

Interrelation of working capital management and efficiency of the company

Sabina Mammadova^{1*}

¹Ph.D. Candidate, Azerbaijan State University of Oil and Industry, Baku, Azerbaijan

Article History

Received: 29 December 2020

Revised: 09 March 2021

Accepted: 11 March 2021

Available Online: 15 March 2021

Keywords: Efficiency of the company, working capital structure, capital management, financial cycle, liquidity

JEL classification: D24, F21

Citation: Mammadova, S. (2021). Interrelation of working capital management and efficiency of the company, *Review of Socio-Economic Perspectives*, Vol 6(1), 13-22.

Abstract

Effective management of working capital gives the company the opportunity to create its value by reducing the need for additional funding, increasing profitability, improving liquidity, and increasing the efficiency of operations. Working capital acts as a lever for the creation of value and value for its owners. An effective management model of working capital allows a company to gain competitive advantage and increase the well-being of shareholders. The relevance of the study is due to the need for quality management in the short-term aspects of the company's activities to achieve its maximum effectiveness. The purpose of this article is to determine the nature of the relationship between the components of working capital and the effectiveness of the company in the Azerbaijan market. Working capital management is an important aspect of management aimed at increasing the competitiveness of a company and creating value for business owners and key stakeholders in the long run. To achieve long-term goals, the company must be paid and provide a level of profitability, satisfying stakeholders. As part of the study, as an indicator of the quality of working capital, the length of the financial cycle of the company was used, as well as the period of turnover of reserves, accounts payable and accounts receivable. There was also a criterion for the effectiveness of the company - an indicator of return on assets (ROA). As a basis for research, a selection of Azerbaijan small and enterprises of various industries, except for companies involved in the financial sector and the service sector, from 2015 to 2019. The course of the investigation showed that there is a significant reciprocal relationship between the long financial cycle of the company and the effectiveness of its activities. In the period between the turnover of the creditor's indebtedness and the effectiveness of the company's activity, a reciprocal relationship was also identified. With the growth of the period of turnover of receivables, the efficiency of the company's activities falls. The periodic turnover of the company's stocks and the effectiveness of its activities are also reflected in the reciprocal relationship.

1. Introduction

Working capital management plays a significant role in the financial management and planning of an enterprise, as it is directly related to the management of short-term assets and liabilities. The quality of use of working capital allows you to increase or decrease the company's performance, depending on what goals the company pursues now.

Currently, there are several approaches to working capital management with different goals. First, working capital management allows the company to provide a continuous flow of investments in its current assets to maintain a balance between assets and liabilities, and therefore, to ensure coverage of various operating expenses. It seems natural that a company needs a certain minimum amount of cash and inventory to meet a variety of day-to-day tasks, from paying payroll to acquiring various licenses or securing its office space. The next important goal is to ensure the constant growth of the company, which, of course, includes the growth of the company's sales. Along with the growth of the company, it needs to increase the resources on which this growth will be based, which leads to the need to increase investments in inventories, receivables, etc. The third goal is to finance additional costs that arise during critical periods of the company's seasonal cycles. In this case, additional

* E-mail: sabinagluckl@yahoo.com & ORCID: <https://orcid.org/0000-0001-7589-4000>

DOI: <https://doi.org/10.19275/RSEP104>

Article Type: Original Paper

funds ensure the fulfillment of guarantees for obligations arising in the periods preceding the direct use of raw materials or materials for these obligations acquired. Finally, the competent use of working capital contributes to the internal development of the company to support its competitiveness by improving the quality of products, business processes of the company and entering new markets. All costs associated with these aspects are often small, but constant, which determines the use of working capital for these purposes.

An effective working capital management policy of a company includes several components: inventory management, accounts payable and receivable. This fact, in turn, means that the quality of working capital management depends not only on the period of capital turnover, but also on its components. The increased turnover of these components reflects a better use of the investments made in them. The competent use of these components will allow the company to reduce its dependence on less available external sources of financing, as well as increase the company's performance.

Thus, all criteria for the efficiency of working capital can be divided into four main components: the length of the financial cycle, the period of turnover of accounts payable, the period of turnover of stocks, the period of turnover of receivables.

2. Literature review

At the present stage of development of market relations, the constant development of competition requires companies to search, develop and improve algorithms for optimal business management. Because of this, the developed and applied models and methods of capital management are one of the most important competitive advantages of the company. Working capital management is one of the important areas of a company's financial management. According to many experts, effective working capital management is to ensure financing of funds required for the current activities of the enterprise.

There are many studies on working capital management. The authors studied the individual components of working capital, as well as the impact of the operating and monetary cycles on the company's performance.

The problem of managing the working capital of companies is of relevance for a number of reasons. Firstly, for all companies, the issue of effective working capital management is quite acute since the level of solvency and financial stability depends on the working capital management policy. Secondly, the problem of increasing operating efficiency for companies comes to the fore in the emerging crisis phenomena in the global and Azerbaijani economies, when companies need to improve the working capital management system to maintain a high level of solvency and financial stability, which in turn will lead to increased competitiveness and strengthening the market position of the company.

Most of the studies revealed a significant inverse relationship between the criteria for working capital and the performance of the firm. Thus, M. Deloof examines the relationship between working capital, expressed by the financial cycle, as well as accounts receivable and payable and the company's performance on a sample of non-financial Belgian firms. The author found that reducing accounts receivable increases the company's profitability, while at the same time, smaller firms prefer to stretch the period of its repayment. Along with this, no relationship was found between the length of the financial cycle and the company's performance. (Deloof, 2003)

Subsequently, in the work of other researchers (J. García-Teruel and P. Martínez-Solano), studying the impact of working capital management on a sample of Spanish small and medium-sized enterprises, it was found that, along with the reduction of accounts receivable, the growth of the company's profitability is affected by and shortening the length of the financial cycle. (García et. al., 2007)

The next work on this topic was the study by H. Nobanee and M. Abdullatif, in which the authors study the influence of the financial cycle of an enterprise on its profitability on a sample of Japanese firms. As a result, the authors found a significant inverse relationship for companies in all industries, except for the consumer goods industry. (Nobanee et. al., 2011)

Several authors analyzed the relationship between financial cycle and rentability of the enterprises. The conclusions of the authors of the works certainly does not mean that issues related to working capital management are not relevant for large enterprises. It would be more correct to say that working capital management has different strategic importance for these groups of enterprises. For small ones, working capital management allows you to solve problems of survival, and for large ones - to increase efficiency. (Grablovski, 1984; Peel, Wilson, 1996)

In the work of A. Pais and G. Miguel, studying the relationship between working capital management and the performance of Portuguese firms, it was found that an increase in the company's profitability is possible by

reducing accounts payable and receivable, as well as reducing inventories. The non-linear relationship between these indicators was also considered and the analysis of the relationship, taking into account industry effects, which confirmed the results obtained earlier. (Pais, Gama, 2015)

In a study by P. García-Teruel, P. Martínez-Solano, and S. Baños-Caballero on a sample of Spanish small and medium-sized companies, in addition to previous studies, the possibility of a non-linear relationship between working capital management indicators and company profitability was examined. As a result, it was determined that the relationship between these indicators has a concave character and there is an optimal value of working capital that maximizes profit, and companies deviating from the optimum reduce their profitability. (García et. al.,2012)

P. García-Teruel, P. Martínez-Solano and S. Baños-Caballero continue their research on the nonlinear relationship between working capital management and company profitability. So, the authors, studying a sample of nonfinancial UK firms conclude that there is a significant concave relationship between working capital investment and firm performance. It was also found that the optimal level of working capital for companies prone to financial constraints is lower. (García et. al.,2014)

Thus, in the work of J. Ebben and C. Johnson, devoted to the relationship between the financial cycle and liquidity, invested capital and the profitability of the company, the authors determined that a shorter financial cycle increases the company's performance. (Ebben, Johnson, 2011)

The earlier findings are confirmed by the work of H. Lyngstadaas and T. Berg. As a result of the study of the relationship between working capital management and the profitability of Norwegian companies, the authors found that the shortening of the financial cycle really has a positive effect on the performance. Moreover, these results were corroborated by industry-specific analyzes and nonlinear relationships. (Lyngstadaas, Berg, 2016)

In general, the results presented in (Padachi, 2006; Garcia-Teruel, Martinez-Solano, 2007), are consistent with the conclusions of (Jose, Lancaster, Stevens, 1996; Shin, Soenen, 1998; Lazaridis, Tryfonidis, 2006): all other things being equal, it is beneficial for firms to reduce the size of their financial cycle in order to increase profitability. Recent studies on this topic have been carried out on the material of the markets of developing countries: on the Malaysian market (Zariyawati et al., 2009), on the Nigeria market (Falope, Ajilore, 2009), on the Kenyan market (Mathuva, 2010). In general, the results obtained are in line with previous studies. They demonstrate that there is an inverse relationship between the financial cycle and a firm's return on assets.

Thus, the analysis of the empirical and theoretical literature on the topic under study made it possible to formulate the following hypotheses.

Hypothesis 1. There is an inverse relationship between the length of the financial cycle of the company and the profitability of its activities.

Hypothesis 2. There is a positive relationship between the period of accounts payable turnover and the results of the company.

Hypothesis 3. There is an inverse relationship between the period of accounts receivable turnover and the results of the company.

Hypothesis 4. There is an inverse relationship between the inventory turnover period and the company's performance.

3. Data and Methodology

Within the framework of the econometric model, the return on total assets (ROA) was chosen as a factor of the achieved results. ROA allows you to assess how effectively the management uses assets to make a profit. In our model we use the operating indicator as a performance criterion, so we are excluding financial assets that reflect investments in the assets of other companies and imply control over them or any other type of activity associated with their management; in particular, such assets include investments in valuable assets [2]. Thus, the calculation of the indicator is carried out according to the following formula:

$$ROA = \frac{NI}{TA - FA}$$

where:

NI is the company's net profit;

TA - total assets of the company;

FA - financial assets of the company.

This criterion is an operational indicator and takes into account only those incomes of the company, the receipt of which is directly related to the production activities of the company and does not depend on changes in the long-term parameters of the company, such as, for example, the capital structure.

The duration of the company's financial cycle was chosen as the main independent variable. In addition, alternative specifications of the model were considered, where individual components of working capital were selected as an independent variable: the turnover period of the company's inventory, the turnover period of accounts receivable and the turnover period of accounts payable.

Also, control variables were identified that can affect the company's performance but are not directly related to working capital management. The first control variable is the size of the company, which is calculated as the natural logarithm of the company's sales. This indicator allows you to reflect the influence of the size of the company on how it can improve its performance. Thus, larger companies, as a rule, have greater opportunities to attract additional investment and receive benefits and softer lending conditions. In addition, large companies can purchase larger quantities of goods and materials, which also allows them to reduce their cost or receive additional discounts. All this allows the company to improve its performance, as well as to better operate the length of its financial cycle. The values of the firm's sales are indicated in terms of 2011. The sales in subsequent years are deflates by annual inflation.

As a second control variable, the company's current liquidity ratio was added, calculated as the ratio of current assets to short-term liabilities. This ratio allows you to reflect how the company can meet its short-term obligations at the expense of its working capital. Thus, the current liquidity ratio can be considered as an indicator of the degree of the company's solvency, and hence its profitability.

Along with the company's ability to attract investment and the degree of its solvency, the fact of the possible risk for its activities remains important. A control variable – leverage ratio is used that reflects this risk; the risks associated with uncertainty that the companies are subject to. The ratio allows to reflect how the company uses its borrowed capital to change the return on equity, while maintaining the required level of financial stability of the company. It should be noted that in this study, the financial leverage was calculated taking into account short-term loans, since the risk of these loans is higher, in addition, the short-term aspect of companies' activities is directly related to working capital. This indicator is calculated as follows:

$$FL = \frac{TD}{E}$$

where:

TD is the total liabilities of the company.

E - is the company's equity.

One more parameter of the company's performance was added - its growth rate. This indicator is associated with almost all indicators of the company's performance, whether it is profit or its operating activities.

According to all studies variables were identified which are presented in Table 1, that allow to assess the impact of working capital management on the performance of the company. Also, based on the selected variables, the following model will be evaluated:

$$ROA_{it} = \beta_0 + CCC_{it} \beta_1 + INFSIZE_{it} \beta_2 + GROWTH_{it} \beta_3 + LIQ_{it} \beta_4 + FD_{it} \beta_5 + m_i + \phi_t + \varepsilon_{it} \quad (1)$$

$$ROA_{it} = \beta_0 + DL_{it} \beta_1 + INFSIZE_{it} \beta_2 + GROWTH_{it} \beta_3 + LIQ_{it} \beta_4 + FD_{it} \beta_5 + m_i + \phi_t + \varepsilon_{it} \quad (2)$$

$$ROA_{it} = \beta_0 + CL_{it} \beta_1 + INFSIZE_{it} \beta_2 + GROWTH_{it} \beta_3 + LIQ_{it} \beta_4 + FD_{it} \beta_5 + m_i + \phi_t + \varepsilon_{it} \quad (3)$$

$$ROA_{it} = \beta_0 + INV_{it} \beta_1 + INFSIZE_{it} \beta_2 + GROWTH_{it} \beta_3 + LIQ_{it} \beta_4 + FD_{it} \beta_5 + m_i + \phi_t + \varepsilon_{it} \quad (4)$$

where $\beta_0 \dots \beta_4$ - parameters of models; m_i is a variable of specific characteristics of the firm;

ϕ_t - dummy time variables that change over time, but equal for all firms in the time period under consideration;

ε_{it} - random components of models; $i = 1, \dots, 425$; $t = 2015, \dots, 2019$.

In the initial specifications of the models, the usual indicator of the company's ROA was used as a dependent variable. However, in the course of the regression analysis, it was decided to bring this indicator at the level of

the 5th and 95th percentile, which made it possible to reduce the abnormality of the distribution of the performance indicator, expressed by the ROA.

Table 1. Variables to the model

Variables	Formula	Indicator
Return on Assets, (in days)	Net Income / (Total Assets – Financial Assets)	ROA _t
Accounts Receivable Turnover, (in days)	(Accounts Receivable _t / Sales Revenue _t) × 365	DL _t
Accounts Payable Turnover, (in days)	(Accounts Payable _t / Sales Revenue _t) × 365	CL _t
Inventory Turnover, (in days)	(Inventory _t / Cost of Goods Sold _t) × 365	INV _t
Financial cycle, (in days)	INV _t + DL _t - CL _t	CCC _t
Company Size	ln (Sales Revenue _t)	INFSIZE _t
Growth rate	(Sales Revenue _t - Sales Revenue _{t-1}) / Sales Revenue _{t-1}	GROWTH _t
Liquidity ratio	Current Assets _t / Short term Liabilities _t	Liquid _t
Financial leverage ratio	Borrowed Capital _t / Total Assets _t	FD _t

Source: Compiled by the author

An empirical analysis of the relationship between working capital management and the company's performance is based on a sample of Azerbaijan SMEs from 2015 to 2019. To collect information about companies the annual financial statements were analyzed separately.

To form the final sample, only small and medium companies were selected, whose average number of employees is under 1000, and the annual revenue 10 million dollar and under. Also, due to the specifics of their activities, companies related to the financial sector were excluded from the sample: the banking sector, insurance, rent, etc., as well as service companies. Sample includes 425 Azerbaijan companies for the period 2015–2019. The total number of observations was 2125.

Table 2. Statistics of variables

	Minimum value	Maximum value	Average value	Median values	Standard=d deviation
ROA	-0,143	0,72	0,12	0,065	(0,21)
CCC	-1429,4	2711,67	65,72	36,05	(137,64)
INV	-9,843	1522,81	83,81	43,98	(121,09)
CL	0,004	2533,07	86,32	45,09	(114,98)
DL	0,018	1761,32	77,93	40,87	(97,98)
LIQUID	0,0035	114,62	1,76	0,97	(2,86)
FD	0,003	5,52	0,72	0,61	(0,31)
INFSIZE	9,593	17,75	11,09	11,97	(0,87)
GROWTH	-0,692	116,32	0,86	0,14	(3,73)
Observations	2125				

Source: Compiled by the author in STATA

Statistics of variables are reflected in table 2. As can be seen from the table the average return on assets of companies is 12%, the median value is only 6%. Several companies have a negative profitability value, which indicates that their activities are unprofitable. The average value of the company's financial cycle is 65.72 days (2 month), the minimum value of the financial cycle of companies is 1429.4 days, along with a rather small median value (36.05 days), this indicates that some companies have additional free funds.

Companies spend an average of 86.32 days on paying off debts and they spend 77.93 days for collecting accounts receivable from their customers. It means that collecting the debts from counterparties is faster than giving them away. Regarding the sale of products from the warehouse, companies spend an average of 83.81 days on this.

Average indicator of ensuring their short-term liabilities with working capital is 1.76. In other words, the amount of working capital is more than twice the size of the short-term liabilities of the Azerbaijani companies according to our samples and estimations. The average company size is expressed by the logarithm of revenue and is 11.09, while the average annual growth rate of the company's revenue is 86%. The median growth rate is only 1%, which means that more than half of the companies have a very insignificant growth rate. A matrix of pairwise correlations between the variables was built for a preliminary assessment of the hypotheses put forward. The final indicators of the correlation matrix are shown in table. 3.

Table 3. Correlation matrix results

	ROA	CCC	CL	DL	INV	LIQUID	INFSIZE	GROWTH
ROA	1							
CCC	0,0211** *	1						
CL	-0,126***	-0,287***	1					
DL	-0,0489** *	0,352***	0,469***	1				
INV	-0,212***	0,531***	0,311***	0,198***	1			
LIQUID	0,130***	0,265***	-0,132***	0,0342** *	0,127***	1		
INFSIZE	0,073***	-0,0474** *	-0,00386***	0,00654	-0,098***	-0,0473***	1	
GROWTH	0,0198** *	-0,0185** *	-0,000675	-0,00198	-0,0175***	-0,0138***	0,153***	1

Source: Compiled by the author in STATA

As per result in correlation matrix reflected in table. 3, all components are significantly correlated with the company's performance indicator, but the correlation values are too small to speak of any strong relationship.

To assess the relationship between working capital management and company performance several regression models including OLS, panel regression models were built. The result is shown in table 4.

Table 4. Model parameters

	Return on Assets		
	OLS	Random effects	Fixed effects
CCC	-0,000119	-0,0000647***	-0,0000648***
	(0,00001)	(0,00001)	(0,00001)
Growth	0,000294	-0,000389	-0,00198***
	(0,00031)	(0,00030)	(0,00035)
INFSIZE	0,0129***	0,0156***	0,0302***
	(0,00195)	(0,00143)	(0,00201)
	(0,00027)	(0,00023)	(0,00030)
LIQUID	0,00356***	0,00330***	0,00215***
	(0,00053)	(0,00042)	(0,00041)
FD	-0,132***	-0,168***	-0,184***
	(0,00548)	(0,00513)	(0,00752)
Constant	-0,00798	-0,101***	-0,238***
	(0,01689)	(0,01624)	(0,02598)
Observations	2125		
Number of companies	425		
R2	0,129		0,117
Wald Chi^2		1853,36	
F-statistics	352,75		190,93
Company Fe			
			YES

Source: Compiled by the author in STATA

The value of the financial cycle is significantly different from zero and has a negative sign in all three models. According the values of the t-statistic, there is no reason to reject hypothesis 1 that there is a negative relationship between the length of the financial cycle and the company's performance.

In general, except for the growth rate of companies which is significant only in the model with deterministic effects, all components of the models were significant. For comparison the Breusch – Pagan test was used, and it showed that the model with random effects more accurately and correctly describes the data compared to OLS.

The results we obtained are presented in table. 5 allow us to reveal the presence of a statistically significant relationship between working capital management and the performance of Azerbaijan companies.

Table 5. Assessment models

	Return on Assets		
	1 st Model	2 nd Model	3 rd Model
CCC	-0,0000648***		
	(0,00001)		
Growth	-0,00198***	-0,000187***	-0,000192***
	(0,00035)	(0,00035)	(0,00035)
INFSIZE	0,0302***	0,0195***	0,0198***
	(0,00201)	(0,00209)	(0,00213)
LIQUID	0,00215***	0,00108***	0,00174***
	(0,00041)	(0,00049)	(0,00048)
FD	-0,184***	-0,156***	-0,159***
	(0,00752)	(0,00760)	(0,00759)
CL		-0,0000598***	
		(0,00001)	
DL			-0,0000296*
			(0,00002)
INV			-0,000176
Constant	-0,238***	-0,239***	-0,302***
	(0,02598)	(0,02672)	(0,02758)
Observations	2125		
Number of companies	425		
R2	0,129	0,127	0,128
F-statistics	352,75	354,69	298,78
Company Fe	YES	YES	YES

Source: Compiled by the author in STATA

An inverse relationship was found between the length of the company's financial cycle and the profitability of its assets which is consistent with hypothesis 1. An increase in the length of the financial cycle by 100 days can lead to a decrease in the return on assets by 0.006%.

The results of models assessed reflects that the components of working capital have a reciprocal relationship with the indicator of the company's efficiency. Thus, the period of turnover of the creditor is inversely related to profitability of assets, which in turn means that we reject Hypothesis 2.

According to Model we can confirm the hypothesis 3 about the cashback relationship between the period of turnover of accounts receivable and the effectiveness of the company's activities, so the parameter given the variable value is significantly different. Thus, the acceleration of the period of receivables repayment is positively reflected in the effectiveness of the company. The size indicator of the company (INFSIZE) was statistically significant at 1% level of significance and positively correlated with the profitability of the company in all models. This agrees with the general presentation that large companies have greater opportunities to attract additional investment in their activities.

Based on the results of the research, for the analysis of the relationship between management of working capital and the effectiveness of the company were built 3 models with fixed random effects. All indicators of working capital were statistically significant and have a reciprocal character in relation to the effectiveness of the company. Hypotheses 1, 2, 4 were confirmed and Hypothesis 3 was rejected.

4. Conclusion

Working capital management is an important aspect of management aimed at increasing the competitiveness of a company and creating value for business owners and key stakeholders in the long run. To achieve long-term goals, the company must be paid and provide a level of profitability, satisfying stakeholders. In other words, the management policy of working capital is reduced to the growth of the company's profitability at an adequate level of liquidity. To achieve the goals, set by the company, it is necessary to take into account the short-term planning, which will be based on the long-term promotion of long-term tools.

As part of the study, as an indicator of the quality of working capital, the length of the financial cycle of the company was used, as well as the period of turnover of reserves, accounts payable and accounts receivable. There was also a criterion for the effectiveness of the company - an indicator of return on assets (ROA). As a basis for research, a selection of Azerbaijan small and enterprises of various industries, except for companies involved in the financial sector and the service sector, from 2015 to 2019.

The results show that in other words, to increase the profitability of the company, it is necessary to reduce the length of the financial cycle. In the period between the turnover of the creditor's indebtedness and the effectiveness of the company's activity, a reciprocal relationship was established. The result obtained indicates that the increase in the term of payment of the creditor's debt increases the risk of reducing the trust of the parties to the supplier, and therefore, the introduction of different fines, penalties and interest. Thus, companies need to be very careful to work with creditor indebtedness, assessing the risk of deterioration of relations with each counterparty.

With the growth of the period of turnover of receivables, the efficiency of the company's activities falls. The faster the company's counterparties pay off its debts, the higher its profitability. Another result of study states that excess stocks in warehouses or irrational use of stocks, increasing their unnecessary quantity, reduces the efficiency of the enterprise. To deal with such situations, it is important for companies to competently assess the structure of reserves, as well as the rationality of the volume of these or other reserves in the face of market conditions. In this way, it is possible to conclude that the purpose of the study was achieved, and the advanced tasks were solved.

References

- Baños-Caballero S., García-Teruel P.J., Martínez-Solano P. How does working capital management affect the profitability of Spanish SMEs? *Small Business Economics*.2012;39(2):517–529. DOI: 1007/s11187–011=9317-8
- Baños-Caballero S., García-Teruel P.J., Martínez-Solano P. Working capital management, corporate performance, and financial constraints. *Journal of Business Research*. 2014;67(3):332–338. DOI: 10.1016/j.jbusres.2013.01.016
- Deloof M. Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*. 2003;30(3–4):573–588. DOI: 10.1111/1468–5957.00008
- Ebben J. J., Johnson A. C. Cash conversion cycle management in small firms: Relationships with liquidity, invested capital, and firm performance. *Journal of Small Business & Entrepreneurship*. 2011;24(3):381– 396. DOI: 10.1080/08276331.2011.10593545
- Falope O., Ajilore O. Working Capital Management and Corporate Profitability: Evidence from Panel Data Analysis of Selected Quoted Companies in Nigeria / *Research Journal of Business Management*. 2009. Vol. 3. N 3. P. 73–84.
- García-Teruel J.P., Martínez-Solano P. Effects of working capital management on SME profitability. *International Journal of Managerial Finance*. 2007;3(2):164–177. DOI: 10.1108/17439130710738718
- Grablowski B. Financial Management of Inventory / *Journal of Small Business Management*. 1984. Vol. 22. N 3. P. 59–65.
- Jose M., Lancaster C., Stevens J. Corporate Returns and Cash Conversion Cycles / *Journal of Economics and Finance*. 1996. Vol. 20. N 1. P. 33–46.
- Lazaridis I., Tryfonidis D. Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange / *Journal of Financial Management and Analysis*. 2006. Vol. 19. N 1. P. 26–35.

- Lyngstadaas H., Berg T. Working capital management: Evidence from Norway. *International Journal of Managerial Finance*. 2016;12(3):295–313. DOI: 10.1108/IJMF-01–2016–0012
- Mathuva D. The Influence of Working Capital Components on Corporate Profitability: A Surveys on Kenyan Listed Firms // *Research Journal of Business Management*. 2010. Vol. 4. N 1. P. 1–11.
- Nobanee H., Abdullatif M., Al Hajjar M. Cash conversion cycle and firm's performance of Japanese firms. *Asian Review of Accounting*. 2011;19(2):147–156. DOI: 10.1108/13217341111181078
- Padachi K. Trends in Working Capital Management and Its Impact on Firms' Performance: An analysis of Mauritian Small Manufacturing Firms // *International Review of Business Research Papers*. 2006. Vol. 2. N 2. P. 45–58.
- Pais M. A., Gama P. M. Working capital management and SMEs profitability: Portuguese evidence. *International Journal of Managerial Finance*. 2015;11(3):341–358. DOI: 10.1108/IJMF-11–2014–0170
- Peel M., Wilson N. Working Capital and Financial Management Practices in the Small Firm Sector /*International Small Business Journal*. 1996. Vol. 14. N 2. P. 52– 68.
- Shin H., Soenen L. Efficiency of Working Capital Management and Corporate Profitability/ *Financial Practice and Education*. 1998. Vol. 8. N 2. P. 37–45.
- Zariyawati M., Annuar M., Taufiq H., Abdul Rahim A. Working Capital Management and Corporate Performance: Case of Malaysia /*Journal of Modern Accounting and Auditing*. 2009. Vol. 5. N 11. P. 47–54.