

**Charles University in Prague**

Faculty of Social Sciences

Institute of Economic Studies



**Foreign Direct Investment in Emerging Markets:  
Evidence from Russia since 2000s**

*Master's Thesis*

Author: Mgr. Mahir Suleymanov

Supervisor: prof. Ing. Oldřich Dědek CSc.

Years at matriculation: 2013/2015

## *Declaration of Authorship*

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Prague, January 14, 2015

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Signature

## **Acknowledgment**

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I am thankful to my supervisor Prof. Ing. Oldřich Dědek CSc. and my friends from the faculty for their comments and contribution during my research.

# Abstract

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The main purpose of this thesis work is to analyze the role of FDI in Russian economy and to find out the degree of impact on the economic growth. The empirical research captures 2000-2013 years specifying by quarterly time-series, which investigates the topic based on two hypotheses. These hypotheses mainly revolve over the role of FDI in the economy as a whole and by major economic sectors (financial sector, heavy industry sector and trade sector). The evidence outcomes of the investigation makes it clear that FDI does not always induce the economic growth by sectors, since due to the spillover effect, there is not a warranty that each sector gets equivalent positive impact from the inflow of FDI.

*Key words: Foreign Direct Investment, economic growth, transition economies, attractive sectors of economy.*

*JEL classification: F21 - International Investment • Long-Term Capital Movements.*

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# Master Thesis Proposal

Institute of Economic Studies  
Faculty of Social Sciences  
Charles University in Prague



<b>Author:</b>	<b>Mgr. Mahir Suleymanov</b>	Supervisor:	<b>Prof. Ing. Oldřich Dědek CSc.</b>
E-mail:	Mahir_suleymanov@mail.ru	E-mail:	dedek@fsv.cuni.cz
Phone:	775 181 417	Phone:	222 112 325
Specialization:	<i>Economics and Finance</i>	Defense Planned:	January 2015

## Proposed Topic:

**Foreign Direct Investment in Emerging Markets: Evidence from Russia since 2000s**

## Motivation:

The increasing importance of global FDI movements motivated modern economists to investigate its effects on economic growth. It appears very enthusiastic for a host country, since it relies on liberalization and openness of the economy. From commonly accepted point of view, FDI inflow into some industry considered positively. However, there are different convictions, which explains that in different developing countries it works differently and could have adverse effect on the economy in general. As a newly emerged market, since the collapse of the Soviet Union, Russia got a transition course toward the market economy and began to be interested in attraction of FDI. Especially, after a decade, in 2000s, economy started to recover and getting started its stability period. Thus, huge Russian economy become quite attractive for foreign investors.

In this thesis work, I would like to focus on FDI in Russia and investigate the role of direct foreign investment in economic growth process of Russian economy since 2000s, which will help to a reader to understand the positive and negative effects of FDI in evidence from Russia.

## Hypotheses:

**Hypothesis 1:** Whether the total FDI plays pivot role on sustainable economic growth in Russia for 2000-2013.

**Hypothesis 2:** Whether FDI have significant impact on GDP growth by major industries (heavy industry, finance and trade).

## Methodology:

The purpose of the empirical analysis strictly based on the determination whether the total FDI and FDI in the banking sector exerts distinguishing impact on an economic growth in Russia in 2000-2013 years. The model, which I apply, is almost the same model used by Carkovic M. – Levine R. (2002) and Alfaro L. et al. (2003). Initially as a benchmark for time-series, it is necessary to estimate the impact of FDI on economic growth. Therefore, we have to regress the following model by OLS:

$$GROWTH_t = \alpha_0 + \alpha_1 * INITIAL\_GDP_t + \alpha_2 * FDI\_total_t + \alpha_3 * CONTROLS_t + \epsilon_t \quad (1)$$

In the next step, my task is to estimate the FDI in three major economic sectors, as these three industries capture from 17 up to 58 percent of total FDI inflow in a country. Thus, I specified inflows of FDI for each sector and as following (Alfaro, L. 2003):

$$GROWTH_t = \alpha_0 + \alpha_1 * INITIAL\_GDP_t + \alpha_2 * FDI_t^H + \alpha_3 * FDI_t^F + \alpha_4 * FDI_t^T + \alpha_5 * CONTROLS_t + \varepsilon_t \quad (2)$$

#### Outline:

9. INTRODUCTION
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13. EMPIRICAL RESULTS
14. CONCLUSION
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**Author**

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**Supervisor**

# 1. Introduction

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Today the intensive investment inflow plays very substantial role in any economy and researches of the foreign direct investment stays on the focus point of the international economics. Russian economy also is not so far from the reality, whether in micro or macro level. On the other hand, although there are sizeable number of empirical researches on determinants of FDI, however, being a developing country, the Russian market still have not been studied enough in terms of perspectives for foreign investments.

Foreign Direct Investment (FDI) in Russia is specific, which determined by the complex relationships of the Russian economy with the international movement of capital, the relationships that have developed over twenty years ago at the beginning of the transition period. Foreign Direct Investment (FDI) in Russia is a specific case, which is determined by the complex relationships between the Russian economy and the international movement of capital, where the ties of relations have developed over twenty years ago at the beginning of the transition period. After the collapse of the Soviet Union, economy of the Russian Federation has faced with devastating damages in each field of economy. In the 90s, Russia experienced a sharp decline in domestic investment and massive capital outflow on the background of 99 extremely low attractiveness of the country for inbound foreign direct investment. However, since the Putin's seizure of power in early of 2000s, it was able to catch a stability in the country. Thus, in this paper I wanted to shed a light on the post-2000 period, which is considered as a period of recovery of the Russian Economy. Furthermore, it is necessary to note that in the 2000s, the transnationalization has become a significant parameter of market strategies of the subjects of the Russia, which was in a result of transformation of the Russian economy by involving mainly industry-related companies. As far as, each company has its own strategy on investing abroad, thus, each of them differs by its industrial structure and market strategy, which brought about the studying of the eclectic theory of transnationalization developed by John H. Dunning.

The large size of Russia was always interesting to investors, especially its domestic market capacity, geographical advantages, and skillful labor force compare to other developing countries. Since the openness of Russian markets for investors the amount of inflows radically changed and during a decade the ratio of fixed capital investments at actual prices increased 466 times (from 2.5 bln. of ruble in 1990, up to 1165.2 bln. of ruble in 2000 (*before 2000 - trln. roubles*)). Thus, the total volume of accumulated foreign investment in the Russian economy at the end of 2010 amounted higher than 300 bln. US dollars, which advances the previous year by 11.9%. However, the largest share in the accumulated foreign capital accounted for other investments made on a return basis - 58.3% (at the end of 2009. - 55.5%), the share of direct investments was 38.7% (40.7%), portfolio investment - 3.0% (3.8%).<sup>1</sup>

The main aim of this paper is to investigate the interregional and intersectional dependence of the FDI inflow in Russia and to found out the long-run relationship between FDI and its location-related determinants since 2000s. However, there is not any serious source written in English, which describes the determinants of FDI in Russia, by empirical methods. Thus, for creating my model I referred to the empirical estimation method following the research done by Alfaro, L. (2003) and Carkovic M. – Levine R. (2002), using an alternative approach to explain the relationship between FDI and its regional and inter-sectoral determinants.

This paper focuses on three guideline hypotheses: Hypothesis 1. Foreign direct investment induces Russian economic growth. Hypothesis 2. Foreign direct investment have the significant impact on mining industry. Hypothesis 3. Foreign direct investment differs in terms of regional allocation.

The paper is organized as follows: section (2) presents the theoretical background of FDI and literature review, section (3) highlight the role of FDI in Russia and location-related determinants, section (4) presents the methodology used in the study. The paper in the (5) section continues with the discussion of the data and empirical results and concludes by the (6) section.

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<sup>1</sup> Federal State Statistical Service of Russian Federation. Link: [http://www.gks.ru/bgd/regl/B11\\_04/lssWWW.exe/Stg/d04/2-in-invest.htm](http://www.gks.ru/bgd/regl/B11_04/lssWWW.exe/Stg/d04/2-in-invest.htm)

## 2. The Theoretical Background

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Since 2013, the investment motivation has changed once again. Today the inflow of capital towards the Russian economy stands for a main question in agenda of economic integration and development. Onward the crisis a number of new investment projects have been signed, especially the important portion among them occupied by the investments through the speculative funds. In the current situation, the foreign direct investment (FDI) plays more preferential role in the development of Russian economy than hedge funds, however, for attraction of the FDI it is important to create a long-term attractive interest for investors in doing business in the country and much less fluctuating economic conditions. Unlike hedge funds, the role of FDI is important, because it makes money from the participation in the management and development of the real business. Furthermore, the role of FDI contributes to the level of innovative knowledge in the host economy, as on one hand, by introducing innovations and capital intended for investment and production processes, on the other hand, by providing new managerial skills and trainings that can spread to domestic firms. They are considered as a source of *external* forces, resources, technology, skilled workers and managers to ensure renewal of the economy, the introduction into the production process of new technologies, equipment, and new corporate governance practices. On their base, the economy can be successfully carry out modernization by introducing all sorts of innovations in order to effectively influence on the development. Thus, until the end of our decade the main priority for a country is the strategy of social-economic development of a country through the possible highest balanced economic growth, based on the institutional and investment motives.

### 2.1. The OLI Framework – basics of FDI

A significant increase of foreign investment in world scale since the late 50s, brought about the globalization of capital movement. In this circumstances, there was a need to adopt the theory of transnationalization of the companies providing an explanation to the foreign

investments. The topic, especially, was studied by companies from the developed countries for explaining the role of international expansion of firms from emerging economies.

At the root of the modern understanding of foreign direct investment are two basic approaches to the interpretation of their nature: the first approach is "why" and "how" (indigenous approach), which refers to the characteristics of the company, giving her an advantage in the implementation of FDI; the second approach is "where" (exogenous approach), which refers to the characteristics of the country, affecting the adoption of firm decision on direct investment in its economy.<sup>2</sup> These approaches were especially investigated by Stephen H. Hymer (1960, 1976), Peter J. Buckley & Mark Casson (1976), and Frank A. Southard (1976).

However, John H. Dunning made some new and synthesized these two approaches. The new theory was quite reliable to understand the nature of FDI and it named as an *eclectic paradigm theory* (1980), also known as the concept of OLI, which includes three necessary conditions on the basis of which any firm decides to implement FDI (ownership, location, internalization). This concept approaches in terms of systematization of the factors that are determine the international production to create a common format for theoretical research, which could logically combine numerous theories of international production and FDI. Despite there have been introduced a number of theories, the eclectic paradigm theory is the most actual concept nowadays. Thus, it was suitable to apply the individual perspective into the international economics.

According to Dunning, the theory was built especially on three pillars, and each of them is equivalently significant. In terms of investors, these three identified conditions must be met to a firm for participating in the process of foreign direct investment. However, the lack of any of these pillars differently reflects in the economy. For instance, in case of existence only of two pillars – ownership and internalization – there occurs an environment for direct domestic investment rather than for FDI.

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<sup>2</sup>Е. Семак—И. Турлай (2009) *Современное Представление О Природе Прямых Иностраных Инвестиций: Интегрированный Подход*. Международные экономические отношения.

The internationalization of economy in Russian starts since 2000s. Today the majority of the FDI in Russia is carried out by large industrial companies which are interested in the finding of the natural resources. This trend was directly associated with the process of structural transformation of the Russian industrial production, which led to the formulation of the vertically integrated and horizontally diversified companies with distinct market strategies, part of which was the strategy of transnationalization.<sup>3</sup> The main idea of expansion in this period becomes not a seizure of the most attractive assets, rather than a control over the sector.

### **2.1.1. Ownership**

The benefits of ownership (O), or notion of the "why" of foreign direct investment - a benefit from the ownership of intangible assets, that is the knowledge capital, which provides advantages in relation to other companies of the market.<sup>4</sup> Unlike the capital-based assets, the knowledge-based assets assumes to be significant in the decision-making process of FDI. The other property of knowledge-based assets are easily transferability among affiliates versus to capital-based assets and behaves as an exclusive property of any firm in a period of agreement. Investing firm must have specific advantages of ownership, which provides the firms with a competitive advantage over local firms. Firm-specific assets allow the firms to obtain an internationalization decision and it refers to the things such as a brand names, practises, business-advantage, patents, superior knowledge about technology.

Within the framework of OLI paradigm there can be faced two types of benefits from ownership and each of them include the benefits from already working new enterprises and benefits derived from the multinational enterprises. If the first type receives benefits from the ownership of such intangible assets as a unique technology, then the second type, known as transaction costs minimization advantage, receives benefits from the ownership of a joint management of assets within the TNC. Thus, the benefit of branches of TNC emerges from its

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<sup>3</sup> Кислицын Д. В. (2009) *Применение Теории Оли Для Объяснения Причин И Особенности Транснационализации Российских Компаний*. Кемеровский государственный университет. Link: [www.econorus.org/consp/files/lsoz.doc](http://www.econorus.org/consp/files/lsoz.doc)

<sup>4</sup> Е. Семак—И. Турлай (2009) *Современное Представление О Природе Прямых Иностраных Инвестиций: Интегрированный Подход*. Международные экономические отношения.

origin, having an access to the relatively cheaper facilities as R&D, business practice and resources, which in terms of successfulness gives an advantage to the transnationality.

In late of 1990s, there was developed a new model of knowledge capital described by horizontal FDI and vertical FDI by Markusen. The main features of the knowledge capital are:

- the activities of the company to build knowledge capital (eg, R&D) can be carried away from its operations, transferred abroad; and by transfer of the knowledge capital (e.g., production technologies) into its foreign branch usually does not imply any significant costs;
- the second property of knowledge capital that leads to the association of multinationals with knowledge capital is the fact that knowledge capital often has a joint-input or "public-good" property within the firm;
- a third feature of knowledge capital is important in explaining the link between FDI and country characteristics, particularly that skilled-labor-abundant countries are the major source countries for FDI.<sup>5</sup>

Combination of the first and the second features meet in the vertically organized companies, which allocate knowledge capital from headquarters, located in country of origin of investment, and transmits its local enterprises with new innovations located in the country receiving FDI. However, in contrast to vertical FDI, the horizontal FDI of knowledge capital is explained by the first and third features. The created knowledge capital is applicable both in country of origin of investment as well as in a host country receiving FDI. Thus, the firms with horizontal FDI appear within the countries with the same market size and capacity of skilled labor capital.

### **2.1.2. Location**

According to Dunning location of the host country is one of the important parameters for attracting FDI. The benefits of the location (L), or notion of the "where" of foreign direct investment - a benefit from the advantages of internalization coupled with the factors of

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<sup>5</sup> James R. Markusen (2000) *Foreign Direct Investment And Trade*. University of Adelaide. Centre For International Economic Studies. Policy Discussion Paper No. 0019. Link: <http://www.adelaide.edu.au/cies/papers/0019.pdf>

production which is located abroad.<sup>6</sup> Host countries need to have a specific advantage of location that make it attractive for foreign investors and for placement of the international production. Unlike exports location gives to the host economy an advantage to integrate to the foreign market via FDI. However, there are a number of other factors as infrastructure, market size, favorable trade policies, local interest rate, lower production costs including human capital and different factors of endowment, which determine the advantage of the location of the hosting economy.

According to other approach from Shatz and Venables (2000) location-related determinant of FDI should be splitted into two categories as vertical FDI and horizontal FDI. Vertical FDI occurs when a multinational corporation (MNC) fragments the production process internationally, locating each stage of production in a country, where the main motive is to minimize production costs which could be labour of different skill levels, primary commodities, intermediate goods, or even access to externalities such as knowledge spillover.<sup>7</sup> From this point of view, the vertical FDI behaves as trade creating factor, which interconnects the different locations. Unlike to vertical FDI, the horizontal FDI occurs when an MNC carries out the same production activities in different countries, where the motive could be to reduce costs, such as transportation costs and tariffs, or to improve the competitive position of firms in the market.<sup>8</sup> Authors of the concept explain it due to the production in local markets being a part of the internal trade, where local production takes precedence over the exports.

However, in general there is not a clear cut difference between horizontal and vertical FDI. The determining boundaries between these two categories are not fixed and may change over time (Dunning, 1993). Moreover, the boundaries between different types of FDI become less evident as all FDI is seen as part of an overall strategy of enhancing competitiveness, which this strategy therefore makes it increasingly difficult to point to a single locational determinant (F. Noorbakhsh et al, August 1999).<sup>9</sup>

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<sup>6</sup> Е. Семак—И. Турлай (2009) *Современное Представление О Природе Прямых Иностранных Инвестиций: Интегрированный Подход*. Международные Экономические Отношения.

<sup>7</sup> Wong Hock Tsen (2005) *Determinants of Foreign Direct Investment in the Manufacturing Industry of Malaysia*. Journal of Economic Cooperation 26, 2 (2005). of Link: <http://www.sesrtic.org/files/article/89.pdf>

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

### 2.1.3. Internalization

The benefits of internalization (I), or notion of the "how" of foreign direct investment - a benefit of independent use of the intangible assets, rather than on their transfer to any other independent foreign partner.<sup>10</sup> It gives to the firm an advantage of internalizing the goods it produces and to keep full control over a product, which is made on trust. This condition of FDI is important for determining the mode of entry in the foreign market. In reality, a firm possessing an ownership advantage has three main ways of serving the foreign market; it can sell via spot transactions (exports), it can serve the foreign market via arm's-length transactions, i.e. via licensing, franchising, and subcontracting the distribution of the goods to a party in the foreign market (Navaretti and Venables, 2004), or it can internalize the advantage.<sup>11</sup> Thus, the internalization (or control) advantages arise as answer to market failure, as for example which regards that buyers and sellers have asymmetric information, what creates uncertainty around the quality of the transactions and the proper price.<sup>12</sup>

According to Dunning (2000) the aim of efficiency seeking investors focuses on obtaining more efficient division in labour market. Thereby, the OLI paradigm stresses out one important aspect any firm considers before its internationalization, which is referred to a transnational company's decision to enter a foreign location based on the maximized economic efficiency, i.e. the trade-off between the costs, involved in setting the production at a different location abroad, and the costs of exporting the products from the home to a hosting country.<sup>13</sup> Thus, the O and L advantages must be complemented by internalisation to overcome transaction costs, such as those pertaining to transport, information, different taxes and tariffs which differ among countries, and other market imperfections; although the other two OLI dimensions highlight reasons why firms would move production to a foreign location, they do not give any

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<sup>10</sup> E. Семак—И. Турлай (2009) *Современное Представление О Природе Прямых Иностранных Инвестиций: Интегрированный Подход*. Международные экономические отношения. Link: [http://elib.bsu.by/bitstream/123456789/18829/1/2009\\_2\\_JIIR\\_semak\\_turlay\\_r.pdf](http://elib.bsu.by/bitstream/123456789/18829/1/2009_2_JIIR_semak_turlay_r.pdf)

<sup>11</sup> The OLI Eclectic Paradigm Economics Essay. ukessays.com. Link: <http://www.ukessays.com/essays/economics/the-oli-eclectic-paradigm-economics-essay.php>

<sup>12</sup> David de Matías Batalla (2012) *Internationalization theory towards FDI: The OLI Framework*. Link: <http://nociosdesdeconomiaempresa.wordpress.com/2012/11/09/internationalization-theory-towards-fdi-the-oli-framework/#respond>

<sup>13</sup> Zvirgzde, D. -- Schiller, D. -- Diez, J. R. (2013) *Location choices of multinational companies in transition economies: A literature review*. WP2/05 SEARCH WORKING PAPER. <http://www.ub.edu/searchproject/wp-content/uploads/2013/01/WP-2.5.pdf>

reasons to why a firm would not simply license a foreign producer to make the item for the parent firm.<sup>14</sup>

**Table 1.** Alternative Routes of Servicing Markets

Route of servicing market	Ownership Advantage	Internalization Advantage	Location Advantage
<i>Foreign direct investment</i>	Yes	Yes	Yes
<i>Trade in goods and servicing (Export)</i>	Yes	Yes	No
<i>Contractual transfer</i>	Yes	No	No

Source: Dunning, John H. (1988).

## 2.2. The Essence of Foreign Investment

Today sustainable economic development of any country is impossible without the active participation in global economic relations. Along with the intervention of international trade the role of capital flows are becoming increasingly important. By getting the investment opportunity the countries undertake an effective area of further cooperation. Nevertheless, it makes a sense to discuss about the foreign investment, when there is invested foreign capital in assets of national companies of any cooperating country. Attracting of foreign investment in the country gives a whole series of advantages, namely:

- inflow of foreign capital into innovative projects allows the recipient country to gain an access to the latest technologies, techniques and the best practices in the organization of production;
- country acquires the possibility of additional funding for major investment projects;
- along with the entering of the financial resources, the host country obtains also the many years of experience which has been accumulated by the investor country in the world market;
- an increase in foreign investment contributes to the country's integration into the world economy, which in turn provides it with sustainable economic development;

<sup>14</sup> Liu, Y. (2009) *Factors Determining Location Choice of Foreign Direct Investment in China: A perspective from an Inland Province*. Massey University (Albany). New Zealand. Link: [http://mro.massey.ac.nz/bitstream/handle/10179/3811/02\\_whole.pdf?sequence=1](http://mro.massey.ac.nz/bitstream/handle/10179/3811/02_whole.pdf?sequence=1)

- in the event that the government is experiencing temporary financial difficulties, then foreign investment is helping to resolve these difficulties, although on the other hand it increases the external debt of the recipient country;
- foreign investment stimulates and gives a new impetus to the development and growth of domestic investment.<sup>15</sup>

Furthermore, each country has its internal rules providing foreign investors with commitments, showing the ways how the foreign investment can be realized. According to Russian legislation, they can be done by:

- holding the shares of the enterprises and organization, together with legal entities and citizens of the host country;
- creation of enterprises wholly owned by foreign investors;
- the acquisition of the property, including securities;
- the acquisition of rights to use land and other natural resources, as well as other property rights on their own or with participation of legal entities or citizens;
- entering into contracts with legal entities and citizens, providing other forms of foreign investments.<sup>16</sup>

### **2.3. The classification of Foreign Investment**

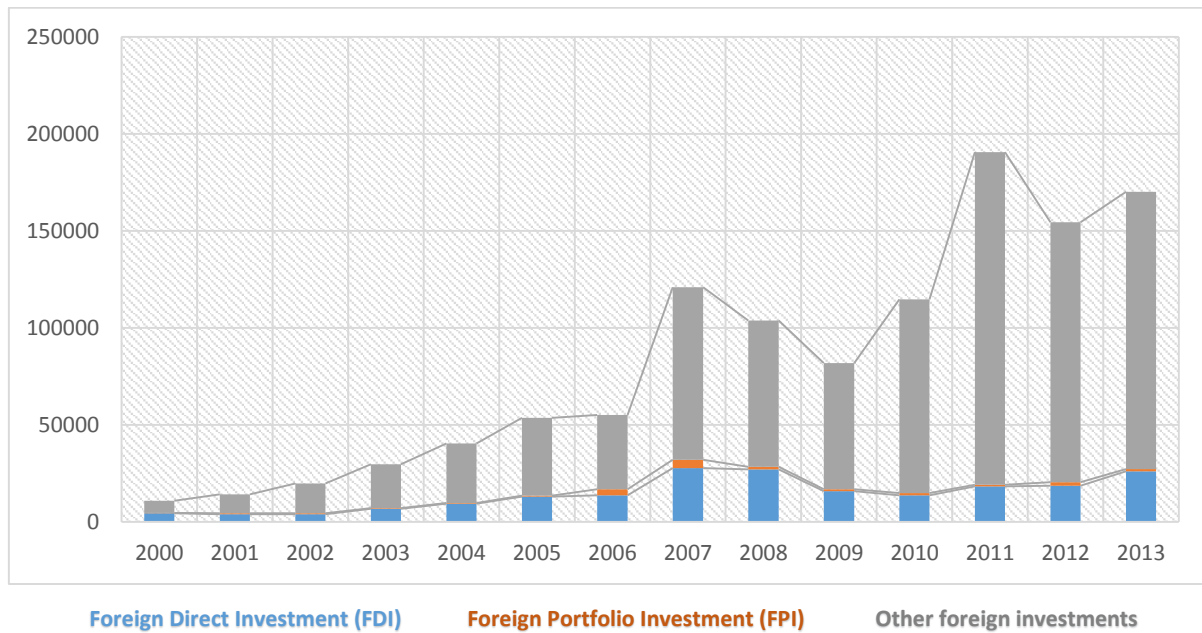
Foreign investment can be classified according to various criteria. These criteria determine the origin and the purpose of the capital flows. The most detailed classification is shown in Table 1. Depending on the *subject of investments* foreign investment is mostly classified into three categories. However, in the Russian economy the parity of foreign investments differs in terms of subject of investments and the share of FDI in total foreign investments is very low compared with developed countries:

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<sup>15</sup> Сущность иностранных инвестиций. Link: <http://www.welleconomics.ru/>

<sup>16</sup> Ibid: <http://www.welleconomics.ru/>

Figure 1. Proportions of foreign investments in Russian economy (mln. dollars).



Source: Ministry of Finance of the Russian Federation

Regarding to our topic, the distinguishing features of FDI are considered the purpose of the production, long term sustainability and the ability to provide an investor with management control over the company.

**Table 2:** Classification feature: types of foreign investments.



## **2.4. Spillovers and the factors influencing on the extent of them**

There are a couple of different factors influencing on the characteristics of the FDI spillovers, and even decisively change the magnitude of the attraction of the investment. There are five main factors as was mentioned by Crespo and Fontoura in 2007, which effect on the extent of the benefit from the foreign direct investment. They are:

1. Proximity;
2. Characteristics of national firms;
3. FDI characteristics;
4. Trade;
5. Technological gap and absorptive capacity;
6. Other factors.<sup>17</sup>

Especially, important role-play technological gap and the characteristics of foreign investment. Unlike other factors, the role of FDI characteristics assumes as a direct determinant of spillovers in FDI.

## **2.5. Positive and negative effects of FDI**

Foreign direct investment influences on the host countries economy through the capital flows, as FDI provides capital which is usually missing in the host country. The role of FDI is quite influential and can change the economic structure of the host country. Even so, the expected effect of FDI is not always positive for accepted country, as for developing countries and countries with economies in transition, the effect of FDI is ambiguous. He is not always positive, as in developed countries (James R. Markusen, 2002), and not in all cases provide effective help in overcoming stagnation and out of poverty traps (Brooks, D. H. et al, 2010).

Although on one hand, FDI allows to attract financial resources missing in the national economy, contributes to apply the modern technology and creates different market institutes increasing the productivity of labour, on the other hand, FDI can have a devastating impact on the local economy, pulling them to the imperfect competitive economy with the high barriers in prices. Furthermore, in the absence of legal restrictions and worthy competition policy, FDI

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<sup>17</sup> Crespo, N. – Fontoura, M (2007) *Determinant Factors of FDI Spillovers—What Do We Really Know?*. World Development 35 (3): 410–25

becomes very strong tool for monopolization of industries through the intervention of foreign capital, as well as, it leads to the withdrawal of income from the host country that adversely affects on the competitiveness of the industry and country as a whole. For instance, foreign companies may buy a local competing or obstructing company and simply shut it down in order to gain a monopoly in the sector. In an indirect hand, the inflow of FDI may effects on decline of working positions, can lead to the increase of imports, and in a weak management policy foreign companies can bring about the growth of wages in a country, which the domestic companies usually are not able to follow with the same steps.

Analysing FDI for some countries with transition economies we can found out the absence of positive externalities, which is explained by domination of competition effect over the positive effect of improving technology (Jozef Konings, 2000). For some countries with transition economies FDI has the potential not to give positive results: by gradual replacement of domestic producers from the market with the foreign ones, it risks being more significant negative rather than positive on the inflow of new technologies.<sup>18</sup> Thus, these parameters are being helpful for checking the accuracy of our first hypothesis.

## **2.6. The normative and legal regulation of foreign investment**

The legal status of foreign investment in developing countries is quite diverse, which is under the predetermination of the political control of a country in respect to foreign capital inflow. The politics of the developing countries with respect to foreign capital often observed by variabilities and changes, which is explained by the fact that these states experiencing an acute shortage of resources for investment have to resort to raise funds from outside.<sup>19</sup> However, on the other hand under the conditions of the incoming foreign investment the national interests are threatened to remain under the shadow of the monopoly of foreign investment. Thus, the legal regulation of the foreign investments remains under the absolute control of the nation-state, since it depends on the state policy whether to restrict or stimulate the conditions of the foreign investment. The fundamental principle of international law is to

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<sup>18</sup> Ратникова, Т. – Гладышева, А. (2013) *Пространственные детерминанты распределения ПИИ по регионам РФ*. Link: <http://ecpol.ru/2012-04-05-13-41-25/2012-04-05-13-41-42/720-prostranstvennye-determinanty-raspredeleniya-pii-po-regionam-rf.html>

<sup>19</sup> Богуславский, М. М. (2006) *Международное частное право Правовое регулирование иностранных инвестиций*. Библиотека "Полка букиниста". Link: [http://society.polbu.ru/boguslavsky\\_privatelaw/ch42\\_i.html](http://society.polbu.ru/boguslavsky_privatelaw/ch42_i.html)

ensure that every state has sovereignty over its territory and it has the right to dispose of their sovereign rights, as it deems necessary to ensure their economic development in the current circumstances, which do not remain unchanged.<sup>20</sup>

In a world of globalization there were established number of certain rules and standards to be met by the national law of the states, which the criterias of these standards were caused from the objective and subjective reasons. The objective reasons combine the fact that a foreign investor must be protected against non-commercial risks which shall be increased compare to domestic investors in terms of costs and losses due to the need to engage in investment activity on the territory of a “foreign“ country; but the subjective aspect of the foreign investment originate from the nature of the desire of foreign investors to obtain privileges and preferences as much as possible and to fulfill its obligations to a minimum extent.<sup>21</sup> Thus, the Investment Code Act provides the several methods of foreign investment programs and furthermore, the particular investment modes suggest only to the huge capitalization projects or to those which are in interests of the developing countries.

As far as the essence of the foreign investments are the tangible and intangible assets owned by individuals and legal entities of a state which are localized for the purpose of profit in the territory of another state. However, the structure of the legal regulation of investment relations can be divided into two pillars – international law (international agreement, which is international legal regulation of investment held on the universal, regional and bilateral levels) and domestic (based on the national legislation of the host country). The main form of FDI regulation at the international level are the international investment agreements (IIAs), which agrees and reinforces the measures to regulate FDI between the countries concerned. The investment climate is largely determined by what the legal regime of a particular State able to grant foreign investors. In world practice there are several types of legal regimes:

- national treatment;
- MFN - most favoured nation;
- fair and non-discriminatory treatment;

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<sup>20</sup> Вознесенская, Н. Н. (2011) *Правовое регулирование и защита иностранных инвестиций в России: монография*. Wolters Kluwer Russia. ISBN: 978-5-466-00656-8

<sup>21</sup> Eurasian Legal Portal. Национально – правовое регулирование иностранных инвестиций: состояние и тенденции развития. Link: [http://www.eurasialegal.info/index.php?option=com\\_content&view=article&id=1911:2013-03-06-10-10-38&catid=207:2013-02-26-04-35-58&Itemid=1](http://www.eurasialegal.info/index.php?option=com_content&view=article&id=1911:2013-03-06-10-10-38&catid=207:2013-02-26-04-35-58&Itemid=1)

- preferential treatment;
- reciprocal treatment.<sup>22</sup>

According to the legislation of the hosting state the most important measures to limit foreign investment include:

- a) the establishment of a special state control over the admission of foreign capital to the development of mineral resources and the natural resources;
- b) avoidance of foreign capital in some, the most important sector for the national economy;
- c) establishment of a mandatory national interest of the state or private capital to enterprises established by foreign firms (in mixed company);
- d) measures aimed at using what - that part of the profits of foreign enterprises for internal needs of a developing country (taxation, restrictions on repatriation of profits abroad, and so on);
- e) determination of the concession policy.<sup>23</sup>

At the national level in many countries, including Russia, acts the principle of the protection of foreign investment.

The right of a state to control the entry of foreign investment and to exercise jurisdiction on the activity of foreign investors in its territory is firmly established in customary international law, as an attribute of state sovereignty, or more precisely, its territorial jurisdiction, which this right is only qualified where the host state has entered into treaty commitments that guarantee to foreign investors rights of entry, establishment or a certain treatment, and by general international law rules regarding treatment of aliens.<sup>24</sup>

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<sup>22</sup> Н. Н. Вознесенская (2011) *Правовое регулирование и защита иностранных инвестиций в России: монография*. Wolters Kluwer Russia. ISBN: 978-5-466-00656-8.

<sup>23</sup> Богуславский, М. М. (2006) *Международное частное право Правовое регулирование иностранных инвестиций*. Библиотека "Полка букиниста". Link: [http://society.polbu.ru/boguslavsky\\_privatelaw/ch42\\_i.html](http://society.polbu.ru/boguslavsky_privatelaw/ch42_i.html)

<sup>24</sup> Ibrahim, F.I. Shihata (2004) *Regulation of Foreign Investment*. International Sustainable Development Law - Vol. II. Link: <http://www.eolss.net/sample-chapters/c13/E6-67-03-04.pdf>

## 2.7. Globalization and the role of MNCs in modern economic relations

An industry analysis in the global economy plays the main role in allocation of the key actors and the primarily it is built on the availability of the integration unions, transnational companies and national economics. Due to the globalization process, which determines the development of most industries today, a leading influence on the industry is moving from national economies to multinational corporations (MNCs operate in an "open" economy without regard to the degree of liberalization of national economies).<sup>25</sup> However, the international monopoly was not established as a new phenomenon in the global industrialization process, as a long-lasting integration steps of the world economics in a vertical line – in the framework of the international corporations, it has been continuing since the First World War. Moreover, the traditional interpretation of the concept of "international monopoly" was based on the principle of association in the framework of the private-monopoly capital units of different national origin.<sup>26</sup> Thus, under the modern international economic relations the MNCs holds more complex features.

Nevertheless, on the ground of international economic relations there is not a commonly accepted definition of MNCs. The international division of the labour force has occurred as a key task of manufacturing companies. So the dismemberment of the creation and marketing of products in certain features and dispersal of these features around the world have led to the creation of an integrated international production systems based on the aggregation of a number of international strategies of MNCs.<sup>27</sup> The distinctive feature of modern international monopoly defines not for the origin of capital, but by the area of its operations. Multinational corporations behave as a national capital, despite the field of activities are international, and regardless in which country such a company is established, it gets into the business as a legal entity in all participating countries.

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<sup>25</sup> Потоцкая Т.И. (2006) Изучение транснациональной деятельности компаний как элемент отраслевого анализа (на примере алмазно-бриллиантового комплекса). Менеджмент в России и за рубежом. Link: <http://dis.ru/library/detail.php?ID=25913>

<sup>26</sup> Ibid.

<sup>27</sup> Студопедия (2014) ТНК в современных экономических отношениях. Link: [http://studopedia.net/7\\_36209\\_tema--tnk-v-sovremennih-ekonomicheskikh-otnosheniyah.html](http://studopedia.net/7_36209_tema--tnk-v-sovremennih-ekonomicheskikh-otnosheniyah.html)

## 2.8. Literature review

In order to describe the exact shape of the empirical analysis and the background of the FDI flows towards Russia, it is important to review some relevant articles concerning the survey of FDI. There are number of articles and researches devoted to the studying of the role, impacts and identity of the foreign direct investments. However, problems related to FDI are unpredictable and cannot be estimated unambiguously. Unlike the researches done by Choe (2003), Balasubramanyam N. – Salisu M. – Sapsford D. (1999) and Karbasi, A. – Mohamadi, E. – Ghofrani, S. (2005) who insisted on the positive impact of FDI on economic growth, there are also some other authors as Alfaro L. (2003), whose research disproved the findings of others and argued that the in terms of invested economic sectors the FDI inflows exert different impacts on the economic growth. Related articles were written also about the FDI distribution across Russian regions. For instance, Ahrend R. (2000) while surveying the accessibility of Russian regions for FDI flows finds out that there are four factors, which explain the FDI allocation in Russian regions as the previous investments made by other entrepreneurs, a large market size; the endowment of raw materials or other production factors; existence of a partner company.

The other more actual and closest to the present study of the FDI flows into Russia can be assumed the work of Buccellato T. – Santangelo F. (2009). After the analysis of the regional characteristics of Russia, authors explained factors effecting on FDI allocation across the country, furthermore, among other factor they especially highlighted the features of neighboring regions. On the root of features are effective market potential of the neighboring markets and the agglomeration effect which shows the credibility of the neighbors. Bradshaw M. (2002) did the other similar approach to the topic in terms of regional characteristic. He indicated five groups according to the attractiveness for investors.

Undoubtedly the results achieved by Ledyeva S. – Linden M. (2006) were very important. They make use of a gravity model based on the usual variables: market size of both, recipient region and source country, and the distance between source country and recipient

region.<sup>28</sup> Using the gravity model (in other words GDP measurement) they concluded that the larger the region, the larger the volume of investment it will stretch.

However, the alternative results were obtained by Iwasaki I. – Sukanuma K. (2005). They assume that there is no geographical barrier to the distribution of FDI in Russian regions.

Thus, each research paper depending on the data sets and applied models highlights different aspects of the issue. Proceeding from this, one of the options to classify the research directions might be by analyzing the hypothesis. To sum up, previous empirical studies found that the most important determinants in explaining FDI allocation in Russian regions are market size, infrastructures, natural resources and various indicator of socio-economic development and institutions' quality.<sup>29</sup>

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<sup>28</sup> Bucclato, T. -- Santangelo, F. (2009) *Foreign Direct Investments Distribution In The Russian Federation: Do Spatial Effects Matter?*. Centre for the Study of Economic and Social Change in Europe (CSESCE). Economics Working Paper No.99. Link: <http://discovery.ucl.ac.uk/17435/1/17435.pdf>

<sup>29</sup> Ibid: <http://discovery.ucl.ac.uk/17435/1/17435.pdf> page 7

## 3. FDI in Russia

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### 3.1. Main characteristics of FDI flows to Russia

Before analyzing the capitalization of the Russian economy by the foreign investors, it is necessary to characterize the entire economy of the Russian Federation and surely should be emphasized the hard post-Soviet transition period through what the economy passed. On this purpose, the Russian government tries to convince foreign investors that there has already been established a favorable and safe environment in the country for different investment activities, however, the western investors still keeps restraining to invest with big portions. The skeptic approach is quite understandable, as the description of a state in the country does not clearly characterize the real promising economy and in general, the circumstances contradict the existence of the favorable investment climate in the country.

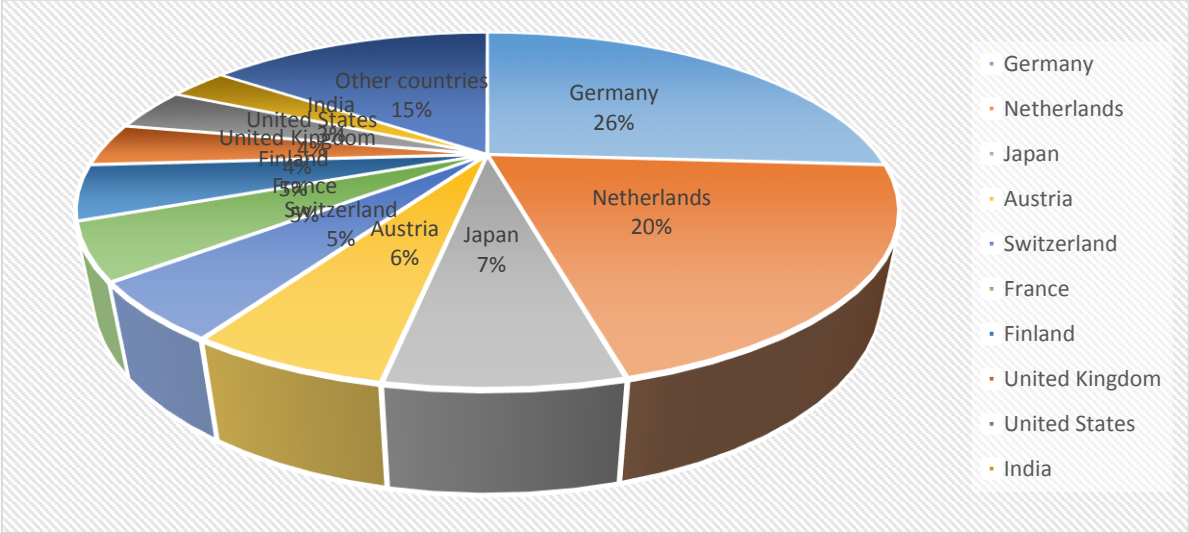
Today, according to the information of Russian Federal State Statistics Service, the inflow of the foreign investment in 2013 year increase 40 percent, and reached up to the \$26 billiard, which was almost \$7.5 billion more than the previous year.<sup>30</sup> However, the inflow from offshore increased even less than one percent and with the 89 percent from whole offshore investment capacity, Cyprus is still remaining on the leading position among all offshore investment regions (but since 1 January of 2013, the Cyprus is not considering as an offshore zone and it was removed from the list of offshore regions of the Ministry of Finance of the Russian Federation). The huge number of Russian companies registered in Cyprus in order to re-invest their capital in Russian market as foreign capital. Moreover, due to this reason in the Ministry of Finance there was carried out some preventive measures against of the illegal intervention. The other offshore regions are British Virgin Islands, United Arab Emirates, the Bahamas, Jersey Island and the Seychelles. The total amount of foreign investment, with

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<sup>30</sup> Национальное Рейтинговое Агентство (апрель 2014) *Прямые Иностранные Инвестиции В России: Региональный Аспект. Итоги 2013 Года*. Link: [http://www.ra-national.ru/uploads/rus/files/analytic/file\\_review/20.pdf](http://www.ra-national.ru/uploads/rus/files/analytic/file_review/20.pdf)

exclusion the investment from offshore zones in 2013 year estimated in \$ 15.26 billion, which could estimates quite high for Russian economy.

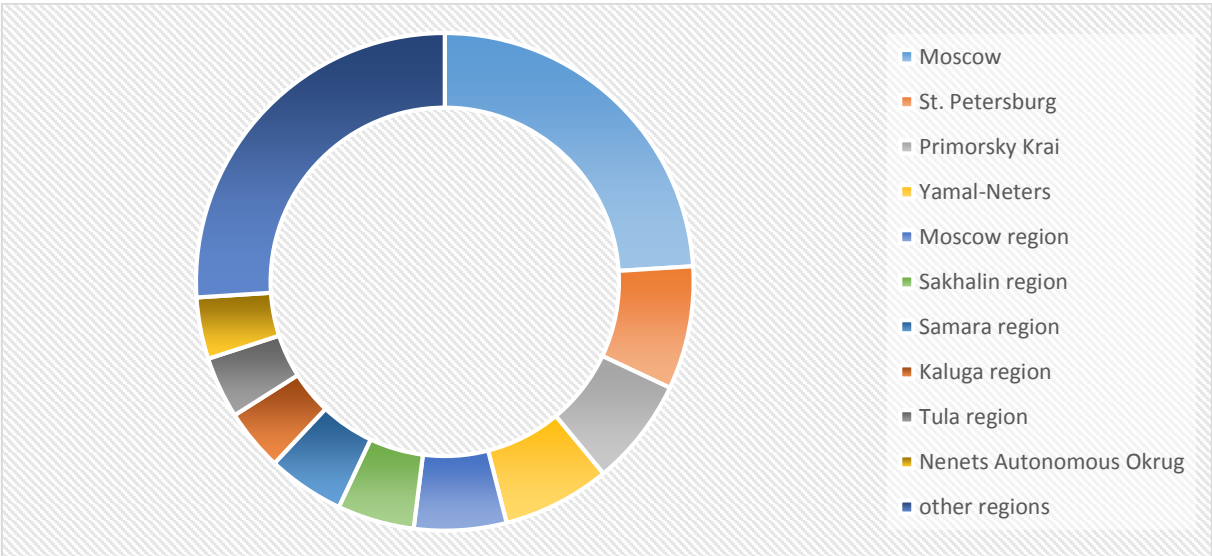
**Figure 2:** FDI in Russia from non-offshore regions



Source: Rosstat

The investment from foreign countries flows to the central regions and regions, which are rich with oil and gas deposits; especially they are Moscow, Saint Petersburg, Sub-Moscow region, Sakhalin Region, Yamal-Nenets and Nenets Autonomous Okrug and so on. Due to the differentiation of the investment climate in the country, and the growing needs to regional factors and conditions in the socio-economic development, in Russia it is becoming more uneven in terms of regional distribution of foreign capital.

**Figure 3.** Regional allocation of FDI in Russia.



Source: Russtat 2013. NRA.

Considering the features of foreign investment in the Russian regions, one can note the existence of enterprises with foreign investments that involve technological stages of production of goods or services from vendors located in other countries, however, separation of the production process now developed not only inter-firm, but also in the international economic space, where participants of the transnational production process, being in different countries or on different continents, are agreed on the production of a particular product, observing uniform standards and norms of co-production.<sup>31</sup>

The particularity of regional allocation of foreign investment in Russia is that it is especially concentrated in the biggest metabolizes of the western side of the country, but in the north and northeast regions are observed with lack of foreign investment. The misbalance is obvious across Russian territory, for instance, only in Moscow the amount of foreign investment is higher than the completely eastern territory.

### **3.2. Russia in an international market of investment**

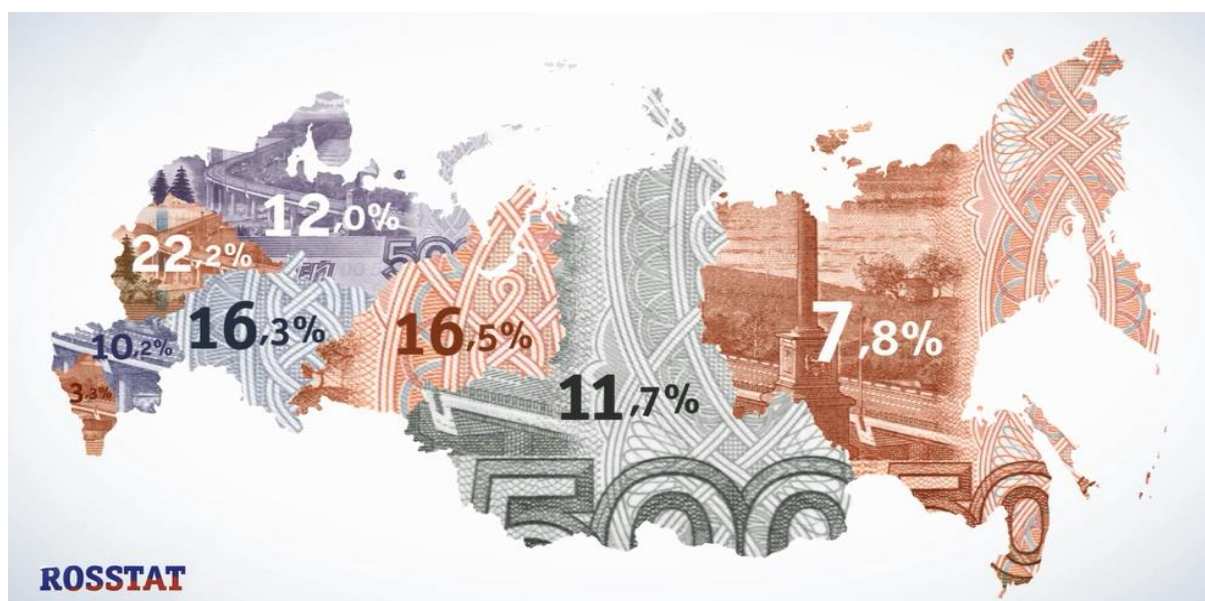
According to the National Rating Agency, the regional ranking of Russian regions based on the FDI per capita (excluding the FDI from offshores) indicates the main fields of attractions of investment to the regions, and plays the role of guideline for the future investors too.

Despite the FDI inflow increased quite significantly especially in 2013 year, however, the allocation of investment in terms of regions still reminds ambiguous. The general overview across regions shows that although by the end of 2013, there was indicated increase of the FDI inflow in 37 regions, on the other hand, in other 38 regions, the FDI was decreased, moreover, in rest of 8 regions the investment still reminds disappointing as during the previous years, excluding offshore FDIs.

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<sup>31</sup> Федеральное Государственное Образовательное Учреждение Высшего Профессионального Образования «Башкирский Государственный Аграрный Университет». *Иностранные инвестиции в экономике России* 2. [http://baza-referat.ru/Иностранные инвестиции в экономике России 2](http://baza-referat.ru/Иностранные_инвестиции_в_экономике_России_2)

**Figure 4:** Per capita allocation of FDI among regions of Russia



Source: *Rosstat*.

In Russia, the large-scale projects with foreign investment market are implementing very randomly. This trend can be explained with the higher volatility indexes of FDI inflows. For instance, in some regions of Russia the annual FDI inflows increased several times, despite in other regions, by contrast, there was sharp decline of FDI. Thus, according to The National Rating Agency, the main positions of investment attraction occupy by Nenets autonomous region, Yamal-Nenets autonomous region and Sakhalin region, which the substantial part of investment directly related to the mining industries where oil and gas extraction stay for the first place.

In the fourth place of ranking list Kaluga region retained its position. Compare with the previous years' Kaluga almost did not change its position, which unlike upper mentioned regions is a bright example to the “non-commodity” regions with a favorable investment environment. The strategic advantage of the region makes it chances to increase for investors, who are looking for good conditions for providing a favorable regional legislation and consistent investment policy.

The fifth position in the list occupies by Primorsky Krai, where during the last years due to the geographical location the Japan capital in FDI market of the region significantly increased.

Moscow according to report of The Russian National Rating Agency, placed in the 7<sup>th</sup> rang. It is followed Leningrad region and then by Saint Petersburg in the 9<sup>th</sup> place. However, unlike other regions of Russian Federation, the reason of the high activity of foreign investment attraction to these federal cities was recorded due to the centralization of the international financial and industrial cooperation with the R&D capability of the country.

Due to the depressiveness of the regions, investors are still avoiding from the rest regions. The attractiveness of investment to the rest regions out of the top 10 regions are remained almost unchanged.

Thus, the main line of solution of the regional investment problem should be achieved by the regional consistence and stability. The other option could be via regional integration and providing of investment project with the neighboring countries. Namely, to open east side to Japan and China who are very intensively interesting in far east regions, as Trans-Baikal territory, the Amur region and so on. During last years, China almost keeps the absolute FDI inflow share to the eastern regions of Russia, from 95 up to 100 percent respectively.

### **3.3. The sectoral distribution of FDI**

Inter-sectoral distribution of FDI has changed significantly over the last decade. Actually, some of analysts claim that foreign investment in Russia began to grow especially, from the moment when the oil prices are sharply increased. However, it would be unprofessional approach if to say that in Russia only raw material industries consider attractive for foreign investments. Even in contrary, during the last years the FDI especially mobilized in the service sector, and stays almost at the same level with financial sector. International financial and banking groups seek for intervention in the Russian market; particularly these attempts become more worthwhile after the Russia's WTO accession. Except from the more general interesting fields for investors as real estate, information and communication, construction, energy and gas, there are some fields of economy as health care, manufacture of machinery, electronics, which still have not provoked an interest in foreign investors.

The agreement signed in 2012 between Nissan-Reno and AvtoVAZ, become a new stage of the new government policy. Moreover, some local authorities also have the permission to attract

foreign auto-entrepreneurs, capitalizing on their freedom of action. Using this ability Kaluga region managed to create the chain of automotive industries including Mitsubishi, Peugeot-Citroen and Volkswagen auto concerns. Thus, it was a beginning of the diversification of FDI, where the next positions were occupied by metallurgy, metalworking and mining industries. However, their share in total FDI decreased in double since 2000, related to interests of strategic approach of federal center on the mining industry the investors are restricted from the investing. Especially, this law was strict up to the end of great economic recession in 2009. Last years, the flexible attitude to the foreign investment is more obvious. The agreement signed after several years of discussions between Rosneft and British Petroleum in October 2012 may it prove.

Table 3: FDI in Russia by Economic Activities, 2010-2012

<b>FDI in Russia by Economic Activities, 2010-2012</b>	<b>million USD</b>	<b>Percentage value (%)</b>
The total volume for the period from 2010 to I quarter 2012	<b>112265</b>	<b>100</b>
Wholesale and retail trade	<b>25935</b>	<b>23</b>
Financial activities and Insurance	<b>20675</b>	<b>18</b>
Mining and quarrying	<b>9541</b>	<b>8</b>
Manufacturing: manufacture of basic metals and fabricated metal products	<b>9081</b>	<b>8</b>
Provision of other services	<b>7338</b>	<b>7</b>
Real Estate	<b>5826</b>	<b>5</b>
Information and communication	<b>5254</b>	<b>5</b>
Construction	<b>4178</b>	<b>4</b>
Production and distribution of electricity, gas, steam and air conditioning	<b>4147</b>	<b>4</b>
Manufacturing: Manufacture of food products, beverages and tobacco	<b>4099</b>	<b>4</b>
Research and development	<b>3789</b>	<b>3</b>
Manufacturing: Manufacture of other non-metallic mineral products	<b>2252</b>	<b>2</b>
Chemical Production	<b>2071</b>	<b>2</b>
Not distributed by activity	<b>1714</b>	<b>2</b>
Manufacturing: Manufacture of other non-metallic mineral products	<b>1323</b>	<b>1</b>
Manufacture of electrical and optical equipment	<b>889</b>	<b>1</b>
Transport and storage	838	1
Manufacturing: Manufacture of machinery and equipment	669	1

source: obsfr.ru/fileadmin/reports/2013/02\_Vercueil\_ru.pdf

### 3.4. The origin of the FDI in Russia: quasi-investors

Having checked the geographical origins of the FDI in Russian market, we can find out that there are quite non-related countries with Russian economy. Through the dis-balance in the inflowing FDI, we can easily grasp and explain the origin of the capital. From the following table one is obvious that more than half of FDI aimed in Russian are Russian investors from offshore zones.

**Table 4:** Distribution of FDI in Russia by countries, in millions dollars of 2011.

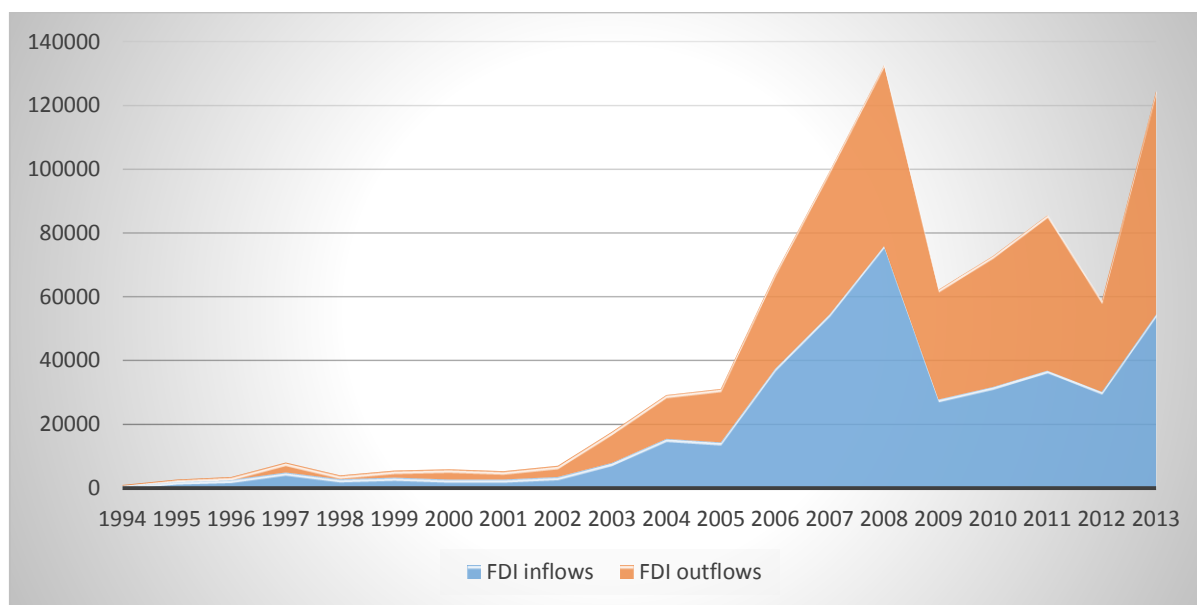
<b>FDI to Russia</b>	<b>2011</b>	<b>FDI from Russia</b>	<b>2011</b>
<b>Total</b>	<b>455904</b>	<b>Total</b>	<b>361738</b>
<b>Cyprus</b>	<b>128816</b>	<b>Cyprus</b>	<b>121596</b>
<b>The Netherlands</b>	<b>59745</b>	<b>The Netherlands</b>	<b>57291</b>
<b>British Virgin Islands</b>	<b>56442</b>	<b>British Virgin Islands</b>	<b>46137</b>
<b>Bermuda</b>	<b>32547</b>	<b>Switzerland</b>	<b>12679</b>
<b>Bahamas</b>	<b>27089</b>	<b>Luxembourg</b>	<b>11599</b>
<b>Luxembourg</b>	<b>20316</b>	<b>United Kingdom</b>	<b>10662</b>
<b>Germany</b>	<b>18741</b>	<b>United States</b>	<b>9501</b>
<b>Sweden</b>	<b>16088</b>	<b>Island Jersey</b>	<b>7035</b>
<b>France</b>	<b>15420</b>	<b>Germany</b>	<b>6692</b>
<b>Ireland</b>	<b>8893</b>	<b>Gibraltar</b>	<b>5701</b>

source: [obsfr.ru/fileadmin/reports/2013/02\\_Vercueil\\_ru.pdf](http://obsfr.ru/fileadmin/reports/2013/02_Vercueil_ru.pdf)

However, in 2013, from Russia abroad spent \$ 201.6 billion of investment, or 34.5% more than in 2012. The volume of Russian investments accumulated abroad by the end of 2013 amounted to \$ 176.4 billion. Moreover, to the Virgin Islands had 33.9%, Cyprus - 18.7%, Netherlands - 13.2%, the UK - 5.2%. Unlike other countries, the investments from the first three countries in the upper given list cannot be considered as foreign direct investments, rather the investments from these regions have an obvious offshore character.

On the other hand, in general, the total amount of FDI outflows are still higher than FDI inflows in Russian economy. From the following diagrams we can notice that since 2009 the outflow of the capital is almost doubled than inflow.

**Figure 5:** Russian FDI inflows and FDI outflows during 1994-2013



Source: Rosstat.

### 3.5. The investment attractiveness of Russian regions

The attractiveness of the regions for investment defines as a set of factors affecting the effectiveness, appropriateness, and risk level of investments in the territory of the region. According to the National Rating Agency, the investment attractiveness of the region consists of seven factors, each of which can be evaluated by means of selecting the proxy-variables for it:

- availability of natural resources of the region and the quality of the environment in the region;
- human resources in the region;
- regional Infrastructure;
- internal market in the region;
- the production potential of the regional economy;
- institutional environment and socio-political stability;
- financial sustainability of the regional budget and enterprises in the region.<sup>32</sup>

Thus, the survey of the attractiveness rating of investment in Russian regions for 2013 years showed the presence of two distinct reasons of attractiveness of Russian regions to

<sup>32</sup> Национальное Рейтинговое Агентство (Деcембер 2013) *Рейтинг инвестиционной привлекательности регионов России*. Link: [http://belgorodinvest.com/OLD/images/information\\_items\\_property\\_470.pdf](http://belgorodinvest.com/OLD/images/information_items_property_470.pdf)

investors. The *first* reason is the possession of the basic regional advantages, which combine the rich natural resources and favorable geographical position; the *second* reason for the growth of investment attractiveness of the region is a purposeful work to create a favorable investment climate conducive to attracting large investors and business development.<sup>33</sup>

Necessary to understand that any investment rating largely depends on the statistics that take into account the economic progresses in the regions. Therefore, if the leadership of the region is active in increasing the investment attractiveness, there is no need to wait for the moment when these measures will be reflected in the statistics. Necessary to understand that any investment rating largely depends on the statistics that take into account the economic progresses in the region. Nevertheless, in order that the investor made that decision, two conditions are necessary -- an active and persistent promotion of the region.

### **3.6. Formation of the labor market in Russia**

The formation of the territorial labor markets in the scale of the federal and regional level are under the influence of various factors and conditions, which play the key role in the determination of the Russian labor market. As a part of entire economy, the labor market also cannot exist separately, without cooperation with other fields of economy. It is a sophisticated multi-functional system with a high degree of uncertainty and characteristics caused by the specificity of product, which is sold in this market.<sup>34</sup>

Location decision of MNCs points to the high priority attaching to labor-market flexibility issues in determining the investment locations, thus the labor market flexibility will have a substantial impact on the nature of FDI and will affect the practices and behavior of inward investing organizations.<sup>35</sup> Furthermore, the labor market is a necessary element in the objective competitive market economy as a whole.

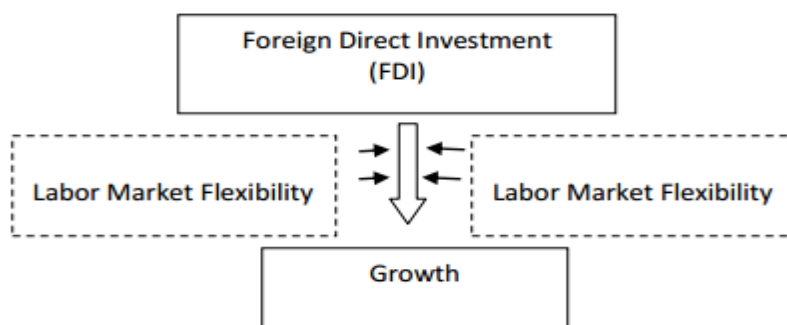
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<sup>33</sup> Ibid: page 10.

<sup>34</sup> Kotova, L. -- Ponomarev, M.-- Mulačová, V. (2013) Features of the Labour Market in Russia. Plekhanov Russian University of Economics. Link: [file:///C:/Users/User/Downloads/Feautres of the labour market in Russia.pdf](file:///C:/Users/User/Downloads/Feautres%20of%20the%20labour%20market%20in%20Russia.pdf)

<sup>35</sup> Nordin, N. -- Zainudin, N. -- Hameed, L. M. (2013) *Labor Market Flexibility, Foreign Direct Investment And Economic Growth In Malaysia*. Department of Economics, Faculty of Management & Muamalah Kolej Universiti Islam Antarabangsa Selangor.

### The Conceptual Framework.



Source: *The Conceptual Framework*.<sup>36</sup>

The availability of labor is expected to exert a positive effect on FDI location, as a large amount of available labor provides the firm with a pool of workers from which it can choose its labor force; however, there are a number of other considerations, as the cost of labor will have an inverse effect on investment (Mudambi, 1995), while more-productive labor will yield productivity gains.<sup>37</sup>

### 3.7. Market size of Russia and GDP

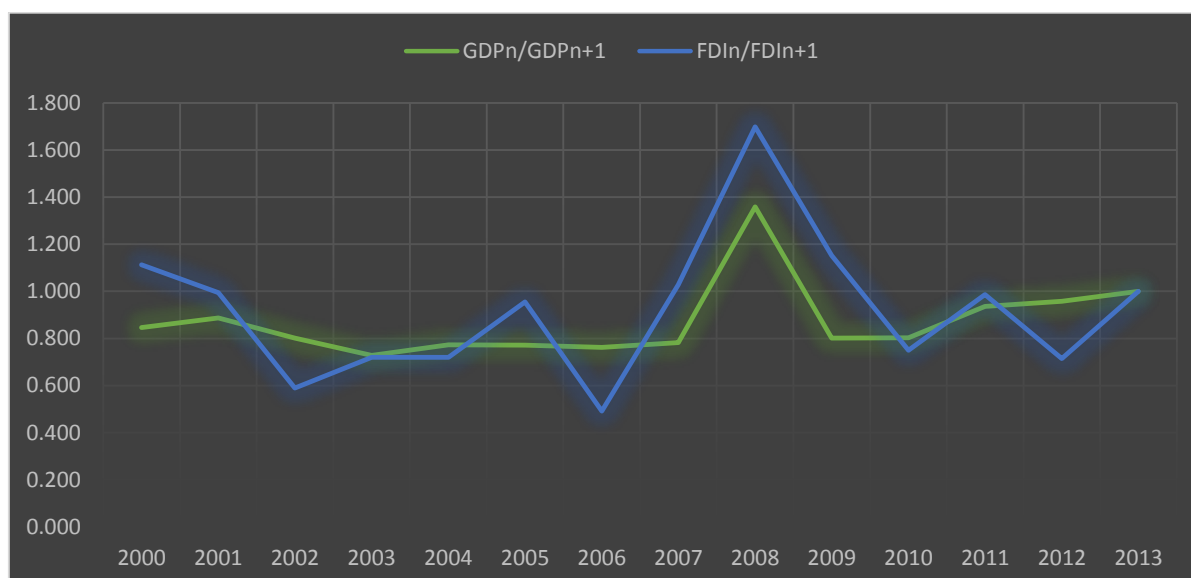
The market size is one of the important determinant, which attracts the FDI inflow, because the basic idea is "the safe investments the high returns". On this basis, the dynamic of GDP growth plays one of the key function to consider the capacity of the size of market. Several scholar as Imad Moosa (2005) and Hara M – Razafimahefa I. (2003), has investigated this topic. They found out that the market size and the growing promising economies are more attractive in terms of FDI inflows.

According to Markusen (1998), the GDP assumes as an alternative measure of the market size, where the economies with small markets participate as exporters. The other author (Amina Lahreche-Revil, 2006) studied the issue using *the gravity model* (that is, GDP measurements) and emphasized the existence of the positive correlation between FDI and GDP measures. This relationship is easy to observe also in Russian case.

<sup>36</sup> Nordin, N. -- Zainudin, N. -- Hameed, L. M. (2013) *Labor Market Flexibility, Foreign Direct Investment And Economic Growth In Malaysia*. Department of Economics, Faculty of Management & Muamalah Kolej Universiti Islam Antarabangsa Selangor.

<sup>37</sup> Jonathan Jones – Colin Wren (November 2007) *Foreign Direct Investment and the Regional Economy*. University of Newcastle upon Tyne, UK. Link: <http://www.ashgate.com/isbn/9780754681137>

**Figure 6:** FDI and GDP correlation.



Source: Rosstat.

Furthermore, in terms of bilateral FDI, the Bayesian statistical techniques applied by Blonigen B. –Piger J. (2011), was also very effective to estimate a set of variables affecting on the FDI activities in the counterpart countries' GDP. The results showed that *the gravity model* is significant for understanding the investment movements and correlation between cooperating countries. The main lesson from the studying FDI — GDP relationship is that foreign investors seek markets that are large enough to support their operations and benefit from economies of scale, and real GDP can be used as a proxy for market size, which is a primary determinant of FDI.<sup>38</sup>

Table 5: Main factors affecting on FDI

Factor	Effect	Factor	Effect
GDP/market size	+	Transaction costs/ technology	-
Inflation	-	Transparency	-
Exchange rates	-	Trade in goods and services/ agreements	-/+
Stock market development/returns	+	Capital controls	-
Availability of private credit	+	Tax rates	-
Information asymmetry	-	Interest rates	-
Distance	-/+	Dividends	+

Source: <http://www.cavehill.uwi.edu/bdoffice/documents/caricomcrossborderequityflows.pdf>

<sup>38</sup> Mohan, P. -- Watson, P. K. (March 2010) *CARICOM Cross-Border Equity Flows*. Sir Arthur Lewis Institute of Social and Economic Studies University of the West Indies. Link: <http://www.cavehill.uwi.edu/bdoffice/documents/caricomcrossborderequityflows.pdf>

### 3.8. Inward FDI and international position of Russia

Today according to the report of the Global Investment Trades Monitor, Russia with 94 billion dollars stand for the third place in the list of inward attracted FDI.<sup>39</sup> Thus, Russia advanced its position six spots, skipping ahead only US and China, which attracted into its economy approximately 159 billion and 127 billion dollar relatively. In 2013, Russia received a record amount of foreign direct investment, which was 84% higher than the previous year. As reasons for the sharp FDI inflows towards Russia, UNCTAD indicates the high activity of the Russian market of mergers and acquisitions.<sup>40</sup> The rise was predominantly ascribed to the large acquisition by BP (United Kingdom) of 18.5% of Rosneft (Russia Federation) as part of Rosneft's \$57 billion acquisition of TNK-BP, which is owned by a company registered in the British Virgin Islands.<sup>41</sup>

The total volume of foreign direct investment in 2013 amounted to \$ 170.2 billion, which is 10.1% higher than in 2012. Thus, the FDI had 15.4% of the total investment, which corresponds to the proportion in 2012. By the end of 2013 accumulated foreign capital in the Russian economy amounted to \$384 billion, an increase of 6% compared with 2012. The largest share in the accumulated foreign capital accumulated for other investments made on a returnable basis approximately two third part (66%), the share of direct investments was 33.8%.

The most accumulated share of FDI was in the manufacturing industry (38%), wholesale and retail trade and repair (18%), mining (17%).

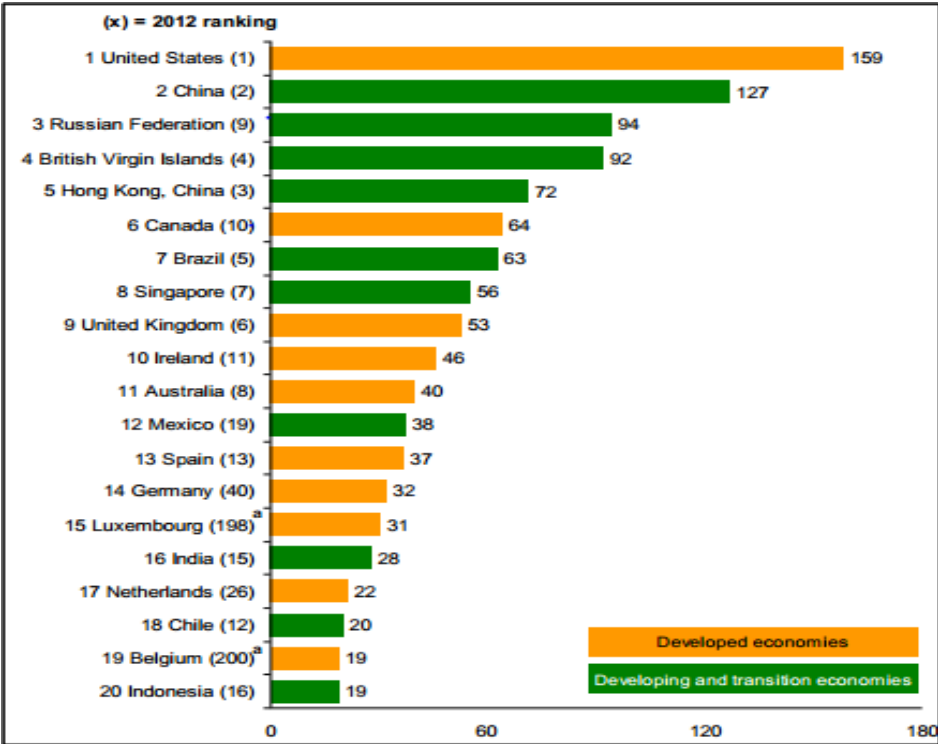
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<sup>39</sup> Global Investment Trend Monitor (2014) *Global Fdi Rose By 11%; Developed Economies Are Trapped In A Historically Low Share*. United Nations UNCTAD, No: 15. Link: [http://unctad.org/en/PublicationsLibrary/webdiaeia2014d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/webdiaeia2014d1_en.pdf)

<sup>40</sup> Ольга Бухарова (2014) РФ вышла на 3 место в мире по притоку прямых иностранных инвестиций. Link: <http://www.rg.ru/2014/01/29/investiciya-site-anons.html>

<sup>41</sup> Global Investment Trend Monitor (2014) *Global Fdi Rose By 11%; Developed Economies Are Trapped In A Historically Low Share*. United Nations UNCTAD, No: 15. Link: [http://unctad.org/en/PublicationsLibrary/webdiaeia2014d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/webdiaeia2014d1_en.pdf)

Figure 7. Rating list accumulated FDI by countries.



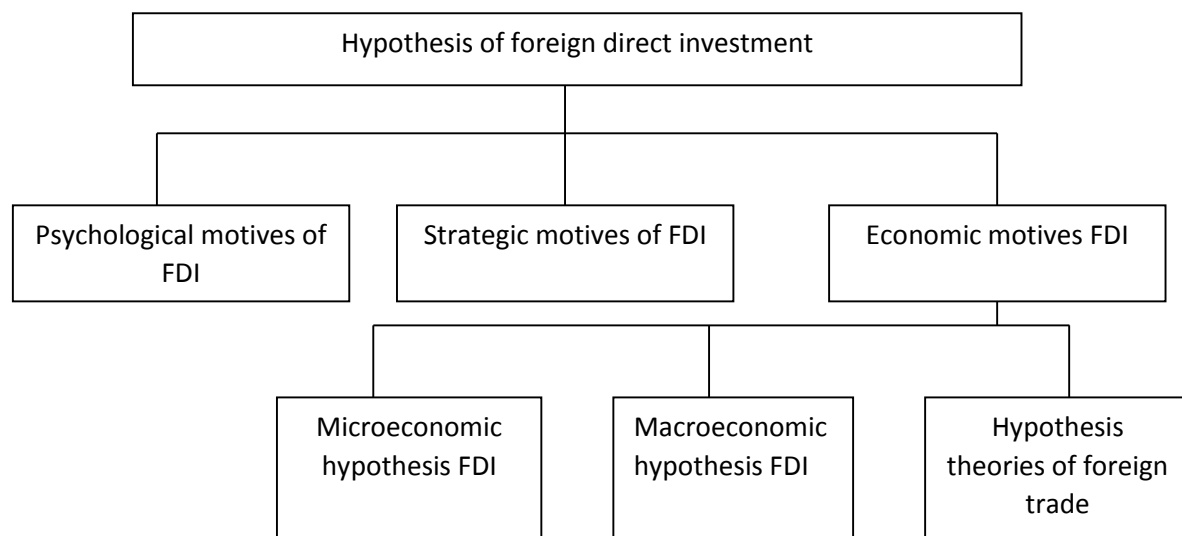
Source: UNCTAD.

## 4. Methodology

### 4.1. Methodology framework

The first conceptual hypothesis for understanding the foreign direct investment appeared in a result of increased activity of the subsidiaries of American companies in European markets in 50s. Thus, this tendency forced to understand also the political, psychological and economic motives behind of it. Strategic and psychological motives of foreign direct investment case studies with transnational corporations (TNCs) have shown that the motives for the implementation of foreign investment based on strategic decisions of four main types:

- (a) the search for new markets;
- (b) the search for new sources of raw materials;
- (c) seek opportunities for doing production with higher efficiency;
- (g) search for new information.<sup>42</sup>



For each investor the economic motives and the financial consequences stand for the first place. Needs initial comparative approach for distinguishing the economic benefits between home country and host country. However, the inviter country undertake some important political and physiological motives. The key factors of foreign direct investment in these hypotheses are taken different returns on equity (hypotheses profitability), market size (total market hypothesis

<sup>42</sup> Ковалев, В. В. (2013) *Инвестиции*. Учебник Государственного образовательного стандарта по специальности "Финансы и кредит". Link: <http://www.alleng.ru/d/econ-fin/econ-fin172.htm>

and the hypothesis of production volume), costs of factors of production (production cycle hypothesis), and changes in the exchange rate (the exchange hypothesis space). In terms of investor, the most important case among these hypotheses is the profitability.

## **4.2. Hypothesis**

Hypothesis 1: *Whether the total FDI plays pivot role on sustainable economic growth in Russia for 2000-2013.*

The amount of foreign direct investment in Russia is gradually and continuously increasing. However, there are different opinions about FDI inflow. On one hand, there is a widely extended opinion that FDI is important to boost the economic growth, on the other hand, some others claim that the impact of foreign direct investment of economic growth is controversial and must be tested on the cross-sectoral base.

The hypothesis will be tested using econometric correlation analysis. As basis key indicators, we need two indicators — growth rate of the domestic output as a dependent variable and foreign direct investment and initial GDP per capita as key independent variables, respectively. The control variables will manage the role of conditions and motivation of government in FDI inflows. The motivational idea of the model originated from the Borensztein, E. (1998), Alfaro, L (2003) and Alfaro, L. et al (2003).

Hypothesis 2: *Whether FDI have significant impact on GDP growth by major industries (heavy industry, finance and trade).*

Based on the previous hypothesis, we can advance our investigation and shed a light on more narrow aspects of FDI impact on GDP growth, explaining particularly, on which major sectors are foreign investors are eager to invest. Furthermore, the results of research will be helpful to understand the real effect of FDI by sectors, since each sector reacts differently to the capital intervention. As we know, in Russian economy, during the last decade financial sector, heavy industry and trade play exclusively important role in attraction of investors. Hence, the task is to find out the ways that FDI inflows by sectors effect on the position of industries and, in

general, on the GDP growth. Thus, the essence of the applied model remains the same as for the first hypothesis (Alfaro, L. (2003)) including the FDI separately in sectoral order.

### **4.3. Data Description**

The data was accurately collected from several reliable sources. Each of them was very helpful in terms of formulating my model and explaining my hypotheses. Especially, the data collected from Russian Federal State Statistics Service (FSSS), Central Bank of Russia (CBR) and The World Bank. In addition, I also addressed to the database of The United Nations Conference on Trade and Development (UNCTAD) and The Worldwide Governance Indicators (WGI).

For the first hypothesis I am intended to use the time period from 2000 up to 2014 in order to study the interaction of total FDI on the economic growth. The data is taken in a quarterly intervals for increasing the accuracy of the estimation. However, there are some variables which I will create as quarterly data from the annually given data. Moreover, for founding out the impact of FDI on economic activity, I will include the FDI inflows into the sectors. Nevertheless, the FDI distribution among the sectors in Russia Federation began accounting since 2010 by Central Banks of Russia. The data is given quarterly and I will especially focus on three sectors: heavy industry, finance and trade.

The data for the main and dependent variables – initial GDP per capita, FDI and GDP growth rate – will be taken from the FSSS, the World Development Indicators (WDI) database of the World Bank and the database of Organization for Economic Cooperation and Development (OECD), respectively. Similarly with author Alfaro L. (April, 2003), I use growth rate of output as a growth of per capita GDP in dollars. GDP per capita is a measure of the total output of a country divided by the number of population in the country.

However, the dataset FDI covers only the period from 2000 up to 2014 and measures the general FDI inflow into the Russian Federation. Part of the control variables (*inflation* and *institutional quality/political stability*) are obtained from CBR and from the Worldwide Governance Indicators (WGI), which report six aggregate governance indicators over the period

1996-2013, covering i) Voice and Accountability, ii) Political Stability and Absence of Violence, iii) Government Effectiveness, iv) Regulatory Quality, v) Rule of Law, and vi) Control of Corruption.<sup>43</sup> The rest part of control variables (*foreign investment, openness, government expenditures, market capitalization and financial depth*) based on the dataset obtained from the upper mentioned sources will be calculated according to the requirements of the model. I add the openness variable into the control matrix in order to capture the openness of a country (in our case, it is Russia), which estimates a ratio of the sum of imports and exports to the total gross product (GDP). Financial depth data comes from CBR and proxied by M2 amount of liquid liability of the financial system to the GDP, which for most countries equals M2/GDP.<sup>44</sup> Foreign total investment stands for the ratio of the gross market formation to GDP, which is important to analyze its relationship with FDI. Because, on one hand, FDI could indicate economic growth simply by augmenting capital accumulation in the host country, which it would require that FDI does not ‘crowd out’ equal amounts of investment from domestic sources by competing in product markets or financial markets (for example, under conditions of financial repression); on the other hand, FDI could increase economic growth if it is more productive, or efficient, than domestic investment.<sup>45</sup> Data describing the market capitalization (MC) obtained from WDI and measures the total market value of listed shares within the stock market development as a ratio to GDP. The main feature behind this parameter is that it is less arbitrary than any other measure of stock market development.<sup>46</sup> Finally, the government consumption data obtained from the WDI database of the world bank, and includes all government consumption, transfer payment, investment and spendings. In the following table I summarized the descriptive statistics of variables, showing the mean, standard deviation, minimum and maximum values.

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<sup>43</sup> The World Bank: Worldwide Governance Indicators: <http://info.worldbank.org/governance/wgi/pdf/c187.pdf>

<sup>44</sup> E. Borensztein - J. De Gregorio - J-W. Lee (1998) How does foreign direct investment affect economic growth? Journal of International Economics 45 (1998) 115–135. Link: <http://www.olemiss.edu/courses/inst310/BorenszteinDeGLee98.pdf>

<sup>45</sup> Ibid. Page 128

<sup>46</sup> Anokye M. Adam - George T. (October 2008) Foreign Direct Investment (FDI) and Stock market Development: Ghana Evidence. Munich Personal RePEc Archive. Link: [http://mpra.ub.uni-muenchen.de/11261/1/MPRA\\_paper\\_11261.pdf](http://mpra.ub.uni-muenchen.de/11261/1/MPRA_paper_11261.pdf)

**Table 6:** Descriptive statistics of variables.

Sample size: 56 quarters

	Mean	Std.dev.	Minimum	Maximum
<b>GROWTH</b>	1,16%	1,16%	-3,57%	3,70%
<b>INITIAL GDP</b>	263 970,0 \$	161890,0 \$	0 \$	570 550,0 \$
<b>FDI</b>	8 431,5 \$	1,20%	678,56 \$	18 696 \$
<b>INFLATION</b>	2,64%	1,61%	-0,20%	7,00%
<b>OPENNESS</b>	0,4631	0,0521	0,3571	0,6311
<b>GOVERN.SPENDING/GDP</b>	0,1812	0,0253	0,1334	0,2593
<b>INSTITUTIONAL QUALITY</b>	-0,9303	0,1179	-1,0876	-0,7106
<b>FINANCIAL DEPTH</b>	1,1002	0,3910	0,4797	1,8559
<b>TOTAL INVESTMENT</b>	8594,5 \$	7603,7 \$	114,24 \$	40147 \$
<b>FDI_BANKING</b>	1009,4 \$	948,89 \$	5,0587 \$	3554,4 \$
<b>POLITICAL STABILITY</b>	0,6585	0,0383	0,5900	0,7200
<b>MARKET CAP.</b>	150 590 \$	106 150 \$	9730,5 \$	375 750 \$
<b>FDI_FINANCIAL SECTOR</b>	15475. \$	10002. \$	3289.2 \$	31346. \$
<b>FDI_HEAVY INDUSTRY</b>	12501. \$	6210.1 \$	5727.4 \$	28052. \$
<b>FDI_TRADE</b>	9407.8 \$	3467.5 \$	3562.2 \$	16541. \$

However, before starting to run the model, we should run the unit root (UR) for each of the non-stationary variables. Because many economic and financial time series exhibit trending behavior or non-stationarity in the mean, that is why it is important to determine the most appropriate form of the trend in the data.<sup>47</sup> Therefore, the unit root tests used for determining the trending data by the first differences of the deterministic functions to render the data stationary.<sup>48</sup> Thus, in this case, first step is determining the unit root using the Dickey-Fuller test (DF-test). As we know, the time-series has a unit root, if its first differences forms a stationary time-series. This condition can be written as  $y_t \sim I(1)$ , if the number of the first differences is  $\Delta y_t = y_t - y_{t-1}$  is a stationary  $\Delta y_t \sim I(0)$ . Using this test checks the value of the coefficient  $a$  in the autoregressive equation of the first order AR (1).

$$y_t = a \cdot y_{t-1} + \varepsilon_t$$

where  $y_t$  is a time-series, and  $\varepsilon_t$  is error.

<sup>47</sup> Link: <http://faculty.washington.edu/ezivot/econ584/notes/unitroot.pdf>

<sup>48</sup> Ibid.

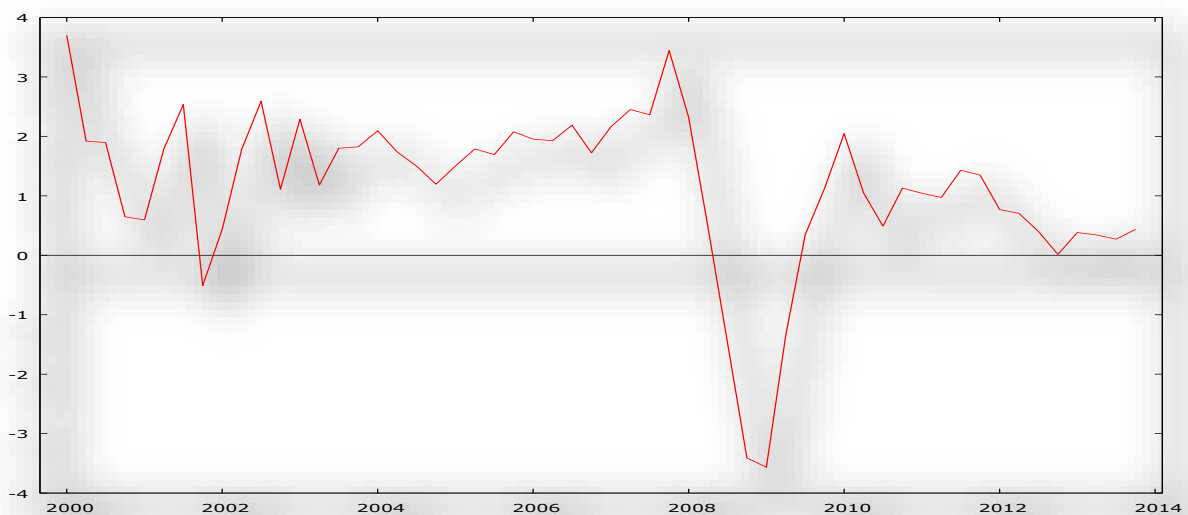
If  $a = 1$ , then we obtain the unit root, an integrated first-order time series -  $I(1)$ , in which  $y_t$  number is not stationary. Otherwise, if  $|a| < 1$ , then the number is stationary -  $I(0)$ . For financial and economic processes value  $|a| > 1$  is not peculiar, because in this case the process behave "explosively". The occurrence of such processes is unlikely, since the financial and economic environment is quite inert, which does not allow to take infinitely large values for short time intervals.

As we know, there are long-run equilibrium relationships among the non-stationary time-series, applied in economic and financial models. Thus, we continue with the formal analysis of the stationarity to exact the presence of the unit root (UR). Before testing the first stationarity, it is better to look at the time-series plot of the dependent variable, growth, and the residual to see whether it has a constant and trend. If we control the results of the test, we must reject the null hypothesis when the p-value is smaller than the significant level:

1. p - value < significance level = reject null = stationarity
2. p - value > significance level = cannot reject the null = non – stationarity.

We got the following ADF test about growth with the *asymptotic p-value 0.02259*, what means that the variable is stationary and we can use variable even without the first difference.

**Figure 1:** Stationarity of the Growth of GDP.



## **4.4. Research Methodology**

In the description of the foreign direct investment, the amount of the borrowed funds finds an expression in two types: either, as a share of foreign direct investment in a region in the ratio of total GDP over the region (or over the whole country), or as a share of the foreign capital in the company. In order to assess the resulting effect of FDI on the Economic Growth, I augmented the economic growth function for the Foreign Direct Investment across each sectors within the economy as it is applied by Alfaro L. et al. (2003). I accounted for six control variables (*inflation, institutional quality/political stability, total foreign investment, openness, government expenditures, and financial depth*), which do affect the economic growth. Furthermore, the initial GDP for the current year taken in its logarithmic form as is described in the variable definition part that follows. In analyzing the research problem, I will use an Ordinary Least Square estimation technique (OLS), specifying for the whole sample in an aggregate FDI across all the sectors and disegregated for FDI in the individual sectors. Analytical testing including, White's correction of hetroschedasticity and multicollinearity tests for the residuals will also be performed.

The model have to be built on the features, which will explain the interaction between dependent variables, and independent variables, that is, the way in which independent variables influence on changings of the dependent variables. Thus, the model based on the implementation of the variables makes it possible to talk about the decision-making capacity of investor, which in its turn, this potential use of the model allows estimating the real effect of FDI.

### **4.4.1. Model specification**

The purpose of the empirical analysis strictly based on the determination whether the total FDI and FDI in the banking sector exerts distinguishing impact on an economic growth in Russia in 2000-2013 years. The model, which I apply, is almost the same model used by Carkovic M. – Levine R. (2002) and Alfaro L. et al. (2003). However, keeping the structure of the model unchanged I append to the model time-series of FDI in banking sector given in a quarterly base insist of a general FDI. Initially as a benchmark for time-series, it is necessary to

estimate the impact of FDI on economic growth. Therefore, we have to regress the following model by OLS:

$$GROWTH_t = \alpha_0 + \alpha_1 * INITIAL\_GDP_t + \alpha_2 * FDI\_total_t + \alpha_3 * CONTROLS_t + \varepsilon_t \quad (1)$$

Where t is a period and represents quarterly;

*GROWTH* – dependent variable, indicates the economic growth of GDP;

*INITIAL\_GDP* – stands for log of the current *GDP per capita* at the beginning of the period;

*FDI\_total* – equals to the gross FDI/GDP ratio.

The last parameter, *CONTROLS*, represents a vector of conditioning information, which encompasses inflation rate, institutions, government expenditures, M2/GDP ratio and openness to trade by quarters.

In the next step, our task is to estimate the FDI in three major economic sectors – heavy industry (manufacturing & quarrying & mining), finance (insurance & banking & other financial activities) and trade (wholesale & retail), as these three industries captures from 17 up to 58 percent of total FDI inflow in a country, with a mean 33 percent quarterly value. Thus, I specified inflows of FDI for each sector and as following (Alfaro, L. 2003):

$$GROWTH_t = \alpha_0 + \alpha_1 * INITIAL\_GDP_t + \alpha_2 * FDI_t^H + \alpha_3 * FDI_t^F + \alpha_4 * FDI_t^T + \alpha_5 * CONTROLS_t + \varepsilon_t \quad (2)$$

where, *H* means the FDI inflows in *heavy industry* sector, *F* means the FDI inflows in *financial* sector, and *T* means the FDI inflows in *trade* sector. All other variables reminds similar as in the previous model.

This model allows us to depict the negative and positive effects of FDI by sectors, which in its turn will be considerable for both the host country and investors. However, due to the accounting of the FDI inflows by sectors in Russian Federation officially started since 2010, I will reduce variables up to 16 observations and use quarterly data from 2010 up to 2013.

#### 4.4.2. Definition of Variables

Following the model specification of Alfaro (2003), I augmented the economic growth function for my interest variables of the FDI and also accounted for the sectoral variations. The idea based on the investigation of the channel by including additional variables proxying for

the other factors, through which total FDI may be beneficial for growth. Each of these variables has specific interaction with FDI. Including additional variables into the model, we can describe the nature of the regressions.

Thus, in the table below we obtained the OLS estimates including for each of the control variables with the combination of total FDI and *initial\_GDP*, and two packets of complex estimates. Independent variable *initial\_GDP* defines as the log of the current GDP per capita at the beginning of the period. Inflation is a log of (1+average inflation of the period). Openness is log of the (export+import)/GDP for the period. Financial depth indicates the log of the M2 amount of liquid liability as a ratio to the GDP. Moreover, the FDI in the model included as a log of (1+*total\_FDI*/GDP). The rest control variables in the model are logs of respective variables given as a share of GDP over the period. Furthermore, I take the logarithm of each variable, because of the time series are heteroskedastic and occurrence of the large local variance of the series depending on the level of series. By this way, we can also minimize the scale of the variables but keep their effect at the same level.

## 5. Empirical results

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For empirical computation, I used gretl software, which is designed for econometric analysis. The main outcomes of the regressions explain that the FDI, in general, has a positive impact on the economic growth, however, the economic conditions, which are characteristic for a host country can interact adversely with FDI inflows.

In Table 7, we can see the main regression results with all control variables included separately. Almost in each case, except the regression 1.4 and 1.9, regressions with each variables in a conditioning set show that FDI has positive effect and strongly statistically significant effect on economic growth. However, especially interesting outcome is that GDP per capita has negative coefficient while FDI performs positively. The results of 1.1 – 1.8 regressions show that, if in inflation rate, total investment, government expenditure and financial depth occur 1% change, it will bring about the reduction of GDP growth per capita, although coefficients are not statistically significant. On the other hand, the rest control variables in a combination with FDI and GDP per capita effect positively on growth. Moreover, conditioning set of FDI, market capitalization and political stability effect highly significantly on GDP growth per capita.

In general, we can say that there is an obvious statistically significant effect of FDI on growth of GDP and the magnitude of changes are from 0.47% up to 1.54%, which the latter one is not a significant. On the other hand, the other core variable, initial GDP, exhibits an opposing effect on the GDP growth rate, since within each regression from 1.1–1.9 it obtains a negative statistically significant sing, excluding the regression run with a financial depth. The magnitude of coefficients of initial GDP fluctuates from -1.15% up to -0.48% depending on the specification used. The other result of the regressions from table 7 is that the control variables from columns 1.5 and 1.7 have also a statistical significant impact on GDP growth.

**Table 7:** OLS Estimation result for each control variables

Dependent Variable: Growth of GDP (2000-2013; quarterly)

	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)	(1.7)	(1.8)	(1.9)
Independent variable	Coefficient (standard errors)								
<b>Initial GDP</b>	-1.1518*** (0.234)	-1.0089*** (0.207)	-0.9279*** (0.275)	-0.9881*** (0.204)	-0.9528*** (0.199)	-0.6497 (0.637)	-0.4820* (0.282)	-0.8921*** (0.262)	-1.1609 (0.968)
<b>Inflation</b>	-0.3218 (0.255)								-0.3448 (0.274)
<b>Investment</b>	-0.6055 (0.809)								1.6791 (1.372)
<b>Openness</b>	0.7944 (1.795)								3.1066 (2.092)
<b>Gov.Exp</b>	-1.3083 (0.883)								-2.6680 (1.702)
<b>Market.Cap</b>	0.4907** (0.225)								0.3403 (0.332)
<b>Fin.Depth</b>	-0.7667* (0.289)								1.5982 (2.005)
<b>Polit.Stabl</b>	6.0841** (2.364)								-1.6673 (1.354)
<b>Instut.Qual</b>	0.8683 (1.209)								6.6588 (4.108)
<b>FDI</b>	0.8431*** (0.110)	0.4745*** (0.102)	0.8823*** (0.328)	1.1982 (0.928)	0.6622** (0.032)	0.7306*** (0.181)	0.5132* (0.184)	0.9220*** (0.239)	1.5352 (0.285)
<b>Observations</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>
<b>R<sup>2</sup></b>	0.3610	0.3468	0.3417	0.3690	0.3690	0.3439	0.4221	0.3462	0.5224

**NB:** All the regressions include a constant term and are estimated by Ordinary Least Square corrected for heteroskedasticity. \*\*\*, \*\* and \* denote significance level at 1%, 5% and 10% respectively.

The last column (1.9) indicates that, despite the FDI within the interaction of all variables behaves positively, but still it is not statistically significant and does not have a robust effect on GDP growth. Moreover, mentioning that R-squared is fluctuating around 35% we can say that, according to the given OLS regressions the model is able to explain only 1/3 of changings of the GDP growth.

In the table 8 that follow, estimation for the relation between the economic growth as a dependent variable and that of the total FDI with other additional control variables that determine the economic growth are presented. Even if there are sectoral heterogeneity across the country, the data accounted for here presents the variations that change sluggishly.

Therefore, added with the limited time range of data for some of the sectors; I could not use some other estimation techniques like the GMM panel estimators to exploit the time series variation in the data.

**Table 8:** OLS Estimation results (Aggregate cases)

Dependent Variable: GDP growth (quarterly: 2000-2013)

Independent variable	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)	(1.7)	(1.8)	(1.9)	(1.10)	(1.11)	(1.12)	(1.13)
	Coefficient (standard errors)											
<b>Initial GDP</b>	-1.0205 (0.967)	-1.4782 (0.906)	-0.831*** (0.287)	-1.0478*** (0.293)	-0.9904*** (0.291)	-1.1380*** (0.240)	-0.6584* (0.330)	-0.8866*** (0.279)	-0.5103 (0.777)	-1.3723 (0.896)	-1.1380*** (0.240)	-0.5152* (0.291)
<b>Inflation</b>	-0.2974 (0.273)	-0.2266 (0.270)	-0.2442 (0.267)	-0.3431 (0.281)	-0.3442 (0.282)	-0.2898 (0.275)	-0.2295 (0.250)				-0.2898 (-0.289)	
<b>Investment</b>	1.6972 (1.380)	1.2262 (1.341)	1.3687 (1.320)	0.8801 (1.388)	-0.4173 (0.880)	-0.2803 (0.865)		-0.7465 (0.842)	-0.4700 (1.093)	1.5309 (1.204)	-0.2803 (0.866)	
<b>Openness</b>	2.4108 (2.027)	2.1479 (2.033)	1.6864 (1.925)	0.8468 (2.016)	1.7086 (1.895)			1.2166 (1.861)	2.1928 (2.064)			
<b>Gov.Exp</b>	-2.6397 (1.712)	-3.1185* (1.185)	-2.4312* (1.001)	-1.7621 (1.463)						-3.3364* (0.768)		
<b>Market.Cap</b>	0.2969 (0.332)	0.5970** (0.238)	0.6071** (0.236)						0.5723** (0.241)	0.5873** (0.231)		
<b>Financial.D</b>	1.3573 (2.008)	1.5022 (2.021)							-0.4563 (1.733)	1.0351 (1.898)		
<b>Polit.Stabl</b>	5.0376 (3.917)						6.5136** (2.747)					6.8087** (2.724)
<b>Instut.Qual</b>							-0.8315 (1.317)					-0.7186 (1.309)
<b>FDI</b>	1.9837 (0.373)	1.6673* (0.246)	1.3953* (0.598)	1.7776*** (0.495)	0.6971*** (0.283)	1.5195*** (0.160)	1.3576** (0.374)	0.7516*** (0.271)	1.7282** (0.736)	1.4326* (0.663)	1.5195*** (0.160)	1.3345* (0.405)
<b>Observations</b>	56	56	56	56	56	56	56	56	56	56	56	56
<b>R2</b>	0.5037	0.4832	0.4763	0.3945	0.3740	0.3624	0.4366	0.3529	0.4280	0.4629	0.3625	0.4259

**NB:** All the regressions include a constant term and are estimated by Ordinary Least Square corrected for heteroskedasticity. \*\*\*, \*\* and \* denote significance level at 1%, 5% and 10% respectively.

As we can see from Table 8, FDI is found to be positive and highly significant in most of the specifications. The regression in all the columns is made with a control for some variable effects. That is, effect of the FDI after controlling for initial income and market capitalization, in the one of the case, followed by inclusion of the domestic investment in the list of control variables; in the other case, accounting for the national net investment in the home country. In addition, I also accounted for more additional growth control variables, such as inflation as proxy for macroeconomic instability, government expenditure, market capitalization, and institutional variables. And also, I run an aggregate cases for all the variables in the

specification. Yet still the significance of the FDI persists to hold in most of the cases; even if there is variation in the magnitude of the coefficient. This actually might arise due to the omitted variable bias arising from dropping and addition of the control variables under consideration. Here, I used these different specifications with an assumption that there exists some sort of correlation between some of the control variables (for e.g. Institutional Quality) and that of the FDI; resulting in multicollinearity. Hence, rather than orthogonalizing these variables individually, to check for the net effect; I excluded some of the variables from the model considering the net effects from the respective control variables in each of the specifications.

For the control variables, the coefficient on the Initial GDP and Government Expenditure are negative and significant, while Market Capital and Political Stability variables have a positive and significant effect on the economic growth. However, the other control variables are found to have insignificant effect for the economy of Russia for the sample year under consideration. All the specifications are well fit, explaining about 40% variation of the percentage level of the GDP growth rate, as is indicated in the R-squared of each of the analysis. Because this amount of  $R^2$ , though seemingly small, in the social sciences is reasonably accepted normal.

Having tried to regress the similar combinations with author Alfaro, L., I have got an interesting table where almost in each column we can see that FDI has positive and statistically significant coefficient, excluding the first column. The table 8 displays that the other core variable, initial GDP, in regressions behaves more statistically significantly in an interaction with two or more control variables than in regressions with a single included control variable.

In addition, one is important to underline that control variables such as government expenditure, market capitalization and political stability, have a statistically significant effect on a GDP growth. We see that the one unit point change of political stability index, motivates the GDP growth almost more than 6.5%, which is quite high impact on economy. Actually, the high volatility of political stability and the vulnerable reaction of GDP growth to it can be explained as that the political environment is not stable enough.

The market capitalization has a positive statistically significant effect on GDP growth. Its volatility fluctuates around 0.6%, which means that in case of market capitalization increase one percentage it brings about the increase of GDP growth from 0.57% up to 0.61%.

The government expenditure in interactive regressions behaves negatively. It obtained a coefficients from -2.43% up to -3.34%. However, it is pretty logic that model indicated the negative signs for government expenditure, since the government is spending money to cover its needs.

Unlike from the table 7 in table 8 we can see that R-squared is also increased and now is able to explain only from 35% up to 50% (mean value 42%) of changes in GDP growth.

In the section that follows, I account for the sectoral FDIs in the country and obtained the next results as in Table 9.

**Table 9:** Growth and FDI by sectors.

Dependent variable –Average real annual growth rate (quarterly, 2010-2013)

Independent variable	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)	(1.7)	(1.8)	(1.9)	(1.10)	(1.11)
	Coefficient (standard errors)										
<b>Initial GDP</b>	-0.2085** (0.054)	-0.1714*** (0.048)	-0.1624** (0.055)	-0.1594 (0.054)	-0.1697** (0.057)	-0.1486* (0.062)	-0.1974*** (0.050)	-0.1693** (0.051)	-0.1473** (0.054)	-0.1371** (0.048)	-0.1399** (0.047)
<b>Inflation</b>	-0.4424 (0.381)					-0.3192 (0.452)	-0.4735 (0.350)	-0.4643 (0.332)	-0.3176 (0.395)	-0.2299 (0.332)	-0.2476 (0.328)
<b>Investment</b>		1.3718 (0.855)				2.3049 (1.350)	5.9147 (3.483)	6.2456* (2.309)	2.2924* (0.678)	2.5157** (1.049)	2.5007** (1.017)
<b>Market_Cap</b>			0.4823 (0.462)			-1.0155 (1.639)			-1.0290 (1.420)	-1.5218* (0.552)	-1.4009 (0.788)
<b>Instit. Quality</b>				-7.1186 (6.191)		-7.8535 (3.392)		-7.6714 (5.390)	-12.9312 (8.444)	-9.9579 (3.103)	-7.6829 (10.456)
<b>Polit. Stab.</b>					2.1513** (0.494)	4.7956 (7.937)			4.2415 (6.206)	4.1178 (6.841)	5.0874 (6.335)
<b>FDI_F</b>	0.3756** (0.156)	0.7710** (0.108)	0.2732** (0.102)	0.1432 (0.057)	0.7914 (0.166)	2.8593 (0.348)	0.3614** (0.096)	0.4430 (0.126)	0.5827 (0.632)		
<b>FDI_H</b>	-1.7075 (0.273)	-0.8033* (0.232)	-0.8756 (0.127)	-1.3663 (1.282)	-0.3559 (0.099)	0.1713 (1.093)	-0.7472 (0.610)	1.8004 (0.197)		0.9346 (0.583)	
<b>FDI_T</b>	-0.8345 (1.560)	-0.7016 (0.823)	1.1109 (0.817)	0.7968 (0.949)	0.7457* (0.331)	0.7822 (0.685)	-0.4968 (1.253)	1.0347 (0.401)			1.8933 (0.828)
<b>Observation</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>
<b>R<sup>2</sup></b>	0.7217	0.7465	0.7153	0.7212	0.6958	0.8468	0.7892	0.8318	0.8438	0.8407	0.8447

**NB:** All the regressions include a constant term and are estimated by Ordinary Least Square corrected for heteroskedasticity. \*\*\*, \*\* and \* denote significance level at 1%, 5% and 10% respectively.

The table above is very helpful for understanding the second hypothesis. The empirical results from this table describes the reality and directly explain that FDI flows do not always

bring about the positive effect in terms of the economic growth. In the columns 1.1-1.8 we can see the OLS results of FDI by three major sectors of economy in an interaction with each control variable separately. In the columns 1.1—1.3 our regressions, which is run into separately with inflation rate, total investment and market capitalization, show that only the inward FDI into the financial sector gives a positive statistically significant feedback. But with other control variables as political stability and institutional quality no one of the sectors responds statistically significantly. However, the result obtained for inward FDI into both heavy industry and trade do reacted inadequately. Moreover, the inward FDI into heavy industry displayed negative effect on economic growth, although excluding column 1.2 with total investment, the obtained results were not statistically significant. In case 1.2, it means that if FDI into heavy industry increase 1% it would cause the decrease of GDP growth rate by -0.803%.

Talking about the inward FDI into trade we can see that it also showed the similar reaction the same as FDI in heavy industry, however, when it regresses with market capitalization and institutional quality variables coefficients obtain the positive sign, but still non-significant from the statistical point of view. But the result from column 1.5 implements that the inward FDI into the trade sector has a positive and softly statistically significant outcome, which its increase by 1% motivates the GDP growth rate to increase by 0.746%. In additional, the same column also shows that political stability still has a signifiact impact on GDP growth rate, which its increase by one unit point increase the GDP growth rate by 2.151%. Notwithstanding its coefficient is not so large, but it still displays that the political conditions are influential on economic integration.

In the columns from 1.8–1.11 the regressions estimated for each sector separately including all control variables. But here we observe some other shape of control variable, that is, the total investment, which effects on GDP growth rate significantly positively, although, no one of the FDI by sectors obtained significant coefficient.

In the column 1.6, we see that while including all control variables and all core variables no one of the sectors could effect on general GDP growth rate, except the soft significance of initial GDP per capita. This variable behaved statistically significantly in each regression column.

The coefficient of determination, denoted by R-squared, increased obviously compare with the other tables (table 7 et 8). Its magnitude fluctuates around 0.7815, with a minimum 0.6958 and maximum 0.8468. Actually, in cases if our coefficients statistically significant, it means that, including the inward FDI by sectors, we are able to explain only 78.15% of changing of the GDP growth.

The main outcome of the table 9 is that the second hypothesis was not approved. Having obtained negative (for heavy industry) and non-significant coefficients we can frankly say that, FDI inflow in Russian economy still needs to formulate its features and priorities, as because it is not still clear that FDI has positive impact on growth of Russian economy.

## 6. Conclusion

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The increasing importance of global FDI movements motivated modern economists to investigate its effects on economic growth. It appears very enthusiastic for a host country, since it relies on liberalization and openness of the economy. From commonly accepted point of view, FDI inflow into some industry considered positively. However, there are different convictions, which explains that in different developing countries it works differently and could have adverse effect on the economy in general. As a newly emerged market, since the collapse of the Soviet Union, Russia got a transition course toward the market economy and began to be interested in attraction of FDI. Especially, after a decade, in 2000s, economy started to recover and getting started its stability period and huge Russian economy become quite attractive for foreign investors.

This thesis underlines the FDI inflow into the Russian economy since 2000. Having tested the effect of FDI in Russian economy as a whole and by major sectors, there is econometric evidence that the FDI result in the economic growth in a host country. More specifically to the sectors, the foreign direct investment in the financial sector is found to be statistically significant as compared to the other two sectors. Therefore, the outcomes of my research clearly depicted that comparing three major sectors of economy, among which only FDI into financial sector behaves inducing the growth of GDP. Nevertheless, within the all-inclusive regression, FDI into financial sector did not obtain statistically significant sign. The other two sectors, that is, heavy industry and trade sectors, in general responded either statistically non-significantly or negatively. Moreover, the finds evidence that FDI into trade sector is quite ambiguous.

The summing up this paper highlights that FDI inflows by sectors (that is, financial, heavy industry and trade) exert growth effect on economy. Nevertheless, apart from all analytical results, it is necessary to underline the role of political stability in Russia, which in some particular cases achieved highly positive significant results. The rise to the occasion of this variable once again explains the role of obstruction and influence of government on

economic adjustment. In addition, the total investment also took impactful role in the sectoral allocation of FDI, which could be explained with the large inflow of investments into the particular field of economy, including the investments from offshore zones. However, in a model with all-inclusive regression, where FDI indicates the total inflow, the role of total investment was not noticeable. From economic perspective, the other variables have not been influential.

Finally, the outcomes of this thesis suggest a number of recommendations. For further research, it is important to take into consideration the control levers of the state, through which the government keeps economy under its own adjustment and the level of schooling. Especially, the shortage of the openness of economy was obvious in the analyses of FDI flows into the major sectors. Moreover, the failure of FDI in Russian market can be occurred as a cause of level of schooling. Investing mostly into non-scientific sectors as trade and heavy industry, where usually and mainly requires manual work, once again stresses the low level of reliability of schooling in Russia.

The Russian Government controls the economy and it makes foreign investors to think sceptical in order to invest. By restricting the movement of FDI into the Russian economy, it exerts a retention of pace of progress of host economy and leads to a needs for the adoption of new technologies. Russia has a huge perspective to take advantage from FDI inflows, however, for this sake, it should overcome the bureaucracy and the government control by making the market more open, and to increase the level of schooling, which is certainly important for creating a productive investment environment.

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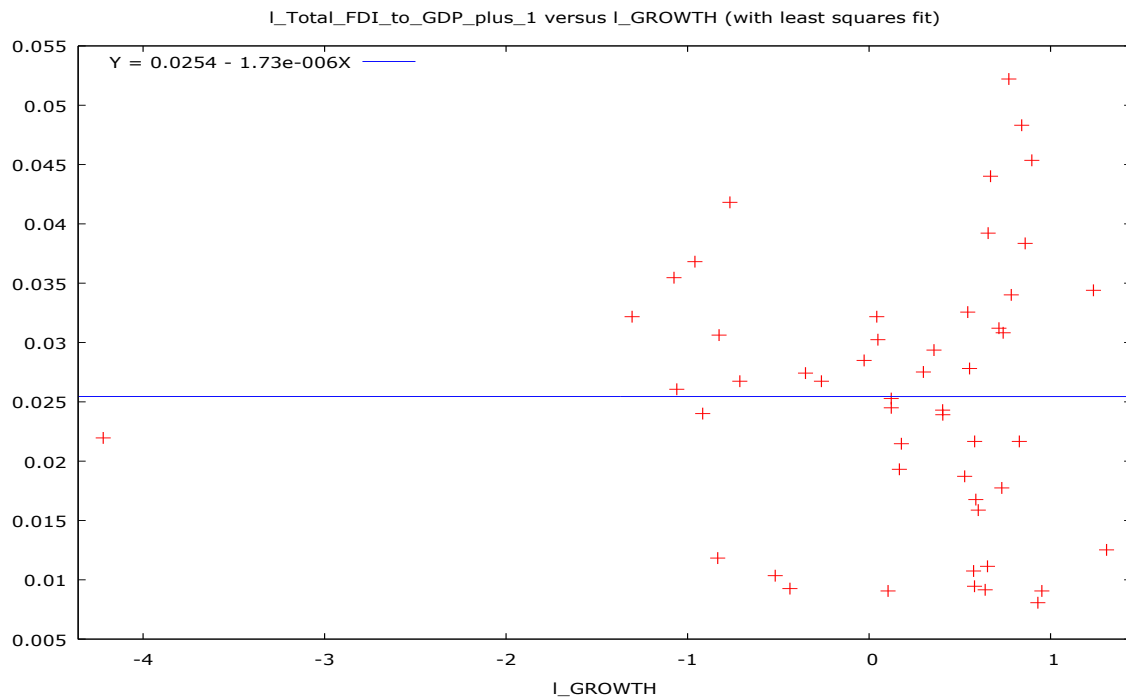
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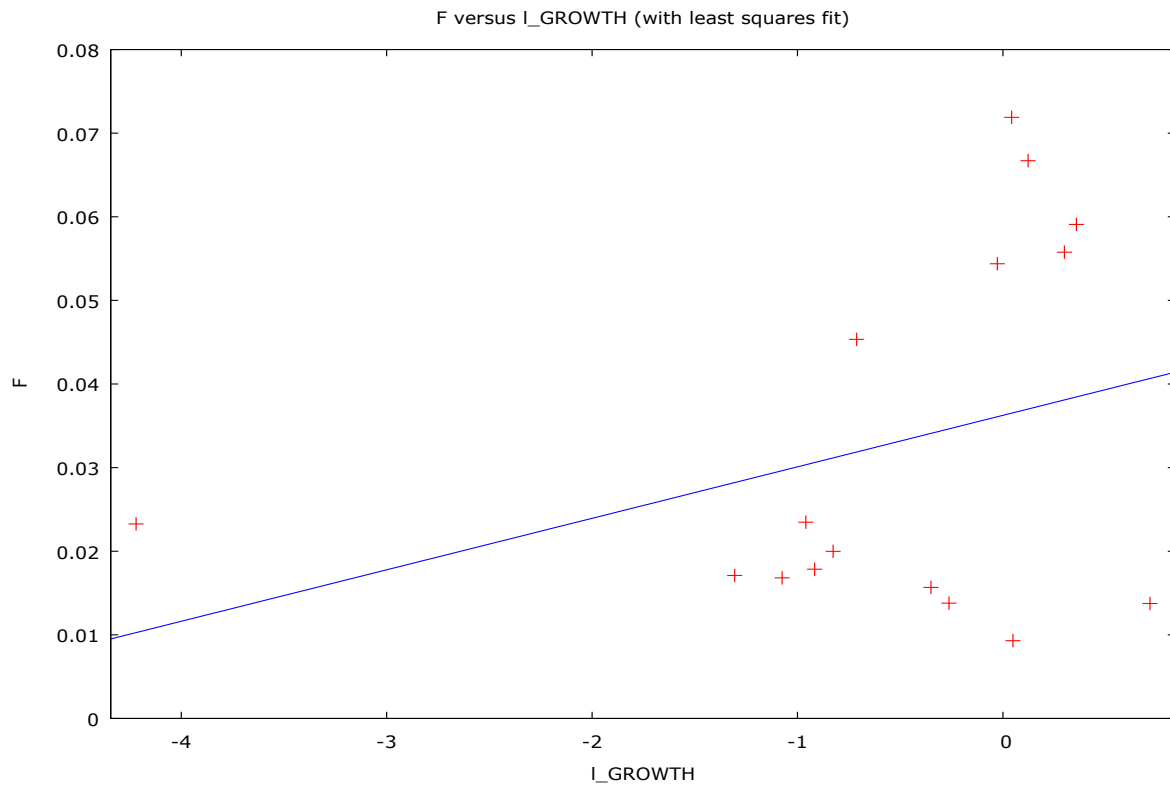
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## Appendix

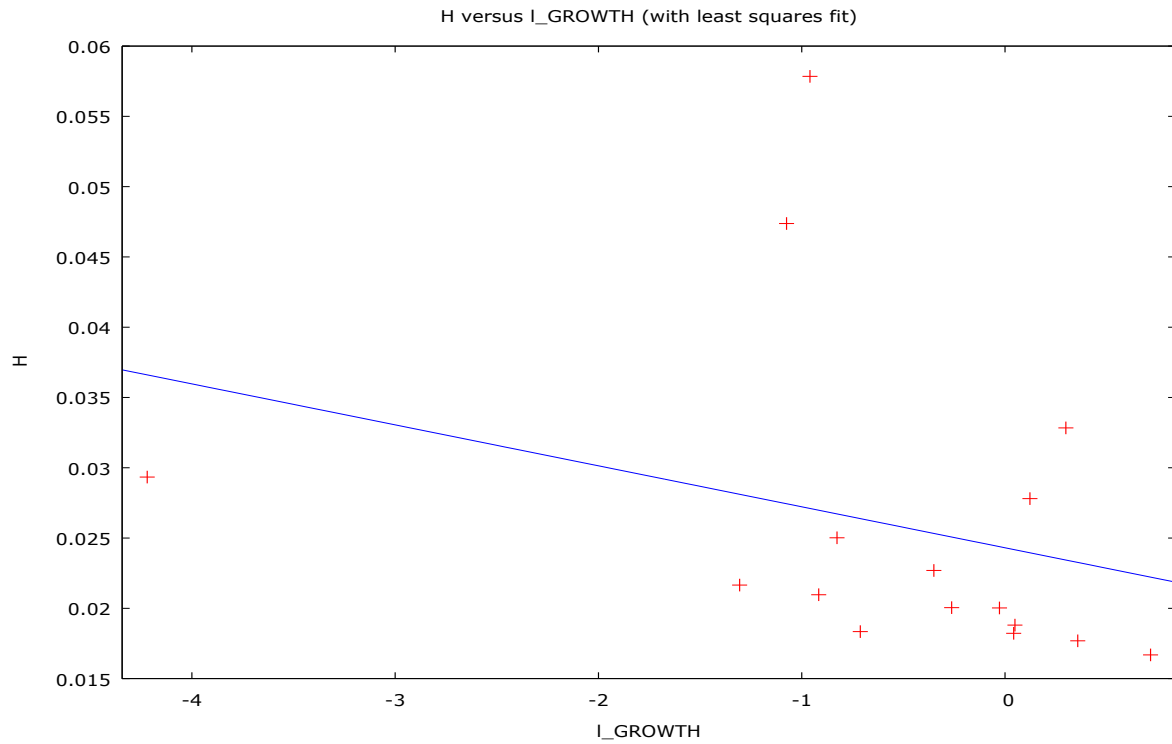
**Figure 1:** Total FDI and GDP Growth (2000 – 2013; quarterly)



**Figure 2:** FDI in the Financial sector and GDP Growth (2010 – 2013; quarterly)  
(F means Log of (1+FDI financial sector/GDP))



**Figure 3:** FDI in the heavy industry sector and GDP Growth (2010 – 2013; quarterly)  
 (F means Lof of  $(1+FDI \text{ heavy industry}/GDP)$ )



**Figure 3:** FDI in the trade and GDP Growth (2010 – 2013; quarterly)  
 (F means Lof of  $(1+FDI \text{ trade}/GDP)$ )

