Katarzyna Żak*

Borrower discouragement of corporations in financing physical investments

Introduction

Investment, in particular the one implemented by the corporate sector, is a driving force behind every economy. Economic entities have to engage in investment activity if they want to run successful operations, maintain market position and keep up with the competition [Pastusiak, 2010, p. 8]. Two major approaches to defining investment can be identified: monetary and physical. The former perceives investment as the movement of money. This means that the material dimension of an investment is not emphasized, but investments are treated as the flow of funds involving outflows and inflows of capital. The latter highlights the necessity to achieve a material effect of a given investment. An important role in this approach is played by the balance sheet as the compilation of an entity's assets and sources of finance. According to the physical approach, turning capital into assets or using new capital are perceived as investment [Rogowski, 2013, p. 22–23].

Literature [c.f. Jajuga, Słoński, 1997; Wypych, 2007; Rogowski, 2013] defines investments as long-term, risk-carrying allocation of economic resources (as investment outlays) aimed at a future benefit. They highlight their characteristic features, such as: outlay (the allocation of own capital, usually at the cost of current consumption, and external capital through asset acquisition), benefit (the expected outcome of an investment), time (how long capital is engaged and how long it takes to achieve a benefit), risk (the chance of deviations from the expected value of planned outlays and costs, benefits from the time of capital engagement, the length of the lifecycle of an investment).

In terms of what an investment concerns, we can distinguish physical investments (tangible assets and intangible assets, but those that carry ownership rights – licenses, trade marks, patents) and financial (capital) investments – in financial and capital market instruments [Towarnicka, 2000, p. 31]. Based on the general definition of an investment, physical investments of corporations are risk-carrying expenditures of an investor's funds (own and/or external) on creating and/or rebuilding of fixed

* Dr, Wydział Ekonomii, Katedra Zarządzania Przedsiębiorstwem, Uniwersytet Ekonomiczny w Katowicach, ul. Adamskiego 7, 40-069 Katowice, katarzyna.zak@ue.katowice.pl

tangible assets and currents assets in order to achieve expected benefits in the future. Physical investments are usually made with view of long-term exploitation. Accordingly, managers have to manifest due diligence while planning investment outlays and the sources of their financing and they need to make projections for their financial and economic implications in the future. According to Mayer [1988, p. 1167–1183; 1990, p. 307–322] and his concept of the hierarchy of sources of finance, investment projects are first financed from internal and then from external sources.

The phenomenon referred to as borrower discouragement was brought into focus in the course of the research project entitled "Financing physical investment in the corporate sector in the Visagrad countries" and supervised by dr hab. A. Samborski, prof. UE. The article aims to explain what this phenomenon involves and determine its scope and causes in the counties under consideration. In order to achieve this goal, the author presents and compares two major sources of finance for physical investments in non-financial corporations, i.e. internal finance and bank finance. The article also attempts to identify their determinants in the countries analyzed.

The subject of the diagnosis is the sector of non-financial corporations in the Visegrad Group countries (so-called V4) in the years 2005–2015. The article presents the review of literature and presents the ways of financing physical investments using the methodology of the net sources of financing proposed by C. Mayer.

1. Corporations as discouraged borrowers – a conceptualization

The prerequisite for any investment, including a physical investment, is access to capital. Two sources can be indicated: equity and debt capital. Equity capital comprises funds at an enterprise's disposal contributed by its owners (e.g. retained profit, depreciation), while debt capital includes funds at an enterprise's disposal on a temporary basis provided by its creditors, for example long-term bank loans, bonds, leasing [Sierpińska, Jachna, 2004, p. 244–245].

According to the theory developed by Mayer, a bank loan should be a primary source of external debt capital for corporations due to its relatively easy accessibility and transparent regulated terms of application. The use of bank capital allows corporations to boost production capabilities, pursue new investments, increase employment, and, as a consequence, generate a significant part of GDP. Hence, in macro-economic terms, the inclusion of bank crediting in the sources of finance by corporations contributes to increased growth potential of an entire economy [Sawicka, Tymoczko, 2014, p. 6]. A number of corporations, however, do not apply for bank credit, even if they need such financing, their growth prospects

are favorable and their economic situation is sound. Such corporations are referred to as "discouraged borrowers", while the attitude defined as reluctance to apply for credit is known under the term "borrower discouragement". Literature proposes an array of definitions used to discuss the discouraged borrower (Table 1).

Table 1. Selected definitions of the discouraged borrower

Authors	Definition
Cavalluzzo, Cavalluzzo, Wolken	Discouraged borrowers are usually small businesses in need of financing that avoid applying for credit because they think they would not able to get it. Such an attitude is mainly caused by their conviction about their poor credit history and weak financials. These businesses express a subjective opinion that they belong to groups that banks are reluctant to credit.
Fraser, Chakravarty, Xiang, Chakravarty, Yilmazer	It is an entity that avoids applying for a bank loan because of the supposition that its financial situation is not sufficiently stable and for fear of being turned down.
Han, Fraser, Storey	It is a high-or low-risk entity that is in need of capital, but does not apply for a loan to a bank since it fears that its application will be rejected.
Freel, Cater, Tagg, Masson	It is an economically sound business that needs external financing, but it gives up applying for funds for fear of rejection. The rejection of a loan application has a psychological effect that involves the risk of losing status, which is unacceptable for a potential borrower.

Source: Own elaboration based on [Cavalluzzo et al., 2002, p. 4–35; Fraser, 2005, p. 5–10; Chakravarty, Xiang, 2009, p. 10; Chakravarty, Yilmazer, 2009, p. 781–816; Han et al., 2009, p. 415–424; Freel et al., 2012, p. 399–418].

The studies on borrower discouragement conducted so far reveal the following causes behind such attitudes among corporations [Sawicka, Tymoczko, 2014, p. 10–11]:

- the erroneous conviction of corporations about the weak quality of their assets that might be used as collateral,
- the legal form of an enterprise – the more difficult it is to separate what belongs to an enterprise from what belongs to its owner, the weaker the relationships between a bank and a business and the stronger the conviction about difficulties potentially emerging during the application process,
- ethnic considerations – the ethnic background of the owners or managers of an enterprise,
- whether an enterprise is run by a male or a female,

– poor credit history stemming from a prior rejection of a loan application.

2. Methodology for determining the method of financing physical investments by non-financial corporations

In order to compare two basic sources of finance for physical investments, the article applies the methodology of net sources of finance, developed by C. Mayer [1990, 1998]. The varied nature of investments means that they cause economic flows, creating economic value. Hence, it seems justified to ground research in financial flows. The methodology pioneered by C. Mayer applies the flows of funds, instead of their balances, correcting the gross sources of finance by their use in order to estimate a net contribution from banks, equity capital, commercial papers, trade credits, and other instruments to the financing of the corporate sector [Suzuki, Cobham, 2005, p. 1].

One of the universally available sources of data on the flow of funds in corporations the European System of National and Regional Accounts. It is used to estimate flows of funds to and from the domestic corporate sector as a whole [Corbett, Jenkinson, 1997, p. 69–93]. The European System of National and Regional Accounts (ESA 95) offers a coherent international methodological and accounting standard that can be used for in-depth analysis of an economy, its structure and links with other economies. The strength of national accounting is the fact that the system is adjusted to market economy and verified in practice.

Figures used to estimate physical investments in the corporate sector were obtained from two accounts, out of four accounts recording the accumulation, i.e. the capital account and the financial account. The capital account describes the changes in the value of non-financial assets held by institutional entities. The aim of the accumulation accounts is to present the process of capital transactions financing (i.e. investments and an increase of tangible working capital as well as acquisition and disposition of financial assets and liabilities). The capital account shows the acquisition of non-financial revenue and capital transfers for the capital transactions financing. On the revenue side (the sources) (the changes in liabilities and net worth) of the capital account are recorded as the net savings and capital transfers. The growth of non-financial assets and depreciation of fixed assets are recorded on the expenditures side (the uses) (i.e. the changes in assets) of the capital account. The balancing item of the capital account is the net lending (+) or the net borrowing (–). The financial account records the financial transactions of financial assets and liabilities that occur between institutional entities and between these entities and abroad. The assets changes side of this account records

the acquisition of financial assets less their use, i.e. the increase of financial claims, where as the liabilities changes side and net worth – the incurrence of liabilities less their repayment, i.e. the increase in financial obligations. As it has already been mentioned, the financial account does not have a balancing item, transferred to the next account, however the net result of this account and the net incurrence of liabilities less the net acquisition of financial assets, equal in values, but with the opposite sign of the net receivables/payables – the item balancing the capital account [Samborski, 2011, p. 160; *Studia i analizy statystyczne*, 2016, p. 9].

The net result of the financial account (the net incurrence of liabilities less the net acquisition of financial assets) is equal in value, yet with the opposite sign, to the balancing item in the capital account (the net receivables/payables). This results from the fact that in a given period the sources of finance in the corporate sector (revenues) are equal to their use (expenditure). Hence, based on the flow of funds account it is possible to estimate the structure of financing in the corporate sector.

We should remember that part of the funds raised by corporations is contributed towards the accumulation of financial assets. In consequence, the identification of the sources of finance for physical investments involves subtracting the net acquisition of financial assets (an increase in financial claims) from the net incurrence of liabilities (an increase in financial obligations). The logic behind the estimation of the sources of finance for physical investments in the corporate sector is presented in Table 2.

Following the logic presented in Table 2, we can determine the significance of different sources of finance used in financing physical investments in the corporate sector within a given period of time. This procedure, however, does not show how specific investment projects are financed in particular corporations.

Table 2. Flow of funds account

"Net pay-off" method	
Gross revenues (Gross sources)	Gross expenditure (Gross uses)
1. Gross saving	9. Currency, deposits and loans
2. Loans	10. Shares and other equity
3. Shares and other equity	11. Securities other than shares
4. Securities other than shares	12. Other accounts (receivable/payable)
5. Other accounts (receivable/payable)	13. Capital transfers
6. Capital transfers	14. Other(insurance technical reserve)
7. Other (insurance technical reserve)	15. Gross capital formation
8. TOTAL REVENUES (TOTAL SOURCES)	16. TOTAL EXPENDITURE (TOTAL USES)

"Net balance" method	
Net sources	Net uses
Internal (1)	
Bank finance (2–9)	
New equity (3–10)	
Bonds (4–11)	
Trade credit (5–12)	
Capital transfers (6–13)	
Other (7–14)	
NET SOURCES (8–9-10–11–12–13–14)	PHYSICAL INVESTMENT (15)

Source: Own elaboration based on [Samborski, 2011, p. 160; Corbett, Jenkinson, 1997, p. 86].

3. The assessment of borrower discouragement in corporations based in the Visegrad Group countries

The application of the methodology for net sources of finance, proposed by C. Mayer, allowed for the compilation of internal and bank sources of finance for physical investments in non-financial corporations based in the V4 countries (Table 3).

Unlike the other Visegrad Group countries, in the years under consideration, Czechia (Czech Republic) enjoyed a relatively stable situation with respect to internal sources of finance. The average level of this source of finance stood at 82.75%, while its highest value (94.62%) was reached in 2009 and the lowest – 71.47% – in 2007.

Czechia's banking system is dominated by foreign ownership, i.e. approx. 30% of banks in Czechia are foreign banks, whereas in the remaining 47% the subsidiaries of foreign banks hold a stake in the structure of banks in Czechia. This form of operations conducted in another country is preferred mainly by Austrian and German banks.

Table 3. Internal and external sources of finance for physical investments in V4 countries, non-financial corporations, 2005–2015 (%)

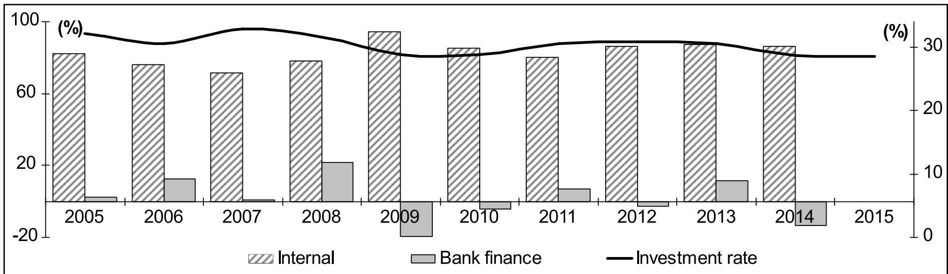
Year	Czechia		Hungary		Poland		Slovakia	
	Internal	Bank finance	Internal	Bank finance	Internal	Bank finance	Internal	Bank finance
2005	82.26	2.16	81.09	24.84	121,81	–9.29	68.49	–8.29
2006	75.99	12.36	92.21	19.81	110.37	17.00	81.13	0.91
2007	71.46	0.84	83.14	43.72	85.04	18.14	85.55	1.39
2008	78.23	21.70	82.51	33.25	102.53	48.73	84.02	24.94
2009	94.62	–19.59	127.33	6.51	146.68	–9.50	120.82	0.82
2010	85.18	–4.21	122.71	–38.80	143.86	–16.65	103.98	4.70
2011	80.14	6.76	119.19	–13.74	138.18	18.79	89.31	–2.21

Year	Czechia		Hungary		Poland		Slovakia	
	Internal	Bank finance	Internal	Bank finance	Internal	Bank finance	Internal	Bank finance
2012	86.47	–2.67	115.03	39.26	141.03	27.23	132.56	–22.43
2013	87.11	11.70	129.27	–23.00	157.87	4.26	135.73	–25.75
2014	86.08	–13.25	108.10	–1.34	142.77	5.24	119.72	–27.20
2015	:	:	128.80	–164.97	151.63	2.77	114.33	8.25
: not available								

Source: Own elaboration based on [Eurostat Database, accessed: June 2017].

Bank sources for financing physical investments in non-financial corporations in Czechia played an important role especially in the years 2006, 2008 and 2013, when their contribution exceeded 10%, only to come as high as 22% in 2008. It is worthwhile to note that the stream of finance was reversed in 2009–2010, when funding started to flow from the corporate sector to the banking sector. The situation was the result of the financial crisis in 2008, when many corporations either reduced their investment activity or invested mainly with their own funds. Figure 1 presents internal and bank finance for physical investments in the corporate sector, compared to the gross investment rate in Chechia's economy in the years of 2005–2015.

Figure 1. Investment rate, internal and bank finance of Czech non-financial corporations, 2005–2015



Source: Own elaboration based on [Eurostat Database, accessed in June 2017].

In the case of the other debt instruments, a significant contribution to financing physical investments both in the Czech and Polish corporate sector came from net trade credit. On the other hand, bonds played a minor role, although it should be admitted that the use of this instruments is more extensive in Czech corporation than in companies based in Poland. This is because, among others, bonds are a financial instrument used mainly by large corporations and the percentage of such corporations is higher in Czechia than in Poland.

In the years of 2005–2015 we could see significant changes in the way of financing physical investment in the corporate sector in Hungary (Table 3). From 2005 to 2008 internal funding stayed at a low level – from 81% to 92% – however in 2009 it started to rise to well over 100%. Internal funding reached its highest levels of 129.27% and 128.80% in 2013 and 2015 respectively. In the years of 2005–2009, banking sources played an important role in financing physical investments in Hungary. In the subsequent years, however, the banking sector in that country experienced increasing difficulties, which was also reflected in its ability and willingness to finance physical investments planned by Hungarian companies. The reasons behind the decreasing participation of banking institutions in financing of development for Hungarian corporations include:

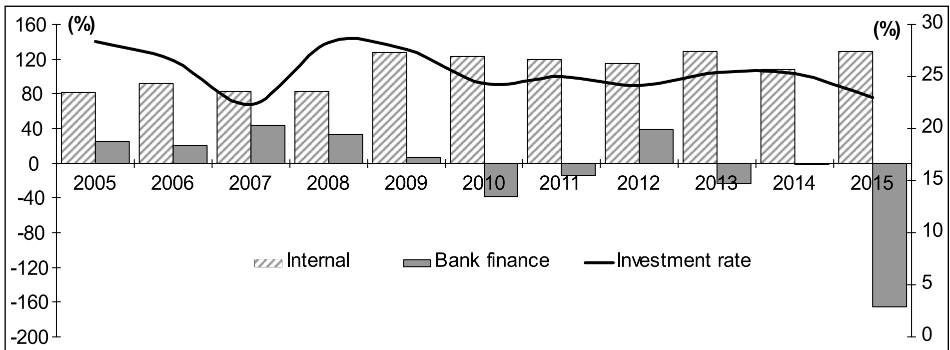
- introduction (in 2010) of tax for companies and individuals in Hungary, at the rate of 0.53% of their assets, which so far has cost the corporate sector 2.5 billion euros,
- introduction (in 2013) of tax on financial transactions, generating the annual revenues for the government of 0.85 billion euros,
- conversion of Swiss franc loans, leading to significant deterioration in the banking sector's performance,
- a rise in credit default risk, which used to remain around the average level for the region, but in late 2014 risky loans went up to 14% of the banks' portfolio, while in Poland, Czech Republic and Slovakia the average figure was 7%,
- some controversial ideas related to ownership transformations in the banking sector, planned by the government (nationalisation of the banking sector).

An attempt to incentivise lending was made by the Central Bank, which had launched a so-called 'credit scheme for growth stimulation' (NHP), under which by the end of 2014 commercial banks received zero-interest funds totalling 2,750 billion forints. These funds were meant to help commercial banks to provide funding to small and medium-sized corporations. In 2015, the Central Bank added another tranche of 500 billion forints. Despite these efforts, the level of Hungarian businesses' borrowings fell to a record low in 2015. In that year the total debt rate of the corporate sector went down to 6,354 billion forints. Such a dramatic fall in borrowing may mean that companies focused on repaying their existing loans, rather than applying for new ones. In the first four months of 2015, Hungarian businesses' payments to commercial banks were by 230 billion forints higher than their new loans. Another unfavourable phenomenon was the fact that such bank loans – inconsistently with the underlying aim – were mostly applied for by bigger companies, instead of SMEs, although banks had been

eager to finance such companies also before. When looking at the corporate sector, a decrease in borrowing could primarily be seen in such industries as food, construction, power generation and IT. The only industries which managed not to give up to that trend were machine and chemical ones [Szczęśniak, 2016; Lanczi, 2010].

Figure 2 presents internal and bank finance for physical investments in the corporate sector, compared to the gross investment rate in the Hungarian economy in the years of 2005–2015.

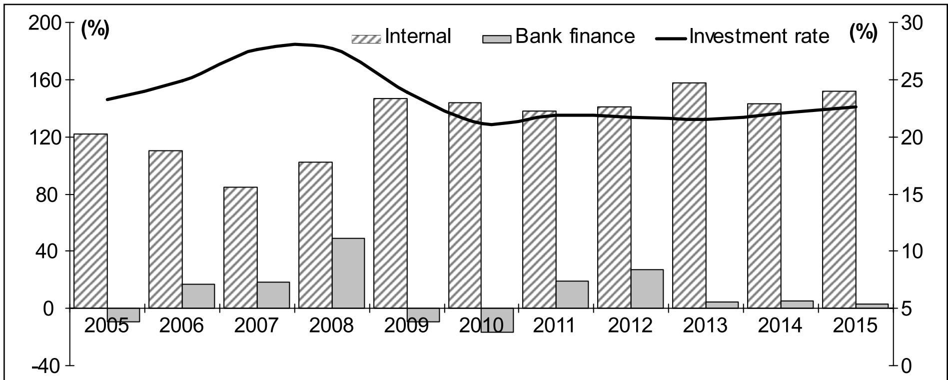
Figure 2. Investment rate, internal and bank finance of Hungarian non-financial corporations, 2005–2015



Source: Own elaboration based on [Eurostat Database, accessed in June 2017].

Also in Poland, the corporate sector seems to rely on internal finance for physical investments to a much larger extent than on bank loans. In the researched period of time, only in 2007 the value was lower than 100%, while in all the other years it exceeded 100%, with a significant rise occurring after 2008 and continuing until today. Figure 3 shows a disproportion between the use of internal finance and bank finance for physical investments in Poland's corporate sector. In 2005 and in the years 2009–2010, more loans were repaid than taken out by Polish corporations. It is estimated that approximately 20% of corporations in Poland have not taken any loans for their entire period of operation. The data lead to a conclusion that a large number of corporations operate – out of choice or necessity – without financing provided by bank loans. The survey conducted by the National Bank of Poland (Poland's central bank) revealed that the main reasons why corporations were not interested in bank financing were their own sufficient resources and the use of non-bank finance. This means that financial security is more important for corporations than the opportunity to take advantage of high positive leverage.

Figure 3. Investment rate, internal and bank finance of Polish non-financial corporations, 2005–2015



Source: Own elaboration based on [Eurostat Database, accessed in June 2017].

More specific reasons for adopting the attitude of a discouraged borrower towards the possibility of obtaining a bank loan to support the growth of an enterprise can be identified as: uncreditworthiness, high costs of a loan and unfavourable repayment conditions, a mismatch between a bank offer and the needs of an enterprise, overly complex procedures, the reluctance of corporations to reveal their documentation, concerns related to credit terms, market uncertainty, bad experiences of cooperation with a bank, fear of the rejection of an application [Sawicka, Tymoczko, 2014, p. 29 and further].

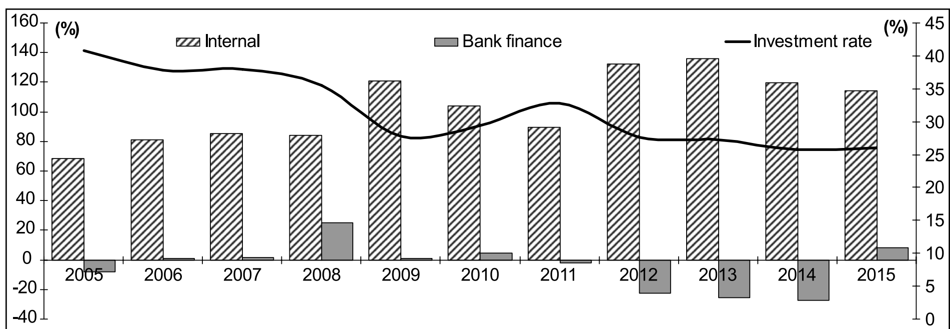
In the years 2005–2008, Slovakia had an average share of internal finance for physical investments at the level of 79.80%. In the period, we can notice low levels of bank finance, with the exception of 2008, when bank finance accounted for almost 25%. One of the reasons can be identified as relatively high inflation, making bank loans more expensive. Additionally, in the case of Slovakia the financing of physical investments by non-financial corporations should be considered through the prism of the euro adoption in this country. The efforts undertaken by the consecutive governments led to Slovakia's accession to the eurozone in 2009. A major success achieved in the years 2009–2010 was the inflation rate kept below 1%, which caused that the Central Bank reduced the interest rate to 1.75% in 2009. The eurozone accession also resulted in the lower cost of money in Slovakia and low interest rates gave both individuals and businesses access to cheaper credit. Before the euro adoption, credit terms in Slovakia had been similar to the ones in Poland.

In January 2007, interest on investment loans was the same in both countries – 5.9%, whereas in 2009 Slovakian businesses paid 3.8% annually

and Polish firms – 6.2% [Kowalczyk, 2009]. Undoubtedly, the economic slowdown, originated by the 2008 world crisis, contributed to the greater use of accumulated equity and the reduction in interest shown in bank loans on the side of corporations, but compared to the other V4 countries, the shift was not as deep. The situation changed completely after 2011. In the years 2012–2014, managers in non-financial corporations made their investment decisions mainly based on internal finance, while in the case of bank finance, we could observe the reversal of the streams of funding, which started to flow from the corporate sector to the banking sector. Slovakia's banking sector is a small, conservative banking market, characterized with strong capital concentration and dominated by foreign investors, mainly from Austria, Czechia and Luxemburg.

Figure 4 presents internal and bank finance for physical investments in the corporate sector, compared to the gross investment rate in the Slovakian economy in the years of 2005–2015.

Figure 4. Investment rate, internal and bank finance of Slovakian non-financial corporations, 2005–2015



Source: own elaboration based on [Eurostat Database, accessed in June 2017].

It is worthwhile to note that the fulfillment of the Maastricht criteria and the euro adoption by Slovakia reduced political populism and provided foreign investors with a guarantee that the country where they invested would continue to develop. Since 2009, Slovakia has approved the investment from, for example, Volkswagen, AU Optronics and Samsung. Furthermore, the financial decisions made by corporations since 2013 have been influenced by the corporate bond market.

Conclusions

The observations discussed in the article, concerning the reluctance of managers running non-financial corporations in the Visegrad group countries to use bank loans in financing physical investments, are also

confirmed by the results of the study presented in the article entitled "The Effects of the Banking System Structure on Borrower Discouragement: Empirical evidence across 25 European countries" [Mol-Gómez-Vázquez et al., 2018, p. 312–329]. The authors of the study argue that borrower discouragement among corporations is definitely stronger and more prevalent in Eastern European countries, including the V4 countries, than in Western Europe. Both in Slovakia and in Poland, which rank second and third lowest among the 25 analyzed European countries, but also in the Czech Republic and in Hungary, the most significant causes of borrower discouragement among corporations stem from relatively high interest rates and complicated banking procedures. Additionally, corporations encounter barriers arising from the necessity to meet collateral requirements.

The comparative study encourages reflection that borrower discouragement among corporations is related to conservative development policies pursued by corporations, which opt for conservative financing strategy based on internal finance. It should also be noted that the diversification (or its absence) of sources of finance for investment activity depends on, *inter alia*, differences between economies in macroeconomic terms, the features of the financial system and the characteristics of a particular market (e.g. costs of capital), legislation, alternative methods of capital acquisition and their availability (including the position of a stock exchange as a source of capital acquisition). Undoubtedly, borrower discouragement in the corporate sector was also exacerbated by the economic crisis, which was reflected in scaling down investment processes and financing investment projects from equity capital.

In V4 countries, in the wake of the 2008 crisis, the banking sector attempted to implement favourable loan policies for corporations by introducing low margins and applying more lenient risk assessment in particular sectors. Special programmes were pursued, aiming to encourage the use of bank finance, especially by the small and medium-sized enterprise sector. In 2013, in Czech Republic, Poland, Hungary and Slovakia a government programme of guarantees – *de minimis* – was launched, targeting the SME sector. Its main goals were [Sawicka, Tymoczko, 2014, p. 39]:

– offering loans to banks so that they can provide borrowing to corporations,
– introducing a system of guarantees for corporations applying for loans while not having collateral,
– giving access to interest-free funds by the central bank to domestic banks in order to support borrowing targeted at small and medium-sized corporations,

– granting loans with reduced interest repayment to small and medium--sized corporations.

According to the representatives of banks, the programme of guarantees has helped to reach many corporations that would not be granted a bank loan on commercial terms, which contributes to reduced borrowing discouragement, especially among small and medium-sized businesses.

References

Cavalluzzo K.S., Cavalluzzo L., Wolken J. (2002), *Competition, Small Business Financing, and Discrimination: Evidence From a New Survey*, "Journal of Business", Vol. 75, No. 4.

Chakravarty S., Xiang M. (2009), *What Discourages Small Businesses from Asking for Loans? The International Evidence on Borrower Discouragement*, Working Papers No 903, Department of Consumer Sciences and Retailing, Purdue University.

Chakravarty S., Yilmazer T. (2009), *A multistage model of loans and the role of relationships*, "Financial Management" Vol. 38, No. 4.

Corbett J., Jenkinson T. (1997), *How is investment financed? A study of Germany, Japan, the United Kingdom and the United States,* The Manchester School Supplement, Blackwell Publishers Ltd., Oxford.

Eurostat Database, www.ec.europa.eu/erostat/, accessed: November-June 2017.

Fraser S. (2005), *Finance for Small and Medium-Sized Enterprises. A Report on the 2004 UK Survey of SME Finances*, Centre for Small and Medium-Sized Enterprises, Warwick Business School, University of Warwick.

Freel M., Carter S., Tagg S., Masson C. (2012), *The latent demand for bank debt: characterizing discouraged borrowers*, "Small Business Economics", Vol. 38, No. 4.

Han L., Storey D.J., Fraser S. (2009), *Are good or bad borrowers discouraged from applying for loans? Evidence from US small business credit market*, "Journal of Banking & Finance", Vol. 33, No. 2.

Jajuga T., Słoński T. (1998), *Finanse spółek. Długoterminowe decyzje inwestycyjne i finansowe,* Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu, Wrocław.

Kowalczyk J. (2009), *Słowacy mają już kredyty znacznie tańsze niż my*, https://www.pb.pl/, accessed: 06.2017.

Lanczi A. (2010), *Kryzys finansowy a węgierska polityka*, http://www.omp.org.pl, accessed: 11.2016.

Mayer C. (1990), *Financial systems, corporate finance and economic development*, in: R. Hubbard (ed.), *Asymmetric information, corporate finance and investment*. National Bureau of Economic Research, New York.

Mayer C. (1998). *New issues in corporate finance,* "European Economic Review", Vol. 32, No. 5.

Mol-Gómez-Vázquez A., Hernández-Cánovas G., Koëter-Kant J. (2018), *Legal and Institutional Determinants of Factoring in SMEs: Empirical Analysis across 25 European Countries*, "Journal of Small Business Management", Vol. 56, No. 2.

Pastusiak R. (2010), *Ocena Efektywności Inwestycji*, CeDWu, Warszawa.

Rogowski W. (2013), *Rachunek efektywności inwestycji.* Wolters Kluwer, Warszawa.

Samborski A. (2011), *Wykorzystanie rachunków narodowych w analizach ekonomicznych*, in: *Podstawy metodologii badań w naukach o zarządzaniu*, W. Czakon (ed.), Wolters Kluwer, Warszawa.

Sawicka A., Tymoczko I. (2014), *Dlaczego polskie przedsiębiorstwa nie korzystają z kredytu?*, Instytut Ekonomiczny Narodowego Banku Polskiego, Warszawa.

Sierpińska M., Jachna T. (2004), *Ocena przedsiębiorstwa wg standardów światowych*, Wydawnictwo Naukowe PWN, Warszawa.

Studia i analizy statystyczne (2016), *Rachunki narodowe według sektorów i podsektorów instytucjonalnych w latach 2011–2014*, GUS, Warszawa.

Suzuki K., Cobham D. (2005), *Recent trends in the sources of finance for Japanese firms: has Japan become a 'high internal finance' country,* Discussion Paper Series, No. 0501, University of St Andrews, Scotland.

Szczęśniak A. (2016), *Viktor Orban i walka o suwerenność Węgier*. "Nowa Debata", www. nowadebata.pl, accessed: 11.2016.

Towarnicka H. (2000), *Strategia inwestycyjna przedsiębiorstwa*, Wydawnictwo Akademii Ekonomicznej we Wrocławiu, Wrocław.

Wypych M. (ed.). (2007), *Finanse przedsiębiorstwa z elementami zarządzania i analizy*, Absolwent Sp. z o.o., Łódź.

Summary

The article places the main focus on borrower discouragement. Its primary aim is to explain what this phenomenon involves and determine its scope and causes in the Visegrad Group counties (V4). In order to achieve this aim, the author presents and compares two major sources of finance for physical investments in non-financial corporations, i.e. internal finance and bank finance.

The article uses the methodology of net sources of finance initially developed by C. Mayer, J. Corbett and T. Jenkinson.

The practical dimension of the analysis should be perceived through the prism of the opportunities to determine the direction of changes in the area of financing physical investments of non-financial corporation in the V4 countries.

Keywords

physical investments, sources of finance, borrower discouragement