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# FINANCIAL POSITION OF THE COMPANIES OPERATING IN THE POULTRY AND PIG SECTORS OF THE VISEGRAD COUNTRIES

Review  
Article

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## Keywords

*Net working capital;  
Pig and poultry sector;  
Solvency;  
Financial position;  
Visegrád countries*

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## JEL Classification

*Q14*

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## Abstract

*A thorough understanding of business processes is essential for successful corporate operation. The best method of gaining knowledge is analysis, namely the understanding and evaluation of correlations between economic phenomena. In the present study, the financial position of companies operating in the poultry and pig sectors of the Visegrád countries is examined and compared. This sector was chosen because the food industry is one of the most important sectors, both because of its size and since it satisfies fundamental human needs. Both globally and in Hungary, these two industries are the most prominent in terms of trends in production and consumption. Present study examines corporate data series downloaded from the EMIS database and performed the analysis of various financial indicators that can be calculated from them. Along the primary research question, the time series development of the financial position of these sectors was examined in terms of solvency. Based on the examinations it can be stated that the pig sector clearly performs better in Poland, which was also true for the Czech Republic at the end of the period. In Hungary and Slovakia, however, the poultry sector performed better.*

## INTRODUCTION

According to the opinion of Musinszki (2014), the analysis of financial position requires the examination of the state of the balance sheet data at a given time; these data are used for static analysis. The analysis of the financial position shows the development of the provision of financial assets necessary for the continuous operation (Pataki, 2011; Böcskei & Deres, 2015). Corporate performance has already been examined through financial indicators by multiple researchers (Suhanyi & Suhanyiova, 2014., Bayaraa, Tarnóczy & Fenyves, 2019.; Fenyves, Pető, Harangi-Rákos & Szenderák, 2019, Zsarnóczyai & Zéman, 2019). Analysis of the financial position began by examining the development of net working capital. Net working capital is essential for the determination of the short-term financial position of companies. Net working capital is calculated as the difference between the current assets and the short-term liabilities of the enterprise, i.e. the part of the current assets that is not fixed by short-term liabilities. It can also be said that net working capital is essentially the portion of current assets that is financed by equity or long-term financial assets or long-term liabilities. The higher the value of net working capital, the more flexible the company is in terms of its financing policy. If this value is negative, then part of the fixed assets is financed with short-term liabilities; this is called aggressive financing policy. However, this is rather dangerous because fixed assets need to be utilized on a long-term basis for the sake of functioning, and this should be done with short-term resources to keep the company up and running. If net working capital is calculated according to the method defined above, then working capital management includes the financing and management of the current assets of the company and the monitoring of short-term liabilities (Tarnóczy, Fenyves & Vörös, 2014). Effective liquidity management not only ensures the survival of the company, but also allows companies to achieve higher profitability with less expense. In addition, it can provide a strategic advantage in economically challenging periods. Solvency index numbers are usually based on traditional liquidity ratios (Tarnóczy, Fenyves & Vörös, 2014). Liquidity ratios measure the ability of businesses of meeting their short-term liabilities. The ratio compares the liquid assets of companies to their short-term liabilities. The high value of the indicator ratio indicates that the company is expected to meet its short-term obligations on time and to finance its operating costs in the near future. The enterprise might be having difficulties if the ratio has lower values, which might also cause

problems in the operation of the company (Fenyves, Tarnóczy & Bács, 2016).

Depending on which part of current assets is compared to short-term liabilities, various liquidity ratios can be calculated.

The value of the general liquidity ratio expresses the percentage of assets that can be mobilized or which can be easily cashed, represented by liquid liabilities that can be settled in the short term. The higher the value of the indicator, the more secure the liquidity of the company. The general liquidity ratio is often called the working capital ratio. The relationship between the ratios also shows that if the company meets value expected in the case of the general liquidity ratio, net working capital will be positive. It also follows that the general liquidity ratio must be at least one in order for net working capital to be positive (Fenyves, 2014).

If the value of the indicator is less than one, there is a risk that the business will become insolvent. Values above one are acceptable. Values between 1.2 and 1.8 are considered normal for normal operation. However, extremely high values may lead to a deterioration in profitability (Darabos & Rózsa, 2015). Generally, a higher indicator is good for manufacturing companies, while a lower value is sufficient for and might be acceptable for service companies, as they tend to have more accurate cash flow projections and fewer inventories or liabilities (Tarnóczy et al., 2014).

The general liquidity ratio was previously known in the scientific literature as a 2:1 ratio, but currently, depending on the sector, values of 1.3-1.7 are satisfactory. Too high values might result in the decline of profitability (Darabos & Rózsa, 2015).

A more severe test of the liquidity of an enterprise is the quick liquidity ratio, which compares short-term liabilities to the difference between current assets and inventories, since companies also possess such immobile stocks that cannot be cashed quickly (Musinszki, 2014). Stocks or inventories are the slowest to be turned into cash, selling them is the most risky, therefore it is reasonable to adjust the liquidity ratio with them. If they are included in the ratio, it might result in a distorted picture of the company, but if the ratio is adjusted with them, it will result in a more realistic view of the business. In terms of the obtained values, scientific literature considers one or higher appropriate (Brealey & Myers, 2011).

In the case of cash-level liquidity, also known as the instant liquidity ratio, short-term liabilities are only compared to the combined value of cash stocks and marketable securities. In the case of instant liquidity ratios, these excessively high values may not necessarily indicate effective operation, as a company that has proper business management tries to invest all its cash rather than reserve it. After all, even though extra returns on

such investments are low, it is still more beneficial than not producing any income. The acceptable value of cash-level liquidity is between 0.25 and 0.3, which means that the company would be able to pay out 25-30% of its current liabilities immediately (Fenyves et al., 2016).

Regarding traditional liquidity ratios, it is also important to note that due to the basic characteristics of annual statements, an accurate picture of the solvency of the examined company cannot always be obtained. It would be important for liquidity ratios to be reviewed from time to time, but this would require companies to close their accounting records monthly or at least quarterly (Fenyves, 2014). Thus, in the case of sectors, semi-annual data would also facilitate the examination of the sectors concerned.

The indebtedness ratio shows the extent to which companies finance their assets with external capital, so it can be inferred how strong a company is, in this case sectors (Brealey & Myers, 2011).

## MATERIAL AND METHOD

For the analyses, the corporate rankings of the EMIS database were used. The analysis is limited to enterprises in the Visegrad Countries, which is one of the prominent regional organizations of the European Union (Visegrad Cooperation – also known as Visegrád Countries, Visegrad Four or V4). The aim of this cooperation is to enforce the joint economic and political interests of its four Member States – Poland, Hungary, the Czech Republic and Slovakia. The Visegrád Group covers a total area of 532.8 thousand km<sup>2</sup>, which represents almost 12% of the EU territory, of which 25.9 million hectares is agricultural land, which represents 14% of the total agricultural area of the EU.

58% of the V4 area is from Poland, 18% from Hungary, 15% from the Czech Republic and 9% from Slovakia. The applied database contains various balance sheet and profit and loss account data series of the V4, that is, companies that operate in the poultry and pig sectors of Hungary, Poland, the Czech Republic and Slovakia from 2014 to 2018. The database included companies that were operating during the examined period. Balance sheet and profit and loss account data are presented in millions of euros as a unit of measure. Data series regarding the Czech Republic for 2018 have not yet been included in the database, so analyses involving the Czech Republic only cover four years.

The database contains different numbers of companies by country and by sector. Table 1 below summarizes the composition of the database. It can clearly be seen from the sample that the number of companies operating in the poultry sector is higher

in all four countries, especially in Hungary and Poland. The number of companies in the Czech Republic and Slovakia is more balanced than in the other two countries.

The financial position of the companies operating on the different sectors of the countries constituting the database was analysed through the examination of the solvency of the sectors, which was realized by calculating and analysing various liquidity ratios and indebtedness ratio.

## RESULTS

Figure 1 illustrates the development of net working capital in the V4 countries broken down by sector. Based on the net working capital values of the four countries, no clear conclusion can be drawn for the two sectors.

In the case of Hungary, no clear conclusion can be drawn, as the net working capital of poultry companies is higher in 2014 and 2017, however, it is not far behind the companies of the pig sector in the other examined years. The net working capital of Hungarian poultry companies continuously increases at the beginning of the period, followed by a decline in 2018, while the net working capital of the companies within the pig sector increases sharply in 2015 compared to the previous year, but a steady decline can be observed afterwards.

At the beginning of the period, the net working capital values of Polish poultry companies were lower than those of the companies operating within the Hungarian poultry sector, and due to the continuous increasing tendency in 2017, Poland overtook Hungary. In 2018, the decline of the indicator is reflected here as well, but the value of the indicator is still higher than in Hungary.

In the case of the Czech Republic, it is also unclear, the companies of which sector are performing better, since while the working capital of the companies within the pig sector is more favourable at the beginning of the period – to the extent that the net working capital of poultry companies is negative – by the end of the period, the poultry sector is clearly performing better.

Of the four countries, the situation is clear only for Slovakia, as the net working capital of companies within the poultry sector is much more favourable in each of the analysed years.

Positive net working capital can also be interpreted that the company, in the presented case, the sectors are likely to be able to meet all their liabilities throughout the year, i.e. they are solvent (Fenyves, 2014). Net working capital is negative for the Czech poultry sector in only one of the analysed years, but this is not a cause for concern, as the indicator will develop positively in the following years.

If the intention was to determine which of the two sectors and their companies performed better, it would be the companies of the poultry sector based on net working capital. Although companies of the pig sector companies performed better in the first years of the analysed period in some countries, this changed by the end of the period in favour of poultry companies. In 2018, this statement is not true for Hungary; however, the poultry sector is not far behind the pig sector either. Therefore, in the light of these data, the analyses continued with the calculation and analysis of the liquidity ratios and the indebtedness ratio.

The different liquidity ratios and indebtedness ratios of companies in the two sectors are illustrated in Figures 2 and 3 for each of the four countries, respectively.

The general liquidity ratio for the companies of the poultry and pig sectors in each of the four countries reflects the values referred to by scientific literature, indicating normal operation of the sectors. The general liquidity ratio for Hungary, Poland and the Czech Republic was more favourable for the companies of the pig sector. Only Slovakia has a higher general liquidity ratio for poultry companies.

The quick liquidity ratio was the most favourable in Slovakia for poultry companies in the Czech Republic for the companies operating in the pig sector during the examined period. Based on the quick liquidity ratio, it is not possible to decide which sector performs better, as the value of the ratio is constantly fluctuating by sector and country. In the case of Hungary, the quick liquidity of companies within the poultry sector was more favourable in the three examined years. In Poland, this was the case only in two of the analysed years. In the case of the Czech Republic, the pig sector companies performed better in terms of quick liquidity in each of the analysed years, while the opposite is true in Slovakia.

The value of the cash-level liquidity ratio exceeded the values expected by scientific literature for each examined only for companies of the Polish pig sector. Consequently, in the case of Poland, companies of the pig sector were performing better. Although in Hungary the companies in any of the sectors do not reach the critical value of 0.25 determined by scientific literature, the companies operating in the poultry sector perform better in this case. Enterprises in the pork sector of the Czech Republic have achieved explicitly good cash-level liquidity in 2018, but in other years, the value of the indicator will not reach the relevant critical bottom level in this country in either sector. In the case of companies operating in the pig sector in Slovakia, the liquidity situation at cash level developed particularly poorly, it was below 0.1 for each analysed year. It means that companies of the

poultry sector companies performed better in this country.

The indebtedness ratio divides the V4 countries into two separate groups. In the case of Hungary and Poland, the indebtedness ratios of the companies within the poultry sector are higher, which is unfavourable for us, while in the Czech Republic and Slovakia the indebtedness of the companies within the pig sector is clearly higher. Since on the basis of analysing the financial situation no clear decision can be made regarding which sector is performing better, the analysis continued with the calculation of profitability.

## CONCLUSIONS

The examination of the financial position involved the calculation and analysis of the net working capital and liquidity ratios. Based on the net working capital, it was difficult to clearly decide which sector performed better; therefore, the examination continued with the analysis of the liquidity ratios. Based on the analysis of the liquidity ratios, no clear decision could be made regarding which companies in the sector were performing better, as based on these, the companies in the pig sector clearly performed better in Poland, which is true at the end of the period in the Czech Republic as well. However, in the rest of the countries, companies of the poultry sector tend to perform better. When analysing the financial situation, values of the indebtedness ratios were also calculated, which showed that the indebtedness of poultry companies is higher in Hungary and Poland, while in the case of the Czech Republic and Slovakia the same is true for the companies of the pig sector. Therefore, it was impossible to clearly determine, which sector and companies performed better.

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**TABLES & FIGURES**

Table 1  
**Number of analysed companies by country and sector**

Country	Number of analysed companies (pcs.)	
	Poultry sector	Pig sector
Hungary	295	125
Poland	294	82
Czech Republic	32	27
Slovakia	38	24

*Source: own editing*

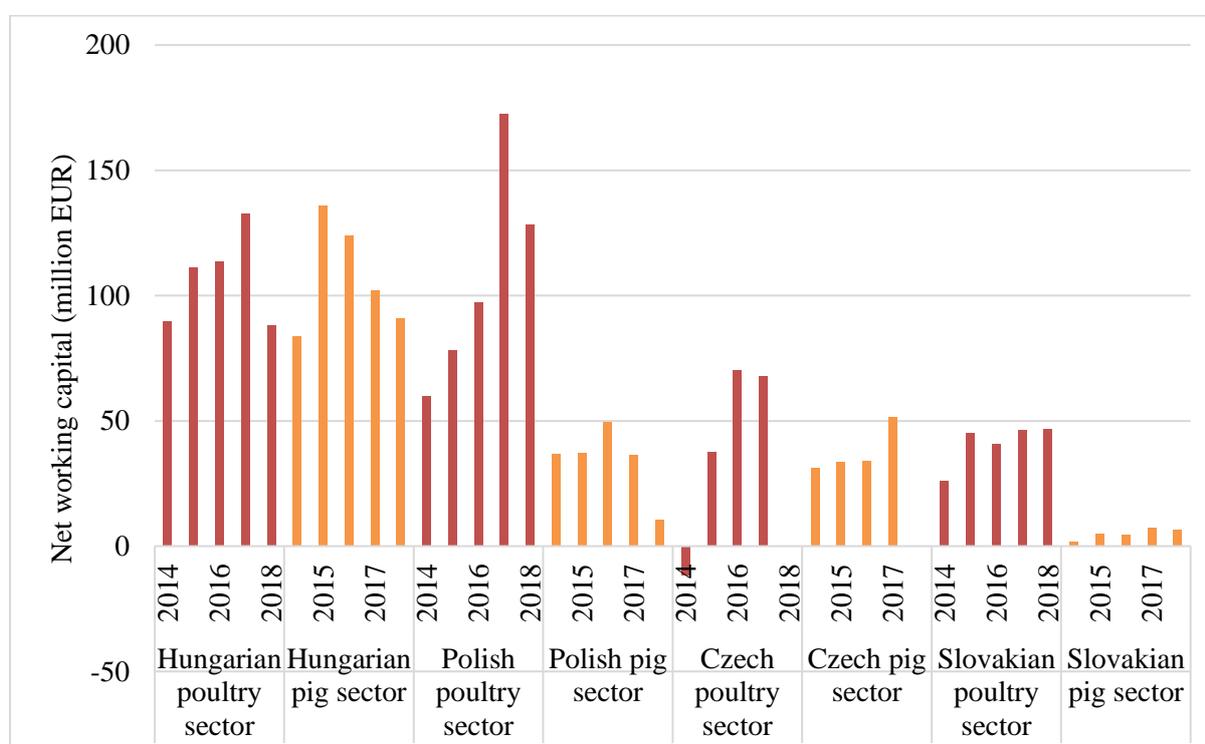


Figure 1  
**Development of net working capital in the poultry and pig sectors of the V4 countries between 2014-2018**  
*Source: Own editing and calculation based on EMIS (2019)*

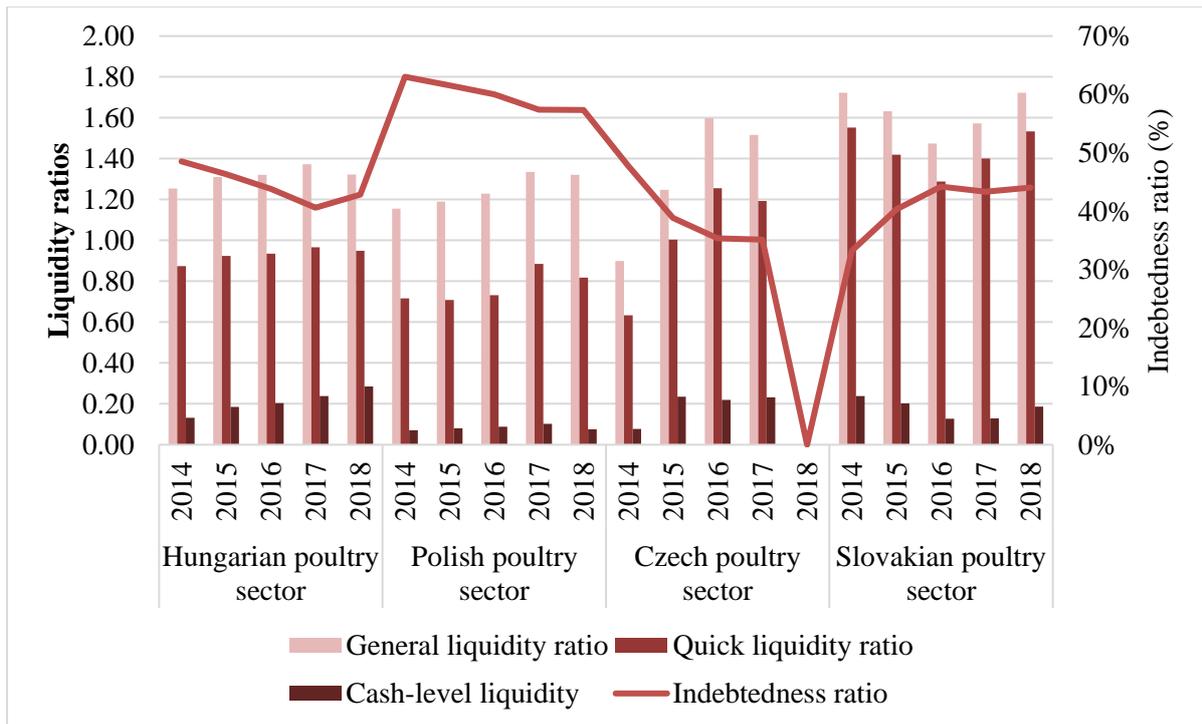


Figure 2  
Development of the liquidity ratios and indebtedness ratio of the poultry sectors of V4 countries between 2014 and 2018

Source: Own editing and calculation based on EMIS (2019)

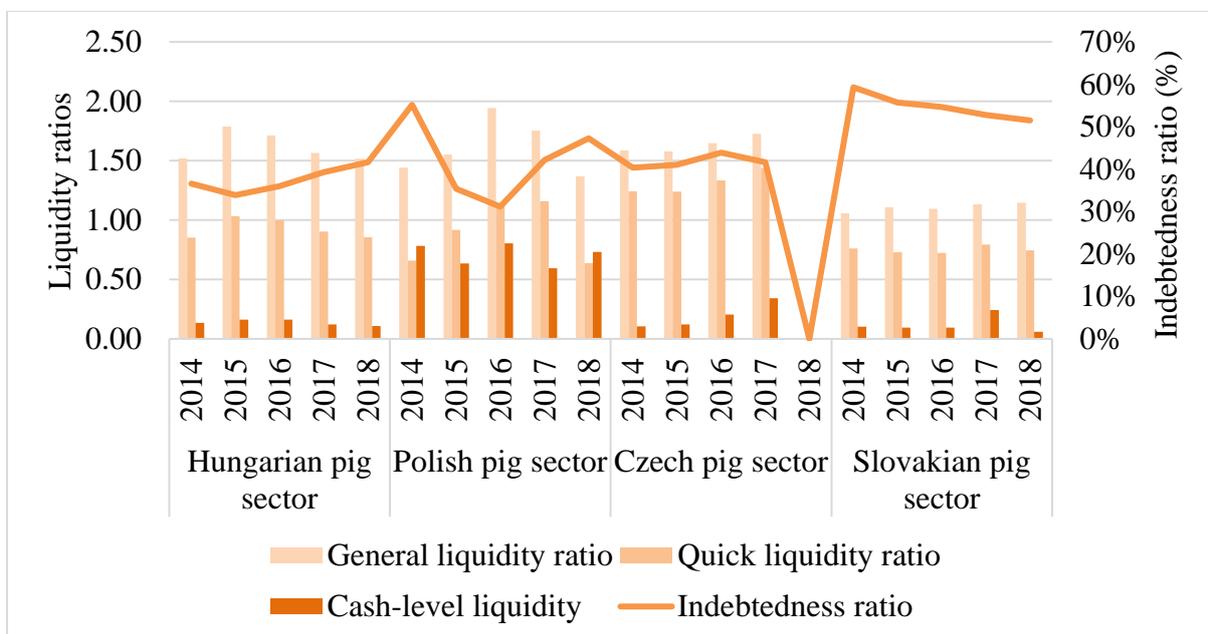


Figure 3  
Development of the liquidity ratios and indebtedness ratio of the pig sectors of V4 countries between 2014 and 2018

Source: Own editing and calculation based on EMIS (2019)