Impact of Foreign Companies on Fixed Asset Investments of Domestic Enterprises in Poland

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Abstract:

Analyzing the literature, which indicates the high importance of financial surplus in investment expenditures, which are essential in creating a competitive advantage, and having in mind that with GDP growth a decreasing trend can be observed in the sphere of investment expenditures in Poland, an analysis was made of the sources of financing investment expenditures of enterprises and the financial result of entities with domestic and foreign capital operating in Poland. This made it possible to identify the situation of the Polish economy over the years in terms of the structure of investments and to try to answer the question of whether the financial results achieved by entities with domestic capital are sufficient to make the investments necessary to maintain a high position in the competitive environment.

As a result of the analysis, it was found that entities with domestic capital, representing a majority of around 80 % of the total balance sheet contributors in Poland, generate only 60% of the gross financial result, while less than 20 % of foreign companies have a financial result exceeding 40%. The methods used include an analysis of the literature, data contained in statistical databases (CSO and Eurostat). The data presented cover the period 2005-2020, mostly in the form of annual aggregates for Poland.

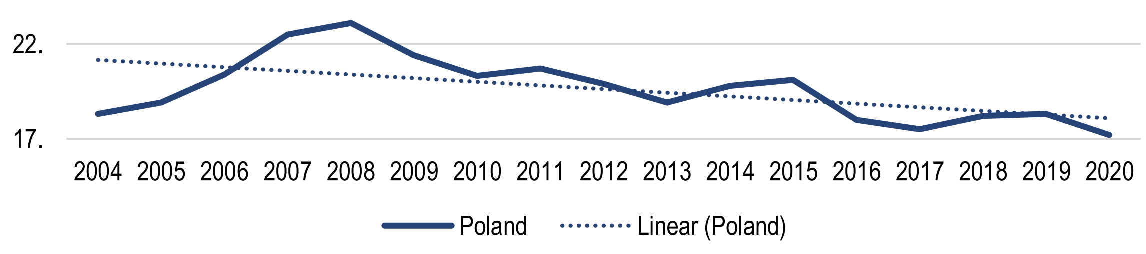
Keywords: national accounts; gross fixed capital; investment outlays; foreign capital; foreign direct investments.

JEL Classification: E22; G31; O33.

Introduction

Foreign direct investment is considered a fundamental factor in the economic development processes. With unlimited access to funding, they provide capital inflows that compensate the deficit and reduce growth barriers in developing countries. In addition to providing capital in the financial aspect, it is notable that they contribute the dynamization of processes related to productivity and efficiency growth, which are a consequence of the modernization of the host economies. However, in relation to foreign investors, the assumption must be made that their elementary purpose is to make the highest possible profit - maximizing the benefits for their owners, depending on the strategy adopted.

Figure 1. Gross fixed capital formation in gross domestic product for selected countries, 2004 - 2020 (%)



Source: own study based on tables "Annual national accounts, Gross fixed capital formation by AN_F6 asset type", Eurostat, https://ec.europa.eu/ (accessed 09.08.2022).

The declining scale of investment in Poland has become a starting point for analyzing the role of foreign capital in processes related to investment expenditure of domestic enterprises operating in Poland. Identifying this

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relationship is an important element in monitoring the dynamics of development processes and also provides an opportunity to estimate external risks.

Within the scope of this article, investment outlays are indicated as the primary measure of investment. Where other measures are used, this will be highlighted. The Central Statistical Office defines investment outlays as financial or tangible expenditures whose purpose is to create new fixed assets or to improve (rebuild, expand, reconstruct or modernize) existing fixed assets. Relative to the category of gross fixed capital formation, it does not include expenditure on intellectual property products (*e.g.,* R&D work).

1. Literature Review

The dependence of investment expenditures on the financial situation of economic entities has remained in theoretical considerations and empirical studies since the 1980s. Research papers as Fazzari *et al.* (1988), Gilchrist, Himmelberg (1995), Kaplan, Zingales (1997), Cleary (1999), Bond *et al.* (2003), D'Espallier *et al.* (2009), Allayannis and Mozumdar (2004), Almeida *et al.* (2004), Hovakimian and Titman (2006) often report on the dependence of investment on cash flow, *i.e.* the Investment- Cash Flow Sensitivity relationship. Studies initiated by Meyers (1977) include other variables in the model that extend the interpretation of the results of the study, i.*e.,* interest costs or the level of debt (Hernando and Martínez-Carrascal 2008, Martínez-Carrascal and Ferrando 2008).

The hypothesis of the relationship between investment and cash flow was confirmed by Fazzari, Hubbard and Petersen (1988) who pointed out that for companies for which it is too expensive or impossible to obtain external financing, they determine the level of investment on the basis of the profit generated, which presented the view that the sensitivity of investment to changes in cash flow can show the financial health of companies.

Further studies have been published over the years, *e.g.,* Lang, Ofek and Stuzl (1996) have pointed to an inverse correlation between the level of debt and investment growth. This is due to the fact that the scale of debt reduces the level of funds allocated to investment and reduces the possibility of raising additional funds at a lower price. However, problems in raising capital are not an obstacle when the attractiveness and growth prospects of an entity are high.

Lamont (1997) confirmed that a decrease in the liquidity of entities results in a decrease in investment. For this purpose, he compared the level of cash flow between different groups of companies on the basis of the size of dividends paid out.

Tulasi Devi and Rao (2001) showed that gross internal funds were more important in explaining the volatility of business investment. Benito and Young (2002), examining data of companies listed on the London Stock Exchange (LSE) between 1973 and 1998, also highlighted the importance of internal sources in financing corporate investment, suggesting that when investments are financed from external sources, they are lower than when they are financed from an economic entity's own resources.

The research of Guargilia (2008) confirmed the dependence of investments on cash flow. At the same time, their sensitivity to cash flow increases in the case of high external restrictions, which is particularly evident among micro and small enterprises with a short history on the market, which have difficulty in obtaining funds for business development.

Jungili and Kumar (2010), while studying the Indian market, identified a significant and positive relationship between firm size and investment. It was observed that large entities have a high degree of freedom in accessing external sources of finance, and consequently more freedom to create investments.

Colombo, Croce, Guerini (2013) studying the effect of public subsidies on the Italian enterprise found that they eliminate the budgetary limitations of small enterprises. Moreover, this effect persisted over time and the sensitivity of investment to the level of cash flow occurs, however in the short term.

Almeida and Campello (2007) showed that the level of investment has no effect on the sensitivity of cash flow when the company has unlimited access to external financing. In contrast, a positive impact was observed among entities that experience restrictions in the sphere of access to external financing.

Calcagnini, Ferrando and Giombini (2012) examining the interdependence between the capital market, the labour market and their impact on the investment in tangible fixed assets of economic entities, showed that the development of the capital market is a stimulus that reduces the profitability of the assets, since a developed financial system stimulates competition between companies, which in turn reduces the profits of individual entities. According to the authors, the level of investment is more influenced by the flexibility and degree of development of the enterprise than by the size of the capital market in which it operates.

In the Polish literature, research into investment in fixed assets of Polish companies was undertaken by Tyrowicz (2009), who examined 181 entities listed on the Warsaw Stock Exchange in 1995-2003, distinguishing between companies with private and government ownership. The results of the analysis allowed the conclusion that companies partly owned by the government had an increased tendency to invest in fixed assets. The positive impact of foreign-owned enterprises on the level of investment was not confirmed, as there was a small percentage of such entities in the sample (14%).

Nehrebecka and Jarosz (2012) based on data from 58,000 Polish enterprises in 1995 - 2010, confirmed the significant, negative impact of debt and the costs associated with its service on investment decisions. Cash flow, on the other hand, was characterized by the strongest influence of a positive nature, especially among small enterprises, which have high restrictions in using external sources of financing due to their low creditworthiness and high business risk.

For the most recent study on Polish companies, data collated from financial statements extracted from the Emerging Markets Information Services (EMIS) database of companies listed on the Warsaw Stock Exchange and NewConnect were used. The aim was to verify the dependence of the companies' investment policy on their internal sources of financing (such as cash flow), concluding that companies operating in an imperfect market face difficulties in obtaining debt capital for investment. In this case, the financing of investment activities is done using cash flow. In addition, the empirical study showed, the impact of cash flow is much stronger during economic slowdowns, when financial restrictions are more binding (Nehrebecki 2020).

2. Comparative Analysis of the Gross Fixed Capital Structure Formation in Poland and Selected EU Countries in 2004 - 2020

In this article, research methods including an analysis of literature on micro and macroeconomics were applied. Statistical materials of the Central Statistical Office (GUS) and Eurostat were used to deepen the analysis.

Considering the numerous studies on the impact of the financial situation on the capital expenditures of business entities, this article distinguishes between the financial result of entities with domestic and foreign ownership with the aim of indicating whether domestic subjects have sufficient capital resources to make expenditures on fixed assets and intellectual property products.

Table 1. Sources of financing fixed assets of enterprises in Poland, 2008 - 2020 (mln PLN)

Years	Total	Own funds	Percentage
2008	134 091 160	95 911 566	72%
2009	119 100 093	81 372 737	68%
2010	114 075 302	78 896 026	69%
2011	130 688 663	91 585 429	70%
2012	128 096 794	90 626 012	71%
2013	132 955 702	93 378 347	70%
2014	150 294 185	102 659 277	68%
2015	167 157 080	112 380 591	67%
2016	149 086 791	109 027 684	73%
2017	159 098 094	116 971 071	74%
2018	181 487 204	132 200 599	73%
2019	199 895 393	136 154 686	68%
2020	184 294 701	127 860 732	69%

Source: own study based on tables "Local Data Bank", Central Statistical Office (accessed 09.08.2022).

It can be observed that, to a dominant extent, economic entities in Poland finance their investments from their own resources (72% in 2004 and 69% in 2020). At the same time, this scale does not show a decreasing trend over the years, despite the appearance of many alternative options for financing their activities with external funds after Poland's accession to the European Union. This may be due to the low access of some enterprises to external financing, high bureaucracy in the sphere of obtaining subsidies and the financing of investments by entities with foreign capital from their own resources.

Among enterprises with foreign capital with a workforce of 10% or more, it is apparent that these enterprises are in the minority among those operating in Poland, not exceeding 18% over the years.

Table 2. Number of enterprises submitting balance sheet with domestic and foreign capital, 2005-2020 (mln PLN)

Years	Enterprises submitting balance sheet	Enterprises with foreign capital	Share in balance enterprises
2005	44.426	6.977	15,7
2006	45.246	7.363	14,6
2007	46.603	7.610	16,3
2008	50.681	8.328	16,4
2009	51.809	8.230	15,9
2010	51.622	8.338	16,2
2011	52.823	8.465	16,0
2012	53.070	8.613	16,2
2013	54.332	8.581	15,8
2014	54.629	8.821	16,1
2015	54.103	8.836	16,3
2016	53.667	8.660	16,1
2017	50.652	8.675	17,0
2018	50.013	8.810	17,6
2019	50.158	8.914	17,8
2020	49.485	8.763	17,7

Source: own study based on tables "Economic activity of foreign-owned enterprises 2005-2020", Central Statistical Office (accessed 09.08.2022).

However, when analyzing the financial result of enterprises with foreign capital in comparison with enterprises filing their balance sheets in Poland, it is apparent that they generate about 40% of the total financial result (41% in 2005 and 43% in 2020). It follows that foreign-owned enterprises, which constitute a minority of around 18 % of the total number of entities filing the balance sheet in Poland, generate more than 40 % of the gross financial result, while more than 80 % of domestic enterprises have a financial result not exceeding 60 %.

Table 2. Gross financial result of enterprises with domestic and foreign capital in the years 2005-2020 (mln. PLN)

Year	Enterprises submitting balance sheet	Enterprises with foreign capital	Share in balance enterprises
2005	79.902,1	33.092,4	41,4
2006	99.060,2	41.370,2	42,0
2007	131.421,6	56.476,2	43,0
2008	95.963,4	36.344,2	37,9
2009	116.342,2	55.042,4	47,3
2010	133.461,5	55.111,3	41,3
2011	137.120,7	39.516,9	28,8
2012	127.997,8	51.442,4	40,2
2013	131.962,1	48.741,4	36,9
2014	135.547,6	50.903,9	37,6
2015	120.899,4	56.740,5	46,9
2016	150.453,4	65.760,3	43,7
2017	176.223,0	70.666,7	40,1
2018	167.942,5	68.553,7	40,8
2019	164.377,4	75.449,2	45,9
2020	163.433,1	69.470,5	42,5

Source: own study based on tables "Economic activity of foreign-owned enterprises 2005-2020", Central Statistical Office (accessed 09.08.2022).

In the sphere of investment outlays in the Polish economy, entities with domestic capital dominate (55% in 2005 and 60% in 2020). However, due to the significant disproportion in the number of domestic entities in relation to foreign enterprises, when analyzed individually, it is apparent that entities with foreign capital engage much more financial resources in investments in fixed assets. This can be explained by the fact that foreign capital, in order to gain a competitive advantage, is a source of knowledge and technology transfer through investments in training, infrastructure, human capital, research and development (R&D) or new technologies. These are investments with strong externalities, the impact of which is not limited to a single enterprise, but also indirectly affects the overall activities of other economic entities.

Table 3. Investment outlays on fixed capital of enterprises with domestic and foreign capital, 2005-2020 (mln PLN)

Year	Enterprises submitting balance sheet	Enterprises with foreign capital	Share in balance enterprises
2005	73.248,5	32.951,1	45,0
2006	86.885,8	55.913,0	64,4
2007	110.777,8	48.456,4	43,7
2008	124.002,6	51.670,9	41,7
2009	110.254,0	42.497,0	38,5
2010	105.309,3	38.470,5	36,5
2011	121.942,4	46.066,1	37,8
2012	118.869,9	42.264,3	35,6
2013	123.681,0	43.410,2	35,1
2014	141.738,7	48.823,3	34,4
2015	158.148,7	54.822,8	34,7
2016	138.247,9	57.560,0	41,6
2017	144.797,7	59.561,7	41,1
2018	165.702,0	66.856,0	40,3
2019	184.638,6	76.683,9	41,5
2020	168.221,1	65.473,0	38,9

Source: own study based on tables "Economic activity of foreign-owned enterprises 2005-2020", Central Statistical Office (accessed 09.08.2022).

Conclusion

Over the years, Poland has been one of the countries with high GDP growth. However, GDP growth is accompanied by a downward trend in investment. Investments are significantly important in terms of reducing costs, improving health and safety at work, increasing productivity and protecting the environment, which consequently leads to improved competitiveness of enterprises. It is also important to point out the relationship between investment levels and cash flow.

At the same time, the Polish economy opened up to foreign investment after 2004. In a situation of increased competition, domestic enterprises may find it difficult to create investment expenditures due to the achievement of an unsustainable level of profits. One of the underlying capabilities in the economic development process manifests itself in the ability to raise and provide capital. This capability is the result of a strong financial resource base of foreign investors. This enables an enterprise to operate efficiently in foreign markets, while at the same time initiating the development of competition and modern solutions in the production process.

When analyzing the sources of investment funding, it is particularly noteworthy that own funds form the basis in the sphere of investment expenditure. The key point here, was to identify to what extent enterprises with domestic capital are functioning competitively and achieving sufficient financial results from which to finance investments in the future. The results of the analysis show that domestic companies, per unit, achieve significantly lower financial results than companies with foreign capital, which prevents them from making investments in fixed assets on a larger scale that will allow them to maintain their advantage in the competitive environment.

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