



**Evaluation of the Competitiveness and the Business Environment of Russian
Federation: Challenges and Perspectives**

by Spyridon Triantafyllou

MASTER THESIS

Supervisor: Harry Papapanagos

Department of Balkan, Slavic and Oriental Studies

University of Macedonia

Thessaloniki

September, 2014

ABSTRACT

In this dissertation we examine the competitiveness and the business environment in Russian Federation by analysing the country's performance according two important indexes: the Global Competitiveness Report published by the World Economic Forum and the Ease of Doing Business published by World Bank. Both indexes' reports published annually are international benchmarking indicators related to a country's analysis and regional analysis. We compare the Russia's performance to that of the ten Black Sea countries, the average of the European Union member states, the U.S.A. and the remaining three BRIC countries (Brazil, India and China), over several periods mainly the last decade. From the analyses, it was found that Russian Federation has improved both its performance in the competitiveness and in the attractiveness of the business environment compared with the previous year, and at the same time has a good overall position compared with the average of the Black Sea countries and the remaining BRIC countries. In addition, we find evidence that the effect of the attractiveness of the business environment and the country's competitiveness on per capita GDP is positive. In fact, the beneficial effect of the attractiveness of the business environment it is three times more pronounced in the case of low-income countries compared with the high-income countries. Also, the positive effect of competitiveness on per capita GDP is almost five times than the effect of the business environment. For all groups of countries no statistically significant effect of the business environment on FDI inflows was found, but a positive effect was found only in the case of high-income countries. This conclusion may well be combined with several policy recommendations as underlined by the reports for further improvement of such indicators of the Russian Federation.

Keywords: *Russian Federation, BS-10, BRIC, competitiveness, Global Competitiveness Index (GCI), business environment, Ease of Doing Business (EDB) Index*

TABLE OF CONTENTS

ABSTRACT	III
1 INTRODUCTION	1
2 GLOBAL COMPETITIVENESS INDEX	2
2.1 DEFINITION OF COMPETITIVENESS	2
2.2 THE GLOBAL COMPETITIVENESS INDEX	3
2.3 THE STRUCTURE OF THE COMPETITIVENESS INDEX	3
2.3.1 <i>Basic Requirements Sub-Index</i>	4
2.3.2 <i>Efficiency Enhancers Sub-Index</i>	5
2.3.3 <i>Innovation and Sophistical Sub-Index</i>	6
2.4 THE INTERRELATION OF THE 12 PILLARS	7
2.5 STAGES OF DEVELOPMENT AND THE WEIGHTED INDEX	7
2.6 ANALYSIS OF THE GLOBAL COMPETITIVENESS INDEX IN RUSSIAN FEDERATION	9
2.6.1 <i>Russian Federation's Performance on the Basic Requirements Sub-Index</i>	12
2.6.2 <i>Russian Federation's Performance on the Efficiency Enhancers Sub-Index</i>	15
2.6.3 <i>Russia Federation's Performance on the Innovation Sub-Index</i>	20
3 EASE OF DOING BUSINESS	23
3.1 DEFINITION OF EASE OF DOING BUSINESS	23
3.2 THE EASE OF DOING BUSINESS INDEX	24
3.3 THE STRUCTURE OF THE EASE OF DOING BUSINESS INDEX	25
3.4 ANALYSIS OF THE EASE OF DOING BUSINESS INDEX IN RUSSIAN FEDERATION	28
3.4.1 <i>Russian Federation's performance according to the Doing Business</i>	28
3.4.1 <i>Russian Federation's performance in terms of Bureaucracy</i>	31
4 EMPIRICAL EVIDENCE	37
4.1 EASE OF DOING BUSINESS	37
4.1.1 <i>Ease of Doing Business in Russian Federation</i>	37
4.1.2 <i>The Effect of Ease of Doing Business on per Capita GDP and FDI inflows</i>	38
4.2 GLOBAL COMPETITIVENESS	41
4.2.1 <i>The Effect of Competitiveness on per Capita GDP and FDI inflows</i>	41
5 POLICY RECOMMENDATIONS	43
6 CONCLUSIONS	46
REFERENCES	48
APPENDIX	50

LIST OF TABLES

<i>Table 0.1:</i> Russian Federation’s Performance on the GCI compared with BS-10.....	10
<i>Table 0.2:</i> Russian Federation’s ranking scores based on the GCI compared with BS-10, EU-28 and the U.S.A.....	11
<i>Table 0.3:</i> Russian Federation’s Performance on the GCI compared with BRIC countries	11
<i>Table 0.4:</i> Russian Federation’s Performance on the Basic Requirements Index compared with BS-10, EU-28 and the U.S.A.	12
<i>Table 0.5:</i> Russian Federation’s Performance on the Basic Requirements Index compared with BRIC countries.....	13
<i>Table 0.6:</i> Russian Federation’s Performance on the 1st Pillar of the GCI – Institutions	14
<i>Table 0.7:</i> Russian Federation’s Performance on the 2nd Pillar of the GCI – Infrastructure	14
<i>Table 0.8:</i> Russian Federation’s Performance on the 3rd Pillar of the GCI – Macroeconomic Environment.....	15
<i>Table 0.9:</i> Russian Federation’s Performance on the 4th Pillar of the GCI – Health and Primary Education	15
<i>Table 0.10:</i> Russian Federation’s Performance on the Efficiency Enhancers Index compared with BS-10, EU-28 and the U.S.A.	16
<i>Table 0.11:</i> Russian Federation’s Performance on the Efficiency Enhancers Index compared with BRIC countries.....	17
<i>Table 0.12:</i> Russian Federation’s Performance on the 5th Pillar of the GCI – Higher Education and Training	18
<i>Table 0.13:</i> Russian Federation’s Performance on the 6th Pillar of the GCI – Goods Market Efficiency	18
<i>Table 0.14:</i> Russian Federation’s Performance on the 7th Pillar of the GCI – Labor Market Efficiency	19
<i>Table 0.15:</i> Russian Federation’s Performance on the 8th Pillar of the GCI – Financial Market Development.....	19
<i>Table 0.16:</i> Russian Federation’s Performance on the 9th Pillar of the GCI – Technological Readiness.....	19
<i>Table 0.17:</i> Russian Federation’s Performance on the 10th Pillar of the GCI – Market Size	20
<i>Table 0.18:</i> Russian Federation’s Performance on the Basic Requirements Index compared with BS-10, EU-28 and the U.S.A.	20
<i>Table 0.19:</i> Russian Federation’s Performance on the Innovation Sub-index of the GCI compared with BRIC countries	21
<i>Table 0.20:</i> Russian Federation’s Performance on the 11th Pillar of the GCI – Business Sophistication.....	22
<i>Table 0.21:</i> Russian Federation’s Performance on the 12th Pillar of the GCI – Innovation	22
<i>Table 0.1:</i> Ease of Doing Business Rankings in 2014.....	29
<i>Table 0.2:</i> Russian Federation’s Performance on the EDB compared with BS-10	30
<i>Table 0.3:</i> Russian Federation’s Performance on the EDB by each pillar compared with BS-10.....	30
<i>Table 0.4:</i> Russian Federation’s Performance on the EDB compared with BS-10, EU-28 and the U.S.A. in terms of Bureaucracy (procedures).....	33
<i>Table 0.5:</i> Russian Federation’s Performance on the EDB compared with BRIC countries in terms of Bureaucracy (procedures).....	34
<i>Table 0.6:</i> Russian Federation’s Performance on the EDB in relation to BS-10 in terms of Bureaucracy (time).....	35
<i>Table 0.7:</i> Russian Federation’s Performance on the EDB compared with BRIC countries in terms of Bureaucracy (time)	36
<i>Table 0.3:</i> Ease of Doing Business Relative Rankings in 2012.....	38
<i>Table 0.4:</i> Regression Results for the Effect of Ease of Doing Business Index on Macroeconomic Variables	40
<i>Table 0.5:</i> Regression Results for the Effect of Ease of Doing Business Index on Macroeconomic Variables	42

LIST OF FIGURES

<i>Figure 2.1:</i> The Global Competitiveness Index framework	4
<i>Figure 2.2:</i> Countries/Economies at each stage of development	8
<i>Figure 2.3:</i> Russian Federation’s overall performance according to the Global Competitiveness Index	9
<i>Figure 0.6:</i> The Structure of the Ease of Doing Business Index	23
<i>Figure 0.2:</i> The Structure of the Ease of Doing Business Index	24
<i>Figure 0.3:</i> Russian Federation’s overall performance according to the Ease of Doing Business Index	31
<i>Figure 4.1:</i> GDP per Capita and Ease of Doing Business Rank.....	50
<i>Figure 4.2:</i> FDI and Ease of Doing Business Rank.....	51
<i>Figure 4.3:</i> GDP per Capita and Competitiveness.....	52
<i>Figure 4.4:</i> FDI Inflows and Competitiveness	53

1 INTRODUCTION

Entrepreneurship is one of the factors that determines the level and growth of productivity in each country and is the main determinant of competitiveness in international markets. The business-economic environment in each country is one of the key factors determining productivity and its improvement over time contributes to enhancing productivity. The improvement of the business-economic environment essentially implies creating the conditions conducive for the attraction of an increasing number of investments (both domestic and foreign) in the country's economy. Investment is the main mechanism for the introduction of new technology and it contributes to the ongoing modernization of production processes and to the exploitation of comparative advantages. Shoring up a country's attractiveness for investment must be one of the key priorities for every administration.

The objective of this dissertation is to evaluate the performance of the Russian Federation's economy in the Global Competitiveness Index and the Ease of Doing Business Index.

The Black Sea region consists of 10 countries: Armenia, Azerbaijan, Bulgaria, Georgia, Moldova, Romania, Russian Federation, Turkey and Ukraine, all of which are drained by Black Sea. Apart from Greece and Turkey, all the other countries were ex-communist countries struggling after 1989 to deal with transition in terms of political liberalism and free market economy. From now on, this group will be referred to as **BS-10** and thus, a regional analysis is needed.

Also, in the early 2000s, the countries of Brazil, Russia, India and China, which belong to the group of emerging markets, boasted rapid economic growth, much higher than that in developed and rich countries. At the same time these countries spanned large areas on the world map while their total population covered a large proportion of the total world population. This led to the creation of an economic term to describe the economies of these countries, which came by name "BRIC" the acronym of the aforementioned four countries. For reasons of comparison, we shall examine Russian Federation's performance in relation to its peer group, which obviously involves the **BRIC** group of countries.

The structure of the present dissertation is as follows: In chapter 2 and chapter 3 there is a description of the Global Competitiveness Index and Ease of Doing Business Index respectively, and data collected by reports suitable for country analysis for Russia and regional analysis for the BS-10 and BRIC countries. Emphasis is given to further analysis among the BRIC countries. In chapter 4, empirical evidence derived from these Indexes is produced in relation to per Capita GDP and FDI inflows for Russian Federation. Furthermore, in chapter 5 some policy recommendations are provided in accordance with the findings in chapters 2 and 3. Finally, chapter 6 stresses the main conclusions drawn by the implementation of this research.

2 GLOBAL COMPETITIVENESS INDEX

2.1 DEFINITION OF COMPETITIVENESS

Unlike businesses, which measure their competitiveness in terms of the market share they control and the amount of innovation they develop, measuring the competitiveness at a country level is a much more complex process. In what follows, we examine certain definitions on country competitiveness that can be found in the relevant literature.

Tyson (1992) argued that competitiveness refers to the country's ability to provide goods and services that meet the criteria of international competition, while the country's citizens enjoy a sustainable and growing standard of living. An early study by the World Economic Forum (1996) defined competitiveness as the ability of country to attain sustainable high growth rates of per capita GDP. Then in an OECD (1996) study it was argued that competitiveness means supporting abilities of companies, industries and regions to create relatively high levels of income and employment, while not shying away from international competition. Fagerberg (1996) defined competitiveness as the ability a country to achieve its main economic policy objectives, particularly that of income growth and employment, without facing problems with its balance of payments problems.

According to Aiginger (1996) a country is considered to be competitive if it sells several goods and services, which create satisfactory incomes, compatible with expectations and aspirations (current and future) of the country, and under conditions (macro-economic and social) deemed as satisfactory by the citizens.

According to World Economic Forum (2007), a country's competitiveness involves a nexus of *policies* and *institutions* which affect the *productivity level* of a country. In turn, a country's level of productivity determines the sustainable level prosperity, which an economy may enjoy. So, the more competitive economies are able to provide their citizens with higher levels of prosperity. The productivity level also determines the return on investments in an economy. And since a country's economic growth depends on investment returns, a more competitive economy will probably grow faster in the medium and the long-run.

According to the Institute for Management Development (IMD) (2006), the competitiveness of country is the field of economic theory, which deals with data and the policies that shape a country's potential to establish and maintain an environment conducive to greater value creation for businesses and greater prosperity for their citizens.

As it is clear from the above definitions, there has been an attempt in recent years to give to the concept of competitiveness a wider content, beyond that of aiming at the improvement of certain indicators such as GDP growth, or of reducing costs, or of enhancing export performance. The new approach takes into

consideration factors such employment, social cohesion, institutional and regulatory framework of the economy, and the quality of life.

For Krugman (1994) however the obsession with a country's competitiveness, on empirical grounds, is almost completely without any foundations. The author argued that although it makes sense to say that, for example, U.S. have become less competitive in the production of TV sets or textiles products, while they have gained competitiveness in computer manufacturing, it does not make any sense however to say that U.S. are more or less competitive as an economy.

Further, Krugman (1994) argued that we cannot define competitiveness at a national level using economic terms, since the proposed strategy for achieving a high level of competitiveness cannot be justified, and it will probably lead to poor economic outcomes. The author also disagrees with those attempting to approach the issue of competitiveness within a wider perspective, which does not focus solely on macroeconomic variables, but it encompasses concepts such as productivity, technological innovation, and infrastructure. Countries, for Krugman (1994), do not compete with each other in a zero-sum game, but they participate in a "game" which benefits all parties involved. For example the loss of American competitiveness in manufacturing TV sets or cloning products does not imply that the American economy has become less competitive, rather it signifies a slump in these sectors of the economy, and this can be the outcome of a deeper structural change in the production pattern of American economy shifting its production focus toward other activities. This change can benefit both the American economy and the countries filling in the production gap in the aforementioned products.

2.2 THE GLOBAL COMPETITIVENESS INDEX

The World Economic Forum (WEF) publishes each year, during the last three decades, a competitiveness report, which draws a widespread attention. Since 2005, the WEF relies for its analysis of international competitiveness on the **Global Competitiveness Index** (GCI), which assesses and takes into account microeconomic and macroeconomic factors affect the national competitiveness.

2.3 THE STRUCTURE OF THE COMPETITIVENESS INDEX

The most recent edition of the index (GCI 2014-2015) covers 144 countries. In order to construct the GCI, WEF measures the performance of countries in terms of **12 pillars** of competitiveness, each of which consists of a number of variables, weighted with different weights depending on the importance of their contribution towards the enhancement of national competitiveness. According to the taxonomy followed by the WEF, these 12 pillars are made up of 111 indices (variables), which are supposed to influence the competitiveness and productivity of a country.

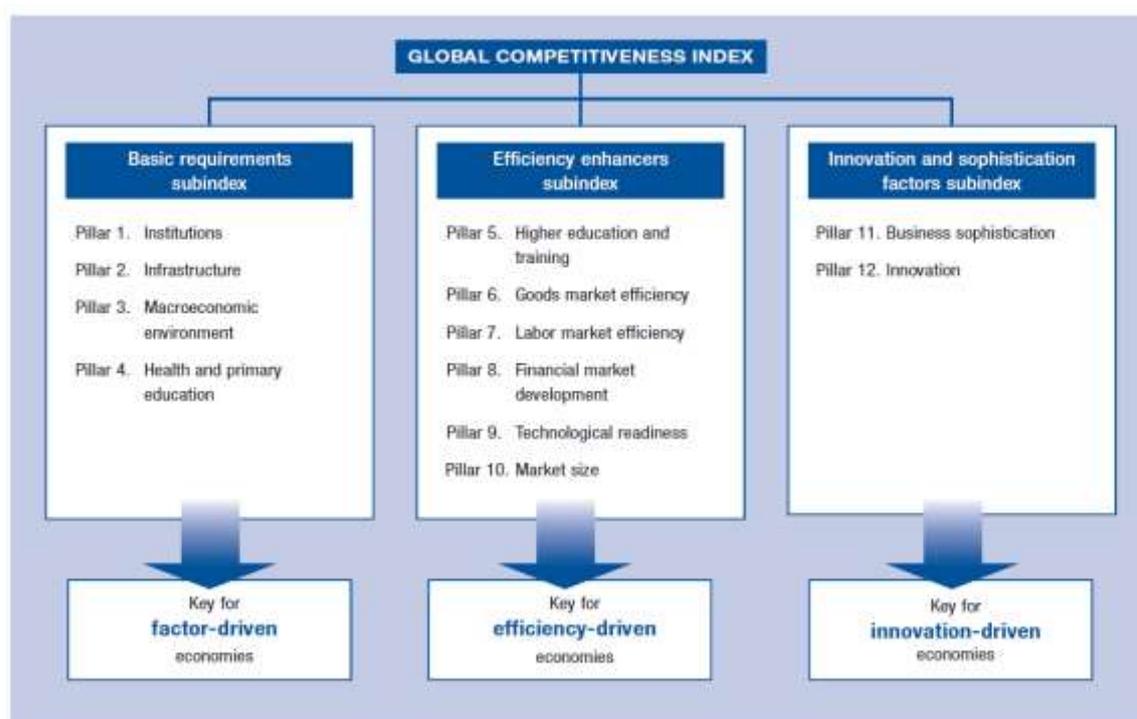
The value of 30 indices, out of the total of 111, is determined by objective criteria (e.g. public debt as a percentage of GDP or the number of internet connections), while the value of the remaining indices is

determined from opinion surveys conducted annually by the WEF with the participation of business executives from each country. The questionnaire invites participants to rate their countries on a scale ranging from 1 to 7 (best result) a series of questions that proxy the desired index WEF wants to quantify.

In what follows, we touch on each of twelve pillars (**Figure 2.1**). Before that we need to bear in mind that these twelve pillars of competitiveness are grouped in three main sub-indices:

1. **Basic requirements:** This sub-index includes the pillars of institutions, infrastructure, macroeconomic environment, and health and primary education. The basic requirements sub-index is a key for **factor-driven economies**.
2. **Efficiency Enhancement:** This sub-index includes the pillars of higher education and training, labor market efficiency, goods market efficiency, financial market development, technological readiness, and market size. The efficiency enhancers sub-index is a key for **efficiency-driven economies**.
3. **Innovation and Sophistication:** It includes the pillars of business sophistication and innovation.

Figure 2.1: The Global Competitiveness Index framework



Source: World Economic Forum

2.3.1 Basic Requirements Sub-Index

This sub-index consists of the following four pillars of the GCI:

- 1st pillar: Institutions
- 2nd pillar: Infrastructure
- 3rd pillar: Macroeconomic Environment

- 4th pillar: Health and Primary Education

Institutions

The **institutional environment** consists of the legal, regulatory and administrative framework within which economic agents (i.e. individuals, businesses) and governments operate. WEF considers the role of institutional environment as one of the most important factors affecting investment policies and the way in which states distribute benefits and costs arising from developmental strategies and policies.

Infrastructure

The existence of a large and efficient infrastructure network is critical to ensure the effective functioning of the economy, in general, and of certain growing sectors, in particular.

Macroeconomic Environment

WEF considers a stable macroeconomic environment an important factor for businesses and also for the whole economy. Although, by itself, the existence of macroeconomic stability is not a sufficient condition for increasing productivity, macroeconomic instability however prevents the country from achieving a high level of competitiveness.

Health and Primary Education

WEF believes that the health of a country's labor force is vital for its competitiveness and productivity. At the same time, the amount and quality of primary education boost, especially in time of intense specialization, the effectiveness of human resources in adapting to more advanced production processes and techniques.

2.3.2 Efficiency Enhancers Sub-Index

Efficiency enhancers are the second sub-index of the Global Competitiveness Index, and it includes the following pillars:

- 5th pillar: Higher Education and Training
- 6th pillar: Goods Market Efficiency
- 7th pillar: Labor Market Efficiency
- 8th pillar: Financial Market Development
- 9th pillar: Technological Readiness
- 10th pillar: Market Size

Higher Education and Training

A higher education of good quality is critical for economies wish to move to up the value-chain ladder. In a globalized environment, where firms compete, it is of vital for a national economy to possess a tank of well-trained employees who are capable of adapting to the changing and growing needs of the production process.

Goods Market Efficiency

Competitive goods markets, i.e. in economies with no oligopolies and monopolies, lead to higher productivity, and to the creation of products that can stand up to international competition.

Labor Market Efficiency

WEF considers labor market efficiency an important factor for an economy to achieve a competitive. Labor market flexibility allows the optimal placement of human resources in the labor market, and it contributes to the increase of their productivity. Also, labor market flexibility contributes to the movement of labor toward growing industries, and it attenuates the variation in market wages without incurring any social unrest.

Financial Market Development

WEF considers the existence of a well-organized financial sector that allows access to financing productive capital budgeting projects as an important factor for an economy to gain in competitiveness. Also, WEF sees favourably the existence of a regulatory framework protecting investors, and of a banking sector guarantying the security and transparency of economic activity.

Financial markets (whether capital or money markets) play an important role in the deployment of financial resources in order to finance long-term capital budgeting projects, facilitate trading in short-term debt instruments, and meet the short-term financing needs of as governments, banks, and companies. An efficient financial sector contributes to the allocation of domestic and foreign savings (the latter entering the country from abroad) to their most productive uses.

Technological Readiness

This pillar captures the ability of the economy to absorb new technologies that boost corporate productivity. Mainly, this pillar focuses on the telecommunications infrastructure.

Market Size

The size of an economy significantly affects its productivity, as it allows for the possibility companies to create and subsequently exploit economies of scale. At the same time, companies producing in large markets can take advantage from the existence of a strong domestic demand.

2.3.3 Innovation and Sophistical Sub-Index

The innovation and sophistication sub-index is a key for **innovation-driven economies**, and it includes the following pillars:

- 11th pillar: Business Sophistication
- 12th pillar: Innovation

Business Sophistication

This pillar is of particular importance for countries that have achieved a high level of economic development. Countries that outperform in this area have exhausted all the available means to improve

productivity, and hence they achieve competitive advantages using new forms of organizing production and businesses networks (clusters).

Innovation

The innovation pillar is a very important factor especially for those countries and companies, which they have reached the limits of knowledge in the production process, and consequently through innovation they can expand their knowledge and gain competitive advantages.

2.4 THE INTERRELATION OF THE 12 PILLARS

According to the World Economic Forum, although it is reported the results of the 12 pillars of competitiveness separately (see **Figure 2.1**), it is important to keep in mind that they are not independent: they tend to reinforce each other, and a weakness in one area often has a negative impact in others. For example, a strong innovation capacity (pillar 12) will be very difficult to achieve without a healthy, well-educated and trained workforce (pillars 4 and 5) that is adept at absorbing new technologies (pillar 9), and without sufficient financing (pillar 8) for R&D or an efficient goods market that makes it possible to take new innovations to market (pillar 6). Although the pillars are aggregated into a single index, measures are reported for the 12 pillars separately because such details provide a sense of the specific areas in which a particular country needs to improve.

2.5 STAGES OF DEVELOPMENT AND THE WEIGHTED INDEX

While all of the pillars described above will matter to a certain extent for all economies, it is clear that they will affect different economies in different ways. This is because they are in different stages of development: as countries move along the development path, wages tend to increase and, in order to sustain this higher income, labor productivity must improve. In line with well-known economic theory of stages of development, the GCI assumes that, in the first stage, the economy is factor-driven and countries compete based on their factor endowments—primarily unskilled labor and natural resources. Maintaining competitiveness at this stage of development hinges primarily on well-functioning public and private institutions, a well-developed infrastructure, a stable macroeconomic environment, and a healthy workforce that has received at least a basic education. As a country becomes more competitive, productivity will increase and wages will rise with advancing development. Countries will then move into the efficiency-driven stage of development, when they must begin to develop more efficient production processes and increase product quality because wages have risen and they cannot increase prices. At this point, competitiveness is increasingly driven by higher education and training, efficient goods markets, well-functioning labor markets, developed financial markets, the ability to harness the benefits of existing technologies, and a large domestic or foreign market. Finally, as countries move into the innovation-driven stage, wages will have risen by so much that they are able to sustain those higher wages and the associated

standard of living only if their businesses are able to compete with new and unique products. At this stage, companies must compete by producing new and different goods using the most sophisticated production processes and by innovating new ones.

Two criteria are used to allocate countries into stages of development. The first is the level of GDP per capita at market exchange rates. A second criterion is used to adjust for countries that, based on income, would have moved beyond the first stage, but where prosperity is based on the extraction of resources. This is measured by the share of exports of mineral goods in total exports (goods and services), and assumes that countries with more than 70 percent of their exports made up of mineral products are to a large extent factor driven. Consequently, countries that are resource driven and significantly wealthier than economies at the technological frontier are classified in the innovation-driven stage. Any countries falling between two of the three stages are considered to be “in transition.” The classification of countries into stages of development is shown in **Figure 2.2**.

Figure 2.2: Countries/Economies at each stage of development

Stage 1: Factor-driven (37 economies)	Transition from stage 1 to stage 2 (16 economies)	Stage 2: Efficiency-driven (30 economies)	Transition from stage 2 to stage 3 (24 economies)	Stage 3: Innovation-driven (37 economies)
Bangladesh	Algeria	Albania	Argentina	Australia
Burkina Faso	Angola	Armenia	Bahrain	Austria
Burundi	Azerbaijan	Bulgaria	Barbados	Belgium
Cambodia	Bhutan	Cape Verde	Brazil	Canada
Cameroon	Bolivia	China	Chile	Cyprus
Chad	Botswana	Colombia	Costa Rica	Czech Republic
Côte d'Ivoire	Gabon	Dominican Republic	Croatia	Denmark
Ethiopia	Honduras	Egypt	Hungary	Estonia
Gambia, The	Iran, Islamic Rep.	El Salvador	Kazakhstan	Finland
Ghana	Kuwait	Georgia	Latvia	France
Guinea	Libya	Guatemala	Lebanon	Germany
Haiti	Moldova	Guyana	Lithuania	Greece
India	Mongolia	Indonesia	Malaysia	Hong Kong SAR
Kenya	Philippines	Jamaica	Mauritius	Iceland
Kyrgyz Republic	Saudi Arabia	Jordan	Mexico	Ireland
Lao PDR	Venezuela	Macedonia, FYR	Oman	Israel
Lesotho		Montenegro	Panama	Italy
Madagascar		Morocco	Poland	Japan
Malawi		Namibia	Russian Federation	Korea, Rep.
Mali		Paraguay	Seychelles	Luxembourg
Mauritania		Peru	Suriname	Malta
Mozambique		Romania	Turkey	Netherlands
Myanmar		Serbia	United Arab Emirates	New Zealand
Nepal		South Africa	Uruguay	Norway
Nicaragua		Sri Lanka		Portugal
Nigeria		Swaziland		Puerto Rico
Pakistan		Thailand		Qatar
Rwanda		Timor-Leste		Singapore
Senegal		Tunisia		Slovak Republic
Sierra Leone		Ukraine		Slovenia
Tajikistan				Spain
Tanzania				Sweden
Uganda				Switzerland
Vietnam				Taiwan, China
Yemen				Trinidad and Tobago
Zambia				United Kingdom
Zimbabwe				United States

Source: World Economic Forum

2.6 ANALYSIS OF THE GLOBAL COMPETITIVENESS INDEX IN RUSSIAN FEDERATION

In this section we will analyze the competitiveness performance of Russian Federation (**Figure 2.3**) using its ranking scores on the global competitiveness index compared with the BS-10 states, the average of 28 member states of European Union and the United States of America during the period 2002-2015 and compared with the BRIC Countries during the period 2006-2015.

Figure 2.3: Russian Federation's overall performance according to the Global Competitiveness Index

	Rank (out of 144)	Score (1-7)
GCI 2014–2015	53	4.4
GCI 2013–2014 (out of 148).....	64	4.2
GCI 2012–2013 (out of 144).....	67	4.2
GCI 2011–2012 (out of 142).....	66	4.2
Basic requirements (25.5%)	44	4.9
Institutions	97	3.5
Infrastructure	39	4.8
Macroeconomic environment	31	5.5
Health and primary education.....	56	6.0
Efficiency enhancers (50.0%)	41	4.5
Higher education and training.....	39	5.0
Goods market efficiency	99	4.1
Labor market efficiency	45	4.4
Financial market development	110	3.5
Technological readiness.....	59	4.2
Market size.....	7	5.8
Innovation and sophistication factors (24.5%)	75	3.5
Business sophistication	86	3.8
Innovation.....	65	3.3

Source: World Economic Forum

Table 2.1 shows the ranking of Russia based on the GCI varied from a minimum of 51 during the period 2008-2009 to a maximum of 67 during the period 2012-2013. In other words, Russia attained its best performance in the period 2008-2009 and its worst in 2012-2013.

Russia was the best performer in 2008-2009 among the BS-10, but in any case its performance during this period is much below than these ones of the average of 28 member states of European Union and of the U.S.A. Russia's competitiveness performance has been steadily improved and during the period 2014-2015 is in the 53th place, similar to the period 2008-2009 where it was the best performer among the BS-10, as shown in **Table 2.2**.

The best performer is Azerbaijan, whose competitiveness performance increased by an impressive of 30 places, from the 69th place in 2008-2009 to the 38th place in 2014-2015, that is, the country gained on average 4.4 places per annum over a nine-year period. The worst performer has been Greece, whose competitiveness performance dropped by 56 places, from the 35nd place in 2003-2004 to the 96th place in 2012-2013, that is, the country lost an average 4.67 places per annum over the twelve-year period. Greece

was the best performer for several years due to the fact that it always has had market economy compared with other BS-10 states, but a feasible explanation for such a decline may be the crisis of 2008 suffered the country which affected all kinds of market efficiency.

Table 2.2 presents further details about the Russia's performance on the GCI providing also the average performance during the period 2002-2015. Although Russia steadily improves its performance during a thirteen-year period and despite the fact that only after 2008 outperforms the BS-10 average, its scores remain small reflecting its competitiveness. The majority of BS-10 countries have improved their competitiveness indexes during the period 2002-2015, but still lag by distance behind the European Union and the United States of America.

Table 2.1: Russian Federation's Performance on the GCI compared with BS-10

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Armenia	-	-	-	79	82	93	97	97	98	92	82	79	85
Azerbaijan	-	-	-	69	64	66	69	51	57	55	46	39	38
Bulgaria	62	64	59	58	72	79	76	76	71	74	62	57	54
Georgia	-	-	94	86	85	90	90	90	93	88	77	72	69
Greece	38	35	37	46	47	65	67	71	83	90	96	91	81
Moldova	-	-	-	82	86	97	95	-	94	93	87	89	82
Romania	66	75	63	67	68	74	68	64	67	77	78	76	59
Russian Federation	64	70	70	75	62	58	51	63	63	66	67	64	53
Turkey	69	65	66	66	59	53	63	61	61	59	43	44	45
Ukraine	77	84	86	84	78	73	72	82	89	82	73	84	76

Source: World Economic Forum

Notes: 1) 80 countries in 2002-2003; 102 countries in 2003-2004; 104 countries in 2004-2005; 117 countries in 2005-2006; 125 countries in 2006-2007; 131 countries in 2007-2008; 134 countries in 2008-2009; 133 countries in 2009-2010; 139 countries in 2010-2011; 142 countries in 2011-2012; 144 countries in 2012-2013; 148 countries in 2013-2014; 144 countries in 2014-2015. 2) The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Table 2.2: Russian Federation's ranking scores based on the GCI compared with BS-10, EU-28 and the U.S.A.

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	Average 2002-2015
Armenia	-	-	-	3.44	3.75	3.76	3.73	3.71	3.76	3.89	4.02	4.10	4.01	3.81
Azerbaijan	-	-	-	3.64	4.06	4.07	4.10	4.30	4.29	4.31	4.41	4.51	4.53	4.22
Bulgaria	3.68	3.67	3.98	3.83	3.96	3.93	4.03	4.02	4.13	4.16	4.27	4.31	4.37	4.03
Georgia	-	-	3.14	3.25	3.73	3.83	3.86	3.81	3.86	3.95	4.07	4.15	4.22	3.81
Greece	4.32	4.58	4.56	4.26	4.33	4.08	4.11	4.04	3.99	3.92	3.86	3.93	4.04	4.16
Moldova	-	-	-	3.37	3.71	3.64	3.75	-	3.86	3.89	3.94	3.94	4.03	3.79
Romania	3.59	3.38	3.86	3.67	4.02	3.97	4.10	4.11	4.16	4.08	4.07	4.13	4.30	3.96
Russian Federation	3.64	3.46	3.68	3.53	4.08	4.19	4.31	4.15	4.24	4.21	4.20	4.25	4.37	4.00
Turkey	3.31	3.65	3.82	3.68	4.14	4.25	4.15	4.16	4.25	4.28	4.45	4.45	4.46	4.08
Ukraine	2.97	3.17	3.27	3.30	3.89	3.98	4.09	3.95	3.90	4.00	4.14	4.05	4.14	3.76
BS-10 average	3.59	3.65	3.76	3.60	3.97	3.97	4.02	4.03	4.04	4.07	4.14	4.18	4.25	3.94
EU-28 average	4.4	4.6	4.8	4.7	4.9	4.7	4.7	4.7	4.5	4.7	4.7	4.7	4.74	4.68
U.S.A.	5.9	5.8	5.8	5.8	5.6	5.7	5.7	5.6	5.4	5.5	5.5	5.5	5.5	5.63

Source: World Economic Forum, and author's calculations

Notes: 1) 80 countries in 2002-2003; 102 countries in 2003-2004; 104 countries in 2004-2005; 117 countries in 2005-2006; 125 countries in 2006-2007; 131 countries in 2007-2008; 134 countries in 2008-2009; 133 countries in 2009-2010; 139 countries in 2010-2011; 142 countries in 2011-2012; 144 countries in 2012-2013; 148 countries in 2013-2014; 144 countries in 2014-2015. 2) The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Table 2.3 shows the ranking of Russia based on the GCI in comparison with the BRIC countries during the period 2006-2015. The best performer is by far China, whose competitiveness performance is one of the best worldwide. China increased its performance by 20 places, from the 34th place in 2006-2007 to the 14th place in 2014-2015, that is, the country gained on average 2.2 places per annum over a nine-year period. The worst performer is India, whose competitiveness performance dropped by 29 places, from the 42nd place in 2006-2007 to the 71^h place in 2014-2015, that is, the country lost on average 3.22 places per annum over the six-year period. Russia has steadily improved its performance, as mentioned above, following a reverse trend compared with Brazil, whose overall performance has declined.

Table 2.3: Russian Federation's Performance on the GCI compared with BRIC countries

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Brazil	66	72	64	56	58	53	48	56	57
Russian Federation	62	58	51	63	63	66	67	64	53
India	42	48	50	49	51	56	59	60	71
China	34	34	30	29	27	26	29	12	14

Source: World Economic Forum

Notes: 1) 125 countries in 2006-2007; 131 countries in 2007-2008; 134 countries in 2008-2009; 133 countries in 2009-2010; 139 countries in 2010-2011; 142 countries in 2011-2012; 144 countries in 2012-2013; 148 countries in 2013-2014; 144 countries in 2014-2015. 2) The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

2.6.1 Russian Federation's Performance on the Basic Requirements Sub-Index

Table 2.4 shows the performance of Russian Federation on the *basic requirements* sub-index compared with the BS-10 states, the average of 28 member states of European Union and the United States of America, according to the GCI Report 2014-2015.

Generally, the best performer is Greece, whose scores, except for the *macroeconomics*, are greater than the average of BS-10 and close to the average of the 28 member states of the European Union, followed by Turkey and Azerbaijan. The worst performer is Moldova, whose scores are the smallest among the BS-10 and generally its scores in each pillar are much less than the average of BS-10.

Russia is well performed and generally outperforms the average of BS-10 and in the pillar of *macroeconomics* not only is the best performer, but outperforms both the average of the 28 member states of the European Union and the U.S.A. as well.

Table 2.4: Russian Federation's Performance on the Basic Requirements Index compared with BS-10, EU-28 and the U.S.A.

Pillars	Basic Requirements			
	Institutions	Infrastructure	Macro-economics	Health & Primary Education
Armenia	3.8	3.8	4.6	5.3
Azerbaijan	4.0	4.1	6.4	5.2
Bulgaria	3.3	4.1	5.4	6.0
Georgia	4.2	4.3	5.1	5.8
Greece	3.6	4.9	3.3	6.1
Moldova	3.2	3.7	4.9	5.4
Romania	3.6	3.7	5.2	5.5
Russian Federation	3.5	4.8	5.5	6.0
Turkey	3.9	4.6	4.8	5.8
Ukraine	3.0	4.2	4.1	6.1
BS-10 average	3.61	4.22	4.93	5.72
EU-28 average	4.47	5.15	4.87	6.28
U.S.A.	4.7	5.8	4.0	6.1

Source: World Economic Forum, and author's calculations

Note: The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Table 2.5 reports the ranking of Russian Federation on the *basic requirements* sub-index; this index varied from a maximum of 68 during the period 2007-2008 to a minimum of 44 during the period 2014-2015. In other words, Russia attains its best performance in the basic requirements sub-index in the period 2014-2015 and its worst in 2007-2008. Russia's competitiveness in the basic requirements index had a fluctuation, but generally improved an impressive of 24 places, from the 68th place in 2007-2008 to the 44th place in 2014-2015, that is, the country gained on average 3 places per annum over an eight-year period.

The best performer of the BRIC countries is China which improved its performance by 14 places, from the 44th place in 2007-2008 to the 28th place in 2014-2015, that is, the country gained on average 1.75 places per

annum over an eight-year period. The worst performer was initially Brazil until the period 2010-2011, but then it has been India, whose competitiveness in the basic requirements index dropped by 36 places, from the 60th place in 2006-2007 to the 96th place in 2013-2014, that is, the country lost on average 4.5 places per annum over the eight-year period.

Table 2.5: Russian Federation's Performance on the Basic Requirements Index compared with BRIC countries

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Brazil	84	101	96	91	86	83	73	79	83
Russian Federation	66	68	56	64	65	63	53	47	44
India	60	74	80	79	81	91	85	96	92
China	42	44	42	36	30	30	31	31	28

Source: World Economic Forum

Notes: 1) 125 countries in 2006-2007; 131 countries in 2007-2008; 134 countries in 2008-2009; 133 countries in 2009-2010; 139 countries in 2010-2011; 142 countries in 2011-2012; 144 countries in 2012-2013; 148 countries in 2013-2014; 144 countries in 2014-2015. 2) The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Russia has had a slight improvement of its basic requirements performance, as its ranking went up 3 places from the 47th place in 2013-2014 to the 44th place in 2014-2015. Then, we shall examine the performance of Russian Federation in the various pillars of the basic requirements index, over two time periods: 2013-2014 and 2014-2015.

Russia became more competitive with regard to its **institutions**, that is, the quality of its institutions improved in 2014 compared with 2013. Specifically, as **Table 2.6** shows the global ranking of its institutions rose the 120th place in 2013-2014 to the 133th place in 2014-2015.

Generally, the country improved all its institutions such as, in the property rights (120th), in efficiency of legal framework in challenging regulations (99th), in organized crime (101th) and the protection of minority shareholders' interests (118th). But, despite this improvement scores remain low in the diversion of public funds (102th), the favoritism in decisions of government officials (87th) and the wastefulness of government spending (87th) harm both the public sector and the businesses when they have to deal with transactions with the state. Finally, Russia emphasized on the transparency of government policymaking (68th) and the efficacy of corporate boards (64th).

When it comes to its **infrastructures**, the country improved its position by 29 places landing the 93th place in 2013 and the 74th place in 2014. As **Table 2.7** shows, Russia's performance has improved impressively with regard to its quality of overall infrastructure (74th) and the quality of railroad infrastructure (26th), but still remains problematic about the quality of roads (124th). However, the country fared better when it comes to the available airline seat (11th) and the mobile telephone subscriptions (20th) and the quality of air transport infrastructure (101st).

Although Russia improved its position in terms of **macroeconomics**, some components of the third pillar have deteriorated, apart from the government debt which has remained stable (10th) and the country credit

rating which has improved (37th) (**Table 2.8**). Finally, as far as the **health and primary education system** is concerned, Russia's scores generally have improved such as the business impact of HIV (60th), the business impact of tuberculosis (75th) and the life expectancy (95th) (**Table 2.9**).

Table 2.6: Russian Federation's Performance on the 1st Pillar of the GCI – *Institutions*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
1st pillar: Institutions				
1.01 Property rights	3.0	133	3.3	120
1.02 Intellectual property protection	2.9	113	3.0	107
1.03 Diversion of public funds	2.5	113	2.7	102
1.04 Public trust in politicians	2.7	84	3.0	74
1.05 Irregular payments and bribes	3.2	109	3.4	102
1.06 Judicial independence	2.7	119	2.9	109
1.07 Favoritism in decisions of government officials	2.6	111	2.8	87
1.08 Wastefulness of government spending	2.8	99	2.8	87
1.09 Burden of government regulation	2.9	120	2.9	111
1.10 Efficiency of legal framework in settling disputes	3.0	118	3.2	110
1.11 Efficiency of legal framework in challenging regs.	2.8	120	2.9	99
1.12 Transparency of government policymaking	3.8	101	4.0	68
1.13 Business costs of terrorism	4.7	112	4.6	104
1.14 Business costs of crime and violence	4.5	80	4.5	70
1.15 Organized crime	4.2	111	4.2	101
1.16 Reliability of police services	3.0	122	3.2	114
1.17 Ethical behavior of firms	3.7	101	3.9	72
1.18 Strength of auditing and reporting standards	4.0	107	4.1	106
1.19 Efficacy of corporate boards	4.3	98	4.6	64
1.20 Protection of minority shareholders' interests	3.3	132	3.5	118
1.21 Strength of investor protection, 0–10 (best)*	4.7	100	4.7	98

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.7: Russian Federation's Performance on the 2nd Pillar of the GCI – *Infrastructure*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
2nd pillar: Infrastructure				
2.01 Quality of overall infrastructure	3.8	93	4.1	74
2.02 Quality of roads	2.5	136	2.7	124
2.03 Quality of railroad infrastructure	4.2	31	4.3	26
2.04 Quality of port infrastructure	3.9	88	3.9	81
2.05 Quality of air transport infrastructure	3.9	102	4.1	79
2.06 Available airline seat km/week, millions*	3,506.5	11	3,685.0	11
2.07 Quality of electricity supply	4.5	83	4.8	73
2.08 Mobile telephone subscriptions/100 pop.*	183.5	6	152.8	20
2.09 Fixed telephone lines/100 pop.*	30.1	38	28.5	39

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.8: Russian Federation's Performance on the 3rd Pillar of the GCI – *Macroeconomic Environment*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
3rd pillar: Macroeconomic environment				
3.01 Government budget balance, % GDP*	0.4	23	1.37	39
3.02 Gross national savings, % GDP*	28.5	32	25.3	41
3.03 Inflation, annual % change*	5.1	91	6.8	115
3.04 General government debt, % GDP*	10.9	10	13.4	10
3.05 Country credit rating, 0–100 (best)*	65.9	39	67.7	37

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.9: Russian Federation's Performance on the 4th Pillar of the GCI – *Health and Primary Education*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
4th pillar: Health and primary education				
4.01 Malaria cases/100,000 pop.*	N/Appl	1	S.L.	n/a
4.02 Business impact of malaria	(NE)	1	N/Appl.	n/a
4.03 Tuberculosis cases/100,000 pop.*	5.5	74	91.0	89
4.04 Business impact of tuberculosis	97.0	94	5.5	75
4.05 HIV prevalence, % adult pop.*	5.6	65	1.1	110
4.06 Business impact of HIV/AIDS	1.00	107	5.8	60
4.07 Infant mortality, deaths/1,000 live births*	9.8	58	8.9	53
4.08 Life expectancy, years*	69.0	101	70.5	95
4.09 Quality of primary education	4.1	61	4.2	57
4.10 Primary education enrollment, net %*	93.4	79	96.2	54

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

2.6.2 Russian Federation's Performance on the Efficiency Enhancers Sub-Index

Table 2.10 shows the performance of Russian Federation on the *efficiency enhancers* sub-index compared with the BS-10 states, the average of 28 member states of European Union and the United States of America, according to the GCI Report 2014-2015.

Generally, the best performers are Russian Federation and Turkey, whose scores are close to the average of BS-10, followed by Romania and Greece. The worst performer is Ukraine, whose scores in each pillar are much less than the average of BS-10.

Russia is well performed and generally close to the average of BS-10. What is remarkable is the score in the pillar of *market size*, due to the surface and the big population of Russian Federation which obviously plays a major role in the competitiveness of the country. The market size has a decisive role similar to these one of the U.S.A.. Also, Russia has improved its score in higher education and training, which is very close to the average of 28 member states of European Union.

Table 2.10: Russian Federation’s Performance on the Efficiency Enhancers Index compared with BS-10, EU-28 and the U.S.A.

Pillars	Efficiency Enhancers					
	Higher education & training	Goods market efficiency	Labor market efficiency	Financial market development	Technological readiness	Market size
Armenia	4.2	4.4	4.2	3.7	3.7	2.8
Azerbaijan	3.9	4.3	4.6	3.8	4.3	3.7
Bulgaria	4.5	4.4	4.2	4.2	4.7	3.9
Georgia	3.9	4.4	4.5	3.9	3.8	3.0
Greece	4.8	4.2	3.7	3.0	4.8	4.3
Moldova	4.1	4.1	4.1	3.7	4.4	2.6
Romania	4.6	4.2	4.0	4.1	4.5	4.4
Russian Federation	5.0	4.1	4.4	3.5	4.2	5.8
Turkey	4.7	4.6	3.5	4.2	4.3	5.3
Ukraine	4.9	4.0	4.1	3.5	3.5	4.6
BS-10 average	4.46	4.27	4.13	3.76	4.22	4.04
EU-28 average	5.22	4.71	4.37	4.28	5.99	4.29
U.S.A.	5.8	5.1	5.3	5.3	5.8	6.9

Source: World Economic Forum, and author's calculations

Notes: The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Table 2.11 shows the ranking of Russia on the *efficiency enhancers* sub-index; this index varied from of a maximum of 55 during the period 2011-2012 to a minimum of 41 during the period 2014-2015. In other words, Russia attained its best performance in the efficiency enhancers sub-index in the period 2014-2015 and its worst in 2011-2012. Russia’s competitiveness in the efficiency enhancer index improved by 14 places, dropping from the 55nd place in 2011-2012 to the 41st place in 2014-2015, that is, the country gained on average 3.5 places per annum over a four-year period.

The best performer of the BRIC countries was initially India until the period 2008-2009, but then it has been China, whose competitiveness in the efficiency enhancers requirements index increased by 15 places, from the 48th place in 2006-2007 to the 30^h place in 2014-2015, that is, the country gained on average 2 places per annum over the nine-year period. The worst performer for many year between 2009-2014 used to be mainly Russia and Brazil, during the period 2014-2015 has been India, whose competitiveness in this sub-index fell by 28 places, from the 33rd place in 2006-2007 to the 61th place in 2014-2015, that is, the country lost on average 3.1 places per annum over the nine-year period.

Table 2.11: Russian Federation’s Performance on the Efficiency Enhancers Index compared with BRIC countries

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Brazil	51	55	51	42	44	41	38	44	42
Russian Federation	52	48	50	52	53	55	54	51	41
India	33	31	33	35	38	37	39	42	61
China	48	45	40	32	29	26	30	31	30

Source: World Economic Forum

Notes: 1) 125 countries in 2006-2007; 131 countries in 2007-2008; 134 countries in 2008-2009; 133 countries in 2009-2010; 139 countries in 2010-2011; 142 countries in 2011-2012; 144 countries in 2012-2013; 148 countries in 2013-2014; 144 countries in 2014-2015. 2) The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Russia has had an improvement of its efficiency performance, as its ranking went up 10 places from the 51th place in 2013-2014 to the 41th place in 2014-2015. Then, we shall examine the performance of Russian Federation in the various pillars of the efficiency enhancers index, over two time periods: 2013-2014 and 2014-2015.

When it comes to **higher education and training**, Russia improved its secondary enrollment performance, as its rank went up from the 75th place in 2014 to the 56nd place in 2015, and the same was true for its availability of research and training services, where its rank went up from the 76th place in 2013 to the 59th place in 2015 (**Table 2.12**). Also, there has been a decline in the tertiary enrollment performance, where the relevant rank dropped from the 14nd place in 2014 to 19th place in 2014.

Then, Russia’s competitive performance improved significantly in the **goods market efficiency pillar**, where all its components rose their rankings, but some of them still they remain low (**Table 2.13**). Here it should be stressed the important improvements such as in the intensity of local competition (74th), in the burden of customs procedures (95th), in the degree of customer orientation (83th) and in the buyer sophistication (44th). Also, other improvements, but still worrisome are the effectiveness of anti-monopoly policy (102th), the agricultural policy costs (125th), the prevalence of foreign ownership (124th) and the imports as a percentage of GDP (133th).

When it comes to **labor market efficiency**, again Russia’s performance significantly improved (**Table 2.14**). The most important improvements include the cooperation in labor-employer relations (89th), the hiring and firing practices (41th), the pay and the productivity (24th) and the reliance on professional management (85th)

Another strong point in the Russian economy is the **development of its financial markets**. **Table 2.15** shows that the country’s rank in this Pillar of the GCI has improved in an impressive way as concerned several financial services.

Furthermore, Russia managed to improve its performance in the **technological readiness** pillar of the GCI index (**Table 2.16**). For instance, the availability of latest technologies (108th) and the percentage of

individuals using the Internet (49th) are some of these components. However, there has been a deterioration in terms of internet bandwidth (61th) and mobile broadband subscriptions (29th).

Finally, when it comes to the **market size** pillar, Russia's performance is almost perfect with a domestic market size and the foreign market size having a rank 7 and 9, respectively (**Table 2.17**).

Table 2.12: Russian Federation's Performance on the 5th Pillar of the GCI – *Higher Education and Training*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
5th pillar: Higher education and training				
5.01 Secondary education enrollment, gross %*	88.6	75	95.3	56
5.02 Tertiary education enrollment, gross %*	75.9	14	76.1	19
5.03 Quality of the education system	3.5	85	3.5	84
5.04 Quality of math and science education	4.3	56	4.3	59
5.05 Quality of management schools	3.6	113	3.7	104
5.06 Internet access in schools	4.6	54	5.1	41
5.07 Availability of research and training services	4.1	76	4.3	59
5.08 Extent of staff training	3.8	88	3.8	89

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.13: Russian Federation's Performance on the 6th Pillar of the GCI – *Goods Market Efficiency*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
6th pillar: Goods market efficiency				
6.01 Intensity of local competition	4.5	113	5.0	74
6.02 Extent of market dominance	3.5	93	3.7	75
6.03 Effectiveness of anti-monopoly policy	3.5	116	3.7	102
6.04 Effect of taxation on incentives to invest	3.0	125	3.1	122
6.05 Total tax rate, % profits*	54.1	124	50.7	116
6.06 No. procedures to start a business*	8	88	7	78
6.07 No. days to start a business*	18	78	15.0	75
6.08 Agricultural policy costs	3.0	134	3.1	125
6.09 Prevalence of trade barriers	3.8	124	4.0	111
6.10 Trade tariffs, % duty*	9.4	103	9.5	102
6.11 Prevalence of foreign ownership	3.4	132	3.4	124
6.12 Business impact of rules on FDI	3.6	121	3.7	118
6.13 Burden of customs procedures	3.3	124	3.6	95
6.14 Imports as a percentage of GDP*	21.6	139	22.1	133
6.15 Degree of customer orientation	4.1	113	4.4	83
6.16 Buyer sophistication	3.6	57	3.7	44

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.14: Russian Federation's Performance on the 7th Pillar of the GCI – *Labor Market Efficiency*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
7th pillar: Labor market efficiency				
7.01 Cooperation in labor-employer relations	3.9	112	4.1	89
7.02 Flexibility of wage determination	5.3	41	5.6	28
7.03 Hiring and firing practices	3.9	77	4.2	41
7.04 Redundancy costs, weeks of salary*	17.3	85	17.3	83
7.05 Effect of taxation on incentives to work	3.0	122	3.0	115
7.06 Pay and productivity	4.2	46	4.6	24
7.07 Reliance on professional management	3.8	105	4.0	85
7.08 Country capacity to retain talent	2.8	112	2.9	103
7.09 Country capacity to attract talent	3.0	97	3.1	92
7.10 Women in labor force, ratio to men*	0.87	41	0.87	41

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.15: Russian Federation's Performance on the 8th Pillar of the GCI – *Financial Market Development*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
8th pillar: Financial market development				
8.01 Availability of financial services	4.1	91	4.4	71
8.02 Affordability of financial services	3.8	95	4.1	69
8.03 Financing through local equity market	3.1	90	3.1	86
8.04 Ease of access to loans	2.9	68	3.0	56
8.05 Venture capital availability	2.6	70	2.7	61
8.06 Soundness of banks	4.0	124	4.0	118
8.07 Regulation of securities exchanges	3.6	102	3.7	91
8.08 Legal rights index, 0–10 (best)*	3	118	3	113

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.26: Russian Federation's Performance on the 9th Pillar of the GCI – *Technological Readiness*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
9th pillar: Technological readiness				
9.01 Availability of latest technologies	4.0	124	4.2	108
9.02 Firm-level technology absorption	3.9	126	4.2	98
9.03 FDI and technology transfer	3.7	125	3.8	123
9.04 Individuals using Internet, %*	53.3	62	61.4	49
9.05 Fixed broadband Internet subscriptions/100 pop.*	14.5	46	16.6	43
9.06 Int'l Internet bandwidth, kb/s per user*	32.9	52	41.2	61
9.07 Mobile broadband subscriptions/100 pop.* ⁹	52.9	25	60.1	29

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.17: Russian Federation’s Performance on the 10th Pillar of the GCI – *Market Size*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
10th pillar: Market size				
10.01 Domestic market size index, 1–7 (best)*	5.7	8	5.7	7
10.02 Foreign market size index, 1–7 (best)*	6.1	7	6.1	9
10.03 GDP (PPP\$ billions)*	2,513.3	6	2,556.2	4
10.04 Exports as a percentage of GDP*	29.1	101	27.8	104

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

2.6.3 Russia Federation’s Performance on the Innovation Sub-Index

Table 2.18 shows the performance of Russian Federation on the *innovation* sub-index compared with the BS-10 states, the average of 28 member states of European Union and the United States of America, according to the GCI Report 2014-2015.

The best performer is Turkey, whose scores are much greater than the average of BS-10, but less than the average of the 28 member states of the European Union, followed by Azerbaijan and Greece. The worst performer is Moldova, whose scores are the smallest among the BS-10 and generally the scores in each pillar are much less than the average of BS-10.

Russia's scores are close to the average of BS-10, but by far less than the average of the 28 member states of the European Union and the U.S.A..

Table 2.18: Russian Federation’s Performance on the Basic Requirements Index compared with BS-10, EU-28 and the U.S.A.

Pillars	Innovation	
	Business Sophistication	Innovation
Armenia	3.7	3.0
Azerbaijan	3.9	3.3
Bulgaria	3.6	2.9
Georgia	3.5	2.7
Greece	3.9	3.2
Moldova	3.4	2.5
Romania	3.8	3.3
Russian Federation	3.8	3.3
Turkey	4.3	3.4
Ukraine	3.7	3.2
BS-10 average	3.76	3.08
EU-28 average	4.61	4.12
U.S.A.	5.6	5.5

Source: World Economic Forum, and author's calculations

Notes: The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Table 2.19 shows that over the period 2006-2015 the ranking of Russia based on the innovation sub-index of GCI varied from a minimum of 68 during the period 2006-2007 to a maximum of 108 during the period 2012-2013. In other words, Russia attained its best performance in this sub-index in the period 2006-2007 and its worst in 2012-2013.

Russia's competitiveness in the innovation sub-index plummeted 40 places, from the 68th place in 2006-2007 to the 108th place in 2012-2013, that is, the country lost on average 6.67 places per annum over a six-year period. After then, the country has improved its position, but still the previous change rendered Russia the BRICs worst performer with regard to this sub-index. The best performer of the BRIC countries was initially India until the period 2009-2010, but then it has been China, whose competitiveness in the basic innovation index increased by 14 places, from the 45th place in 2006-2007 to the 31th place in 2010-2011, that is, the country gained on average 2.8 places per annum over the five-year period. After this important increase, the rank has slightly changed, but still in a good position.

Table 2.19: Russian Federation's Performance on the Innovation Sub-index of the GCI compared with BRIC countries

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Brazil	36	41	42	38	38	35	39	46	56
Russian Federation	68	77	73	73	80	97	108	99	75
India	26	26	27	28	42	40	43	41	52
China	45	50	32	29	31	31	34	34	33

Source: World Economic Forum

Notes: 1) 125 countries in 2006-2007; 131 countries in 2007-2008; 134 countries in 2008-2009; 133 countries in 2009-2010; 139 countries in 2010-2011; 142 countries in 2011-2012; 144 countries in 2012-2013; 148 countries in 2013-2014; 144 countries in 2014-2015. 2) The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Russia has had a significant improvement of its innovation performance, as its ranking went up 24 places from the 99th place in 2013-2014 to the 75th place in 2014-2015. Then, we shall examine the performance of Russian Federation in the various pillars of the innovation index, over two time periods: 2013-2014 and 2014-2015.

Russia's competitive performance improved significantly in the **business sophistication**, where all its components rose their rankings in an impressive way (**Table 2.20**). It should be stressed the important improvements such as in the local supplier quantity and quality (91th) and (88th) respectively, in the nature of competitive advantage (75th), in control of international distribution (73th) and in the extent of marketing (44th). Also, other improvements, but still worrisome are the state of cluster development (118th) and the value chain breadth (96th).

Finally, when it comes to innovation, Russia generally improved its performance, as specific components rose their rankings as shown in **Table 2.21**. For instance, significant improvements have been the government procurement of advanced tech products (81th) and the availability of scientists and engineers (70th).

Table 2.20: Russian Federation’s Performance on the 11th Pillar of the GCI – *Business Sophistication*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
11th pillar: Business sophistication				
11.01 Local supplier quantity	4.3	109	4.4	91
11.02 Local supplier quality	3.9	111	4.1	88
11.03 State of cluster development	3.1	124	3.1	118
11.04 Nature of competitive advantage	3.1	102	3.4	75
11.05 Value chain breadth	3.2	114	3.5	96
11.06 Control of international distribution	3.7	105	4.0	73
11.07 Production process sophistication	3.3	105	3.5	92
11.08 Extent of marketing	3.9	90	4.3	64
11.09 Willingness to delegate authority	3.5	96	3.6	81

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

Table 2.21: Russian Federation’s Performance on the 12th Pillar of the GCI – *Innovation*

Indicator	GCI 2013-2014		GCI 2014-2015	
	Value	Rank/148	Value	Rank/144
12th pillar: Innovation				
12.01 Capacity for innovation	3.5	64	3.8	66
12.02 Quality of scientific research institutions	3.7	65	4.0	56
12.03 Company spending on R&D	3.1	69	3.2	62
12.04 University-industry collaboration in R&D	3.6	64	3.6	67
12.05 Gov’t procurement of advanced tech products	3.1	108	3.3	81
12.06 Availability of scientists and engineers	3.8	90	4.1	70
12.07 PCT patents, applications/million pop.*	6.1	43	7.1	41

Source: Global Competitiveness Reports 2013-2014 and 2014-2015

3 EASE OF DOING BUSINESS

3.1 DEFINITION OF EASE OF DOING BUSINESS

According to the Ease of Doing Business report 2014, sound business regulations are important for a thriving private sector—and a thriving private sector is important for overall development. In the developing world the private sector is the largest employer, providing an estimated 90% of jobs. Having the right business regulations and related institutions is therefore essential for the health of an economy, as the attractiveness of a country's business environment is expected to be improved.

A thriving private sector—with new firms entering the market, creating jobs and developing innovative products—contributes to a more prosperous society. Governments play a crucial role in supporting a dynamic ecosystem for firms. They set the rules that establish and clarify property rights, reduce the cost of resolving disputes and increase the predictability of economic transactions. Without good rules that are evenly enforced, entrepreneurs have a harder time starting and growing the small and medium-size firms that are the engines of growth and job creation for most economies around the world.

Doing Business captures several important dimensions of the regulatory environment as it applies to local firms. It provides quantitative measures of regulations for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. Doing Business also measures regulations on employing workers (**Figure 3.1**).

Figure 3.1: The Structure of the Ease of Doing Business Index

1. START-UP	2. OPERATION	3. EXPANSION	4. INSOLVENCY
1.1 Stating a Business	2.1 Dealing with Construction Permits	3.1 Registering Property	4.1. Resolving Insolvency
<i>1.1a. Minimum Capital Requirements</i>	2.2 Getting Electricity	3.2 Getting Credit	
<i>1.1b. Procedures, Time and Cost.</i>	2.3 Paying Taxes	3.3 Protecting Investors	
	2.4 Trading Across Borders	3.4 Enforcing Contracts	
	2.5 Employing Workers		

Source: Doing Business

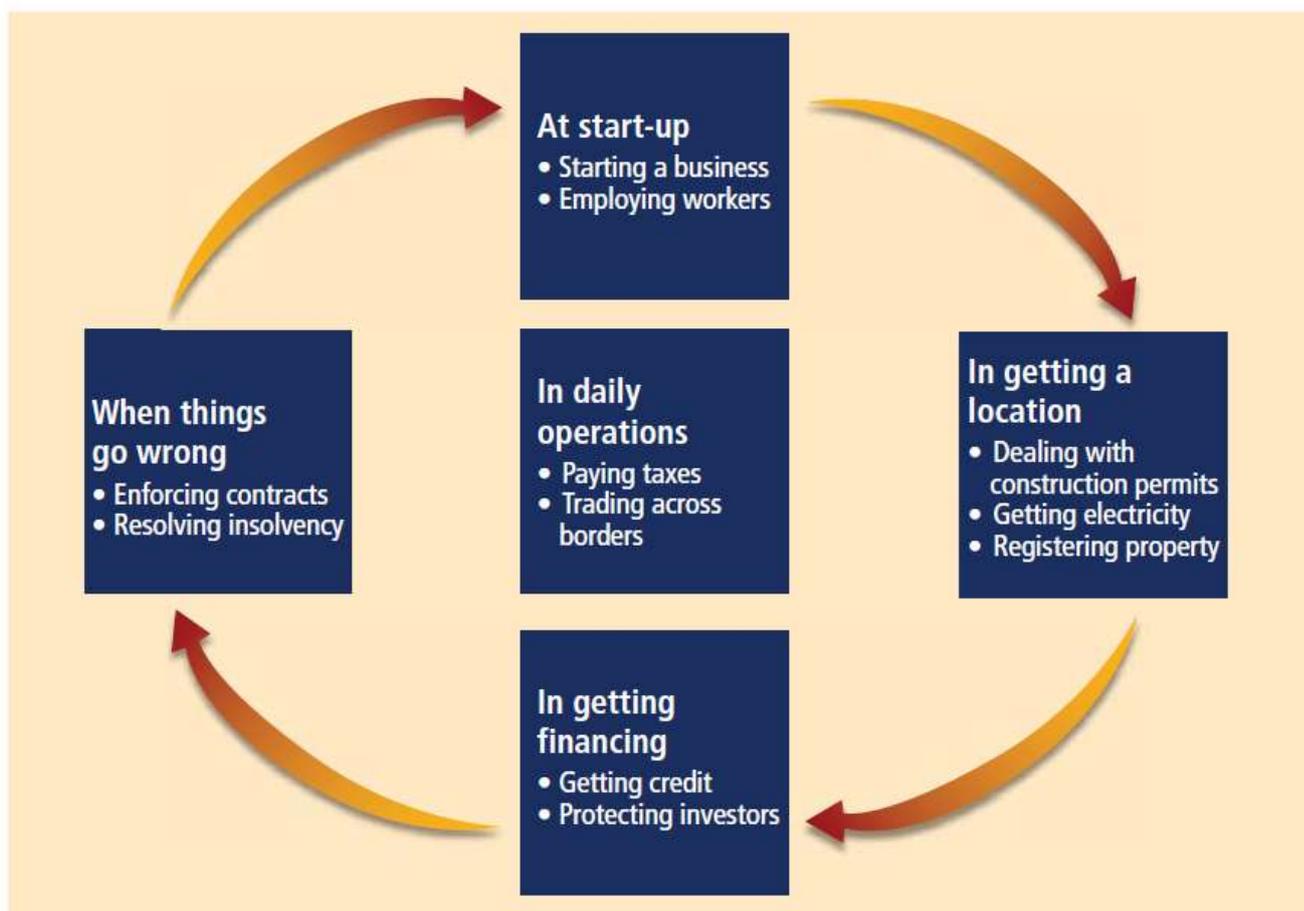
3.2 THE EASE OF DOING BUSINESS INDEX

The **Ease of Doing Business index** (EDB) ranks economies according to their performance in this field. For each economy the ranking is calculated as the simple average of the percentile rankings on each of the following ten topic, each of which constitutes a pillar of the EDB:

- 1st pillar: Starting a Business
- 2nd pillar: Dealing with Construction Permits
- 3rd pillar: Getting Electricity
- 4th pillar: Registering Property
- 5th pillar: Getting Credit
- 6th pillar: Protecting Investors
- 7th pillar: Paying Taxes,
- 8th pillar: Trading Across Borders,
- 9th pillar: Enforcing Contracts and
- 10th pillar: Resolving Insolvency.

Emphasis will be given on these specific pillars, and not on employing workers, which affect firms throughout their life cycle (**Figure 3.2**).

Figure 3.2: The Structure of the Ease of Doing Business Index



3.3 THE STRUCTURE OF THE EASE OF DOING BUSINESS INDEX

The most recent edition (EDB, 2014) covers 189 countries. Doing Business focuses on 10 topics-pillars, with the specific aim of evaluating and providing quantitative measures of regulations relevant to the life cycle of a domestic firm. The index provides quantitative measures of regulations for these ten pillars—as they apply to domestic small and medium-size enterprises. It also looks at regulations on employing workers. Doing Business uses a simple averaging approach for weighting component indicators and calculating rankings and the distance to frontier measure.

Doing Business is not about eliminating the role of the state from private sector development. On the contrary, Doing Business recognizes that the state has a fundamental role in private sector development. A key premise of Doing Business is that economic activity requires good rules. These include rules that establish and clarify property rights, reduce the cost of resolving disputes, increase the predictability of economic interactions and provide contractual partners with core protections against abuse. The objective is to have regulations designed to be efficient, accessible to all who use them and simple in their implementation. Accordingly, some Doing Business indicators give a higher score for better and more developed regulation, as the protecting investors indicators do for stricter disclosure requirements for related-party transactions. Other indicators, such as those on dealing with construction permits, automatically assign the lowest score to economies that have no regulations in the area measured or do not apply their regulations (considered “no practice” economies), penalizing them for lacking appropriate regulation. Still others give a higher score for a simplified way of applying regulation with lower compliance costs for firms—as the starting a business indicators do, for example, if firms can comply with business start-up formalities in a one-stop shop or through a single online filing portal. And finally, some indicators recognize economies that apply a risk-based approach to regulation as a way to address environmental and social concerns—that is, by imposing greater regulatory requirements on activities that pose a higher risk to the population and lesser regulatory requirements on lower-risk activities.

Analytically, the ten pillars that we will examine are the following:

Starting a Business

The **starting a business** indicators are important for many reasons. For the poor, starting a business or finding a job is an important way out of poverty. Then, in most parts of the world small and medium-size businesses are often the main providers of jobs.

The data on starting a business are based on a survey and research investigating the procedures that a standard small-medium size company needs to complete to start operations legally. These include obtaining all necessary permits and licenses and completing all required inscriptions, verifications and notifications with authorities to enable the company to formally operate. The *time* and cost required to complete each *procedure* under normal circumstances are calculated, as well as the *minimum capital requirement* that must be paid in. The procedures refer to the procedures (number) necessary to legally start and operate a company.

The time refers to the time (in calendar days) required to complete each procedure (calendar days). Note this pillar does not include time spent gathering information, while it is assumed that each procedure starts on a separate day and it is completed once final document has been received. These procedures include *preregistration* (for example, name verification or reservation, notarization), registration in the economy's largest business city, and post-registration (for example, social security registration, company seal). The minimum capital requirement can be an obstacle for potential entrepreneurs. Initially *Doing Business* measured the required minimum capital regardless of whether it had to be paid up front or not. In many economies only part of the minimum capital has to be paid up front. To reflect the actual potential barrier to entry, the paid-in minimum capital has been used rather than the required minimum capital.

It is assumed that all information is readily available to the entrepreneur, that there has been no prior contact with officials and that all government and non-government entities involved in the process function without corruption.

Dealing with Construction Permits

The ease of **dealing with construction permits** records the *procedures, time* and *cost* required for a small to medium-size business to obtain all the necessary approvals to build a simple *commercial warehouse*, and connect it to water, sewerage and to land line services. Good construction regulation matters for public safety. It also matters for the health of the building sector and the economy as a whole.

Procedures to legally build a warehouse includes submitting all relevant documents and obtaining all necessary clearances, licenses, permits and certificates, completing all required notifications and receiving all necessary inspections, obtaining utility connections for water, sewerage and a fixed telephone line and finally registering the warehouse after its completion.

All official fees associated with legally completing the procedures are included. Time is recorded in calendar days. The survey assumes that the entrepreneur is aware of all existing regulations and does not use an intermediary to complete the procedures, unless required to do so by law.

Getting Electricity

Doing business measures the *procedures, time* and *cost* for a small to medium-size business **to get a new electricity connection** for a standardized warehouse with standardized electricity needs. Poor infrastructure services, particularly poor electricity services, create serious impediments for businesses. Poor electricity supply services impact the productivity of firms and the investments.

Registering Property

Registered property rights are essential to support investment, productivity and growth. Evidence from economies around the world recommends that property owners with registered titles tend to invest more. Besides they have a better opportunity of getting credit when using their property as collateral. Private and public sector as well do benefit from the land registration. For governments, having credible, up-to-date figures in cadastres and land registries is crucial to properly assess and collect tax revenue. Property transfer taxes are an important source of revenue for many governments. But when transfer fees and taxes are too

heavy, this not only deteriorates the protection of property rights but also decreases possible revenue from property taxes.

The data cover the full sequence of *procedures* necessary to transfer the property title from the seller to the buyer, *time* to register property (in calendar days) and official *costs* to register property (as a percentage of the property value). Every required procedure is included, whether it is the responsibility of the seller or the buyer or must be completed by a third party on their behalf.

Getting Credit

Strong **creditor rights** increase loan accessibility, since lenders have better legal protection in the event of bankruptcy and reorganization of the borrower; as a result they become more self-assured about the return of their investment in cases of default and as a result more eager to liberalize credit on favorable terms. On the other hand, weak creditor protection and weak enforcement make credit markets tighter. Credit bureaus and credit registries are essential parts of the financial structure that enables entrance to formal finance and they are one manner of increasing access to finance for individuals and small firms.

Protecting Investors

The **protection of investors** is necessary for companies to raise the capital needed to grow, innovate, diversify and compete. The lack of investor protection stunts the development of equity markets. Economies with active capital markets tend to successfully protect investors. In these economies investors receive reliable financial information, they participate in the company's decision making process, and the company's directors are liable for their managerial decisions.

Paying Taxes

All governments are in need of revenue, and the tall order for them is to optimally design the tax rates and the tax base. Furthermore, governments need to build a tax compliance system that will not dishearten taxpayers from contributing to it. The total tax burden for a company affects investment and growth. Businesses are more prone to resort to informal sector dealings with the employees (and suppliers) when the tax rates are burdensome.

Paying taxes and other mandatory contributions depend on *number of tax payments*, *time* measuring the hours per year necessary to prepare, file and pay them, and the *total tax rate*.

Trading across borders

Countries that have efficient customs, good transport networks and fewer document requirements making compliance with export and import procedures faster and cheaper are more competitive globally.

The data on **trading across borders** include *documents* recorded, *time* (in calendar days) from start to finish of each procedure and the *cost*, not including tariffs or trade taxes

Enforcing Contracts

Effectual commercial disagreement resolution has numerous benefits. Courts are needed for businesspersons because they interpret the rules of the market and defend economic rights. Well-organized and translucent courts embolden new business dealings because businesses recognize they can depend on the courts whether a new customer fails to pay. Three indicators cover this pillar the number of *procedures*

which includes all those that demand interaction between the parties or between them and the judge and the court officer, the *time* which counts the days from the moment that a plaintiff files the lawsuit in court until the moment of payment and the official *cost* of going through court procedures.

Resolving Insolvency

Over the centuries economies have introduced a variety of legal mechanisms and institutions that allow lenders to recover their investment from the borrower without resorting to violence. Economies with good bankruptcy procedures are those that maximize the total value of recovered and make it possible to do so at a low cost. Economies with less efficient and more costly **insolvency procedures** generally have lower recovery rates.

This pillar measures the *time* (in calendar days), *cost* and outcome of *insolvency proceedings* involving domestic entities.

3.4 ANALYSIS OF THE EASE OF DOING BUSINESS INDEX IN RUSSIAN FEDERATION

3.4.1 Russian Federation's performance according to the Doing Business

In this section we shall analyze how Russian Federation fared on Ease of Doing Business report, that is, the business environment of Russian Federation using its ranking scores on the doing business index compared with the BS-10 states, the United States of America and the BRIC Countries during the period 2006-2014.

Table 3.1 shows the best ten performers in Ease of Doing Business report for 2014 and its scores in each of ten pillars. So, in 2014 the 10 economies with the most business-friendly regulation were Singapore; Hong Kong SAR; New Zealand; the United States; Denmark; Norway; the United Kingdom; the Republic of Korea; Malaysia; and Georgia. The Russian Federation ranked **92nd** among 189 economies, while it had the best ranking among the BRIC countries, followed by China (96th), Brazil (116th) and India (134th).

The ranking was based on the degree of adoption, implementation and progress of reform programs in each of the 10 topic which are considered to determine the degree of easiness of doing business in each country.

The high ranking based on this index means that the state has created an environment conducive to a smooth operation of the business sector. A high ranking on this index implies the existence of a simplified legislative/administrative framework, which allows businesses to operate more efficiently, with state oversight and intervention only when required, protects property rights, and ensures labor market flexibility.

In general, the EDB index can be regarded as an important indicator for determining the competitiveness and attractiveness (for investment) of each country, but it not the only indicator for this purpose.

Table 3.1: Ease of Doing Business Rankings in 2014

Country	EDB Ranking	Starting a Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Resolving Insolvency
Singapore	1	3	3	6	28	3	2	5	1	12	4
Hong Kong SAR, China	2	5	1	5	89	3	3	4	2	9	19
New Zealand	3	1	12	45	2	3	1	23	21	18	12
United States	4	20	34	13	25	3	6	64	22	11	17
Denmark	5	40	8	18	7	28	34	12	8	32	10
Malaysia	6	16	43	21	35	1	4	36	5	30	42
Korea, Rep.	7	34	18	2	75	13	52	25	3	2	15
Georgia	8	8	2	54	1	3	16	29	43	33	88
Norway	9	53	28	17	10	73	22	17	26	4	2
United Kingdom	10	28	27	74	68	1	10	14	16	56	7
Brazil	116	123	130	14	107	109	80	159	124	121	135
Russian Federation	92	88	178	117	17	109	115	56	157	10	55
India	134	179	182	111	92	28	34	158	132	186	121
China	96	158	185	119	48	73	98	120	74	19	78

Source: World Bank, Doing Business Data

At this point it should be noted that countries with a high ranking in the EDB index are generally countries who have already achieved a relatively high level of economic development (as shown in **Table 3.1**). Of course, the direction of causality is not clearly defined. On the one hand, maintaining a favorable business and economic environment (i.e. having a high rank on the EDB index) contributes to attracting investment and thereby achieving higher growth rates. On the other hand, the developmental process per se may lead to a higher EDB ranking, as a higher level of economic development is linked with substantial improvement of the institutional and organizational framework for the operation of the economy (e.g. the introduction of modern systems for recording and controlling business operations, land use registries, computerization of public services, etc.).

Table 3.2 compares the ranking of Russia's performance among the BS-10 states over a nine-year period, during which Russia's doing business scores improved 5 places, from the 97th place in 2006 to the 92th place in 2014. The ranking of Russia based on the EDB varied from a maximum of 124 in 2011 to a minimum of 92 in 2014. In other words, Russia attained its best performance in 2014 and its worst in 2011.

The best performer is by far Georgia, whose doing business performance increased by an impressive of 104 places, from the 112th place in 2006 to the 8th place in 2014, that is, the country gained on average 12 places per annum over a nine-year period. The worst performer is steadily Ukraine, whose doing business performance dropped by 20 places, from the 132nd place in 2006 to the 112^h place in 2014, whereas it attained its worst performance in 2012 (152th).

The majority of BS-10 countries have improved their doing business indexes during the period 2006-2014, but still lag by distance behind best economies worldwide, except for Georgia and Armenia.

Table 3.2: Russian Federation's Performance on the EDB compared with BS-10

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2006-2014
Armenia	37	34	39	39	43	61	55	32	37	-
Azerbaijan	100	99	96	96	38	69	66	67	70	+30
Bulgaria	59	54	46	46	44	57	59	66	58	+1
Georgia	112	37	18	18	11	17	16	9	8	+104
Greece	111	109	100	100	109	101	100	78	72	+39
Moldova	88	103	92	92	94	99	81	83	78	+10
Romania	71	49	48	48	55	65	72	72	73	-2
Russian Federation	97	96	106	106	120	124	120	112	92	+5
Turkey	84	91	57	57	73	73	71	71	69	+15
Ukraine	132	128	139	139	142	149	152	137	112	+20

Source: World Bank, Doing Business Data

Notes: 1) 178 countries in 2006; 178 countries in 2007; 181 countries in 2008; 183 countries in 2009; 183 countries in 2010; 183 countries in 2011; 185 countries in 2012; 185 countries in 2013; 189 countries in 2014. 2) The best performer yearly is highlighted in yellow colour and the worst performer yearly is highlighted in red colour.

Table 3.3 presents analytically the performance of Russian Federation on the ten pillars of the EDB compared with the BS-10 states.

Again, in general, Georgia is the best performer by each pillar (i.e. dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes and trading across borders). Its rankings are some of the best worldwide. Another good performer is considered to be Armenia, despite the fact that in enforcing contracts as the worst performer among the BS-10 countries. The worst performer is Ukraine, whose scores in some pillars are the smallest among the BS-10 countries (i.e. registering property, protecting investors, paying taxes and resolving insolvency).

Russia is the second worst performer in the BS-10 region according to the overall ranking. In generally, its scores are very low (i.e. getting credit). Paradoxically, Russia attains the best performance in two sole pillars, which are enforcing contracts and resolving insolvency.

Table 3.3: Russian Federation's Performance on the EDB by each pillar compared with BS-10

Country	EDB Ranking	Starting a Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Resolving Insolvency
Armenia	37	6	79	109	5	42	22	103	117	112	76
Azerbaijan	70	10	180	180	13	55	22	77	168	28	86
Bulgaria	58	65	118	118	62	28	52	81	79	79	92
Georgia	8	8	2	2	1	3	16	29	43	33	88
Greece	72	36	66	66	161	86	80	53	52	98	87
Moldova	78	81	174	174	19	13	80	95	150	23	91
Romania	73	60	136	136	70	13	52	134	76	53	99
Russian Federation	92	88	178	178	17	109	115	56	157	10	55
Turkey	69	93	148	148	50	86	34	71	86	38	130
Ukraine	112	47	41	41	97	13	128	164	148	45	162

Source: World Bank, Doing Business Data

3.4.2 Russian Federation's performance in terms of Bureaucracy

Figure 3.3 shows, in detail and by each pillar, the overall performance of Russian Federation according to the EDB 2014 report. Five pillars are marked indicating the *Doing Business* reforms affecting all sets of indicators included in this year's report, implemented from June 2012 to June 2013. In fact, Russian economy has been the third out of the 10 economies improving the most across 3 or more areas measured by Doing Business in 2012/13.

Figure 3.3: Russian Federation's overall performance according to the Ease of Doing Business Index

RUSSIAN FEDERATION		Europe & Central Asia	GNI per capita (US\$)	12,700	
Ease of doing business (rank)	92	High income	Population (m)	143.5	
✓ Starting a business (rank)	88	✓ Registering property (rank)	17	✓ Trading across borders (rank)	157
Procedures (number)	7	Procedures (number)	4	Documents to export (number)	9
Time (days)	15	Time (days)	22	Time to export (days)	22
Cost (% of income per capita)	1.3	Cost (% of property value)	0.1	Cost to export (US\$ per container)	2,615
Minimum capital (% of income per capita)	1.2			Documents to import (number)	10
		Getting credit (rank)	109	Time to import (days)	21
✓ Dealing with construction permits (rank)	178	Strength of legal rights index (0–10)	3	Cost to import (US\$ per container)	2,810
Procedures (number)	36	Depth of credit information index (0–6)	5		
Time (days)	297	Public registry coverage (% of adults)	0.0	Enforcing contracts (rank)	10
Cost (% of income per capita)	89.0	Private bureau coverage (% of adults)	59.2	Procedures (number)	36
				Time (days)	270
✓ Getting electricity (rank)	117	Protecting investors (rank)	115	Cost (% of claim)	13.4
Procedures (number)	5	Extent of disclosure index (0–10)	6		
Time (days)	162	Extent of director liability index (0–10)	2	Resolving insolvency (rank)	55
Cost (% of income per capita)	293.8	Ease of shareholder suits index (0–10)	6	Time (years)	2.0
		Strength of investor protection index (0–10)	4.7	Cost (% of estate)	9
				Recovery rate (cents on the dollar)	42.8
		Paying taxes (rank)	56		
		Payments (number per year)	7		
		Time (hours per year)	177		
		Total tax rate (% of profit)	50.7		

Source: World Bank, Doing Business

In the case of Russia, there has been stressed the following:

- **Starting a business:** Russia made starting a business easier by abolishing the requirement to have the bank signature card notarized before opening a company bank account.
- **Dealing with construction permits:** Russia made dealing with construction permits easier by eliminating several requirements for project approvals from government agencies and by reducing the time required to register a new building.
- **Getting electricity:** Russia made getting electricity simpler and less costly by setting standard connection tariffs and eliminating many procedures previously required.
- **Registering property:** Russia made transferring property easier by streamlining procedures and implementing effective time limits for processing transfer applications.

- **Trading across borders:** Russia made trading across borders easier by implementing an electronic system for submitting export and import documents and by reducing the number of physical inspections.

Put differently, the country became less bureaucratic in these five pillars reflecting several activities. That is, Russia created a more attractive business environment in these fields. Therefore, it is important to analyze whether a country implementing reforms in each pillar become more or less bureaucratic. This can be derived from the comparison of the *procedures* and the *time* required to perform a business activity. Furthermore, it is important to analyze the Russia's doing business scores compared with the BS-10 states, the average of 28 member states of European Union and the United States of America and the BRIC Countries, in 2014.

Tables 3.4 and 3.5 show procedures required to perform activities in six pillars (starting a business, dealing with construction permits, registering property, paying taxes, trading across borders (documents required to export and import) and enforcing contracts) in Russia compared with the BS-10 states, the average of 28 member states of European Union and the United States of America, and the BRIC countries, respectively, in 2014.

As shown in **Table 3.4**, the best performer among the BS-10 states and thus the less bureaucratic country is Georgia, as in general not many procedures are required to start a business (2), to deal with construction permits (9), to register property (1), to pay taxes (5) and to trade across borders (4 documents to export and import). Its procedures are much less than these ones of the average of the average of BS-10 states, the 28 member states of European Union and of the U.S.A.. Other relatively less bureaucratic countries related to the average of the BS-10 are Armenia and Bulgaria.

The worst performer and thus the least bureaucratic country among the BS-10 states is Russia, as in general many procedures are required to start a business (7), to deal with construction permits (36) and to trade across borders (9 documents to export and 10 documents to import). Other relatively more bureaucratic countries related to the average of the BS-10 are Azerbaijan and Greece.

The BS-10 states, in total and on average, except from Georgia, are far more bureaucratic than the average of 28 member states of European Union and the United States of America. So, these countries have less attractive business environment in terms of procedures required compared with the average of 28 member states of European Union and the United States of America.

Table 3.4: Russian Federation’s Performance on the EDB compared with BS-10, EU-28 and the U.S.A. in terms of Bureaucracy (procedures)

	Start a business (procedures)	Dealing with construction permits (procedures)	Registering property (procedures)	Paying taxes (number per year)	Documents to export	Documents to import	Enforcing contracts (procedures)
Armenia	2	21	3	10	5	8	49
Greece	5	19	11	8	4	6	39
Azerbaijan	3	28	4	18	9	11	40
Bulgaria	4	18	7	13	4	5	38
Georgia	2	9	1	5	4	4	33
Moldova	6	26	5	31	7	8	31
Romania	5	15	8	39	5	6	32
Russian Federation	7	36	4	7	9	10	36
Turkey	6	20	6	11	7	8	36
Ukraine	6	10	8	28	6	8	30
BS-10 average	4,6	20,2	5,7	17,0	6,0	7,4	36,4
EU-28	5,4	14,0	5,0	12,5	4,7	5,3	32,3
U.S.A.	6,0	16,0	4,0	11,0	3,0	5,0	32,0

Source: World Bank, Doing Business Data, and author's calculations

Notes: The best performer is highlighted in yellow colour and the worst performer is highlighted in red colour. The less the number of procedures, the better the performance (less bureaucratic).

As shown in **Table 3.5**, the best performer among the BRIC countries and thus the less bureaucratic country is Russia, as in general less procedures are required to start a business (7), to register property (4), to pay taxes (7) and to enforce contracts (36). Its procedures are similar to these ones of China.

The worst performer and thus the least bureaucratic country among the BRIC countries is India, as in general many procedures are required to start a business (12), to deal with construction permits (35), to pay taxes (33), to trade across borders (9 documents to export and 11 documents to import) and to enforce contracts (46).

Therefore, the less bureaucratic countries are Russian Federation and China, and the more bureaucratic one in India, reflecting their business environment in terms of procedures required to perform a business activity. But still, BRIC's scores are much smaller than these ones of the average of 28 member states of European Union and the United States of America.

Table 3.5: Russian Federation's Performance on the EDB compared with BRIC countries in terms of Bureaucracy (procedures)

	Start a business (procedures)	Dealing with construction permits (procedures)	Registering property (procedures)	Paying taxes (number per year)	Documents to export	Documents to import	Enforcing contracts (procedures)
Brazil	13	15	14	9	6	8	44
Russian Federation	7	36	4	7	9	10	36
India	12	35	5	33	9	11	46
China	13	25	4	7	8	5	37

Source: World Bank, Doing Business Data

Notes: The best performer is highlighted in yellow colour and the worst performer is highlighted in red colour. The less the number of procedures, the better the performance (less bureaucratic).

Tables 3.6 and 3.7 show time required to perform activities in six pillars (starting a business, dealing with construction permits, registering property, paying taxes, trading across borders (time required to export and import), enforcing contracts and resolving insolvency) in Russia compared with the BS-10 states, the average of 28 member states of European Union and the United States of America, and the BRIC countries, respectively, in 2014.

As shown in **Table 3.6**, the best performer among the BS-10 states and thus the less bureaucratic country is again Georgia, as in general not many time is required to start a business (2 days), to deal with construction permits (73.5 days), to register property (2 days), to trade across borders (9 days to export and 10 days to import) and to resolve insolvency (2 years). Its procedures are much less than these ones of the average of the average of BS-10 states, the 28 member states of European Union and of the U.S.A.. Another relatively less bureaucratic countries related to the average of the BS-10 is Armenia.

The worst performer and thus the least bureaucratic country among the BS-10 states is difficult to be defined as many countries have mixed good and bad scores. It should be noted that in Greece 1,300 days (almost four years) required to enforce the contracts which is disappointing and creates unattractive business environment.

The BS-10 states, in total and on average, except from Georgia, are far more bureaucratic than the average of 28 member states of European Union and the United States of America. So, these countries have less attractive business environment in terms of procedures required compared with the average of 28 member states of European Union and the United States of America.

Table 3.6: Russian Federation's Performance on the EDB in relation to BS-10 in terms of Bureaucracy (time)

	Start a business (days)	Dealing with construction permits (days)	Registering property (days)	Paying taxes (hours per year)	Time to export (days)	Time to import (days)	Enforcing contracts (days)	Resolving insolvency (years)
Armenia	4	84	7	380	16	18	570	1,9
Greece	14	105	20	193	16	15	1.300	3,5
Azerbaijan	7	212	11	214	28	25	237	2,3
Bulgaria	18	104	14	454	20	17	564	3,3
Georgia	2	73,5	2	280	9	10	285	2,0
Moldova	7	291	5	181	32	35	337	2,8
Romania	8,5	287	20	200	13	13	512	3,3
Russian Federation	15	297	22	177	22	21	270	2,0
Turkey	6	164	6	226	13	14	420	3,3
Ukraine	21	73	45	390	29	28	378	2,9
BS-10 average	10,3	169,1	15,2	269,5	19,8	19,6	487,3	2,7
EU-28	12,9	178,8	27,7	192,6	11,8	10,6	565,8	2
U.S.A.	5,0	91,0	12,0	175,0	6,0	5,0	370,0	2.7

Source: World Bank, Doing Business Data, and author's calculations

Notes: The best performer is highlighted in yellow colour and the worst performer is highlighted in red colour. The less the time needed, the better the performance (less bureaucratic).

As shown in **Table 3.7**, the best performer among the BRIC countries and thus the less bureaucratic country is Russia, as in general less time is required to start a business (15 days), to register property 2 days), to pay taxes (177 hours per year), to enforce contracts (270 days) and to resolve insolvency (2 years). The second best performer is China.

The worst performer and thus the least bureaucratic country among the BRIC countries is Brazil, as in general many time is required to start a business (107.5 days), to deal with construction permits (400 days), to pay taxes (2,600 hours per year), to enforce contracts (731 days) and to resolve insolvency (4 years).

Also, it should be noted that in Greece 2,600 hours (almost three months) required pay taxes and in India 1,420 days (almost four years) require to enforce contracts, which function as a deterrent in a healthy business environment.

Therefore, the less bureaucratic countries are Russian Federation and China, and the more bureaucratic one in Brazil, reflecting their business environment in terms of time required to perform a business activity. But still, BRIC's scores are much smaller than these ones of the average of 28 member states of European Union and the United States of America.

Table 3.7: Russian Federation's Performance on the EDB compared with BRIC countries in terms of Bureaucracy (time)

	Start a business (days)	Dealing with construction permits (days)	Registering property (days)	Paying taxes (hours per year)	Time to export (days)	Time to import (days)	Enforcing contracts (days)	Resolving insolvency (years)
Brazil	107.5	400	30	2,600	13	17	731	4
Russian Federation	15	297	22	177	22	21	270	2,0
India	27	168	44	243	16	20	1,420	4.3
China	33	270	29	318	21	24	406	1,7

Source: World Bank, Doing Business Data

Notes: The best performer is highlighted in yellow colour and the worst performer is highlighted in red colour. The less the number of procedures, the better the performance (less bureaucratic).

4 EMPIRICAL EVIDENCE

4.1 EASE OF DOING BUSINESS

4.1.1 Ease of Doing Business in Russian Federation

To this end, we shall compute the **relative ranking** for each field. For example, suppose that country A attains a rank of 50 out of 100 countries, while Country B receives a rank of 50 out of 60 countries. The question is which ranking is better. In both cases, there are 49 (=50-1) countries that received a better ranking than either Country A or country B. However, in the case of Country A there are 49% (=49/100) of the countries with a better rank than country A, while in the case of Country B there are 81.66% (=49/60) of countries that received a better rank than country B. So, obviously the rank of country A was better.

Table 4.1 shows the relative ranks of the BRICs based on Ease of Doing Business report for 2012. So, the best performance of Russia was in the field of *enforcing contracts*, where only a 4.7% of countries, i.e. 9 (=0.047×189) countries had a better rank than Russia. The next best performance of Russia was in the field of *registering property*, where only a 8.5% of countries, i.e. 16 (=0.085×189) countries had a better rank than it, and third best performance of Russia was in the field of *resolving insolvency*, where only a 28.5% of countries, i.e. 54 (=0.2857×189) countries had a better rank than it.

When it comes to the worst performance, Russia fared worst in *dealing with construction permits*, where 93.6% of countries, i.e. 177 (=0.936×189) countries had a better rank in this field than Russia. The next worst performance of Russia was in the field of *trading across borders*, where 82.5% of countries, i.e. 156 (=0.852×189) countries had a better rank than it, and third worst performance of Russia was in the field of *getting electricity*, where 61.38% of countries, i.e. 116 (=0.6138×189) countries had a better rank than it.

Then, we see that Russia outperformed the remaining of the BRICs in the following five topics: starting a business, registering property, paying taxes, enforcing contracts, and resolving insolvency. In the remaining topics, Brazil had the best performance in *dealing with construction permits* and *getting electricity*, India had the best performance in *getting credit*, and *protecting investors*, and China had the best performance in *trading across borders*.

Table 4.1: Ease of Doing Business Relative Rankings in 2012

Country	Ease of Doing Business	Starting a Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Resolving Insolvency	Getting Credit
Brazil	60,85%	64,55%	68,25%	6,88%	56,08%	41,80%	83,60%	65,08%	63,49%	70,90%	57,14%
Russian Federation	48,15%	46,03%	93,65%	61,38%	8,47%	60,32%	29,10%	82,54%	4,76%	28,57%	57,14%
India	70,37%	94,18%	95,77%	58,20%	48,15%	17,46%	83,07%	69,31%	97,88%	63,49%	14,29%
China	50,26%	83,07%	97,35%	62,43%	24,87%	51,32%	62,96%	38,62%	9,52%	40,74%	38,10%

Source: World Bank, Doing Business Data and author's calculations

4.1.2 The Effect of Ease of Doing Business on per Capita GDP and FDI inflows

Table 4.2 reports the estimation results concerning the effects of the ease of doing business index on the following macroeconomic variables: (a) GDP per capita (in constant 2005 US\$); and (b) FDI net inflows (as a % of GDP).

The first part of the table shows the coefficient estimates with robust standard errors, that is, a correction for heteroscedasticity has taken place. In the diagnostic results, we report the adjusted R^2 , the F statistic and its significance value, and a test statistic for the Breusch-Pagan test of heteroscedasticity. We test for heteroscedasticity using the Breusch-Pagan (1979) test. Assuming that the disturbance terms are normally distributed, then if they are homoscedastic and if the sample size n increases indefinitely, the test statistic follows the chi-square distribution with $m - 1$ degrees of freedom, where m are the number of variables in the auxiliary regression. If the p-value of the Breusch-Pagan theta estimate is greater than 5%, we reject the null hypothesis of homoscedasticity in favor of the heteroscedasticity alternative.

We start with the effect of Ease of Doing Business index in 2012 on the per capita real GDP in 2013 (Column 2, **Table 4.2**). The estimated results show that for every unit improvement in the ranking (as the rank decreases by one unit) per capita real GDP increases by \$173.27. These results have been corrected for the presence of heteroscedastic errors, since the probability value of the Breusch-Pagan theta test statistic was almost zero.

To see if there is any differentiating effect of the *Ease of Doing Business index* on the per capita GDP among various groups of countries, we make use of three slope-dummy variables. Specifically, the following four income groups will be considered: (a) Group 1 with low-income countries; (b) Group 2 with lower-middle income countries; (c) Group 3 with upper-middle income countries; and (d) Group 4 with upper income (see **Figure 4.1**, Appendix). To capture the presence of these four different groups we construct the dummy variables \mathbf{dum}_k , for groups $k = 2,3,4$, which take on the following values: $\mathbf{dum}_k = 1$ if country i belongs to the k th income group and zero otherwise.

So the third column of **Table 4.2** presents the results from estimating a model with the three slope-dummies and the explanatory variable of the *Ease of Doing Business index*. The estimated results show that in *low-income* countries, i.e. when $\mathbf{dum}_2 = \mathbf{dum}_3 = \mathbf{dum}_4 = \mathbf{0}$, for every unit improvement in the EDB ranking (as the rank decreases by one unit) real per capita GDP is expected to increase by \$152.45. Again these results have been corrected for the presence of heteroscedastic errors. Then, in the case of *lower-middle income* countries, i.e. when $\mathbf{dum}_2 = \mathbf{1}$ and $\mathbf{dum}_3 = \mathbf{dum}_4 = \mathbf{0}$, the estimated coefficient for the slope-dummy *Ease of Doing Business_Dum2* is -23.10, but it is not statistically significant. Therefore, in lower-middle income countries for every unit improvement in the EDB ranking (as the rank decreases by one unit) real per capita GDP is expected to increase by \$152.45, as in the case of low income countries. The same holds, in the case of *upper-middle income* countries, i.e. when $\mathbf{dum}_3 = \mathbf{1}$ and $\mathbf{dum}_2 = \mathbf{dum}_4 = \mathbf{0}$, the estimated coefficient for the slope-dummy *Ease of Doing Business_Dum3* is -19.35, but it is not statistically significant. Hence, in upper-middle income countries for every unit improvement in the EDB ranking (as the rank decreases by one unit) real per capita GDP is expected to increase by \$152.45, as in the case of low income countries.

However in the case of *high income* countries, i.e. when $\mathbf{dum}_4 = \mathbf{1}$ and $\mathbf{dum}_2 = \mathbf{dum}_3 = \mathbf{0}$, the estimated coefficient for the slope-dummy *Ease of Doing Business_Dum4* is 102.35, and it is statistically significant. Hence, in high income countries for every unit improvement in the EDB ranking (as the rank decreases by one unit) real per capita GDP is expected to increase by just \$50.10 ($=\$152.45 - \102.35), as in the case of low income countries.

Then we continue with the effect of Ease of Doing Business index in 2012 on FDI inflows as a percentage of GDP (Column 4, **Table 4.2**). The estimated results show that for every unit improvement in the ranking (as the rank decreases by one unit) FDI inflows as a percentage of GDP is expected to increase by 0.0141 percentage points, but this estimate is not statistically significant. Further, the p-value of the F-statistic shows that the model does not fit the data well and it should be discarded. These results have been corrected for the presence of heteroscedastic errors, since the probability value of the Breusch-Pagan theta test statistic (32.97) was almost zero.

Like in the previous case, we examine if there are any differentiating effects of the *Ease of Doing Business index* on the FDI inflows among now three groups of countries (see **Figure 4.2**, Appendix). Specifically, the following three income groups will be considered: (a) Group 1 low-income and lower-middle income countries; (b) Group 2 with upper-middle income countries; and (c) Group 3 with upper income.

So the last column of **Table 4.2** presents the results from estimating a model with the two slope-dummies and the explanatory variable of the *Ease of Doing Business index*. The estimated results show that in *low-income* and *lower-middle* countries, i.e. when $\mathbf{dum}_2 = \mathbf{dum}_3 = \mathbf{0}$, for every unit improvement in the EDB ranking (as the rank decreases by one unit) FDI inflows are expected to increase by 0.0197 percentage points of GDP, but this estimate is not statistically significant, and hence the estimated effect on FDI inflows is assumed to be nil. In the case of *upper-middle income* countries, i.e. when $\mathbf{dum}_2 = \mathbf{1}$ and $\mathbf{dum}_1 = \mathbf{dum}_3 = \mathbf{0}$, the estimated coefficient for the slope-dummy *Ease of Doing Business_Dum3* is 0.0082, but it is

not statistically significant. Therefore, for upper-middle income countries an improvement in the EDB ranking (as the rank decreases by one unit) is not expected to affect FDI inflows.

However in the case of *high income* countries, i.e. when $\mathbf{dum}_3 = 1$ and $\mathbf{dum}_1 = \mathbf{dum}_2 = 0$, the estimated coefficient for the slope-dummy *Ease of Doing Business_Dum4* is -0.0339, and it is statistically significant. Hence, in high income countries for every unit improvement in the EDB ranking (as the rank decreases by one unit) FDI inflows are expected to increase by 0.0339 percentage points of GDP.

Table 4.2: Regression Results for the Effect of Ease of Doing Business Index on Macroeconomic Variables

MACROECONOMIC VARIABLES				
	GDP per Capita (constant 2005 US\$)		FDI Inflows (% of GDP)	
Constant	26.345,12*	24.403,88*	4.5888*	5.22*
Ease of Doing Business	-173.27*	-152.45*	-0.0141	-0.0196
Ease of Doing Business × Dum2	-	-23.10	-	-
Ease of Doing Business × Dum3	-	-19.35	-	0.0082
Ease of Doing Business × Dum4	-	102.35*	-	-0.0339*
DIAGNOSTICS				
Adj. R ²	0.3967	0.4247	0.0041	
F	108.48 (0.000)	32.02 (0.000)	1.31 (0.25)	2.46 (0.0695)
N	167	167	78	78
Breusch-Pagan Test Statistic (prob.)	68.31 (0.000)		32.97(0.000)	

Note: The parenthesis in the diagnostics data contain the p-values of the estimates

4.2 GLOBAL COMPETITIVENESS

As in the previous section, we shall examine the effects of the competitiveness, as this is captured by the countries' rank on the Global Competitiveness Index 2011-2012 on certain macroeconomic variables in 2013.

4.2.1 The Effect of Competitiveness on per Capita GDP and FDI inflows

Table 4.3 reports the estimation results concerning the effects of the economy's competitiveness on GDP per capita (in constant 2005 US\$); and FDI net inflows (as a % of GDP).

Column 2, of **Table 4.3** presents the results from the effect of global competitiveness in 2013 on the per capita real GDP in 2013. The results show that for every unit improvement in the ranking (as the rank decreases by one unit) per capita real GDP is expected to increase by \$548.32 (compared with \$173.27 in the case of Ease of Doing Business Index). From the value of the theta statistic there is no evidence of heteroscedastic errors, since the probability value of the Breusch-Pagan theta test statistic was 76.16%.

To see if there is any differentiating effect of the *Global Competitiveness Index* on the per capita GDP among various groups of countries, we make use just one slope-dummy variable for the justification of the two-group selection (see **Figure 4.3**, Appendix). Specifically, the following two income groups will be considered: (a) Group 1, which includes low-income countries, lower-middle income countries, and with upper-middle income countries; and (b) Group 2 which include upper-income countries. To capture the presence of these two different income groups we construct the dummy variable **dum₅** which takes on the value 1 if the country belongs to the high-income group and zero otherwise.

So the third column of **Table 4.3** shows the estimates from model containing one slope-dummy and as an explanatory variable of the countries' ranking on the Global Competitiveness Index. The estimated results show that all countries expect *high-income* countries, i.e. when **dum₅ = 0**, for every unit improvement in the GCI ranking (as the rank decreases by one unit) real per capita GDP is expected to increase by \$573.76. In the case of *high income* countries, i.e. when **dum₅ = 1**, the estimated coefficient for the slope-dummy *Competitiveness_Dum5* is 155.13, and it is statistically significant at the 10% level of significance. Hence, when the high-income countries are concerned, every unit improvement in the GCI ranking (as the rank decreases by one unit) real per capita GDP is expected to increase by \$418.63 (= \$573.76 - \$155.13).

Finally, as in the case of the ease of doing business index, the effect of a country's competitiveness in the period 2011-2012 on FDI inflows as a percentage of GDP was not statistically significant (Column 4, **Table 4.3**) (see **Figure 4.4**, Appendix).

Table 4.3: Regression Results for the Effect of Ease of Doing Business Index on Macroeconomic Variables

MACROECONOMIC VARIABLES			
	GDP per Capita (constant 2005 US\$)		FDI Inflows (% of GDP)
Constant	46.918,18*	45.068,58*	1.4695
Competitiveness	-548.33*	-573.76*	0.0314
Competitiveness × Dum5	-	155.13**	
DIAGNOSTICS			
Adj. R²	0.5358	0.5740	0.0049
F	42.55(0.000)	41.08 (0.000)	1.16 (0.2890)
N	37	37	34
Breusch-Pagan Test Statistic (prob.)	0.09 (0.7616)		0.00 (0.9460)

Note: The parenthesis in the diagnostics data contain the p-values of the estimates

5 POLICY RECOMMENDATIONS

“The Russian economy is at a crossroads It has tremendous potential but is still heavily reliant on volatile revenues from natural resources. It would do well to invest more in infrastructure, human capital and innovation, so that larger segments of society can partake in Russia’s transformation.” (OECD, 2014) These words announced by OECD Secretary-General Angel Gurría well summarize Russian Federation's contemporary economy and many of its future challenges in the framework of economic survey of Russian Federation. The survey was drawn up and published in the context of ongoing discussions on the Russia’s potential accession to the OECD.

As proved in the Chapters 2 and 3, Russia improved its scores in terms of competitiveness and attractiveness of the business environment. However, for some resource-based economies that have reached very high levels of income, the capacity to increase the productivity of any other sector beyond mineral production will be based on the country’s capacity to boost innovation, because adopting technology from abroad is not sufficient to increase productivity enough to sustain their high wage levels. At the same time, these countries can afford to invest in innovation, given their high income (Global Competitiveness Report, 2014-2015).

According to the economic survey by OECD, Russian Federation indicates that despite the fact that country's macroeconomic indicators have been improved, especially after world's economic recession, productivity and living standards are also still well below those of the most advanced market-oriented countries. (OECD, 2014)

Structural reforms to improve the business climate are key to raising potential growth and economic resilience. As energy prices stagnate and labour and capital become fully utilized, growth is falling behind pre-crisis rates. Making the economy stronger, more balanced, and less dependent on volatile rents from natural resource extraction is therefore a key challenge. This requires higher productivity growth and greater energy efficiency, both driven by competition, stronger investment and better matching of skills and jobs. The sequencing, political economy and implementation of structural reforms are all important. (OECD, 2014)

Establishing a transparent, coherent and predictable business climate would help chart a path for stronger growth. The Survey urges sustained and effective anti-corruption measures, greater judicial independence, and a reduction in barriers to market entry and competition. (OECD, 2014)

This leads us to policy recommendations for the improvement of the Russian's competitiveness, specific policies should be implemented (OECD, 2014):

- tackling transport bottlenecks by improving the efficiency of infrastructure spending, promoting competition in the transport sector and ensuring better policy coordination to address urban transport challenges. This is concerned with the 2nd pillar of the GCI, *Infrastructure*. Transport system bottlenecks pose barriers to more geographically balanced growth. (OECD, 2014) Data published by the World Bank in 2009 showed that spending on Russia's roads fell from 2.8% to 1.5% of GDP, compared with 3.5% spent by China. In 2010, work was completed on a motorway that links European Russia to its far east. The transport system is heavily Moscow-centered, with virtually all transportation channels of economic significance starting from Moscow (Global Competitiveness Report, 2012-2013)
- The Russian Federation has one of the highest shares of tertiary educated population in the world, but the education system has had difficulties supplying the right mix of skills for employers. The brain drain reached its peak in the late 1990s when scientists quitted Russia in teams and sometimes manages to preserve those teams in other countries (Soboleva, 2011). Russia is said to be facing a labor force crisis and it is set to lose 17 million skilled workers by 2030 (Pyatakov, 2012). Increased educational spending should be a priority, in particular in poorer regions, and restructuring of vocational and higher education institutions should continue, improving curricula and links with business. This is concerned with 5th pillar of the GCI, *Higher Education and Training*.
- The Russian labour market is very flexible. This helps to achieve low unemployment, but excessive labour turnover limits incentives to invest in human capital, which thwarts economic growth and can lead to higher inequalities. The Survey encourages more balanced dialogue between employers and labour, as well as strengthening lifelong learning, activation programs and temporary income support. This is concerned with the 7th pillar of the GCI, *Labour Market Efficiency*.
- broad-based support for the adoption of new technologies, including those beyond the high-tech sector, particularly to improve energy efficiency. It also urges finalizing public R&D sector reform. This is concerned with the 12th pillar of the GCI, *Innovation*. The survey continues, despite a long tradition of scientific excellence, Russia performs worse than most OECD countries in terms of scientific output and patents, which is partly linked to the unfinished reform of the public R&D sector. Firms rarely see innovation as part of their business model. Innovation policies have recently become more focused at firms but results are not yet visible. (OECD, 2014)

Finally, policy recommendations for increasing the attractiveness of the Russian's business environment are of the utmost importance. At this point, it should be stressed the synergies between the pillars of the Global Competitiveness Index and the Ease of Doing Business.

A changing factor in one pillar of one of the two indexes may affect the other index. Over the past decade governments worldwide have been actively improving the regulatory environment for domestic companies.

Most reforms relating to *Doing Business* topics have been nested in broader reform programs aimed at enhancing economic competitiveness, as Russian Federation. (Ease of Doing Business 2014)

So, when it comes to policy recommendations for the improvement of business environment specific, some problems should be identified and resolved (OECD, 2014) :

- The authorities seem to have become more energetic on fighting corruption and strengthening the legal protection of businesses. However, capital outflows and the low market valuation of Russian companies suggest that business is not yet fully convinced. This is concerned with 6th pillar of the EDB, *Protecting Investors*.
- Law enforcement appears to be uneven, whistleblower protection is weak, and civil society organizations and non-aligned media face constraints. This is concerned with 9th pillar of the EDB, *Enforcing Contracts*.
- Red tape has been reduced, and recently adopted federal initiatives tackle many administrative barriers, but there has been less progress on the regional level. This is concerned with 1st pillar of the EDB, *Starting a Business*, 2nd pillar of the EDB, *Dealing with Construction Permits*, 4th pillar: *Registering Property*, 5th pillar of EDB, *Getting Credit* and 7th pillar of EDB, *Paying Taxes*.
- Governance of state-owned enterprises has improved somewhat, but privatization plans were recently downsized. Notwithstanding WTO accession in 2012, market opening is meeting resistance. This is concerned with 6th pillar of the EDB, *Trading Across Borders*. (OECD, 2014)

6 CONCLUSIONS

Understanding that the role of the competitiveness and the business environment is important for several actors as well as the factors that enhance Russian Federation's prospects were discussed in the above study. By using two indexes, the Global Competitiveness Index (GCI) and the Ease of Doing Business (EDB) Index we can easily perceive the importance of the competitiveness and the business environment, respectively.

The Russian Federation's competitiveness is placed at 53rd position out of 144 countries with some improvements related to the efficiency of goods markets (in particular domestic competition), ICT use, and business sophistication. But still today, the Russian economy continues to face many deeply rooted challenges that will have to be addressed for the country to strengthen its competitiveness. Russia's weak and inefficient institutional framework (97th) remains its Achilles heel and will require a major overhaul in order to eradicate corruption and favoritism (92nd) and re-establish trust in the independence of the judiciary (109th). Diversification of the economy will need reinforcing the very small and small-to-medium enterprises sector as well as continued progress toward a stronger and more stable financial system (110th). These challenges prevent Russia from taking advantage of its competitiveness strengths, which are based on a well-educated population, fairly high levels of ICT use (47th), and its solid potential for innovation (65th). (Global Competitiveness Report, 2014-2015)

Weak institutions and network structures impede the entrepreneurial development in Russia in comparison with the rest of the world. One reason for this was the absence of property rights. The enforcement of property rights is also a major barrier for business development in Russia, with violations common and the business community often opting for informal resolution of conflicts rather than using formal institutions (Aidis and Adachi, 2005). The formal institutional environment in Russia has long been identified as the primary obstacle to entrepreneurship development (Djankov *et al.*, 2002). It was also seen that in Russia's Judicial System is not independent from the state (ICJ, 2012).

A major asset of the Russian economy is obviously the country's large domestic market, which is a pole of attraction for foreign investors. Russia is a huge and growing market for imported agricultural products (USDA, 2012).

The Russian Federation's business environment is placed at 92nd position out of 144 countries with significant improvements related to the starting a business (88th), dealing with construction permits (178th), getting electricity (178th), registering property (17th) and trading across borders (157). But again, as in the case of competitiveness, there are concerns about the doing business challenges in the country. Despite the reforms taken place the previous years in these fields, Russia faces problems to further attract new

entrepreneurs as for the most part has not used the recent spell of high growth to implement the structural reforms needed to boost productivity and build competitiveness. The necessary reforms are crucial to improve the business climate, so problems such as getting credit (109th) and protecting investors (115th) should be solved. (Ease of Doing Business, 2014)

The overall performance of Russia has been close to the average of the BS-10 states, but much less than the average of the 28 member states of the European Union and the United States of America. Compared with the BRIC economies, China is the absolute winner in terms of competitiveness (28th) followed by Russian Federation. Things change when it comes for the business environments, as Russia continues to lead the BRIC economies, marginally followed by China (96th). These results highlight how important it will be not only for Russia, but for the BS-10 and the emerging economies to promptly and efficiently implement structural reforms. (Global Competitiveness Report, 2014-2015)

When it comes to the effect of the EDB on the per capita GDP, it was seen that the lower the ranking on the index, i.e. easier it is to make business, the higher the per capita real GDP. One interest finding of the research was that this beneficial effect of the Ease of Doing Business is three times more important in low-income countries than in high-income countries. Also, when it comes to the effect of the GCI on the per capita GDP, it was seen that the lower the ranking on the index, the higher the per capita real GDP, which is much greater compared with this one in the case of EDB. Therefore, another interest finding of the research was that the positive effect of competitiveness on per capita GDP is almost five times than the effect of the business environment and again, the impact of the Global Competitiveness Index was beneficial for the high-income countries.

When all countries were taken into consideration, no evidence was found on the existence of a relationship between the EDB and FDI net inflows into the country, and the same applies for the relationship between the GCI and FDI net inflows. However, when income-group membership was taken into consideration, it was found that the improvement of EDB ranking had a beneficial effect on FDI inflows (as a percentage of GDP) only in the case of high-income countries.

The remain questions are how all these implications affect the competitiveness and the doing business in Russian Federation. Further investigation has to be done how changes in these indexes affect the per capita GDP and the FDI inflows. Therefore, the findings of the study will need to be updated annually to keep pace with the changes occurring within the two indexes, GCI and EDB. Additionally, a replication of this study in a different approach including more macroeconomic indicators may have other results. The findings of such surveys may have important implications for the policymakers in multilateral policy organizations, who must focus on designing a more business-friendly environment, especially in the low-income countries.

REFERENCES

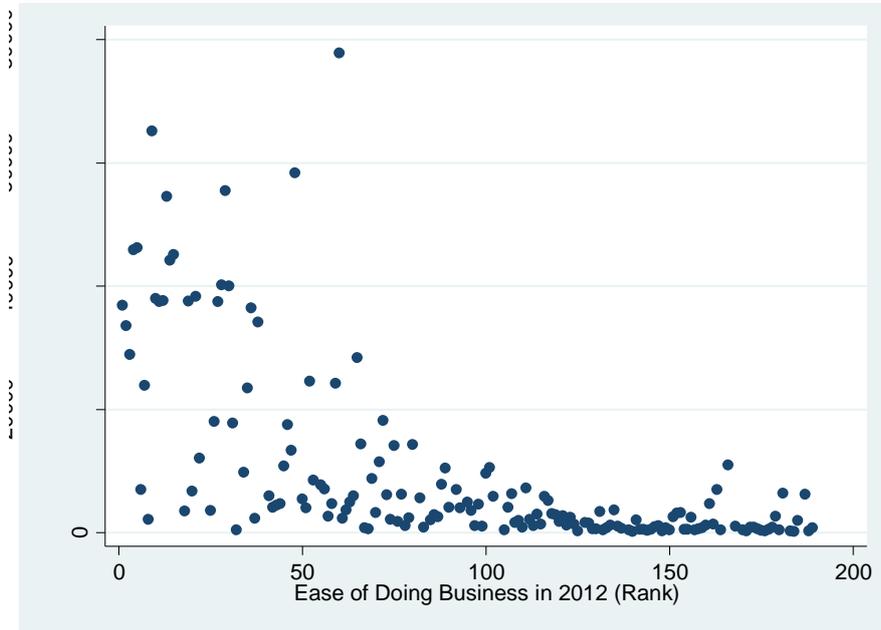
- Aiginger, K. (2006). "Competitiveness: From a Dangerous Obsession to a Welfare Creating Ability with Positive Externalities" *J Ind Compet Trade*, 6:161-177.
- Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. (2002). "The Regulation of Entry" *The Quarterly Journal of Economics*, 67:1- 37.
- Fagerberg S. (1996). "Technology and Competitiveness" *Oxford Review of Economic Policy*, 12:39-51.
- ICJ (2010). "The State of the Judiciary in Russia", Report of The International Commission of Jurists Research Mission on Judicial Reform To the Russian Federation, 20-24 June 2010
- IMD (2011). *World Competitiveness Yearbook*.
- Krugman, P. (1994). "Competitiveness: A Dangerous Obsession." *Foreign Affairs*, March/April.
- Neary P. (2006). "Measuring Competitiveness The Economic and Social Review." 37, (2):115-134.
- OECD (2014). Russian Economy Growing But Further Reforms Needed, Retrieved July 25th 2014 from OECD: <http://www.oecd.org/russia/russian-economy-growing-but-further-reforms-needed.htm>
- Pyatakov, S. (2012). *Russia will plug brain drain with foreign labor by 2030 -report*, Retrieved July 27th, 2014 from RIA Novosti: <http://rt.com/news/prime-time/russia-foreign-force-hays-report-163/>
- Soboleva, I. (2011). "Patterns of Human Capital Development in Russia: Meeting the Challenge of Market Reforms and Globalization" *International Journal of Institutions and Economies Human Capital Development in Russia* 235, Vol. 3, No. 2, July 2011, pp. 235-257.
- The World Bank (2004). *Doing Business in 2004 Understanding Regulation*.
- The World Bank (2005). *Doing Business in 2005 Removing Obstacles to Growth*.
- The World Bank (2006). *Doing Business in 2006 Creating Jobs*.
- The World Bank (2007). *Doing Business 2007 How to Reform*.
- The World Bank (2008). *Doing Business 2008*.
- The World Bank (2009). *Doing Business 2009*.
- The World Bank (2010). *Doing Business 2010 Reforming through Difficult Times*.
- The World Bank (2011). *Doing Business 2011 Making a Difference for Entrepreneurs*.
- The World Bank (2012). *Doing Business 2012 Doing business in a more transparent world*.
- The World Bank (2013). *Doing Business 2013 Smarter Regulations for Small and Medium-Size Enterprises*.
- The World Bank (2014). *Doing Business 2014 Understanding Regulations in for Small and Medium-Size Enterprises*.
- The World Bank (2014). *Doing Business 2014 Economy Profile: Russian Federation*.
- USDA (2012). *Global Agricultural Information Network*, Report Number: RS 1215
- World Bank (2012). *Russian Economic Report. Moderating Risks, Bolstering Growth*. World Bank, Spring.
- World Economic Forum (2001). *The Global Competitiveness Report 2001-02*.
- World Economic Forum (2002). *The Global Competitiveness Report 2002-03*.

World Economic Forum (2003). *The Global Competitiveness Report 2003-04*.
World Economic Forum (2004). *The Global Competitiveness Report 2004-05*.
World Economic Forum (2005). *The Global Competitiveness Report 2005-06*.
World Economic Forum (2006). *The Global Competitiveness Report 2006-07*.
World Economic Forum (2007). *The Global Competitiveness Report 2007-08*.
World Economic Forum (2008). *The Global Competitiveness Report 2008-09*.
World Economic Forum (2009). *The Global Competitiveness Report 2009-10*.
World Economic Forum (2010). *The Global Competitiveness Report 2010-11*.
World Economic Forum (2011). *The Global Competitiveness Report 2011-12*.
World Economic Forum (2012). *The Global Competitiveness Report 2012-13*.
World Economic Forum (2013). *The Global Competitiveness Report 2013-14*.
World Economic Forum (2014). *The Global Competitiveness Report 2014-15*.

APPENDIX

Figure 4.1: GDP per Capita and Ease of Doing Business Rank

Part A



Part B

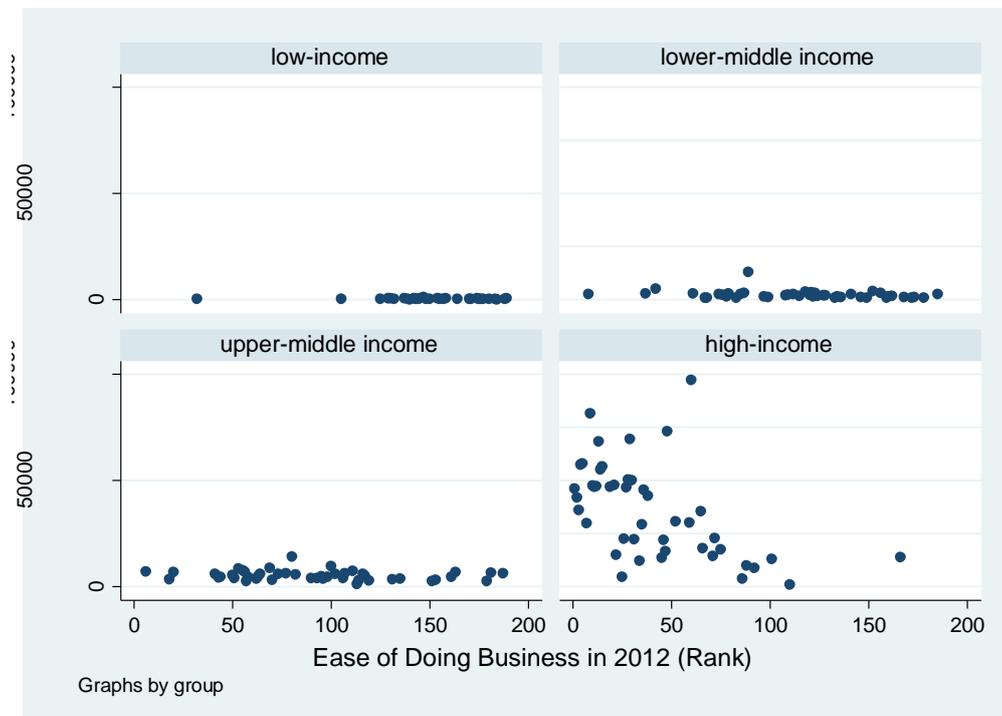
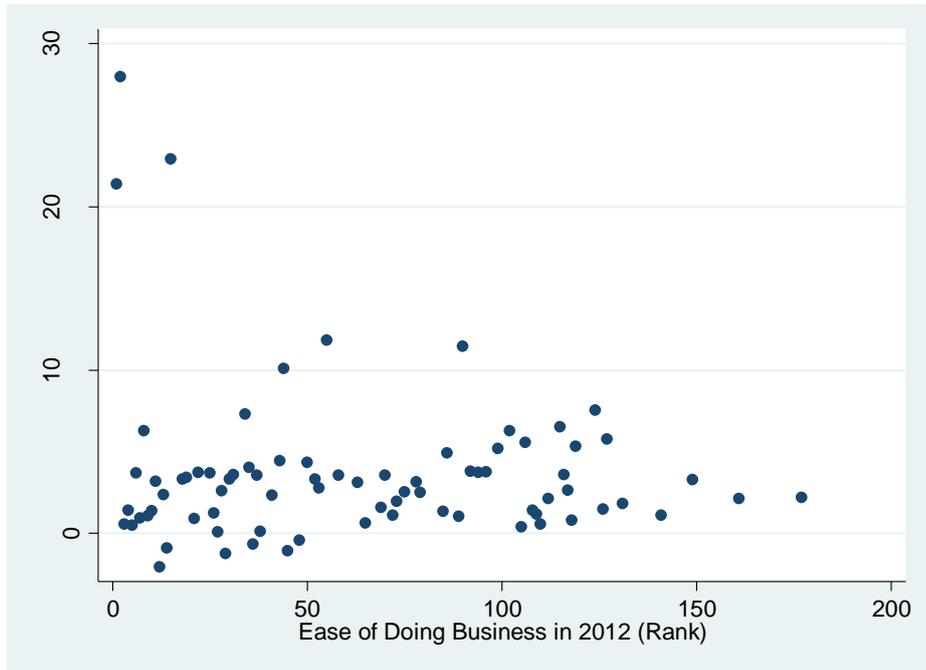


Figure 4.2: FDI and Ease of Doing Business Rank

Part A



Part B

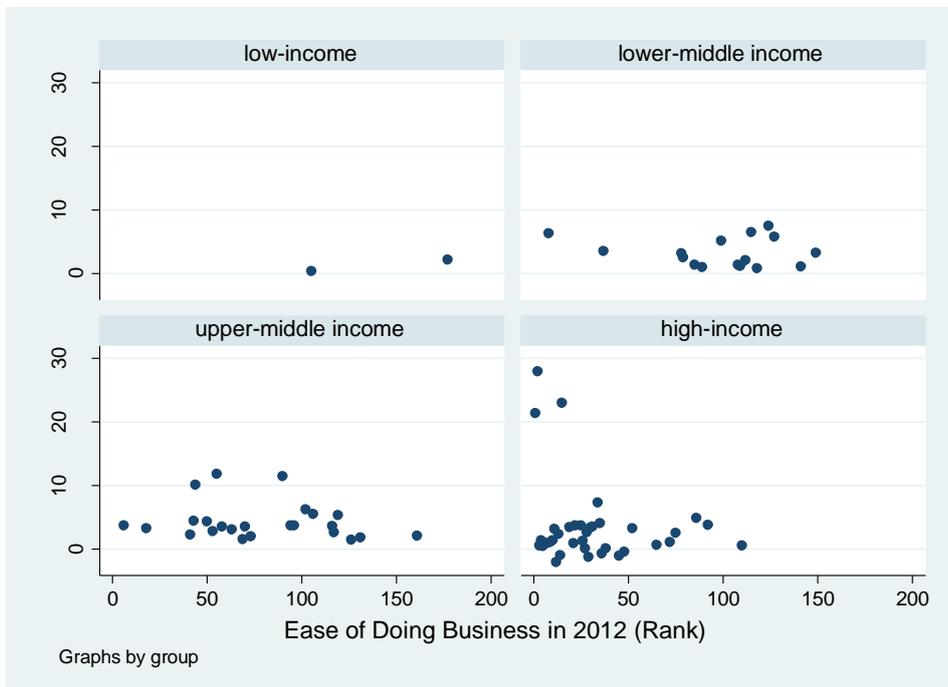
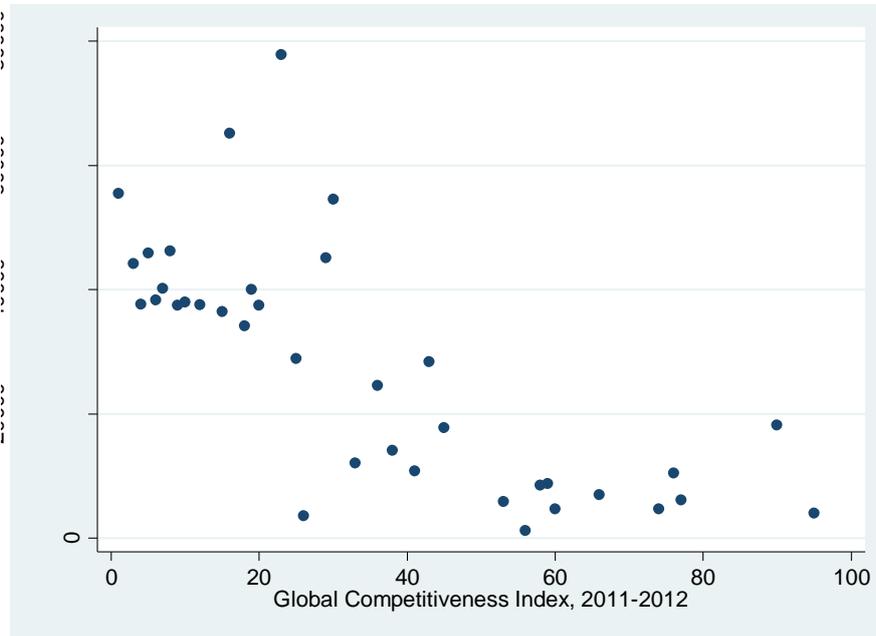


Figure 4.3: GDP per Capita and Competitiveness

Part A



Part B

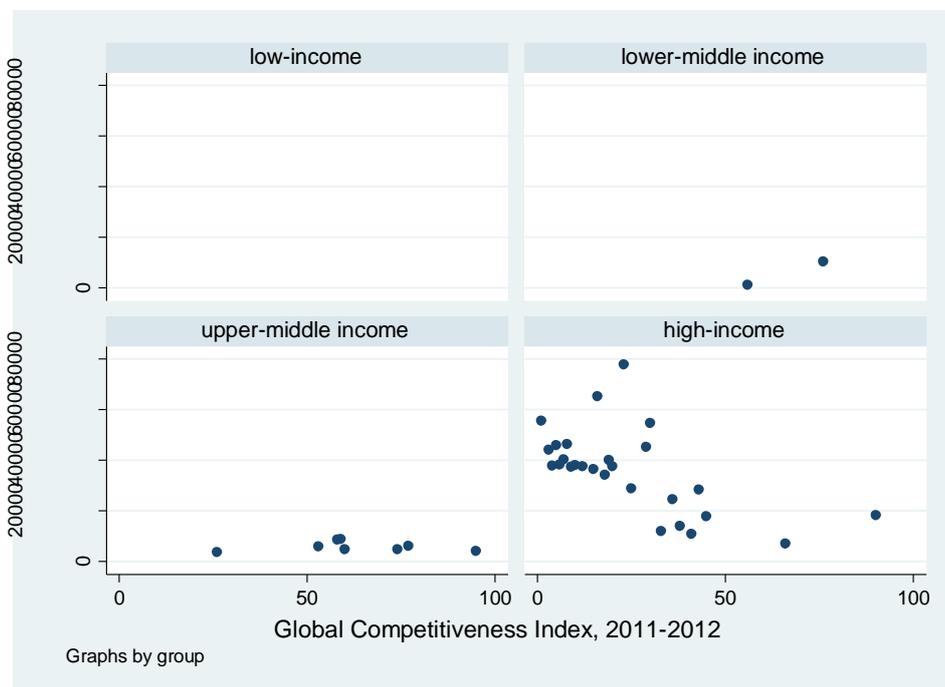
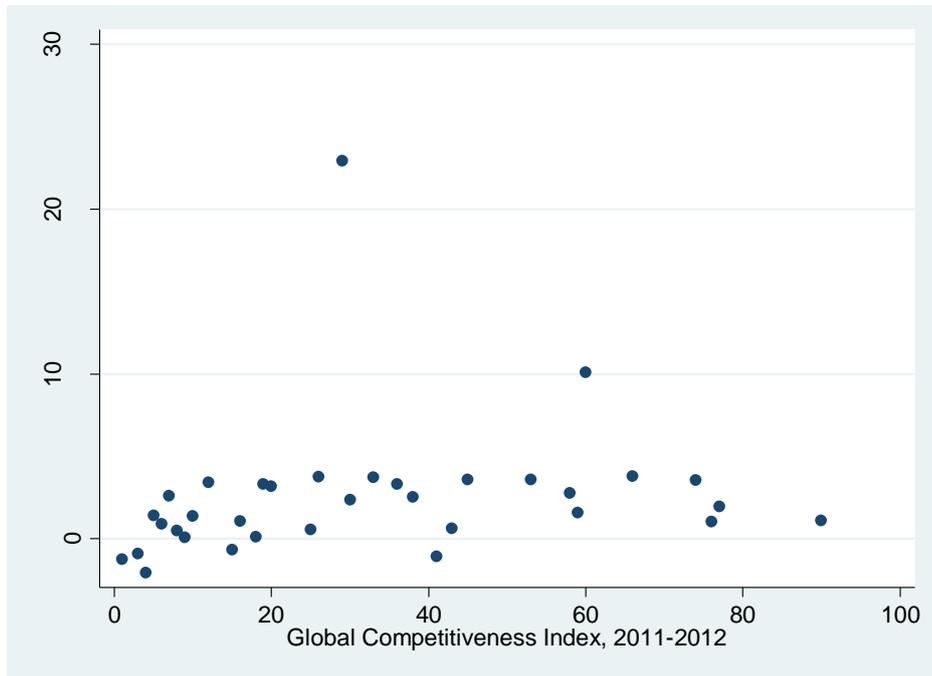


Figure 4.4: FDI Inflows and Competitiveness

Part A



Part B

