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Use of Investment Ratings as Target Progress Measures in Result-Oriented Budgeting

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Target indicators reflecting the progress in meeting the above program's objectives should constitute an integral part of this program. This report is dedicated to the scope of various investment ratings' applicability as target progress measures. The first section provides an overview of the investment ratings best practices, the second section describes proprietary calculations, and the final section presents findings and recommendations regarding the possibility of and rationale behind the use of certain indicators as target performance measures of the State Program of Enhancing Investment Appeal of the Russian Economy.

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Introduction

One of the Russian government's priorities in a country that has been investment-hungry for quite a long time is to secure inflows of Russian and foreign investments in the real sector.

As is noted in many publications¹, foreign direct investments (FDI) have a number of advantages over any other forms of external and internal financing (government and private investments alike). First of all, this comes from FDI long-term character, lesser volatility, higher efficiency and overall favorable impact on the investee country due to transfer of advanced technologies and corporate governance best practices.

Presently, many policymakers and analysts of the investment market share a view that assignment of high sovereign investment ratings by the leading international agencies (Moody's, Standard & Poor's, Fitch. etc.) may have a positive impact on the amounts of foreign direct investments so long as it reflects the country's economy's attractiveness for inward investments.

The first investment agency to have raised Russia's sovereign rating to the investment grade was the Moody's international rating agency (October 8, 2003). Later, other agencies - Fitch (October 18, 2004) and Standard & Poor's (January 31, 2005) also raised Russia's sovereign rating to the investment grade.

A question arises as to what this might mean in terms of FDI inflows? To answer it, one must understand what factors are critical for inward investments and to what extent indices of sovereign risk and investment attractiveness may be relied on.

Accordingly, in our work we want to define the interplay between investment ratings, sovereign ratings of economic freedom, etc. published by the international rating agencies, and the amounts of foreign direct investments flowing into the economy of the investee country. Such an analysis will help understand the extent of reliance that foreign investors willingly put on the information provided by rating agencies in making decision to invest, and to what extent this decision is the product of their own prudent judgment. Should we say that the main attention is paid to various non-economic sovereign risks (political, social, etc.), or economic risks and benefits are more important? It is quite possible that even with high political and regulatory risks potential investors might nevertheless go for it realizing that high investment risks go hand in hand with huge opportunities to garner benefits. In this case the investor's strategy might be that of trying to abide by the rules of business conduct accepted in the investee country i.e. give bribes, if necessary, use a political clout through connections with influential politicians or by lobbying his interests in the upper echelons of power, etc.

Perhaps sovereign investment ratings or economic freedom indicators (e.g. EFW, Fraser Institute) do not at all constitute any informative guidelines for the investors so long as a sovereign rating of the country or any political risks involved may not matter very much as far as investment appeal of a specific project or a company is concerned.

Is it that the problem of attracting foreign capital totally belongs in the realm of economic factors, economic risks and economic benefits? For instance, at some point there may 'simply' not be any potential investment projects left in the investee country that are deemed lucrative to the extent of effectively coping with all associated risks, including *economic* risks of the market low paying capacity, nonperformance of contracts by suppliers that transform into *institutional* risks of ownership rights vulnerability and the lack of sanctions for contractual defaults, etc.

¹ See, for instance, "Program for Attraction of Foreign Direct Investments in the Economy of the Russian Federation for 2000-2003", Bureau of Economic Analysis, 2000

Notwithstanding, ROI is falling due to purely economic factors: non-efficient management, lack of long-term planning and poor understanding of the local market and country specificities².

1. Experience in Analyzing Information Content of Investment Ratings

Rent derivation and underinvestment in determining sovereign ratings

International companies wishing to invest in this or that country are encountered with two types of risks: large-scale but rarely occurring risks (natural calamities, state coups, terrorist attacks) and the second type of risks, far less significant but more frequently incurred (fraud, graft, regulatory risks and legally unprotected contracts).

It is widely acknowledged that the ratings assignment by various foreign organizations is a factor weighing into the final decision of foreign investors. On the other hand, it is also noted that although ratings do impact the investors' opinion they should not in any way be viewed as a guarantee of foreign investments massive inflow.

G. Ferri in the article "**More Analysts, Better Ratings: Do Rating Agencies Invest Enough in Less Developed Countries?**" says that insomuch as the market of rating services is highly monopolized³ the rating agencies 'underinvest' into the information gathering especially when it comes to ratings of non-OECD countries. As a result, companies in the emerging markets find themselves undervalued and underinvested in both absolute and relative terms.

It is noted that rating agencies are very good in predicting credit risks relating to the developed countries where they have been stationed and working for years, e.g. the USA⁴. At the same time these agencies were incapable of forecasting the majority of financial crises such as those in Mexico and Asia. Many analysts believe that sovereign risks assessments were both late and inadequate in terms of the markets' fundamental characteristics⁵. Others note that in evaluating private companies in the emerging markets the rating agencies rely entirely on the relevant sovereign ratings and attach too little importance to individual performance of the investee company⁶.

As a graphic example of inadequate, in our opinion, assessment of the actual investment attractiveness of national economies we may point to the World Bank's database containing sovereign comparisons made as a result of the companies' survey on what they deemed were major restraints of their business activity⁷. According to the results of the survey for 2003, only 9.52% of more than 500 Russian companies surveyed believe that the Russian legislation is a factor restraining business activity, 13.7% named corruption, whilst another 12.42% - criminality, larceny and the lack of law and order. Only 13% of those surveyed named the cost of borrowing as a business restraint. Compare: in relatively developed Poland with lesser rampage of criminality, corruption and restraint of civil freedoms, the results were 23.08%; 25.27%; 23.75%; 51.74%, respectively, while in far less prosperous Azerbaijan the results were: 4.38%; 19.36%; 2.60%; 14.10%. Were a potential investor to decide based on such information his choice would have been obvious.

Our viewpoint is shared in some analytical papers where they doubt the ability of ratings to be a reliable yardstick in measuring investment attractiveness⁸. Benchmarking of countries placed

² Ferry (2003)

³ White, (2002)

⁴ Ederington, Yawitz & Roberts, (1987)

⁵ Ferri, Liu & Stiglitz, (1999); International Monetary Fund, (1999); Monfort & Mulder, (2000)

⁶ Bongini, Laeven and Majnoni, (2001); Ferri, Liu & Majnoni, (2001); Ferri & Liu, (2003)

⁷ <http://rru.worldbank.org/DoingBusiness/ExploreTopics/EnforcingContracts/CompareAll.aspx>

⁸ Cm. M. Ballotta (2004)

high in various ratings on competitiveness of economy, economic freedom, etc. indicate significant discrepancies.

In the article "**Differential Properties in the Ratings of Certified vs. Non-Certified Bond Rating Agencies**" by **Beaver W., Shakespeare C., and Soliman M.** two types of ratings are claimed to exist: (1) those prepared by large certified agencies such as Standard & Poor's, Moody's, Fitch Ratings, Dominion Bond Rating System, and (2) those prepared by non-certified agencies (e.g. Egan-Jones Ratings Co.). It turns out that the former are worse in reflecting positive trends on the securities market while doing much better when it comes to assessing negative trends (which themselves might be a result of the ratings' fall below the investment grade). Consequently, by so doing they underestimate investment attractiveness of companies. As for the ratings of non-certified agencies, these are normally more flexible and better account for the market fluctuations. According to the authors, assessments of the first rating agencies' group are normally targeted on large institutional investors guided by the conservative 'prudent investor' rule; therefore, they seem to have a quasi-regulatory nature. Ratings of other agencies, in fact, represent recommendations for investors, especially the ones pursuing the profits strategy. So it may be concluded that ratings of many reputed rating agencies may misrepresent the investment appeal by way of overestimating the risks. The issue of ratings' efficiency is also associated with the potential conflicts of interest, when a rating agency charges the rated company for provision of rating services.

To ensure that investment ratings bear more information content, **J. Salo** in the article "**The Emergence of Non-Financial Rating Agencies for the Promotion of Global Standards: An Assessment and Empirical Analysis of Two Proprietary Databases**" suggests that apart from the ratings based on financial statements one should use non-financial characteristics such as corporate governance efficiency, social environment, compliance with environmental standards, etc. In the author's opinion, this would help avoid underestimation of companies.

The survey of **Erb C.B., Harvey C.R., and Viskanta T.E.**, "**Political Risk, Economic Risk, and Financial Risk**", proves that, in view of the leading international bankers, ratings where a relatively higher priority is given to the political factor describe a country's investment potential better. In the survey, the key risk factors for emerging nations in 1994 in the first place included "national debt servicing", in the second place - political environment and prospects and only in the third place - economic environment.

On the other hand, the article "**Prototype risk rating system**" by **Crouhy M., Galai D., and Mark R.**⁹ describes how the average accrued penalty interest rates for overdue corporate bond payments were distributed for different rating groups. It was found that the lower the rating of a company, the higher the accrued penalty interest rates which are distributed primarily in the logistical way.

Factors affecting foreign direct investment

In spite of the numerous analytical and empirical studies on foreign direct investment¹⁰, there is no agreement on the key factor affecting investments by transnational corporations (TNC). It is generally agreed that the key factors are the scope of the domestic market and access to natural resources. However, experience of the poorest nations having considerable natural resources and population (even though with low paying capacity) proves that business environment, which is conditioned by many institutional and political factors, is of primary importance for TNC to make investment decisions.

It is indicated in the survey by **J. Morisset**, "**Foreign direct investment in Africa: policies also matter**", that although countries having large markets and/or ample natural resources always

⁹ See also "2004 Corporate Default & Rating Transition Study"//Rating Agency Malaysia Berhad, April 2005, www.ram.com.my

¹⁰ Wheeler & Mody (1992), Singh & Jun (1995), UNCTAD (1998), UNCTAD (2003)

attract foreign investors' attention, a major factor for capital inflow is competitive business environment. According to the results of econometric analysis, substantial economic growth and foreign trade liberalization boost FDI better than the resource base. Apart from macroeconomic and political stability, reorganizations contributing to the improvement of business environment included:

- More open economy, which is achieved through trade liberalization;
- Launching of an attractive privatization program;
- Improvement of legislation in the field of mineral resources extraction and investment;
- Participation in FDI related international treaties;
- Development of priority projects having multiplicative effect on other investment projects;
- High-ranking officials including President should be interested in the issue.

Other contributing factors of positive business environment also include governance efficiency, control over corrupt practices, the rule of law, the quality of regulators. Such factors may also include the absence of political violence and openness of the political system¹¹. According to the results of the survey carried out by **Bastos F. and Nasir J., "Productivity and the Investment Climate: What Matters Most?"**, the most important characteristic of investment climate ensuring differences in the performance of firms is not a high level of competition, but the level of infrastructure development and problems related to the rent seeking activities and red tape.

An opposite view was expressed in an article by **Albuquerque R. ("The Composition of International Capital Flows: Risk Sharing Through Foreign Direct Investment")**, where it was found out that the share of foreign direct investment is higher in the countries with a low credit rating and financial restrictions. Having no opportunity to borrow on financial markets (or to borrow at a low interest rate), such countries regard FDI as a source of external finance and ensure more or less favorable conditions for such financial flows. Countries with developing and transitional economies are characterized by and active use of benefits and guarantees (i.e. non-application or exemptions from the national legal provisions). Another advantage of foreign direct investment is the fact that in attracting such investment the government does not incur any interest-related costs – all risks are borne by potential investors. Therefore, it was proved that high investment risks can be compensated by special treatment for FDI.

There are some other works dealing with issues mentioned in this study. Such works analyze in what way the quality of institutions accounts for the differences between the countries in terms of welfare and overall economic growth¹², the latter being a factor of foreign direct investment. In particular, as far as Russia is concerned, it is indicated that the following factors represent the barriers to FDI¹³ growth: (a) restrictions on the demand on the internal and external markets which become even stronger due to the low competitiveness of traditional Russian goods and services; (b) international ratings of Russia's investment appeal is at the speculative stage; (c) a high level of investment risks, primarily due to insufficient legal support of internal and external investors; (d) the lack of efficient tools to transform people's savings into investment.

A number of works offer estimates of the importance of specific factors in selecting company locations¹⁴. Economic factors important for the purpose of placing investment abroad

¹¹ In spite of the fact that three major international rating agencies conferred a sovereign credit rating of investment grade on Russia (which was due to a significant improvement of macroeconomic indicators, budget planning and ability to repay and service its debt), Russia failed to use its potential of investment appeal growth to the full extent. Portfolio and the more so strategic investors had to take into account the increased level of investment risks associated with weakened guarantee of protection of ownership rights and examples of selective use of law with respect to specific companies.

¹² Meon & Weill (2005); Doh, Jones, Teegen; Bastos & Nasir (2004), Harvey (2002)

¹³ Publications of Direct Investments Fund, <http://www.ivr.ru/ipi.shtml>

¹⁴ Institute of Economic Research (Munster, Germany), (Autschbach J. Internationale Standortwahl: Direktinvestitionen der deutschen Automobilindustrie in Osteuropa, Wiesbaden, 1997. S. 156—159)

include the following ones, in the order of decreasing importance: sales potential; competitive environment; investment environment; inflation level; labor market maturity; resources and energy sources endowment; transportation infrastructure. In accordance with the results of the survey, technological, social, cultural and natural factors are not of fundamental importance for placing production facilities abroad. However, cultural differences or the tendency towards discrimination of foreigners with underlying politics may result in project cancellation, even if other indicators are positive.

In accordance with the estimates of **Campbell R. Harvey (National Bureau of Economic Research, Cambridge, MA)** presented in “**Economic, Financial and Political Risk in Portfolio and Direct Investment**”¹⁵, *political risks* (which include deviations of economic expectations from actual indicators, impossibility of economic planning, human factor associated with the personalities of political leaders, external conflicts, corrupt practices in the government, participation of the military in politics, involvement of clergymen in politics, lack of law compliance traditions, racial conflicts, political terrorism, civil wars, red tape) account for 50% of all investment risks, *financial risks* (debt or unfavorable debt restructuring; late loan repayments; unilateral termination of treaties by the government; losses due to control over currency transactions; expropriation of private investment) – for 25%; *economic risks* (inflation, servicing of foreign debt as a percentage ratio of exports of goods and services; international liquidity indicators; foreign trade collection experience; balance of payments as percentage of the production of goods and services; indicators of shadow foreign exchange market) – 25%.

2. Analysis of information content of investment ratings

Indices used

We used various sovereign indices and ratings as generally recognized assessments of investment appeal of economies:

- 1) **Assessment of sovereign risks by international rating agencies such as Standard&Poor’s, Fitch, Coface North America, Moody's**¹⁶

Although sovereign ratings represent assessment of credit risks of national governments and do not reflect the risk of default of other issuers, the rating of credit risks of a national government is a reference point on which the ratings of all other leading issuers operating within its jurisdiction are based.

Key economic and political factors taken into account by rating agency experts to determine the sovereign rating include the following ones:

- Stability of political institutions and the degree of involvement of the general public in the political processes;
- The structure of personal income and structural organization of economy;
- Fiscal policy and its flexibility;
- Monetary policy and inflationary pressures;
- Government and private debt and debt service history.

- 2) **Opacity Index of PricewaterhouseCoopers**¹⁷

This index indicates the degree of opacity of investment conditions - lack of clear, accurate, understandable and generally recognized practices of managing relations between business, investors and the government.

¹⁵ www.duke.edu/~charvey

¹⁶ www.fitchratings.com; www.moodys.com; www.standardandpoors.com; www.coface-usa.com

¹⁷ www.pwc.org

Opacity Index uses 65 variables from 41 sources, including the World Bank, International Monetary Fund, ISSA (International Securities Services Association), International Country Risk Guide and others. O-factor includes 5 indices evaluating the following matters:

- Level of corruption in governmental bodies;
- Insufficient transparency of the legal framework, contractual law, insufficient protection of private property rights;
- Non-transparent economic policy (fiscal, monetary and tax);
- Absence of financial accounting standards;
- Lack of business conduct regulations.

3) **IMD World Competitiveness (Международный институт развития управления)**¹⁸

Assessments of investment attractiveness made by the International Institute of Management and Development (World Competitiveness Yearbook) take into account 286 different criteria grouped into the following categories:

- State of economy;
- Public administration;
- Business efficiency;
- Infrastructure.

4) **FDI Confidence Index (AT Kearney)**¹⁹

Like similar indices, it takes into account the influence of political, economic and regulatory changes on foreign direct investments and preferences of leaders of the largest global companies.

5) **Index of Economic Freedom (Heritage Foundation)**²⁰

Comprises the list of institutional factors determining the degree of economic freedom:

- Corruption in legal structures, services sector, as well as governmental bureaucracy;
- Non-tariff trade barriers, such as import restrictions and quotas, licensing and marking requirements;
- Fiscal burden (income tax, corporate profit tax) in percentage of production output;
- Legal order, reliability, impartiality, efficiency of the legislative system, ability to enforce implementation of contracts;
- Regulatory burden on business, including health care, security and environmental regulation;
- Banking operations' restrictions regarding provision of financial services (sale of securities and insurance business);
- Labor market regulation;
- Black market, including contraband, piracy in the area of intellectual property, illegal labor market.

6) **Freedom in the World (Freedom House)**²¹

Since 1972, the Freedom House Center has been publishing annual assessments of the state of national civil liberties – the so-called “Freedom in the World” index. Individual countries are evaluated on the basis of surveys regarding political rights and civil liberties. Each country is

¹⁸ www.imd.ch/wcy

¹⁹ <http://www.atkearney.com/>

²⁰ <http://www.heritage.org/research/features/index/>

²¹ www.freedomhouse.org

evaluated against the scale from 1 to 7, where 1 is the highest and 7 is the lowest degree of freedom. Afterwards the average figure is arrived at on the basis of all components and the rating is formed on the 3 – point scale.

7) Economic Freedom of the World (EFW) index (Fraser Institute)²²

The first component of the index indicates the degree to which the state relies on individual choice and market forces, and not on any political process of distribution of resources, goods and services; the larger the state sector's share, the lower is the degree of economic freedom.

The second component is related to the degree of protection of private property rights and characterizes availability of economic freedom and civil society.

The third component, related to monetary market stability is inversely-correlated to inflation rate.

The fourth component reflects the degree of transparency of national economy and its involvement in the global trade and is related to the absence of significant foreign trade barriers.

The fifth component is related to the absence of significant internal restrictions on access to the labor market, capital market as well as the low degree of state regulation of entrepreneurial activity.

As seen from the description of the indices, in addition to economic parameters they all comprise an assessment of the level of protection of property rights, political stability, degree of transparency of national economy, level of corruption. Thus it can be stated that investment attractiveness indices reflect the level of economic, political, institutional risks faced by potential investors when taking investment decisions.

Alongside with the variables belonging to the ratio scale we used indices of rating agencies which represent order variables (or letter denotations like AAA, AA, etc. into ratings). To analyze relationships between ranking classifications we applied the Spirman correlation coefficient.

As a comparable indicator of the level of investments we used data on direct foreign investments (both their absolute figures and figures included into GDP).

We split the sample consisting of 131 countries into 3 groups according to OECD methodology:

- Developed countries (USA, European Union member-states, Japan, Great Britain, Canada, South Korea, Australia, Taiwan, Sweden, Switzerland, Hong Kong, Denmark, Norway, Israel, Singapore, New Zealand, Cyprus, Iceland) – 24 countries;
- Countries of Eastern Europe and Turkey (Turkey, Estonia, Latvia, Lithuania, Czechia, Hungary, Poland, Slovakia, Slovenia, Bulgaria, Malta, Romania, Bosnia and Herzegovina, Croatia, Macedonia) – 17 countries;
- Developing countries, including former USSR countries – 90 countries.

As different calculation methodologies were applied to calculations of the above-mentioned indicators, Table 1 shows index fluctuation tendencies depending on the level of investment attractiveness and economic freedom.

Table 1. Investment appeal indicators

Indicator	Economic essence of dynamics
Opacity factor	The higher the factor's score, the higher the uncertainty level
IMD World Competitiveness	The higher the indicator's score, the higher the investment appeal level
FDI Confidence Index	The higher the indicator's score, the higher the investment appeal level

²² www.freetheworld.com

Index of Economic Freedom (Heritage Foundation)	The higher the indicator's score, the lower the economic freedom level
Freedom in the World (Freedom House)	The higher the indicator's score, the higher the level of civil liberties
Economic Freedom in the World Index (Fraser Institute)	The higher the indicator's score, the higher the level of economic and civil liberties
Sovereign risks rating of Standard & Poor's; Fitch, Country Risk (Coface North America), etc.	The higher the rating, the lower the country risks' level

Selection of a reliable indicator for interstate comparison of investment volumes

We used the volume of direct foreign investments as well as the total volume of investments in percentage of country's GDP as investment indicators. In certain instances, when it is necessary to exclude influence of initial natural resource endowment, the share of direct foreign investments as part of GDP is adjusted by the natural resources' evaluation figure representing the difference between the outputs of extraction and manufacturing industries²³.

Analysis results

We examined the hypothesis of inter-connection of investment attractiveness ratings and comparable volumes of direct foreign investments in order to understand the adequacy of using indicators to reflect the investment attractiveness of an economy.

Here we summarize the results of the statistical analysis by different country groups. Using the assumptions that investors are guided by international ratings and country risk assessments, we considered the correlation between 2003 investments and 2002 indicators. We would like to specify in advance that the ultimate result is not to determine any relationship with certain indicators but the absence of such links with other indicators of investment attractiveness, country risk indices, etc.

²³ For more detail, see Morisset (2001)

Table 2. Correlation between investments and indicators of investment attractiveness for countries with different prosperity levels (correlation coefficients relevant at the 10% level, 0 – absence of relevant connections, the incorrect, from the point of view of the hypothesis connection is marked in red.)

		High income per capita, USD [22201...48800]			Average income per capita, USD [8401...22200]			Low level of income per capita, USD [100...8400]		
		FDI_03	FDIDP_03	GIDP_04	FDI_03	FDIDP_03	GIDP_04	FDI_03	FDIDP_03	GIDP_04
FDI Confidence Index_02 (AT Kearney)		0,62	-0,60	-0,66	0	0	0	Insufficient data	Insufficient data	Insufficient data
Index of Economic Freedom_02 (Heritage Foundation)		0	0	0	0	0	0	0	-0,24	0
Freedom in the World_02 (Freedom House)		0	0	0	0	-0,74	0	0	0,20	0
EFW components (Fraser Institute)_02	1 ²⁴	0	0	0	0	0	0	-0,22	0	-0,24
	2 ²⁵	0	0	0	0	0	0	0	0	0,35
	3 ²⁶	0	0	0	0	0	0	0	0	0,23
	4 ²⁷	0	0,55	0	0	0	0	0	0,33	0,39
	5 ²⁸	0	0	0	0	0	0	-0,26	0,28	0
Opacity Index_01		Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	0,49	0	0,39
Country Risk_02 (Coface North America) **		0	0	0	0,68	0	0	0,55	0	0,28
Fitch_02**		0	0	0	0	0,61	0	0	0	0,33
**Spirman ranking correlation coefficients were computed for ordinal scales										

²⁴ Low level of governmental sector

²⁵ High level of protection of private property rights

²⁶ Monetary market stability

²⁷ Absence of foreign trade barriers

²⁸ Low business regulation level, absence of barriers to limit access to internal markets

Table 2 demonstrates the following:

For economies *with the highest prosperity level*:

- Absolute volumes of direct foreign investments significantly and positively correlate with the FDI Confidence index;
- On the contrary, the volume of foreign direct investments related to national GDP significantly and negatively correlates with the FDI Confidence index and is significantly and positively related to the 4th component of EFW index;
- The volume of aggregate internal investments related to national GDP significantly and negatively correlates with the FDI Confidence index;

For economies with *average prosperity level*:

- Absolute volumes of direct foreign investments significantly and positively correlate with the Country Risk index;
- The volume of direct foreign investments, related to national GDP significantly and negatively correlates with the Freedom in the World (Freedom House)²⁹ index and significantly and positively correlates with the Fitch agency rating;
- We discovered no significant links with any indices in relation to the volume of aggregate internal investments related to the national GDP.

For economies with *low per capita income* (predominantly, developing countries):

- Absolute volumes of foreign direct investments significantly and negatively correlate with the 1st and 5th components of the EFW index and significantly and positively correlate with the Country Risk indicator and Opacity Index;
- The volume of direct foreign investments related to the national GDP significantly and negatively correlates with the Index of Economic Freedom (Heritage Foundation), significantly and positively correlates with the index of the Freedom in the World (Freedom House), significantly and positively correlates with the 4th and 5th components of the EFW index;
- The volume of aggregate investments related to the national GDP significantly and positively correlates with the 2nd, 3rd, 4th components of EFW, Opacity Index and the Country Risk and Fitch indices. At the same time similarly to the absolute volume of investments, there is a significant negative connection with the 1st component of EFW.

3. Conclusions

Our analysis has shown that the majority of investment appeal ratings and country risk indicators cannot serve as a guide for investors making a decision on direct investment and do not reflect the real volume of investments. The influence of such country indicators as civil liberties, development of institutions, and investment attractiveness on foreign direct investments in comparable terms for all countries³⁰, can be found only in relation to certain group of countries, predominantly countries *with low per capita income*. Only for such countries there exists a significant (about 30% on average) correlation between indicators of investment attractiveness and investments, both direct foreign investments and general (also in comparable terms).

The EFW Index calculated by Fraser Institute displays the greatest correlation with investment volume as all its components significantly and positively correlate with the share of investments in GDP. Share of *foreign direct investments* in GDP correlates with the components which indicate the absence of obstacles to foreign trade, free access to internal markets and low level of government regulation.

The share of aggregate investments in GDP mostly correlates with the high level of private property protection, stability of monetary market, absence of foreign trade barriers. It is noteworthy

²⁹ The sample included only 11 countries

³⁰ Direct investments in % of national GDP

that for this group of countries, the first component of the index related to the low share of the public sector and absence of government interference in economy negatively correlates with investment activity and insignificantly correlates with other components of the composite index of economic freedoms.

In general, the share of aggregate investments (including domestic and foreign, direct and portfolio investments) are more sensitive to various ratings and country indices as in addition to the Fraser index they correlate with such ratings as Fitch and Country Risk (North America).

For countries with the highest per capita income a reliable rate of correlation can only be the connection between foreign direct investments and the Fraser index components responsible for the lack of foreign trade barriers. The FDI Confidence index which “correctly” correlates with absolute volumes of foreign direct investments inversely correlates with the share of foreign investments in GDP and the share of aggregate investments in GDP. Therefore, this index correlates with these investments significantly and negatively, i.e. the greater the share of investments, the less the investment appeal by the FDI Confidence index.

Therefore, we may conclude that, most probably, ratings are informative only for portfolio investments aimed not at long-term investments or control of companies but at deriving profit from short-term fluctuations on the stock market sensitive to any information about awarding/increase/decrease of credit rating.³¹

To sum up, the main conclusions are as follows:

- There is no index which would equally correctly describe investment climate and investment appeal *for all groups of countries* as they need a special assessment system which would take into account specific risks associated with each group of countries depending on the type of economy: developing, advanced, etc.
- A significant correlation between the indices and the size of investments can be found but it is never higher than 0.30-0.40.
- Greatly correlating with the size of investments are the indices which, strictly speaking, are not related to investment attractiveness but measure the level of development of institutions and civil freedoms, i.e. various components of the Fraser index (EFW).
- The majority of investment appeal indicators do not reflect the real situation and therefore, cannot serve as a guide for investments.
- Accordingly, the State Program of Enhancing Investment Appeal of the Russian Economy must use *as target indicators* not the investment ratings or investment appeal ratings but such indices as the *index of economic freedoms and/or its components*.

If the volume of investments in comparable units highly and significantly correlates with the indices reflecting the level of economic and civil rights and, on the contrary, poorly correlates with the indices reflecting the availability of resources and infrastructure, this means that investments go to the regions where they can be easily placed without the risk of losing invested funds: no barriers for foreign capital, availability of projects which require investments, favorable regime for an inflow of foreign investments, low probability of expropriation by the State, low investment risks and uncertainties, etc. It should also be noted that large direct investments more often than not are directly supported by the governments of both the donor and investee countries, and their agreements compensate for the defects of investment regime in the investee country. Accordingly, the efforts of the investee country to improve the situation reflected in the index of economic freedoms (and other similar freedoms) will help increase FDI from minor investors who invest not

³¹ See Alice LaPlante, “The Bond-Rating System Isn't Broken, Say Researchers”//Stanford Graduate School of Business Research, April 2005O on the correlation of ratings with return on the stock market http://www.gsb.stanford.edu/news/research/acctg_bever-soliman_bondratg.shtml

in mega projects (primarily, extraction of natural resources) but in smaller hightec projects. Attraction of the latter is, in our opinion, the critical goal as Russia faces the transition to a new technological system.

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APPENDIX 1. List of Variables

FDI_03	Foreign direct investments, \$ (2003)
FDIDP_03	Foreign direct investments in % of GDP (2003)
GIDP_04	Совокупные инвестиции в % от ВВП (2004)
FCON_02	FDI Confidence Index (AT Kearney) (2002)
EC_FR_02	Index of Economic Freedom (Heritage Foundation, 2002)
FRW_02	Freedom in the World (Freedom House, 2002)
OFAC_01	Opacity Index (PricewaterhouseCoopers, 2001)
I1_02	Fraser index components (2002): Small share of public sector
I2_02	High level of protection of private property rights
I3_02	Stability of money market
I4_02	No foreign trade barriers
I5_02	Low level of regulation of business, no obstacles to access to domestic markets
S_02	Composite index of Fraser Institute (EFW)
CRISK	Country Risk (Coface North America)
FITCH_02	Sovereign rating of Fitch Ratings, 2002

APPENDIX 2. Results of statistical analysis

Correlations: countries with a high per capital income

Correlations

	FDI_03	FDIDP_03	GIDP_04	FCON_02	EC_FR_02	FRW_02	OFAC_01	I1_02	I2_02	I3_02	I4_02	I5_02	S_02
FDI_03	Pearson Correlation Sig. (2-tailed) N	1 ,127 19	,205 ,604 19	,616* ,033 12	,206 ,398 19	a 18	-,830 ,082 5	,120 ,625 19	-,360 ,130 19	,368 ,121 19	,215 ,377 19	,068 ,783 19	,086 ,727 19
FDIDP_03	Pearson Correlation Sig. (2-tailed) N	,127 ,604 19	1 ,111 19	-,601* ,039 12	-,310 ,196 19	a 18	-,076 ,903 5	,242 ,318 19	-,315 ,189 19	,087 ,722 19	,548* ,015 19	,087 ,724 19	,264 ,274 19
GIDP_04	Pearson Correlation Sig. (2-tailed) N	-,205 ,400 19	,377 ,111 19	1 ,661* 12	-,058 ,813 19	a 18	,845 ,072 5	,257 ,288 19	-,184 ,452 19	-,281 ,244 19	-,124 ,613 19	,180 ,460 19	,100 ,683 19
FCON_02	Pearson Correlation Sig. (2-tailed) N	,616* ,033 12	-,601* ,039 12	-,661* ,019 12	1 ,952 12	a 11	-,695 ,193 5	,163 ,614 12	,161 ,617 12	,397 ,201 12	-,271 ,394 12	,184 ,566 12	,142 ,660 12
EC_FR_02	Pearson Correlation Sig. (2-tailed) N	,206 ,398 19	-,310 ,196 19	-,058 ,813 19	-,020 ,952 12	1 19	,591 ,294 5	-,634** ,004 19	-,311 ,195 19	-,146 ,552 19	-,554* ,014 19	-,566* ,012 19	-,847** ,000 19
FRW_02	Pearson Correlation Sig. (2-tailed) N	a 18	a 18	a 18	a 11	a 18	a 4	a 18	a 18	a 18	a 18	a 18	a 18
OFAC_01	Pearson Correlation Sig. (2-tailed) N	-,830 ,082 5	-,076 ,903 5	,845 ,072 5	-,695 ,193 5	a 4	1 ,294 5	-,467 ,428 5	-,776 ,123 5	-,479 ,415 5	-,539 ,348 5	-,587 ,299 5	-,713 ,177 5
I1_02	Pearson Correlation Sig. (2-tailed) N	,120 ,625 19	,242 ,318 19	,257 ,288 19	,163 ,614 12	-,634** ,004 19	a 18	-,467 ,428 5	1 ,472 19	-,176 ,416 19	-,198 ,437 19	,189 ,001 19	,720** ,837** 19
I2_02	Pearson Correlation Sig. (2-tailed) N	-,360 ,130 19	-,315 ,189 19	-,184 ,452 19	,161 ,617 12	-,311 ,195 19	a 18	-,776 ,123 5	-,176 ,472 19	1 ,706 19	,093 ,831 19	-,053 ,254 19	,254 ,294 19
I3_02	Pearson Correlation Sig. (2-tailed) N	,368 ,121 19	,087 ,722 19	-,281 ,244 19	,397 ,201 12	-,146 ,552 19	a 18	-,479 ,415 5	-,198 ,416 19	,093 ,706 19	1 ,107 19	,381 ,442 19	-,187 ,854 19
I4_02	Pearson Correlation Sig. (2-tailed) N	,215 ,377 19	,548* ,015 19	-,124 ,613 19	-,271 ,394 12	-,554* ,014 19	a 18	-,539 ,348 5	,189 ,437 19	-,053 ,831 19	,381 ,107 19	1 ,860 19	,461* ,047 19
I5_02	Pearson Correlation Sig. (2-tailed) N	,068 ,783 19	,087 ,724 19	,180 ,460 19	,184 ,566 12	-,566* ,012 19	a 18	-,587 ,299 5	,720** ,001 19	,254 ,294 19	-,187 ,442 19	,043 ,860 19	1 ,000 19
S_02	Pearson Correlation Sig. (2-tailed) N	,086 ,727 19	,264 ,274 19	,100 ,683 19	,142 ,660 12	-,847** ,000 19	a 18	-,713 ,177 5	,837** ,000 19	,254 ,294 19	,045 ,854 19	,461* ,047 19	,829** ,000 19

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

a. Cannot be computed because at least one of the variables is constant.

Correlations: countries with an average per capital income

Correlations

		FDI_03	FDIDP_03	GIDP_04	FCON_02	EC_FR_02	FRW_02	OFAC_01	II_02	I2_02	I3_02	14_02	15_02	S_02
FDI_03	Pearson Correlation	1	,209	,164	,663	-,193	-,301	-,836	-,036	,069	,429	,402	,196	,333
	Sig. (2-tailed)		,538	,673	,337	,570	,368	,164	,917	,840	,188	,221	,564	,317
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
FDIDP_03	Pearson Correlation	,209	1	-,176	-,399	-,503	-	-,890	,491	,495	-,129	,113	,454	,445
	Sig. (2-tailed)	,538		,650	,601	,115	,009	,110	,126	,122	,706	,740	,160	,171
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
GIDP_04	Pearson Correlation	,164	-,176	1	-,592	,219	-,232	,999*	-,034	-,307	,090	,545	-,098	,079
	Sig. (2-tailed)	,673	,650		,408	,572	,549	,026	,932	,422	,818	,129	,801	,841
	N	9	9	9	4	9	9	3	9	9	9	9	9	9
FCON_02	Pearson Correlation	,663	-,399	-,592	1	,485	,572	,552	-,913	-,491	-,007	-,219	,062	-,568
	Sig. (2-tailed)	,337	,601	,408		,515	,428	,628	,087	,509	,993	,781	,938	,432
	N	4	4	4	4	4	4	3	4	4	4	4	4	4
EC_FR_02	Pearson Correlation	-,193	-,503	,219	,485	1	,463	,679	-,696*	-,655*	-,131	-,140	-,649*	-,696*
	Sig. (2-tailed)	,570	,115	,572	,515		,152	,321	,017	,029	,701	,682	,031	,017
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
FRW_02	Pearson Correlation	-,301	-,739"	-,232	,572	,463	1	,936	-,445	-,544	-,284	-,478	-,339	-,682*
	Sig. (2-tailed)	,368	,009	,549	,428	,152		,064	,170	,084	,398	,137	,309	,021
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
OFAC_01	Pearson Correlation	-,836	-,890	,999*	,552	,679	,936	1	-,607	-,885	-,788	-,779	-,822	-,904
	Sig. (2-tailed)	,164	,110	,026	,628	,321	,064		,393	,115	,212	,221	,178	,096
	N	4	4	3	3	4	4	4	4	4	4	4	4	4
II_02	Pearson Correlation	-,036	,491	-,034	-,913	-,696*	-,445	-,607	1	,273	-,129	-,178	,354	,447
	Sig. (2-tailed)	,917	,126	,932	,087	,017	,170	,393		,416	,705	,600	,285	,168
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
I2_02	Pearson Correlation	,069	,495	-,307	-,491	-,655*	-,544	-,885	,273	1	,279	,492	,726*	,823**
	Sig. (2-tailed)	,840	,122	,422	,509	,029	,084	,115	,416		,406	,125	,011	,002
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
I3_02	Pearson Correlation	,429	-,129	,090	-,007	-,131	-,284	-,788	-,129	,279	1	,766*	-,197	,578
	Sig. (2-tailed)	,188	,706	,818	,993	,701	,398	,212	,705	,406		,006	,561	,062
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
14_02	Pearson Correlation	,402	,113	,545	-,219	-,140	-,478	-,779	-,178	,492	,766*	1	,193	,735**
	Sig. (2-tailed)	,221	,740	,129	,781	,682	,137	,221	,600	,125	,006		,570	,010
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
15_02	Pearson Correlation	,196	,454	-,098	,062	-,649*	-,339	-,822	,354	,726*	-,197	,193	1	,584
	Sig. (2-tailed)	,564	,160	,801	,938	,031	,309	,178	,285	,011	,561	,570		,059
	N	11	11	9	4	11	11	4	11	11	11	11	11	11
S_02	Pearson Correlation	,333	,445	,079	-,568	-,696*	-,682*	-,904	,447	,823*	,578	,735"	,584	1
	Sig. (2-tailed)	,317	,171	,841	,432	,017	,021	,096	,168	,002	,062	,010	,059	
	N	11	11	9	4	11	11	4	11	11	11	11	11	11

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Correlations: countries with a low per capita income

Correlations

		FDI_03	FDIDP_03	GIDP_04	FCON_02	EC_FR_02	FRW_02	OFAC_01	I1_02	I2_02	I3_02	I4_02	I5_02	S_02
FDI_03	Pearson Correlation	1	,071	,353"	,963"	,035	-,092	,485*	-,221	,075	,016	,162	-,263*	-,038
	Sig. (2-tailed)		,502	,002	,000	,753	,385	,026	,062	,529	,895	,174	,026	,750
	N	92	91	77	8	83	92	21	72	72	72	72	72	72
FDIDP_03	Pearson Correlation	,071	1	,346"	,693	-,235*	,200	-,019	-,095	,159	,148	,326"	,275*	,240*
	Sig. (2-tailed)	,502		,002	,057	,033	,058	,936	,433	,186	,218	,005	,020	,044
	N	91	91	76	8	82	91	21	71	71	71	71	71	71
GIDP_04	Pearson Correlation	,353"	,346"	1	,863"	-,013	,043	,390	-,242	,351"	,228	,390"	,187	,285*
	Sig. (2-tailed)	,002	,002		,006	,913	,709	,081	,054	,004	,069	,001	,139	,022
	N	77	76	77	8	74	77	21	64	64	64	64	64	64
FCON_02	Pearson Correlation	,963"	,693	,863"	1	,359	-,778*	,423	-,621	-,289	,387	,125	-,543	-,260
	Sig. (2-tailed)	,000	,057	,006		,382	,023	,297	,100	,488	,343	,768	,164	,534
	N	8	8	8	8	8	8	8	8	8	8	8	8	8
EC_FR_02	Pearson Correlation	,035	-,235*	-,013	,359	1	-,526"	,683"	-,205	-,444**	-,483**	-,536**	-,546**	-,694"
	Sig. (2-tailed)	,753	,033	,913	,382		,000	,001	,092	,000	,000	,000	,000	,000
	N	83	82	74	8	83	83	21	69	69	69	69	69	69
FRW_02	Pearson Correlation	-,092	,200	,043	-,778*	-,526"	1	-,512*	,152	,386**	,308"	,491"	,425"	,539"
	Sig. (2-tailed)	,385	,058	,709	,023	,000		,018	,203	,001	,008	,000	,000	,000
	N	92	91	77	8	83	92	21	72	72	72	72	72	72
OFAC_01	Pearson Correlation	,485*	-,019	,390	,423	,683*	-,512*	1	,338	-,225	-,561"	-,200	-,620**	-,660"
	Sig. (2-tailed)	,026	,936	,081	,297	,001	,018		,134	,327	,008	,385	,003	,001
	N	21	21	21	8	21	21	21	21	21	21	21	21	21
I1_02	Pearson Correlation	-,221	-,095	-,242	-,621	-,205	,152	-,338	1	-,229	,220	,089	-,005	,383"
	Sig. (2-tailed)	,062	,433	,054	,100	,092	,203	,134		,053	,063	,458	,964	,001
	N	72	71	64	8	69	72	21	72	72	72	72	72	72
I2_02	Pearson Correlation	,075	,159	,351"	-,289	-,444"	,386"	-,225	-,229	1	,306**	,389"	,389"	,585**
	Sig. (2-tailed)	,529	,186	,004	,488	,000	,001	,327	,053		,009	,001	,001	,000
	N	72	71	64	8	69	72	21	72	72	72	72	72	72
I3_02	Pearson Correlation	,016	,148	,228	,387	-,483**	,308"	-,561"	,220	,306"	1	,456"	,390"	,803"
	Sig. (2-tailed)	,895	,218	,069	,343	,000	,008	,008	,063	,009		,000	,001	,000
	N	72	71	64	8	69	72	21	72	72	72	72	72	72
I4_02	Pearson Correlation	,162	,326"	,390"	,125	-,536"	,491"	-,200	,089	,389"	,456"	1	,444"	,740**
	Sig. (2-tailed)	,174	,005	,001	,768	,000	,000	,385	,458	,001	,000		,000	,000
	N	72	71	64	8	69	72	21	72	72	72	72	72	72
I5_02	Pearson Correlation	-,263*	,275*	,187	-,543	-,546"	,425"	-,620"	-,005	,389**	,390"	,444"	1	,603"
	Sig. (2-tailed)	,026	,020	,139	,164	,000	,000	,003	,964	,001	,001	,000		,000
	N	72	71	64	8	69	72	21	72	72	72	72	72	72
S_02	Pearson Correlation	-,038	,240*	,285*	-,260	-,694"	,539"	-,660**	,383"	,585"	,803"	,740"	,603"	1
	Sig. (2-tailed)	,750	,044	,022	,534	,000	,000	,001	,001	,000	,000	,000	,000	
	N	72	71	64	8	69	72	21	72	72	72	72	72	72

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Nonparametric Correlations: countries with a high per capita income

Correlations

			FDI_03	FDIDP_03	GIDP_04	CRISK	FITCH_02
Spearman's rho	FDI_03	Correlation Coefficient	1,000	,095	-,099	-,149	,141
		Sig. (2-tailed)		,700	,685	,568	,564
		N	19	19	19	17	19
	FDIDP_03	Correlation Coefficient	,095	1,000	,407	,149	-,094
Sig. (2-tailed)		,700	,083	,568	,701		
N		19	19	19	17	19	
	GIDP_04	Correlation Coefficient	-,099	,407	1,000	,075	-,203
Sig. (2-tailed)		,685	,083	,774	,405		
N		19	19	19	17	19	
	CRISK	Correlation Coefficient	-,149	,149	,075	1,000	-,133
Sig. (2-tailed)		,568	,568	,774	,610		
N		17	17	17	17	17	
	FITCH_02	Correlation Coefficient	,141	-,094	-,203	-,133	1,000
Sig. (2-tailed)		,564	,701	,405	,610		
N		19	19	19	17	19	

Nonparametric Correlations: countries with an average per capita income

Correlations

			FDI_03	FDIDP_03	GIDP_04	CRISK	FITCH_02
Spearman's rho	FDI_03	Correlation Coefficient	1,000	,245	,354	,678*	,275
		Sig. (2-tailed)		,467	,349	,031	,441
		N	11	11	9	10	10
	FDIDP_03	Correlation Coefficient	,245	1,000	-,228	,066	,606
Sig. (2-tailed)		,467	,555	,857	,064		
N		11	11	9	10	10	
	GIDP_04	Correlation Coefficient	,354	-,228	1,000	,099	-,287
Sig. (2-tailed)		,349	,555	,799	,453		
N		9	9	9	9	9	
	CRISK	Correlation Coefficient	,678*	,066	,099	1,000	,478
Sig. (2-tailed)		,031	,857	,799	,162		
N		10	10	9	10	10	
	FITCH_02	Correlation Coefficient	,275	,606	-,287	,478	1,000
Sig. (2-tailed)		,441	,064	,453	,162		
N		10	10	9	10	10	

* Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations: countries with a low per capita income

Correlations

			FDI_03	FDIDP_03	GDP_04	CRISK	FITCH_02
Spearman's rho	FDI_03	Correlation	1.000	.410"	-.008	.547*	.248
		Sig. (2-tailed)		.000	,942	.000	,145
		N	92	91	77	83	36
	FDIDP_03	Correlation	.410"	1.000	.314	.083	.162
		Sig. (2-tailed)	.000		,006	,459	,346
		N	91	91	76	82	36
	GDP_04	Correlation Coefficient	-.008	.314"	1.000	.282*	.332*
		Sig. (2-tailed)	.942	,006		,016	,048
		N	77	76	77	72	36
	CRISK	Correlation Coefficient	.547"	.083	.282*	1.000	.850"
		Sig. (2-tailed)	.000	,459	,016		.000
		N	83	82	72	83	35
	FITCH_02	Correlation	.248	.162	.332*	.850*	1.000
		Sig. (2-tailed)	.145	,346	.048	.000	
		N	36	36	36	35	36

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).