Factors affecting cash flow management activities of textile and garment enterprises in Vietnam

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ABSTRACT

Purpose: This study shows the level of influence of factors on cash flow management activities of enterprises through survey and recovery analysis from data of 50 Vietnamese garment enterprises.

Design/Methodology/Approach: The article uses two basic research methods including: qualitative and quantitative research. In which, the qualitative method is to synthesize research works related to the article, thereby determining the research hypothesis. The quantitative method is implemented on the basis of building a scale for 7 factors affecting cash flow management activities and surveyed and analyzed data from 50 textile and garment enterprises in Vietnam to test the published hypotheses.

Findings: The results show that 5 out of 7 factors have an impact on cash flow management activities of listed textile and garment enterprises in Vietnam, including: sales policy (SP), inventory management policy (IMP), payment policy with suppliers (PPS), enterprise size (ES) and level of information technology application in cash flow management (LIC).

Conclusion: In particular, sales policy is the strongest impact factor, the ability to apply information technology has the weakest impact, in particular, inventory management policy has a negative impact on cash flow management activities.

Research Limitations/Implications: From the results of this research, the author suggested for Vietnamese textile and garment enterprises in cash flow management activities.

Practical Implications: This research result is completely consistent with previous domestic and foreign studies.

Contribution to Literature: The study provides necessary information to help Vietnamese textile and garment enterprises improve cash flow management in the coming time.

Keywords: *Cash flow management, Cash flow, Factors, Research, Textile enterprises.*

1. INTRODUCTION

Cash flow is the most important resource for business activities. In business activities, money is considered blood and cash flow is the lifeblood of the business. Cash flow plays an essential role in ensuring continuous operations as well as increasing business efficiency of businesses. Therefore, cash flow management is an issue that directly determines the survival of businesses.

In fact, a number of Vietnamese textile and garment enterprises, including large ones, have gone bankrupt not due to low profitability or declining profits but due to lack of capital in cash to pay due debts and meet necessary spending needs. However, a situation where textile enterprises have excess cash will lead to wasteful and ineffective use of money, while businesses must borrow capital from banks or other credit institutions. That shows weakness in the business's cash flow management activities.

To stand firm in the market and avoid falling into bankruptcy, textile and garment enterprises need to effectively implement corporate financial management solutions, in which cash flow management is an effective tool to help businesses This business maintains production and business activities and fills the income gap. In particular, to go through the current difficult and volatile period, Vietnamese textile and garment enterprises need to have a

reasonable cash flow management strategy, ensure solvency and avoid facing risks. financial risk. It is necessary to increase profits, strengthen sustainability and future development prospects.

Based on that reality, the author conducted this research to provide useful information on cash flow management activities for Vietnamese textile and garment enterprises to increase corporate value.

2. THEORETICAL BASIS AND RESEARCH OVERVIEW

Cash flow management shows special importance, determining the survival and development of every business and has been researched by many scholars.

2.1. Theoretical Basis for Cash Flow Management Activities

Cash flow management is an important factor in creating business liquidity. Liquidity is a special feature of money. Liquidity helps businesses avoid "shocks" of unexpected cash flows (Keynes, 1937).

According to Scherr (1989) and Bartlett et al. (2014): Cash flow management involves determining optimal cash levels, cash flow planning, determining the appropriate amount of short-term investments as well as effective methods for controlling accounts receivable, disburse cash to maintain daily operations and ensure the growth process of the business.

Cash flow management is an important content of financial management, not only helping businesses operate smoothly but also helping businesses surpass competitors when they have investment opportunities. Effective cash flow management is associated with assessing the current cash flow situation to plan cash flow, establish cash collection and spending regulations, thereby making decisions on cash reserve levels, cash inflow management, create and control, create a balance of revenue and expenditure of capital in cash.

Thus, cash flow is always fluctuating and production and business activities of businesses have many potential risks coming from within the business itself or from customers. Therefore, to minimize risks and ensure a strong financial situation for businesses, it is necessary to implement cash flow management.

2.2. Study Overview

There have been many empirical studies on analyzing factors affecting cash flow management. Specifically:

Doctoral thesis: "Cash flow management of Vietnamese food processing enterprises" by Do (2014). Based on understanding the concept and content of enterprise cash flow management, and comprehensively evaluating the factors affecting enterprise cash flow management, the thesis deeply analyzes the current status of cash flow management activities. of food processing enterprises, thereby proposing a cash flow management model suitable for these enterprises. However, the thesis has not fully quantified the objective factors affecting the cash flow management activities of enterprises.

Research "Cash Conversion Cycle Management in Small Firms: Relationships with Liquidity, Invested Capital, and Firm Performance" by Ebben and Johnson (2011) examined the relationship between cash conversion period and liquidity, investment capital and operating efficiency of small businesses. In a sample of 879 small US manufacturing firms and 833 small US retail firms, the cash conversion cycle was found to be related to all three dimensions. Businesses with more efficient cash turnover periods will have higher liquidity, less debt needs and higher profits. The results also show that small business owners or managers can influence cash flow management effectiveness through cash conversion cycle management.

The study "Exploration of Cash Flow Management for Enterprise's Business Performance - Examining Cash Flow Management with Enterprise's Business Performance" by Egwu (2021) addresses the impact of cash flow management on enterprise's business performance. In it, the author specifically investigated the financial performance of small and medium enterprises and analyzed the data using descriptive and linear regression methods. The results showed that cash flow management affects the financial performance of enterprises in Abuja. The study recommends that owners and managers of enterprises in Abuja should improve cash flow management to improve business performance.

Thus, it can be seen that the above studies mainly consider the impact of cash flow management on business performance, there is no research on the influence of factors on cash flow management activities of businesses. listed textile enterprises.

3. RESEARCH MODEL AND RESEARCH HYPOTHESES

3.1. Research Models

The author has referred to previous studies on factors affecting cash flow management activities, concluded with a theoretical basis related to research and expert discussion, so proposed a model to research factors. Affecting cash flow management activities of textile and garment enterprises include: (i) Sales policy, (ii) Inventory management policy, (iii) Payment policy with suppliers, (iv) Size of the enterprise, (v) Awareness and capacity of financial administrators on cash flow management, (vi) Coordination between departments in cash flow management, (vii) Level of technology application Information technology in cash flow management.
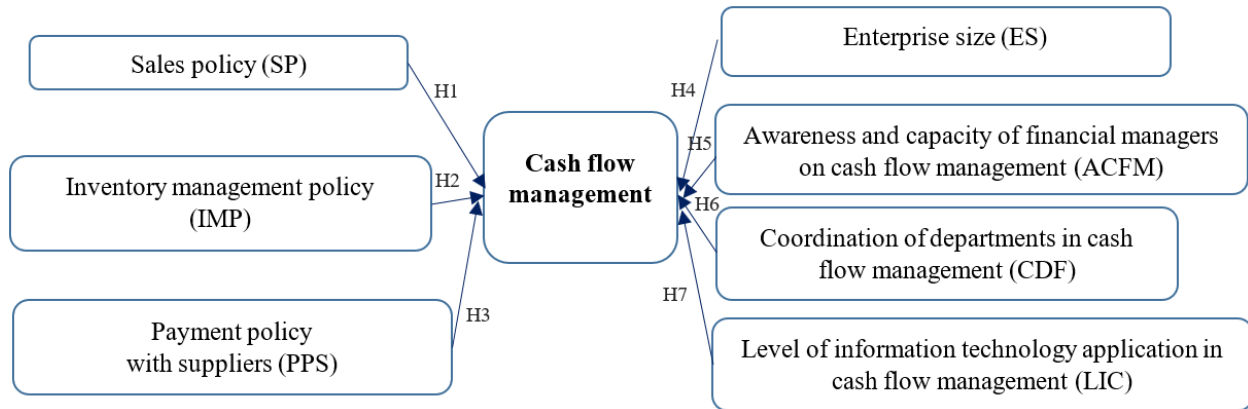
The specific research model is as follows:

Figure 1. The research model of factors affecting cash flow management activities of listed textile and garment enterprises.

Figure 1 illustrates the research model of factors affecting cash flow management activities of listed textile and garment enterprises.

3.2. Build Research Hypotheses

Based on the proposed 7 factors affecting cash flow management activities of Vietnamese textile and garment enterprises, the author builds the following research hypothesis:

$$CM_i = \alpha + \beta_1 SP_i + \beta_2 IPM_i + \beta_3 PPS_i + \beta_4 ES_i + \beta_5 ACFM_i + \beta_6 CDF_i + \beta_7 LIC_i + \varepsilon$$

In there:

- CM: Cash flow management.
- SP: Sales policy.
- IMP: Inventory management policy.
- PPS: Payment policy with suppliers.
- ES: Enterprise scale.
- ACFM: Awareness and capacity of financial administrators on cash flow management.
- CDF: Coordination between departments in cash flow management.
- LIC: Level of information technology application in cash flow management.

α is the constant, β is the explanatory coefficient of variation, ε is the residual and i is the number of observations

Accordingly, the author builds hypotheses to research factors affecting cash flow management activities of Vietnamese textile and garment enterprises as follows:

3.2.1. Sales Policy

Sales policy is one of the factors that plays a particularly important role in an enterprise's business operations. A strict and reasonable sales policy will help businesses retain old customers and attract a large number of potential customers. In addition, businesses that set sales policies appropriate to actual conditions will help speed up the recovery of sales proceeds.

According to Gitman (2009) and Ebben and Johnson (2011) to manage cash flow effectively, businesses need to pay attention to building effective sales policies by loosening or narrowing conditions. sales accounts in each stage of production to increase the number of receivables turnover, thereby improving the cash flow of the business. Zala (2010) and Ahmed, Mahtab, Islam, and Abdullah (2017) believe that businesses need to closely monitor receivables for cash flow management to be more effective. According to Bashir and Regupathi (2022) if businesses collect debt quickly, cash flow management will be effective. Besides, Bendavid, Herer, and Yücesan (2017) and Shash and Qarra (2018) believe that businesses need to accelerate the consumption of finished goods inventory.

From the above analysis, we can establish hypothesis H1: sales policy has a positive impact on cash flow management activities of Vietnamese textile and garment enterprises.

3.2.2. Inventory Management Policy

Inventory is the bridge between production and consumption, including all reserved resources to meet the current or future needs of the business. Typically, inventory is divided into three categories: Raw materials, semi-finished products, and finished products. In particular, finished product inventory affects the cash flow management activities of businesses at the stage of finished product consumption. If the business sells goods quickly, the cash flow will increase; on the contrary, if the selling business does not receive money immediately, the cash flow will decrease.

Raw material inventory affects cash flow management activities at the stage of creating input factors of production activities. If a business reserves an optimal amount of raw materials to ensure smooth production operations, it will help save costs and reduce cash flow. If a business stores too many raw materials compared to production needs, it will incur storage costs and ordering costs, thus increasing cash flow.

Lazaridis and Tryfonidis (2006) and Ortín-Ángel and Prior (2004) believes that businesses need to use a raw materials inventory management model. According to Ding, Guariglia, and Knight (2013) and Basyith, Djazuli, and Fauzi (2021) entrepreneurs need to optimize initial investment costs. And Zimon and Tarighi (2021) said businesses need to prevent damage and obsolescence of inventory.

Thus, inventory is a short-term asset with low liquidity, so businesses need to have appropriate inventory control policies to minimize risks and costs incurred when storing raw materials and at the same time speed up speed of turnover of finished products, thereby improving the efficiency of cash flow management. From the above analysis, we can establish hypothesis H2: inventory management policy has a positive impact on cash flow management activities of Vietnamese textile and garment enterprises.

3.2.3. Payment Policy with Suppliers

To create inputs for the production process, businesses need to buy raw materials from suppliers, forming payables and affecting the business's cash flow. Therefore, transparency in payment policies with suppliers will help businesses limit risks, minimize costs and improve cash flow management efficiency.

Keynes (1937) and Breivik, Larsen, Thyholdt, and Myrland (2023) believe that the payment time for housing at the same level should be extended. Normally, businesses want to delay payments to suppliers within allowable limits to take advantage of capital sources to meet production and business activities. However, delaying payments to suppliers affects the business's creditworthiness. Therefore, businesses need to consider the time to delay payables to ensure it does not affect cash flow management activities.

Thus, we can establish hypothesis H3: payment management policy with suppliers has a negative impact on business performance.

3.2.4. Enterprise Scale

According to Dang, Li, and Yang (2018) enterprise size is often used as an important and basic characteristic in most areas of corporate finance and affects cash flow management.

Martínez-Sola, García-Teruel, and Martínez-Solano (2013) and Yuliantari and Sujana (2014) said: enterprise size is determined by the logarithm of total assets because total assets are more stable than revenue, not Every year, businesses sell goods, while the value of goods sold fluctuates every year.

Enterprise size = Ln (Total assets).

Farris II and Hutchison (2002) and Wang, Lee, and Wu (2023) determine enterprise size by revenue. And Lee and Wu (2023) said that: business size affects cash flow management activities and is determined by the number of employees.

From the above analysis, we can establish hypothesis H_4: business size has a positive impact on cash flow management activities of Vietnamese textile and garment enterprises.

3.2.5. Awareness and Capacity of Financial Administrators on Cash Flow Management

Financial administrators play an important role in the cash flow management activities of businesses, being the person who plans, forecasts cash flow, checks and controls cash flow. Proper cash flow management is a difficult and complex task, requiring financial administrators to have good forecasting and analysis abilities to ensure the business's cash flow continuously circulates, creating financial health for businesses, helping to maximize business value.

Administrators with good awareness and capacity in cash flow management will be able to forecast cash flows, select and use appropriate cash flow forecasting models to help businesses minimize costs arising from shortages. cash in business activities, maximize the profitability of excess cash, control cash flow when there is an impact of external factors on the business. In addition, the optimal awareness and capacity of a financial administrator is also demonstrated through the ability to understand the lending interest rates of the banks and financial institutions they are dealing with, and understand how to rate credit. business applications with lenders and at the same time have a deep understanding of how to invest and buy stocks to be able to control cash flow in the business flexibly and effectively.

On the contrary, managers with weak cash flow management capabilities will not be able to forecast cash flows and will use unreasonable models and forecasting methods, causing the business's cash flow to be in short supply or surplus. excess, affecting the solvency and profitability of the enterprise.

Kroes and Manikas (2014) and Myeni (2018) believe that the ability to mobilize capital demonstrates the capacity of financial managers and affects cash flow management activities. Amponsah-Kwatiah and Asiamah (2021) said that the ability to effectively manage and use capital will determine the capacity of the financial administrator. Churchill and Mullins (2001) believe that the ability to ensure financial security of an enterprise will demonstrate the financial manager's awareness and capacity in cash flow management.

Thus, we can establish hypothesis H_5: awareness and capacity of financial managers positively impact cash flow management activities of Vietnamese textile and garment enterprises.

3.2.6. Coordination between Departments in Cash Flow Management

Information about cash flow is provided by many different departments in the business: such as the sales department, treasurer, assistant director, finance director... Each department can impact cash flow. cash inflow and outflow in the business. Therefore, there needs to be coordination and cohesion between departments to manage cash flow to maximize the value of the business.

Shash and Qarra (2018) and Bashir and Regupathi (2022) believe that the assignment of tasks between the chief accountant and the financial director demonstrates coordination between departments in cash flow management. And Zeger and Liang (1986) said that cash flow management activities need to clearly assign tasks to the finance department. According to Arellano and Bover (1995) and Blundell and Bond (1998) it is necessary to build a separate cash flow management department.

Thus, we can establish hypothesis H_6: coordination between departments positively impacts cash flow management activities of Vietnamese textile and garment enterprises.

3.2.7. Level of Information Technology Application in Cash Flow Management

Nowadays, information technology has been present and plays an important and indispensable role in the management and operation process of production and business activities of enterprises and changes traditional transactions to electronic transactions. That increases the position and role of enterprises and the needs of related parties (customers, suppliers, investors, etc.).

According to Churchill and Mullins (2001) and Gill, Biger, and Mathur (2010) it is necessary to be equipped with information technology application software to serve cash flow management activities. Arellano and Bond (1991)

said that it is necessary to strengthen training of human resources to use information technology well to ensure the effectiveness of cash flow management activities.

The application of information technology in cash flow management activities will help businesses reduce time, save costs, and build close relationships with customers and partners.

From the above analysis, we can establish hypothesis H_7: The level of information technology application has a positive impact on cash flow management activities of Vietnamese textile and garment enterprises.

In this study, the author hopes to provide useful information to demonstrate the impact of factors on cash flow management activities of listed textile enterprises. From there, the author will provide appropriate recommendations to help enhance appropriate cash flow management activities to increase value for Vietnamese textile and garment enterprises.

4. RESEARCH METHODOLOGY

4.1. Build a Measuring Scale

To serve the research of factors affecting cash flow management activities of Vietnamese textile and garment enterprises, the authors used a combination of qualitative research methods and quantitative research methods.

Table 1 constructs factors affecting cash flow management of listed textile and garment enterprises.

Table 1. Factors affecting cash flow management.

Numerical order	The scale	Encode	Reference
Dependent variable			
Cash flow management	Ensuring the solvency of the business	CM1	Keynes (1937)
	Minimize costs and avoid overdue payments	CM2	Alfred (2007)
	Have an optimal plan to mobilize additional capital in case of cash deficit and invest surplus cash to avoid waste and increase income for businesses.	CM3	Gitman (2009)
Independent variables			
Sales policy	Develop commercial credit policy	SP1	Gitman (2009) and Ebben and Johnson (2011)
	Monitor receivables closely	SP2	Zala (2010) and Ahmed et al. (2017)
	Fast debt recovery	SP3	Bashir and Regupathi (2022)
	Accelerate consumption of finished product inventory	SP4	Bendavid et al. (2017) and Shash and Qarra (2018)
Inventory management policy	Use the raw materials inventory management model	IMP1	Lazaridis and Tryfonidis (2006) and Ortín-Ángel and Prior (2004)
	Optimize initial investment costs	IMP2	Ding et al. (2013) and Basyith et al. (2021)
	Prevent damage and obsolescence	IMP3	Zimon and Tarighi (2021)
Payment policy with suppliers	Extend supplier payment time	PPS1	Keynes (1937) and Breivik et al. (2023)
	Use auxiliary methods	PPS2	China (2011) and Hale and Long (2011)

Numerical order	The scale	Encode	Reference
	Use appropriate payment methods	PPS3	Lancaster, Stevens, and Jennings (1998)
Enterprise scale	Total assets	ES1	Munusamy (2010); Martínez-Sola et al. (2013) and Yuliantari and Sujana (2014)
	Revenue	ES2	Farris II and Hutchison (2002) and Wang et al. (2023)
	Number of employees	ES3	Arellano and Bond (1991)
Awareness and capacity of financial administrators on cash flow management	Ability to raise capital	ACFM1	Kroes and Manikas (2014) and Myeni (2018)
	Management capacity and effective use of capital	ACFM 2	Amponsah-Kwatiah and Asiamah (2021)
	Ability to ensure financial security of the business	ACFM 3	Churchill and Mullins (2001)
Coordination between departments in cash flow management	Assign tasks between chief accountant and financial director	CDF1	Shash and Qarra (2018) and Bashir and Regupathi (2022)
	Assign clear tasks to the finance department	CDF2	Zeger and Liang (1986)
	Build a separate cash flow management department	CDF3	Arellano and Bover (1995) and Blundell and Bond (1998)
Level of information technology application in cash flow management	Equipped with information technology application software	LIC1	Churchill and Mullins (2001) and Gill et al. (2010)
	Strengthen training of human resources using information technology	LIC2	Arellano and Bond (1991)

The study uses a Likert scale: The attributes of cash flow management activities of listed textile and garment enterprises are measured using a 5-point Likert scale (Likert, 1932) from 1 "strongly disagree" to 5 "strongly agree".

4.2. Research Sample
Based on the proposed research model, the steps of quantitative research are carried out including designing a questionnaire, determining the research sample, collecting data, and analyzing data through SPSS 22 software.
Data collection subjects: Research samples collected from 50 listed textile and garment enterprises in Vietnam. The authors collected data on 7 attributes representing cash flow management activities of listed textile and garment enterprises in Vietnam over a three-year period, from 2021 to 2023, by sending survey forms. directly or indirectly (through acquaintances, via email or google.doc tool). Each business was sent 03 ballots by the author group including:
- 01 questionnaire sent to managers who are General Director/Director or Deputy General Director/Deputy Director.
- 01 questionnaire sent to the representative of the Board of Directors of the Corporation/Company.
- 01 questionnaire sent to the financial administrator of the Corporation/Company.
Research sample size: In this study, we distributed 150 surveys and received 150 surveys. After cleaning the data, we included 138 votes in the analysis. This sample size is adequate.

Table 2. Summary of suitability of survey objects.

Case processing summary		N	%
Cases	Valid	138	100.0
	Excluded[a]	0	0.0
	Total	138	100.0

Note: a. Listwise deletion based on all variables in the procedure.

5. RESEARCH RESULTS

5.1. Checking the Quality of the Scale

Statistical results from Table 2 show that: There were 138 survey subjects and 100% of these subjects were suitable for testing.

Table 3 provides the results of scale testing using Cronbach's Alpha reliability coefficient.

Table 3. Testing the scale using Cronbach's Alpha reliability coefficient.

Item-total statistics				
Observed variable	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
Cronbach's alpha = 0.992				
CM1	10.923	9.486	0.979	0.990
CM2	10.924	9.324	0.986	0.988
CM3	10.951	9.402	0.973	0.991
CM	10.942	9.497	0.982	0.989
Cronbach's alpha = 0.771				
SP1	14.524	7.109	0.621	0.700
SP2	14.349	7.609	0.508	0.743
SP3	14.312	7.041	0.720	0.665
SP4	14.947	9.761	0.114	0.870
SP	14.533	7.354	1.000	0.618
Cronbach's alpha = 0.902				
IPM1	10.6259	3.935	0.712	0.897
IPM2	10.8011	3.448	0.786	0.872
IPM3	10.8741	3.317	0.778	0.880
IPM	10.6569	3.992	0.922	0.845
Cronbach's alpha =0.849				
PPS1	11.741	4.498	0.641	0.827
PPS2	12.133	3.840	0.575	0.883
PPS3	11.785	4.376	0.651	0.823
PPS	11.882	3.972	1.000	0.698
Cronbach's alpha = 0.886				
ES1	11.981	5.153	0.561	0.918
ES2	12.063	4.084	0.760	0.852
ES3	12.112	3.940	0.753	0.859
ES	12.054	4.181	1.000	0.773
Cronbach's alpha = 0.879				
ACFM1	12.651	4.109	0.708	0.857
ACFM2	12.432	4.055	0.685	0.867
ACFM3	12.782	4.021	0.627	0.895
ACFM	12.623	3.855	1.000	0.759
Cronbach's alpha = 0.862				

Item-total statistics				
Observed variable	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
CDF1	12.622	4.142	0.698	0.828
CDF2	12.441	3.997	0.633	0.860
CDF3	12.713	4.166	0.611	0.866
CDF	12.580	3.981	0.961	0.739
Cronbach's alpha = 0.848				
LIC1	8.242	1.989	0.647	0.860
LIC2	8.570	2.010	0.634	0.873
LIC	8.391	2.064	0.921	0.635

The results of Cronbach's Alpha testing of factors in the research model show that the variable CM has Cronbach's Alpha = 0.992 > 0.6, so it meets the standard to retain. The component scales (CM1, CM2 and CM3) all correlate with the total variable >0.3, so they meet the requirements to retain.

Similar arguments for the remaining variables result in the observed variables and the scale ensuring reliability.

From the above results, it shows that all factors are statistically significant and reach the necessary reliability coefficient.

The research model after evaluating the reliability of the scale using Cronbach's Alpha coefficient has 7 factors with 19 observed variables.

Table 4 presents the results of KMO and Bartlett coefficient tests.

Table 4. Test of KMO and Barlett coefficients.

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy.		0.722
Bartlett's test of sphericity	Approx. Chi-square	2829.114
	df	210
	Sig.	0.000

5.2. Exploratory Factor Analysis (EFA)

The results of testing the KMO and Barlett coefficients show that the KMO coefficient = 0.722 > 0.5, proving that the factor analysis table is suitable for the research data. On the other hand, the Barlett test is statistically significant (Sig. < 0.05). That confirms that EFA results are completely reliable for analytical use.

Table 5. Total variance explained.

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	5.970	28.428	28.428	5.970	28.428	28.428	3.973	18.920	18.920
2	3.477	16.557	44.984	3.477	16.557	44.984	3.504	16.685	35.604
3	3.010	14.332	59.316	3.010	14.332	59.316	2.964	14.115	49.720
4	1.692	8.059	67.374	1.692	8.059	67.374	2.782	13.248	62.968
5	1.318	6.274	73.648	1.318	6.274	73.648	2.243	10.680	73.648

Note: Extraction method: Principal component analysis.

Table 5 shows that Initial Eigenvalues ranging from 1,318 to 5,970 are >1 and meet the requirements, the extracted variance value is 73.648%.

Table 6 shows the rotation matrix results.

Table 6. Rotation matrix.

Rotated component matrix^a							
Observation variable	**Component**						
	1	**2**	**3**	**4**	**5**	**6**	**7**
CM1							
CM2							
CM3							
SP1	0.826						
SP2	0.908						
SP3	0.810						
SP4	0.863						
IPM1		0.751					
IPM2		0.688					
IPM3		0.774					
PPS1			0.815				
PPS2			0.823				
PPS3			0.834				
ES1				0.733			
ES2				0.827			
ES3				0.775			
ACFM1					0.799		
ACFM2					0.885		
ACFM3					0.895		
CDF1						0.793	
CDF2						0.865	
CDF3						0.883	
LIC1							0.662
LIC2							0.690

Note: Extraction method: Principal component analysis.
Rotation method: Varimax with Kaiser normalization.
a: Rotation converged in 6 iterations.

The results of factor analysis based on the rotated matrix show that the factor groups are drawn from observed variables with loading factors on the factors being quite high (> 0.5), the loading factors are considered is meaningful. Table 7 presents the results of the Person correlation analysis.

Table 7. Person correlation analysis.

Correlations									
Observation variable		**CM**	**SP**	**IDM**	**PPS**	**ES**	**ACFM**	**CDF**	**LIC**
CM	Pearson correlation	1	0.779^{**}	0.097	0.058	0.044	0.362^{**}	0.362^{**}	0.362^{**}
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.023	0.015	0.000
	N	137	137	137	137	137	137	137	137
SP	Pearson correlation	0.779^{**}	1	0.355^{**}	0.062	0.035	0.428^{**}	0.428^{**}	0.428^{**}
	Sig. (2-tailed)	0.000		0.000	0.002	0.006	0.000	0.000	0.000
	N	137	137	137	137	137	137	137	137
IPM	Pearson correlation	0.097	0.355^{**}	1	0.339^{**}	0.277^{**}	0.100	0.100	0.100
	Sig. (2-tailed)	0.259	0.000		0.016	0.031	0.005	0.004	0.003
	N	137	137	137	137	137	137	137	137
PPS	Pearson correlation	0.058	0.062	0.339^{**}	1	0.739^{**}	0.130	0.130	0.130
	Sig. (2-tailed)	0.497	0.472	0.000		0.007	0.031	0.002	0.003
	N	137	137	137	137	137	137	137	137

Correlations									
Observation variable		**CM**	**SP**	**IDM**	**PPS**	**ES**	**ACFM**	**CDF**	**LIC**
ES	Pearson correlation	0.044	0.035	0.277[**]	0.739[**]	1	0.058	0.058	0.058
	Sig. (2-tailed)	0.608	0.686	0.001	0.000		0.001	0.001	0.001
	N	137	137	137	137	137	137	137	137
ACFM	Pearson correlation	0.371[**]	0.428[**]	0.100	0.130	0.058	1	1.000[**]	1.000[**]
	Sig. (2-tailed)	0.000	0.000	0.245	0.131	0.501		0.208	0.310
	N	137	137	137	137	137	137	137	137
CDF	Pearson correlation	0.371[**]	0.428[**]	0.100	0.130	0.058	1.000[**]	1	1.000[**]
	Sig. (2-tailed)	0.000	0.000	0.245	0.131	0.501	0.000		0.400
	N	137	137	137	137	137	137	137	137
LIC	Pearson correlation	0.362[**]	0.428[**]	0.100	0.130	0.058	1.000[**]	1.000[**]	1
	Sig. (2-tailed)	0.000	0.000	0.245	0.131	0.501	0.000	0.000	0.001
	N	137	137	137	137	137	137	137	137

Note: **. Correlation is significant at the 0.01 level (2-tailed).

5.3. Person Correlation Analysis

The table shows the correlation between the independent variables and the dependent variable as follows:

Sig. of the 5 independent variables including SP, IPM, PPS, ES, LIC compared to the dependent variable are all less than 0.05. Thus, these 5 independent variables have a linear relationship with the dependent variable.

Sig. of 02 independent variables including ACFM, CDF compared to the dependent variable are all greater than 0.05. Thus, these two independent variables do not have a linear relationship with the dependent variable.

Besides, the table shows the correlation between independent variables as follows:

The two independent variables ACFM and CDF have Sig less than 0.05, so the possibility of collinearity between them is relatively high (Dormann et al., 2013). These two variables need to be removed from the regression model.

Table 8 presents the summary results of the model fit.

Table 8. Summary model table to check model fit.

Model summary[b]				
Model	**R**	**R square**	**Adjusted R square**	**Std. error of the estimate**	**Durbin-Watson**
1	0.794[a]	0.631	0.617	0.632	1.596

Note: a. Predictors: (Constant), LIC, ES, IPM, SP, PPS.
b. Dependent variable: QTDT.

5.4. Check the Fit of the Model

Research results show that:

Durbin – Watson index = 1.596 in the range of 1.5 < D < 3, indicating no autocorrelation phenomenon.

The adjusted R^2 correlation coefficient value is 0.617 > 0.5. Therefore, this is an appropriate model to use to evaluate the relationship between independent variables and the dependent variable. The adjusted R^2 coefficient in the model is 0.617, meaning that the built linear regression model fits the data set 61.7%. This also means that cash flow management activities of Vietnamese textile and garment enterprises are explained by 7 independent variables with an influence level of 61.7%, the remaining parts are due to random errors.

Table 9. ANOVA regression analysis.

ANOVA[a]						
Model		**Sum of squares**	**df**	**Mean square**	**F**	**Sig.**
1	Regression	93.421	5	18.684	48.900	0.000[b]
	Residual	50.054	131	0.382		
	Total	143.474	136			

Note: a. Dependent variable: CM.
b. Predictors: (Constant), SP, IPM, PPS, ES, LIC.

5.5. Regression Analysis

In the ANOVA analysis Table 9, it shows: Sig value. = 0.000 < 0.05, which leads to the conclusion: the set linear regression model including 05 independent variables: SP, IPM, PPS, ES, LIC is appropriate.

Table 10. Multiple regression analysis.

Coefficientsᵃ								
		Unstandardized coefficients		**Standardized coefficients**			**Collinearity statistics**	
Model		**B**	**Std. error**	**Beta**	**t**	**Sig.**	**Tolerance**	**VIF**
1	(Constant)	2.095	0.534		-0.178	0.859		
	SP	1.253	0.095	0.832	13.192	0.000	0.708	1.413
	IPM	-0.430	0.113	-0.232	-3.816	0.000	0.762	1.312
	PPS	0.095	0.125	0.062	0.759	0.049	0.425	1.351
	ES	0.048	0.118	0.032	0.407	0.015	0.451	1.218
	LIC	0.044	0.093	0.028	0.470	0.021	0.795	1.258

Note: a. Dependent variable: CM.

From the Table 10, it can be seen that the variance inflation factor (VIF) of the 5 independent variables with values from -1.218 to 1.413 are all less than 2, so multicollinearity does not occur.

All 5 variables SP, IPM, PPS, ES, LIC have Sig. < 0.05 proves that all of these variables are significant in the regression model. We can write the equation of factors affecting cash flow management activities of Vietnamese textile and garment enterprises as follows:

$$[CM]i = 2.095 + 0.832\,SP - 0.232\,IPM + 0.062\,PPS + 0.032\,ES + 0.028\,LIC$$

The correlation analysis results of Table 10 show that hypotheses H1, H2, H3, H4, H7 are all accepted. Specifically, the variables SP, PPS, ES and LIC (equivalent to hypotheses H1, H3, H4, H7) have a positive impact on the dependent variable (CM), the variable IPM has a negative impact on the dependent variable. In particular, the strongest impact is the insurance policy variable (β_1=0.832), followed by the monetary policy variable (β_3=0.062), ES variable (β_4= 0.032) and LIC (β_5=0.028).

5.6. Residual Analysis

The average value of the residuals is shown in the following graphs:
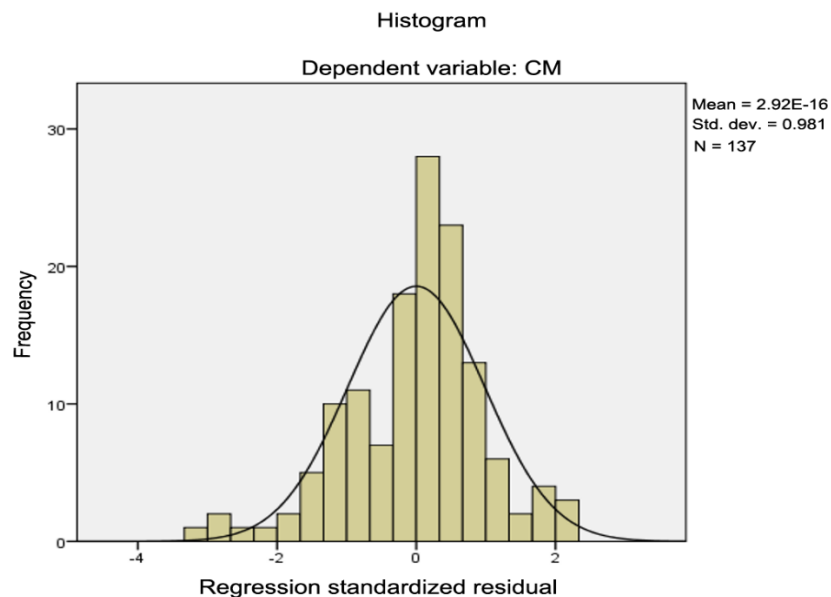Figure 2 shows the frequency of the standardized residuals.

Figure 2. The frequency of the standardized residuals

According to the Histogram chart above, mean = 2.9E-16 is close to 0, the standard deviation is 0.982, close to 1. Thus, the residual distribution is approximately normal, assuming the normal distribution of residuals is not violated. The Normal P-P Plot of the regression results is as follows:

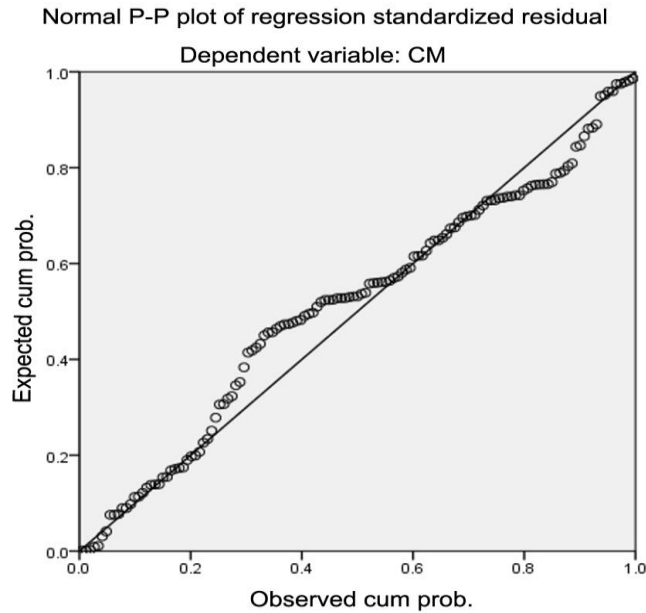Figure 3 shows the normal distribution of standardized residuals.

Figure 3. The normal distribution of standardized residuals.

According to the chart above, the actual observed points are concentrated quite close to the diagonal of the expected values, so the residuals have an approximately normal distribution, assuming the normal distribution of the residuals is not violated.

The Scatter Plot chart checks the linear relationship assumption of the regression model as follows:

Figure 4 shows the random distribution of standardized residuals.
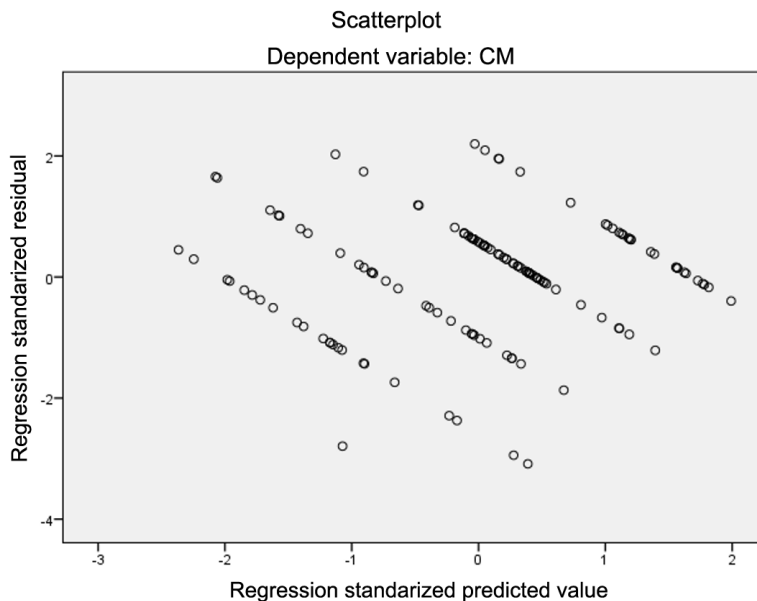
Figure 4. The random distribution of standardized residuals.

According to the chart above, the data points are distributed around the 0-intercept line and tend to form a straight line, so the linear relationship assumption is not violated.

6. CONCLUSION AND RECOMMENDATIONS

Empirical research results show that there are 05 factors affecting the cash flow management activities of Vietnamese textile and garment enterprises. From this result, the authors recommend a number of solutions to improve the effectiveness of cash flow management activities of Vietnamese textile and garment enterprises as follows:

First, the research results have shown that sales policy is positively related to cash flow management activities. In other words, if you set up a strict and appropriate sales policy, cash flow management activities will work well. To implement good sales policies, textile enterprises need to pay attention to some basic issues:

6.1. For Perfecting Commercial Credit Policy

Each type of business will have its own characteristics and be affected by fluctuations in different economic periods. Therefore, when drafting economic contracts, textile enterprises need to consider a clear policy of expanding or narrowing sales terms, depending on the specific goals and time and the economic factors of the market, but Ensure compliance with current policies and regulations.

6.2. Closely Monitor Receivables

Textile and garment enterprises need to open regular and detailed records of customer receivables to accurately assess customers' ability to pay, thereby making correct and timely decisions. In addition, textile and garment enterprises need to have specific implementation instructions including regulations on credit policies, conditions for customers to enjoy incentives, necessary business processes... to serve as a basis. for departments in the enterprise to compare and implement.

6.3. Use Effective Debt Collection Measures

After drafting a comprehensive credit policy, textile and garment enterprises need to thoroughly implement it to ensure respect for honesty, objectivity and fairness with customers. In addition, textile and garment businesses need to consider environmental factors that affect customer conditions and the business's current conditions to achieve the highest efficiency.

Second, research results have shown that payment policies with suppliers have a positive effect on cash flow management activities.

Textile and garment businesses need to pay attention to accounts payable to suppliers to reduce dependence on banks, save costs and ensure the financial situation of the business. To do that well, textile and garment businesses need to do:

Complete and detailed synthesis of forms including: detailed record sheet, reconciliation sheet or confirmation table of payables to suppliers. Besides, when managing cash flow considering each specific aspect, appropriate forms need to be added. Specifically: detailed accounts payable management for each invoice and payment deadline requires attention: reporting the debt age of invoices (usually divided by week or month), list of invoices due for payment., list of overdue invoices, list of outstanding invoices from suppliers...

In addition, textile and garment enterprises need to flexibly use payment tools to minimize risks and take advantage of term payment cash flows through trading futures contracts or guaranteed warrants.

Third, research results have shown that business size has a positive effect on cash flow management activities.

Enterprise size is a measure of the size of the enterprise, expressed as the size of total assets. The larger the scale of the business, the more convenient it will be to access capital and customers. Therefore, to maximize business value, textile and garment enterprises need to base their business scale on a harmonious balance between revenue and costs, and at the same time come up with a plan to mobilize and use capital. reasonable in cash flow management activities.

Fourth, research results have shown that the application of information technology has a positive effect on cash flow management activities.

To effectively apply information technology in cash flow management, textile and garment enterprises need to:

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(i) Dedicate financial resources to invest in the application of information technology in business management. Reality shows that businesses can initially spend a high amount of money but will achieve long-term results.

(ii) Build your development strategy based on the information technology application strategy, prepare human resources to serve the business's operations in a certain period of time.

(iii) Coordinate with intermediary information technology organizations to send officials and employees to specialized training domestically, instead of having to send them abroad to minimize costs.

Fifth, research results have shown that inventory management policy has a negative effect on cash flow management activities.

First of all, textile and garment enterprises need to shorten the storage time of finished products.

Shortening the storage time of finished products increases a business's profitability because it reduces the time money is stagnant in inventory. To shorten the storage time of finished products, textile and garment enterprises need to:

(i) Promote and promote market research activities.

(ii) Develop a flexible sales policy.

(iii) Create a complete sales channel and product distribution policy.

(iv) Establish and strengthen the organizational structure for product consumption.

Besides, textile and garment enterprises need to comply with the process of consuming finished products

Textile and garment enterprises need to comply well with the consumption process to reduce storage time for finished products. Specifically, when a sales transaction arises, the sales department employee makes a request for warehouse release. The accounting department, based on the approved warehouse release request, checks the status of finished products in the warehouse, at the same time writes invoices, records and accounts operations arising from the release of goods. The warehouse keeper releases finished products and records warehouse cards. Monthly or quarterly, there is a reconciliation between the accounting department and the warehouse department to promptly detect and take immediate measures when problems arise.

REFERENCES

Ahmed, S. U., Mahtab, N., Islam, M. N., & Abdullah, M. (2017). Impact of working capital management on profitability: A study on textile companies of Bangladesh. *Journal of Business Financial Affairs, 31*(2), 305-330. https://doi.org/10.4172/2167-0234.1000292

Alfred, D. D. (2007). *Corporate finance* (2nd ed.). NewYork: High Rise Pulishers.

Amponsah-Kwatiah, K., & Asiamah, M. (2021). Working capital management and profitability of listed manufacturing firms in Ghana. *International Journal of and Productivity and Performance Management, 70*(7), 1751-1771. https://doi.org/10.1108/ijppm-02-2020-0043

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies, 58*(2), 277-297. https://doi.org/10.2307/2297968

Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics, 68*(1), 29-51. https://doi.org/10.1016/0304-4076(94)01642-d

Bartlett, G., Beech, G., De Hart, F., De Jager, P., De Lange, J., Erasmus, P., & van Rooyen, S. (2014). *Financial management –turning theory into practice*. South Africa: Oxford University Press.

Bashir, R., & Regupathi, A. (2022). Aggregate and disaggregate measures of operating and non-operating working capital influence on firm performance: Evidence from Malaysia. *International Journal of Banking and Finance, 17*(1), 1-26. https://doi.org/10.32890/ijbf2022.17.1.1

Basyith, A., Djazuli, A., & Fauzi, F. (2021). Does working capital management affect profitability? Empirical evidence from Indonesia listed firms. *Asian Economic and Financial Review, 11*(3), 236. https://doi.org/10.18488/journal.aefr.2021.113.236.251

Bendavid, I., Herer, Y. T., & Yücesan, E. (2017). Inventory management under working capital constraints. *Journal of Simulation, 11*(1), 62-74. https://doi.org/10.1057/s41273-016-0030-0

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics, 87*(1), 115-143. https://doi.org/10.1016/s0304-4076(98)00009-8

Breivik, J., Larsen, N. M., Thyholdt, S. B., & Myrland, Ø. (2023). Measuring inventory turnover efficiency using stochastic frontier analysis: Building materials and hardware retail chains in Norway. *International Journal of Systems Science: Operations & Logistics, 10*(1), 1964635. https://doi.org/10.1080/23302674.2021.1964635

China, K. P. M. G. (2011). *China's 12th five-year plan: Overview*. China: KPMG Advisory.

Churchill, N. C., & Mullins, J. W. (2001). How fast can your company afford to grow. *Harvard Business Review, 79*(5), 135-143.

Dang, C. D., Li, F., & Yang, C. (2018). Measuring firm size in empirical coporate finance. *Journal of Banking & Finance, 85*, 159-176. https://doi.org/10.1016/j.jbankfin.2017.09.006

Ding, S., Guariglia, A., & Knight, J. (2013). Investment and financing constraints in China: Does working capital management make a difference? *Journal of Banking & Finance, 37*(5), 1490-1507. https://doi.org/10.1016/j.jbankfin.2012.03.025

Do, H. N. (2014). *Cash flow management of Vietnamese food processing enterprises.* Doctoral Thesis, National Economics University, Hanoi.

Dormann, C. F., Elith, J., Bacher, S., Buchmann, C., Carl, G., Carré, G., . . . Leitão, P. J. (2013). Collinearity: A review of methods to deal with it and a simulation study evaluating their performance. *Ecography, 36*(1), 27-46.

Ebben, J. J., & Johnson, A. C. (2011). Cash conversion cycle management in small firms: Relationships with liquidity, invested capital, and firm performance. *Journal of Small Business & Entrepreneurship, 24*(3), 381-396. https://doi.org/10.1080/08276331.2011.10593545

Egwu, E. M. (2021). Exploration of cash flow management for enterprise's business performance. *Asian Journal of Economics Business and Accounting, 82*(5), 105–111. https://doi.org/10.9734/ajeba/2021/v21i1030435

Farris II, M. T., & Hutchison, P. D. (2002). Cash-to-cash: The new supply chain management metric. *International Journal of Physical Distribution and Logistics Management, 32*(4), 288-298. https://doi.org/10.1108/09600030210430651

Gill, A., Biger, N., & Mathur, N. (2010). The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal, 10*(1), 1-9.

Gitman, L. J. (2009). *Principles of managerial finance* (12th ed.). Bostos, MA: Pearson Prentice Hall.

Hale, G., & Long, C. (2011). What are the sources of financing of the Chinese firms? In Cheung Y.-W., Kakkas V., Ma G. (Eds.), The Evolving Role of Asia in Global Finance. In (pp. 313–337). Bingley, UK: Emerald Group Publishing Limited.

Keynes, J. M. (1937). The general theory of employment. *The Quarterly Journal of Economics, 51*(2), 209-223.

Kroes, J. R., & Manikas, A. S. (2014). Cash flow management and manufacturing firm financial performance: A longitudinal perspective. *International Journal of Production Economics, 148*, 37-50. https://doi.org/10.1016/j.ijpe.2013.11.008

Lancaster, C., Stevens, J. L., & Jennings, J. A. (1998). Corporate liquidity and the significance of earnings versus cash flow. *Journal of Applied Business Research, 14*(4), 27-38.

Lazaridis, I., & 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), 26 -35.

Lee, C. C., & Wu, Y. (2023). The impact of COVID-19 pandemic on hospitality stock returns in China. *International Journal of Finance & Economics, 28*(2), 1787-1800.

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology, 22*(140), 5-55.

Martínez-Sola, C., García-Teruel, P. J., & Martínez-Solano, P. (2013). Corporate cash holding and firm value. *Applied Economics, 45*(2), 161-170. https://doi.org/10.1080/00036846.2011.595696

Munusamy, H. (2010). Strategic cash flow management. *Journal of Financial Economics, 83*(3), 599-634.

Myeni, S. S. (2018). *Cash-flow management strategies in small and medium-sized occupational health enterprises.* Walden Dissertations and Doctoral Studies Collection.

Ortín-Ángel, P., & Prior, D. (2004). Accounting turnover ratios and cash conversion cycle. *Problems and Perspectives in Management, 2*(1), 189-205.

Scherr, F. C. (1989). *Modern working capital management: Text and cases*: Prentice Hall Inc Pulishers.

Shash, A. A., & Qarra, A. A. (2018). Cash flow management of construction projects in Saudi Arabia. *Project Management Journal, 49*(5), 48-63. https://doi.org/10.1177/8756972818787976

Wang, C.-W., Lee, C.-C., & Wu, L.-T. (2023). The relationship between cash flow uncertainty and extreme risk: International evidence. *Pacific-Basin Finance Journal, 77*, 101927. https://doi.org/10.1016/j.pacfin.2022.101927

Yuliantari, & Sujana, I. K. (2014). The influence of financial ratio, firm size, and cash flow operating on return share of F&B companies. *Journal of Accounting and Business, Udayana University, 7*(3), 125 - 138.

Zala, V. S. (2010). *A study of productivity and financial efficiency of textile industry of India.* Thesis PhD, Saurashtra University.

Zeger, S. L., & Liang, K.-Y. (1986). Longitudinal data analysis for discrete and continuous outcomes. *Biometrics, 42*(1), 121-130. https://doi.org/10.2307/2531248

Zimon, G., & Tarighi, H. (2021). Effects of the COVID-19 global crisis on the working capital management policy: Evidence from Poland. *Journal of Risk and Financial Management, 14*(4), 169. https://doi.org/10.3390/jrfm14040169