EFFECTS OF THE WORKING CAPITAL MANAGEMENT ON SMALL AND MEDIUM-SIZED ENTERPRISES. A CASE STUDY OF CHILEAN COMPANIES

Juan Alejandro Gallegos Mardones, Hugo Moraga-Flores, José Navarrete-Oyarce and Luis Araya-Castillo

SUMMARY

Small and medium-sized enterprises (SMEs) play a crucial role in economic and social development by generating wealth and creating jobs. They have become significant contributors to this development due to the employment opportunities they provide. While the literature on financial economics has extensively explored the relationship between working capital management and profitability in large enterprises, there has been less focus on SMEs. Research into SMEs' working capital management and profitability has not produced conclusive results, highlighting the need for further investigation into new explanations and causal relationships. This study employs the panel data method and finds a positive and significant relationship between investment in accounts receivable and business performance. In contrast, investment in inventory and leverage with suppliers show a negative impact on profitability when measured by ROA and ROE. A major limitation of this study was the lack of market data, which hindered a more precise measurement and analysis of the results.

Introduction

Small and medium-sized enterprises (SMEs) play a crucial role in economic and social development by generating wealth and creating jobs. They have become significant contributors to this development due to their ability to create new job opportunities (Panda *et al*., 2021).

Businesses' success is related to the development of its competitive advantage, and this, in turn, is linked to proper working capital management that facilitates its business model (Mazanec, 2022), and allows appropriate liquidity to fund operations. This is how corporates achieve greater profitability (Braimah *et al*., 2021) without increasing costs and insolvency risk (Adam *et al*., 2017).

Mazanec, (2022) define proper working capital management as the net investment between current assets and current liabilities that meets the demand for permanent resources of the cash conversion cycle, short-term debt service and operating expenses. According to Braimah *et al*., (2021), working capital management is a measurement that denotes a company's short-term financial health, which focuses on the investment in current assets and current liabilities, such as inventories, accounts receivable, cash, accounts payable, and other short-term obligations.

KEYWORDS / Chile / JEL Classification: M41; G30; G31 / Performance / Small and Medium-Sized Enterprises (SMEs) / Working Capital /

Received: 05/31/2024. Modified: 09/02/2024. Accepted: 09/07/2024.

Juan Alejandro Gallegos Mardones (Corresponding author). Doctor in Engineering Sciences, Pontificia Universidad Católica de Chile, Chile. Academic, Faculty of Economic and Administrative Sciences, Universidad Católica de la Santísima Concepción, Chile. Address: Alonso de Rivera 2850, Concepción, Chile. e-mail: jgallegos@ ucsc.cl.

Hugo Moraga-Flores. Doctor in Economics and Business, Universidad Europea de Madrid, Spain. Academic, Faculty of Economic and Administrative Sciences, Universidad de Concepción, Chile. e-mail: hmoraga@udec.cl.

José Navarrete-Oyarce. Doctor in Law and Business Administration, Universidad de Lleida, Spain. Director of Business Administration Engineering, Faculty of Economics and Business, Universidad Andrés Bello, Sede Concepción, Chile. e-mail: jose.navarrete@unab.cl.

Luis Araya-Castillo. Doctor in Management Sciences, Universidad Ramon Llull, Spain. Ph.D. in Management Sciences, ESADE Business School, Spain. Doctor in Business, Universidad de Barcelona, Spain. Dean, Faculty of Engineering and Business, Universidad Católica Silva Henríquez e-mail: larayac@ucsh.cl.

EFECTOS DE LA GESTIÓN DEL CAPITAL DE TRABAJO EN LAS PEQUEÑAS Y MEDIANAS EMPRESAS. UN ESTUDIO DE CASO DE EMPRESAS CHILENAS

Juan Alejandro Gallegos Mardones, Hugo Moraga-Flores, José Navarrete-Oyarce y Luis Araya-Castillo

RESUMEN

Las pequeñas y medianas empresas (PYMEs) juegan un papel crucial en el desarrollo económico y social al generar riqueza y crear empleos. Se han convertido en contribuyentes significativos de este desarrollo debido a las oportunidades de empleo que ofrecen. Aunque la literatura en economía financiera ha explorado extensamente la relación entre la gestión del capital de trabajo y la rentabilidad en grandes empresas, ha habido menos enfoque en las PYMEs. La investigación sobre la gestión del capital de trabajo y la rentabilidad en las PYMEs no ha producido resultados concluyentes, lo que destaca la necesidad de investigar nuevas explicaciones y relaciones causales. Este estudio emplea el método de datos de panel y encuentra una relación positiva y significativa entre la inversión en cuentas por cobrar y el rendimiento empresarial. En contraste, la inversión en inventario y el apalancamiento con proveedores muestran un impacto negativo en la rentabilidad cuando se mide por ROA y ROE. Una limitación importante de este estudio fue la falta de datos del mercado, lo que dificultó una medición y análisis más precisos de los resultados.

EFEITOS DA GESTÃO DO CAPITAL DE GIRO NAS PEQUENAS E MÉDIAS EMPRESAS. UM ESTUDO DE CASO DE EMPRESAS CHILENAS

Juan Alejandro Gallegos Mardones, Hugo Moraga-Flores, José Navarrete-Oyarce e Luis Araya-Castillo

RESUMO

As pequenas e médias empresas (PMEs) desempenham um papel crucial no desenvolvimento econômico e social ao gerar riqueza e criar empregos. Elas se tornaram contribuintes significativos para esse desenvolvimento devido às oportunidades de emprego que oferecem. Embora a literatura em economia financeira tenha explorado extensivamente a relação entre a gestão do capital de giro e a rentabilidade em grandes empresas, houve menos foco nas PMEs. A pesquisa sobre a gestão do capital de giro e a rentabilidade nas PMEs não produziu resultados conclusivos, destacando a necessidade de investigar novas explicações e relações causais. Este estudo utiliza o método de dados em painel e encontra uma relação positiva e significativa entre o investimento em contas a receber e o desempenho empresarial. Em contraste, o investimento em inventário e o apalancamento com fornecedores mostram um impacto negativo na rentabilidade quando medidos por ROA e ROE. Uma limitação importante deste estudo foi a falta de dados de mercado, o que dificultou uma medição e análise mais precisas dos resultados.

Altaf and Shah, (2017) suggest that investment in working capital depends on a business' financial strategy, and it may vary depending on risk aversion degree and company's financial strategy defines the investment in working capital, costs and benefits must be considered too; hence, managers have to establish the optimal inversion level (Gorondutse *et al*., 2017). The finance literature has studied the relationship between working capital management and large enterprises' profitability mainly (Panda *et al*., 2021). However, the discussion around working capital management in small and medium-sized enterprises' contexts has not awaken the same interest (Gorondutse *et al*., 2017), in spite of the enormous economic and social development potential (Baker *et al*., 2019), where, besides, a deficient working capital management becomes one of the main reasons why these companies fail (Ukaegbu, 2014).

Research on working capital management and profitability in SMEs has not yet yielded conclusive results. This highlights the need to explore new explanations and causal relationships. This study examines the effects of working capital management on Chilean SMEs' profitability, as well as the characteristics of their CEOs and how these can influence firm performance (Lindsay *et al*., 2017). The panel data method was employed. The main findings indicate a positive and significant relationship between investment in accounts receivable and business performance. Conversely, investment in inventory and leverage with suppliers negatively affects profitability when measured by ROA and ROE.

The rest of the document is organized as follows: Section 2 presents the literature review, Section 3 describes the data and methodology, Section 4 analyzes the results, and Section 5 concludes the study.

Literature Review

Effective working capital management is understood as a measure of the short-term financial health of an enterprise, focusing on the combination of current assets and current liabilities of operations, such as cash, accounts receivable, inventory, suppliers, and accounts payable. One of the most commonly used metrics to measure working capital is the cash conversion cycle, which is calculated as the sum of days inventory outstanding plus days sales outstanding minus days payables outstanding (Rey-Ares *et al*., 2021).

Working capital can also be understood in terms of the cash conversion cycle, which is defined as the average investment in accounts receivable and inventory, minus the spontaneous financing provided by suppliers (Fernández-López *et al*., 2020). Another way to measure working capital is by assessing the excess of current assets over current liabilities, which includes cash, accounts receivable, inventory, accounts payable, and current debt (Mardones, 2022).

Finance literature has mainly examined the relationship between working capital

management and the profitability of large enterprises (Panda *et al*., 2021) in developed countries (Nguyen and Nguyen, 2018). However, the discussion on working capital management in the context of small and medium-sized enterprises has not garnered the same level of interest (Gorondutse *et al*., 2017), despite the significant economic and social development potential (Baker *et al*., 2019). Moreover, poor working capital management is one of the main reasons these companies fail (Ukaegbu, 2014). Concerning accounts receivable, a prolonged average collection period limits both the availability of resources for meeting capital requirements for new projects and the normal development of the business, negatively affecting the company's performance and reducing net profit for shareholders (Dary and James, 2019).

In order to improve companies' performance, state that businesses should increment the rotation of accounts receivable and inventories, whereas the rotation of payments when it comes to accounts payable should decrease; which will allow the company to be extended a higher credit to pay their loans (Nguyen *et al*., 2020). However, evidence is inconclusive in this matter due to certain results that reveal investment in working capital increases sales, which, in turn, enhances the company's performance (Baños-Caballero *et al*., 2020).

In this context, an increase in sales resulting from a higher commercial loan improves long-term relationships with clients (Pérez *et al*., 2018), while simultaneously maintaining higher inventory levels to protect the business from price fluctuations (Mahmood *et al*., 2019). Therefore, the formulated hypothesis is as follows:

Hypothesis, *H1*: A positive and significant relationship is observed between investment in accounts receivable and company performance.

Recent research has identified an inverted U-shaped non-linear relationship (Altaf and Shah, 2017), suggesting that there is an optimal level of investment in accounts receivable (Mahmood *et al*., 2019). This is because increased investment in net assets raises investment costs, diminishes financial performance, and increases bankruptcy risk (Boisjoly *et al*., 2020). Hence, the following hypothesis is proposed:

Hypothesis, *H2*: An inverted U-shaped non-linear relationship is observed between investment in accounts receivable and company's performance.

Regarding inventory management, it is observed that maintaining higher investment levels incurs greater opportunity costs for investment, storage, and control, which reduces business performance (Fernández-López *et al*., 2020; Sensini and Vazquez, 2021). Braimah *et al*., (2021) state that an excess of investment in accounts receivable and inventory negatively impacts business performance. Therefore, the following hypothesis is proposed:

Hypothesis, *H3*: A negative and significant relationship is observed between investment in inventories and business performance.

When companies make substantial investments, they can avoid potential stockouts, ensure continuous production, benefit from quantity discounts, and protect themselves from price fluctuations (Pérez *et al*., 2018). However, such policies may also lead to increased costs of fixed assets and higher opportunity costs (Dary and James, 2019). Similarly, an inverted U-shaped non-linear relationship is observed between investment in inventories and company profitability (Altaf and Shah, 2017). Therefore, the hypothesis is as follows:

Hypothesis *H4*: An inverted U-shaped non-linear relationship is observed between investment in inventories and company performance.

Sharma *et al.* (2023) discovered a positive and significant relationship between business performance and the extension of payment deadlines granted by suppliers. Longer payment deadlines allow companies to take advantage of supplier financing, keeping cash for a longer period. Consequently, rather than relying on external financing sources with higher costs, the company can enhance its performance by allocating those resources to more profitable activities (Baños-Caballero *et al*., 2020).

The use of commercial loans as an alternative source of financing becomes more important in countries with less developed financial markets because it alleviates the financial constraints that enterprises face. Even in environments with well-developed financial markets, commercial loans have become the primary short-term financing source for SMEs (Peng and Zhou, 2019). Nonetheless, Tunio *et al*. (2021) suggest that using commercial loans as a financing source can be costly for companies, as their implicit interest rates, often linked to early payment discounts, can be substantially higher than those of bank loans. Consequently, the following hypothesis is proposed:

Hypothesis, *H5*: A negative and significant relationship is observed between investment in suppliers and a company's profitability.

Pakdel and Ashrafi (2019) found that the characteristics of senior managers can help predict strategic decision-making. Organizational decisions often reflect the personality of senior managers, making the executive's gender a relevant variable since women tend to approach analysis and strategic decision-making differently from men. As a result, gender may influence investment in working capital and decision-making processes (Naqi and Siddiqui, 2020).

Evidence on the relationship between CEO gender and investment in working capital is scarce, particularly in Latin America (Zeng and Wang, 2015). Women are generally more risk-averse than men and are more concerned about how resources are allocated (Zeng and Wang, 2015). Therefore, it is expected that female CEOs will exhibit more conservative behavior than their male counterparts. Reguera-Alvarado *et al*. (2017) and Jeong and Harrison (2017) state that female CEOs can enhance decision-making in businesses due to their management skills and ability to reduce agency costs. Therefore, the proposed hypothesis is:

Hypothesis *H6*: Companies led by female CEOs maintain lower investments in working capital compared to their male counterparts, resulting in better financial performance.

Data and Methods

Data and study of variables

The variables used for this research include two dependent performance variables, five independent variables and five moderator ones. Dependent variables to measure the company's performance are return on assets ROA (Net operating income to total assets) and return on equity ROE (Net income to total equity). As for independent variables, investment in accounts receivable, AR, (Value inventories to total assets), inventories, INV, (Value inventories to total assets), working capital, WK, (Current assets minus current liabilities to total assets), accounts payable, AP, (Value accounts payable to total assets) and CEO's gender are considered, CEO (Variable dummy that equals 1 when the CEO is a woman female and 0 otherwise).

To mitigate potential omitted variable bias, we include several control variables in this research. The choice of control variables is following the literature (Chauvet and Jacolin, 2017). Control variables are also incorporated, such as leverage, LEV, (Total debt to total assets), enterprise' size, SIZE, (natural logarithm of total assets), operating cash flow, OCF, (Earnings after tax plus annual depreciation to total assets), sales growth,

Growth, (Percentage of change in sales with respect to the previous year), interest rate, RATE, (Interest rate active), Gross domestic product growth, GDP, (Percentage of change in gross domestic product growth) and industry.

Regarding the use of the control variable SIZE, its incorporation is relevant since even though our data is only companies classified as SMEs, there is a variety of sizes in the data, and therefore, the diversity of size is relevant to consider (Altaf and Shah, 2017; Braimah *et al*., 2021). Furthermore, we have grouped into four types: natural resources and mining industry, industrial and production, construction sector and finally, commercial sector and services according to information proposed by the survey to Chilean SMEs firms themselves, where they indicate the most relevant industry in their business, which are: Natural resources, Manufacturing Industry, Construction and finally, Commerce and Services.

Finally, the level of competition faced by the company in its industry is assessed through the CEO's perception, which is classified as very important, important, or not important.

Methodology

This research uses data retrieved from the Fifth Longitudinal Business Survey, which includes relevant information from Chilean SMEs firms (https://www.ine.gob.cl/estadisticas/economia/ciencia-y-tecnologia/encuesta-longitudinal-de-empresas) over the period 2014 - 2019. The final sample consists of 12,839 businesses that have complete data for all variables included in this study and were classified as 1,077 in the natural resources industry, 1,139 in manufacturing, 828 in construction, and 9,795 in trade and services. We also collected the active interest rate for each year from World Bank data (https://datos.bancomundial.org/indicador/FR.INR.LEND).

To verify the hypotheses proposed in this study the panel data method has been used (Almaqtari *et al*., 2019). The Hausman test allows a fixed or random effects model in panel data (Li, 2016). The null hypothesis (Ho) of the random effects model is that it is consistent; if its p-value is greater than 0.05, we accept the null hypothesis, and if the p-value is less than 0.05, we reject it. In our case, the Hausman test produced a p-value of 0.000, indicating that the fixed effects model is the appropriate method. The data were entered into and tabulated using STATA 17 statistical software to evaluate our hypotheses. To address the objectives and hypotheses of this research, the equations below will be used. The equations are the following:

$$FP_{i,t} = \alpha + \beta_1 AR_{i,t} + \beta_2 INV_{i,t} + \beta_3 AP_{i,t} + \beta_4 CEO_{i,t} + \beta_5 LEV_{i,t} + \beta_6 SIZE_{i,t} + \beta_7 OCF_{i,t} + \beta_8 Growth_{i,t} + \beta_9 Rate_{i,t} + \beta_{10} GDP_{i,t} + e_{i,t} \quad (1)$$

$$FP_{i,t} = \alpha + \beta_1 AR_{i,t} + \beta_2 INV_{i,t} + \beta_3 AP_{i,t} + \beta_4 CEO_{i,t} + \beta_5 LEV_{i,t} + \beta_6 SIZE_{i,t} + \beta_7 OCF_{i,t} + \beta_8 Growth_{i,t} + \beta_9 Rate_{i,t} + \beta_{10} GDP_{i,t} + \beta_{11} AR_{i,t}^2 + \beta_{12} INV_{i,t}^2 + e_{i,t} \quad (2)$$

The presence of endogeneity may cause inference errors, which may invalidate the consistency of fixed effects estimators (Alonso-Borrego and Arellano, 1999). The standard way to solve this problem is to use instrumental variables. Thus, we have proposed the use of lagged variables as valid instruments, just as we used the system estimator from (Blundell and Bond, 1998; Bond, 2002; Mardones, 2022). In our case, the only variable that exhibits this problem is leverage (Espinosa *et al*., 2012).

Descriptive variables and data

We have analyzed the significant correlation between performance variables and explanatory variables. In the case of ROA, we observed a correlation with accounts receivable (AR) of 0.354, -0.048 with the inventories variable (INV), with accounts payable (AP) -0.141. In relation to performance variable ROE, its correlation with accounts receivable (AR) is of 0.061, -0.052 with inventories (INV), -0.082 with accounts payable variable (AP). As for the CEO's gender variable, i.e., when the CEO is a woman, there is a negative relationship of -0.034 associated to ROA variable, and -0.029 when performance is measured through performance variable ROE (Table I).

Table II shows the descriptive statistics of the variables used for this research. The average performance of ROA and ROE is 6.3% and 18.8% respectively. The average investment in accounts receivable (AR) is 43.8% of total assets, in inventories (INV) is 12.1%,

TABLE I
CORRELATION MATRIX

	ROA	ROE	AR	INV	AP	CEO	LEV	SIZE	OCF	Growth	RATE	GDP
ROA	1.000*											
ROE	0.592*	1.000*										
AR	0.354*	0.061*	1.000*									
INV	-0.048*	-0.052*	0.276*	1.000*								
AP	-0.141*	-0.082*	0.166*	0.090*	1.000*							
CEO	-0.034*	-0.029*	0.062*	-0.041*	0.030*	1.000*						
LEV	-0.051*	-0.056*	-0.054*	0.073*	0.004	0.033*	1.000*					
SIZE	-0.150*	-0.152*	-0.007*	-0.023*	0.052*	0.209*	0.088*	1.000*				
OCF	0.049*	0.015*	-0.006*	-0.020*	-0.009*	0.038*	0.003	0.172*	1.000*			
Growth	0.002*	0.017*	-0.002*	-0,005*	-0.002*	-0.009*	-0.004*	-0.014*	0.005*	1.000*		
RATE	0.012*	0.022*	-0.026*	0.018*	0.011*	-0.282*	0.004*	0.069*	-0.004	-0.002	1.000*	
GDP	0.010*	0.002*	0.009*	0.009*	0.003*	0.108*	-0.001*	-0.005*	0.004*	0.003	-0.087*	1.000*

*p < 0.1; ** p < 0.05; *** p < 0.01. ROA : Net operating income to total assets) and return on equity, ROE :Net income to total equity, AR: Value inventories to total assets, INV : Value inventories to total assets, AP: Value accounts payable to total assets, CEO: Variable dummy that equals 1 when the CEO is a woman female and 0 otherwise, LEV: Total debt to total assets, SIZE: natural logarithm of total assets, OCF: Earnings after tax plus annual depreciation to total assets, Growth: Percentage of change in sales with respect to the previous year, RATE: Interest rate active, GDP: Percentage of change in gross domestic product growth.Source: Own computation using STATA 17 software, prepared by the authors.

TABLE II
DESCRIPTIVE STATISTICS

Variable	Observations	Mean	Std. Dev.	Min	Max
ROA	12,839	0.063	0.189	-1.936	1.997
ROE	12,839	0.188	0.422	-1.982	1.993
AR	12,839	0.438	0.296	0	5.281
INV	12,839	0.121	0.188	0	1.124
AP	12,839	0.205	0.254	0.033	7.182
CEO	12,839	0.386	0.487	0	1
LEV	12,839	0.1	0.208	0	11.637
SIZE	12,839	14.775	2.764	6.802	31.686
OCF	12,839	0.063	0.189	-1.936	1.997
GROW	12,839	0.005	0.295	-1	0.997
RATE	12,839	0.045	0.006	0.04	0.056
GDP	12,839	0.02	0.013	0.007	0.04

ROA: Net operating income to total assets and return on equity, ROE: Net income to total equity, AR: Value inventories to total assets, INV: Value inventories to total assets, AP: Value accounts payable to total assets, CEO: Variable dummy that equals 1 when the CEO is a woman female and 0 otherwise, LEV: Total debt to total assets, SIZE: natural logarithm of total assets), OCF, (Earnings after tax plus annual depreciation to total assets, Growth: Percentage of change in sales with respect to the previous year, RATE: Interest rate active, GDP: Percentage of change in gross domestic product growth. Source: Own computation using STATA 17 software, prepared by the authors.

and in accounts receivable (AP) is 20.5%. Finally, the average participation of female CEOs in SMEs reaches 38.6% (Table II).

When analyzing each industry, the commercial and services industry has the highest number of companies with 9,795 firms. Regarding accounts receivable (AR), companies in the construction industry show the highest investment with 49.3% of total assets, followed by the trade industry with 45.8%. The manufacturing industry displays the highest average investment in inventories (INV) at 14.9%, followed by the trade and services industry at 12.4%. When analyzing the average debt in accounts payable (AP), the trade and services industry has a higher proportion of 21.5%. Regarding executive management positions headed by women, we have observed that their participation is lower than that of their male colleagues; however, the trade and services industry exhibits the highest participation at 40.5% (Table III).

Results and Discussion

Table IV displays the results of the regression models (1) and (2) that estimate the investment in working capital and corporate performance. It should be pointed out that the definition of working capital considered here involves causal relationship between investment in accounts receivable (AR), inventories (INV) and accounts payable (AP), and the profitability measurements ROA and ROE.

When the performance measurement is ROA, a positive and significant effect on investment in accounts receivable (AR) is observed: 0.0279 for model (1) and 0.0291 for model (2). On the other hand, when ROE is the performance measurement, results for both (1) and (2) are similar, with the relationship between AR and performance being 0.0538 and 0.0531, respectively. These results agree with the findings of Baños-Caballero *et al*. (2020) and Pérez *et al*. (2018), who assert that investment in accounts receivable improves a business's performance. According to these results, H1 cannot be dismissed, as a positive and significant relationship between investment in accounts receivable and company performance is detected.

Regarding the average investment in inventories (INV), when models (1) and (2) are estimated with ROA as the performance measurement,

TABLE III
SOME DESCRIPTIVE STATISTICS BY INDUSTRY

	Observations	Mean	Std. Dev.	Min.	Max.
Industry = Natural resources					
AR	1,077	0.309	0.27	0	1
INV	1,077	0.083	0.145	0	1.001
AP	1,077	0.142	0.194	0	1.12
CEO	1,077	0.312	0.464	0	1
Industry = Manufacturing					
AR	1,139	0.354	0.252	0	1
INV	1,139	0.149	0.171	0	1.124
AP	1,139	0.176	0.195	0	1.752
CEO	1,139	0.327	0.469	0	1
Industry = Construction					
AR	828	0.493	0.286	0	1.001
INV	828	0.093	0.171	0	1.045
AP	828	0.209	0.226	0	1.109
CEO	828	0.345	0.476	0	1
Industry = Commerce and Services					
AR	9,795	0.458	0.298	0	5.281
INV	9,795	0.124	0.195	0	1
AP	9,795	0.215	0.267	-0.033	8.182
CEO	9,795	0.405	0.491	0	1

ROA : Net operating income to total assets and return on equity, ROE: Net income to total equity, AR: Value inventories to total assets, INV: Value inventories to total assets, AP: Value accounts payable to total assets, CEO: Variable dummy that equals 1 when the CEO is a woman female and 0 otherwise, LEV: Total debt to total assets, SIZE: natural logarithm of total assets, OCF: Earnings after tax plus annual depreciation to total assets, Growth: Percentage of change in sales with respect to the previous year, RATE: Interest rate active, GDP: Percentage of change in gross domestic product growth. Source: Own computation using STATA 17 software, prepared by the authors.

TABLE IV
RELATIONSHIP BETWEEN WORKING CAPITAL AND CEO'S GENDER WITH PERFORMANCE

	Equation (1)		Equation (2)		Equation (1)		Equation (2)	
	R.O.A.				R.O.E.			
	Coefficient		Coefficient		Coefficient		Coefficient	
AR	0.0279	**	0.0291	***	0.0538	***	0.0532	**
	(0.010)		(0.011)		(0.183)		(0.018)	
IVN	-0.0822	***	-0.0852	***	-0.0668	***	-0.7033	**
	(0.018)		(0.190)		(0.033)		(0.332)	
AP	-0.0511	***	-0.0509	***	-0.0329	**	-0.0328	**
	(0.009)		(0.009)		(0.017)		(0.016)	
CEO	0.0033		0.0033		-0.0074		-0.0074	
	(0.004)		(0.004)		(0.008)		(0.007)	
L.LEV	0.0553	***	0.0538	***	-0.1358	***	-0.1361	***
	(0.012)		(0.012)		(0.228)		(0.023)	
Size	0.0366	***	0.0367	***	0.0186	**	0.0183	***
	(0.056)		(0.004)		(0.007)		(0.008)	
OCF	0.0173	***	0.0183	***	1.1558	***	1.1556	***
	(0.000)		(0.000)		(0.022)		(0.021)	
Growth	0.0000		0.0001		0.000		0.0000	
	(0.001)		(0.002)		(0.000)		(0.000)	
Rate	-0.1922	***	-0.2005	***	-0.1181	***	-0.1375	***
	(0.480)		(0.481)		(0.826)		(0.863)	
GDP	0.2379	**	0.2384	***	0.2731	*	0.2732	*
	(0.064)		(0.104)		(0.180)		(0.1790)	
AR2			0.000				0.0000	
			(0.001)				(0.000)	
INV2			0.000				0.0000	
			(0.001)				(0.000)	
Constant	-0.5875		0.000	***	-0.3124	**	-0.3117	**
	(0.064)		(0.064)		(0.117)		(0.116)	
Fixed effects								
Firm	Yes		Yes		Yes		Yes	
Year	Yes		Yes		Yes		Yes	
Industry	Yes		Yes		Yes		Yes	
Observations	12,839		12,839		12,839		12,839	
Adj. R-squared	0.5702		0.5703		0.5752		0.5750	

Standard deviation in parentheses. *p < 0.1; **p < 0.05; ***p < 0.01. ROA (Net operating income to total assets) and return on equity, ROE (Net income to total equity), AR, (Value inventories to total assets), INV, (Value inventories to total assets), AP, (Value accounts payable to total assets), CEO (Variable dummy that equals 1 when the CEO is a woman female and 0 otherwise), LEV, (Total debt to total assets), SIZE, (natural logarithm of total assets), OCF, (Earnings after tax plus annual depreciation to total assets), Growth, (Percentage of change in sales with respect to the previous year), RATE, (Interest rate active), GDP, (Percentage of change in gross domestic product growth). Source: Own computation using STATA 17 software and prepared by the authors.

both models reveal a negative and significant relationship of -0.0822 and -0.0852, respectively. Similar results were obtained when models (1) and (2) were estimated but using ROE as the performance measurement, as the relationship between INV and performance is -0.0668 and -0.0733, respectively.

These outcomes are in accordance with Braimah *et al.*, (2021), Fernández-López *et al.*, (2020) and Sensini and Vazquez, (2021), who have stated that maintaining higher investments entails dealing with higher opportunity costs, which, in turn, decreases a business's performance, despite some benefits suggested by the literature (Pérez *et al.*, 2018). According to these results, H3 cannot be discarded because a negative and significant relationship between investment in accounts receivable and company performance is observed.

With respect to suppliers' loans (AP), there is a negative and significant relationship when estimating models (1) and (2), with figures of -0.0511 and -0.0509 respectively when the performance measurement is ROA, and -0.0329 and -0.0328 for ROE. This shows that, despite its easy approval, this kind of financing may be more expensive than a regular loan. These results are in agreement with (Tunio *et al.*, 2021). In conclusion, H5

cannot be dismissed since there is a negative and significant relationship between investment in accounts receivable and business' performance.

Regarding female CEOs, no significant differences in relation to men have been detected when estimating models (1) and (2) because such estimations are not notable. These results agree with Nguyen *et al.* (2020). According to these results, H6 is dismissed because there is no significant relationship between CEO gender and business performance. The outcomes of control variables when estimating models (1) and (2) with ROA as the performance measurement reveal that the leverage variable (LEV), which is lagged and used as an instrument due to its endogenous relationship, has a positive and significant effect of 0.0553 and 0.0538 for each equation, respectively. This confirms that resorting to debt is beneficial (Mahmood *et al.*, 2019). However, when estimating its relationship with ROE, negative and significant results are observed (Table IV).

Enterprise size (SIZE) and operating cash flow (OCF) variables have a positive and significant relationship with performance: 0.0366 and 0.0186 when estimating model (1), and 0.0186 and 0.0183 when estimating model (2). These results agree with what Atan *et al.*, (2018) proposed. The growth variable (GROWTH) does not show a significant relationship with the performance variable when estimating models (1) and (2). In this regard, the literature is not conclusive (Mardones and Cuneo, 2020), since greater the ability to grow, can increase market share and synergies; however, competition within an industry might increase, which could hinder company performance.

Artica *et al.*, 2019, highlight that, in emerging economies, particularly in Latin America, the role of macroeconomic factors is relevant, such as the interest rate (Rate) and economic growth (GDP) variables in the results of companies and investment decisions. However, their results are not conclusive (Le, 2019). For example, favorable economic conditions allow for an increase in the performance of firms, and the evolution of the economic cycle in our research has been measured by the Rate and GDP variables (Altaf and Ahmad, 2019; Ukaegbu, 2014).

Concerning the gross domestic product variable (GDP), when models (1) and (2) are estimated and the performance

TABLE V
ESTIMATION OF THE RELATIONSHIP BETWEEN WORKING CAPITAL AND CORPORATE PERFORMANCE CONSIDERING THE LEVEL OF COMPETITION

	Low competition Coefficient				Medium competition Coefficient				High competition Coefficient			
	ROA		ROE		ROA		ROE		ROA		ROE	
AR	0.0101		0.0429	**	0.0378	**	0.1176	**	0.0541	***	0.0791	***
	(0.010)		(0.022)		(0.012)		(0.028)		(0.016)		(0.036)	
IVN	-0.0522	***	-0.1066	***	-0.0508	***	-0.0862	**	-0.0353	**	-0.0133	**
	(0.015)		(0.034)		(0.021)		(0.045)		(0.031)		(0.071)	
AP	-0.0531	***	-0.0856	***	-0.1148	***	-0.1973	***	-0.1399	***	-0.1635	***
	(0.009)		(0.019)		(0.015)		(0.033)		(0.021)		(0.048)	
CEO	-0.0136	***	-0.0304	***	-0.0121	*	0.0303	**	-0.0045		-0.0074	
	(0.006)		(0.012)		(0.006)		(0.015)		(0.009)		(0.023)	
L.LEV	0.0536	***	0.0749	***	-0.0383	**	0.0906	**	-0.0157		-0.0692	
	(0.011)		(0.024)		(0.021)		(0.045)		(0.028)		(0.066)	
Size	-0.0084	***	-0.0162	***	-0.0085		-0.0192		-0.0088	***	-0.0221	***
	(0.002)		(0.026)		(0.001)		(0.003)		(0.002)		(0.004)	
OCF	0.0010	***	0.0010	***	0.0010	***	0.0000	*	0.0010	***	0.0000	***
	(0.000)		(0.000)		(0.000)		(0.000)		(0.001)		(0.000)	
Growth	0.0015	***	0.0016		0.0000		0.0000		0.0015		0.0001	
	(0.006)		(0.014)		(0.000)		(0.000)		(0.003)		(0.008)	
Rate	-0.1928	*	-0.5933	**	-0.2017	**	-0.8999	***	-0.1052	*	-0.1758	*
	(0.645)		(0.363)		(0.837)		(0.085)		(0.146)		(0.798)	
GDP	0.2452	*	0.7701	***	0.1090	*	0.0973	*	-0.0592		-0.5694	
	(0.143)		(0.298)		(0.160)		(0.353)		(0.208)		(0.5359)	
Constant	0.1831	***	0.3204	***	0.0582	*	0.1082		0.1440	***	0.1375	***
	(0.032)		(0.068)		(0.041)		(0.091)		(0.058)		(0.01375)	
Observations	6,618		6,618		4,194		4,194		2,027		2,027	
Adj. R-squared	0.4594		0.5113		0.5045		0.5194		0.6255		0.4867	

Standard deviation in parentheses. *p < 0.1; **p < 0.05; ***p < 0.01. ROA (Net operating income to total assets) and return on equity, ROE (Net income to total equity), AR, (Value inventories to total assets), INV, (Value inventories to total assets), AP, (Value accounts payable to total assets), CEO (Variable dummy that equals 1 when the CEO is a woman female and 0 otherwise), LEV, (Total debt to total assets), SIZE, (natural logarithm of total assets), OCF, (Earnings after tax plus annual depreciation to total assets), Growth, (Percentage of change in sales with respect to the previous year), RATE, (Interest rate active), GDP, (Percentage of change in gross domestic prod-uct growth). Source: Own computation using STATA 17 software and prepared by the authors.

measurement is ROA, the two models reveal a positive and significant relationship of 0.2378 and 0.2384, respectively. On the other hand, when ROE is the performance measurement, the relationship is 0.2731 and 0.2732, respectively. This suggests that economic growth affects financial performance positively because it provides better opportunities to invest, which increases the demand for investment in working capital and benefits its performance (Pérez *et al*., 2018).

The lending rate is a proxy for the opportunity cost faced by firms when obtaining financing in the financial market, which is negatively related to the firm's level of profitability. Research on the impact of macroeconomic variables has demonstrated the considerable influence of macroeconomic conditions on liquidity and investment in working capital (Wijerathna *et al*., 2024) and has shown that the increase in liquidity levels has been attributable to macroeconomic influences, such as changes in interest rates. The relationship between the interest rate (RATE) and the performance variable in terms of ROA is negative and significant: -0.1922 when model (1) has been estimated, and -0.2005 in the case of model (2). Furthermore, the effects are -0.1181 and -0.1375 when using ROE as a performance measure.

When examining eventual non-linear effects among the variables used to determine the investment in working capital in terms of models (1) and (2), and ROA and ROE as performance measurements, no significant effect was found that establishes a non-linear relationship between investment in accounts receivable (AR^2) and inventories (INV^2) with business performance. According to these outcomes, H2 and H4 are discarded since no significant relationship between investment in accounts receivable and inventories with company performance has been observed.

Moreover, we considered the effects of market competition on performance. According to Babar and Habib (2021), investing in working capital can be beneficial in highly competitive markets, leading to increased performance. However, it can also result in higher agency

TABLE VI
ESTIMATION OF THE RELATIONSHIP BETWEEN WORKING CAPITAL AND CORPORATE PERFORMANCE BY INDUSTRY

	Natural resources		Manufacturing		Construction		Commerce and Services		Natural resources		Manufacturing		Construction		Commerce and Services	
	Coefficient ROA								Coefficient ROA							
AR	-0.0481		0.0844	*	0.0482		0.0218	**	-0.0431		0.117		0.138		0.0804	***
	(0.0322)		(0.0447)		(0.0511)		(0.0111)		(0.0857)		(0.0904)		(0.102)		(0.0234)	
INV	-0.1560	***	-0.113		-0.267	***	-0.0405	*	0.0228		-0.3320	**	-0.4830	***	-0.1170	***
	(0.0487)		(0.0822)		(0.0896)		(0.0208)		(0.130)		(0.166)		(0.178)		(0.0440)	
AP	-0.0248		-0.204	***	-0.163	**	-0.0444	***	-0.2160	*	-0.4160	***	-0.4530	***	-0.0724	***
	(0.0414)		(0.0605)		(0.0721)		(0.0094)		(0.1100)		(0.122)		(0.144)		(0.0200)	
CEO	0.0183		-0.00423		-0.00572		0.00419		-0.0153		0.00612		-0.0296		0.0008	
	(0.0127)		(0.0168)		(0.0226)		(0.0048)		(0.0339)		(0.0339)		(0.0450)		(0.0101)	
L.LEV	-0.0191		0.139	**	-0.0352		0.0588	***	0.0625		0.3630	***	-0.132		-0.0934	***
	(0.0560)		(0.0612)		(0.0806)		(0.0132)		(0.1490)		(0.124)		(0.160)		(0.0279)	
SIZE	0.0138	**	0.0294	*	0.143	***	0.0393	***	0.0223	*	0.09030	***	0.2750	***	0.0569	***
	(0.0070)		(0.0154)		(0.0254)		(0.0048)		(0.0186)		(0.0311)		(0.0506)		(0.0101)	
OCF	0.0000	**	0.0000	***	0.0000	***	0.0000	***	0.0000	*	0.0000		0.0000	***	0.0000	**
	(0.0000)		(0.0000)		(0.0000)		(0.0000)		(0.0000)		(0.0000)		(0.000)		(0.0000)	
Growth	-0.0002		0.0169	*	-0.00151		0.0000		0.0000		0.0491	***	0.0123**	**	0.0000	
	(0.0001)		(0.0089)		(0.0028)		(0.0000)		(0.0004)		(0.0180)		(0.0056)		(0.0000)	
Rate	0.1360		-0.4638	***	2.100		-0.222	***	-0.9310	*	-0.8800	***	1.3600		-0.2640	***
	(1.3240)		(1.696)		(2.661)		(0.537)		(3.5270)		(3.429)		(5.2970)		(1.1380)	
GDP	-0.1270		0.359		0.868	*	0.202	*	-1.0070		0.908		0.2450	*	0.6470	***
	(0.2850)		(0.376)		(0.524)		(0.111)		(0.7600)		(0.759)		(1.0430)		(0.2350)	
Constant	-0.1460		-0.563	**	-2.023	***	-0.632	***	-0.1340		-1.617	***	-3.6920	***	-0.9560	***
	(0.1160)		(0.239)		(0.385)		(0.0782)		(0.3090)		(0.484)		(0.766)		(0.1660)	
Observations	1,077		1,139		828		9,795		1,077		1,139		828		9,795	
R-squared	0.042		0.094		0.148		0.031		0.014		0.102		0.187		0.023	

Standard deviation in parentheses. *p < 0.1; **p < 0.05; ***p < 0.01. ROA (Net operating income to total assets) and return on equity, ROE (Net income to total equity), AR, (Value inventories to total assets), INV, (Value inventories to total assets), AP, (Value accounts payable to total assets), CEO (Variable dummy that equals 1 when the CEO is a woman female and 0 otherwise), LEV, (Total debt to total assets), SIZE, (natural logarithm of total assets), OCF, (Earnings after tax plus annual depreciation to total assets), Growth, (Percentage of change in sales with respect to the previous year), RATE, (Interest rate active), GDP, (Percentage of change in gross domestic prod¬uct growth) Source: Own computation using STATA 17 software and prepared by the authors.

costs and decreased company value (Atif *et al*., 2022; Dittmar and Mahrt-Smith, 2007). Increased competition can discourage unwanted behaviour by agents and ultimately increase the value of the company (Alimov, 2014).

Table V shows the perception of competition for models (1) and (2). This data has been classified into three categories: low competition, medium competition and high competition. When performance is measured in terms of ROA, the relationship between investment in accounts receivable (AR) and performance is positive and significant (0.0378 and 0.0541 for each model), but only when competition is medium or high. The relationship with investment in inventories (INV) remains negative and significant across all competition categories: -0.0522 for low competition, -0.0508 for medium competition, and -0.0353 the high competition. In relation to accounts payable (AP), the relationship is negative and significant across all levels: -0.0531 for low competition, -0.1148 for medium competition, and -0.1399 for high competition.

Regarding CEO's gender, when the CEO is a woman, a negative and significant relationship is found when competition is low and medium (-0.0136 and -0.0121, respectively); when competition is high, according to the CEO's perception, there are no statistical gender differences. Considering ROE as the performance measurement, investment in accounts receivable remains positive and significant: 0.0429, 0.1176, and 0.0791 for low, medium, and high competition levels, respectively.

For investment in inventories and accounts payable, the relationship is negative and significant across all competition levels, similar to that observed with ROA as a performance measurement. When the CEO is a woman and competition is low or medium, a negative and significant relationship is evident. These results align with the stance of Marinova *et al*. (2016), who observed a reduction in company value when the CEO is female. However, according to the CEO's perception, no statistical gender differences are observed when competition is high. Furthermore, the results are similar in terms of ROA and ROE. Francoeur *et al*. (2021) and Marinova *et al*. (2016) offer a possible explanation for this, suggesting that female managers may have a positive, negative, or neutral impact on performance.

Regarding investment in working capital and performance by industry, the results show that investment in accounts receivable (AR) has a positive and significant relationship for manufacturing, commercial, and service industries when performance is measured using ROA and ROE. No differences related to CEO gender were observed. Leverage (L.LEV) and company size (SIZE) show positive and significant relationships with investment and performance. The effects of interest rates (Rate) are consistent across industries, and no significant differences were observed (Table VI).

Conclusion

The study intends to analyze the impact of working capital management on enterprises' financial performance. To develop this objective, investment in working capital has been defined as the average investment in accounts receivable, inventories, and spontaneous financing provided by suppliers (Fernández-López *et al*., 2020). Results reveal there is a positive and significant relationship between investment in accounts receivable and corporate performance when measured in terms of ROA and ROE, which confirms our first hypothesis. Regarding investment in working capital, results show a negative relationship with performance, in accordance with (Dary and James, 2019); and as for financing provided by suppliers, its relationship with performance is negative and significant. This could be explained by the higher cost of this source of finance compared to bank loans (Dary and James, 2019). In consequence, hypotheses 3 and 5 cannot be dismissed. Since no non-linear relationships were found among investment in working capital, hypotheses 2 and 4 are rejected.

The contribution of this research to the literature related to corporate finance management includes how working capital management affects the performance of SMEs, considering the gender of CEOs and the level of competition in the industry. The results primarily apply to SMEs. However, they are consistent with the finance literature that is relevant to any company.

Firstly, this investigation studies the working capital management of Chilean SMEs in a longitudinal context. Secondly, this study could be of help to managers in the development of financial strategies that optimize investment in working capital. Thirdly, the research investigates the impact that CEO gender has on investment in working capital, which responds to the new challenges around gender parity on boards of directors.

As regards some of the main limitations faced while conducting the study, these include the lack of market data that could have enhanced the precision of some financial measurements, as well as the need for information from several countries to obtain more general results and conclusions. For further research, we suggest collecting data from other countries in the region to broaden the study.

REFERENCES

Adam AM, Quansah E, Kawor S (2017). Working capital management policies and returns of listed manufacturing firms in Ghana. *Scientific Annals of Economics and Business 64*: 255-269.

Alimov A (2014) Product market competition and the value of corporate cash: Evidence from trade liberalization. *Journal of Corporate Finance 25*: 122-139.

Almaqtari FA, Al-Homaidi EA, Tabash MI, Farhan NH (2019) The determinants of profitability of Indian commercial banks: A panel data approach. *International Journal of Finance & Economics 24*: 168-185. https://doi.org/10.1002/ijfe.1655

Alonso-Borrego C, Arellano M (1999) Symmetrically normalized instrumental-variable estimation using panel data. *Journal of Business & Economic Statistics 17*: 36-49.

Altaf N, Ahmad F (2019) Working capital financing, firm performance and financial constraints: Empirical evidence from India. *International Journal of Managerial Finance 15*: 464-477.

Altaf N, Shah F (2017) Working capital management, firm performance and financial constraints: Empirical evidence from India. *Asia-Pacific Journal of Business Administration 9*: 206-219. https://doi.org/10.1108/APJBA-06-2017-0057

Artica RP, Brufman L, Saguí N (2019) Por que as empresas latino-americanas retêm muito mais caixa do que costumavam reter? *Revista Contabilidade & Finanças 30*: 73-90.

Atan R, Alam Md. M, Said J, Zamri M (2018) The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal 29*: 182-194. https://doi.org/10.1108/MEQ-03-2017-0033

Atif M, Liu B, Nadarajah S (2022) The effect of corporate environmental, social and governance disclosure on cash holdings: Life-cycle perspective. *Business Strategy and the Environment 31*: 2193-2212

Babar M, Habib A (2021) Product market competition in accounting, finance, and corporate governance: A review of the literature. *International Review of Financial Analysis 73*: 101607.

Baker HK, Kumar S, Singh HP (2019) Working capital management: Evidence from Indian SMEs. *Small Enterprise Research 26*: 143-163. https://doi.org/10.1080/13215906.2019.1624386

Baños-Caballero S, García-Teruel PJ, Martínez-Solano P (2020) Net operating working capital and firm value: A cross-country analysis. *BRQ Business Research Quarterly 23*: 234-251.

Blundell R, Bond, S (1998) Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics 87*: 115-143.

Boisjoly RP, Conine TE, McDonald MB (2020) Working capital management: Financial and valuation impacts. *Journal of Business Research 108*: 1-8. https://doi.org/10.1016/j.jbusres.2019.09.025

Bond SR (2002) Dynamic panel data models: a guide to micro data methods and practice. *Portuguese Economic Journal 1*: 141-162.

Braimah A, Mu Y, Quaye I, Ibrahim AA (2021) Working Capital Management and SMEs Profitability in Emerging Economies: The Ghanaian Case. SAGE Open 11: 215824402198931. https://doi.org/10.1177/2158244021989317

Chauvet L, Jacolin L (2017) Financial inclusion, bank concentration, and firm performance. World Development 97: 1-13.

Espinosa M C, Maquieira V C, Vieito JP, González A M (2012) Capital structures in developing countries: The Latin American case. *Investigación Económica 71*: 35-54.

Dary SK, James HS (2019) Does investment in trade credit matter for profitability? Evidence from publicly listed agro-food firms. *Research in International Business and Finance 47*: 237-250. https://doi.org/10.1016/j.ribaf.2018.07.012

Dittmar A, Mahrt-Smith J (2007) Corporate governance and the value of cash holdings. *Journal of financial Economics 83*: 599-634.

Fernández-López S, Rodeiro-Pazos D, Rey-Ares L (2020) Effects of working capital management on firms' profitability: Evidence from cheese-producing companies. *Agribusiness 36*: 770-791. https://doi.org/10.1002/agr.21666

Francoeur C, Lakhal F, Gaaya S, Saad IB (2021) How do powerful CEOs influence corporate environmental performance? *Economic Modelling 94*: 121-129.

Gorondutse AH, Abubakar A, Ali RA, Naalah MNI (2017) The effect of working capital management on SMEs profitability in Malaysia. *Polish Journal of Management Studies 16*: 99-109. https://doi.org/10.17512/pjms.2017.16.2.09

Jeong SH, Harrison DA (2017) Glass breaking, strategy making, and value creating: Meta-analytic outcomes of women as CEOs and TMT members. *Academy of Management Journal 60*: 1219-1252.

Le B (2019) Working capital management and firm's valuation, profitability and risk: Evidence from a developing market. International *Journal of Managerial Finance 15*: 191-204.

Li F (2016) Endogeneity in CEO power: A survey and experiment. *Investment Analysts Journal 45*: 149-162. https://doi.org/10.1080/10293523.2016.1151985

Lindsay V, Rod M, Ashill N (2017) Institutional and resource configurations associated with different SME foreign market entry modes. *Industrial Marketing Management 66*: 130-144. https://doi.org/10.1016/j.indmarman.2017.07.014

Mahmood F, Han D, Ali N, Mubeen R, Shahzad U (2019) Moderating Effects of Firm Size and Leverage on the Working Capital Finance–Profitability Relationship: Evidence from China. *Sustainability 11*: 2029. https://doi.org/10.3390/su11072029

Mardones JG (2022) Working capital management and business performance: Evidence from Latin American companies. *Economic Research-Ekonomska Istraživanja 35*: 3189-3205. https://doi.org/10.1080/1331677X.2021.1986675

Mardones JG, Cuneo GR (2020) Capital structure and performance in Latin American companies. *Economic Research-Ekonomska Istraživanja 33*: 2171-2188. https://doi.org/10.1080/1331677X.2019.1697720

Marinova J, Plantenga J, Remery C (2016) Gender diversity and firm performance: Evidence from Dutch and Danish boardrooms. *The International Journal of Human Resource Management 27*: 1777-1790.

Mazanec J (2022) The Impact of Working Capital Management on Corporate Performance in Small–Medium Enterprises in the Visegrad Group. *Mathematics 10*: 951. https://doi.org/10.3390/math10060951

Naqi A, Siddiqui DA (2020) The Impact of Aggressive Working Capital Management Policy on Firm's Value: A Mediating Effect of Company's Profitability. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3683016

Nguyen ATH, Nguyen TV (2018) Working Capital Management and Corporate Profitability: Empirical Evidence from Vietnam. *Foundations of Management 10*: 195-206. https://doi.org/10.2478/fman-2018-0015

Nguyen THH, Ntim CG, Malagila JK (2020) Women on corporate boards and corporate financial and non-financial performance: A systematic literature review and future research agenda. *International Review of Financial Analysis 71*: 101554. https://doi.org/10.1016/j.irfa.2020.101554

Pakdel M, Ashrafi M (2019) Relationship between Working Capital Management and the Performance of Firm in Different Business Cycles. *Dutch Journal of Finance and Management 3*: em0057. https://doi.org/10.29333/djfm/5874

Panda AK, Nanda S, Panda P (2021) Working Capital Management, Macroeconomic Impacts, and Firm Profitability: Evidence from Indian SMEs. *Business Perspectives and Research 9*: 144-158. https://doi.org/10.1177/2278533720923513

Peng J, Zhou Z (2019) Working capital optimization in a supply chain perspective. *European Journal of Operational Research 277*: 846-856. https://doi.org/10.1016/j.ejor.2019.03.022

Pérez AL, López SF, Pazos DR, Bonilla FL (2018) Análisis en la relación entre el fondo de maniobra y la rentabilidad: caso del sector oleícola español. *The National Administration Review 9*: 7-25.

Reguera-Alvarado, N, De Fuentes P, Laffarga J (2017) Does Board Gender Diversity Influence Financial Performance? Evidence from Spain. *Journal of Business Ethics 141*: 337-350. https://doi.org/10.1007/s10551-015-2735-9

Rey-Ares L, Fernández-López S, Rodeiro-Pazos D (2021) Impact of working capital management on profitability for Spanish fish canning companies. *Marine Policy 130*: 104583. https://doi.org/10.1016/j.marpol.2021.104583

Sensini L, Vazquez M (2021) Effects of Working Capital Management on SME Profitability: Evidence from an Emerging Economy. *International Journal of Business and Management 16*: 85. https://doi.org/10.5539/ijbm.v16n4p85

Sharma R, Mehta K, Goel A (2023) Non-linear relationship between board size and performance of Indian companies. *Journal of Management and Governance 27*: 1277-1301. https://doi.org/10.1007/s10997-022-09651-8

Tunio MN, Chaudhry IS, Shaikh S, Jariko MA, Brahmi M (2021) Determinants of the Sustainable Entrepreneurial Engagement of Youth in Developing Country–An Empirical Evidence from Pakistan. *Sustainability 13*: 7764.

Ukaegbu B (2014) The significance of working capital management in determining firm profitability: Evidence from developing economies in Africa. *Research in International Business and Finance 31*: 1-16. https://doi.org/10.1016/j.ribaf.2013.11.005

Wijerathna HS, Anuradha N, Ajward R (2024) Do selected board governance mechanisms strengthen the link between institutional and macroeconomic variables and the financial flexibility of corporations? Empirical evidence from an emerging economy. *Journal of Asia Business Studies 18*: 412-429.

Zeng S, Wang L (2015) CEO gender and corporate cash holdings. Are female CEOs more conservative? *Asia-Pacific Journal of Accounting & Economics 22*: 449-474. https://doi.org/10.1080/16081625.2014.1003568.