## FINANCIAL PERFORMANCE AND MARKET GROWTH OF THE COMPANIES IN HUNGARY AND ROMANIA: A STUDY OF THE FOOD RETAIL COMPANIES

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#### Abstract

Currently, there is a growing concentration in terms of supermarkets and hypermarkets, discount stores, and wholesalers. The advancement of retail chains has accelerated and they now have significant market share. In the EU countries, food retail turnover is characterized by concentration, with more than 90% of turnover coming from retail chains. Therefore, in the present study, the choice was made to analyse the average indicators of the sector and to compare them with the indicators of the largest sales companies in addition to the financial data of the top 100 companies with the highest turnover both in Hungary and Romania. The article provides an insight into the economic, property, income and liquidity situation of Hungarian and Romanian companies, which are dominant in food retailing. It also describes the liabilities structure and asset composition of the companies surveyed in the two countries. It can be stated that the short-term liquidity of Romanian enterprises in the case of the liquidity ratio and the quick liquidity ratio lags behind the values experienced by Hungarian enterprises. The value of cash-level liquidity is similar to the values in Hungary, it is characterized by a low but increasing trend. Comparing the indicators of the examined Hungarian enterprise and the sector, it can be observed that in 2015, when the analysed companies showed a loss of profit, negative values can also be recorded in the case of the average profitability indicators of the sector. The article also covers future analysis possibilities and perspectives.

**Keywords:** Economic Analysis, Profitability, Liquidity, Retail Sale of Food

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#### **1. INTRODUCTION**

The food trade plays an important role in fulfilling the needs of the population. Currently, the international research community devotes increasing attention to this area, whether sustainability or the role of short supply chains comes to the focus within food trade. The condition for the long-term survival of enterprises is the preservation of competitiveness and

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the continuation of efficient management. Examining the economic situation of enterprises and analysing their data is essential in our time. It is important for business managers to have the proper information about their operations for making right and informed decisions. Well-established decisions help businesses achieve their objectives and respond to market changes in the best and most timely manner possible. In addition, it is important for other stakeholders, investors, to become familiar with the businesses, whether it is worth investing into them. It is also important for banks, different partners to make their decisions.

In the scope of the presented research, food retail enterprises of Hungary and Romania are analysed. Trade relations between the two countries are of paramount importance in the life of the two countries, regardless of the EU membership, and the two countries are important partners in all areas of economic life.

International retail trade of food has undergone major changes both horizontally and vertically during the recent decades. Concentration is growing worldwide in the case of hypermarkets and supermarkets, discount stores, and wholesalers. Following the millennium, the advancement of retail chains has accelerated and they currently have a significant market share. Retail sales of food in Hungary are characterized by a high concentration, similar to the European average. The situation and structural transformation of food retail have been and are being addressed by numerous studies, among which relatively few studies have been found that have examined the economic situation of food retail enterprises. With the help of the EMIS database, the data of Hungary and Romania were examined, the objective was to reveal whether and to what extent the economic situation of food retail companies differs in the two countries. Concentration is increasing in the sector, thus the development of the financial indicators of the selected companies are compared with the size of the indicators characteristic of the sector as a whole. Szakály, Popovics, Szakály, and Kontor (2020) suggest that consumers continue to give priority to favourable value for money in their food retailing decisions. As Săgeată (2020) points out, retail outlets are more common in areas with higher average incomes, resulting in more specialized shops in richer areas and large area shops with low prices in such regions; thus consumers on modest incomes living in impoverished rural small towns are forced to shop in more expensive shops. Consequently, residents of better-income areas can spend their higher wages more economically, while residents with lower income can only purchase goods more expensive from their lower incomes. This also confirms that the role of food retailers is prominent in creating social justice. The relevance of the present study as highlighted by Fenyves, Zsidó, Bircea, and Tarnóczi (2020), that based on the report of the European Commission (2014), Hungary and Romania, although neighbouring countries and their historical and economic development show many parallels, fall into different categories in terms of the development of retail chains. Based on the above, modern forms of retail, such as hypermarkets and discount chains, have become more widespread in Hungary since the turn of the millennium than in Romania.

The remainder of the paper is organised as follows: Section 2 reviews the relevant literature, Section 3 presents the research methodology, Section 4 introduces results of the study, Section 5 discussed the results, and Section 6 concludes the paper.

#### **2. LITERATURE REVIEW**

#### 2.1. Necessity of financial analysis

A prerequisite for successful corporate management is knowledge and awareness (Böcskei & Kis, 2020). Businesses need information to carry out their activities, to function properly, to manage their operation independently and to make decisions (Bíró, Kresalek, Pucsek, & Sztanó, 2016). As a result of the widespread use of the Internet, information concerning the external environment has become much easier and more widely available than ever before (Moussa, Delhoumi, & Ouda, 2017). Similarly, forecasting market demand is also based on information (Mtshali, Mbhele, & Neboh, 2019). One of the basic methods of information necessary for continuous corporate management and decisionmaking is economic and financial analysis, which is the exploration of connections and factors influencing economic phenomena, thus a method of gaining knowledge that partly facilitates and partly provides the necessary information (Blumné Bán, Kresalek, & Pucsek, 2011; Katona et al., 2020). Rodríguez-Pallares and Pérez-Serrano (2017)emphasize the importance of information in reducing risk in decision-making, and also that information-based decision-making increases the transparency of the operations of companies. The analysis can be carried out at different levels, thus it is very important that the analyses that decisions are aligned prepare the with the appropriate decision levels. The primary source of information for the comprehensive analysis of management is the accounting statement, the purpose of which is to inform market participants about the reliable, realistic overview of the company and to provide an image of the asset, financial and profitability situation of the company (Act C of 2000).

#### 2.2. Methods of analysis

During the analysis of the annual report, the asset and financial situation of the companies, as well as the profitability and efficiency of their management can be assessed using financial data. In order for a business to retain its assets in addition to making a profit, it is also very important to maintain its liquidity. Emphasis is placed on the examination of profitability in the examination of income-generating ability, while the examination of liquidity is given a prominent role in the analysis of the financial situation (Brealey & Myers, 2005). When performing the analysis, it is necessary to create indicators or complex indicator systems that best characterize the activity of the enterprise. When compiling the indicators, attention must be paid to the invariance of the content, since only when this is fulfilled will the data become truly comparable.



The analysis of the financial situation can be performed either by examining the composition of assets and liabilities or by means of indicators. During the compilation of the indicators, the so-called balance sheet matching principle must be taken into account, which means that the maturity of liabilities must be in conformity with the return on assets (ROA), i.e., it must finance committed assets with a permanent source (Siklósi & Veress, 2018).

The analysis of the financial situation is somewhat more complex than the analysis of the asset situation, during which the emphasis is on the examination of liquidity (Siklósi & Veress, 2018). Working capital management is closely related to short-term liquidity because one of the objectives of companies is to be able to continuously finance their activities and to use their internal resources properly. The most fundamental task of liquidity management is to minimize this risk, i.e., to develop an optimal funding structure. Consequently, great emphasis needs to be put on the analysis of the liquidity situation, and thus on the monitoring of liquid assets and short-term liabilities.

Profitability indicators show how effectively the company utilized the resources provided or made available by the owners and creditors, as well as the assets at its disposal. A business operates profitably when its revenues exceed its costs and expenses. For the analysis of profitability, the items of the profit and loss account are used, by means of which the profitability of the enterprise is examined (Bács, Böcskei, Fenyves, & Tarnóczi, 2015). indicators show Profitability how much of the revenue of a company in a given business year can be assigned to a unit of one of the categories the analysis is based on. In the case of profitability indicators, the benchmark can be the value of all assets, the value of equity, or the net sales revenue (Sütő, 2017a).

One of the most important fields of the analyses related to the firm operations is the investigation of the ownership concentration. South-Korean analyses showed that the increase of the ownership concentration has a positive effect on the firm performance (Lee, 2008). The relation between ownership and governance can enhance corporate performance by having a positive effect on corporate performance. But on the other hand, they can also have an effect on the stock prices (Füerst & Kang, 2004). If the company is interested in different geographical regions – globally – it can also have effect on the corporate a positive results (Iskandar-Datta & McLaughlin, 2007) and these kinds of activities are supported by the spreading tendencies of globalisation (Hussein, 2020).

#### 2.3. Situation of the retail sales of food

Zsidó (2018) found that examining the activities of the national economy, it can be stated that trade has been and still is of great importance now and in the future. The continuous development of infrastructure at all levels has helped achieve that currently nothing is impossible to acquire. It is no longer a challenge to buy different products from anywhere in the world. If national economies are analysed, the various statistics unquestionably show the importance and weight of trade activity. Examining the number of joint ventures in both analysed countries, the share of enterprises engaged in commercial activities is the largest, in Romania (2015 and 2016) 33.47% and 32.16%, respectively, and in Hungary 22.42%. The number and proportion of companies operating in the trade and car repair sector far exceed any other field of activity. The importance of this activity is also emphasized by the contribution of trade to gross value added, both in Hungary (2016) and Romania (2015). In 2016, in Hungary (as well as in Romania), the contribution of trade and car repair sector to the gross value added was 10.1%, it was the strongest sector after the processing industry (Zsidó, 2018).

Lukic and Lalic (2019) examined store chains that are also engaged in Serbian food retailing in terms of the development of earnings before interest, taxes, depreciation, and amortization (EBITDA). In their comparison, the three most important competitors in the Serbian food retail market were compared to chains with similar profiles in the United States and the United Kingdom. They found that the surveyed Serbian companies had a lower EBITDA margin than the chains surveyed in developed countries. In their view, it is primarily in the areas of capital, sales revenue and sales-related costs, such as operating costs, that the efficiency of Serbian food retailing can be increased, which could mean reserves for development in the longer term.

In their study, Jankuné Kürthy, Stauder, and (2012) examined the management of Györe enterprises engaged in food trade. The international and Hungarian situation of food retail companies was processed. It has been found that international food trade has undergone major changes both horizontally and vertically in recent decades. They concluded that there was a globally growing concentration of food trade in terms of supermarkets, hypermarkets, discount stores and wholesalers as well. Multinational companies often seek to strengthen their global presence by acquiring their competitors. This process is steadily accelerating, especially in developing countries (Jankuné Kürthy et al., 2012).

According to Sütő (2018), food retailing in Europe currently shows a diverse picture, as the store chains in addition to the largest hypermarkets include convenience stores open 24/7, family convenience stores and even street vendors. As a typical trend of the sector, an increase in concentration can be mentioned as well. At the same time, it can be observed that the position in the sales channel is strengthening, while the structure of the store network is changing. The development of food retail is determined not only by the spread of modern logistics solutions but also by the growing commercial brands. Rudawska and role of Bilinska-Reformat (2018) present the development of discount store chains in recent decades, through the introduction of a Polish example. The chains that have been popular in Poland since the change of regime initially focused on serving customers preferring low-cost but low-quality goods, but with the appearance of large international discount chains, such stores have been gradually repositioned, targeting so-called smart customers with their offers, who place great emphasis on quality. At the same time, it was also observed in



the food retail trade of Poland that delicatessens, which also offer a premium shopping experience and where a special supply of goods is available, however typically at very high prices, have also gained considerable popularity. Devlin, Birtwistle, and Macedo (2003) found that the perceptions of food-buying consumers have a significant effect on the turnover of individual store chains, thus understanding the decision-making process of consumers during shopping is vital to the stores.

However, it is also important to emphasize that there are significant differences in retail activity not only by country but also by region. Pénzes (2005) highlighted the relationship between consumer needs and corporate customer orientation as the reason for the differences and also drew attention to the influencing power of the degree of competition, the importance of the level and change of concentration and the extent of economic development, which among other factors, determine the operation of the retail sales of food. In their publication, Kunc and Križan (2018) also examined the size and turnover of retail units and consumer habits in an international comparison. It was found that consumer habits in the countries of the former Eastern bloc have changed with extreme speed, based on the examples seen in Western European countries, so that we can no longer speak of significant regional differences within Europe in this area. There are significant differences in business size per customer, with Central and Eastern Europe also approaching Western Europe in terms of business size, which clearly supports the proliferation of larger retail units. According to the publication of Bahn and Abebe (2017), modern food supply networks, including hypermarkets and supermarkets, as well as discount stores, have appeared in many segments around the world. These stores are available in many countries in both smaller and larger settlements, and after areas inhabited by the high-income population, they have appeared in middle-class residences and near the residences of the low-income population. However, such a spread of modern stores does not occur at the same rate everywhere.

In terms of points of sale, the largest share is represented by hypermarkets and supermarkets, as well as discount stores; their share in 2012 was 46.4%. The share of sales in retail chains is forecast to increase further. The expansion of the chains and the increase in their size also affect their internal operation (e.g., the establishment of regional warehouses, centralized procurement) (Sütő, 2017b). Jankuné Kürthy et al. (2012) emphasize that the strengthening of the dominant participants of the food retail trade sector and their market expansion are also supported by the change in the attitudes of consumers. This is because consumers are becoming more accustomed to and demanding the shopping opportunities offered by modern retail, and their attraction to foreign brands is growing as well (Jankuné Kürthy et al., 2012). "The expansion intensity of retail chains towards developing countries was further increased by the fact that the economic crisis hit developed markets the hardest, thus consumption growth in these countries slowed down" (Élelmiszer, 2011). Hilding-Hamann and Rønn Sørensen (2008)highlighted the response of wholesale and retail

companies in Europe to the arising challenges. According to their analysis, the involved players have improved their own competitiveness as a result of acquisitions and mergers. In addition, efforts were made to introduce new technologies and restructure supply processes to increase efficiency. Finally, they undertook to introduce new products to attract new consumers and consumer demands and to introduce innovations in personnel management (Hilding-Hamann & Rønn Sørensen, 2008).

Ever since the 2000s, the spread of modern sales channels has become faster. In Hungary, in the field of trade, the share of hypermarkets, supermarkets and discount chains, i.e., "modern retail", already exceeded 70% in 2011, while that of traditional retail units, including independent and other small grocery stores, and consumer markets has declined. A typical trend in Hungary was that food retail chains with international ownership structure acquired a large number of stores (Berezvai, 2014). Popp and Juhász (2011) predicted that the modern sales channels presented above, i.e., hypermarkets and supermarkets, as well as discount stores will continue to strengthen their market positions, mainly to the detriment of traditional commercial channels, i.e., small general grocery stores and markets. In order for a retail chain to play a decisive role in the food trade in Hungary, it is necessary to focus primarily on large sales volumes and lower consumer prices compared to traditional small shops. In the research of Špička (2016) the food retail sectors of six Central European countries were examined and it was found that among the countries in the region, Austria, the Czech Republic, Germany, Hungary and Poland, basically two dominant types of players appeared on the market. It is typical in the studied countries that in addition to nationally owned retail chains, multinational food retail chains also appear at the same time. Additionally, in relation to the Hungarian market, Špička (2016) also points out that in the study period ending in 2015, smaller food retail units owned domestically were still very popular. According to Bilková, Križan, Horňák, Barlík, & Zubriczký (2018), in the countries of the former Eastern bloc, before the change of regime, the service sector, including retail and food retail, lagged significantly behind Western European countries. After the regime change, a rapid catchingup process, often encouraged by capital investment by multinational companies, began, resulting in fewer disparities in the forms and networks of food retailing between western and eastern Europe than they were thirty years ago. Large shopping malls have emerged in Central and Eastern European as well as hypermarkets countries. and supermarkets, and large discount store chains, which also show a similar spatial distribution. Accordingly, urban areas have developed primarily in large cities, where supermarkets and diverse commercial offerings can be concentrated. In such larger settlements, consumers can choose from several alternatives in their consumer decisionmaking, and the increase in decision-making opportunities also encourages competition among food retailers. In contrast, in rural, mainly rural, commercial activities have expanded to a much lesser extent, and in exceptional cases, for example, they may even have deteriorated as a result of



declining consumer potential or declining population. All this is a problem mainly because the population of small settlements, which are typically living in worse conditions, is more exposed to the decisions of traders, as there may be no competition on the sales side at all locally. As Szenderák, Lakatos, and Nagy (2020) stated the state lost its role in retail and in the service sector overall in the countries of the former Eastern bloc. Fenvves, Nvul, Dajnoki, Bács, and Tömöri (2019) also underlined this scientific result. This tendency had a huge impact on the operation of the whole service sector. This circumstance is crucial because the success of retail companies can depend on the communication strategies and tools used as well (Kallier & Cant, 2016) because the media has a huge impact on everyday life (Kőmíves, 2013a) while its structure radically changed in the last decades (Kőmíves, 2013b) causing significant growth in the consumption of different digital contents (Kicova, Bartosova, & Popp, 2020).

According to Bilková et al. (2018), in the countries of the former Eastern bloc, before the change of regime, the service sector, including retail and food retail, operated lagging significantly behind as compared to Western European countries. After the regime changes in these countries, a rapid catching-up process began, often encouraged by capital investment by multinational companies, began, as a result of which there are fewer disparities in the forms and networks of food retailing between western and eastern Europe than there were thirty years ago. Large shopping malls have appeared in Central and Eastern European hypermarkets well countries, as as and supermarkets and large discount store chains emerged, which also show a similar spatial distribution. Accordingly, urban areas, where supermarkets and diverse commercial offerings can be concentrated have developed primarily in large cities. In such larger settlements, consumers are able to choose from multiple alternatives in their consumer decision-making, and the increase in decision-making opportunities also encourages competition among food retailers. In contrast, in rural areas, commercial activities have expanded to a much lesser extent, and in exceptional cases, for example, they may even have deteriorated as a result of declining consumer potential or declining population. All this is a problem mainly because the population of small settlements, which are typically living in worse conditions, is more exposed to the decisions of traders, as there may be no competition on the sales side at all on a local level. Secondly, it is also a serious problem that the chances of a healthy diet for those living in small settlements deteriorate significantly as a result of poorer supply conditions. In their research, Krivonos and Kuhn (2019) confirmed that investments in food production, food manufacturing and food retailing, especially in countries with weaker economic positions than developed countries, can also result in significant progress in food and nutrient supply towards the population. The growing international nature of food trade and the reduction of economic burdens associated with crossing borders can significantly improve access to a varied diet for the population of countries with small and less diverse crop structures. Ver Ploeg and Wilde (2018)

conducted their research in the United States, finding that it is not the geographical proximity of grocery stores to places of residence that has a decisive influence on how healthy the diets of different households are. Decisions concerning a healthy diet are primarily influenced by the level of education of people, their demographic situation and the commitment of the household members, in addition to food prices. Thus, it was emphasized that it is important to apply individual incentives and that the accessibility of individual stores also plays a key role.

According to Jankuné Kürthy et al. (2012), in order to reduce their procurement costs businesses interested in retail seek to build a direct relationship with food producers, thus reducing the importance of wholesale. It was also explained that if excessive concentration develops in a sector, it may have competition law implications. This typically causes various disadvantages for customers of a given sector, as well as for its competitors, as companies that are able to define the market as a whole often take the opportunity to dictate prices and other conditions. However, high concentration might complicate the position of smaller organizations on the supplier side even if it does not yet reach the level required for competition law relevance. A great solution to addressing competition risks is presented by Baresa, Ivanovic, and Bogdan (2017) when they examine the effects of the application of franchises of increasing importance in food retail. In their view, the risk of entering the market can be significantly reduced by smaller companies when they start their business with the permission of a larger franchise owner, which can thus realize the benefits of using the franchise in the market.

Nowadays, especially during the era the spread of the novel coronavirus — the COVID-19 pandemic — the role of health in human life became more important than ever before in the last century. Vagnoni, Oppi, and Cavicchi (2020) analysed the economic performance of the retail pharmacies in Italy — as retail units where people can buy drugs and other non-drug products as well. These products can play a crucial role in health prevention. As a result of their analysis Vagnoni et al. (2020) stated that the ownership structure has a great impact on the profitability of pharmaceutical retail companies. In this context, the evaluation of the financial indicators of the companies interested in the pharmaceutical industry is also necessary (Mulenga & Bhatia, 2020). The analysis of these companies is a unique combination of biochemical and humanitarian aspects (Tömöri & Bács, 2015) however during the economic analysis great attention has to be paid to the high-risk level related to the pharmaceutical industry (Fenyves et al., 2020). On the other hand, the role of healthy diets and healthy nutrition also increased. In this case, the retail sector can be responsible for making available more healthy food resources for people (Pfau, Müller, Bács, & Bácsné Bába, 2018). Changing lifestyles can have a positive effect on the health conditions (Fróna, Szenderák, & Harangi-Rákos, 2019; Fróna, 2020; Kiss, Oláh, Popp, & Lakner, 2020) while the food production is affected by several factors (Harangi-Rákos, Popp, & Oláh, 2017a; Harangi-Rákos, Popp, & Oláh, 2017b).



#### **3. RESEARCH METHODOLOGY**

During the development of the database, the scope within the EMIS database was narrowed to retail trade (44), then to food and beverage stores (445) based on the NAICS (North American Industry Classification System) classification system, and finally the sample was selected from grocery stores and supermarkets (4451). This classification actually corresponds to the non-specialised retail trade of food in Hungarian NACE (TEÁOR) (4711). This division includes stores engaged in the retail sale of a wide range of goods, in which the sale of food, beverages and tobacco products is the dominant and general in-store retail trade, where several other product groups are sold in addition to the predominant sales of food, beverages and tobacco products (Teáorszámok, 2020). The number of enterprises engaged in non-specialised retail trade in food stores within the EMIS database in the period between 2015 and 2018 is shown in Table 1 for both Hungary and Romania. In the scope of the analysis, the 100 companies with the highest sales revenue were selected in both countries in the period 2015-2018 from the entire database. The resulting database thus formed the basis of the analysis. Subsequently, the indicators obtained during the analysis were compared with the average value of the indicators characteristic of the entire database.

**Table 1.** Number of enterprises engaged in nonspecialised retail trade of food in Hungary and Romania in the period between 2015–2018 (pcs.)

Country	2015	2016	2017	2018			
Hungary	1,391	1,435	1,363	1,327			
Romania 5,904 5,777 5,710 5,519							
Source: Own editing based on the EMIS database.							

Among the methods of financial analysis in the study, the methods of analysing the asset, financial and profitability situation were used. suitable The statement is for examining the management of the company on the basis of the indicators calculated by its data. Based on this, it is possible to perform asset, financial, profitability analyses and efficiency of the business. The indicators can be calculated as the quotient of two data, they refer to a static state (Takács, 2009). From the data of the balance sheet and the income statement, ratios were formed, which were then analysed. Data from the asset and liability side of the balance sheet were used for the analysis of assets and finances. In the scope of the profitability analysis, in addition to the balance sheet data, the data of the profit and loss accounts of the companies were also required. Financial analyses most often examine financial ratios. However, analysts often make the mistake of calculating all possible indicators. However, experience shows that a few indicators usually only result in the information that is really required (Virág, 2004). In the scope of the analysis, the first 100 companies were selected from the EMIS database with the highest turnover in the examined period. The average indicators of the selected enterprises were calculated from the aggregated basic data. The balance sheet and profit and loss account are linked through profit after tax.

#### 4. RESEARCH RESULTS

# 4.1. Analysis of the financial situation of 100 companies engaged in non-specialised retail sales of food

Analysing the asset structure of Hungarian enterprises, it can be stated that during the examined period the share of fixed assets was higher, the share of fixed assets was above 50% in all four years. In 2016, fixed assets and current assets were present in almost equal proportions in the businesses, the highest ratio of fixed assets (57.27%) was in 2018.

During the examined period, the value of assets increased until 2017 and then in 2018 it approached the 2015 level. Nearly half of the current assets are accounted for by trade receivables and other receivables each year. The ratio of inventories within current assets was 30% during the analysed period. The ratio of cash funds increased during the four years, from 12% in 2015 to 18% in 2018.

In the next step within the analysis of the financial situation, the data on the liabilities side was analysed using vertical balance sheet analysis. In terms of the development of the capital strength indicator over time, growth can typically be rated favourably. In a basic case, a capital strength ratio of 60% would be expected. However, it is sector-specific, with an average of 48% for retail companies and 28% for wholesale companies. When assessing the development of the share of liabilities, the burden of debt capital and the fact that the company may become increasingly dependent on external financing as a result of a lasting increase in the ratio should not be ignored (Bíró et al., 2016). Examining the structure of liabilities, it can be stated that the ratio of equity to liabilities was around 50-50% in the period between 2015-2017. In the first two years of the study, liabilities accounted for more than 50% of corporate financing, and in 2017, equity was above 50% within the structure of liabilities. In 2018, the value of the capital strength ratio approached 60% (58.76%).

Examining the liabilities side, it can be said that the ratio of short-term liabilities to total liabilities was over 70% in the analysed period, and this ratio increased steadily, to 86% in 2018. Within short-term liabilities, trade payables accounted for the largest share, with a value of more than 70%.

Working capital essential is for the determination of the short-term financial condition of companies. Working capital analysis is one of the methods to assess the creditworthiness of a company and it also helps to better understand the normal business cycle of the company. To assess the structure of assets and the consistency of assets and liabilities, the fixed asset coverage ratio is used, by means of which the relationship between liabilities and fixed assets can be examined. When evaluating the indicator, the starting point is the requirement that the maturity of liabilities and the return on assets should be consistent with each other (Blumné Bán et al., 2011). Based on the indicators of the horizontal balance sheet analysis, it can be said that the value of the net working capital ratio of Hungarian enterprises was favourable, e.g., it had a positive value in



the analysed period. In the case of the coverage of fixed assets, in the period between 2015 and 2017, the equity alone did not cover the value of the fixed assets, the value of the indicator reached 100% in 2018. Completed with long-term liabilities, the value of fixed assets was already covered.

Regarding the asset composition of Romanian enterprises, it can be said that similarly to the asset structure of Hungarian enterprises, the proportion of fixed assets is higher within the assets of the enterprise. The ratio of fixed assets approached 60% in all four years of the analysed period. Compared to Hungarian companies, there was no change in the asset structure in Romania, while in Hungary the ratio of the two main asset groups was almost the same, in 2018 it was 57–43%, while in Romania the value was around 60–40%. In the case of Romanian enterprises, it can be observed that the assets of enterprises increased in the examined period, in 2018 it was 40% higher than in 2015.

Examining the value of fixed assets and current assets, it can be established that by 2016, compared to 2015, fixed assets increased by 7%, the value of current assets remained almost unchanged, it decreased by 1%. From 2016 to 2017, there was a large rate of growth of nearly 25% for both groups, and by 2018, the values increased by 8% compared to 2017. Within the stock of current assets, inventories are present in the largest proportion, followed by trade and other receivables. Another difference can be recorded here compared to the Hungarian data, as trade receivables accounted for almost 50% of current assets. The ratio of cash funds increased compared to the Hungarian trend, reaching 16% by 2018 from 12% in 2015.

Examining the structure of the liabilities side, it can be said that the ratio of equity to liabilities remained at almost the same value in the analysed period. In Romania, the capital strength ratio of enterprises increased in the examined period but was unable to reach the 50% ratio, it was 43% in 2015 and 48% in 2018. The same trend can be liabilities structure observed in the of the enterprises of both countries, but Hungarian companies achieved a more stable asset position, with an equity ratio of 52% in 2017 and 59% in 2018. Examining the composition of the liabilities side in more detail, it can be said that the largest share of liabilities is accounted for by short-term liabilities, with a proportion exceeding 70%, which was 78% in 2015 and 72% in 2018. Within short-term liabilities, trade payables represented a proportion of 87-88% between 2015 and 2017 and 78% in 2018.

The share of short-term liabilities within the liabilities of Hungarian companies increased compared to the trend in Romania and represented a higher share (86%) by the end of the period, within which trade payables were higher in Romania. Based on the indicators of the horizontal balance sheet analysis, it can be said that the value of the net working capital ratio of Romanian companies fluctuated during the analysed period.

It had a negative value in 2015 and 2016, which meant that the value of short-term liabilities exceeded the value of current assets. In 2017 and 2018, it was already characterized by a positive, favourable value. In the case of the coverage of fixed assets, equity alone did not cover the value of fixed assets in the period between 2015 and 2018, the value of the indicator was below 100% in all four years. It reached its highest value of 82% in 2018. Completed with long-term liabilities, in the case of the indicator "Coverage of fixed assets II", a value below 100% can be observed in 2015 and 2016, which means that long-term liabilities and equity together do not cover the value of fixed assets. The indicator exceeded 100% in 2017 and 2018.

### 4.2. Analysis of the financial situation of Hungarian and Romanian companies

In the course of analysing the financial situation, short-term and long-term liquidity were examined. In the case of Hungarian enterprises, it can be stated that the general liquidity ratio showed an upward trend in the analysed period (Figure 1). The value of the indicator was below the lower limit of the expected value according to the scientific literature, which means that current assets can cover the amount of short-term liabilities. The value of the cash-level liquidity ratio showed an increasing trend, but it was very low every year (0.13 in 2015, 0.22 in 2018).

Figure 1. Development of the liquidity of Hungarian enterprises





short-term liquidity of The Romanian enterprises in the case of the liquidity ratio and the quick liquidity ratio is behind the values recorded for Hungarian enterprises (Figure 2). The liquidity ratio shows an increasing tendency, its value does not even reach 1 in the first two years. A value above 1.1 was recorded in 2017 and 2018, which approaches the lowest value according to the literature in 2017. The value of the quick liquidity ratio is also low, but it is characterized by an increasing trend, reaching its highest value (0.69) in 2018, which was lower than the generally expected 1. The value of cash-level liquidity is similar to the values in Hungary, it is characterized by a low but increasing trend. Based on the study, it can be said that the companies of both countries have low liquidity values, but Hungarian companies have minimally better liquidity compared to the Romanian companies.



Figure 2. Development of the liquidity of Romanian enterprises



Source: Own calculation based on the EMIS database.

In the course of examining long-term liquidity, the value of the debt/equity ratio (Table 2) shows the amount of debt per unit of equity and the commitment of equity and external capital providers to finance the business. In the case of Hungarian enterprises, the value of the indicator decreases from year to year, which is also confirmed by the increase in the capital strength indicator and the development of total indebtedness. The value of the equity multiplier decreased because equity increased year after year (the rate of change was 25% in 2018 compared to 2015) and total assets did not change in magnitude between 2015 and 2018.

Table 2. Long-term liquidity indicators of Hungarian and Romanian enterprises in the period of 2015–2018

Name	2015	2016	2017	2018			
Hungarian enterprises							
Debt/equity ratio 1.15 1.10 0.94 0.70							
Total indebtedness	0.54	0.52	0.48	0.41			
Equity multiplier	2.15	2.10	1.94	1.70			
Romanian enterprises							
Debt/equity ratio 1.33 1.15 1.08 1.07							
Total indebtedness	0.57	0.54	0.52	0.52			
Equity multiplier	2.33	2.15	2.08	2.07			
Source: Own calculation based on the EMIS database							

Source: Own calculation based on the EMIS database

When examining the long-term liquidity of Romanian enterprises, the value of the debt/equity ratio shows a decreasing trend (Table 2). Its values are higher than the values of Hungarian companies, but the favourable trend is also confirmed by the capital strength and total indebtedness indicators. Similar findings were obtained for the equity multiplier. Based on the comparison of the data of the two countries, examination of the long-term liquidity also resulted in more favourable values for Hungarian companies.

#### 4.3. Analysis of the profitability situation of Hungarian and Romanian companies

In the analysis of the profitability situation, first, the development of the items in the profit and loss account was examined. The net sales revenue of Hungarian companies shows a continuous increase in the analysed period. There was an almost 30% increase in 2018 compared to 2015.

The growth rate of material expenses is the same as the growth rate of sales revenue, but personnel exceeds the growth of expenses the growth of the previous two factors. In 2015, Hungarian companies closed the year with a loss. All three profit categories in Table 3 were negative, and the negative result of operating (business) activities was also affected by other income and other expenses not included in the table.

<b>Table 3.</b> Profit factors of Hungarian enterprises in the
period between 2015–2018 (thousand EUR)

Name	2015	2016	2017	2018
Net sales revenue	6,108,339	7,039,180	7,569,768	7,886,064
Depreciation	145,389	150,793	160,307	167,017
Material expenses	5,148,021	5,963,273	6,376,899	6,604,484
Personnel expenses	535,676	614,163	687,393	745,333
Operating (business) profit	-196,035	102,391	287,631	206,662
Pre-tax profit	-169,175	149,489	283,260	213,690
After-tax profit	-177,179	135,035	269,970	202,440

Source: Own calculation based on the EMIS database.

The loss of pre-tax profit is lower than the loss of the operating profit, which indicates the positive value of the profit of financial operations. In the next three years of the study, the management of enterprises was characterized by a positive profit. The businesses reached the highest after-tax profit in 2017. The factors determining the results of Romanian companies are presented in Table 4. The values of the factors determining the categories are much higher than the ones recorded for Hungarian companies. The growth rate of net sales revenue was exceeded by the growth rate of depreciation and personnel expenses. Analysing the profit categories of Romanian enterprises, it can be stated that the enterprises closed the years with a negative profit of financial operations in most of the years. Unlike Hungarian companies, Romanian companies achieved positive and higher results in all profit categories every year.

Table 4. Profit factors of Romanian enterprises in the period between 2015-2018 (thousand EUR)

NTerrore	2015	2016	2017	2010
Name	2015	2016	2017	2018
Net sales revenue	9,182,184	10,197,593	11,176,871	12,299,365
Depreciation	168,772	184,918	201,813	283,559
Material expenses	7,403,555	8,093,960	8,691,035	9,487,804
Personnel expenses	536,636	646,078	758,367	857,189
Operating (business) profit	344,590	389,788	489,650	491,746
Pre-tax profit	331,077	375,181	460,510	476,758
After-tax profit	266,352	299,496	384,185	375,547

Source: Own calculation based on the EMIS database.

It concludes from the development of the results of Hungarian companies that in 2015 the profitability indicators of enterprises have a negative value. Of the years closed with a positive profit, the profitability indicators for 2017 are the most favourable (Table 5). The value of the return on sales (ROS) indicator is the lowest, followed by the value of the return on assets and finally, return on equity (ROE) had the highest value between 2016-2018. In the case of the profitability indicators of Romanian enterprises, the most favourable indicator values were recorded in 2017. In the examined period, higher indicator values were recorded for Romanian enterprises in almost all cases, except for the 2017 ROA and ROE indicator values. Table 5 and 6 show the indicator values of the 100 companies with the highest sales revenue in both countries compared to the average values of the companies operating in the industry.



Name	Indicators of the 100 enterprises with the highest sales revenue, dealing with non-specialised retail sales of food				Average indicators of the sector			
	2015	2016	2017	2018	2015	2016	2017	2018
Operating ROS	-3.21%	1.45%	3.80%	2.62%	-1.85%	1.83%	3.54%	2.62%
Pre-tax ROS	-2.77%	2.12%	3.74%	2.71%	-1.47%	2.14%	3.56%	2.69%
Net ROS	-2.90%	1.92%	3.57%	2.57%	-1.60%	1.90%	3.33%	2.52%
ROA	-5.28%	4.07%	7.60%	6.02%	-2.99%	3.98%	9.21%	6.16%
ROE	-11.37%	8.54%	14.72%	10.25%	-7.08%	9.02%	14.98%	10.58%
Liquidity rate	1.15	1.16	1.16	1.20	1.07	1.10	1.09	1.25
Quick liquidity rate	0.81	0.84	0.83	0.83	0.70	0.74	0.73	0.84

Table 5. Indicators of Hungarian enterprises and average indicators of the sector in the period of 2015–2018

Source: Own calculation based on the EMIS database.

The profitability indicators of the analysed companies show less favourable values compared to the sectoral average. In the period between 2016 and 2018, the analysed companies typically produce values that are similar in magnitude, but with 1–1 exceptions, typically higher than the industry average. The findings observed for profitability

indicators are also true for the liquidity ratio. Comparing the data of Romanian companies, it can be stated that the values of the indicators of the analysed companies in all cases exceed the values of the indicators typical of the sectoral average.

Table 6. Indicators of Romanian enterprises and average indicators of the sector for the period of 2015-2018

Name	Indicators of the 100 enterprises with the highest sales revenue, dealing with non-specialised retail sales of food			Av	Average indicators of the sector			
	2015 2016 2017 2018			2015	2016	2017	2018	
Operating ROS	3.75%	3.82%	4.38%	4.00%	1.36%	1.73%	2.44%	2.41%
Pre-tax ROS	3.61%	3.68%	4.12%	3.88%	3.19%	3.58%	3.94%	3.81%
Net ROS	2.90%	2.94%	3.44%	3.05%	2.51%	2.86%	3.26%	3.00%
ROA	5.94%	6.45%	6.69%	6.05%	5.18%	6.25%	6.39%	6.02%
ROE	13.82%	13.88%	13.91%	12.52%	13.67%	15.42%	14.62%	13.57%
Liquidity rate	0.96	0.99	1.15	1.11	1.01	1.02	1.17	1.15
Quick liquidity rate	0.58	0.54	0.71	0.69	0.56	0.53	0.68	0.67

Source: Own calculation based on the EMIS database.

In the case of the analysed companies, the pre-tax ROS indicator was always lower than the operating ROS indicator, which means that financial operations might expect losses in these companies. Based on the sectoral indicator, it can be said that the pre-tax ROS indicator significantly exceeds the values of the operating ROS indicator every year, which in this case can be explained by the profit of financial operations. Similar to the ROS indicator, the ROA indicator is higher for the analysed companies, and the ROE indicator is higher within the sector, except for 2015. The liquidity ratio shows more favourable values for the sector, while the quick liquidity ratio is almost the same in both cases.

#### **5. DISCUSSION OF THE RESULTS**

Based on the available data, the development of the asset, financial and profitability situation was examined in the period of 2015–2018. In the course of the analysis, it was found that compared to Hungarian companies, there was no change in the asset structure in Romania, while in Hungary the ratio of the two main asset groups was almost the same, in 2015 it was 57–43%, in Romania, it was around 60–40%. During the analysis of the ratios within current assets, a difference in Romania compared to the data in Hungary could also be observed, where trade receivables accounted for almost 50% of current assets. The ratio of cash funds increased compared to the Hungarian tendency, reaching 16% in 2018 from 12% in 2015. The same trend can be observed in the funding structure of enterprises in both countries, but Hungarian companies achieved a more stable asset position, with an equity ratio of 52% in 2017 and 59% in 2018. The ratio of short-term liabilities within liabilities of Hungarian companies increased compared to the trend in Romania and represented a higher share (86%) by the end of the period, within which trade payables were higher in Romania.

The short-term solvency of Romanian companies in the case of the liquidity ratio and the quick liquidity ratio lags behind the values experienced for Hungarian companies. The value of cash-level liquidity is similar to the values in Hungary, it is characterized by a low but increasing trend. Companies in both countries have low liquidity values, but Hungarian companies have slightly better liquidity than companies in Romania. Based on the examination of long-term liquidity, it can be said that the values of the debt/equity ratio in Romania are higher than the values of Hungarian companies, but the favourable trend is also confirmed by the capital strength and total indebtedness ratios. The same can be seen for the equity multiplier. Based on the comparison of the data of the two countries, the examination of long-term liquidity also showed more favourable values in the case of Hungarian companies. The values of the factors determining the results of Romanian companies are much higher than what could be experienced in the case of Hungarian companies. The growth rate of net sales revenue was exceeded by the growth rate of depreciation and personnel expenses. Analysing the profit categories of Romanian enterprises, it can be stated that the enterprises closed the years with negative profits for financial operations in most of the years. Unlike



businesses Hungarian companies, Romanian achieved positive and higher results in all profit categories every When year. comparing the indicators of Hungarian enterprises and the sector, it can be observed that in 2015, when the results of the analysed companies showed a loss, negative values can also be observed in the case of the profitability indicators of the sectoral average. In the period between 2016 and 2018, the analysed companies typically produce values of similar magnitude, but apart from 1–1 exceptions, typically higher than the industry average. The findings for profitability indicators can also be confirmed for the liquidity ratio. Comparing the data of the Romanian companies, it can be stated that the values of the ROS indicators of the companies in all cases exceed the values of the indicators typical of the sectoral average. For the analysed companies, the pre-tax ROS indicator always takes a lower value than the operating ROS indicator, which means that financial operations have to expect losses in the case of these companies. Based on the sectoral indicator, it can be said that the pre-tax ROS indicator significantly exceeds the values of the operating ROS indicator every year, which in this case can be explained by the profit from financial operations. Similar to the ROS indicator, the ROA indicator is higher for the analysed companies, and the ROE indicator is higher for the sector, except for 2015. The liquidity ratio shows more favourable values for the industry, while the quick liquidity ratio is almost the same in both cases.

#### **6. CONCLUSION**

Numerous studies have dealt and are dealing with the situation and structure of the food retail trade. It can be said that international food trade has undergone major changes both horizontally and vertically during the recent decades. Concentration in supermarkets, hypermarkets, discount stores, and wholesalers is increasing worldwide, resulting in more than 90% of food turnover coming from various retail chains. Among the above research, there are relatively few studies that have examined the economic situation of food retail businesses. The profitability of food retail is determined by intense competition between chains, for achieving economic stability and to attract consumers. In the presented research, the development of the property, financial and profitability situation in the period between 2015-2018 was analysed, using the data of the annual statements of Hungarian and Romanian companies. The main goal was a complex analysis of the 100 companies with the largest turnover in retail, as these companies are the dominant market players in the group of food retailers. The results obtained can be useful not only for the sector but also for individual actors. With the help of the analyses, gap-filling research was conducted. Examining the economic situation is of paramount importance for the long-term survival of businesses. The findings of the above study can be useful for researchers and professionals examining the retail sector who are trying to judge the future expected performance and situation of the sector. The availability of data for analysis appears to be a limiting factor in research on similar economic topics. Not all financial statement databases are public and available in all countries. The EMIS system (available to researchers of the University of Debrecen) makes it possible to carry out similar comparative research. The extension of the topic to the Visegrad countries could be a possible additional research area, and it is intended to extend it to the EU-27 level in the future. This reveals the situation of the sector, the perspectives and directions of its future development. Accordingly, further research may be even more detailed and complex, where correlations can already be explored in relation to the wealth, financial and income situation of the sector. The larger number of items can already ensure representativeness, but one must not forget about the possible errors and lack of data in the available financial statements. Long-term studies can also cover the analysis of differences between companies operating in different sectors. This is also noteworthy because one of the most important changes in the operation of various supply chains is the spread of the idea of sustainability. As a result, one of the most important key criteria for successful corporate operations has become the sustainability of supply chains, which also include individual companies. In practice, this means that more and more enterprises and large companies pay special attention to sustainability expectations in their operations. This is a most welcomed fact, but it could also reduce the gap in the extent of one of the most important and most emphasized benefits of short food supply chains that is environmental awareness.

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