states or coalitions (2007). Additionally, these authors criticize global governance in the understanding that it has not been able to diminish global poverty, and it is not effective at all addressing environmental issues in a proper manner, blaming the huge gaps its lack of capacity unveils (ibid).

In conclusion, this section aimed at presenting the research and dynamics of transnational governance. Djelic and Sahlin-Andersson’ work presents some forces guiding this phenomenon. A brief example of the impact of global rankings, in the education field was also introduced, as well as critique to the performance that international governance presents as of today. An interesting last thought on this matter is that, in absence of a world government scientifics, researchers, experts and the like, found in ruling and standard setting, the natural path to reach harmonization (Ahrne and Brunsson 2006). Global organizations, issuing suggestions or in a coercive way, are tools for benchmarking which are taken for granted, and consequently many actors (e.g. states) will try by all means to use the same tool or formula, to bring world order. Also discussed by these authors, the biggest challenge for standard-setting nowadays is competition for setting the “optimum” standard which will then be followed (or not). In chapter 4, a perfect example illustrating these thoughts is introduced, when contrasting two competitiveness rankings, which are fighting to be the most prestigious of the world, the Global Competitiveness Report of the WEF, and the World Competitiveness Yearbook of the IMD.
3.3 Understanding Competitiveness

After discussing development theories and the dynamics behind its development and spreading at a transnational level, I will center the following section on discussing a particular concept which has become relevant in our global world: Competitiveness. The complexity involved in almost all measures on development “invites” organizations, experts and individuals to engage in creating additional forms of assessing performance of states, claiming that these new ways overcome shortcomings of their predecessors. Consequently, many efforts have been made in order to put, to a considerable extent, many individual measures together. This is the approach taken to create the popular measure of competitiveness which one can easily notice in the structures and definitions of rankings proposed by many authors and international organizations.

A distinguished author on the matter is Michael E. Porter. Though his main contributions were aimed at competitive advantages of firms within a specific industry, soon he was challenged to make a bridge to link his initial theories to the context of nations. Difficulty of the task is referred by him in an interview made by Stonehouse and Snowdon (2007):

“...So, that initial core of work was really about firm level competition. I didn’t even utter the word government or locational factors. Those issues were not even on the radar at that time. Then I got exposed, almost by accident, to the issue of national competitiveness. I was appointed by President Reagan to a commission investigating the competitiveness of the United States. I immediately started to scratch my head because there is no simple translation between the competitiveness of a firm and the competitiveness of an economy.”

The resemblance of this bridge between firm and states is adequately addressed by Lall (2001). He summarizes the issue mentioning that firms fight for a piece of market, thus measuring whether they are competitive/profitable or not, but within their specific industry. While nation’s competitiveness involves that states engage in a race with other states, measure who is leading the competition and engage in strategies to advance in such race.

Even though the basic step of understanding competitiveness and translate it from the firm to the nation level is still a hard task, the act of measuring it implies to attack the issue from many angles and add even more complexity to the discussion. Indices, such as those related to competitiveness, are followed by key actors in countries. Thus, developers of these indexes have to be extremely cautious on the methodology and how they communicate their rankings, because global leaders could misuse the information leading to incorrect policies fostering unequal growth among countries (Mayer, 2008).

Difficulty though, does not stop research and opinions on measuring it, instead they propose that this metric, within the globalized economy where states are right now, helps small, medium and large firms to acquire a competitive advantage, delimited by the “relative competitive position of their home country” (ibid. p.222).
Concurring with the introductory part of this section, Önsel (et. al. 2008) discuss that this measure should include many factors to better assess a country’s competitiveness level. They mention macro and micro economic levels, and the value of how efficient government institutions are, quality of education, infrastructure for health and communications and the country’s economical and political stability (ibid.). Additional opinions on the key factors explaining a better or worst competitiveness are the overall country’s risk rating, computers per capita, access to telecommunications and internet, balanced trade or investments in IT education, just to mention a few (Zanakis and Becerra, 2005).

![Michael Porter’s Determinants of Competitiveness](image)

Önsel’s (et.al. 2008) perspective is similar to Porter’s outlook of nation’s competitiveness, which can be seen in Fig.2, where authors equally emphasize the importance of both macroeconomic and microeconomic strategies to foster a successful performance in terms of competitiveness.

Furthermore, Önsel (et.al. 2008) see competitiveness rankings as benchmarks, which can be used by policy-makers and those interested in the subject, to evaluate the relative position a specific state has, accounted by known and prestigious indexes.

The idea presented earlier about policy makers concern about competitiveness, is also discussed by Lall (2001). He addresses an interesting symbiosis between indexes developers and users. He believes that states (users) center of attention on these types of measures implies countries’ interest on keeping their competitive advantages, mainly in the technological arena. And in the other hand, institutions and consultants (developers) keep assembling indexes to fulfill the immense demand for benchmarking and measuring performance, which will provide guidelines for policy-makers (ibid.). At last but not the least, Lall also introduces an interesting discussion on whether measuring a country’s competitiveness performance is or not actually relevant. He draws that it may make not much sense to rank an overall economy, and it is of more relevance
to rank only specific industries. A harsher critic on the issue made in his work is that competitiveness is even a “meaningless” concept in terms of economic issues (Lall, 2001).

Regardless of the critic on the concept of competitiveness, measuring and indexes are a reality. An interesting exercise on measuring it is presented by Fagerberg (et.al. 2007). Their framework for studying competitiveness is delimited by 4 main factors: technology, capacity, price and demand. Their understanding of technology is the ability to compete in markets of new services and products. Capacity refers to the talent to take advantage of technological innovations. Price is translated into unit labor costs and its growth. And finally, demand is described as the relationship between a states’ trade structure with internal and external demand. After analyzing a set of 90 countries in the time period from 1980 until 2002 they relate the difference in competitiveness performance highly linked with 3 out of the 4 factors mentioned before: technology, demand and capacity (ibid.).

The list of studies, books, journal articles and the like discussing the matter of competitiveness is broad and an enormous set of opinions on why is it relevant to measure, how is it measured, who should measure it and any other derivative questions is almost endless. But where researchers opinion convey to a great extent, is on discussing and citing two of the most prestigious and popular indexes on competitiveness on the last years. The one developed by the international Institute for Management Development (IMD) and on the other hand, the ranking designed by the World Economic Forum association (WEF). Studying competitiveness and its main rankings presents an exciting area of research to understand development and governance, and its implications in actual decisions individual states implement.
4. Empirical Results

Development guidelines can be found when looking at different international organizations. Competitiveness has become a popular measure of development which states closely follow when international rankings are published by prestigious organizations. However, before introducing this particular measure and its principal actors, we need to bring into consideration the broader picture where this measure comes from, also helpful to exemplify the dynamics in transnational governance.

4.1 Outline of development measures and global rankings

Bringing forth ideas from Chapter 1 regarding GDP and if we take into account the statement introduced in the Chapter 3 about the different actors, or in other words, the world divide in the global economy, the next step relevant for the present study is to find out how can anyone know who are these actors. The most common way to acknowledge this is by evaluating states as to know how they are performing. And for such task, different types of measures have been created and used since many years ago. The most important has been mentioned, Gross Domestic Product. In this section, some of these popular measures will be mentioned, as well as the rankings and organisms which are responsible for quantifying and scrutinizing states’ performances.

Gross Domestic Product (GDP) along with Gross National Income (GNI), are the main economic measures in different type of literature. Morrison (2006) defines GDP as the sum of the output of economic activities produced in a country in one year, including national and foreign producers. Morrison also defines GNI, as the measure including GDP plus the income that citizens of one country earn from abroad investments. One can find many derivations from these two main measures, some authors focusing on GNI, but most of them on GDP.

The main measure derived from GDP, is GDP per capita, this is, dividing the total GDP by the total population of one country. In addition, and to make comparisons more reliable, as Morrison (2006) explains it, the term of Purchasing power parity (PPP) was introduced, with the purpose of adjusting the exchange rates, thus comparing “similar” international USD between countries.

Consequently, countries and global organizations constantly calculate and forecast GDP. GDP growth rates are the most used and common measure of economic development. High growth rates regarding this particular measure are always focus of attention, and several strategies can be followed by countries in order to accomplish superior performance.

Of course, criticism exists toward the effectiveness of the GDP measure. Detractors of GDP as a measure question its relevance when assessing social welfare. For instance, Bergh (2009)
underlines the paradox of this measure. In other words, GDP might show and quantify economic growth in a given period of time, but this snapshot might not be translated into a generalized progress when speaking of social welfare. Other shortcomings presented by Bergh are that GDP fails to account for income distribution, neglects the amount of the informal economy (of great importance in many Latin American countries) or that it does not see how is it affecting (or not) environmental issues and consumption of natural resources (ibid.).

But on the other hand, Bergh’s insights are that these shortcomings are of no relevance for economic growth, and also stress the importance, as of today, of the GDP as an overall measure. In his point view, marketing, consumption, financial markets and the like, pay special attention on the measure, as future consumption hints and important information to make forecasts and predictions within private firms, economists and politicians.

As a consequence of these ambivalent points of view regarding GDP, global organizations, such as United Nations, started the task of measuring development in a slightly different manner, but still considering the importance of GDP. In 1990 this global organization introduced the measure of Human Development Index in its yearly Human Development Report. The HDI broadly divides in 3 areas, measuring in first place life expectancy at birth, access to knowledge and education and finally access to a “decent standard of living”. In this last area, the index considers GDP per capita at PPP (UNDP, 2010). However, criticism to this particular measure exists. For instance, Sagar and Najam (1998) suggest some procedural changes to give the proper weight to each of the 3 areas, but their contribution is basically that the HDI fails to take into consideration equality measures and sustainability. They also consider that the HDR fails to actually analyze the causal effects of GDP growth and only incorporates the measure “as-is” without a thorough understanding (ibid.).

In response to the shortcomings of the Human Development Index addressed in the previous paragraph, other measures were developed and efforts were centered on covering such neglecting. A popular measure then for equal development is the GINI Index. This index main use is to rank states based on the distribution of income among its population. The term as defined by the OECD Statistics department, is the area below the Lorentz curve, having a 45 degree line which means the perfect equality, illustrating the cumulative share of income by the population, from the poorest to the richer (OECD Stat Extracts, 2010). Thus a 0 value means perfect income distribution or equality, and 1 the opposite pole. Of course criticism on this measure can be found too. For instance, Deltas (2003) argues that still size of the population may present biases on the final calculation, hence suggesting that other factors or statistics should be considered in order to avoid the population size bias.

An additional measure, also developed by United Nations is the one concerned about poverty around the world. Back in 1997, UN included in his Human Development Report, the indicator called Human Poverty Index (HPI). The purpose of this indicator is to go a step further on the regular approach of looking at poverty only in terms of income. HPI takes into account other
traits related to poverty, these are: short life, deficient basic education and reduced access to private and public resources (UNDP, 2010). This index is part of the set of indexes composing the global Human Development Index. Once again, some years prior to the introduction of this index, some discussions were held regarding the definition of poverty. For example, Atkinson (1987) discussed 3 important aspects, such as which is the optimum poverty line definition, how an index could be developed to measure poverty, and how research towards looking for relations between inequality and poverty, should be arranged and performed.

Education is another big concern among developed as well as developing economies. Little and Green (2009) contribution regarding this subject is that education, in the globalization context, plays a much more important role on economic growth. The link these authors achieve is that education, translated into knowledge and skills, is a key factor to attract foreign direct investment, and it helps managers and directors to engage in global business. Besides seeing education as an investment, lately it has become studied as a tool to fight poverty (Tarabini, 2010). This starting point has opened the doors to establish a specific agenda regarding the matter on global forums. That is why many organizations struggle to measure it, such as the UN (once again in their Human Development Report) and OECD to mention a couple of examples.

Until this part we have mentioned measures related in large or to some extent to economic issues. But there are also a couple of very transcendental measures, developed by non-governmental organizations, which are not directly linked (at least on the surface) with economic issues, although it could be discussed they affect directly economic performance. These measures are related to assessing the level of criminality and corruption around the world.

Regarding criminality, an organization who has managed so far to take the flag and authority to measure this particular trait among states is Amnesty International. Their mission is to encourage states, organizations and individuals to protect human rights (Amnesty International, 2010). United Nations’ Office on Drugs and Crime also provides some crime statistics from almost all its member states, setting also their concern on diminishing criminality rates around the world.

Corruption presence and incidence in countries has also been a matter of concern by politicians and business people all around the globe. Transparency International is another non-governmental organization, which in its own words, works towards stopping the harmful effect of corruption in daily activities (Transparency International, 2010). Among their activities, is to measure corruption in different countries. They perform it via its most popular tool which is the Corruption Perception Index, a survey of surveys as they refer to it, aiming on assessing the perception of corruption. Salinas-Jimenez (2007) explain how significant is the reputation of institutions’ integrity to foster competitiveness and economic growth, and assuring that to a relative extent, level of corruption affect both technological progress and productivity.

In summary, some of the most common or popular measures, in different contexts (economic, education, social, etc.) have been addressed in this section. Associated with every measure
discussed until now, prominent organizations were mentioned, such as United Nations (in its different departments and programmes) Amnesty International, Transparency International, OECD and others. Also relevant opinions from different authors have been introduced, as an example of the different opinions both on the measures and how they help or not setting agendas for future development of states. Even though only a brief outline has been made on these measures, one can see the complexity of the subject, and the many opinions that exist on the effectiveness of such measures as a guide for states to attain development. Additionally, implicitly the trend of a global order (or governance) is revealed when one notices the increasing amount of international organizations assessing and providing with benchmarks to all states. In the next section, I will go further into analyzing one last important measure, which is quite popular in media and among politicians, chambers of commerce and business people in many countries: Competitiveness.

4.2 Competitiveness Global Rankings

As it has been mentioned before, scholars, media, governments, business world and individuals are mostly interested in competitiveness rankings. Discussions are held at different levels, from the only interest in the final ranking, to the usefulness and reliability of the rankings. Scholars commonly focus its discussions in two relevant world rankings, one developed by a private management institute, and another elaborated by an international prestigious governmental network: The Global Competitiveness Report and the World Competitiveness Yearbook.

4.2.1 The Global Competitiveness Report

As mentioned earlier, the Global Competitiveness Report has its origins together with the WCY and has become also a highly prestigious ranking assessing competitiveness levels of states, and places an interesting competition to the IMD’s WCY. One can see some similarities in how the index is built, but before going on any further, the definition of the competitiveness concept by the developers of this index is needed, and is read as follows:

“…competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country”

(GCR, 2009) As presented in the first chapter, this particular ranking presents 12 broad areas which are the pillars to measure competitiveness, which are: institutions, infrastructure, macroeconomic stability, health and primary education, higher education and training, goods
market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size, business sophistication and innovation.

Similarly as the WCY, the ranking is divided in quantitative (or hard data) and qualitative (business people surveys) in an effort to include both available information and the perception the everyday actors within firms have on their environment.

Again one can see that the ranking gathers the opinion of many researchers on what are the best areas that can help best explain competitiveness in a nation. Furthermore, they too look for its stakeholders, (governments, scholars, business people, etc.) to have relevant information when deciding investments (GCR, 2009)

Oral and Chabchoub (1996) analyzed the GCR in its earliest years, and they support it by mentioning that in order to build the report, several articles were included which were written by prestigious business people, academics and state people. But in the other hand, they also stress that many of its users do not actually know what is the exact methodology to build such index, which can lead to jump into assumptions that may not be real to the country’s reality.

Lall’s (2001) believes that the ranking puts especial attention on measuring technology development, thus allocating a lot of weight on this area for the elaboration of the final ranking. He also addresses that the GCR of the WEF ranks best those economies in complete free trade, not giving an opportunity to other countries which are in a transition stage. One of his final statements regarding the GCR is that even though all the data presented is useful, it does not merits so much attention like media is doing in present times about it, nor the contestation that it brings between academics and policy makers.

4.2.2 The World Competitiveness Yearbook

Claimed by their developers, IMD’s World Competitiveness Center, the World Competitiveness Yearbook (WCY) issued for the first time in 1989, is the first global competitiveness report ever attempted by any institution. Their understanding of competitiveness is centered in 4 variables or dimensions, which shape, from their view point, the competitive environment of a state. The dimensions are: attractiveness vs. aggressiveness; proximity vs. globality; assets vs. processes and; individual risk taking vs. social cohesiveness. (IMD, 2010) The relationship of these dimensions is illustrated in Fig.3
The academic definition for competitiveness, soil for this particular ranking is mentioned by Garelli (2010) also vital developer of the index:

“Competitiveness of Nations is a field of Economic theory, which analyses the facts and policies that shape the ability of a nation to create and maintain an environment that sustains more value creation for its enterprises and more prosperity for its people”

A key word in the definition is environment. The WCY divides such environment in four areas: economic performance, government efficiency, business efficiency and infrastructure. 5 subcategories derive from each main area, leading to an approximately 300 criteria to build the index. They aim at special users of the index with different purposes. Among these are governments or policy makers, giving them a tool to benchmark policies; academics who can find data to engage in further studies and businesses which can use the information to make investment decisions. (IMD, 2010)

Likewise, the index does not avoid some criticism. Huggins and Izushi (2009) highlight the subjectivity of the measure, since two thirds of the index’s weight is put on qualitative data, and the remaining third relies on qualitative data (surveys to business men). Fougner (2008) sums to this critic that the index is not reliable enough, caused by the biased theoretical framework and methodology employed to build it. Furthermore, he warns not to consider this source, as well as other rankings, as neutral. He emphasizes that the role of this index is to shape or govern nations, in line with capitalism and neoliberal economic trends.

Similar to what many of the authors previous to this section discussed, the World Competitiveness Yearbook manages to gather the input of these scholars and research of the IMD Business School, to narrow the definition of competitiveness to key factors explaining the environment where firms are established, grow and succeed or fail in the international arena. In the next section another prestigious ranking will be presented, closely linked to the WCY since
both were originated from the same index, but later in the years got apart, creating a competition among them: the Global Competitiveness Report of the World Economic Forum.

These are just a couple of reviews scholars have on this ranking, and it does receives a lot of attention, but mainly researchers keep skeptic about the methodology and final use of the ranking for key stakeholders. But it is not my purpose to get in this interesting debate. The most important part of the research aimed in this study is to use the World Competitiveness Report as a common ground to analyze its practical usefulness on development issues and, its underlying implications in the global order. The exercise will then be made to try to interpret what this ranking has to state about two specific countries.

4.3 Mexico and Brazil portrayals according to the World Economic Forum on its Global Competitiveness Report.

The comparative approach of this study requires selecting two specific units, in this case two countries already discussed in the first chapter, Brazil and Mexico. We will particularly look into the time period of 2008 and 2009, under the lens of the Global Competitiveness Index. However and before going into details about our selected countries, I will describe the composition and structure of this particular ranking and afterwards describe Brazil and Mexico within this framework, engaging in a factor deconstruction comparison. (Kao, 2008)

4.3.1 Understanding the Index

The Global Competitiveness Index (GCI), central component of the Global Competitiveness Report (GCR) issued by the World Economic Forum (WEF) is a weighted average ranking including 12 broad pillars, which from the WEF’s point of view explain the environment in which firms are embedded and the everyday setting where activities take place. Units, in this case states, are ranked and assigned a score for each pillar - based at the same time in a numerous criteria also scored to turn up with the score for that particular pillar - and then the overall score of the 12 pillars is weighted to finally generate the final score and ranking.

In order to build such score, the GCI manages to gather data from quantitative and qualitative sources. Quantitative data refers to the available hard data gathered from national statistics offices and other international organizations which main task is to keep track of this type of information. Main sources of quantitative data are: United Nations; International Monetary Fund (World Economic Outlook Database); European Bank of Reconstruction and Development; OECD Economic Outlook; European Central Bank; The World Bank (World Development
Indicators); European Commission (Eurostat); African Development Bank; World Health Organization; International Trade Centre; International Labour Organization; International Telecommunication Union; The United States patent and trademark office; International Air Transport Association, among others.

In the other hand, qualitative data is collected from a global survey applied to managers and directors in the business world, thus it quantifies the “perception” that these people have on specific issues where hard data is not available. For Brazil 181 respondents answered the survey, and 154 for Mexico.

The pillars, and the understanding of WEF’s team how competitiveness should be measured, are the following:

1st Pillar: Institutions
2nd Pillar: Infrastructure
3rd Pillar: Macroeconomic Stability
4th Pillar: Health and primary education
5th Pillar: Higher education and training
6th Pillar: Goods market efficiency
7th Pillar: Labor market efficiency
8th Pillar: Financial market sophistication
9th Pillar: Technological readiness
10th Pillar: Market size
11th Pillar: Business sophistication
12th Pillar: Innovation

Additionally, the index categorizes these 12 pillars within 3 areas, which lead to 3 key development stages: Factor-driven (1st-4th pillars), efficiency-driven (5th-10th pillars) and innovation driven (11th and 12th pillars). (See Fig. 4). The team constructing the report acknowledges the differences among countries, and for such reason they created these categories. As stated in the GCR (2009) the first stage, factor-driven finds its main traits in low labor productivity and reliance on basic resources. The second stage of development, efficiency-driven, states engage on improving production processes and quality. And the innovation-driven stage defines those countries having a high standard of living and competing through innovation and state-of-the-art technologies. (ibid p.7).
The implications of such categorization developed in the GCR are extremely important for the final ranking. Each stage of development implies a different weight assigned for the pillars included in such stage. For instance, for countries which are depicted as in early developing stages, or factor driven, pillars (1st – 4th pillars) have a higher weight in the final ranking, accounting for 60% of the final score, and putting a low weight on the last pillars concerned about innovation and business sophistication. (See fig. 5)

<table>
<thead>
<tr>
<th>Subindex</th>
<th>Factor-driven stage (%)</th>
<th>Efficiency-driven stage (%)</th>
<th>Innovation-driven stage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic requirements</td>
<td>60</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Efficiency enhancers</td>
<td>35</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Innovation and sophistication factors</td>
<td>5</td>
<td>10</td>
<td>30</td>
</tr>
</tbody>
</table>

Regarding the question on what criteria does the GCR use to categorize countries within these 3 stages; the answer is based on the variable of GDP Per Capita (in USD) and to what degree countries are still factor-driven or not (GCR, 2009, p8). GDP is used as proxy of wage, since this data is not widely available, and to determine the factor-driven status, trade of mineral goods is
the measured factor. In Fig. 6 one can see the 3 stages, with 2 additional intermediate transition stages and the limits of each category, in terms of GDP per capita. However, the GCR is not quite clear on stating the exact weights it uses for the final score and ranking on the countries in these transition stages. The report on its introductory section, only highlights that the weights change “smoothly” and more weight is put on those pillars more important for the next stage, and the ranking may “penalize” those countries which have more shortcomings in such pillars (GCR, 2009, p.11) Also important to mention, all the scores, final and within the pillars, and both hard data and survey’s answers are “normalized” to a ranking of 1-7. A rank of 7 is the maximum (best) value and 1 the lowest. In Appendix 1 the full weights for each pillar are presented, and also to illustrate the categories and type of questions addressed in each one.

<table>
<thead>
<tr>
<th>Stage of development</th>
<th>GDP per capita (in US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Factor driven</td>
<td>&lt; 2,000</td>
</tr>
<tr>
<td>Transition from Stage 1 to Stage 2</td>
<td>2,000–3,000</td>
</tr>
<tr>
<td>Stage 2: Efficiency driven</td>
<td>3,000–9,000</td>
</tr>
<tr>
<td>Transition from Stage 2 to Stage 3</td>
<td>9,000–17,000</td>
</tr>
<tr>
<td>Stage 3: Innovation driven</td>
<td>&gt; 17,000</td>
</tr>
</tbody>
</table>

Fig. 6 Categorization of Stages of Development (GCR, 2009)

Finally, two important points are interesting to describe. The first is that the overall index, mainly in the 2008 and 2009 versions follow or adapted the general approach of competitiveness of Michael Porter. As the GCR (2008) states, the main difference is that they find a different “translation” regarding the concepts of the index (ibid p.38) in contrast with Porter’s initial contributions. A second point and in order to give a further understanding of the construction of this particular ranking, its team and creators have to be mentioned. The project of the GCR is led by a set of professors, economists, mathematicians and the like, which are current, or have worked or studied, in universities such as Harvard, Yale, Columbia, Manchester, Bochum, Geneva, British Columbia, Institute of Latin American Studies, London University, among others. Additionally members of the team have worked in international organizations such as the World Trade Organization, the International Trade Centre, National Bureau of Economic research, International Organization for Migration, as well as in large private organizations (e.g. banks, financial institutions and consulting firms). (GCR, 2009, p.477)
4.3.2 Brazil and Mexico, competitiveness as a perception.

Once the structure of the report was explained, I will now engage in going through the 3 classifications of the 12 pillars in the order established in the GCI. I will make the comparisons between Brazil and Mexico and contrast of these pillars, and in the following section, briefly complement the findings in some of these areas with some viewpoints of academics regarding the specific pillar or area under scrutiny.

When looking into the last reports issued by the WEF, and without going any further than 3 years ago (2007) one can see a unique pattern which might indicate a future trend. Since 2007, Brazil’s ranking on competitiveness has improved 14th places, from the 72nd place up to the 56th in 2009. Mexico in the other side, lost 8 positions from 2007 in the 52nd position to the 60th place in 2008, and did not improve in 2009 keeping the same place. Even though we could go further in the past to analyze the relative positions and rankings of our research units, it would not be so reliable, since in 2006, the GCR included only 10 pillars, and since 2007 it has been measuring the 12 pillars mentioned so far, with minor changes on the weights of some specific criteria in these last 3 years. Nonetheless, it is important to mention that prior to 2007, Brazil and Mexico have been depicted fairly in the same range of places close or lower than the 57-59 positions, and generally speaking Mexico was presented above Brazil.

Another initial point before going into the pillars is that for the 2009 GCR Brazil and Mexico are depicted to be in different stages of development. Brazil was identified still in the stage 2, where the pillars on efficiency-driven economies have a more important weight for the final ranking. Mexico was now classified in the transition stage between efficiency-driven and innovation-driven economies. As mentioned earlier in the explanation of the report’s structure, the report is not quite clear on explaining if the weights used for the final score in the transition stages (where Mexico was classified) changes in some extent within the pillars. In a simple arithmetic calculation taking into account the individual scores for every pillar, the weights (Fig. 5) used for the final score seem to be the same.

In Fig. 7 Brazil’s and Mexico’s scores were summarized within the 3 broad areas (sub indexes) presented in the GCR, this is, basic requirements (or factor driven category), efficiency enhancers and innovation factors for 2008 and 2009.

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>Sub indexes</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall Index</td>
<td>Basic Requirements</td>
<td>Efficiency Enhancers</td>
<td>Innovation Factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td>Score</td>
<td>Rank</td>
<td>Score</td>
<td>Rank</td>
<td>Score</td>
<td>Rank</td>
<td>Score</td>
</tr>
<tr>
<td>Brazil</td>
<td>56</td>
<td>4.23</td>
<td>91</td>
<td>4.04</td>
<td>42</td>
<td>4.41</td>
<td>38</td>
</tr>
<tr>
<td>Mexico</td>
<td>60</td>
<td>4.19</td>
<td>59</td>
<td>4.47</td>
<td>55</td>
<td>4.15</td>
<td>67</td>
</tr>
</tbody>
</table>
This figure shows that scores are quite similar in 2009, with only 4 hundredths of difference. For this reason it is required to analyze the 3 sub indexes in order to find more detail on how this final score was constructed.

1\textsuperscript{st} Sub-Index: Basic Requirements (1\textsuperscript{st} – 4\textsuperscript{th} pillars)

Within the first sub-index, Basic requirements, an extreme contrast can be seen. Brazil is assigned position 91\textsuperscript{th} in this index, while Mexico the 59\textsuperscript{th}, just one position better than its overall ranking. The first 2 pillars institutions and infrastructure, included in this sub-index present similar rankings and scores for both countries. The similarity relies that in practically all the criteria in these pillars, Brazil and Mexico present serious shortcomings. Mexico’s worst score resulted from asking respondents regarding for the costs caused by organized crime (survey data), placing Mexico in the 129\textsuperscript{th} place out of 133 countries. Likewise, Brazil’s worst score is regarding the burden of government regulation (survey data) in the 132\textsuperscript{th} place. In general, the scores for Mexico and Brazil in these pillars are close to the bottom table of the whole ranking.

The main difference in this first sub-index is in the third (Macroeconomic stability) and fourth (Health and primary education) where Mexico performs much better than Brazil. Regarding macroeconomic stability, both in 2008 and 2009, Mexico outperforms Brazil’s by 74 and 81 places accordingly. The information gathered for this particular pillar is hard data, and among some criteria are government surplus/deficit, inflation, interest rates and government debt. Speaking about health and primary education, still Mexico is presented above Brazil, although not for a large amount as the previous pillar, accounting for a place difference of 14 places in both years. Quality of primary education and malaria incidence both in Brazil and Mexico pull their rankings down in the 3\textsuperscript{rd} and 4\textsuperscript{th} pillars. Mexico’s main best scores are the high amounts of education expenditure and primary enrollment, where Brazil fails to accomplish a high evaluation.

In sum, within these first 4 pillars, the general overview shows a large amount of shortcomings for both countries, but mainly for Brazil in terms of macroeconomic stability, where its inflation rates are the only positive point. Furthermore, Brazil’s quality of education and some disease incidences are ranked extremely low. Mexico’s positive side is its macroeconomic stability.
2nd Sub-Index: Efficiency Enhancers (5th – 10th pillars)

At the beginning of this section, I stipulated that Brazil and Mexico are placed and weighted under the second stage of development (Efficiency-driven). Nevertheless, Mexico is presented between the 2nd and last stages of development presented by the GCR. However, the weight for the final score for these 6 pillars is 50% of the overall ranking, which illustrates the importance of the individual scores in this part for the construction of the final score and ranking.

In contrast, to some extent, within the first sub-index, Brazil is presented performing generally better than Mexico. Actually Mexico, for 2008 and 2009 showed no improvement, while Brazil moved up 9 places in the same period. The larger discrepancies are evidenced under the criteria of labor market efficiency where Mexico is depicted in the 115th position and Brazil in the 80th. Additionally, the financial market sophistication next to technological readiness also present highly competitive advantages for Brazil. What it is still important to highlight is that almost all the criteria within these 3 pillars (7th, 8th and 9th) find its main source in survey data.

Regardless the many similarities (mostly shortcomings) between our two subjects of study, Brazil is slightly perceived as performing better under these pillars within the efficiency enhancers’ sub index. If once again weights to construct the final score are counted, and both 1st and 2nd sub indexes are put together for Brazil and Mexico, roughly the same score and ranking would be the final result. But still, the final GCR 2009 score presents Brazil performing better. Such situation obliges to look further in the last part of the index, the last sub index: Innovation factors.

3rd Sub-Index: Innovation Factors (11th – 12th pillars)

Even though this particular pillar contributes only for 10% of the final score, seems to be quite relevant for the final score of Brazil and Mexico. Brazil here is presented in 38th position and Mexico in the other side in the 67th place, setting a difference of 29 places. Before, it was mentioned the difference in the second sub index regarding the 7th, 8th and 9th pillars which can also be contributing to the final different scores for these two countries, regarding the many similarities already described.

Out of the 16 questions forming the 11th and 12th pillars, 15 are obtained from survey data and only one data table is hard data where Mexico and Brazil have the 60th and 59th position accordingly. Moreover, the overall counting of advantages and disadvantages present Brazil with 33 and Mexico only 20. (The definition of advantage can be read in section 4.3.1)

In addition to the description of all pillars, the report also presents insights regarding these particular countries and what are their strengths and weaknesses. The remarks of GCR authors
on strengths of Brazil are: “…the growing domestic market, the most developed financial market in the region, and a diversified and sophisticated business sector and a high potential for innovation” (GCR 2009)

Regarding Mexico’s insights on its strengths are: a large market, a sophisticated business sector, well developed clusters, good quality of local suppliers, and a comprehensive value chain.

Besides the data tables, the report includes country summaries or profiles where one can find basic scores and graphs on each country’s performance. In this summary, authors of the report found interesting to add a final question, (not included for the final score in the ranking) where respondents had to select (from their own perception) the key factors that might be impeding to do business smoothly in their country. The 5 most mentioned factors starting with the most mentioned for Brazil and Mexico are:

**Brazil: (72.9% of the responses)**
Tax Regulations
Tax Rates
Restrictive labor regulations
Inefficient government bureaucracy
Access to financing

**Mexico: (63.5% of the responses)**
Inefficient government bureaucracy
Corruption
Crime and theft
Access to financing
Restrictive labor regulations

In sum, the report includes a vast set of data tables with different type of questions, assigning scores to all categories and criteria authors have selected to define competitiveness. As already mentioned, most of the pillars and criteria where Brazil and Mexico are quite different, are based on survey data, which in turn seems quite normal since almost all the index is based on this source of information. The pillars that present more differences between the countries studied, are the 11th and 12th (Innovation Factors) and to some extent the 7th, 8th and 9th pillars within the efficiency enhancers’ sub index (see Fig. 8). Nevertheless, an with the purpose to validate these findings it is necessary to look over scholars and academics opinions and research on the competitiveness of Mexico and Brazil, and either corroborate or refuse what the index presents.
4.3.3 Brief article discussions

Several researchers have engaged in some discussions about the key factors hampering or strengthening competitiveness for both Mexico and Brazil. The purpose of this section is then to validate the empirical findings of the previous section or reject them to some extent.

Blecker’s work (2009) regarding Mexico explains that prior to his research period (1979-2007) Mexico was attaining important and steady growth rates, but it was intermittent once the economic strategies were changed from import substitution to a liberalized economy. On this last point is where Blecker emphasizes one of Mexico’s weaknesses where it is relying to a large extent to exports and basically only with its main trade partners U.S.A. and Canada. After this
authors discusses the 4 major crisis in Mexico, he stresses that after the “tequila” crisis (in 1995) Mexico exhibited less volatility in its markets, but still growing at low rates regarding GDP. Blecker finishes his insights about Mexico vulnerability and lack of competitiveness based on external shocks such as financial inflows, oil prices, U.S. growth and lagged exchange rate (2009). Mishkin (1999) analysis of the “tequila” crisis concludes, as many other authors, that different policies should be developed for emerging and developed countries, since the same strategies might not be enough to recover from crisis and then get in the track for a steady development.

Gallagher (et.al. 2008) also pinpoint the vulnerability of Mexico regarding its exports (non-oil) to the U.S. compared to those of China, and these authors find in low investment on infrastructure a key factor why Mexico is not growing faster in this particular sector. Furthermore, these authors highlight that Mexico’s exports are based on medium-technology, failing to trade high innovative products, thus deteriorating the overall competitiveness of the country.

Solleiro and Castañon (2005) contribution for Mexico’s challenge to increase its competitiveness is based on innovation. They conceive competitiveness even more important today, regardless it has existed for many years, because now it is measured differently (at firm, industry and nation levels), and encourages competition among different countries throughout the world. Thus, to have (or be perceived) as highly competitive, Solleiro and Castañon suggest countries must establish a sophisticated base of competition to outperform its opponents. Moreover, these authors look into Mexico’s performance within the World Economic Forum ranking to Mexico and underscore the dropping in this metric.

In the other hand, Brazil’s performance has also been discussed by some authors, both taking this country as an example of recovery and competitiveness. For instance, Figueiredo (2008) discusses how Brazil has gone through a change in technological readiness, placing this country in a stage between basic and intermediate innovation. Figueiredo stresses that is not only macro-economic policies which fostered this innovation development, but the work of local agencies in support of this.

Gruben and Welch (2001) focus on the recovery Brazil had from 1999 crisis, overcoming its banking weakness, fiscal deficits and foreign debt (some macroeconomic variables) which is to some extent in line with the strength of financial markets sophistication presented in the GCR 2009.

Another article developed by Ryan (2010) is an excellent example of innovation development in Brazil. Ryan presents in a short extent, how this innovation was supported by the innovation law established in 2005 in Brazil, in this case within the bio-medical technology industry, where the main purpose was to integrate innovation policies with the government’s efforts to increase trade and the related policies aiming at such trading.
4.4 Competitiveness in the media

Up to this point, the information presented has been regarding what academics and especially one of the main competitiveness rankings, backed by the WEF have to say on the competitiveness issue. However, to complete the empirical findings on this subject, it is important to describe the magnitude and coverage that competitiveness has had in media.

Although a slight subjective, one can see the popularity of the term competitiveness in media and electronic means. For instance, when searching for the term competitiveness in one of the most popular search engines in the internet, it results in roughly 10 million links. An within the search of “competitiveness ranking”, both the Global Competitiveness Report of the World Economic Forum and the World Competitiveness Yearbook of the IMD institute come at first place.

This simple exercise illustrates nothing but the popularity of these two indexes. Also as presented in this work, many scholars and academics focus their research, or at least cite to a large or lesser extent these indexes, both to support them or critique them.

Regardless the fact on how easy can one be lead, through internet, to the GCR or the WCY, one can also see a high coverage by the main newspapers both in Brazil and Mexico regarding competitiveness issues. Some examples are the coverage of the newspapers O Globo (2009a, 2009b) presenting the new of the better position of Brazil on the WCY and in the GCI. The Jornal do Brasil (2009a, 2009b) and O Estado do Sao Paulo (2009) also highlight the improvement in such competitiveness reports. Additionally, organizations in other countries, such as ICEX, a Spanish government organization fostering exports, addresses as well the performance of countries, underlining the last GCR report where Brazil is depicted as more competitive than Mexico (ICEX, 2010)

Mexico’s newspapers also pay special attention to the rankings of the WEF and IMD. El Financiero (2009) stresses the bad scores on crime and bureaucracy. El Economista (2009) also presents several articles regarding the competitiveness index, but one specially pinpoints Mexico’s lack of capability to move as fast as other economies to climb up in such ranking. El Universal (2009) also discusses the weaknesses in violence scores and the low development of institutions. The list continues with all main newspapers covering the latest releases of these particular rankings, and the main discourse in such news articles is the solely mentioning of the change in ranking, but further questioning and analysis of the rankings is frequently neglected.

But what are the implications (or translation) of such media coverage? Or how is it relevant what scholars have discussed and what the findings in the GCR have shown so far in this study. In the next section, I will start a hopefully in-depth analysis of the implications of the empirical findings with the literature addressed earlier in this work. Later in the discussion and conclusion section I will discuss in a broader manner how this type of study could be used for future research regarding competitiveness, its perception, measuring and coverage.
5. Analysis

Chapter 4 has been a compilation of the translation of competitiveness, with special emphasis on the concept developed by the World Economic Forum and its Global Competitiveness Index. I have chosen two similar countries (Brazil and Mexico) to contrast them under the lens of this specific organization. Additionally, some selected academic papers have been addressed discussing particularly competitiveness in several aspects regarding our subjects of study. Moreover, besides the information or further discussion that the ranking could bring up, I discussed to a lesser extent how media coverage in the issue is so important. In this chapter I will analyze in first place the dynamics of competitiveness in what I categorize as a first layer, where the discussion is focused on what empirical results have shown us and its link to the theoretical framework. The purpose of this first layer is to delineate the most evident facts such as the scores, rankings and general development theories. And in a second place, the discussion steps further in a second layer (or broader picture) which requires interpreting the index in a global and transnational context. From my point of view, this approach is often missing and not quite addressed by scholars on their discussions, this is, the implications of this specific concept of competitiveness, and ranking of the WEF in the transnational governance context.

First Layer

As already introduced in the previous chapter, one can see specific features which mark strong differences between Brazil and Mexico, within the GCR 2009. To bring in perspective again the results, taking into account the overall scores within the three sub indexes (basic requirements, efficiency enhancers and innovation factors) and the correspondent weights to the efficiency-driven stage, one could identify the differences in the final ranking between these two countries allocated in the innovation factors sub index, accounting for only the 10% of overall score. The other 2 sub indexes, accounting for 90% of the score, have no major differences when weighted together, although I have underlined differences in the 7th, 8th and 9th pillars. However, Brazil’s score on the basic requirements sub index is quite low relative to its overall ranking, which challenges and jeopardizes the objectivity of the final score, since one would expect to some extent uniformity in the stages. In other words, countries should be assessed with a minimum score in the first or second stages, in order to be depicted as progressing in such ranking.

Furthermore, in the countries’ profiles (see Appendix 2) the 9th, 11th and 12th pillars call to attention, since from the 24 sub-factors included for all the three pillars, Mexico is presented with only 3 advantages and Brazil with 17 advantages. (An advantage is relative by the overall ranking. If the specific ranking/score in a determined sub factor – out of the over 100 factors – is lower than the overall GCI ranking of that country, the sub factor is considered a disadvantage, if its higher than the overall ranking, is an advantage) This criteria applies for the countries ranked 51 and lower.
The previous statements lead us to answer the research question of this study, which was to find the pillars which account for the final difference in the score of Mexico and Brazil.

The findings in the GCR and the discussion and information presented in section 4.3.3 illustrate a great resemblance. Figueiredo’s (2008) work on the change in Brazil regarding technological readiness, which in turn placed it in clear stages of innovation and additionally, Ryan (2010) analysis of the relevance of the innovation law implemented in 2005 in Brazil, clearly explain why in the GCR Brazil outperforms Mexico in the category.

Another key point found in the index, both for Mexico and Brazil, are the shortcomings regarding infrastructure. Our literature review, particularly the contribution of Adelman and Morris (1997), attend to the hindrances in the Latin American context regarding infrastructure and additionally the problems these countries face when speaking about reliable institutions. These categories fall in the first and second pillars, where both subjects are far behind optimal scores, compared to other emerging economies.

Prebisch’s thesis about center and peripheral states is more evident on Mexico’s performance, principally if the score on the access to latest technologies and absorption of new technology is analyzed. Mexico is ranked below world’s average while Brazil is above. Prebisch thesis is quite old, yet still present in many Latin American economies.

In the same tenor of differences in technology, Devlin and Moguillansky (2009) already addressed this issue in the 10 factors they suggest are the main issues hampering growth in Latin America. They found that it is relatively common within the region that the industrial sector does not invest in high technology, thus resulting also in a decrease in investment in research and development. This fosters the difference between developed and emerging countries. Once again, such phenomenon is better illustrated by Mexico’s poor performance under these criteria within the index. On the other hand the exception is Brazil, underlined by these authors, since this country has invested amounts above the Latin-American average.

Furthermore, Devlin and Moguillansky additionally mentioned a lack of diversification in production and exports, and the generalized low quality of education. Mexico and Brazil scores on basic education are below the median values, and the lack of diversification in exports is evidenced more in Mexico, which suffered a higher impact in the present crisis since 85% of its exports are to U.S. and mainly oil related.

A final comment in this part is related to Frieden’s (2006) argument on the benefits of globalization. He states that those specialized countries could be more competitive, and Brazil aiming at investing in technology and innovation, is already on the track pursuing such strategy, while Mexico is still involved on tackling other issues. I can conclude in this part, that theories and opinions of scholars regarding development and competitiveness can be validated to a great extent in the empirical findings. Some theories although quite aged, are still present in today’s globalized world, and it can be also drawn from this analysis, that within the context of similar
(large) economies Brazil and Mexico are, the specific pillars on technology and innovation can be used in some degree as a proxy to explain the steadier GDP growth rate of Brazil. This last statement has to be taken cautiously, since this assumption is given within the context of the GCR and further research should be done with different countries within the region to verify these results.

The GCR then, it is a useful tool when addressing development issues (translated in the competitiveness concept) of similar subjects. Nevertheless, I strongly believe it would be more objective to divide the ranking in three, according to the development stages already suggested in the index. The top 10 most competitive countries have been the same for quite long time, and without a full understanding in economics and based on a more logic approach, rankings in general should compare similar economies. One can perfectly acknowledge that countries included in the rankings as different as Cuba contrasted to Switzerland, contributes little for further research or reliable comparisons.

However, the empirical findings in this work can be supported by the research of many academics, but in order to make a more meaningful contribution, a broader analysis of the dynamics of this ranking is needed. In the second part, I will venture on discussing such behavior, often not addressed by researchers: the role of a specific ranking within a transnational governance perspective.

**Second layer**

As mention in the introduction of this chapter, the second layer involves an interpretation of the GCI role in the global context. If, as stated earlier, the GCI ranking succeeds on addressing what academics already wrote regarding the hindrances, particularly of emerging economies, and more specifically speaking about the 2 larger economies in the American continent, Brazil and Mexico, then what would it be the role or particular contribution of these type of rankings in the world order?

The GCR and other rankings (mentioned in section 4.1) are the consequence of the present globalized world, in line with Coe (et.al. 2003) analysis of the dynamics of these phenomena, where there is an increase in the interactions and networking among states, private firms and international organizations.

In first place, it is remarkably evident that this ranking’s purpose is to “celebrate” the market-driven (capitalism, liberalization, etc.) economies. Morrison (2006) definition of capitalism, which main purpose is to bring benefits to the society, is clearly represented in the index. Djelic and Sahlin-Andersson (2006) 4 forces can be identified within the empirical findings: scientization, marketization, formal organizing and virtue and virtuosity. The latter I will discuss in chapter 6, since the present economic global crisis demands particular attention on the trustworthiness in transnational interactions.
Scientization, in this context translated in the “economic science” or what experts, rule makers and economists have developed through out many years is the base for the construction of the GCI ranking. Furthermore, in line with capitalism, the ranking is the perfect tool for spreading the market ideals in a “soft manner”, but still extremely coercive. My opinion is that the underlying purpose of the World Economic Forum team is to “organize” stages of development and suggest what countries should take care of in order to get in the track of development. Nevertheless, one could say states and its leaders could ignore these types of rankings, but media coverage on competitiveness rankings is fast and harsh, unveiling the shortcomings of the country (under the scrutiny of the international organization, in this case the WEF) thus influencing at some level, policy making within the state.

An open question would be what is the ultimate purpose of this specific ranking? Held and McGrew (2007) audaciously suggested that international organizations simply look for keeping and protecting the interests of its founders, commonly the most powerful western economies. Such thought goes against the spirit of “wealth for everyone” of market economies.

At last but not the least, it is ought to be mentioned that the GCI is built upon survey data. Mentioning this is not with the purpose of questioning the reliability of the index, but to contrast to some extent with the scientization force mentioned earlier. Science is mainly supported by facts, and this ranking is supported by perceptions. A perception might be subjective and biased, although it could be argued that still it holds its share of truth. In addition, many questions, from my point of view, require experts in the matter to answer them, and this seems not to be the case in the ranking, where respondents were mainly managers and directors in many type of organizations. Still, my purpose is not to question the construction of the index, which I have already discussed that it succeeds addressing what academics and scholars argued on development and competitiveness. The main point is to underscore the big influence the index can put on states, having in consideration that it is a perception index. Additionally, the influence of this ranking can be connected to a powerful organization such as the World Economic Forum.

In general, and as Meyer et.al. (1997) suggested, that the Competitiveness ranking and its increasing popularity, together with many other rankings developed by international organizations is becoming part of a world culture. Within this blurry world culture, “global politics” (Held and McGrew, 2007) are the common factor and individual state’s agendas are no longer domestic. Instead, discussions on tracks for development are discussed in international forums and countries “must” voluntarily comply with the standards, suggestions and models the most powerful economies suggest. Forces of transnational governance (Djelic and Sahlin-Andersson, 2006) are easily observed in the empirical findings, thus encouraging further discussions on the subject. Such additional research could help better understand, and improve, transnational governance, which has become extremely noteworthy in rough and turbulent economic times, where decisions involving many countries have to be taken in a rapid pace.
6. Discussion and Conclusion

This research has tackled and analyzed the issue of competitiveness. The approaches taken have been in the first part, to depict two specific countries under the lens of the Global Competitiveness Index, endorsed by an international organization: the World Economic Forum.

In this first part, I analyzed the validity and congruency that the final results of comparing Brazil and Mexico show us, according to our theoretical framework, when discussing the development strategies throughout history and how this development is particularly measured within the concept of competitiveness. One can see that such index is based in many of these theories. However, the index as such does not present a breaking-through contribution on development ideas. Their main input is to summarize to a great extent these theories and indirectly suggest policy makers where to center their efforts when designing strategies for a sustainable development.

On the second part I have stepped further into the dynamics of this particular ranking, and its implications in what several authors call the observable fact of transnational governance. Such analysis, as mentioned earlier, is not commonly argued by those users of global indexes, but still requires that more and more researchers center their work on such dynamics.

As an extension of the research of Maddison, (1992) endorsed by the World Bank, who developed a detailed work of Brazil and Mexico, mainly swayed more to the economic and development history up to 1980, my work has been centered in the latest period, mainly in the second half of the first decade of the 21st century. Yet, this work has not gone into economic details, as such research is already vast and exhaustive. Instead, I have complemented a development/competitiveness analysis of these two countries, with the underlying implications and role of the Global Competitiveness ranking, and similar measurements which day by day become increasingly important.

As mentioned in chapter 5, this work and the statements presented, have of course limitations and need to me considered for those interested in following similar researches on this brand. Regardless it might be questionable the selection of Brazil and Mexico as subjects of study, and the Global Competitiveness Index as the comparative ground, several examples and justifications of the similarities and relevance of comparing these subjects were presented.

Moreover, the discussion on transnational relevance presents even a greater challenge and material for further research. The final force, virtue and virtuosity (Boli, 2006), out of the four presented by Djelic and Sahlin-Anderson (2006) is gaining more importance as of today, which main characteristics is to reward “good behavior” and point out “bad behavior”. Victims of the global crisis, analysts and experts find in the lack of efficient supervision of international organizations on the financial systems, the main cause for the present economic situation in the
world. An extremely sensitive and key metric in economies, also in line with the trend depicted earlier, is the level of confidence of consumers. Such confidence in the future, clearly seen as a perception, drives or diminishes savings and investment. My believe is that rankings and international organizations influence in a great extent this level of confidence in individual states, and it is their duty to handle information in its different presentations (such as rankings) in a responsible manner, since perceptions are quite susceptible and volatile in civil societies.

Another point for discussion I identify is that it could be argued that, regardless of the forces and trends already in the transnational governance context, global decisions are still time-consuming and not quite efficient when tackling serious issues. In addition, lack of trust in global interactions has confirmed to be of great harm for economies to function smoothly, diminishing levels of confidence mentioned earlier. When key actors in our economic system such as rating firms get involved in controversial situations and actually originate serious issues, one can see the importance of developing and improving practices which global institutions utilize to monitor global interactions.

Coming back to our comparative framework, the Global Competitiveness Ranking, additional insights can be drawn. Even though my purpose is not to place a critique on the ranking, since once again plenty papers have been done on the matter, it is important to mention this ranking as the perfect example of the influence of perceptions, fostered by powerful organizations. This is the reason why I have introduced the importance of media coverage. My personal opinion is that media coverage, in its duty of informing, fails to analyze further what they are reporting. The GCI can be seen as both an excellent tool to summarize and truthfully suggest what they believe is the best way on pursuing development, but it is also a tool which can be encouraging a distorted perception of the countries included. A country depicted as more competitive, but still its governmental institutions are presented as little or no reliable leaves many questions open. Another country presented as following macroeconomic old recipes just as the main developed economies, seems to be of no relevance and seen as not competitive. My point here is that the construction of the index evidences a gap, or incorrect balance between hard data and survey data. The phenomenon is that actual facts are not of much importance as the perception of those facts, and global rankings, and the organizations behind them nurture such difference.

Rankings in general present a broad field of study in terms of transnational governance. The example presented in this research, introduced in chapter 3, described the contribution of Hedmo (et.al 2006) regarding MBA global rankings and its use as “prototype imitation”. Each organization aims at spreading out its own ideas. Since international organizations can not directly influence policy making in states, they have found in rankings an indirect way on pointing out what under their perspective is the optimal approach, within specific areas such as economy, criminality, corruption, education, etc. What future studies should then address is in first place to pass the evident facts, as I followed in the analysis chapter in what I called a first layers. The needed further analysis is on the interpretation of these tools and if they actually are or not contributing to an orderly construction of international governance. Is it feasible to see in
the near future a Latin American country in a better ranking score than any developed state in North America or Europe? Is it fair to design and apply a high education test to first year and last year students? Basic questions like these and of course more elaborated ones are what I would expect on future research on this matter.

A final statement is that as of today, market economies seem to prevail, and will do for a long time. A market economy requires countries to interact and to trade on daily basis. These interactions lead to generate clear and reliable rules among these actors. At this point is where the concept of transnational governance locates its fertile soil. Standards, soft or hard regulation, rankings and the like can be argued to be efficient tools, as presented by the analysis of the Global Competitiveness Report in this study, but still it is the responsibility of all actors, (developed and emerging countries, governmental and non-governmental organizations, civil society, etc.) to make a full stop to question and analyze the efficiency of these tools and their backing up organizations, responsible for the status of the present world order.

There are still several major issues concerning all states in the world: environmental, economical, social, etc. and it is time, once again of all actors involved, on taking deep consciousness on the dynamics of how are we organizing (or de-organizing) global interactions.

Emancipate yourself from mental slavery, no one but ourselves can free our minds.

- Bob Marley
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APPENDIX 1 & 2:
Appendix 1: Full weights of the 12 pillars in the GCR Report (GCR, 2009, pp.45)

BASIC REQUIREMENTS

1st pillar:
Institutions ................................................................. 25%
A. Public institutions .................................................. 75%
1. Property rights .................................................... 20%
1.01 Property rights
1.02 Intellectual property protection
2. Ethics and corruption ........................................... 20%
1.03 Diversion of public funds
1.04 Public trust of politicians
3. Undue influence .................................................... 20%
1.05 Judicial independence
1.06 Favoritism in decisions of government officials
4. Government inefficiency ......................................... 20%
1.07 Wastefulness of government spending
1.08 Burden of government regulation
1.09 Efficiency of legal framework in settling disputes
1.10 Efficiency of legal framework in challenging regulations
1.11 Transparency of government policymaking
5. Security ................................................................. 20%
1.12 Business costs of terrorism
1.13 Business costs of crime and violence
1.14 Organized crime
1.15 Reliability of police services
B. Private institutions .................................................. 25%
1. Corporate ethics .................................................... 50%
1.16 Ethical behavior of firms
1.17 Strength of auditing and reporting standards
1.18 Efficacy of corporate boards
1.19 Protection of minority shareholders’ interests

2nd pillar:
Infrastructure .......................................................... 25%
A. General infrastructure ........................................... 50%
2.01 Quality of overall infrastructure
B. Specific infrastructure ............................................. 50%
2.02 Quality of roads
2.03 Quality of railroad infrastructure
2.04 Quality of port infrastructure
2.05 Quality of air transport infrastructure
2.06 Available seat kilometers (hard data)
2.07 Quality of electricity supply
2.08 Telephone lines (hard data)

3rd pillar:
Macroeconomic stability ............................................. 25%
3.01 Government budget balance (hard data)
3.02 National savings rate (hard data)
3.03 Inflation (hard data)
3.04 Interest rate spread (hard data)
3.05 Government debt (hard data)

4th pillar: Health and primary education ........ 25%
A. Health ................................................................. 50%
4.01 Business impact of malaria
4.02 Malaria incidence (hard data)
4.03 Business impact of tuberculosis
4.04 Tuberculosis incidence (hard data)
4.05 Business impact of HIV/AIDS
4.06 HIV prevalence (hard data)
4.07 Infant mortality (hard data)
4.08 Life expectancy (hard data)
B. Primary education .................................................. 50%
4.09 Quality of primary education
4.10 Primary enrollment (hard data)
4.11 Education expenditure (hard data)

EFFICIENCY ENHANCERS

5th pillar: Higher education and training ...... 17%
A. Quantity of education ............................................. 33%
5.01 Secondary enrollment (hard data)
5.02 Tertiary enrollment (hard data)
5.03 Effectiveness of anti-monopoly policy
5.04 Total tax rate (hard data)
6.05 Number of procedures required to start a business (hard data)
6.06 Time required to start a business (hard data)
6.07 Role of competition ............................................ 67%
6.08 Agricultural policy costs
6.09 Prevalence of trade barriers
6.10 Tariff barriers (hard data)
6.11 Prevalence of foreign ownership
6.12 Business impact of rules on FDI
6.13 Burden of taxes on FDI
6.14 Burden of customs procedures
6.15 Burden of regulations
6.16 Burden of inspections
6.17 Burden of government intervention
7th pillar: Labor market efficiency .......... 17%
A. Flexibility ............................................................. 50%
7.01 Cooperation in labor-employer relations
7.02 Flexibility of wage determination
7.03 Rigidity of employment (hard data)
7.04 Hiring and firing practices
7.05 Firing costs (hard data)
B. Efficient use of talent ............................................. 50%
7.06 Pay and productivity
7.07 Reliance on professional management
7.08 Brain drain
7.09 Female participation in labor force (hard data)

8th pillar: Financial market sophistication...17%
A. Efficiency .......................................................... 50%
8.01 Financial market sophistication
8.02 Financing through local equity market
8.03 Ease of access to loans
8.04 Venture capital availability
8.05 Restriction on capital flows
8.06 Strength of investor protection (hard data)
B. Trustworthiness and confidence.......................... 50%
8.07 Soundness of banks
8.08 Regulation of securities exchanges
8.09 Legal rights index (hard data)

9th pillar: Technological readiness........... 17%
9.01 Availability of latest technologies
9.02 Firm-level technology absorption
9.03 Laws relating to ICT
9.04 FDI and technology transfer
9.05 Mobile telephone subscriptions (hard data)
9.06 Internet users (hard data)
9.07 Personal computers (hard data)
9.08 Broadband Internet subscribers (hard data)

10th pillar: Market size ..............................17%
A. Domestic market size......................................75%
B. Foreign market size..............................................25%

11th pillar: Business sophistication.............50%
A. Networks and supporting industries ............... 50%
11.01 Local supplier quantity
11.02 Local supplier quality
11.03 State of cluster development
B. Sophistication of firms’ operations and strategy 50%
11.04 Nature of competitive advantage
11.05 Value chain breadth
11.06 Control of international distribution
11.07 Production process sophistication
11.08 Extent of marketing
11.09 Willingness to delegate authority
7.07 Reliance on professional management

12th pillar: Innovation..............................50%
12.01 Capacity for innovation
12.02 Quality of scientific research institutions
12.03 Company spending on R&D
12.04 University-industry collaboration in R&D
12.05 Government procurement of advanced technology products
12.06 Availability of scientists and engineers
12.07 Utility patents (hard data)
1.02 Intellectual property protection
Appendix 2: Countries' Profiles. (GCR, 2009, pp.96 & pp.222)

Brazil

Key indicators
- Population (in millions), 2006: 194.2
- GDP (US$, billions), 2008: 1,572.0
- GDP per capita (US$), 2008: 8,197.4
- GDP (PPP) as share (%) of world total, 2008: 2.46

Global Competitiveness Index

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rank (out of 133)</th>
<th>Score (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCI 2009–2010</td>
<td>66</td>
<td>4.2</td>
</tr>
<tr>
<td>GCI 2008–2009 (out of 134)</td>
<td>64</td>
<td>4.1</td>
</tr>
<tr>
<td>GCI 2007–2008 (out of 131)</td>
<td>72</td>
<td>4.0</td>
</tr>
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</table>

Stage of development

The most problematic factors for doing business

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percent of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax regulations</td>
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</tr>
<tr>
<td>Inflation</td>
<td>10.0</td>
</tr>
<tr>
<td>Restrictive labor regulations</td>
<td>14.0</td>
</tr>
<tr>
<td>Inefficient governmental bureaucracy</td>
<td>11.0</td>
</tr>
<tr>
<td>Access to financing</td>
<td>10.0</td>
</tr>
<tr>
<td>Inadequate supply of infrastructure</td>
<td>9.5</td>
</tr>
<tr>
<td>Corruption</td>
<td>7.0</td>
</tr>
<tr>
<td>Inadequate educated workforce</td>
<td>4.9</td>
</tr>
<tr>
<td>Policy instability</td>
<td>4.1</td>
</tr>
<tr>
<td>Inflation</td>
<td>1.0</td>
</tr>
<tr>
<td>Poor working conditions in national labor force</td>
<td>0.9</td>
</tr>
<tr>
<td>Foreign currency regulations</td>
<td>0.8</td>
</tr>
<tr>
<td>Omes and theft</td>
<td>0.7</td>
</tr>
<tr>
<td>Poor public health</td>
<td>0.6</td>
</tr>
<tr>
<td>Government instability/coups</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country/region and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their ratings.

The Global Competitiveness Report 2009-2010 © 2009 World Economic Forum
### Mexico

#### Key indicators
- Population (millions), 2008: 107.9
- GDP (US$ billions), 2008: 1,088.1
- GDP per capita (US$), 2008: 10,248
- GDP (PPP) as share (% of world total), 2008: 2.24

#### Global Competitiveness Index

<table>
<thead>
<tr>
<th>GCI 2009–2010</th>
<th>Rank (out of 134)</th>
<th>Score (0–7)</th>
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</thead>
<tbody>
<tr>
<td>50</td>
<td>144</td>
<td>5.4</td>
</tr>
<tr>
<td>51</td>
<td>143</td>
<td>5.5</td>
</tr>
<tr>
<td>52</td>
<td>142</td>
<td>5.5</td>
</tr>
</tbody>
</table>

**Basic requirements**
- 1st pillar: Institutions: 63
- 2nd pillar: Infrastructure: 63
- 3rd pillar: Macroeconomic stability: 63
- 4th pillar: Health and primary education: 63

**Efficiency enhancers**
- 5th pillar: Higher education and training: 74
- 6th pillar: Goods market efficiency: 74
- 7th pillar: Labor market efficiency: 74
- 8th pillar: Financial market sophistication: 74
- 9th pillar: Technological readiness: 74
- 10th pillar: Market size: 74

**Innovation and sophistication factors**
- 11th pillar: Business sophistication: 74
- 12th pillar: Innovation: 74

#### Stage of development

<table>
<thead>
<tr>
<th>Factor driven</th>
<th>Transition 1-2</th>
<th>Efficiency driven</th>
<th>Transition 3-4</th>
<th>Innovation driven</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### The most problematic factors for doing business

- Inefficient government bureaucracy: 155
- Corruption: 123
- Crime and theft: 123
- Access to financing: 123
- Restrictive labor regulations: 123
- Inadequate supply of infrastructure: 123
- Tax regulations: 123
- Trade regulations: 123
- Inadequately educated workforce: 51
- Inflation: 51
- Poor work ethic in national labor force: 51
- Policy instability: 51
- Government instability/coups: 51
- Foreign currency regulations: 51
- Poor public health: 51

*Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country/economy and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.*

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## Mexico

### The Global Competitiveness Index in detail

#### 1st pillar: Institutions

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property rights</td>
<td>96</td>
</tr>
<tr>
<td>Intellectual property protection</td>
<td>81</td>
</tr>
<tr>
<td>Proportion of public funds</td>
<td>108</td>
</tr>
<tr>
<td>Rule of law</td>
<td>94</td>
</tr>
<tr>
<td>Judicial independence</td>
<td>91</td>
</tr>
<tr>
<td>Feasibility of doing business</td>
<td>87</td>
</tr>
<tr>
<td>Transparency of government policies</td>
<td>117</td>
</tr>
<tr>
<td>Efficiency of legal framework in settling disputes</td>
<td>94</td>
</tr>
<tr>
<td>Efficiency of legal framework in challenging legislation</td>
<td>90</td>
</tr>
<tr>
<td>Freedom of trade services</td>
<td>124</td>
</tr>
<tr>
<td>Bribery of civil servants</td>
<td>129</td>
</tr>
<tr>
<td>Effectiveness of civil service</td>
<td>150</td>
</tr>
<tr>
<td>Effectiveness of corporate boards</td>
<td>102</td>
</tr>
<tr>
<td>Protection of minority shareholders’ rights</td>
<td>72</td>
</tr>
</tbody>
</table>

#### 2nd pillar: Infrastructure

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of overall infrastructure</td>
<td>71</td>
</tr>
<tr>
<td>Quality of roads</td>
<td>67</td>
</tr>
<tr>
<td>Quality of rail infrastructure</td>
<td>66</td>
</tr>
<tr>
<td>Quality of port infrastructure</td>
<td>62</td>
</tr>
<tr>
<td>Quality of air transportation infrastructure</td>
<td>59</td>
</tr>
<tr>
<td>Availability of road transportation</td>
<td>70</td>
</tr>
<tr>
<td>Quality of electricity supply</td>
<td>71</td>
</tr>
<tr>
<td>Telephone lines</td>
<td>66</td>
</tr>
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</table>

#### 3rd pillar: Macroeconomic stability

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Government surplus/pri</td>
<td>66</td>
</tr>
<tr>
<td>National savings rate</td>
<td>58</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>58</td>
</tr>
<tr>
<td>Interest rate spread</td>
<td>65</td>
</tr>
<tr>
<td>Government debt</td>
<td>41</td>
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</table>

#### 4th pillar: Health and primary education

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business impact of malaria</td>
<td>72</td>
</tr>
<tr>
<td>Malaria incidence</td>
<td>79</td>
</tr>
<tr>
<td>Business impact of tuberculosis</td>
<td>47</td>
</tr>
<tr>
<td>Tuberculosis incidence</td>
<td>39</td>
</tr>
<tr>
<td>Business impact of HIV/AIDS</td>
<td>71</td>
</tr>
<tr>
<td>HIV prevalence</td>
<td>60</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>89</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>39</td>
</tr>
<tr>
<td>Quality of primary education</td>
<td>115</td>
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<tr>
<td>Primary enrollment</td>
<td>27</td>
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<tr>
<td>Education expenditure</td>
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</table>

#### 5th pillar: Higher education and training

<table>
<thead>
<tr>
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<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary enrollment</td>
<td>64</td>
</tr>
<tr>
<td>Tertiary enrollment</td>
<td>73</td>
</tr>
<tr>
<td>Quality of the educational system</td>
<td>115</td>
</tr>
<tr>
<td>Quality of math and science education</td>
<td>127</td>
</tr>
<tr>
<td>Quality of management schools</td>
<td>69</td>
</tr>
<tr>
<td>Internet access in schools</td>
<td>77</td>
</tr>
<tr>
<td>Local availability of research and training services</td>
<td>52</td>
</tr>
<tr>
<td>Expenditure on training</td>
<td>78</td>
</tr>
</tbody>
</table>

#### 6th pillar: Goods market efficiency

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensity of local competition</td>
<td>84</td>
</tr>
<tr>
<td>Extent of market dominance</td>
<td>116</td>
</tr>
<tr>
<td>Effectiveness of anti-monopoly policy</td>
<td>83</td>
</tr>
<tr>
<td>Extent and effect of taxation</td>
<td>91</td>
</tr>
<tr>
<td>Total tax rate</td>
<td>93</td>
</tr>
<tr>
<td>No. of procedures required to start a business</td>
<td>76</td>
</tr>
<tr>
<td>Time required to start a business</td>
<td>76</td>
</tr>
<tr>
<td>Agricultural policy costs</td>
<td>120</td>
</tr>
<tr>
<td>Prevalence of trade barriers</td>
<td>87</td>
</tr>
<tr>
<td>Tariff barriers</td>
<td>87</td>
</tr>
<tr>
<td>Prevalence of foreign ownership</td>
<td>26</td>
</tr>
<tr>
<td>Business impact of rules on FDI</td>
<td>53</td>
</tr>
<tr>
<td>Burden of customs procedures</td>
<td>96</td>
</tr>
<tr>
<td>Degree of consumer legislation</td>
<td>64</td>
</tr>
<tr>
<td>Buyer sophistication</td>
<td>62</td>
</tr>
</tbody>
</table>

#### 7th pillar: Labor market efficiency

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation in labor-employer relations</td>
<td>75</td>
</tr>
<tr>
<td>Flexibility of wage determination</td>
<td>38</td>
</tr>
<tr>
<td>Rigidity of employment</td>
<td>162</td>
</tr>
<tr>
<td>Hiring and firing practices</td>
<td>160</td>
</tr>
<tr>
<td>Firing costs</td>
<td>31</td>
</tr>
<tr>
<td>Pay and productivity</td>
<td>59</td>
</tr>
<tr>
<td>Reliance on professional management</td>
<td>87</td>
</tr>
<tr>
<td>Beam drain</td>
<td>64</td>
</tr>
<tr>
<td>Female participation in labor force</td>
<td>71</td>
</tr>
</tbody>
</table>

#### 8th pillar: Financial market sophistication

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial market sophistication</td>
<td>52</td>
</tr>
<tr>
<td>Funding through local equity market</td>
<td>53</td>
</tr>
<tr>
<td>Ease of access to loans</td>
<td>85</td>
</tr>
<tr>
<td>Venture capital availability</td>
<td>90</td>
</tr>
<tr>
<td>Restriction on capital flows</td>
<td>56</td>
</tr>
<tr>
<td>Strength of investor protection</td>
<td>51</td>
</tr>
<tr>
<td>Sophistication of banks</td>
<td>41</td>
</tr>
<tr>
<td>Regulation of securities exchanges</td>
<td>62</td>
</tr>
<tr>
<td>Legal rights index</td>
<td>53</td>
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</tbody>
</table>

#### 9th pillar: Technological readiness

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of latest technologies</td>
<td>79</td>
</tr>
<tr>
<td>Femal-doctoral technology absorption</td>
<td>77</td>
</tr>
<tr>
<td>Law relating to ICT</td>
<td>67</td>
</tr>
<tr>
<td>FDI and technology transfer</td>
<td>47</td>
</tr>
<tr>
<td>Mobile telephone subscriptions</td>
<td>39</td>
</tr>
<tr>
<td>Internet users</td>
<td>73</td>
</tr>
<tr>
<td>Pental lnternet subscriptions</td>
<td>54</td>
</tr>
<tr>
<td>Broadband Internet subscriptions</td>
<td>50</td>
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</table>

#### 10th pillar: Market size

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic market size index</td>
<td>11</td>
</tr>
<tr>
<td>Foreign market size index</td>
<td>16</td>
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#### 11th pillar: Business sophistication

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local supplier density</td>
<td>56</td>
</tr>
<tr>
<td>Local supplier quality</td>
<td>47</td>
</tr>
<tr>
<td>State of the cluster</td>
<td>53</td>
</tr>
<tr>
<td>Nature of competitive advantage</td>
<td>74</td>
</tr>
<tr>
<td>Value chain breadth</td>
<td>64</td>
</tr>
<tr>
<td>Control of international distribution</td>
<td>69</td>
</tr>
<tr>
<td>Production process sophistication</td>
<td>67</td>
</tr>
<tr>
<td>Degree of marketing</td>
<td>62</td>
</tr>
<tr>
<td>Willingness to delegate authority</td>
<td>77</td>
</tr>
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</table>

#### 12th pillar: Innovation

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity for innovation</td>
<td>80</td>
</tr>
<tr>
<td>Quality of research institutions</td>
<td>46</td>
</tr>
<tr>
<td>Company spending on R&amp;D</td>
<td>70</td>
</tr>
<tr>
<td>University-industry collaboration in R&amp;D</td>
<td>62</td>
</tr>
<tr>
<td>Use of procurement of advanced tech products</td>
<td>90</td>
</tr>
<tr>
<td>Availability of scientists and engineers</td>
<td>54</td>
</tr>
<tr>
<td>Utility patents</td>
<td>60</td>
</tr>
</tbody>
</table>

*Hard data*

Note: For further details and explanation, please refer to the section “How to Read the Country/Economy Profiles” at the beginning of this chapter.