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STRATEGIES OF FINANCING AND CAPITAL ALLOCATION AT POLISH ENTERPRISES UNDER CRISIS CONDITIONS

This paper shows the status and the trends of enterprises' activities in capital allocation in the context of financial crisis. The author attempts to determine the investment activity on the background of the available forms of financing as well as the development potential of enterprises in different regions.

Keywords: investment; financing strategies; capital allocation.

Пауліна Філіп

СТРАТЕГІЇ ФІНАНСУВАННЯ І РОЗПОДІЛУ КАПІТАЛУ НА ПОЛЬСЬКИХ ПІДПРИЄМСТВАХ В УМОВАХ КРИЗИ

У статті висвітлено стан і тенденції в сфері розподілу капіталу підприємств. Зроблено спробу визначити інвестиційну активність в контексті наявних форм фінансування, а також потенціал розвитку підприємств в різних регіонах Польщі.

Ключові слова: інвестування; стратегії фінансування; розподіл капіталу.

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СТРАТЕГИИ ФИНАНСИРОВАНИЯ И РАСПРЕДЕЛЕНИЯ КАПИТАЛА НА ПОЛЬСКИХ ПРЕДПРИЯТИЯХ В УСЛОВИЯХ КРИЗИСА

В статье показаны состояние и тенденции в сфере распределения капитала предприятий. Автором сделана попытка определить инвестиционную активность в контексте существующих форм финансирования, а также потенциал развития предприятий в разных регионах Польши.

Ключевые слова: инвестиции; стратегии финансирования; распределение капитала.

Introduction. Changes in external environment have a significant impact on the activity of economic entities. Enterprises are consistently connected with economy and the results of financial crisis are reflected in their attitudes and behaviours, also in gaining financial resources. Enterprises, in the entire world experiment with new organisational models, they change their procedures and capital processes, attempting to increase efficiency and chances for rapid growth. During this process, the scope of company activity changes, the form and the manner of capital allocation are redefined. In the area of capital raising, enterprises change attitudes and models of their conduct. Between these changes, there are certain foreseeable significant relations which allow gaining a competitive advantage of national economies. A significant, in this capacity, is the impact period of financial crisis.

Literature review. Polish economy is less dependent on global trends, however, it is deeply immersed in global phenomena, that is why it is less resistant to world crisis than it was presumed in its preliminary phase. The most important channels, through which the crisis reaches Poland include credit, exchange rate, export, foreign investments, derivative instruments. Enterprises have many possibilities of selecting sources of gaining financial resources for the conducted investment activity. In order to

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choose a given source of financing such factors as availability, cost of services and the form of capital raising, as well as risk are analysed and considered (Bednarz and Gostomski, 2006: 45). This issue may be perceived by means of the possibilities of enterprise adapting to constantly changing conditions of the environment giving new possibilities of financing (Grzebyk, 2013: 12). These factors confirm the reaction to changes of external environment and openness and reaction to critical situations. Another determinant relying on the choice of a proper financing policy may be external conditions regardless enterprise's activity, i.e. additional policy of a given country, governmental actions supporting proper financial instruments (Klimovsky, 2013: 20). In Polish conditions, the starting point in the selection of financing sources is the level of capital acquisition costs. Macro- and microenvironment may be mentioned among external factors (Bien, 2008: 48). The macroenvironment defines the set of condition resulting from the socioeconomic system, influencing enterprise functioning at national and foreign markets, providing proper stimuli which may be a chance or a threat for enterprise's activity. The external microenvironment defines the competitiveness of cooperators. This microenvironment is defined by the manner in which it impacts the environment that has capabilities of reacting to stimulants coming from outside (Grzebyk, 2011: 101).

Shaping the capital structure, i.e. the proportions of own and foreign capital for an enterprise is a difficult task and it depends on many factors. There is no unified model of an optimal capital structure in literature. There are no fixed solutions for a given type of an enterprise, legal form, development phase or planned investments. In the 1990s, enterprises in different countries have internal sources of gaining financial resources, at the level of 50% of all sources of financing on average from 83% in the USA up to 54% in France (Krajewski, 2008: 63). At present, it is assumed that sustainable and aimed development is determined by foreign capital, along with its reasonable percentage (Szczerbak, 2007: 38). One of the attitudes of shaping the capital structure is an attitude known in literature as the theory of hierarchy according to which, enterprises prefer internal sources of financing (Duliniec, 2011: 47). The aim of the enterprise is not capital structure optimisation, but seeking cheaper sources of gaining capital for investments.

Research methodology. The subject of the research are Polish enterprises and their behaviour reactions to the results of the financial crisis in the area of investments and sources of their financing. In order to identify enterprises' investment actions, the research was conducted in two areas. On the basis of macroeconomic data collected from public statistics of the Main Statistical Office, the analysis of enterprises' behaviour trends was performed in the scope of financing capabilities, which was completed by survey studies. The period of the studies included years after 2007 which was acknowledged as the beginning of the world crisis. The time period of changes are the years 2007–2013. The study was performed on the representative sample of active enterprises, i.e. functioning min 5 years at the market. The sample was selected so as it was possible to present the entire population of companies in Poland. The results underwent the analysis, the test X was selected to study significant differences (Kolenda, 2006: 11). Research results were the basis to create the ranking of provinces in Poland due to the synthetic assessment of investment activity of the sector of enterprises. In order to do that, 6 variables among fractional indices were used. The deter-

mination of investment activity is an agreed notion, it presents mostly the dynamics of investment processes. This approach to the essence of research allows defining the developmental potential of enterprises in particular provinces. The following variables were selected to construct the ranking:

X1 – Investment expenditures of enterprises; calculated per 1 enterprise.

X2 – Investment expenditures on R&D.

X3 – Dynamics of enterprise's investment expenditures (2013 = 100, current prices).

X4 – Percentage of new enterprises which incurred investment expenditures.

X5 – Percentage of enterprises which incurred systematic investment expenditures.

X6 – Percentage of big enterprises which incurred expenditures on innovative activity.

Strategies of financing enterprises in Poland. The financial strategy includes the actions taken in the area of finance, which, by means of shaping proper proportions and relations among financial streams and among assets and the sources of its financing, generate feedback and allow enterprise implement the perspective vision (Krupa, 2011: 300).

Table 1. Total capital of Polish enterprises and the level of capital expenditures, 2008–2013, bln PLN, based on Central Statistical Office

Type of capital	2007	2008	2009	2010	2011	2012	2013
Equity	918.9	959.2	1025.2	1099.0	1170.2	1236.4	1345.8
External capital	809.8	941.3	962.3	1034.1	1178.3	1195.8	1285.3
Total capital	1728.0	1900.5	1987.5	2133.1	2348.5	2432.2	2631.1
The difference between equity and external capital	109.1	17.9	62.9	64.9	-8.1	40.6	60.5
Expenditures on investment	106.0	117.5	105.5	100.9	128.9	149.7	155.4
Financial surplus	164.0	144.9	164.4	179.6	188.9	193.9	199.1
Proportion of capital expenditure to financial surplus	0.64	0.81	0.64	0.56	0.68	0.77	0.78

The proportion of capital or percentage of own and foreign capital in financing enterprise's assets are the part of financial structure. The structure and the form of capital at Polish enterprises in particular years was being similar, however, clear changes are visible within the period of the world financial crisis. After 2007, the surplus of own capitals over foreign ones was systematically decreasing. The value of investment volume in the absolute number is increasing. Resulting from the analyses, Polish enterprises mostly confirm the hierarchy theory of financing sources. Enterprises are trying to generate high profits which are reinvested and, at the same time, preserve relatively low debt ratios. The greatest growth of liabilities was made in 2008, which was connected with beneficial economic situation in the world. Since then, the dynamics of foreign capital financing is decreasing at Polish enterprises, along with an increase of the volume of general debt ratio.

From the viewpoint of the efficiency of capitals allocated at enterprises, the financial surplus is of great importance. The majority of financial surpluses of enterprises does not comply with their financial results. The net financial surplus which is not the sources of its self-financing, is greater than net profit by the sum of depreciation write-offs (Table 2).

Table 2. Percentage of investment in financial surplus due to the size of enterprise, %

The size of enterprises	2007	2008	2009	2010	2011	2012	2013
to 9 employees	0.68	0.78	0.62	0.55	0.52	0.6	0.68
10–49 employees	0.57	0.69	0.61	0.54	0.57	0.59	0.64
50–249 employees	0.68	0.72	0.57	0.57	0.56	0.65	0.70
more than 249	0.71	0.82	0.65	0.55	0.78	0.59	0.64

Source: Prepared on the basis of financial statements of enterprises.

Net financial surplus is the source of enterprise self-financing to lower and lower extent. The highest levels refer to 2007, as similar indicator reappears only in 2011 and in the group of big enterprises. Financial surplus generated within an enterprise cannot be totally used for financing its development. The surplus includes incomes of enterprise owners in the form of dividends and incomes. Net financial surpluses not divided between owners increase enterprise equity and become the source for financing the growth of its assets. In 2007–2013, investment expenditures were lower than the value of generated financial surpluses. Entrepreneurs do not invest from equity as they are not certain how changes in economy develop and what the pace of growth is not only in Poland and in entire Europe. Polish entrepreneurs have saved 180 bln PLN in Polish banks. This is several dozen percent of our GDP.

Table 3. The structure of financing sources for business investment in Poland during 2003–2013, %, based on Central Statistical Office data

Types of capital	2007	2008	2009	2010	2011	2012	2013
Own resources	71.2	73.0	70.0	71.4	70.8	69.3	68.7
Public funding from national funds	2.9	2.5	2.9	4.4	5.6	4.4	2.0
Credits and loans	12.7	11.5	12.0	10.6	11.2	13.1	13.7
The budgetary resources from abroad	5.8	6.0	7.6	6.4	8.3	9.2	10.2
Other sources	3.0	3.0	2.9	2.4	2.1	2.9	2.9
Unfunded expenditures	3.7	4.1	4.6	4.8	2.2	1.1	2.5

At present, in Poland, it is estimated that internal sources of enterprise financing constitute more than 70% of financial sources, with the diminishing tendency after the year 2012. The second, due to its popularity, manner of gaining resources for investments were credits and domestic loans, they constituted 12% of expenditures on average. The lowest percentage had other sources of financing, 2.9% on average. Slightly higher was the ratio of investment expenditures which constituted also resources coming from budgetary resources, 3% on average. Since 2007, the significance of foreign resources was growing. Poland obtained financial support from the EU within the framework of aid programs. In the studied period financing development seizes to be "aim for aim", but it becomes a part of company management. The change in the attitude towards financing activity relies not only on the shift from financing own resources to getting credits, but it is connected with greater use of other financial instruments. Enterprises loan capital from the outside on financing investments, as the situation requires, is visible in the last two years.

In Poland, the investments of the enterprise sector in relation to GDP, belong to the lowest in the region. Within the last 10 years, they constituted not more than 10% of company's goodwill, on average. The enterprises of neighbouring countries invest more, i.e. the Czech Republic, Slovenia, Hungary, Romania. An unfavourable ten-

dency has been observed that rely on displacing private investments by government's investments. Within the last 10 years, enterprises' investments constituted 53% on average of the entire amount of investment. Before 2002, it was close to 61%, however, in 2013 – only 48%.

Assessing the assumed strategies, Polish companies undertake sustainable strategies, i.e. those whose risk and uncertainty are divided into risk level management and the level of profitability maximisation. These strategies are well working in the periods when an investor could observe the entire economic cycle, generating both profits and losses. The assumed risk level allows surviving bad periods. Judging from the studies, there is no clear strategy of company development in the times of uncertainty. Media describes a lot of shocks and threats of the world crisis. Under the influence of such opinions, companies take decisions on investments and change their attitude to being more careful.

Analysis of investment activity from the regional perspective – study results. The analysis of investment activity in certain provinces is significant for sustainable development of the country. The study was performed on the representative sample of enterprises. The sample was selected so as it was possible to present the entire population of companies in Poland. Sampling was performed along with layering the following criteria: the number of employment with the structure of enterprise size according to the number of the employed and regional differentiation by provinces.

Table 4. Investment activity of enterprises by provinces, own research

Province	X1	X2	X3, %	X4, %	X5, %	X6, %
Mazowieckie	28.9	8	34.0	22.4	34.8	21.5
Dolnoslaskie	35.8	10	69.7	11.4	29.1	32.1
Wielkopolskie	41.1	8	13.9	12.3	29.1	34.5
Slaskie	41.9	11	82.1	5.0	20.6	54.6
Pomorskie	36.4	10	62.6	9.7	29.3	28.2
Lodzkie	34.8	9	31.3	12.4	27.8	42.3
Malopolskie	40.7	11	56.0	10.5	27.0	57.8
Swietokrzyskie	32.2	10	44.6	22.5	17.5	31.4
Lubuskie	32.3	10	24.4	10.5	21.8	32.6
Kujawsko-pomorskie	31.2	9	21.2	32.3	27.3	41.5
Zachodniopomorskie	38.73	12	47.2	12.4	23.3	51.2
Opolskie	44.2	13	62.7	16	26.4	66.2
Lubelskie	34.6	10	43.9	8.6	27.0	34.5
Podkarpackie	33.4	9	62.0	12.0	28.1	48.9
Warmińsko-mazurskie	38.4	10	44.9	9.6	27.7	28.5
Podlaskie	29.2	11	24.1	10.3	25.6	41.7
Mazowieckie	57.5	16	19.8	13.7	29.1	49.4

The results confirm the existence of significant differentiation of investments among enterprises at the national level. The difference between the highest and the lowest values of innovative enterprises undertaking investments amounted to 27%. This is more than in the results from 2007, when the difference in the level of innovativeness between regions and enterprises amounted to 18%.

The data on investment activity among enterprises were used for creating a ranking by means of taxonomic methods, including the method of linear ordering. The aim was to group the set of selected elements into more homogenous statistical subsets fulfilling formal conditions of separation and completion. The method of linear

ordering defines the linear hierarchy of objects on the basis of their distance from the so-called development model. After having standardised the features, the model coordinates are assumed as maximum values for observed features for the model and minimum for the anti-model. In own calculations, at the target sample, the Hamming distance was used. As a result of calculations by means of the numerical taxonomy programme, the ranking of provinces was obtained. DH is the measurement of diversity of two sequences with the same distance, expressing the number of places, in other words, the positions by means of which those two sequences are different. This is the lowest number of changes, in other words, the operation of superseding the element with another one, which allow conducting one sequence onto another one.

Table 5. Ranking regions by their investment activity, own research

Ranking position	Region	Relative to standard	
		2007	2013
	Benchmark	0	0
1.	Mazowieckie	0.221	0.234
2.	Dolnoslaskie	0.289	0.288
3.	Slaskie	0.399	0.342
4.	Wielkopolskie	0.411	0.368
5.	Malopolskie	0.387	0.391
6.	Lodzkie	0.522	0.432
7.	Pomorskie	0.536	0.456
8.	Swietokrzyskie	0.541	0.469
9.	Lubuskie	0.611	0.568
10.	Kujawsko-pomorskie	0.566	0.576
11.	Zachodniopomorskie	0.714	0.577
12.	Opolskie	0.688	0.618
13.	Lubelskie	0.691	0.632
14.	Podkarpackie	0.721	0.654
15.	Warmińsko-mazurskie	0.780	0.768
16.	Podlaskie	0.789	0.892
	Anti benchmark	1.0	1.0

Investment attractiveness shows a great relation with the level of economic development of a region, that is why economically well developed regions are highly assessed. In the administrative context, there are urban and industrial agglomerations. In the local scale, the important role in shaping investment attractiveness is played by the existing development potential, functioning of the subzone of special economic zones. Other forms of supporting entrepreneurship are also important i.e. industrial parks, science and technological parks, entrepreneurship incubators. Summing up this stage of the study, regarding the territorial division of the country into provinces, it must be emphasised that relatively more active enterprises, in the area of investments, were located in the following provinces Mazowieckie, Dolnoslaskie, Slaskie. The first 5 also included malopolskie voivodship. This division of the regional investment map, despite its greater uncertainty of enterprises connected with the crisis and relatively low expenditures on investments is constant in comparison to 2007. The variables are strongly correlated with the social and economic potential of regions, in which they act. This situation will have direct impact on the growth of socioeconomic potential of these provinces.

Conclusion. In the context of the current world economic crisis, it may be claimed that Polish enterprises function relatively well. The deteriorating macroeconomic conditions and decreased foreign demand make the activity difficult, however, to a lower extent than before the crisis. The image of investments of enterprises is differentiated. There are many possibilities, potential and willingness to develop by means of increased investment activity. By the results of taxonomic analyses, we can claim that investment activity is regionally differentiated – the highest in Mazowieckie and Dolnoslaskie voivodships. The signs of economic revival and financing investments by foreign capital mainly bank credit and the EU subsidies are confirmed. Nowadays, in Poland, investments constitute merely 19% of GDP. Entrepreneurs do not invest, but they keep money on bank accounts. It is necessary to simplify business activity in order to make them take risk and create new workplaces. Support should concern mainly active enterprises, i.e. acting for the minimum of 5 years at the market.

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