
Investment Activity of Enterprises in Poland in the years 2019-2021 on the Example of the Śląskie Voivodeship

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Abstract:

Purpose: The main purpose of the research was the comparative identification of the investment activities of enterprises located in Poland, in the Silesian Voivodeship in 2019-2021

Design/Methodology/Approach: To carry out the research process, enterprises with their headquarters in Poland in the Silesian Voivodeship were selected. The research was carried out on the basis of the survey method, while the research tool was questionnaires composed of closed questions. The conducted surveys were anonymous. The questionnaire was addressed to 160 randomly selected enterprises from the Śląskie Voivodeship. In addition, a pilot direct interview was carried out in selected entities, which allowed for the preparation of the pre-prepared questionnaire. The adoption of these research techniques allowed for the collection of statistical material (quantitative and economic data) and qualitative (perception, value judgments, judgments, opinions, awareness of facts).

Findings: The research confirmed that the level of new investments initiated by enterprises decreased during the pandemic period (2020-2021). The same applies to the fact that enterprises prefer own financing of new investments and that increasing income / profit is the most important condition of enterprises' investment activity. The research also confirmed that the risk factors during the pandemic are significantly different from those experienced before the pandemic.

Practical Implications: The article sheds light on the relationship between the pandemic period and the previous one, on the investment activity of enterprises in Poland in the Śląskie Voivodeship.

Originality/Value: The article presents the results of research on the investment activity of enterprises in Poland on the example of the Śląskie Voivodeship in 2019-2021.

Keywords: Management, investments, investment activity of enterprises, risk.

JEL codes: D25, D81, E22, G31, G32.

Paper Type: Research article.

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1. Introduction

An enterprise cannot increase the scale of its activity, and thus its economic potential, market share and profit, unless it develops in the conditions of constant changes in the environment (Pierścioneek, 1996). Changes in the environment make enterprises subject to the influence of the country's socio-economic policy and the applicable system solutions, political, social and economic pressures, fluctuations in economic cycles, processes of concentration and deconcentration, specialization, cooperation, systemic and non-systemic influences, various factors shaping the subsequent phases of the cycle the life of the organization (Gościński, 1989).

Firms that make investments may or may not grow. However, firms that make no investment achieve no sustainable growth and may even find it difficult to maintain their survival in such highly turbulent and competitive markets (Gupta *et al.*, 2018). The constant necessity to develop enterprises forces their owners to be ready to make investment decisions.

In 2020, the value of investment expenditure incurred in the Polish economy amounted to PLN 309,458 million. Compared to the previous year, the value of outlays (in constant prices) decreased by 5.0%, of which outlays on buildings and structures fell by 3.4%, on machinery, technical equipment and tools by 3.9%, and on transport by 14.7%. In 2020, 294,957 investments were launched, which was 2.9% more than in 2019. The total cost estimate of the newly started investments amounted to PLN 88,707.6 million and was 18.3% lower than in the previous year. In 2020, compared to the previous year, the share of private sector units in total outlays decreased from 66.3% to 63.8%, while the share of the public sector increased from 33.7% to 36.2%, respectively.

The outbreak of the COVID-19 pandemic in 2020 brought a significant decline in many macroeconomic categories. Closing or limiting the possibilities of operation of individual industries also had an impact on lowering the value of investment outlays. Compared to the previous year, outlays decreased by PLN 11,479 million. As a result, over the years 2017-2019, investment outlays in the national economy increased by PLN 63,056 million, while in 2017-2020 this increase amounted to PLN 51,557 million (Statistics Poland, 2022).

In 2020, the highest value of investment outlays in Poland was recorded in the Mazowieckie voivodeship (PLN 70,321 million, including the Warsaw capital region - PLN 54,435 million), Śląskie (PLN 33,242 million) and Dolnośląskie (PLN 30,128 million). The lowest investment expenditure was recorded in the Lubuskie voivodeship (PLN 5,970 million), Świętokrzyskie (PLN 6,064 million) and Opolskie (PLN 6,660 million). Compared to 2019, in 2020 there was an increase in investment outlays in 5 voivodeships, the largest of which was recorded in the following voivodeships: Zachodniopomorskie (nominal increase by 31.4%) Kujawsko-Pomorskie (by 6.9%) and Pomorskie (by 1, 9%).

In the remaining 11 voivodships, the value of outlays decreased, of which the largest decrease was observed in the Opolskie Voivodeship - a nominal decrease by 15.0%, Dolnośląskie by 10.4% and Śląskie by 10.4% (Statistics Poland, 2022).

Considering the above, the main purpose of the article is the comparative identification of the investment activities of enterprises with their headquarters in Poland in the Silesian Voivodeship in the years 2019-2021.

2. Literature Review

The basis of the company's competitiveness is its specific advantage over its competitors (Porter, 1990). The following can be considered advantages over the competition: technological advantages (they enable the production of new products, lower production costs or the production of products with more favorable features), marketing advantages, advantages in terms of management skills (possibility of using solutions applied in parent companies), financial advantages (possibility of using own capital resources or easier access to sources of external financing), advantages related to the possibility of using cheaper factors of production, more comprehensive support for managerial decisions, better information network (Pott, 1983). In order to gain an advantage over other enterprises, it is necessary to conduct investment activities.

The literature defines investments, among others, as a form of expenditure on material and financial equipment, expenditure on research and development, implementation, education and advertising (Gisser, 1972). In turn, Róžański understands the concept of investment in two ways: as a cash expenditure that should bring income to the investor or as a process in which cash is transformed into other goods, i.e. it is a material aspect (Róžański, 2006). Perridon and Steiner, on the other hand, define investment as the deliberate use of financial resources to obtain structural assets (Perridon and Steiner, 1986).

Avram *et al.* (2009) define the universal investment as expenditure made now to make gains in future (Avram *et al.*, 2009). On the other hand, Dziworska defines investments as intentionally spent funds of an investor aimed at increasing his income (Dziworska, 1993). Schneider argues that an investment is characterized by a stream of payments that starts with expenditure (Schneider, 1991). In addition to the concept of investment, there is also the concept of investing, which emphasizes the long duration of the investment process. Investing is the allocation of financial resources not to current consumption, but to their other involvement, from which certain benefits are expected in the future (Carsberg, 1974).

The investment expenditures are made to gain profits and they can be done in two ways. Investments can be fix investments like buildings, machinery or plants; or monetary investments such as stocks, bonds etc. Both forms of investment can make an enterprise grow. From another point of view, investments can be replacement

investments, when a physical asset is replaced; or investments can be net investments when, to the existing assets, new ones are added. The decision, whether to make an investment or not, depends upon the investor's profit expectation, the cost of the asset and availability to finance the investment, and how to finance that (Virlics, 2013; Harcourt *et al.*, 1967).

Every investment carries a certain risk. Investment risk can be defined as the implication of the existence of significant uncertainty regarding the level of results that can be achieved by the project (Chapman and Ward, 1997). Another way to say that investment risk is the possibility of deviating the expected effectiveness of an investment project from the planned value (Rogowski, 2004). Enterprises, when deciding to invest, should know their level of risk and what is the possible way of returning a given investment.

Companies should be honest about the risks and strategies they intend to implement to mitigate the level of risk. Each company investing should perform an analysis and plan of its own benefit, even if there is no need to finance the investment. The degree of planning will depend, in part, on the size of the enterprise. The time put into the plan will greatly impact your chance for success. There are four basic types of business planning: (1) strategy, (2) operations, (3) financial budgeting, and (4) forecasting. While large companies may have four separate plans, smaller organizations may create one plan that contains a blend of the elements of all four. (Nunn and McGuire, 2010).

To finance investment projects, a firm basically has two financing options, i.e., internal and external. Only when internal funds are insufficient, firms start seeking external debts to secure their investment opportunities (Myers, 1984). However, formal external finance (e.g., bank loans) is not always accessible, especially to small businesses in less developed economies because of issues related to market failures.

As such, informal finance, defined as small, unsecured and short-in-maturity funding capital in this study, appears to be an important alternative (but less desired) financing source (Nguyen, 2020). Hoff and Stiglitz (1990) argue that the existence of informal loans is driven by imperfections in the formal credit markets: banks ration borrowers, and the informal sector serves those borrowers who are rationed out by banks.

The decision of the investor to invest is subjective. His decision depends on the expected costs, his knowledge of the improved techniques and his risk perception, which is entirely a subjective factor. Businessmen want to know the investment project's pay-off period to decide whether they actually will make the investment expenditure or not. (Harcourt *et al.*, 1967)

3. Methods and Materials

The organization of the research included five functional stages:

stage 1 - research programming - defining the purpose, scope, sources of information, type of statistical material, preparation of research techniques and tools,
stage 2 - observation - conducting a survey,
stage 3 - control, ordering, grouping and processing of the collected information,
stage 4 - analysis of the developed material,
stage 5 - inference based on the analysis of the collected information.

The main purpose of the research was the comparative identification of the investment activity of enterprises based in Poland in the Śląskie Voivodeship in the years 2019-2021. The specific objectives of the study included, inter alia:

1. Identification of the types of investments most often carried out in enterprises in the Śląskie Voivodeship.
2. Identification of sources of investment financing.
3. Identification of investment reasons.
4. Identification of risk factors.

The analyzes carried out for the purpose of the task allowed to formulate the following research problems:

1. Do the analyzed enterprises conduct investment activity?
2. What kind of investment financing do enterprises prefer?
3. What are the most important factors for the investment activity of enterprises?
4. Has the period of the pandemic significantly influenced the risk factors of corporate investment?

The following research hypotheses were formulated in the paper:

H1: The level of new investments initiated by enterprises decreased during the pandemic period (2020-2021).

H2: Enterprises prefer their own financing of new investments.

H3: Increasing the income / profit is the most important prerequisite for the investment activity of enterprises.

H4: Risk factors during the pandemic are significantly different from those experienced before the pandemic.

Enterprises with their headquarters in the Silesian Voivodeship were selected to carry out the research process. The research was conducted using the questionnaire method. The questionnaire was addressed to 160 randomly selected enterprises from the Śląskie Voivodeship. In addition, a pilot direct interview was carried out in selected entities, which allowed for the preparation of the pre-prepared

questionnaire. The adoption of these research techniques allowed for the collection of statistical material (quantitative and economic data) and qualitative (perception, value judgments, judgments, opinions, awareness of facts).

The research was conducted in March 2022. The study used a questionnaire composed mostly of closed questions. The questionnaire was sent to representatives of the authorities of 160 companies for completion. 132 questionnaires were received, but 100 completely and correctly completed questionnaires were accepted for this analysis.

Considering the size of the surveyed enterprises, the largest group were enterprises employing up to 10 employees (35% of respondents, where $n=100$), then 32% over 250 employees, 18% from 11 to 49 employees and 15% from 50 to 250 employees. The vast majority of the surveyed enterprises defined the city as their place of business with over 25,000 inhabitants (85%). 12% operate in cities up to 25,000 inhabitants, and 3% in villages.

The companies among which the survey was conducted were in 58% of cases companies operating on the market for over 10 years, 31% from one to five years, 8% from 6 to 10 years, and only 3% were companies that had just started their activity (up to one year). Considering the area of sale of services and products, 51% is the national market, 27% international, 13% local and 9% regional. The vast majority of companies are trade (47%), service companies - 35% and production companies - 18%. Another criterion is the legal form of the enterprise where 35% is a private enterprise of a natural person, 33% a limited liability company, 17% a joint-stock company, 14% a civil partnership, and 1% a general partnership.

4. Research Results and Discussion

In most cases, the surveyed companies confirmed a reduction in the size of investments during the pandemic. As many as 80% of the surveyed enterprises saw a decrease in new investments in the period 2020-2021 compared to 2019. 14% of the surveyed companies did not change the level of investments, and only 6% increased the level of their investments. Table 1 shows the most frequent types of investments in 2019-2021.

Table 1. *Most frequent types of investments within the last 3 years – in % $n = 100$ (1 – no such type of investments, 2 – rarely, 3 – the most frequent type of investments)*

Type of investment	Rating	2019	2020	2021
Replacement of worn or obsolete assets	1	17	21	14
	2	27	22	37
	3	56	57	49
Reduction of product manufacturing costs	1	45	52	67
	2	40	35	20
	3	15	13	13

Production development of the enterprise	1	37	47	51
	2	36	42	39
	3	27	11	10
Real estate, land	1	72	70	81
	2	13	16	9
	3	15	14	10
Research and development	1	60	62	55
	2	18	17	20
	3	22	21	25
Staff training	1	35	46	52
	2	48	39	38
	3	17	15	10

Source: Own study.

The first research hypothesis (H1) assumes that the level of new investments initiated by enterprises decreased during the pandemic period (2020-2021). This hypothesis has been confirmed.

It can be noticed that in five groups of investments there was a significant decrease in new investments carried out. It is about replacing worn-out or obsolete assets, reducing the production costs of products, productive development of the enterprise, training of staff and investments in real estate and land. Only in the research and development group, there was a slight increase in investments in 2021.

Currently, the surveyed companies most often carry out medium-term (38%) investments, followed by short-term (26%) and long-term (36%) investments. Looking at the expected payback period, the companies indicated the following periods:

- less than 1 year - 5%
- 1-2 years - 30%
- 3-5 years - 47%
- 6-10 years - 12%
- over 10 years - 6%.

Table 2 presents investment financing sources in the surveyed enterprises in the years 2019-2021.

Table 2. *Investment financing sources – in % n = 100 (1 – no; 3 - main source)*

Investment financing source	Rating	2019	2020	2021
Own resources	1	10	24	30
	2	29	21	31
	3	61	55	39
Domestic bank loans	1	31	30	29
	2	29	28	36
	3	40	42	35

Foreign bank loans	1	76	78	74
	2	9	12	15
	3	15	10	11
Leasing	1	35	52	60
	2	28	19	15
	3	37	29	25
EU funds	1	63	80	72
	2	28	15	22
	3	9	5	6

Source: Own study.

The second hypothesis (H2) assumes that enterprises prefer their own financing of new investments. This hypothesis has been confirmed.

The most frequently chosen source of investment financing by enterprises in 2019-2021 (table 2) are own funds (in 2019 61%, in 2020 55%, in 2021 39%), domestic bank loans (in 2019 40%, in 2020 42%, in 2021 35%) and leasing (in 2019 37%, in 2020 29%, in 2021 25%). When analyzing the sources of financing investments over the years under study, a downward trend can be noticed during the pandemic of all sources of financing. This was most likely caused by a decline in the overall level of enterprises' investment, the immobilization of a significant part of enterprises, and thus a lack of income. For a large part of enterprises, this period was a struggle for survival. Table 3 presents the factors of investing in enterprises in the years 2019 - 2021.

Table 3. *Factors of investing in a company – in % n = 100 (1 - irrelevant factor, 3 - the most important factor)*

Factors of investing	Rating	2019	2020	2021
Increase of financial result (income) / Increase of profits	1	4	5	5
	2	14	10	7
	3	82	85	88
Increase in domestic production	1	62	55	59
	2	15	19	21
	3	23	26	20
Change in the production profile	1	90	86	77
	2	10	12	15
	3	0	2	8
Diversification of production	1	74	57	58
	2	18	24	19
	3	8	19	23
Start-up (increase) of export production	1	74	80	75
	2	17	15	19
	3	9	5	6
Improving the quality of production	1	43	58	58
	2	45	27	32
	3	12	15	10

Lowering production costs	1	51	54	57
	2	18	21	24
	3	31	25	19
High consumption of tangible fixed assets / failure frequency of machines and devices	1	32	42	42
	2	27	21	19
	3	41	37	39
The pace (requirements) of technical progress / Introduction of automation and robotization	1	54	46	54
	2	17	22	19
	3	29	32	27
Increase in the value of the enterprise	1	41	42	47
	2	16	13	11
	3	43	45	42
Restructuring of enterprises	1	57	57	52
	2	32	29	26
	3	11	14	22
Employment reduction	1	75	63	53
	2	16	21	25
	3	9	16	22
Natural environment protection	1	78	81	84
	2	15	13	8
	3	7	6	8

Source: Own study.

The third hypothesis (H3) assumes that the increase in income / profit is the most important factor in the investment activity of enterprises. This hypothesis has been confirmed.

When analyzing the factors prompting enterprises to invest (Table 3), it can be noted that entrepreneurs are primarily driven by an increase in income / profit (82% in 2019, 85% in 2020 and 88% in 2021). Quite important reasons for investing are also an increase in the company's value (for 2019-2021: 43%, 45%, 42%, respectively) and high consumption of tangible fixed assets / failure frequency of machinery and equipment (for 2019-2021: 41%, 37%, respectively). 39%). On the other hand, the least important factors are the following: change in the production profile, launch (increase) of export production and protection of the natural environment.

H4: Risk factors during the pandemic are significantly different from those experienced before the pandemic. This hypothesis has been confirmed.

The risk factors experienced by enterprises during the implementation of investments in the last 3 years can be arranged as follows (the respondents can assess whether a given factor is a risk factor for the enterprise or not; for each factor n = 100):

- Volatility of demand 78%
- New competitors 66%

- Social and economic policy of the government 65%
- Volatility of prices of raw materials and semi-finished products 52%
- International situation 47%
- Unreliability of machines and devices 26%
- The state of the world economic situation 13%.

Risk factors related to future investments, which the surveyed companies are most afraid of, can be presented as follows (the respondents can assess whether a given factor is a risk factor for the company or not; for each factor $n = 100$):

- Volatility of prices of raw materials and semi-finished products 92%
- Volatility of demand 85%
- International situation 77%
- Social and economic policy of the government 74%
- The state of the world economic situation 68%
- New competitors 21%
- Unreliability of machines and devices 19%.

When comparing the risk factors that companies have already experienced with those that they fear in the future, significant differences can be noticed. The current situation in the world, rapid price increases mean that the main risk factors that entrepreneurs are very afraid of are: volatility of prices of raw materials and semi-finished products, demand volatility, international situation, socio-economic policy of the government and the state of the world economic situation.

5. Conclusions

In order for enterprises to develop and achieve higher income, it is necessary to conduct investment activities. The goal of each investment is to achieve profit, however a rational approach to investment should include not only profit, but also the mutual relationship between profit and risk, with particular emphasis on the specificity of each investment (Róžański and Czerwiński, 1999).

A lot of Polish companies have abandoned investments due to the pandemic. In most cases, the surveyed companies confirmed a reduction in the size of investments during the pandemic. As many as 80% of the surveyed enterprises saw a decline in new investments in the period 2020-2021 compared to 2019.

The next year's implementation of new investments is planned at a lower level than before, which is influenced not only by the pandemic, but also by the general international situation and price increases. This can be especially noticed when comparing the risk factors that companies fear in the future. These are primarily the volatility of prices of raw materials and semi-finished products, volatility of demand, the international situation, the socio-economic policy of the government and the global economic situation.

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