

ЕКОНОМІЧНА ТЕОРІЯ

УДК 330.837:339.9

DOI: 10.26565/2311-2379-2018-95-01

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4 Svobody Sq., 61022, Kharkiv, UkraineE-mail: olgano59@gmail.com, ORCID: <https://orcid.org/0000-0002-5638-6294>**THE EFFECTS OF FOREIGN DIRECT INVESTMENT
ON LABOUR PRODUCTIVITY**

The study of the effects of foreign direct investment (FDI) on the productivity of local firms is aimed at estimating its potential impact in terms of its strengthening activity in developing countries. The article seeks to examine the effects of FDI on labour productivity of local firms and determine the factors that would facilitate the development of more efficient policy to attract FDI to Ukraine. The actual relationship between horizontal and vertical side effects of FDI remains unclear, although the available studies revealed some positive correlations.

While recent studies highlight the considerable research efforts made to understand the issues of the investment motivation of the FDI, its impact on economic growth and competitive advantages in developed economies. Empirical studies of FDI effects on domestic firms expose various factors, conditions and characteristics at the national, industry and firm levels. The reported results do not reflect the ambiguous effects of economic sectors on labour productivity, undervalued labour costs per worker, and do not take into account the role of the shadow economy in Central and Eastern European countries. Inadequate skills and education of workers are estimated to be a major or severe obstacle for the operation of multinational companies in many developing countries.

The government policy on liberalization of FDI inflows makes local markets more attractive for foreign companies. Government support for education and training is a key factor in attracting FDI. The gains achieved from FDI have prompted the government to encourage FDI inflows. The paper discusses the challenges faced by the government to promote policies for attracting FDI in developing countries.

Keywords: side effects, foreign direct investment, labour productivity.**JEL Classification:** O 10, O 11, O 18, O 25.**ЕФЕКТИ ВПЛИВУ ІНОЗЕМНИХ ІНВЕСТИЦІЙ НА ПРОДУКТИВНІСТЬ ПРАЦІ****О. В. Носова**Харківський національний університет імені В. Н. Каразіна
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Дослідження впливу прямих іноземних інвестицій (ПІІ) на продуктивність місцевих фірм спрямовано на отримання оцінки їх можливого ефекту активізації ПІІ в країнах з економікою, що розвивається. Стаття має на меті дослідити вплив ПІІ на продуктивність праці місцевих фірм та визначити фактори, які сприятимуть розробці більш ефективної політики для заохочення привабливих практик ПІІ в Україні. Зростання присутності іноземного капіталу свідчить про те, що працівники галузей з більшою часткою іноземних інвестицій стикаються з більш швидким зростанням заробітної плати. Фактичний взаємозв'язок між горизонтальними та вертикальними побічними ефектами ПІІ залишається неясним, хоча наявні дослідження виявили існування в ряді випадків позитивної кореляції.

У той час як з останніх досліджень випливає, що значні зусилля вчених спрямовані на вивчення мотивації інвестування, пов'язаної з наявністю побічних ефектів ПІІ, їх впливу на економічне зростання, конкурентні переваги в розвинених країнах, і звертають увагу на необхідність короткостроковій коригування в порівнянні з довгостроковими можливостями розвитку. Емпіричні дослідження впливу ПІІ на вітчизняні фірми відображають різні фактори, умови та характеристики на фірмовому, галузевому та національному рівнях. Опубліковані результати вказують на існування різного рівня продуктивності праці в

секторах економіки, на недооцінку величини витрат на робочу силу на одного працівника і не враховують роль тіньової економіки в країнах Центральної та Південно-Східної Європи.

Недостатні навички та освіта працівників оцінюються як велика або серйозна перешкода для операцій багатонаціональних компаній у багатьох країнах, що розвиваються.

Урядова політика лібералізації припливу ПІІ стимулює вхід іноземних компаній на місцеві ринки країн. Державна підтримка освіти та навчання є найважливішим фактором залучення ПІІ. Реалізація переваг, отриманих від ПІІ, спонукала уряди заохочувати приплив ПІІ. У роботі обговорюються виклики, які постають перед урядом для заохочення політики залучення ПІІ у країнах, що розвиваються.

Ключові слова: побічні ефекти, прямі іноземні інвестиції, продуктивність праці.

JEL Classification: O 10, O 11, O 18, O 25.

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ЭФФЕКТЫ ВЛИЯНИЯ ИНОСТРАННЫХ ИНВЕСТИЦИЙ НА ПРОИЗВОДИТЕЛЬНОСТЬ ТРУДА

Исследование влияния прямых иностранных инвестиций (ПИИ) на производительность местных фирм направлено на исследование и оценку вероятного воздействия активизации ПИИ в странах с развивающейся экономикой. В статье изложено понимание влияния ПИИ на производительность труда местных фирм, а также определены факторы, которые будут способствовать разработке более эффективной политики для поощрения практики привлечения ПИИ в Украину. Рост присутствия иностранного капитала свидетельствует о том, что работники отраслей с большей долей иностранных инвестиций сталкиваются с более быстрыми темпами роста заработной платы. Фактическая связь между горизонтальными и вертикальными побочными эффектами ПИИ остается неясной, хотя имеющиеся исследования выявили существование в ряде случаев положительной корреляции.

Вместе с тем из последних исследований следует, что значительные усилия ученых направлены на изучение мотивации инвестирования, связанной с наличием побочных эффектов ПИИ, их влияния на экономический рост, на получение конкурентных преимуществ в развитых странах, и обращают внимание на необходимость краткосрочной корректировки по сравнению с долгосрочными возможностями развития.

Эмпирические исследования побочных эффектов ПИИ на отечественные фирмы отражают различные факторы, условия и характеристики на уровне фирмы, отрасли и на национальном уровне. Опубликованные результаты указывают на существование разного уровня производительности труда в секторах экономики, на недооценку величины затрат на рабочую силу на одного работника и не учитывают роль теневой экономики в странах Центральной и Юго-Восточной Европы. Неодинаковые навыки и уровень образования работников, по оценкам экспертов, являются серьезным препятствием для деятельности многонациональных компаний во многих развивающихся странах.

Государственная политика либерализации притока ПИИ стимулирует выход иностранных компаний на местные рынки стран. Государственная поддержка образования и подготовки кадров является важнейшим фактором привлечения ПИИ. Преимущества, связанные с ПИИ, побудили правительства поощрять приток ПИИ. В работе обсуждаются проблемы, стоящие перед правительством в целях поощрения политики привлечения ПИИ в странах с развивающейся экономикой.

Ключевые слова: побочные эффекты, прямые иностранные инвестиции, производительность труда.

JEL Classification: O 10, O 11, O 18, O 25.

Statement of the problem.

The article analyses direct and indirect effects of foreign direct investment (FDI) on labour productivity for host economy and suggests policy options for improvement of the country's performance and stimulation of economic growth. The inflow of FDI provides transfer of new technologies, development of new management techniques and creation of additional jobs. Several factors influence the attraction of FDI in an Eastern Europe economy including high profit, access to a new market, and availability of low labour cost. The analysis of potential long-run outcomes on productivity growth and investment shows that the transition in the former Soviet Union in addition to the transition of Eastern European countries has a negligible effect on all regions other than the Former Soviet Union itself.

FDI inflows affect and stimulate labor productivity change. The higher wage rates leads to aggregate demand rising. The higher investment with total productivity improvements could reinforce

the current account position. The rising technological transparency of the information society emerging in the European countries, as well as growing intra-European two-way FDI links, have contributed to a rising incidence of technology spillovers and external scale economies. The globalization encourages creating an enlarged world supply of relatively unskilled labour force.

It should be noted that low wages in developing countries attract FDI. Nevertheless, surveys reveal that most FDI occurs between the countries with similar wages. The majority of low wage countries have lowest levels of FDI.

Analysis of recent studies and publications.

The advanced globalization processes in Central and Eastern Europe demonstrate various policy applications for overcoming consequences of the global financial and economic crisis in Eastern Europe. The scientific debates on the relation between quality and cost of labour confirm the relevance and importance of the study of the FDI effects on labour productivity. International economic shocks and the increasing intensity of international economic competition effect the overall production reduction related employment in practically all the countries (Nosova, 2017, p. 100-101). The services level and their rate of growth are greatly affected by assessment supply-side and demand-side conditions, which are shaped by features of national welfare states and industrial relations system that have indeed come under increasing pressure from capital and product markets (Scharpf, Schmidt, 2000, p. 315).

The neoclassical approach considers efficient collective bargaining should occur at the firm level so that highly differentiated wages can be matched with highly differentiated labour productivities while price stability is maintained. Alcacer (Alcacer, 2000, p.12) assert that wages have a negative and significant impact on FDI only for countries with high level of human capital.

International debate has recently emphasized firms from small countries, as they are price-takers on the world market, and the resistance of small countries' companies to excessive nominal wage claims. Wage increases above productivity growth, has been stronger than that of companies in larger economies such as Germany, France or Italy. Moreover, if there is centralized wage bargaining in a small open economy trade union from each sector will find it easier to anticipate price reactions so that modest nominal wage pressure is expected. This suggests that large economies should adopt regionally differentiated wage contracts (Welfens, 2006, p.41).

Fadda (Fadda, 2016, p. 18) asserts that "if a general reduction of working time were extended to all the economy, while different sectors have different rates of productivity increase, obviously this would cause either an exit from the market of the firms in the sector with lower (or nihil) productivity growth, or a change (which could be very substantial) in relative prices".

Free trade theory argues that comparative advantages dictate a country exchange what it can produce most efficiently for what others can produce most efficiently. Even in case a country has absolute advantages in commodity production, it would gain by specializing and using comparative advantages. Free trade theory assumptions include the absence of government intervention in foreign exchange markets, market determinants of exchange rates. The company's strategic behavior takes into account local market demand, labor productivity, and other costs.

The protectionist's approach uses national advantages application. They suggest the strategic directions of trade policy, including infant industry protection, country's sufficient market power improvement in terms of trade through rising export prices relatively to import prices. The existence of factor endowment in the trade with less developed countries effects skilled labor scarcity in the developed countries in wage rise and makes unskilled labor effectively more abundant, reducing wage. Protectionist policies cause the loss of jobs, and labor force reallocation abroad. Scientists analyze the relationship between protection and foreign investment in the models of pure theory of international trade, and considers if protection raises inflows of foreign capital, while if it lowers, foreign capital flows out. Considering relatively capital-intensive industries, the general protection by means of import tariffs induces foreign capital inflow.

Factor endowment and increasing returns effect trade patterns. Products' variety differs with techniques producing in horizontal direction of distribution and in vertical direction, with quality of product improvement, including higher capital/ labor ratios. Caves, Frankel, Jones (Caves, Frankel, Jones, 1996) argue that in spite of the role of fixed costs, economies of scale, and a love for variety all conspire to explain intra-industry trade among countries producing roughly comparable quality products; but factor endowments, including human capital and production technology, are crucial in explaining trade in low-, medium-, or high –quality products.

Bedi and Cieslik (Bedi & Cieslik, 2002) examine the effect of FDI on wages in Poland and find that workers in industries with higher presence of joint venture foreign investments enjoy higher wages. The magnitude of the foreign presence increases over time. It confirms that the workers in industries with greater foreign participation have faster wage growth.

Forslid et al. (Forslid et al., 2002) observe the short-term adjustment problems and low long-term possibilities. Possible long-run outcomes analysis as productivity growth and investment show that adding former Soviet Union transition to Eastern European transition has negligible effect on all other regions than the Former Soviet Union itself, which experiences a strong real income effect. The region's insignificant trade in manufacturing goods relates to the main reason of it.

Graham (Graham, 2000, p. 83) considers outward US FDI leads to wage differentiations in foreign and domestic firms, creates job opportunities for workers, and in aggregate, outward direct investment rather helps than hurts US workers.

Some scientists consider that the US economic loses innovative positions in the product life cycle, and advantages in production of high technology products. The price increase of foreign stock and dollar appreciation makes US assets cheaper comparing to foreign assets. Moran (Moran, 2002) argues that instead of encouraging backward linkages and creating vibrant and competitive industries, domestic-content and joint-venture requirements yield inefficient, high-cost operations that utilize technologies well behind the cutting edge in international markets in the developing countries. Plants subject to such requirements seldom acquire the economies of scale and dynamic learning that would be required to propel them from infant industry to full competitive status.

On the contrary to the above mentioned approach, Economist Intelligence Unit report points out 0,4% difference of average annual growth in GDP per capita in European countries and the U.S. were caused by the European countries lower usage of information and communications technology (Crooks, 2004, p. 4). The international production of foreign affiliates of MNEs is still expanding in recent years. The average annual growth rates over the last five years of foreign affiliate sales, value added and employment have slowed. The data indicate that international production contributes behind slower trade expansion (WIR, 2017, p. 11). Archibugi (Archibugi, 2010) states that before the crisis incumbent firms were more likely to expand their innovation investment, but that the crisis has reverted this picture, giving space to a restricted number of small firms and new entrants that swim against the stream and are expanding innovative activities.

The literature review shows limited research works on the effects of FDI on the productivity of domestically owned firms for a number of transition countries. It should be noted, that the contribution of FDI for the host economy could have two opposite effects. The positive effect results in job training programs, and stimulates further capital inflow into the country. The negative effect deals with differences of average labour productivity in multinationals and domestic firms, which lead to incomplete internationalization of benefits from foreign investment.

Statement of the objectives of the article

The paper addresses the problem, related to FDI spillover effects leading to an increase in the productivity level of local firms and competition in Central and East European countries. The actual relationship between horizontal and vertical FDI spillover effects remains unclear, although the available research has identified some positive correlations. The use of comparison analysis method for FDI practices of foreign capital attracting provides accessible policy – relevant analysis of crucial challenges to encourage FDI inflow. The assessment of various empirical studies of FDI spillover effects on domestic firms reflects various factors, conditions and characteristics on the firm, industry and national level.

Presentation of the base material

Scientists consider capital movement in the form of FDI as the major source of capital attraction. It explains that the basic volume of the cross sectional movement of capital flows is carried out in the form of foreign direct investment. Problems of an estimation of FDI role in the process of capital formation and total investments rise have received ambiguous consideration in the economic literature. FDI inflow has not always accompanied by formation and gain of a fixed capital. Buying a company by a foreign investor results in change of property relations (Nosova, 2003, p.123).

The net private-capital inflows reached about 11 % of the GDP of the whole Central, East and Southeast Europe (CESEE) region by 2007. No other region in the world has experienced such a massive inflow of capital in any year during the past three decades. Another, distinctive feature of the CESEE region development model is current accounts imbalances.

Despite of the negative effects of the global financial crisis inward FDI flows in Eastern Europe are seen recovering in 2010 after inflows to Central and Eastern European countries dropped by half in 2009. The current state of low level investment overall and net FDI likely demonstrate that it is a substitute for trade and it is poorly correlated with economic growth in Russian Federation and the Ukraine. High foreign capital inflows and very high percentage share of FDI stock in GDP indicate that foreign capital plays a vital role in Poland, Hungary and Czech Republic. FDI in CESEE show 45% increase compared with 2015 (See table 1).

Table 1

FDI in the main regions of Central, East and Southeast Europe, EUR million

	2010	2011	2012	2013	2014	2015	2016
EU-CEE	23,278	25,174	30,018	13,271	27,061	23,645	29,020
Western Balkans	3,473	5,675	2,806	3,568	3,503	4,406	4,098
Turkey	6,864	11,625	10,607	9,710	9,656	15,818	11,115
CIS-3+ Ukraine	14,790	18,208	18,174	13,031	8,206	7,974	12,318
Russia	23,875	26,476	23,483	40,196	22,037	10,664	34,012
CESEE total	72,279	87,159	85,089	79,777	70,464	62,507	90,564

Sources: based on data of (WIIW FDI Report, 2017).

In 2016 there was 23% recovery in the EU's Central and East European region and almost 150% in the Commonwealth of Independent States (CIS) and in the Balkans. FDI inflow depends on general state of economy, factors of global financial conjuncture and etc. The growth rate of gross fixed capital formation increases up to 4.7% in 2016 in comparison with 3% in the previous year, employment declines to 1.2 from 1.3, and FDI drops to 8.4 from 11.4 (WIR, 2015). The composition of FDI was not always favourable. In particular, a share of manufacturing, a key sector for developing export potential, was significant only in Czech Republic, Hungary, Poland, Slovakia, Slovenia, but insignificant in other CESEE countries.

FDI affect productivity of local firms via competition between foreign and domestic firms in the host economy. Contribution of skilled and healthy workforce to a productive and prosperous society demonstrates positive FDI effect under foreign capital inflow in subsidiaries in comparison with domestic companies. Non-accession countries trade agreements with EU preferential or association agreements may affect market size, one of the key determinants of FDI (WIR, 2005, p. 136). As the most widespread form of FDI inflow in less developed countries are "zero" investments (greenfield investments), which are carries out in the form of new enterprises establishment and promote expansion of company's capacities in comparison with the process of acquisition of already existing companies. New investments stimulate economic growth by increase supply both national and the companies controllable by foreign proprietors under liberalization trade condition in the country (Graham, 2000, p. 85).

Based on the above, it is necessary to note, that growth of the international movement of the amounts of capital is accompanied by amplification of international TNCs expansion in CIS countries. Development of privatization, commercialization activity opened expanded access for the foreign capital on the new markets and stimulated penetration into new branches of manufacture.

The number of greenfield investment projects in the CESEE region was highest in manufacturing and business services sectors (Table 2). The value of greenfield investment projects increased due to exploration project in Kazakhstan (CIS member). The import-substitution type of investment offer possibilities for new companies, but locally owned producers receive more benefits and less FDI. In 2016 large greenfield projects in manufacturing and services are a signal of investors' interest revival.

Bulkley, Van Alstyne (Bulkley, Van Alstyne, 2004, p. 21) argues that complexity of the relationship between information and productivity necessitates approaches that transcend traditional disciplinary boundaries and acknowledge contributions from economics, complexity, and network theories. Bruno and Campos (Bruno & Campos, 2013, p. 8) assert that the main lesson of macro and micro literature review is conditionality: that firms, sectors or countries that are below certain "thresholds" (either in terms of human capital, financial development or institutional quality) are less likely to benefit from FDI. The considerations of the gap between private and social returns are suggested as a key to solving the problem.

Table 2

	Number of projects			Pledged investment capital, EUR million		
	2014	2015	2016	2014	2015	2016
EU-CEE	667	658	781	17,958	19,614	22,800
Western Balkans	118	91	113	4,571	6,855	3,391
Turkey	110	157	150	4,493	4,983	7,713
CIS-3+ Ukraine	79	75	63	3,024	6,587	37,109
Russia	148	194	200	10,620	12,296	11,298
CESEE total	1,122	1,175	1,307	40,666	50,335	82,311

Sources: Based on data of (WIIW FDI Report, 2017).

Tough competition between the countries of the Central and Eastern Europe for the new markets and spheres of profitable capital investments limit investment opportunities of CIS countries. FDI flows to transition economies are likely to rise moderately in 2017, to about \$ 80 billion supports by the bottoming out of the economic downturn, higher oil prices and privatization plans (WIR, 2017, p. 5). FDI has increased by 15 % in Central and the Eastern Europe while the capital stock in 10 countries of the region has reduced in 2008. Comparison of World Investment Report data of FDI inward stock and outward stock as percentage of GDP shows the predominance of the inflow of the capital in CIS countries in 2016.

Movement of extremely small flows of the foreign capital between CIS countries distinguishes an investment situation in region. The priority branches of investment are considered to be fuel and energy complex, transport, telecommunication. The analysis of branches of foreign investment in Ukraine shows prevalence of FDI inflow in wholesale trade, the food-processing industry and processing of agricultural production, operation with the real estate and in financial activity that causes by search by foreign investors of highly profitable spheres of capital investments and a fast recoupment of investments (Nosova, 2006, p. 141–142).

TNSs have established the control over the most profitable enterprises and branches, including the food-processing industry and sphere of telecommunications. Foreign investors pursue a policy of presence expansion not only due to FDI, by granting credits in full or in partly dependent enterprises.

In conditions of new technological break in Western countries, attraction of R&D in FDI form to CIS countries becomes an important task. The inflow of FDI in R&D provides spillover effects and affects the domestic firms' productivity. The analysis of indirect effects of FDI on productivity spillovers from foreign to domestic firms in the Central and Eastern Europe countries indicates the dependence of the number of industry and firm-level characteristics including the relative technological level vis-a-vis foreign firms (absorptive capacity), export orientation, or firm size (Gersal et al, 2007, p. 69). M&A represent the widespread form of companies' penetration into the markets of advanced countries.

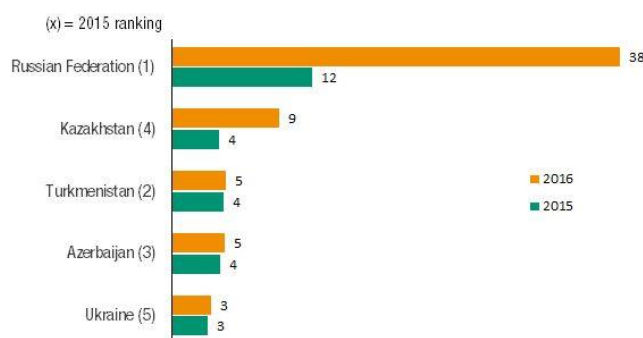


Fig. 1 – Top 5 recipients of FDI inflows in transition economies, 2015 and 2016 (Billion USD)

Source: (WIIW FDI Report, 2017).

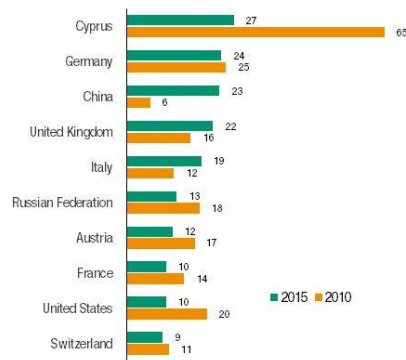


Fig. 2 – Top 10 investor economies in transition economies, 2010 and 2015 (Billion USD)

Source: (WIIW FDI Report, 2017).

The economic and financial crisis of 2008–2009, the fall of the commodity prices affects drastically the decline in FDI inflows to Eastern Europe in the short-term. The financial market regulatory initiatives implemented by the developed countries are likely could be seen in recovering tendencies in the long-term. The empirical evidence of some scientific works suggests that FDI does not always cause growth. Majority of studies find the evidence of positive relationship between FDI and growth.

Spillover effects of foreign direct investment on labour productivity

FDI is considered as a driver of economic growth. Foreign-owned companies apply new technologies, including capital-intensive and skilled labour force. Spillover effects comprise technology transfer, labour and management training, „supplier“ effect. Two indirect effects of foreign capital presence should be noted: productivity spillovers and market access spillovers. Direct effects results in economic growth. Indirect effects of foreign presence in host economy can take the form of horizontal or vertical spillovers.

Coe et al. (Coe et al., 2008) suggest that institutional differences are important determinant of total factor productivity and that they affect the degree of R&D spillovers. Foreign R&D has a positive effect on domestic productivity, and that effect becomes more positive with the degree of trade openness. Endogenous growth theory emphasizes the role of exports in economic growth, highlighting that exports can increase long-run growth by allowing innovations growth in R&D sectors (Dritsaki et al., 2004). Statistical analysis obviously suggests that FDI does not have any significant relationship with economic growth for transition countries (Lyrouudi et al., 2004). Dunning and Buckley (Dunning & Buckley, 2003) consider that inward FDI is the principle source of positive spillovers for host (developed and developing economies).

Herrmann and Jochem (Herrmann & Jochem, 2005) point out that technological spillover and the conglomeration of human capital seem to be important factors for the export performance. Technological spillovers from FDI on local industry confirm that FDI has a positive effect of FDI activity on the productivity of local firms. Empirical results support the conclusion that patents developed by local inventors in Central and Eastern Europe cite the stock of patents of FDI multinationals more often after these companies have established themselves in Central and Eastern Europe.

Kinoshita (Kinoshita, 2001) finds that the learning effect (absorptive capacity) of R &D in Czech manufacturing firms is far important than the innovative effect in explaining the productivity growth of a firm. Griffith et al. (Griffith et al., 2006) analyze the relationship between U.S. and U.K. and provide evidence of knowledge spillovers associated with technology sourcing. Bloom et al. (Bloom et al., 2007) assert that multinational firms replicate their organizational structures and management practices in foreign countries.

Empirical studies of FDI spillover effects on domestic firms are presented in table 3 summarizing the econometric assessments carried out in different countries. Floyd (Floyd, 1996, p. 69) uses firm-level data on manufacturing industries for the period of 2000–2005 in Central and Eastern European countries, and finds that vertical effects tend to be higher and thus economically

more important than horizontal ones. In many cases spillovers are negative, thus foreign presence might have also some adverse impact on local firms productivity. Lutz and Talavera (Lutz & Talavera, 2005, p. 10) examine the effects of the presence of FDI on the performance of individual Ukrainian firms receiving that FDI, and prove that FDI may have not only positive, but also negative economic effects for recipient countries.

Tytell and Yudaeva (Tytell and Yudaeva, 2005, p. 22) look at Russia, Ukraine, Poland and Romania, and suggest that foreign presence is associated with higher capital intensity and lower labour intensity of domestic firms. The production function effect is observed only in relatively more educated and less corrupt regions. Authors support the view that absorptive capacity, assessing education, is clearly important for reaping benefits from FDI.

Table 3

Empirical studies of FDI spillover effects on domestic firms

	Author	Subject of research	Country	FDI spillover effects
1.	Floyd (1996)	Manufacturing industries	Central and Eastern Europe countries	Positive and negative effects.
2.	Lutz and Talavera (2005)	Individual Ukrainian firms	Ukraine	Positive and negative effects.
3.	Tytell and Yudaeva (2005)	Manufacturing in sectors and regions	Russia Ukraine Poland Romania	Positive significant Insignificant Positive significant Insignificant
4.	Gersl et al. (2007)	Manufacturing industries	Estonia Lithuania Poland Romania Czech Republic Latvia Hungary Slovakia Slovenia Bulgaria	Insignificant Horizontal significant Horizontal significant Horizontal significant Horizontal significant Horizontal significant Insignificant Insignificant Horizontal significant Horizontal significant
5.	Bruno and Campos (2013)	Micro and macro estimates	Low and middle income countries	Positive significant
6.	Alarm et al. (2013)	Panel data 19 OECD member countries	19 OECD member countries	Positive significant
7.	Ramirez (2006)	Mining and agriculture industries	Chile	Positive significant
8.	Mebrale (2010)	Manufacturing industries	South Africa	Insignificant

Sources: Constructed on the basis of (Floyd, 1996), (Lutz and Talavera, 2005), (Tytell & Yudaeva, 2005), (Gersl et al., 2007), (Bruno and Campos, 2013), (Alarm et al., 2013), (Ramirez, 2006), (Mebrale, 2010).

Gersl et al. (Gersl et al., 2007, p. 48) find out that empirical studies show that a substantial part of the increase in productivity levels in CEE countries can be attributed to FDI direct effect, but some indirect effects might have played a role as well. In most of CEE countries, foreign companies have on average higher labour and total factor productivity. The results of estimation demonstrate that larger foreign presence in upstream sectors affects negatively the productivity of local firms, suggesting that foreign companies probably mostly use inputs produced by foreign companies, thus the gap in total factor productivity between local and foreign firms may increase. The horizontal spillovers apply demonstration channel, labour market channel and competition channel. Some scientists emphasize detrimental effect on domestic companies within brain drain of talented labour force to the foreign affiliates.

Bruno and Campos (Bruno & Campos, 2013, p.24) use meta-analysis of two data sets covering 549 micro and 553 macro estimates of the effects of FDI on performance in low and middle income countries. They find these effects tend to be larger in macro than in micro studies, and greater in low- than in higher income countries. Scientists identify a paradox that FDI effect emerges only once countries have reached certain thresholds, mainly with respect to human capital and financial development with the finding that these effects are larger for the countries, which are much further below, than those critical thresholds.

Alarm et al. (Alarm et al., 2013) highlight the hypothesis that higher levels of foreign investment and increased labour productivity enhance economic growth of the host economy. FDI improve the labour productivity of a host country, which causes a positive impact on economic growth of the country in short and long run. Ramirez (Ramirez, 2006) analyzes the impact of FDI flows on labour productivity in Chile. The econometric results suggest that FDI flows (lagged) have a positive and significant effect on labour productivity growth in 1960-2000, and the interactive term suggests that the effect is stronger in 1996-2000. Mebrale (Mebrale, 2010) examines the impact of FDI on labour productivity in domestically owned firms in South Africa. The results show that there are no spillover effects which can be attributed to a number of factors including horizontal linkage between multinational companies and domestic firms.

Empirical studies of FDI spillover effects on domestic firms confirm the existence of direct and indirect effects on the domestic firms across the countries, and reflect various factors, conditions and characteristics on the firm, industry and national level. The reported results do not reproduce different effects of economic sectors, on labour productivity, undervalued labour costs per worker, and do not take into account the role of shadow economy in CESEE countries.

The liberalization of FDI legislation at the national and regional levels attracts and enhances foreign capital inflow in host countries. The government has officially to encourage FDI inflow, and to create incentives for foreign companies. Firm-level surveys show that more than 20% of firms in many developing countries have inadequate skills and education of workers which are a major or severe obstacle for their operations. Government support for education and training affects the prospects for individuals and the ability of firms to enter new markets, and adopt new technologies.

Conclusion.

Analysis of FDI effects on labour productivity demonstrates ambiguous tendencies which depend on the country's economic modernization, investment in R&D, and reduction of production costs. FDI inflow into a country indicates various spheres of investment, short-term nature of investment, and predominance of speculative motives. The increase of foreign presence demonstrates that workers in industries with greater foreign participation face a faster wage growth. Creation of the attractive investment climate, policy adjustments, incentive programs towards new work places creation are directed to labour productivity increase and living standards improvement. The release of labour force in certain sectors of the economy in favor of high level of R&D will cause structural changes in the economy, and will result in differential profit rates. Selection of priority investment areas for foreign investors will stimulate labour productivity increase, and provide benefits for sustainable economic growth.

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