# EMPIRICAL ANALYSIS OF THE EFFICIENCY OF WORKING CAPITAL MANAGEMENT AMONG HUNGARIAN FOOD INDUSTRY SMES

**Peter BAGDACS**

*Institute of Accounting and Finance, Faculty of Economics and Business, University of Debrecen, Debrecen, Hungary*
*bagdacs.peter@gmail.com*

**Abstract:** *The Hungarian food industry is one of the strategically important sectors of the national economy, playing a vital role in maintaining food security, supporting employment, and contributing to overall economic performance and value creation. In recent years, firms operating in this sector have faced an increasingly complex and uncertain economic environment shaped by accelerating inflation, rising energy costs, tighter financing conditions, and persistent disruptions in supply chains. These challenges have placed particular pressure on small and medium-sized enterprises, whose financial flexibility, liquidity reserves, and adaptive capacity are typically more limited than those of large corporations. Under such circumstances, the efficiency of working capital management has become a matter of central importance, as it directly affects firms' short-term solvency, operational stability, and profitability. The aim of this study is, on the one hand, to highlight the economic significance of the Hungarian food industry and, on the other hand, to examine empirically the relationship between working capital management efficiency and profitability among Hungarian food industry SMEs. The central research question is whether, and to what extent, the cash conversion cycle and its main components - inventory holding period, receivables collection period, and payables deferral period - affect firm profitability during the period between 2020 and 2024. The research adopts an empirical and quantitative approach, drawing on multi-year panel data to analyse the financial and operational characteristics of Hungarian food industry SMEs. The relevance of the study lies in the fact that the international literature has produced mixed findings regarding the relationship between working capital management and profitability, while longitudinal empirical evidence focusing specifically on Hungarian food industry enterprises remains limited. The expected findings of the study may contribute to a more nuanced understanding of the financial implications of working capital management and may offer valuable insights for corporate decision-makers, researchers, and economic policy actors alike, particularly in supporting decisions aimed at improving liquidity management, strengthening competitiveness, and enhancing financial stability.*

**Keywords:** *working capital management; cash conversion cycle; profitability; Hungarian food industry SMEs*

**JEL Classification:** *G12; G15; G32*

## 1. Macroeconomic Role and Sectoral Trends of the Hungarian Food Industry (2020-2024)

During the period under review, while the total number of enterprises in the national economy increased by approximately 5%, the food industry recorded an overall

decline of around 3% (KSH, 2026a). This suggests that although the sector has maintained its macroeconomic importance, the number of enterprises has not expanded dynamically; rather, a process of concentration and structural transformation can be observed. From the perspective of working capital management, this is particularly relevant, since in a narrowing or stagnant business environment competitiveness is determined less by market expansion and more by internal efficiency.

In addition to changes in the number of enterprises, employment trends also play a decisive role in assessing the sector's economic importance. The number of employees in the food industry rose from 102,461 in 2020 to 106,685 in 2024, representing an increase of approximately 4.1% (KSH, 2025). This growth exceeds the pace observed in the national economy as a whole and indicates that the food industry functioned as a stable, labour-retaining sector during the period examined.

Wages in the food industry increased dynamically across all subsectors during the period under review. In food manufacturing, average gross earnings rose from HUF 342,086 to HUF 560,078, representing an increase of nearly 63.7%, while in beverage manufacturing, they rose from HUF 439,261 to HUF 688,452, equivalent to a 56.7% increase. In tobacco product manufacturing, average earnings increased from HUF 490,645 to HUF 703,781, corresponding to a 43.4% rise (KSH, 2026b). This wage growth clearly indicates intensifying cost pressure within the sector, affecting a substantial share of firms' operating expenses. Rising labour costs increase short-term financing needs, particularly in those subsectors where inventory holding periods are longer or revenue realisation is delayed. Consequently, the efficiency of working capital management becomes a critical factor, as optimising the cash conversion cycle may help firms finance rising costs and mitigate liquidity tensions.

The production performance of the food industry displayed considerable fluctuation during the period examined. The sector's aggregate volume index exceeded the base year in both 2021 and 2022, reaching 108.5% and 106.8%, respectively, before declining markedly to 87.9% in 2023 and then showing a moderate recovery to 103.9% in 2024. This pattern clearly reflects the sector's sensitivity to changes in the broader economic environment. A subsectoral breakdown reveals substantial differences. Particularly high volatility can be observed in meat processing and the manufacture of meat and poultry meat products, where production showed significant fluctuations in several years. The manufacture of grain mill products recorded a sharp decline in 2023 to 80.7%, followed by outstanding growth to 121.7% in 2024, pointing to the cyclical nature of this activity. Fluctuations in production volume have a direct impact on firms' working capital management (KSH, 2026c). Output growth is typically accompanied by increases in inventories, receivables, and short-term financing needs, whereas a decline in output may lead to inventory accumulation and a deterioration in turnover efficiency.

It is also important to emphasise that investment activity in the food industry increased substantially during the period under review. The total value of investment performance in the sector rose from HUF 271,102 million in 2020 to HUF 482,610 million in 2024, representing an expansion of nearly 78%. Growth was particularly strong between 2021 and 2023, signalling intensified efforts toward capacity expansion and technological development, while in 2024 the pace of growth moderated, although the level of investment remained high (Agrárközgazdasági Intézet, 2024).

## 2. Presentation of the Characteristics of the Database Examined

The empirical analysis of the study is based on a firm-level panel database, which allows for a multidimensional examination of the relationship between working capital management and profitability.

### 2.1. Presentation of the Sample Selection and Filtering Criteria

The analysis is based on the EMIS database, which contains firm-level financial and operational data. During the sample selection process, only those enterprises were included that met the criteria applicable to small and medium-sized enterprises (SMEs).

The analysis covers the period between 2020 and 2024, which makes it possible to examine changes in the economic environment and their effects on corporate operations. Only those enterprises were included in the sample for which the required financial data were fully available for the entire period under review.

In the course of compiling the database, further filtering was carried out through the selection of food industry subsectors, thereby ensuring sectoral homogeneity and comparability. The selected subsectors cover the main segments of the food industry, including bakery products, meat processing, dairy processing, fruit and vegetable processing, as well as other food manufacturing activities.

During the data-cleaning process, incomplete, inconsistent, or potentially distortive observations were excluded in order to ensure that the final sample would provide a reliable basis for the empirical analysis. As a result, a balanced panel database was created, containing data for 795 food industry SMEs over the period from 2020 to 2024.

### 2.2. Composition of the Sample by Region, Sector, and Firm Size

Table 1 presents the regional distribution of the food industry SMEs included in the sample.

**Table 1:** Regional Distribution of the Sample

| Region | Number of firms | Percentage share |
|---|---|---|
| Central Hungary | 269 | 33.8 |
| Southern Great Plain | 145 | 18.2 |
| Northern Great Plain | 140 | 17.6 |
| Central Transdanubia | 71 | 8.9 |
| Western Transdanubia | 62 | 7.8 |
| Southern Transdanubia | 60 | 7.5 |
| Northern Hungary | 48 | 6.0 |
| Total | 795 | 100,0 |

Source: own compilation based on EMIS database

Based on the data presented in Table 1, it can be concluded that the regional distribution of the sample is relatively concentrated. The largest share of enterprises is located in Central Hungary, which accounts for 33.8% of the sample, indicating a significant spatial concentration of firms operating in the sector. This is followed by the

Southern Great Plain with 18.2% and the Northern Great Plain with 17.6%, meaning that these three regions together account for nearly 70% of the total sample.
The shares of the remaining regions are considerably lower. Central Transdanubia accounts for 8.93%, Western Transdanubia for 7.8%, Southern Transdanubia for 7.55%, and Northern Hungary for 6.04%. This distribution suggests that the presence of food industry SMEs is not evenly spread across the country but is instead linked to specific economic centres and agriculturally important regions.
In order to explore sector-specific characteristics, it is also important to present the activity structure of the sample under examination. Table 2 illustrates the subsectoral distribution of the food industry SMEs included in the sample.

**Table 2**: Distribution of the Food Industry SMEs Included in the Sample by Subsectors

| Subsector | Number of firms | Percentage share |
|---|---|---|
| Manufacture of bakery products and pasta | 303 | 38.1 |
| Processing and preserving of meat, and production of meat products | 201 | 25.3 |
| Manufacture of other food products | 121 | 15.2 |
| Processing and preserving of fruit and vegetables | 86 | 10.8 |
| Manufacture of vegetable and animal oils and fats | 55 | 6.9 |
| Dairy processing | 29 | 3.6 |
| Total | 795 | 100.0 |

Source: own compilation based on EMIS database

Based on Table 2, it can be concluded that the subsectoral distribution of the sample is highly concentrated. The largest share is represented by the manufacture of bakery products and pasta, which accounts for 38.1% of the total sample, followed by meat processing and the production of meat products with a share of 25.3%. Together, these two largest subsectors account for more than 63% of the sample, indicating the main structural concentrations within the food industry. The medium-weight subsectors include the manufacture of other food products with 15.2%, and the processing and preserving of fruit and vegetables with 10.8%, while the manufacture of vegetable and animal oils and fats accounts for 6.9% and dairy processing for 3.6%. This distribution suggests that the sample covers the major fields of activity within the food industry, although the dominant weight of the leading subsectors remains significant.

Table 3 presents the distribution of the food industry SMEs included in the sample by firm size.

**Table 3**: Distribution of the Sample by Firm Size

| SME category | Number of firms | Percentage share |
|---|---|---|
| Micro-enterprises | 98 | 12.3 |
| Small enterprises | 479 | 60.3 |
| Medium-sized enterprises | 218 | 27.4 |
| Total | 795 | 100.0 |

Source: own compilation based on EMIS database

Based on the data presented in Table 3, it can be concluded that the sample is dominated by small enterprises, which account for 60.3% of the total and therefore represent the most important group in the analysis. Medium-sized enterprises also constitute a substantial share, amounting to 27.4%, while micro-enterprises account for 12.3%, which may be considered relatively low. This size distribution suggests that the sample is primarily concentrated on firms that are more stable in operational terms and possess greater resource capacity.
Differences in firm size are also crucial from the perspective of operational efficiency, resource allocation, and financial structure. Larger firms generally operate with more developed organisational systems, broader financing opportunities, and more efficient resource allocation, whereas smaller enterprises are more likely to face liquidity constraints and financing difficulties. Accordingly, the role of working capital management differs across size categories: for smaller firms, the primary concern is maintaining continuous liquidity, while for larger enterprises the emphasis is more strongly placed on optimising operational efficiency. This, in turn, has a direct effect on the cash conversion cycle and, through it, on profitability.

## 3. Research Hypothesis and Methodological Framework

The aim of this section is to present the theoretical and methodological framework of the study. In this context, the research hypothesis is introduced, along with the empirical methodology applied in the analysis, with particular emphasis on the fixed-effects panel regression approach.

### 3.1. Formulation of the Research Hypothesis

The central objective of the study is to examine the relationship between the efficiency of working capital management and corporate profitability among small and medium-sized enterprises (SMEs) in the food industry. In the literature, the Cash Conversion Cycle (CCC) is widely used as a key indicator (Ashraf, 2012;. Attari, 2012; Ponsian et al., 2014), as it provides an integrated measure of the efficiency of inventory, receivables, and short-term liabilities management.
The relationship between working capital management and profitability has been extensively investigated over the past decades. Among the seminal empirical studies, the work of Shin and Soenen (1998) is particularly noteworthy, as they found a significant negative relationship between the length of the cash conversion cycle and profitability based on data from U.S. firms. Similarly, Deloof (2003) reached comparable conclusions in his analysis of Belgian firms, showing that shorter receivables and inventory cycles are associated with higher profitability. These findings are further supported by Lazaridis and Tryfonidis (2006), as well as Raheman and Nasr (2007), who also document a significant relationship between working capital management and profitability.
Subsequent empirical studies have confirmed these findings across different countries and samples. International comparative analyses generally indicate a negative relationship between the cash conversion cycle and firm performance, although in some cases this relationship exhibits a non-linear pattern. For example, Chang's (2022) global analysis suggests that both excessively low and excessively high levels of working capital can be detrimental, implying the existence of an optimal level.
The literature also highlights that the efficiency of working capital management affects not only profitability but also firm value and liquidity. Efficient inventory and receivables

management reduce capital tied up in operations and improve cash flow, while excessive working capital levels may have a value-destroying effect.

At the same time, several studies point out that the relationship is not necessarily linear. Some findings indicate an inverted U-shaped relationship between working capital management and profitability, suggesting that there exists an optimal cash conversion cycle at which profitability is maximized (Baños-Caballero et al., 2012).

Based on the above theoretical and empirical findings, the following hypothesis is formulated in this study:

H1: There is a significant negative relationship between the cash conversion cycle and profitability in food industry SMEs.

3.2. Theoretical Background of Panel Regression Models

The dataset applied in this study has a panel structure, consisting of observations of multiple firms over several years. This type of data structure allows for the simultaneous analysis of temporal dynamics and cross-sectional differences across firms.

Compared to traditional cross-sectional or time-series methods, panel data analysis enables the control of unobserved individual effects and reduces potential estimation bias. Consequently, the use of panel regression models is justified, as they are suitable for controlling firm-level heterogeneity and for providing more accurate estimates of causal relationships (Baltagi, 2008).

The primary objective of panel regression models is to simultaneously account for both the cross-sectional (between firms) and time-series (over time) dimensions. The general form of the model can be expressed as follows:

$Y_{it} = \beta \cdot X_{it} + \alpha_i + \varepsilon_{it}$

ahol:

$Y_{it}$: dependent variable

$\beta$: coefficient measuring the effect of the explanatory variable on the dependent variable

$X_{it}$: explanatory variable

$\alpha_i$: individual-specific, unobserved effect

$\varepsilon_{it}$: error term

One of the most important features of panel models is the treatment of individual effects, which can be addressed through two main approaches: fixed effects (FE) and random effects (RE) models. The fixed effects model assumes that firm-specific, time-invariant but unobserved factors are correlated with the explanatory variables. Accordingly, the model explicitly controls for these effects, typically by eliminating them through transformation. As a result, the estimates remain unbiased even when individual effects are correlated with the regressors; however, the model does not allow for the estimation of time-invariant variables. In contrast, the random effects model assumes that individual effects are uncorrelated with the explanatory variables and are instead incorporated into the error term as a random component. This allows for more efficient (lower variance) estimates and enables the identification of time-invariant variables. However, if the independence assumption is violated, the estimates become biased (Wooldridge, 2002).

The application of the fixed effects panel regression model in this study is justified from both methodological and economic perspectives. It is reasonable to assume that firm-specific, time-invariant but unobservable factors influence both working capital management and profitability, and that these factors are correlated with the explanatory variables included in the model. In the case of food industry SMEs, such

unobserved effects include, for example, the quality of management and decision-making practices, organizational and operational structure, market position and competitiveness, the stability of supplier and customer relationships, the level of technological development, and the degree of integration into supply chains. These factors are persistent over time, vary across firms, and simultaneously affect both the cash conversion cycle and profitability; therefore, ignoring them would lead to biased estimates. The fixed effects model effectively controls for these time-invariant unobserved heterogeneities, thereby reducing omitted variable bias and providing more reliable estimates. Furthermore, the primary objective of the study is to examine within-firm changes over time, that is, to assess how variations in working capital management affect profitability within a given firm. This objective is well aligned with the estimation approach of the fixed effects model.
Based on these considerations, the fixed effects approach is more appropriate for the purposes of this study and the characteristics of the dataset than the random effects model.

### 3.2. Model Specification and Variables

The applied model can be expressed in the following mathematical form:
$ROA_{it} = \beta_1 \cdot CCC_{it} + \beta_2 \cdot \ln(\text{Total Assets}_{it}) + \beta_3 \cdot \text{Leverage}_{it} + \beta_4 \cdot \text{Liquidity}_{it} + \beta_5 \cdot \text{Firm Age}_{it} + \alpha_i + \varepsilon_{it}$
$ROA_{it}$ (Return on Assets): a measure of profitability defined as the ratio of net income to total assets; it captures the firm's ability to generate earnings and serves as the dependent variable in the model. The index i denotes individual firms, while t represents the time dimension.
$\beta_1$: the regression coefficient associated with the cash conversion cycle, indicating the direction and magnitude of its effect on profitability.
$CCC_{it}$ (Cash Conversion Cycle): a measure of working capital management efficiency, calculated as the sum of the inventory period and receivables collection period minus the payables deferral period; this is the main explanatory variable of the model.
$\beta_2$: the coefficient associated with firm size, capturing its effect on profitability.
$\ln(\text{Total Assets}_{it})$: the natural logarithm of total assets, used as a proxy for firm size; log transformation reduces the influence of extreme values and helps linearize relationships.
$\beta_3$: the coefficient associated with leverage, measuring the impact of capital structure on profitability.
$\text{Leverage}_{it}$: the ratio of total liabilities to total assets, reflecting the firm's level of indebtedness and financial risk.
$\beta_4$: the coefficient associated with liquidity, capturing its effect on profitability.
$\text{Liquidity}_{it}$: a measure of short-term solvency, defined as the ratio of current assets to current liabilities.
$\beta_5$: the coefficient associated with firm age, capturing the effect of experience and operational maturity on profitability.
$\text{Firm Age}_{it}$ (AGE): the number of years since the firm's establishment, used as a proxy for experience and stability.
$\alpha_i$: the individual-specific, time-invariant unobserved effect controlled for in the fixed effects model.
$\varepsilon_{it}$: the error term capturing time-varying, unobserved factors not included in the model.
The main explanatory variable of the model is the cash conversion cycle, while the remaining variables are included as control variables. These control variables serve

to isolate the effects of other firm-specific factors influencing profitability. Firm size is measured based on total assets and can be interpreted as a proxy for economies of scale and access to resources. The leverage ratio reflects the capital structure and the level of financial risk, which may affect both profitability and financing opportunities. The current ratio measures short-term solvency and serves as an important indicator of the firm's liquidity position. Finally, firm age represents operational experience and stability, which may influence performance and risk profile.

The selection of variables is grounded in the relevant literature, which suggests that profitability is determined not only by the efficiency of working capital management but also by firm size, financial structure, and liquidity conditions. In this specification, the model allows for the isolated examination of the effect of the cash conversion cycle while controlling for structural differences across firms.

Table 4 presents the estimation results of the fixed-effects panel regression model.

**Table 4**: Results of the fixed-effects panel regression

| Variable | Coefficient | Std. Error | p-value | Signif. |
|---|---|---|---|---|
| CCC (cash conversion cycle) | -0.000108 | 0.000078 | 0.163 | n.s. |
| Firm size (total assets) | 0.043239 | 0.016377 | 0.008 | *** |
| Leverage | -0.535917 | 0.089825 | 0.000 | *** |
| Current ratio | -0.001278 | 0.002949 | 0.664 | n.s. |
| Firm age | 0.000078 | 0.000630 | 0.901 | n.s. |
| Number of observations | | | | 3975 |
| Number of firms | | | | 795 |
| $R^2$ (within) | | | | 0.2399 |
| F-statistic: | | | | 26.81 |
| Prob > F | | | | 0.000 |

Note: *** p<0.01, ** p<0.05, * p<0.1, n.s. = not significant
Source: own calculations based on firm-level data from the EMIS database

The overall significance of the model is confirmed by the F-statistic (26.81) and its corresponding p-value (0.000), indicating that the explanatory variables jointly have a statistically significant effect on profitability. The explanatory power of the model can be considered moderate, as the within $R^2$ value of 0.2399 suggests that approximately 24% of the within-firm variation is explained by the model.

The main explanatory variable, the cash conversion cycle (CCC), has a negative coefficient (–0.000108), but it is not statistically significant (p=0.163). This implies that no significant relationship can be identified between working capital management efficiency and profitability in the examined sample; therefore, the H1 hypothesis is not supported in this specification.

Among the control variables, firm size shows a positive and statistically significant effect (β=0.043239; p=0.008), suggesting that larger firms tend to achieve higher profitability, likely due to economies of scale and more efficient resource allocation. In contrast, leverage exhibits a significant negative relationship with profitability (β= –0.535917; p=0.000), indicating that higher indebtedness adversely affects financial performance.

The current ratio and firm age do not show statistically significant effects on profitability, suggesting that these factors do not play a decisive role in explaining performance within the sample.
The non-significant result of the aggregate cash conversion cycle justifies a more detailed, component-level analysis of working capital management. Accordingly, the model is modified by replacing the CCC with its main components - days sales outstanding (DSO), days inventory outstanding (DIO), and days payable outstanding (DPO) - which are included separately as explanatory variables. This approach allows for the identification of which specific elements of working capital management have a measurable impact on firm profitability.
The results of this estimation are presented in Table 5.

**Table 5**: Results of the component-based fixed-effects panel regression

| Variable | Coefficient | Std. Error | p-value |
|---|---|---|---|
| Days Sales Outstanding (DSO) | -0.000092 | 0.000113 | 0.415 |
| Days Inventory Outstanding (DIO) | -0.000404 | 0.000123 | 0.001 |
| Days Payable Outstanding (DPO) | 0.000060 | 0.000090 | 0.503 |
| Firm size (total assets) | 0.046596 | 0.016985 | 0.006 |
| Leverage | -0.525638 | 0.068166 | 0.000 |
| Current ratio | -0.001470 | 0.002972 | 0.621 |
| Firm age | 0.000041 | 0.000623 | 0.947 |
| Number of observations | | | 3975 |
| Number of firms | | | 795 |
| $R^2$ (within) | | | 0.2430 |
| F-statistic | | | 22.85 |
| Prob > F | | | 0.000 |

Note: *** p<0.01, ** p<0.05, * p<0.1, n.s. = not significant
Source: own calculations based on firm-level data from the EMIS database

Based on the results presented in Table 5, the overall significance of the model remains confirmed (F=22.85; p=0.000), while the explanatory power slightly improves ($R^2$=0.2430), indicating that the component-based approach provides a more precise explanation of profitability.
Among the components of working capital management, only the inventory period (DIO) shows a statistically significant negative relationship with profitability (β= –0.000404; p=0.001). This suggests that inventory turnover plays a key role in the performance of food industry firms: a longer inventory period increases capital tied up in operations and reduces profitability. In contrast, the receivables collection period (DSO) and the payables deferral period (DPO) do not exhibit statistically significant relationships with profitability, indicating that their effects are less pronounced in the examined sample.
The results of the control variables are consistent with the previous model: firm size continues to have a positive and significant effect, while leverage shows a significant

negative relationship with profitability. The current ratio and firm age remain statistically insignificant in this specification as well.

## 3. Conclusion

The aim of this study was to present the macroeconomic role of the Hungarian food industry and to empirically examine the relationship between working capital management and profitability among small and medium-sized enterprises in the sector over the period 2020-2024. The macroeconomic analysis revealed that the sector plays a stable and significant role in the economy; however, it is characterized by considerable cost pressure, volatile production dynamics, and structural transformation, all of which increase the importance of efficient working capital management.

The empirical results indicate that no statistically significant relationship can be identified between the cash conversion cycle and profitability in the examined sample; therefore, the proposed hypothesis is not supported in this form. At the same time, the component-based analysis shows that the individual elements of working capital management affect firm performance differently: the inventory period has a significant negative impact on profitability, while the management of receivables and payables does not exhibit an independently measurable effect.

Based on the findings, it can be concluded that the impact of working capital management is not uniform but structural in nature, with inventory management playing a particularly important role. In addition, the significant effects of firm size and capital structure suggest that profitability is determined not only by operational factors but also by financial conditions.

## References

1. Agrárközgazdasági Intézet (2024): Agrárgazdasági statisztikai zsebkönyv 2024. Available at: https://www.aki.gov.hu (accessed: 23 April 2026).
2. Ashraf, C. K. (2012): The relationship between working capital efficiency and profitability. Journal of Accounting and Management, (3), pp. 21-45.
3. Attari, M. A. and Raza, K. (2012): The optimal relationship of cash conversion cycle with firm size and profitability. International Journal of Academic Research in Business and Social Sciences, 2(4), pp. 189-203.
4. Baltagi, B. H. (2008): Econometric Analysis of Panel Data. 4th ed. Chichester: John Wiley & Sons.
5. Baños-Caballero, S., García-Teruel, P. J. and Martínez-Solano, P. (2012): How does working capital management affect the profitability of Spanish SMEs? Small Business Economics, 39(2), pp. 517–529.
6. Chang, C.-C. (2022): Cash conversion cycle and corporate performance: Global evidence. In: Encyclopedia of Finance. Cham: Springer International Publishing, pp. 2597-2626.
7. Deloof, M. (2003): Does working capital management affect profitability of Belgian firms? Journal of Business Finance & Accounting, 30(3-4), pp. 573-588.
8. KSH (2026a): KSH Monitor – Vállalkozások. Available at: https://www.ksh.hu/heti-monitor/vallalkozasok.html (accessed: 23 April 2026).
9. KSH (2026b): Gyorstájékoztató. Available at: https://www.ksh.hu/gyorstajekoztatok/ker/ker2512.html (accessed: 23 April 2026).

10. KSH (2026c): Az ipari termelés és értékesítés volumenindexei. Available at: https://www.ksh.hu/stadat_files/ipa/hu/ipa0032.html (accessed: 23 April 2026).
11.Lazaridis, I. and Tryfonidis, D. (2006): Relationship between working capital management and profitability of listed companies in the Athens Stock Exchange. Journal of Financial Management and Analysis, 19(1), pp. 26-35.
12. Ponsian, N., Chrispina, K., Tago, G. and Mkiibi, H. (2014): The effect of working capital management on profitability. International Journal of Economics, Finance and Management Sciences, 2(6), pp. 347-355.
13. Raheman, A. and Nasr, M. (2007): Working capital management and profitability: Case of Pakistani firms. International Review of Business Research Papers, 3(1), pp. 279–300.
14. Shin, H.-H. and Soenen, H. L. (1998): Efficiency of working capital and corporate profitability. Financial Practice and Education, 8(2), pp. 37–45.
15. Wooldridge, J. M. (2002): Econometric Analysis of Cross Section and Panel Data. Cambridge, MA: MIT Press.