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Tomasz DOROŻYŃSKI*
Janusz ŚWIERKOCKI**
Wojciech URBANIAK***

Incentives for Attracting FDI: The Case of the Lodz Region

Abstract: The paper studies the role of incentives provided by local government units (LGUs) in attracting foreign direct investment (FDI) to Poland's Lodz province. The authors draw conclusions based on the results of a direct study using two types of questionnaires, one for foreign investors in the province and the other for LGUs. To ensure the accuracy of the study, the authors conducted an array of statistical surveys and tests.

The *eta* correlation coefficient was among the most important measures, the authors say. It was used to assess the relationship between the inflow of FDI to Lodz province and the investment incentives offered by local government. The method helped verify a hypothesis concerning the significance of statistical relationships between the analyzed variables. The obtained results demonstrate that most LGUs were interested in attracting investors, both Polish and foreign, the authors note. Incentives targeted exclusively at foreign investors were rare, according to the authors. Financial incentives were offered by only 7% of the districts and counties. Tax relief and allowances in property fees and local charges were the most popular types of financial incentives. Many LGUs resorted to various promotional methods.

The results of the study show that investment incentives were of secondary importance to the inflow of FDI to Lodz province, the authors conclude. Nor was this kind of support a key factor behind the decisions of foreign investors to continue operating in the region.

* University of Lodz, Faculty of Economics and Sociology, Department of International Trade; e-mail: tdorozynski@uni.lodz.pl

** University of Lodz, Faculty of Economics and Sociology, Department of International Trade; e-mail: jswierk@uni.lodz.pl

*** University of Lodz, Faculty of Economics and Sociology, Department of International Trade; e-mail: w.urbaniak@interia.pl

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Introduction

It is well known that the Foreign Direct Investment (FDI) may provide both advantages and disadvantages for the receiving economy [e.g. Moran, Graham, Blomström eds. 2005; Tytel, Yudaeva, 2006; Herzer, 2012; Temiz, Gökman, 2014]. Especially in the developing or transition countries they are regarded as a reliable and cheap source of capital, technology, management skills, access to international markets. These assets are mostly contained in a given project but some can be disseminated to local businesses through market channels as spillover effects (e. g. to component makers or to competitors). But foreign investors can also become a source of ruinous competition, inefficient production or damage in natural environment. The net balance of FDI for growth and development is not always positive, because it is dependent on many specific factors, both on the side of an investor (form of market entry, level of technology transferred, procurement source) and on the side of the host country (business climate, openness of the economy, market size and its growth potential). For these reasons, empirical studies provide no grounds for drawing general conclusions on the impact of FDI on the economic growth and development of individual regions in the host country, nor on their influence on the level of income of the local population [e.g. Bajo-Rubio et al. 2010; Mullen, Williams, 2005; Mullen, Williams, 2007; Tondl, Vuksic, 2008].

The above academic misgivings concerning the effects of expansion are surely not shared by investors, whose aim is exclusively to achieve a satisfactory rate of return abroad, mostly disregarding increases in the well-being of the host economy. According to the OLI paradigm [Dunning, 1978], the achievement of the above goal depends on where the production is located. External factors, which impact the selection of concrete sites in concrete countries or regions, have been widely described in the economic literature [for an overview, see e.g. Blonigen, 2005], but the researchers have failed to explain many issues and the matter will probably remain open still for a long time [Blonigen, 2005]. On one hand, in a uniform general equilibrium-based model of location selection only aggregated FDI flows can be considered, and then the inflow depends on the size of the market, trade costs and abundance of production factors. These are very general incentives, referred to as fundamental and long-term ones [Azémar, Desbordes, 2010], i.e. not very useful for recommendations vis-à-vis current economic policy. On the other hand, the analysis of detailed factors that together make up the size of the market, trade costs and abundance of resources makes the researchers use partial equilibrium models and focus on concrete cases, which allow them to draw conclusions on what attracts investors, always with the reservation "it depends".

There is a long list of external factors which impact FDI inflow. Independent variables used by researchers include: economic and social stability [Asiedu, 2001], foreign exchange rate, taxes, institutions, barriers to trade, trade with FDI home country [Blonigen, 2005], size of the host market and the ease of entry into neighbouring markets, cost of labour, employees' skills, availability and quality of infrastructure, agglomerations benefits [Cheng, Kwan, 2000], subsidies [James, 2009], a liberalised labour market [Azémar, Desbordes, 2010], promotion activities [Harding, Javorcik, 2011], and the size of domestic investment [Lautier, Moreau, 2012]. However, despite the plethora of analyses devoted to individual variables, the only one certain conclusion is that FDI inflow depends on demand as estimated by an entrepreneur (market size) and the estimated investment risk (stability of the business environment and conditions), i.e. it is subject to the general investment decision rules formulated already by Keynes [Lautier, Moreau, 2012].

Despite many reservations raised by numerous researchers with reference to the effects of FDI for the development of the host country and the absence of certainty when it comes to the importance of individual factors which attract FDI, politicians' attitude to such capital inflows, previously strongly differentiated, has become mostly positive since the 1990s. This change is particularly evident in developing countries, where other ways of complementing domestic savings remain limited (e.g. foreign assistance) or more risky (e.g. foreign portfolio investment), and domestic technical progress cannot keep pace with global solutions. Based on the expectation that foreign entrepreneurs, by starting their business activities in the host country, will help alleviate these barriers to growth, in many countries the regulations on FDI entry have become both more liberal and more selective in the last dozen or so years [WIR, 2013]. Furthermore, most governments actively compete for projects through an array of incentives, from open grants and tax relief regimes to various promotional activities [Harding, Javorcik, 2011; James 2009, Cass, 2007].

Incentives used to attract foreign investors imply various costs, and are theoretically justified if positive external effects of the investment in question exceed such costs [Corden, 1997], but usually it is not an effective policy for improving the overall welfare of the host country [Blomström, Kokko, 2003]. Due to the complexities around the estimation of externalities, empirical studies on FDI incentives focus on their importance as a decisive factor in investment location. The results of such studies provide different answers, depending on the concrete circumstances in which incentives are applied. Let's take promotion (providing information on conditions for running a business and support in dealing with administrative formalities) as an example. It is pursued in 124 countries by specialized government agencies and has no effect in developed countries, but clearly helps FDI inflow to developing countries because it compensates for the weaknesses of the state, red tape, corruption and information asymmetry [Harding, Javorcik, 2011]. Tax incentives and labour cost subsidies are also more effective in developing countries, but labour market liberalization (easier dismissal procedures) [Azémar, Desbordes, 2010] and better quality of business regulations [Busse, Groizard, 2008] are more attractive solutions to investors. Earlier studies show that tax incentives are of secondary importance, as they are considered only when fundamental factors (political and economic stability, infrastructure, cost of transport) are similar in potential locations [Morisset, Pirnia, 2000]. As we can easily notice, the above examples indicate that politicians should take divergent actions addressed to foreign investors.

Incentives for attracting foreign capital in order to modernize production may be used at various levels of government: central, regional or local. Analyses of the role of incentives and their economic rationale have been usually carried out for the first two groups, and most often for the central government, which is the main actor competing for FDI in the global economy. Local government efforts have been rather omitted by researchers – at least to the best of our knowledge[1]. This lack of interest could well be explained by the difficulties in accessing reliable data on FDI inflows to local economies, and by the poor portfolio of instruments available to local authorities.

However, at this level of governance a separate analysis would be necessary, as an extension of the conclusions formulated for central and regional levels to local levels seems unjustified. Firstly, local governments, due to their legal and political obligations to their communities, should be very interested in the positive long-term outcomes of FDI entry: new production facilities, more employment opportunities, better paid jobs, connection of local suppliers to more advanced enterprises, and additional tax revenues. Economic successes which improve the standard of living of the population are strong arguments for winning votes in an election campaign. At the same time, the arrival of a foreign investor may easily destabilize the local economy by, e.g., increasing demand for specific categories of workers and skyrocketing their wages [Mullen, Wiliams, 2007]. Secondly, in contrast to the central or even regional levels, foreign investors are not anonymous to local authorities, who often engage in direct contact with them. Thus, effective dealing with the investment at administrative level, cross cultural sensibility, and readiness to help the investor, especially in recruiting adequate employees, are much more important. Also the ability to moderate potential conflicts between an investor and the local community is important [Calvano, 2008].

[1] The study by Blonigen, O'Fallon [2011] is one of the exceptions. It is focused on management issues rather than economics, as the authors compared relationships between local authorities and communities in the US and foreign companies against the relations with domestic businesses. The assessment concerned the propensity of both groups to get involved in charity and to help local charity organizations. In this case differences were obvious.

In sum, the attitudes and professionalism of local authorities are decisive for economic climate, which is an important factor for foreign entrepreneurs in choosing the right place for their investments. So two questions could be asked: (1) whether local governments are aware of these opportunities and of the instruments which could help make them happen; and (2) whether foreign investors are sensitive to the incentives offered by local authorities in selecting the location for an investment project in a host country.

This paper aims to study the role of the local self-government (representatives of communes (districts) and counties) in attracting foreign capital, in particular the relationship between incentives used by local authorities and the attraction of FDI to the Province of Lodz[2]. The Lodz Province is not an economic leader among Polish provinces[3], and in order to stimulate growth of production and employment it undoubtedly needs the crucial assets provided by foreign enterprises: more capital, better technology, superior management skills. Therefore making concrete efforts to attract FDI would be a reasonable policy.

Poland can be considered a transition country, which has extensively used various incentives to attract FDI [Cass, 2007]. Despite the above, the importance of incentives for the inflow of FDI to Poland and its regions has seldom been analyzed, and the activities of the local governments in this respect, whose competences were expanded after the administrative reforms in 1999, have not been of great interest to researchers[4]. Summing up the outcomes of these macro- and microeconomic studies it seems justified to conclude, that the role of incentives in stimulating FDI inflow to Poland and in shaping their structure (sectoral, technological, territorial) and economic effects remains little known, although it most probably has been marginal [Świerkocki, 2011]. This may mean the applied incentives were too weak and they should be strengthened or modified. Polish experiences may also confirm the general pattern, whereby for weaker economies major importance is attached to fundamental factors [Morisset, Pirnia, 2000], and it seems justified to say that quite many foreign companies would invest in Poland (in a particular region) regardless of the incentives given by the authorities.

In our paper we try to broaden the scope of the current research on FDI in Poland, concentrating on measures used at various levels of territorial self-government (province, counties and communes) to attract FDI. We point out the implications for the practices and policies of local authorities. Our conclusions are drawn based on the results of a questionnaire study in a Province of Lodz.

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2 The main theses of the paper were presented at the International Conference, New Challenges of Economic and Business Development – 2014, May 8–10, 2014, Riga, University of Latvia.

3 In 2011 GDP per capita in PPS for the Voivodeship of Lodz was 60% of the EU-28 average. This was below the average for Poland (65%), and the Lodz Voivodeship ranked 6th among 16 Polish voivodeships [Eurostat 2014].

4 One should mention Cieślik [2005], Ambroziak [2009], Pastusiak [2011].

Incentives for the inflow of FDI to Poland

As a result of Poland's accession to the European Union, the support offered to investors in Poland must comply with State aid rules (specified in general terms by Art. 107 and 108 of the Treaty on the Functioning of the European Union, TFEU) and may not discriminate against other operators on the internal market. The second requirement formally deprives foreign companies of the primacy in access to investment subsidies, although in practice it does not preclude their preferential treatment if the authorities recognize that they may bring benefits to the economy unattainable from domestic investors.

Following Poland's EU accession, the Structural Funds distributed under Operational Programmes became the main source among various packets of State aid available to all companies operating in Poland[5]. Therefore the EU funds are willingly used by both small and large multinationals. Nevertheless, in a narrow sense, the incentives designed to attract new foreign investors also impose a burden on the central budget and local government budgets. These are: special economic zones (SEZs), Programme for the support of investments of considerable importance for Polish economy (Support programme), and property tax allowances [Świerkocki, 2011].

The first two instruments are managed by the central administration (the government decides on the location of SEZs and on conditions governing the aid granted in them; it also grants subsidies to large investors under the Support programme), though local authorities, trying to persuade the government to take account of the needs and development opportunities of their respective regions, may also in such cases indirectly compete for investors among themselves.

Allowances in property taxes on land and buildings used for economic purposes are the only direct investment incentive in the hands of local authorities. Maximum tax rates are specified every year by the Minister of Finance, but the final amount is decided by communes, which may wave them partially or completely, perhaps making the allowance dependent upon meeting some conditions by the investor. Sometimes they are considered as the most commonly offered incentive [Słomińska, 2007] although, due to relatively small amounts of the tax and restrictions in local government budgets, the importance of the instrument seems small, especially in poor communes. Their attractiveness results from the concrete financial dimension inasmuch as, contrary to allowances offered in SEZs (above all in CIT), they are not just a promise of aid dependent on the profit generated by an investor.

The Polish Information and Foreign Investment Agency (Polish abr. PAIiIZ) promotes Poland as a good location for FDI. The Agency has Regional Investor Assistance Centres in the provinces and Regional Investor Assistance Offices in various cities. PAIiIZ offers services free of charge, including investment

5 E.g. in 2011 there were 183 investment incentives in seven thematic areas, while in 2013 there were 134 incentives in eight areas (data of the Ministry of Economy, Warsaw).

site selection in Poland, tailor-made investor visits to Poland, information on the legal and economic environment, information on available investment incentives, facilitation of contacts with central and local authorities, identification of suppliers and contractors, and takes care of existing investors (to support reinvestments in Poland).

Local government in Poland – structure and competences

A commune is a basic LGU. Its tasks include, inter alia: spatial order, environmental protection, roads, electricity, water supply and water treatment infrastructure in the commune, education, culture, tourism and promotion of the commune [Act of 1990].

The LGU at the second level is a county. A county performs public tasks exceeding the competence of a commune, the most important of which include: social welfare system, support for the disabled, public transport and roads, counteracting unemployment, activating the local labour market, and public education [Act of 1998].

The LGU at the third (highest) level is a voivodeship (province). The scope of local government activity at this level includes, inter alia, stimulating economic activity, enhancing the competitiveness and innovation of the regional economy, and the shaping and maintenance of spatial order [Act of 1998 a].

In the light of the law, the tasks of the local authorities at the two lowest levels (commune and county) do not include an obligation to support investors. The most extensive competences and possibilities in this field are allocated to regional authorities. It is worth emphasizing, however, that local authorities also deal with these issues. They do so indirectly by delivering on their own tasks to improve local government operations, living conditions and the conditions for economic activity in a given area. They also do so directly, by implementing optional tasks which may be financed with their own assets or from external sources. To this end they are authorized to use State aid instruments, which may become an additional incentive for foreign investors when making their location decision. State aid schemes are developed and implemented mainly by the bigger LGUs, usually provinces, counties and large and medium-sized towns.

Study description and method

The assessment of local government activities with respect to attracting FDI was a part of a broader study on the role played by FDI in the economy of a region[6]. The data collected for this study, concerning correlation between

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6 In the article we used part of the results of a direct study conducted for the Project *Role of foreign direct investment in shaping current and future economic profile of the voivodeship of Lodz,* delivered in the period 2009–2011 by the research team of the University of Lodz. The Project

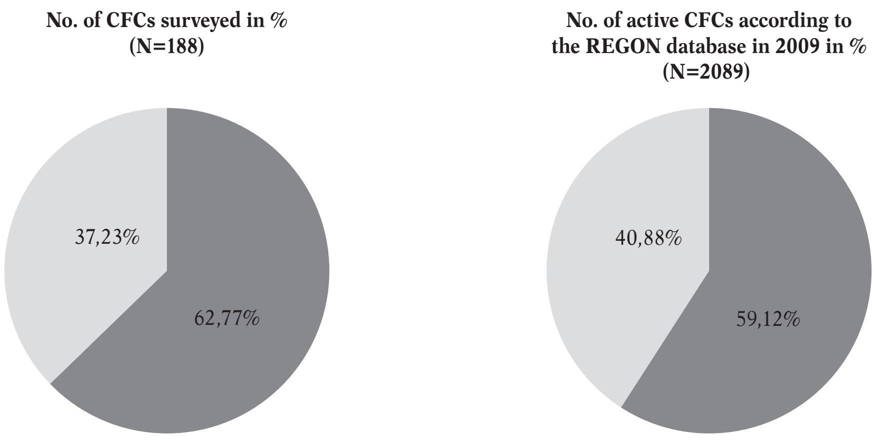
incentives used by local authorities and the attraction of FDI to the Lodz Region, has been reanalyzed from the statistical point of view.

The study was conducted in 2010 and included 275 respondents: LGUs and companies with foreign capital (CFCs)[7]. We used two types of questionnaires (one for LGUs and one for enterprises). Each questionnaire included demographics and was composed of several dozen closed and open questions. Some of them included rating scales. Random and quota sampling was applied.

In selecting the LGUs, quotas were based on the type of unit (type of commune, type of county). The sample consisted of 87 respondents and represented ca. 43% of all local governments in the region. Statistical data showed that investors tended to choose large and medium-sized cities for the location of their businesses. This is why we studied all the counties. In order to achieve a complete picture of the situation in the region, we also included more than one third of all communes, mostly urban ones.

In selecting CFCs we used the REGON database and the results of our own statistical analyses. We questioned 188 CFCs. They accounted for 9% of the total number of CFCs in the province in 2009. The companies were based in 28 towns and cities. We surveyed businesses from all the major towns and cities. The sample included 63% of companies from Lodz. This proportion reflects the share of businesses based in the capital of the province in their total population (Chart 1).

Chart 1. Structure of CFCs



Source: *Foreign Direct Investment, The Case of Lodz Region*, ed. J. Świerkocki, Lodz Science Society, Lodz 2011 and database of active CFCs of the REGON register in 2009.

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was co-financed from EU resources of the European Social Fund. The study results were published in *Foreign Direct Investment. The Case of Lodz Region*, ed. J. Świerkocki, Lodz Science Society, Lodz 2011.

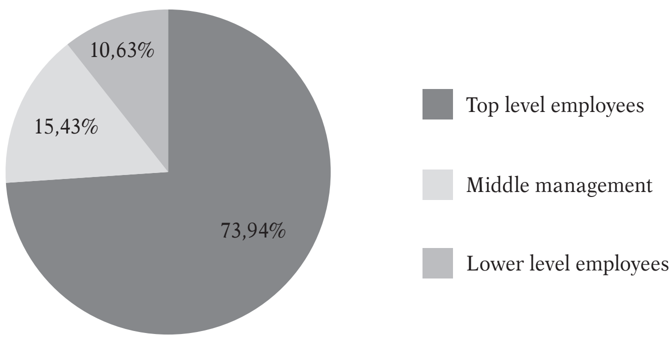
7 The term "companies with foreign capital" is used in publications of Central Statistical Office on FDI in Poland so we take it for convenience.

Based on a questionnaire survey, we evaluated the expectations of entrepreneurs in relation to the incentives provided by local government. For this purpose, LGUs were divided into different categories depending on the type and scope of the incentives used. The survey results were digitalized. Various statistical tools were used for processing the questionnaire data, such as: cross analysis, mean assessment, coefficients of variation, variance analysis and Cronbach's alpha reliability coefficient for the scale.

In order to identify the accuracy of the study, statistical surveys and tests were conducted. A large number of statistical measures concerning the distribution of characteristics were used. They were related to the occurrence of a central tendency, dispersion, and coexistence. The correlation between FDI location and the incentives offered by LGUs for attracting FDI to the Lodz region was tested and evaluated. In order to verify the correlation hypothesis, the eta coefficient and regression testing were used.

Almost 3/4 of interviews were conducted with members of the management staff: directors, CEOs or their deputies. Some respondents occupied lower positions; these were mainly employed as middle level managers, plenipotentiaries, and financial controllers (Chart 2).

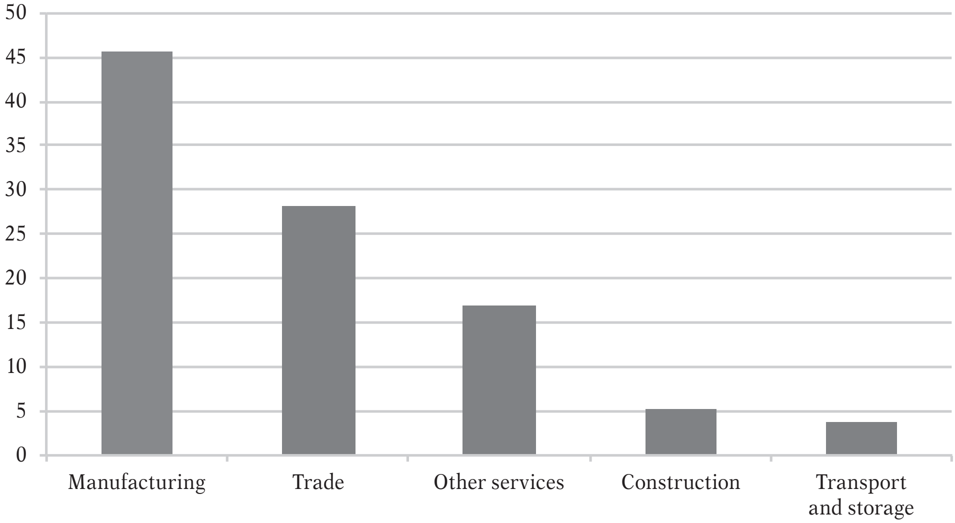
Chart 2. Respondent groups (N=188)



Source: *Foreign Direct Investment. The Case of Lodz Region*, ed. J. Świerkocki, Lodz Science Society, Lodz 2011.

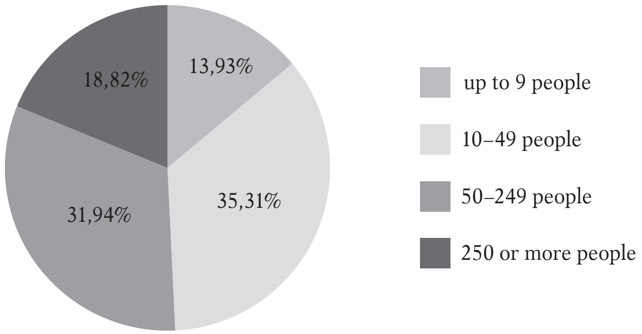
The sample included CFCs representing two sectors: industry and services. The study covered slightly more companies from the industrial sector, which correctly reflected the quantitative structure of companies with foreign capital in the Province of Lodz. The vast majority of these companies dealt with industrial processing (90%). Other enterprises operated in the construction industry. There were only a few companies from the remaining industrial sectors, which is why they are not represented in the sample. Among service companies 60% were trade companies, and 8% were transport and warehouse companies. Other types of business were very much dispersed among various services (Chart 3).

Chart 3. Principal area of business of CFCs (N=188)



Source: same as in Chart 2.

Chart 4. Employment in CFCs in December 2009 (N=188)



Source: same as in Chart 2.

The sample was composed of CFCs with various size of employment. Hence they were divided into groups in accordance with the binding classification of companies by size as set out in the Freedom of Economic Activity Act [Act of 2004, FEA]. The most numerous were companies with employment in the range of 10–49 and 50–249 workers, which belong to the categories of small and medium-sized enterprises and are collectively referred to as SMEs. Their share in the entire sample was two thirds. Big companies employing over 249 people were less than half as numerous as SMEs. The smallest group, in quantitative terms, was the group of micro-enterprises (Chart 4). Companies with foreign capital operating in industry were larger on average than service companies. They dominated among the large and medium-sized operators; while service companies were dominated by small and micro-enterprises.

Study results

Incentives offered by LGUs to attract FDI to the Province of Lodz

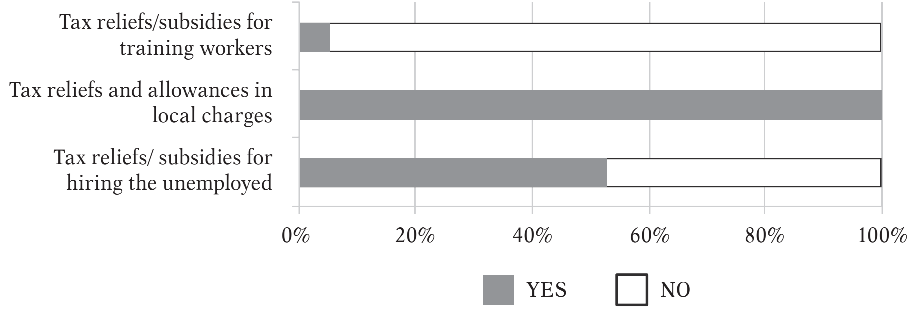
Almost 80% of LGUs are usually interested in attracting all the investors, irrespectively of whether they are domestic or foreign. Such an approach is concurrent with State aid rules in Poland and generally seems to have good economic base [Blomström, Kokko, 2003].

Only less than 10 per cent of LGUs addressed their activities exclusively to foreign investors. That was the option followed by 6 communes and counties, including only one rural commune (which had just printed information materials in English). However, we cannot be sure whether non-discrimination of foreign entities, reflecting a good knowledge of economics and law in LGUs, was a deliberate policy in all cases. The conclusion seems justified, because many respondents admitted that they were simply unaware of the nuances of promotion activities abroad, did not know the needs of foreign investors and did not believe that they could attract them because of the lack of investment opportunities. The lack of knowledge and low self-assessment of investment attractiveness were especially characteristic for rural communes with poorly developed hard and soft infrastructure.

Potential investors could receive two types of support: financial and non-financial. Common perception is that financial grants and tax reliefs belong to the most effective policy instruments used for attracting investors, because they reduce both fixed cost and operating costs. In the Province of Lodz tax relief and allowances in property and local charges were the most popular forms of financial support granted to investors by all the LGUs. This most probably resulted from the fact that such incentives are decided by the communes and can become effective relatively quickly.

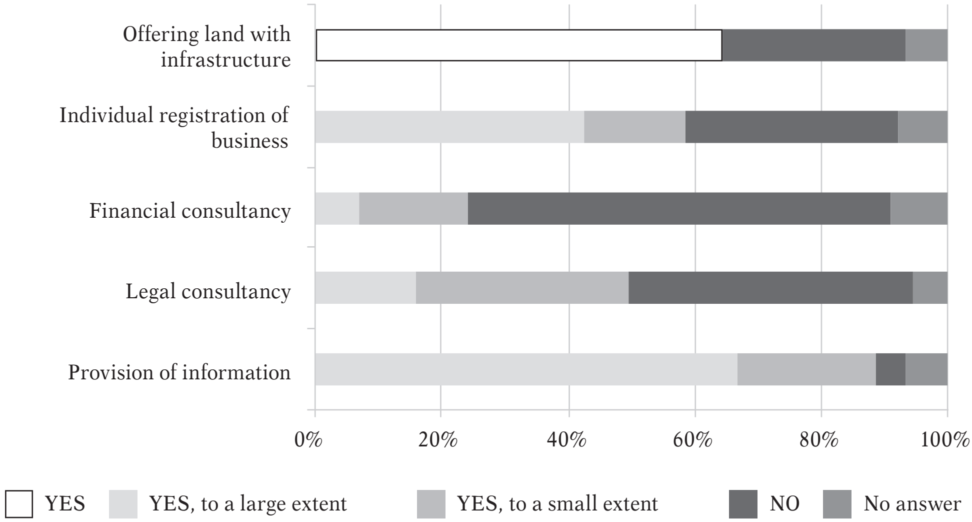
However, it might be interesting that as many as 75% of communes did not have a ready-made offer of such support, neither for foreign nor for domestic entities. Those who prepared financial incentives in advance represented mostly urban communes. Majority of LGUs were ready to consider the form and scope of such assistance only when an investor appeared. So their attitude towards attracting capital was reactive rather than active. The most popular respondents' argument was that negotiations in this matter are individual by their nature and investment proposals have to be considered on a case by case basis. Only very few LGUs attempted to approach the issue in a systematic way, by passing appropriate resolutions (or aid schemes) concerning the possibilities of granting financial aid to investors (domestic or foreign) depending on the value of the undertaking, the size of planned employment and environmental impact of a project.

Chart 5. Financial support for foreign investors offered by communes and townships, in % (N=19) (we asked only those respondents who claimed their LGU has got an offer of financial support for foreign investors)



Source: same as in Chart 2.

Chart 6. Other forms of support offered to foreign investors, in %, (N=87)



Source: same as in Chart 2.

Non-financial support offered by LGUs to all investors could be categorized as promotional activity. It consisted of (Chart 6):

1) information concerning the terms on which one could operate in their respective territories. It was provided by ca 90% of LGUs, as relatively simple, cheap and less absorbing activity for local authorities. Learning, free of charge and from a well-informed source, about binding procedures and norms as well as about the availability of land, infrastructure, workers, suppliers etc., could be important to investors as it reduces their uncertainty and accelerates decision-making process;

2) developed land ready to start different types of investment offered by 64% of respondents for sale or rent. This kind of service is often much more demanding than simply informing incoming businesses on legal conditions, as it requires extra resources and making an effort before an investor has appeared (e.g. settling ownership issues, providing technical infrastructure, connecting with road network). On the other hand, it is also more valued by investors (see next section), because of the scarcity of appropriate investment sites with clear legal status in the Province;
3) assistance in dealing with various formalities, offered by 60% of respondents. This kind of help was, however, most often limited to providing legal information connected with starting and operating a business. Only rarely LGUs were willing to offer legal and even financial consultations (e.g. on the availability of structural funds).

CFCs' opinions about LGUs activities

The purpose of this part of the study was to assess the importance of LGUs activities aimed at both attracting and keeping FDI in the Province of Lodz. We made an attempt to identify and systematize operations by local and regional administration, which could encourage CFCs to invest and stay in the Lodz Region.

Firstly, we identified reasons for choosing the Province as a location site. Therefore the CFCs were asked to evaluate the extent, to which its specific characteristics were encouraging or discouraging for making such a decision. They assessed 27 reasons on a 7-degree scale. Calculated Cronbach's alpha coefficient was 0.884, which indicates a very high accuracy of the measurement [Ferguson, Takane, 2004].

In order to define the distribution of answers to the scaled question, we can use typical ranges of variation. For a seven-degree scale an appropriate range is 2.5–4.0. Its upper edge corresponds to a distribution of answers equally distributed across all the points of scale. The bottom edge of the range is interpreted as a situation in which the values of answers are rather concentrated around a given point on the scale, like in the normal distribution [Churchill, 2002]. In the study of activities by the administration, all the variances were below the lower extreme, meaning the answers were very uniform.

Our analysis of received answers suggests that foreign businesses were encouraged to invest in the Province of Lodz mostly by relative abundance of production factors, first of all labour. Such motivation is characteristic for resource-seeking investors. The incentives (financial and non-financial) were much less important[8]. Their relative impact upon location decision was assessed by respondents in their responses to seven listed factors (Table 1).

8 Różański [2010] came to similar conclusion.

Table 1. Administrative activities as factors encouraging or discouraging the location of FDI in the Province of Lodz (N=188)*

Ranking position by means**	Factor	Mean answer	Variance	Standard deviation	Average relative error	Median	Mode
12	Attitude of commune authorities to foreign investors	4.627	1.844	1.358	0.293	5	4
15	Attitude of county authorities to foreign investors	4.489	1.563	1.250	0.278	4	4
17	Attitude of provincial authorities to foreign investors	4.435	1.416	1.190	0.268	4	4
18	Access to data and information about the province	4.435	1.132	1.064	0.240	4	4
19	Support offered to foreign investors by a commune, a county, or province	4.321	1.760	1.327	0.307	4	4
23	Quick action and flexibility of administration at different levels in the Province of Lodz	3.871	2.621	1.619	0.418	4	4
24	Stability of regulations issued by authorities at different levels in the Province of Lodz	3.863	1.558	1.248	0.323	4	4

* Statistical indicators were calculated using the following scale: factor discouraging from the location: to a large extent (1), to a medium extent (2), to a small extent (3); neither encouraging nor discouraging (4); encouraging to a small extent (5), encouraging to a medium extent (6), encouraging to a large extent (7).
** This ranking covered 27 factors

Source: *Foreign Direct Investment. The Case of Lodz Region*, ed. J. Świerkocki, Lodz Science Society, Lodz 2011 and own study.

The distribution of answers about factors encouraging to locate CFCs in the Lodz Region showed, that for only about one third of CFCs the attitude of commune, county and province self-government was important to invest in the Province of Lodz. This may indicate that the investors did not need to cooperate too much with the administration to start a project and that they relied on market conditions rather than on goodwill of public officials. It may also mean, that the assistance they offered was not attractive enough. Interestingly, investors paid more attention to contacts with self-government at lower levels than with the leaders of the Province. On the other hand, it should be stressed that the net balance of positive and negative assessments of administration' attitudes at each level was definitely positive.

The support which was available to investors was even less important than the attitude of territorial self-government. Only about 20% of respondents considered it meaningful (to a considerable or medium degree) for choosing the Province of Lodz instead of another region in Poland. But also more respondents were of the opinion that the support was encouraging rather than discouraging (the net balance of answers was positive). It suggests that in general investors did not expect much assistance from the authorities but for some of them even modest incentives were attractive enough to determine the location.

It may be interesting, that a certain regularity in the answers was observed – the bigger were the CFCs, the higher their evaluation of available incentives, both financial and promotional ones. We can suppose then, that the LGUs were more favourably disposed towards those foreign investors, who had more to offer to the local economy, first of all in the form of additional jobs. However, there were no significant differences in the opinions between CFCs oriented towards export and those oriented towards the domestic market. These differences could be expected as some authors have indicated that the former, being more mobile and selling in a more competitive environment, regard incentives more highly, especially financial ones [James, 2009].

Secondly, using an open question, we analyzed the motivation of investors to stay in the region. There were at least two reasons for that. On the one hand, it is noted in the literature that it is easier to ensure development in the local economy by strengthening the already existing base of companies rather than attracting new ones [Wojciechowski, 2012]. On the other hand, for more than a half of CFCs exports represented the major destination for their goods and services and ¾ of them were purchasing their raw materials and semi-products abroad. Investors with such a profile may easily start assembling their products in another location. Hence an assessment of LGUs activities aimed at encouraging CFCs to stay in the Province of Lodz for longer is an important separate issue (Chart 7).

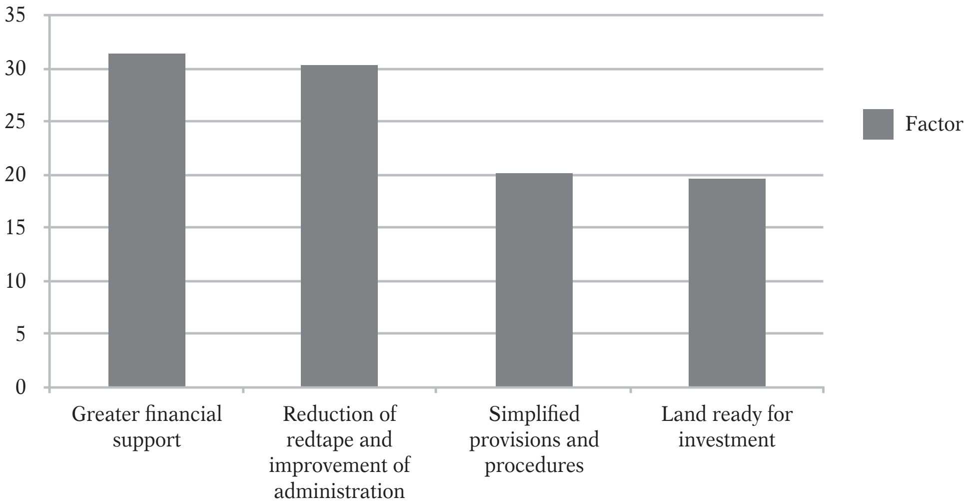
Almost one third of CFCs associated the maintaining of the attractiveness of the region with various forms of financial support. Due to the open nature of the question, entrepreneurs proposed many concrete and detailed solutions. Specifically most suggestions complied with State aid rules and concerned the reduction of taxes and administrative charges. Some CFCs also expected assistance in e.g. applying for external funding, searching for business partners, and training their employees. But a clear majority was satisfied with their investment and did not expect financial incentives to continue economic activity.

The efficiency of administration is another issue. The study by Bénassy-Quéré, Coupet and Mayer [2005], focused on the quality of institutions and its effect on FDI, demonstrated that the quality of various institutions in the host country is of critical importance to CFCs[9]. Similarly Hochberger

9 Authors include variables like the efficiency of public administration in the host country, easiness of starting a business, efficiency of legal regulations of contracts, lack of corruption [Bénassy--Quéré, Coupet and Mayer, 2005].

[2011], exploring the effect of bureaucratic and administrative impediments on the geographic distribution of US FDI, recommended the governments to concentrate on an investor friendly legal system. In our study, nearly one third of CFCs agreed that a reduction of local red tape and more efficient administration would make staying in the Province more attractive (30.32%). This may mean, that problems with administration did not create obstacles big enough to give up an investment in the Region.

Chart 7. Activities undertaken by the administration to encourage CFCs to stay in the Province of Lodz in the opinion of CFCs, % of answers, N=188 (synthesis of an open question; respondents could tick any number of answers)



Source: same as in Chart 2.

Some investors were very critical about professional skills of local authorities. But only about 20% of the respondents advised to simplify provisions and procedures that regulate business operations. It was also suggested, that higher stability of law and its enforcement should be ensured.

Almost every fifth company with foreign capital was of the opinion that local administration could help a lot by subsidizing sites for new businesses. The greatest expectations were linked with developed land ready for investment. CFCs also thought about the expansion of the area of SEZ, acceleration of works on local development plans, creation of industrial parks, warehouses and new high class office space.

The results of this part of the study suggest, that LGUs support was not a decisive factor for attracting and keeping FDI in the Province of Lodz. On the other hand, almost one third of CFCs expected financial or other form of incentives to invest or to stay in the Province. This means LGUs have some role to play if they wish to count on foreign capital as a stimulus for the development of their economies.

Incentives and attracting FDI in the Province of Lodz

Data from the questionnaires were used to analyze the relationship between incentives used by local authorities and the attraction of FDI in the Province of Lodz from a statistical point of view. With reference to the main objective of the paper, we formulated a thesis on a positive impact of incentives offered by local authorities on attracting FDI to regions. The study was conducted for the counties in the Province. We used the eta ratio, the measure of correlation, which examines the relationship between interval/ratio variables (treated as dependent) and nominal/ ordinal (independent) variables [Rószkiewicz, 2002].

$$\eta = \sqrt{\frac{\sum_{i}^{k}\left(\bar{x}_i - \bar{x}\right)^2 \cdot n_i}{\sum_{i=1}^{k}\sum_{j=1}^{n_i}\left(x_{ij} - \bar{x}\right)^2}} \qquad (1)$$

where:
η – eta ratio,
x_{ij} – value of a dependent statistical characteristics for unit j in group i, distinguished based on independent statistical characteristics,
$\bar{x}_i$ – mean value of dependent characteristics of a unit in group i, distinguished based on independent characteristics,
n_i – number of units in group i, distinguished based on independent characteristics,
$\bar{x}$ – mean value of dependent characteristics,
k – number of categories of the dependent characteristics.

In this part of the study the main problem consisted in construing an independent variable that would describe the activities of communes and counties in attracting FDI. Such data are not collected or published by statistical offices, in particular at local or regional levels. This is why we used partial results of questionnaire-based studies. Independent variables which describe the engagement in attracting FDI were based on financial and non-financial incentives used by county authorities and selected communes in a given county. Data from all 24 counties in the province was supplemented with the opinions of the representatives of communes, due to statutory premises and business practice. Communes enjoy much more extensive competences and definitely use financial and non-financial investment incentives, including state aid schemes, much more often than counties.

With respect to the category of financial incentives, we focused mostly on information about tax allowances and subsidies for hiring unemployed people, tax allowances and reduced local charges, and tax allowances and subsidies for training workers. Among non-financial incentives we assessed the involvement of the LGU in the provision of information, legal advice, financial advice, and individual services to investors when they start their businesses or are offered developed investment land.

Hence our independent variables were:
1) financial and non-financial incentives offered by communes and county authorities (based on the answers of county authorities), (x_1);
2) financial incentives offered by communes (based on aggregated answers of representatives of communes in individual counties), (x_2).

Both independent variables were of a dichotomist nature and were accompanied by two categories each that were provided on the basis of yes or no answers.

Dependent variables included:
1) the number of CFCs present in counties as of the end of 2011 (y_1);
2) cumulated value of FDI as of the end of 2011 in the counties of the Province of Lodz (y_2).

Calculations were made assuming that there are two possibilities for each of the two dependent variables, which take account of both independent variables. Calculations were made in two versions: for all the counties; and leaving aside the county of the City of Lodz, which hosts over half of all FDI in the province and strongly differs from the rest. Altogether, there were eight eta ratios. Then we validated the hypothesis on the statistical significance of eta ratios using the F-ratio of the following formula [Rószkiewicz, 2002]:

$$F = \frac{\sum_{i=1}^{k}\left(\overline{x}_i - \overline{x}\right)^2}{\sum_{i=1}^{k}\sum_{j=1}^{n_i}\left(x_{ij} - \overline{x}_i\right)^2} \cdot \frac{n-k}{k-1} \tag{2}$$

where:
F – ratio used to analyze the significance of eta ratio,
n – number of categories of dependent characteristics,
for other symbols see (1).

Table 2. Eta ratios and statistical significance test calculations in option I (all counties)

	Dependent variables	
	y_1	y_2
Independent variables:	Eta ratios	
x_1	0.0434	0.0701
x_2	0.1630	0.1984
	Eta ratios calculated in statistical significance test	
Number of tested categories of independent variables	2	2
Number of tested categories of dependent variables	24	24
F – theoretical	4.30	
F – calculated	0.0415	0.1092
	0.601	0.920

Calculations in the tests of statistical significance were conducted at the level of statistical significance $\alpha = 0.05$

Source: own calculations.

Table 3. Eta ratios and statistical significance test calculations in option II (excluding City of Lodz County)

	Dependent variables	
	y_1	y_2
Independent variables	Eta ratios	
x_1	0.383	0.1152
x_2	0.023	0.1440
	Eta ratios calculated in statistical significance test	
Number of tested categories of independent variables	2	2
Number of tested categories of dependent variables	23	23
F – theoretical	4.31	
F – calculated	3.615	0.281
	0.011	0.457

Calculations in the tests of statistical significance were conducted at the level of statistical significance $\alpha = 0.05$

Source: own calculations.

Calculated eta ratios remain low in both options. This prevented us from dismissing the zero hypothesis on the statistical insignificance of the relationship in all analyzed cases. The results obtained are not clear-cut. They definitely indicate the absence of statistical links between variables.

Summing up, we can say that the relationship analysis we conducted has made us dismiss the thesis of the positive effect of incentives offered by local government units to attract foreign investors into the region.

We also conducted a study using the regression function. Already initial results suggested the lack of a relationship between the variables that describe FDI inflow to counties and incentives. The role of various factors decisive for attracting foreign capital to a region may become the subject of further in-depth analyses, conducted based on quantitative methods.

Conclusions

According to a common view, FDI can provide important benefits for the host economies, mainly access to capital and technology unavailable in the domestic market. This may especially be the case of catching-up countries and regions, where domestic or local entities suffer from the lack of financial resources, know-how and supportive infrastructure. Therefore they compete for foreign capital in various ways. In Poland in order to attract FDI, financial and non-financial incentives are used at various levels of self-government. A number of studies, however, indicate that their role in influencing investment decisions is often minimal.

In the paper we concentrated on activities attracting FDI to counties and communes. Our study based on questionnaires confirmed that financial and non-financial incentives were of little importance for the inflow of FDI to the Province of Lodz. First of all, LGUs, as a rule, did not distinguish between foreign and domestic investors. All businesses were equally welcome. Secondly, only 7% of LGUs prepared ready-made financial offers for foreign investors. The measures were relatively modest and usually "tailor made" to assist a concrete candidate. Thirdly, the promotion-type incentives were much more popular although not all LGUs used them. Fourthly, only about one third of CFCs expected financial or non-financial support to invest or to stay in the Province. They had other reasons to operate here. The strongest one related to resources available in the Province.

The results of the questionnaire study have also been confirmed statistically. The correlation between incentives used by local authorities and the attraction of FDI has been checked for the counties. Using the eta ratio analysis we found the lack of statistical links between variables. To conclude, we can reject the hypothesis of the positive effect of incentives offered by local and regional self-government to attract foreign investors. The improvement of business conditions is more important to this goal.

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http://www.paiz.gov.pl/investment_support

ZNACZENIE ZACHĘT DLA PRZYCIĄGANIA BEZPOŚREDNICH INWESTYCJI ZAGRANICZNYCH. PRZYKŁAD REGIONU ŁÓDZKIEGO

Streszczenie

Głównym celem artykułu jest ocena roli zachęt, jakie stosuje samorząd terytorialny aby przyciągnąć bezpośrednie inwestycje zagraniczne do województwa łódzkiego. Podstawę do wyciągania wniosków stanowią wyniki badania kwestionariuszowego przeprowadzonego wśród przedsiębiorstw z udziałem kapitału zagranicznego (PKZ), które zainwestowały w regionie oraz wśród jednostek samorządu terytorialnego, które gościły te podmioty. W celu rozpoznania prawidłowości wykorzystano metody i testy statystyczne.
Do najważniejszych należał współczynnik eta. Posłużył on do oceny zależności pomiędzy napływem bezpośrednich inwestycji zagranicznych do powiatów województwa łódzkiego a zachętami inwestycyjnymi stosowanymi przez jednostki samorządu terytorialnego. Metoda ta pozwoliła na weryfikację hipotezy dotyczącej istotności powiązań statystycznych pomiędzy badanymi zmiennymi.
Z przeprowadzonego badania wynika, że większość samorządów zabiegała o inwestorów bez względu na to, czy pochodziły z kraju czy z zagranicy. Nieliczne gminy i powiaty posiadały ofertę wsparcia adresowaną wyłącznie do PKZ. Tylko 7% samorządów proponowało pomoc finansową, której najpopularniejszą formą były ulgi w podatkach i opłatach lokalnych. Znacznie więcej stosowało różne zabiegi promocyjne. Wyniki badania wskazują, że zachęty inwestycyjne miały drugorzędne znaczenie dla napływu BIZ do gmin i powiatów województwa łódzkiego. Zachęty nie były również czynnikiem przesądzającym o kontynuowaniu przez PKZ działalności w regionie.

Słowa kluczowe: bezpośrednie inwestycje zagraniczne, zachęty, województwo łódzkie, samorząd terytorialny

Kody JEL: F21, R11