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DO INVESTMENT INCENTIVES MATTER IN MULTINATIONAL ENTERPRISES LOCATION CHOICES? THE CASE OF THE LODZ PROVINCE

Abstract

Background: Theoretically, any country or region in the world whose political and economic situation is stable and predictable can become a potential optimal investment location for multinational enterprises (MNEs). Nevertheless, some locations are doing better than others. In trying to explain why that is the case, the author has taken a closer look at investment incentives viewed as factors that may have an impact on the attractiveness of business locations. MNEs are seeking to find sites in other countries where they could successfully develop their business projects and are looking closely at economic viability of their undertakings. On the other hand, national and local governments in different countries across the world deploy diverse incentives financed from public coffers to attract foreign investors. Supporting foreign direct investment (FDI) through targeted incentive schemes is a subject that for some time has been thoroughly debated by economists and the international business community.
Research purpose: National, regional, and local authorities together with business environment institutions have a significant role in attracting (and retaining) foreign investors. They are equipped with economic policy instruments which, if used properly, may become incentives to MNEs looking for favourable business locations. The hereto discussed study aims to assess the role the host country measures play in location decisions of companies with foreign capital.
Methods: It is based on the results of a questionnaire-based survey conducted by the author in Poland. The study was carried out using the quantitative PAPI (*Pen And Paper Personal Interview*) method while responses provided by MNEs managers were examined by calculating their distributions as well as other statistical measures.
Conclusions: The wide array of investment incentives offered to foreign investors can be divided into several 'thematic' groups of diverse significance. In the below discussed study, most respondents – managers of MNEs which invested in Poland – declared that the availability of State aid schemes was not the main driver in their location decisions which were motivated primarily by cost-related factors. Available surveys that investigate the situation across the world (also in Poland) do not provide sufficient evidence to make a clear-cut assessment of the efficiency

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of investment incentives in attracting (and retaining) FDI projects. Nevertheless, most of them allow us to conclude that incentives are considered secondary in location decisions.

Keywords: foreign direct investment, investment incentives, multinational enterprises, Lodz Province.

JEL classification: F21, F23

1. Introduction

The study aims to assess the role the host country measures play in location decisions of companies with foreign capital. For quite some time already, the world of academia and economic experts have been holding a debate concerning the role of incentives in attracting the FDI.[1] Today, in the times of globalisation, companies increasingly more often seek to achieve an international competitive advantage. Streams of foreign direct investments flow from investors based in developed and developing countries trying to find optimum locations that could ensure them further dynamic growth. To compare, back in 1980 global FDI flows amounted to USD 54 bn, ten years later they reached USD 208 bn to finally exceed USD 1.3 trillion in 2019 (before the pandemic period). Increases in FDI flows stirred up competition among the host economies striving to attract foreign capital by offering it a favourable legal framework. As shown by the statistics, over 3k international investment agreements were signed globally by the end of 2018, out of which almost 90% after 1990. From the regulatory point of view, almost 80% of regulations that entered into force over that period were designed to promote international capital flows.[2]

Businesses which decide to expand abroad and engage at international level do it through engaging in different arrangements. FDI, undertaken usually

[1] **A. Aggarwal**, *Social and Economic Impact of SEZs in India*, Oxford University Press, 2012, Oxford; **L. Johnson**, **P. Toledano**, (lead authors), Background paper for the Eighth Columbia International Investment Conference on Investment Incentives: The good, the bad and the ugly. Assesing the costs, benefits and options for policy reform. Vale Columbia Center on Suistanable International Investment, Columbia University, 2013; **C. Jensen**, **M. Winiarczyk**, *Special Economic Zones – 20 Years Later*, CASE Research Paper 2014/467, Warsaw; **T.A. Tavares-Lehmann**, **P. Toledano**, **L. Johnson**, **Sachs** (eds.), *Rethinking Investment Incentives. Trends and Policy Options*, Columbia University Press, New York 2016; **World Investment Report**, *United Nations Conference on Trade and Development (UNCTAD)*, New York, Geneva 2010–2020.

[2] **W. Karaszewski**, **M. Jaworek**, *Bezpośrednie inwestycje zagraniczne w procesie internacjonalizacji polskich przedsiębiorstw*, Przegląd Organizacji 2016/7, pp. 13–20; **F. Demir**, **Y. Duan**, *Bilateral FDI Flows, Productivity Growth, and Convergence: The North vs. The South,* World Development 2018/101 (C), pp. 235–249; **World Investment Report**, 2010–2020.

to exercise long term control over foreign affiliates, are one of possible paths selected by companies that wish to go international. As a result of FDI, companies controlled by foreign capital (CFC) are established in other countries and the status of the parent company changes into an international enterprise. FDI are viewed as the most advanced but also the most risky form of internationalisation of enterprises.[3]

Why companies with foreign capital decide to choose a particular investment location is a question that for a long time has been investigated by economists and experts in management sciences or international business. Nielsen, Asmussen and Weatherall[4] reviewed 153 works focused on the drivers of location decisions made by the CFCs that were published over the period 1976–2015 in renowned scientific journals.[5] They found out that authors of all these publications were predominantly interested in how much certain attributes of the host economies, such as, e.g., the size of the domestic market, quality of institutions, CIT rate, remunerations in the country, infrastructure or human capital resources influenced the location decision.

Most of the reviewed studies (52%) focused on the macroeconomic level,[6] however, only in seven cases (5%) the authors relied on primary data. Studies devoted exclusively to investment incentives were rather scarce and included, e.g., research studies conducted by Head and Ries[7] and Meyer and Nguyen[8] who examined the importance of special economic zones or Oman[9] who studied the role of tax allowances in investment location decisions. Across the world,

3 **K. Obłój**, **A. Wąsowska**, *Uwarunkowania strategii umiędzynarodowienia polskich firm giełdowych*, WWSZiP, Warszawa 2010; **M. Marinov**, **S**. **Marinova** (eds.), *Impacts of Emerging Economies and Firms on International Business*, Palgrave Macmillan, Basingstoke 2012; **W. Karaszewski**, **M. Jaworek**, *Bezpośrednie inwestycje zagraniczne…*

4 **B.B. Nielsen**, **C.G. Asmussen**, **C. Weatherall**, *The Location Choice of Foreign Direct Investments: Empirical Evidence and Methodological Challenges*, Journal of World Business 2017/52/1, pp. 62–82.

5 Most of them in “Journal of International Business Studies” (26), “International Business Review” (11), and “Strategic Management Journal” (8).

6 Most studies concerned enterprises investing in China.

7 **K. Head**, **J. Ries**, *Inter-city Competition for Foreign Investment: Static and Dynamic Effects of China's Incentive Areas*, Journal of Urban Economics 1996/40 (1), p. 38–60.

8 **K.E. Meyer**, **H.V. Nguyen**, *Foreign investment strategies and subnational institutions in emerging markets: Evidence from Vietnam*, Journal of Management Studies 2005/42 (1), pp. 63–93.

9 **C. Oman**, *Policy Competition for Foreign Direct Investment: A study of Competition among Governments to Attract FDI*, Development Centre of the Organisation for Economic Co-operation and Development 2000.

governments are seeking to actively attract investors by offering them a variety of incentives which include, e.g., fiscal, financial, regulatory, as well as technical and information instruments.[10] However, the mere fact of offering incentives to attract (and retain) CFCs cannot *a priori* be seen as a justified economic move as there are various costs involved which, under certain circumstances, may exceed expected benefits.[11]

2. Literature review

Drivers of location decisions made by international enterprises have for years stimulated researchers' interest. Considerations devoted to them can be found in economic theories, which explain vertical FDI[12], horizontal FDI[13] and international operations of enterprises seen through their productivity[14] or in research studies on international business focused on monopolistic advantages theory[15],

[10] **F. Cass**, *Attracting FDI to Transition Countries: The Use of Incentives and Promotion Agencies*, Transnational Corporations 2007/16 (2), pp. 77–122; **S. James**, *Incentives and Investments: Evidence and Policy Implications*, ICAS of the World Bank Group 2009; **T. Harding**, **B.S. Javorcik**, *Roll out the Red Carpet and They Will Come: Investment Promotion and FDI Inflows*, The Economic Journal 2011/121, pp. 1445–1476; **T.A. Tavares-Lehmann**, **P. Toledano**, **L. Johnson**, **L. Sachs** (eds.), *Rethinking Investment Incentives…*

[11] **S. James**, *Incentives and Investments…*; **K. Tuomi**, *Review of Investment Incentives. Best Practice in Attracting Investment*, Working Paper No F-41003-ZMB-1, International Growth Centre, London School of Economics and Political Science, London 2012, pp. 1–24.

[12] **E. Helpman**, *A Simple Theory of International Trade with Multinational Corporations*, The Journal of Political Economy 1984/92 (3), pp. 451–471; **S.R. Yeaple**, *The Role of Skill Endowments in the Structure of U.S. outward Foreign Direct Investment*, The Review of Economics and Statistics 2003/85 (3), pp. 726–734; **L. Alfaro**, **A. Charlton**, *Intra-industry Foreign Direct Investment*, American Economic Review 2009/99 (5), pp. 2096–2119.

[13] **J.R. Markusen**, *Multinationals, Multi-Plant Economies and the Gain from Trade*, Journal of International Economics 1984/16, pp. 205–216; **J. Markusen**, **A. Venables**, *The Theory of Endowment, Intra-industry and Multi-national Trade*, Journal of International Economics 2000/52 (2), pp. 209–234; **E. Helpman**, **M.J. Melitz**, **S.R. Yeaple**, *Export Versus FDI with Heterogeneous Firms*, American Economic Review 2004/94 (1), pp. 300–316.

[14] **E. Helpman**, **M.J. Melitz**, **S.R. Yeaple**, *Export Versus FDI…*

[15] **S. Hymer**, *The International Operations of National Firms: A Study of Direct Foreign Investment*, Massachusetts Institute of Technology: MIT Press, Cambridge 1960; **C. Kindleberger**, *American Business Abroad*, Yale: University Press, New Haven 1969; **F. Cass**, *Attracting FDI to Transition Countries…*, pp. 77–122.

product life cycle theory[16] and relationships between institutions and enterprises in the light of institutional theory[17].

However, it is the eclectic theory (paradigm) of international production that has become the key tool for studying operations of international enterprises in the spatial context[18]. The theory argues that to engage in an FDI, a company must enjoy three types of advantages originating from three potential sources: Ownership, Location, and Internalization (OLI). Companies engaged in FDI are guided by different motivations[19] and ultimately a location decision is a derivative of: (1) specific attributes (features) of a given location, (2) motivation of a CFC, and (3) investor profile (industry, innovation, ownership structure, *etc*.).[20]

Local authorities' attitude vis-à-vis foreign investors can be the best seen in laws and regulations that they adopt with regard to FDI. However, recent observations reveal that host countries, especially the developing ones, tend to take contradictory steps at the same time: on the one hand, they liberalise regulations on FDI inflow while on the other hand, they adopt more restrictive and selective measures and support criteria (quality). They do it to attract investment projects that are, e.g., technologically advanced and can be beneficial to their economies.[21]

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16 **R. Vernon**, *The Product Cycle Hypothesis in a New International Environment*, Oxford Bulletin of Economics and Statistics 1979/41 (4), pp. 255–267; **C. Hill**, *Foreign Direct Investment*, in: **Ch. Hill** (org.), *International Business: Competing in the Global Marketplace*, MacGraw-Hill, New York 2007, pp. 236–261.

17 **M. Peng**, *Institutions, Cultures and Ethics*, in: **M. Peng** (org.), *Global Strategic Management*, South-Western Cengage Learning, Cincinnati 2009, pp. 90–122; **I. Faeth**, *Determinants of Foreign Direct Investment – a Tale of Nine Theoretical Models*, Journal of Economic Surveys 2009/23 (1), pp. 165–196.

18 **J.H. Dunning**, *The Eclectic (OLI) Paradigm of International Production Past, Present and Future*, International Journal of the Economics of Business 2001/8, pp. 173–190; **J. Cantwell**, **R. Narula**, *The Eclectic Paradigm in the Global Economy*, International Journal of the Economics of Business 2001/8 (2), pp. 155–172; **J.H. Dunning**, **S.M. Lundan**, *Theories of foreign direct investment*, in: **J.H. Dunning**, **S.M. Lundan** (org.), *Multinational Enterprises and the Global Economy*, Edward Elgar Publishing Limited, Cheltenham 2008, pp. 79–115.

19 **J.H. Dunning**, **S.M. Lundan**, *Theories of foreign direct investment*…, pp. 79–115.

20 **R. Strange**, **I. Filatotchev**, **Y-C. Lien**, **J. Piesse**, *Insider Control and the FDI Location Decision. Evidence from Firms Investing in an Emerging Market*, Management International Review 2009/49 (4), pp. 433–454; **B.B. Nielsen**, **C.G. Asmussen**, **C. Weatherall**, *The Location Choice*…, pp. 62–82.

21 **F. Cass**, *Attracting FDI to Transition Countries*…; **S. James**, *Incentives and Investments*…; **T. Harding**, **B.S. Javorcik**, *Roll out the Red Carpet*…, pp. 1445–1476.

National, regional, and local authorities of most countries across the globe run specific incentive schemes targeting incoming FDI. Johnson, Toledano et al. identified 4 main categories of host country measures[22]: fiscal, financial, regulatory, and technical. Similar classification was proposed by Tavares-Lehmann et al. (financial, fiscal, regulatory, and information-technical)[23]. For the purposes of this publication one more category has been added to the above classification and finally the following catalogue of investment incentives has been considered:

1) financial (e.g., grants, subsidies, borrowings, real estate offered at preferential prices);
2) fiscal (tax allowances and exemptions);
3) regulatory (e.g., contracts, bilateral and international agreements favouring FDI, e.g., import facilities, labour law, environmental law);
4) information-technical (information, promotion, advisory services, assistance in investment procedures offered by government and self-government agencies); and
5) in-kind support, i.e, the accompanying infrastructure (e.g., land development, construction of driveways).

Economy-wise, all the above are subsidies granted to reduce investor's costs. These incentives also mitigate financial risk involved in the investment project and encourage an investor to choose the location preferred by the host country authorities. Whenever a host country decides to attract FDI by offering diverse incentives, there are costs involved which can be reasonably explained only when the investment project produces positive externalities that exceed these costs.[24]

Empirical studies motivated by the wish to learn about the role of incentives in attracting FDI which usually see them as a factor decisive for the investment location decision provide inconclusive results and answers which very much depend on circumstances, in which incentives have been applied.[25] Most of them suggest that incentives played secondary role in the location decision.[26]

[22] **L. Johnson**, **P. Toledano**, *The good, the bad and the ugly. Assesing the costs…*

[23] **T.A. Tavares-Lehmann**, **P. Toledano**, **L. Johnson**, **L. Sachs** (eds.), *Rethinking Investment Incentives…*

[24] **W.M. Corden**, *Trade Policy and Welfare*, Clarendon Press, Oxford 1997.

[25] **S. James**, *Tax and Non-Tax Incentives and Investments: Evidence and Policy Implications*, World Bank Investment Climate Advisory Services, 2013.

[26] **N.J. Allen**, **J. Morisset**, **N. Pirnia**, **L.T. Wells**, *Using Tax Incentives to Compete for Foreign Investment – Are They Worth the Cost?*, FIAS Occasional Paper 15, Foreign Investment Advisory Service, Washington DC 2001; **S. James**, *Tax and Non-Tax Incentives and Investments: Evidence and Policy Implications*, World Bank Investment Climate Advisory

The same opinion was formulated by Andersen, Kett, and Uexkull[27] who argued that incentives are rarely among primary factors contemplated by multinational companies when choosing a location. However, if fundamental factors are graded similarly, they may be vital for the final decision. Conclusions along the same line have been drawn for fiscal incentives by Morisset and Pirnia[28] and Larsson and Venkatesh[29]. These researchers also believed that incentives were of secondary importance and investors considered them only when fundamental factors (political and economic stability, infrastructure, costs of transport) were similar or comparable in potential locations.

3. Material and methods

The author decided to use the results of his own questionnaire-based survey conducted in the Lodz Province (one of sixteen regions in Poland) as a case study[30]. The study was conducted using the quantitative PAPI (*Paper and Pen Personal Interview*) method, one of the most effective methods used in market research[31], on a sample of 201 companies with the biggest employment, representing ca. 30% of the total population of CFCs.[32] Interviews were held with

Services, 2013; **S. James**, **S. Van Parys**, *The Effectiveness of Tax Incentives in Attracting Investment: Panel Data Evidence from the CFA Franc Zone*, International Tax and Public Finance 2010/17 (4), pp. 400–429; **A. Klemm**, **S. Van Parys**, *Empirical Evidence on the Effects of Tax Incentives*, International Tax and Public Finance 2012/19 (3), pp. 393–423.

27 **M.R. Andersen**, **B.R. Kett**, **E. von Uexkull**, *Corporate Tax Incentives and FDI in Developing Countries*, Global Investment Competitiveness Report 2017/2018, https://doi.org/10.1596/978-1-4648-1175-3.

28 **J. Morisset**, **N. Pirnia**, *How Tax Policy and Tax Incentives Affect Foreign Direct Investment: A Review*, Policy Research Working Paper 2509, World Bank and International Finance Corporation, Foreign Investment Advisory Service, Washington, D.C. 2000.

29 **Ch. Larsson**, **S. Venkatesh**, *The Importance of Government Incentives Relative to Economic Fundamentals: The Case of Software Industry in Thailand*, Asian Economic Bulletin 2010/27 (3), pp. 312–329.

30 The results of the study were first published in: **T. Dorożyński**, *Wspieranie zagranicznych inwestycji bezpośrednich w Polsce przez system zachęt dla inwestorów*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2018.

31 **G.A. Churchill**, *Badania marketingowe. Podstawy metodologiczne*, Wydawnictwo Naukowe PWN, Warszawa 2002.

32 CFCs for the study were selected using data from the REGON system database of the Statistics Poland. At that time, the REGON database included 653 CFCs established in the Lodz Province between 1988 and 2016.

top managers and employees (mainly CEOs and members of Board, directors, financial directors, and chief accountants).

The interviewed CFCs were distributed across 17 (out of 24) counties (poviats) in the Lodz Province. Data of Statistics Poland suggest that foreign investors focused their activities in cities, which is why almost all companies covered by the study were based in the urban environment. The study covered enterprises from all bigger towns and cities in the Province (mainly county capitals).

As many as 47% of companies included in the sample were based in Lodz while 144 companies (72% of the sample) originated from the Lodz Metropolitan Area (LOM). These proportions show what is the share of companies based in the capital of the Province and in LOM in general population. The research sample brought together manufacturing and service companies; agriculture was not represented as its importance is marginal among CFCs in the Lodz Province (1% in the total CFC population). Only two respondents declared that besides trade and distribution they were engaged in agricultural production.

When it comes to the size of employment, small businesses (employing between 10 and 49 people) constituted the biggest group in the study representing almost 50% of the sample. Middle-sized and large enterprises whose employment is, respectively, 50–249 and over 250, accounted for 36.8% and 12.9% of the surveyed population.

4. Results and discussion

The study aimed to identify the main drivers behind location decisions of CFCs based in the Lodz Province and evaluate their relevance. Location criteria proposed for the research were dictated by theoretical considerations, reviewed empirical studies, and subject-matter literature dealing with all aspects of FDI location decision.

Criteria the most often investigated in literature include, inter alia: size and potential of the internal market[33], quality of life and standard of living[34], economic stability[35], agglomeration effects[36], costs of labour, labour resources,

[33] **L.K. Cheng**, **Y.K. Kwan**, *What Are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience*, Journal of International Economics 2000/51 (2), pp. 379–400.

[34] **M. Alsan**, **D. Bloom**, **D. Canning**, *The Effect of Population Health on Foreign Direct Investment*, NBER Working Paper 2006/10596.

[35] **E. Asiedu**, *On the Determinants of FDI to Developing Countries: Is Africa Different*, World Development 2001/30 (1), pp. 107–119.

[36] **J. Jones**, *Agglomeration Economies and the Location of Foreign Direct Investment: A Meta-Analysis*, Journal of Regional Science 2017/57 (5), pp. 731–757.

quality of human capital[37], taxes[38], business environment[39], institutional environment[40], infrastructure[41], geographic proximity[42], cultural proximity[43], promotion activities of public administration in the host country and investment incentives[44]. For the purpose of this study, the identified criteria (factors) were allocated to six groups:

1) **costs of production**/services, including the cost of labour as well as taxes and local charges;
2) **human resources**, including, inter alia, availability of employees and characteristics of education at different levels in the region;
3) **economic potential of the province**, in particular its market, rating, availability of suppliers, collaborators, universities, and research and development centres in the region;
4) **relations with self-government administration** in the province, that is, quality of service, speedy and flexible operations, stable legal regulations, financial and non-financial assistance measures;

[37] **C. Azémar**, **R. Desbordes**, *Short-run Strategies for Attracting Foreign Direct Investment*, World Economy, 2010/33 (7), pp. 928–957.

[38] **Ch. Bellak**, **M. Leibrecht**, *Some Further Evidence on the Role of Effective Corporate Income Taxes as a Determinants of Foreign Direct Investment in Central and East European Countries*, Proceedings of the Annual Conference on Taxation, National Tax Association, Washington DC. 2007.

[39] **C. Guagliano**, **S. Riela**, *Do Special Economic Areas Matter in Attracting FDI? Evidence From Poland, Hungary and Czech Republic*, Working Paper ISLA 21, Milano 2005.

[40] **F.L. Bartels**, **F. Napolitano**, **N.E. Tissi**, *FDI in Sub-Saharan Africa: A Longitudinal Perspective on Location Specific Factors (2003–2010)*, International Business Review 2014/23, pp. 516–529.

[41] **E. Asiedu**, *Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability*, World Economy 2006/29 (1), pp. 63–77.

[42] **F. Blanc-Brude**, **G. Cookson**, **J. Piesse**, **R. Strange**, *The FDI Location Decision: Distance and the Effects of Spatial Dependence*, International Business Review 2014/23 (4), pp. 797–810.

[43] **R. Mac-Dermott**, **D. Mornah**, *The Role of Culture in Foreign Direct Investment and Trade: Expectations from the GLOBE Dimensions of Culture*, Open Journal of Business and Management 2015/3, pp. 63–74.

[44] **E.W. Bond**, **L. Samuelson**, *Tax Holidays as Signals*, American Economic Review 1986/76 (4), pp. 820–826; **D. Black**, **W. Hoyt**, *Bidding for Firms*, American Economic Review 1989/79 (5), pp. 1249–1256; **M. Nene**, **A. Pasholli**, *Financial Incentives and Their Impact for Attracting FDI Survey with Foreign Investitures in Albania*, Journal of Knowledge Management, Economics And Information Technology 2011/7, pp. 1–14; **M. Owczarczuk**, *Government Incentives and FDI Inflow into R&D – The Case Of Visegrad Countries*, Entrepreneurial Business and Economics Review 2013/1 (2), pp. 73–86.

5) **infrastructure**, including developed investment plots, condition of road, railway, air as well as telecommunication and social infrastructure; and
6) **other**, including public security and safety, geographic and cultural proximity, fairs and exhibitions, and employees' attitude vis-à-vis their occupational duties.

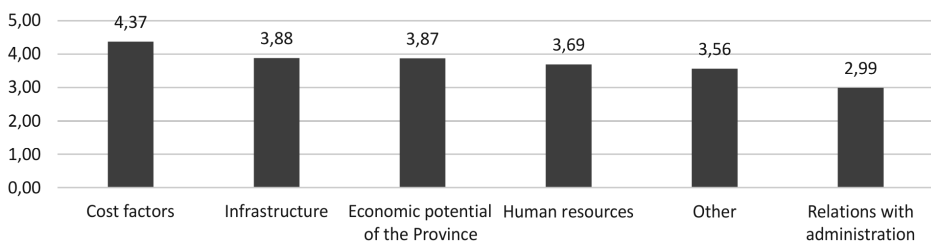
Taken together, there are 41 factors distributed unevenly across 6 groups. The smallest number of factors (three) can be found in group 1 while the biggest number of factors (nine) belong to groups 2 and 5. When disaggregated, all these groups bring together demand, supply, and institutional factors. Importance of factors was evaluated based on the questionnaire using a five-point Likert scale, where '1' meant that a given factor strongly deterred a respondent and '5' that it strongly encouraged her/him. Reliability of the test scores was validated using the Cronbach's alpha coefficient.[45]

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum_{i=1}^{k} \delta_i^2}{\delta^2}\right)$$

where:
α – Cronbach's alpha coefficient,
k – number of questions (factors),
δ^2_i – variance of component for the current sample,
δ^2 – variance of the observed total answers (scores).

The Cronbach's alpha coefficient was calculated, and its value (0.916) confirmed that the scores obtained in the test were highly reliable and the results were fit for further statistical analyses.

FIGURE 1: *Location decision drivers: general ranking based on mean answers (scores)*



S o u r c e: own calculations based on the scores from questionnaire-based study, N = 201.

[45] **G.A. Ferguson**, **Y. Takane**, *Analiza statystyczna w psychologii i pedagogice*, Wydawnictwo Naukowe PWN, Warszawa 2004.

A general ranking of means for six the main groups of factors was drawn up based on partial estimates. We learn from it that cost factors (1) clearly played the most important role in location decisions. Slightly less important were: infrastructure (5) and economic potential of the province (3). Other groups of factors: 2, 6, 4 (human resources, relations with local administration, and other) were most probably indifferent to investors or sometimes even slightly deterred them from making the location decision (4 group – relations with administration) (Figure 1).

The next stage of the study was devoted to the examination of detailed rankings of 41 reasons behind the investment location decisions. The idea was to identify reasons seen as the most encouraging to foreign investors. 15 reasons with the highest scores come from five (out of six) categories. Group 4 (relations with local government in the province) reasons were the only one missing as scores for them were the lowest and they were usually seen as indifferent or slightly discouraging from investing (Table 1).

Looking at the importance of factors in the context of groups, factors from group 1 were obviously the most encouraging to investors. Costs of production, labour, taxes, and local charges are apparently the most important to investors and they ranked first, third and eleventh respectively in this ranking. High scores obtained by two factors from group 2 (human resources, labour market, education) confirmed that availability of workers with adequate skills and management staff were the most encouraging to investors and the first one ranked much higher than the second one (2nd and 10th place respectively).

Another group of factors relevant to investors was 5 (infrastructure). Five reasons from this category can be found at the top of the ranking. The most important was the availability of office and storage space, quality of road infrastructure in the region and developed investment plots earmarked for production activities. Some respondents paid a lot of attention to the quality of telecommunication infrastructure probably because of the relatively high share of service companies operating in the field of IT, BPO or similar.

In addition, the ranking of factors the most encouraging foreign investors to invest in the Lodz Province includes four reasons from group 3 (economic potential of the province). The most important of them is the access to regional market. Investors also appreciated the possibility to cooperate with local business community and highly assessed competition in the regional market, the presence of companies from the same industry, or the proximity of suppliers and business partners. Investors were also encouraged by the offer of fairs and exhibition events organised in the region as they create an opportunity to establish new business contacts (group 6).

TABLE 1: *The most encouraging reasons to invest in the Lodz Province: detailed ranking based on the mean of answers*

Ranking position	Reason	Group of reasons	Mean	Median	Mode
1	Total cost of production (services)	1	4.51	5	5
2	Availability of skilful workers	2	4.46	5	5
3	Cost of labour (salaries & wages and related cost)	1	4.43	5	5
4	Access to regional market	3	4.32	5	5
5	Office space	5	4.31	5	5
6	Warehouse space	5	4.29	5	5
7	Quality of road infrastructure	5	4.29	5	5
8	Competition in the market	3	4.27	5	5
9	Developed investment plots earmarked for production	5	4.20	4	5
10	Availability of skilful management staff	2	4.19	4	5
11	Taxes and other charges, including local taxes and charges	1	4.17	4	5
12	The presence of companies from the same industry	3	4.12	4	5
13	Fairs and exhibitions organised in the region	6	4.08	4	5
14	Availability of suppliers and business partners	3	4.05	4	5
15	Quality of telecommunication infrastructure	5	4.04	4	5

Source: own calculations based on the scores from questionnaire-based study, N = 201.

The second goal of the questionnaire-based study was to assess how much these incentives influenced the largest CFCs in the Lodz Province in their location choices. In the questionnaire-based study respondents were asked to assess to what extent the incentives had contributed to choosing the Lodz Province as a location for their foreign investment. Similarly to the analysis of location factors, the five-point Likert scale was used, from '1' meaning very little or no impact to '5' meaning very strong impact[46].

[46] Reliability of scores was validated using the Cronbach's alpha coefficient. Its value, 0.892, suggests that the scores are highly reliable.

In accordance with the classification adopted in the first part of this paper, incentives have been broken down into five categories, i.e., financial, fiscal, regulatory, information and technical, and in-kind support (accompanying infrastructure) (Table 2).

TABLE 2: *Incentives and their impact on the investment decision: general ranking based on average scores from answers*

Types of incentives	Ranking position	Average	Median	Mode	Standard deviation	Variation coefficient*
In-kind assistance	**1**	3.08	3	4	1.38	0.45
Financial	**2**	2.60	3	3	1.21	0.47
Fiscal	**3**	2.55	3	3	1.13	0.44
Information--technical	**4**	2.38	2	3	1.11	0.47
Regulatory	**5**	1.73	1	1	0.95	0.55

* Average relative error.
Source: own calculations based on the scores from the questionnaire-based study, N = 201.

Groups of incentives played different roles, which is reflected in mean values and other statistics.[47] According to respondents, in-kind assistance, i.e. the availability of accompanying infrastructure such as, e.g., access road to the plot, was the most important to CFCs in the Lodz Province. The impact of incentives from this group on investors' decisions was at least average. The distribution of answers shows that 70% of respondents decided that in-kind assistance was important to medium, high, or very high degree, including 44% of investors who saw its importance as high or very high. Only to 22% of respondents these incentives were irrelevant.

Financial incentives ranked second. To 55% of respondents, their impact on investment decisions was big or huge. However, only every fourth entrepreneur considered financial assistance important or crucial. The share of respondents to whom financial incentives were irrelevant was 25%, close to the one for in-kind support. The last group of incentives in the top three were fiscal incentives. The average assessment of their impact was not much worse than that of financial incentives. However, the distribution of answers clearly shows that fewer respondents gave it the highest score (20%), meaning more investors believed

47 Standard deviation and coefficient of variation (relative standard deviation) exhibit significant differences in how individual foreign investors assess investment incentives.

the impact of fiscal incentives was average (33%). In total, more than half of investors (53%) considered fiscal incentives as important for location decisions.

The two remaining groups of incentives, i.e., information and technical and regulatory instruments were either seen as little relevant (score 2), very little relevant, or irrelevant (score 1) for the investment location decision. Information and technical incentives scored slightly better as 52% of investors assessed their importance as little relevant, very little relevant or irrelevant with 29% of respondents giving them the lowest score. Regulatory incentives were little relevant or irrelevant to almost 79% of respondents including 55% who believed their impact was minor or non-existent. It was the only category in which the lowest scores prevailed.

Obtained results partly coincide with conclusions drawn by Tavares-Lehmann et al.,[48] who said that financial and fiscal instruments are the most important (mainly subsidies and tax allowances). Investors also appreciate access to public services rendered below the market prices (e.g., accompanying infrastructure). The result for information and technical instruments can be surprising. As argued by Harding and Javorcik,[49] creating positive image of the host economy by providing investors with free of charge business information or assistance in dealing with formalities connected with the project can be decisive for the investment location decision. These authors claim that the above is true especially for developing economies in which market distortions and underperforming state administration are still present.

5. Conclusions

The principal goal of research discussed in the paper was to evaluate the impact of host country measures on location decisions made by companies with foreign capital. The empirical part of the work was based on a study carried out amongst 201 the biggest CFCs from the Lodz Province. It helped in assessing the relevance of each and every criterion (factor) considered when selecting a location.

The effects of FDI inflow on the host country economy are rather ambiguous and numerous empirical analyses conducted in many countries have demonstrated that their impact on well-being may differ although in most cases it is positive.

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48 **T.A. Tavares-Lehmann**, **P. Toledano**, **L. Johnson**, **L. Sachs** (eds.), *Rethinking Investment Incentives…*

49 **T. Harding**, **B.S. Javorcik**, *Roll out the Red Carpet…*, pp. 1445–1476.

National, regional, and local authorities in all parts of the world offer investment incentives in a rather universal manner. Studies conducted to date in Poland and elsewhere have revealed that the role of incentives in location decisions was secondary, sometimes even marginal depending on circumstances, in which incentive schemes were applied. For instance, if fundamental factors in competing locations were similar, support offered by the host country could make a difference.[50]

Questionnaire-based and statistical studies conducted with the participation of the largest CFCs in the Lodz Province have led to the following conclusions:

1) when choosing the Lodz Province, investors were guided mainly by low costs, good quality infrastructure in the region, and big market potential;
2) support offered by public administration exerted little impact and a clear majority of respondents decided that the absence of State aid would not have motivated them to change their location decisions;
3) detailed scores showing how relevant were individual groups of incentives differed substantially. By far the most important was the in-kind support in the form of accompanying infrastructure. Financial and fiscal incentives were slightly less important.

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CZY ZACHĘTY INWESTYCYJNE MAJĄ ZNACZENIE DLA WYBORU LOKALIZACJI PRZEZ PRZEDSIĘBIORSTWA Z KAPITAŁEM ZAGRANICZNYM? PRZYPADEK WOJEWÓDZTWA ŁÓDZKIEGO

Abstrakt

Przedmiot badań: Każdy kraj lub region na świecie, którego sytuacja gospodarcza i polityczna jest relatywnie stabilna i przewidywalna, może stać się atrakcyjną lokalizacją dla przedsiębiorstw międzynarodowych. Niemniej jednak niektóre państwa radzą sobie lepiej niż inne w przyciąganiu zagranicznych inwestycji bezpośrednich. Próbując wyjaśnić, dlaczego tak się dzieje, autor przyjrzał się bliżej zachętom inwestycyjnym.
Cel badawczy: Władze krajowe, regionalne i lokalne wraz z instytucjami otoczenia biznesu odgrywają istotną rolę w przyciąganiu (i utrzymaniu) inwestorów zagranicznych. Są one wyposażone w instrumenty polityki gospodarczej, które mogą stać się atrakcyjną zachętą dla przedsiębiorstw międzynarodowych poszukujących korzystnych lokalizacji. Badanie ma na celu ocenę roli, jaką instrumenty kraju przyjmującego odgrywają w decyzjach lokalizacyjnych przedsiębiorstw z kapitałem zagranicznym.
Metoda badawcza: Wykorzystano wyniki ankiety przeprowadzonej przez autora wśród inwestorów zagranicznych zlokalizowanych w województwie łódzkim. Badanie przeprowadzono metodą ilościową PAPI (*Pen And Paper Personal Interview*). Przeanalizowano rozkłady oraz inne miary statyczne odpowiedzi udzielonych przez menedżerów przedsiębiorstw międzynarodowych.
Wyniki: Szeroki wachlarz zachęt inwestycyjnych oferowanych inwestorom zagranicznym można podzielić na kilka grup o różnym znaczeniu. W badaniu większość respondentów zadeklarowała, że dostępność programów pomocy publicznej nie była głównym czynnikiem wpływającym na ich decyzje lokalizacyjne, motywowane przede wszystkim czynnikami kosztowymi. Także dostępne badania nie dostarczają wystarczających dowodów, aby dokonać jednoznacznej oceny skuteczności zachęt inwestycyjnych w przyciąganiu (i utrzymywaniu) ZIB. Niemniej jednak większość z nich pozwala wnioskować, że zachęty mają drugorzędne znaczenie dla decyzji lokalizacyjnych przedsiębiorstw międzynarodowych.

Słowa kluczowe: zagraniczne inwestycje bezpośrednie, zachęty inwestycyjne, przedsiębiorstwo międzynarodowe, województwo łódzkie.