As compared to IH 2009, the sector composition of mid-market deals in IH 2010 saw a shift towards companies in the utilities, real estate and retail & consumer sectors. The retail & consumer and real estate sectors witnessed the largest increase. The oil & gas sector share significantly decreased in IH 2010 as compared to IH 2009, while the shares of other key sectors remained approximately the same. In IH 2010, the utilities, real estate and retail & consumer sectors together accounted for 45% of M&A mid-market value. These sectors represented 20%, 14%, and 11% respectively of overall mid-market deal value.

According to our forecasts if the Russian economy continues its recovery, and GDP and real disposable income gradually increase, the retail & consumer sector will continue to make up a significant share of the M&A mid-market and remain attractive both to domestic and foreign investors, being competitive with the M&A markets of other countries.

Despite further contraction of M&A activity last year, the M&A mid-market showed greater resilience to the crises – during 2009 – 1H 2010 in contracted less than the overall M&A market. The mid-market is expected to stabilise in the near future and there are reasons to believe that the M&A mid-market will recover faster than the market overall. One reason consists in high potential for consolidation in several industries, such as retail & consumer and pharmaceutical. Next reason is that many potential sellers are experiencing constrained liquidity as a result of the crisis and will need external capital to realize growth potentials. That fact that private equity in Russia is expected to increase also allow us to believe in M&A market fast development.

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## DETERMINANTS OF FOREIGN DIRECT INVESTMENT FLOWS AND DISTRIBUTION IN RUSSIAN REGIONS

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There are many theories which attempt to explain the determinants of foreign direct investment (FDI). These theories are significant steps towards the development of a systematic framework for the emergence of FDI. However, the capacity of each of them to serve as a self contained general theory, which could explain all types of FDI (i.e., outward as well as inward FDI at the firm, industry, and country level), has been questioned in the works of various scholars. Agarwal (1980), Parry (1985), Itaki (1991) can be given as examples.

Dunning (1993) describes three main types of FDI based on the motive behind the investment from the perspective of the investing firm. The first type of FDI is called marketseeking FDI, which aim is to serve local and regional markets. It is also called horizontal FDI, as it involves replication of production facilities in the host country. A second type of FDI is called resource-seeking: when firms invest abroad to obtain resources not available in the home country, such as natural resources, raw materials, or low-cost labour. The third type of FDI, called efficiency-seeking, takes place when the firm can gain from the common governance of geographically dispersed activities in the presence of economies of scale and scope. The literature examines a large number of variables that have been set forth to explain FDI. Some of these variables are included in formal hypotheses or theories of FDI, whereas others are suggested because they make sense instinctively.

The most common determinants of FDI are: market size, openness, labour costs and productivity, political risk, infrastructure, growth and tax. All of them will be review below.

Artige and Nicolini (2005) state that market size as measured by GDP or GDP per capita seems to be the most robust FDI determinant in econometric studies. This is the main determinant for horizontal FDI. It is irrelevant for vertical FDI. Jordaan (2004) mentions that FDI will move to regions of countries with larger and expanding markets and greater purchasing power, where firms can potentially receive a higher return on their capital and by implication receive higher profit from their investments.

Charkrabarti (2001) states that the market-size hypothesis supports an idea that a large market is required for efficient utilization of resources and exploitation of economies of scale: as the market-size grows to some critical value, FDI will start to increase thereafter with its further expansion. This hypothesis has been quite popular and a variable representing the size of the host region country's market has come out as an explanatory variable in nearly all empirical studies on the determinants of FDI.

Econometric results on market size are far from being unanimous. Edwards (1990) and Jaspersen et al. (2000) use the inverse of income per capita as a proxy for the return on capital and conclude that real GDP per capita is inversely related to FDI/GDP, but Schneider and Frey (1985), Tsai (1994) and Asiedu (2002) find a positive relationship between the two variables. They argue that a higher GDP per capita implies better prospects for FDI in the host region of country. Pärletun (2008) finds that the variable GDP is positive and statistically significant at less than 1% level. She argues that the enlargement of market size tends to stimulate the attraction of FDI to the region's economy. Ang (2008) finds that real GDP has a significant positive impact on FDI inflows. He also finds that growth rate of GDP exerts a small positive impact on inward FDI.

Charkrabarti (2001) states that there is mixed evidence concerning the significance of openness, which is measured mostly by the ratio of exports plus imports to GDP, in determining FDI, as well. The maintained hypothesis is: given that most investment projects are directed towards the tradable sector, a region's degree of openness to international trade should be a relevant factor in the decision.

Jordaan (2004) claims that the impact of openness on FDI depends on the type of investment. When investments are market-seeking, trade restrictions (and therefore less openness) can have a positive impact on FDI. The reason stems from the "tariff jumping" hypothesis, which argues that foreign firms which seek to serve local markets may decide to set up subsidiaries in the region of the host country if it is difficult to import their products to the region of the country. A range of surveys suggests a widespread perception that "open" economies encourage more foreign investment.

Charkrabarti (2001) claims that wage as an indicator of labour cost has been the most contentious of all the potential determinants of FDI. Theoretically, the importance of cheap labour in attracting multinationals is agreed upon by the proponents of the dependency hypothesis as well as those of the modernization hypothesis, though with very different implications. There is, however, no unanimity even among the comparatively small number of studies that have explored the role of wage in affecting FDI: results range from higher host region wages discouraging inbound FDI to having no significant effect or even a positive association.

The ranking of political risk among FDI determinants remains rather unclear. According to ODI (1997), where the host country owns rich natural resources, no further incentive may be required, as it is seen in politically unstable countries, such as Nigeria and Angola, where high returns in the extractive industries seem to compensate for political instability. In general, as long as the foreign company is confident of being able to operate profitably without excessive risk to its capital and personnel, it will continue to invest

Empirical relationship between political instability and FDI flows is unclear. For example, Jaspersen et al. (2000) and Hausmann and Fernandez-Arias (2000) find no relationship between FDI flows and political risk while Schneider and Frey (1985) find an inverse relationship between the two variables. Edwards (1990) uses two indices, namely political instability and political violence, to measure political risk. Political instability (which measures the probability of a change of government) was found to be significant, while political violence (i.e. the frequency of political assassinations, violent riots and politically motivated strikes) was found to be insignificant.

Infrastructure covers many dimensions ranging from roads, ports, railways and telecommunication systems to institutional development (e.g. accounting, legal services, etc.). According to ODI (1997), poor infrastructure can be seen, however, as both an obstacle and an opportunity for foreign investment. For the majority of low-income countries, it is often cited as one of the major constraints. But foreign investors also point to the potential for attracting significant FDI if host governments permit more substantial foreign participation in the infrastructure sector. Jordaan (2004) claims that good quality and well-developed infrastructure increases the productivity potential of investments in a country and therefore stimulates FDI flows towards the country.

The role of growth in attracting FDI has also been the subject of controversy. Charkrabarti (2001) states that the growth hypothesis developed by Lim (1983) maintains that a rapidly growing regional economy provides relatively better opportunities for making profits than the ones growing slowly or not growing at all.

Lunn (1980), Schneider and Frey (1985) and Culem (1988) find a significantly positive effect of growth on FDI. Gastanaga et al. (1998) and Schneider and Frey (1985) found positive significant effects of growth on FDI.

The literature remains fairly indecisive regarding whether FDI may be sensitive to tax incentives. Some studies have shown that host country corporate taxes have a significant negative effect on FDI flows. Others have reported that taxes do not have a significant effect on FDI. Hartman (1994), Grubert and Mutti (1991), Hines and Rice (1994), Loree and Guisinger (1995), Cassou (1997) and Kemsley (1998) find that host country corporate income taxes have a significant negative effect on attracting FDI flows. However, Root and Ahmed (1979), Lim (1983), Wheeler and Mody (1992), Jackson and Markowski (1995), Yulin and Reed (1995) and Porcano and Price (1996) conclude that taxes do not have a significant effect on FDI. Swenson (1994) reports a positive correlation.

The direction of the effects of above mentioned determinants on FDI may be different. A variable may affect FDI both positively and negatively. For example, factors, such as labour costs, trade barriers, trade balance, exchange rate and tax have been found to have both negative and positive effects on FDI. In the empirical studies a various combination of these determinants as explanatory variables have been used.

In our article we are going to assess the relationship between particular determinants and FDI flows in regional economy. Before we begin analyzing it should be better to mention about some foreign experience in measuring FDI efficiency. There is a model of a choice region by foreign investor.

It is assumed that foreign investors have a latent (i.e. unobserved) profit function once they have decided to establish their physical presence, for the first time, in one of the Polish regions. The profit function is dependent on the characteristics of the individual investor, and the random component that is arising from other unobserved characteristics of choices. Thus, the utility function of locating in region j for the n-th investor faced with J choices of regions can be written in the following form:

$$U_{nj} = \mathbf{x}'_{n} \beta_{j} + \varepsilon_{nj} \tag{1}$$

where there are J error terms  $\varepsilon_{nj}$  for any investor n. The exogenous variables  $x'_n$  describe only the investor and are identical across alternatives. However, the parameter  $\beta_i$  differs across alternatives.

If the investor chooses region j in particular, then we assume that  $U_{nj}$  is the maximum among the J utilities. Hence, the statistical model is driven by the probability that region j is chosen, which is

$$Pr(U_{ni} > U_{nk})$$
 for all other  $k \neq j$  (2)

Assuming that the error terms in Eq. (1) follow independently and identically an extreme value distribution (Manski and Lerman, 1977; McFadden, 1984; Maddala, 1977) of the following form:

$$F(\varepsilon_{nj}) = \exp(-e^{-\varepsilon nj}).$$
(3)

the probability that an investor n chooses region j is a simple expression of

$$\Pr_{n_j} = \Pr(Y_n = j|_{X_n}) = \frac{e^{X_n \beta_j}}{\sum\limits_{n \neq i} e^{X_n \beta_j}},$$
(4)

Eq. (4) forms the basis for the multinomial logit model (MNLM) (Greene, 2002). An interesting feature of this model is that the odds ratio  $(Pr_{nj}/Pr_{ni})$  depends log-linearly on  $x_n$ . Hence J log-odds ratios can be computed based on:

$$\ln \Omega_{jl}(\mathbf{x}_{d}) = \ln \left[ \frac{\Pr[\mathbf{y} = j | \mathbf{x}_{n}]}{\Pr[\mathbf{y} = i | \mathbf{x}_{n}]} \right] = \mathbf{x}_{n} \boldsymbol{\beta}_{jl}, \quad \text{for } j = 1, \dots, J$$
(5)

where *i* is the base category. As  $\ln\Omega_{mbi}(x^*_n) = \ln 1 = 0$ , it must be hold that  $\beta_{i|i|} = 0$ . That is, the log odds of an outcome compared with itself are always 0, and thus the effects of an independent variable must also be 0. Hence we will only estimate J – 1 outcomes, due to the redundant information (Long and Freese, 2003).

The independence of the error term across alternatives in Eq. (1) is a strong assumption, and it implies that an investor's unobserved preference for a certain alternative is independent of its stochastic preference for other alternatives. This imposes the independence of irrelevant alternatives (IIA) restriction on the predicted probabilities, which means that the choice of the regions must be equally substitutable to investors (Hausman and McFadden, 1984).

In our analysis relationship between FDI and its determinants is estimated by regressing the following equation.

$$fdi = a_0 + a_1gro + a_2cost + a_3road + a_4op + a_3risk + \varepsilon$$
(6)

where *fdi* denotes FDI net inflows as a percentage of Gross Regional Product (GRP); *gro* denotes growth rate of per capita GRP, which is a proxy for market size; *road* shows length of highways, which is a proxy for infrastructure; *cost* which is a proxy for wage denotes labour cost per worker, denominated by dollar per year; *op* indicates the degree of openness which is computed as the sum of nominal export and import divided by the nominal GRP; *risk* denotes composite political risk rating (0 = lowest risk to 1 = highest).

The expected sign of *gro* is positive, since the larger market the more opportunities it offers to foreign investors. It is considered that cost advantages have attracted foreign investors. Hence, the expected sign of cost is negative. Foreign investors may prefer countries regions with better infrastructure. Hereby the expected sign of *road* is positive.

Since foreign investors may prefer countries regions with a liberal trade regime, the expected sign of *op* is positive.

The analysis is based on the data of economic development of the Central-Chernozem Zone regions in 2001-2009.

In the beginning of the analysis we made several hypotheses.

Hypothesis 1. As the FDI into the Central-Chernozem Zone regions isn't market-seeking, but instead resource-seeking (in our case – natural resources and raw materials), market size as measured by GRP must be irrelevant for FDI.

Let's check this hypothesis by means of the regression analysis (table 1).

Interdependence between GRP and FDI Flows in the Central-Chernozem Zone regions: 2001-2009

Regions	Regression equation	The coefficient of determination
Belgorod region	y = 84,6 + 0,003 x	$R^2 = 0,57$
Vononezh region	y = -2632 - 6,09 x	$R^2 = 0,004$
Kursk region	y = 348, 3 - 0,001 x	$R^2 = 0,001$
Lipezk region	y = 6426, 5 - 0,01 x	$R^2 = 0,017$
Tambov region	y = 93 - 0.001 x	$R^2 = 0.15$
x - GRP, RUB. mln.;		
v - FDI flows into region, R	UB. mln.	

The results of the analysis which are presented in the table 1 confirm the hypothesis 1. In most of the regions the correlation between the market size and the FDI inflows is very weak (the coefficient of determination is less that 0,2). The only exception here is Belgorod Region where the correlation is medium. That can be explained due to the expanding market and higher purchasing power parity in the given region.

Hypothesis 2. For the Central-Chernozem Zone regions inflows of FDI the degree of openness to international trade is irrelevant due to the fact that most investment projects are directed not towards the tradable sector but are concerned with resources exploitation.

To confirm this hypothesis we have used the regression analysis once again (table 2).

Table 2

Table 1

Interdependence between GRP and FDI Flows in the Central-Chernozem Zone regions: 2001-2009

Regions	Regression equation	The coefficient of determination
Belgorod region	y = 1388065 - 27837 x	$R^2 = 0.16$
Vononezh region	y = 389684, 8 - 11273, 7 x	$R^2 = 0,067$
Kursk region	y = 288691,8 + 4718,6 x	$R^2 = 0,001$
Lipezk region	y = -47204425, 3 + 1000170, 6 x	$R^2 = 0.49$
Tambov region	y = 325918,6 - 26652,3 x	$R^2 = 0.01$
x - export quota, percent.	••	
y - FDI flows into region	ı, RUB. mln.	

The results of analyses confirmed the hypothesis 2. The only exception was the Lipezk Region. The cause for the last is the existence of special economic zone "Lipezk" in that region. As a result the FDI inflows are directed in the particular enterprises of this economic zone. The goods produced by these firms are tradable and that is the reason why FDI inflows in that particular region are susceptible to the region's openness to the global economy.

Having researched several methodic approaches to estimation of the determinants of FDI inflows and distribution we conclude that not all the theories used in international scientific literature can be used while the analysis of FDI flows into Russian regions. Many considerations should be taken into account, namely, the reasons for investing, the investment climate of the country and the type of FDI itself.

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## REGIONAL COMPETITIVENESS ASSESSMENT: THE CASE OF CHINESE REGIONS

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There is now widespread agreement that the regions are the key loci in the organization and governance of economic growth and wealth creation. The credo of competitiveness has attracted various believers and followers. Economists and experts everywhere have elevated competitiveness to the status of a natural law of the modern capitalist economy. To assess a country's competitiveness and to devise policies to enhance it have become officially institutionalized tasks in many nations, e.g. the USA, the UK, Belgium, Italy, the Netherlands and Japan. Also city and regional authorities are themselves increasingly obsessed with constructing local competitiveness indices sp as to compare the relative standing of their localities with that of others, and with devising policy strategies to move their area up the "competitiveness league table" [5, p.991]. The issue of regional competitiveness is subject of theoretical, empirical and policy debate. In an era of performance indicators and rankings it is perhaps inevitable that regions and cities should be compared against each other in terms of their economic performance. It is important to understand that this term does not mean games in which there are losers and winners, but it is a possibility of the region to attract investment. Specialization, efficient resource allocation, innovation and creativity, uses of geographical and resource advantages, etc. - positively affect the economy, not only of a specified region, but also of the whole economy [11]. Competitiveness is generated by the capacity of the region to provide such an economic activity that will affect the dynamic economic growth.

However the new focus on "territorial competitiveness" is itself highly problematic. The very notion is contentious and far from well understood [5, p. 992]. Although the academic literature has been expanding there is still no generally agreed theoretical or empirical framework for answering the questions about the precise meaning of the regional competitiveness, the tools with which it can be measured, the connection between regional competitiveness and prosperity.

We define regional competitiveness as the success with which regions compete with one another over attracting capital and workers which is attained by the effective use of regional competitive potential while maintaining or increasing standards of living of their citizens.

It's important both for the research and the regional governance to differentiate the following definitions: "the sources", "the factors" and "the conditions of regional competitiveness".

Each region has some competitive potential. Usually the sources of regional competitive advantages are based on the regional potential. We suggest the following list of the sources of regional competitive advantages: innovation, information, labor, investment, infrastructural potential and the potential based on natural resources. The presence of an innovative and creative class, the extent and speed of information flows, the quality and skills of the labor force, the scale and quality of public infrastructure and the abundance of capital investment and natural resources are all very important to support and underpin the regional competitive advantages.