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Effects of Working Capital Management on Small-Sized Businesses in Competitive Environments with Economic Policy Uncertainty—A Case Study Applied to Chilean Companies

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Abstract: Working capital is a strategic resource that not only enhances financial performance but also ensures the long-term sustainability of organizations, especially SMEs. In the context of evolving economic policies and the challenges of gender equity affecting Chilean companies, this study explores how economic policy risk (EPU) and CEO characteristics influence working capital, which are essential investments for sustainable growth. The analysis covers 12,839 SMEs from 2014 to 2019. Using a fixed-effects panel data model, the findings reveal that firms tend to increase their investment in working capital in response to rising economic policy uncertainty. However, the relationship follows a non-linear inverted U-shaped pattern, which suggests the existence of an investment optimum between working capital and the EPU. Considering the level of competition, companies increase their investment in working capital when the level of competition is higher. Regarding the gender and age of CEOs, it is observed that women invest less in working capital, as do young CEOs. These results underscore the importance of EPU, along with the gender and age of CEOs, as key factors in promoting sustainable working capital management.

Keywords: small and medium enterprises (SMEs); working capital management; economic policy uncertainty (EPU); Chile

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1. Introduction

Small- and medium-sized enterprises (SMEs) contribute significantly to the economic and social development of the country [1], becoming relevant actors and excelling in the creation of new job opportunities [2–4]. The sustainability of these companies is associated with the proper management of working capital investment, which is an essential and strategic resource that facilitates their business model [5–8].

Proper working capital management enables the company to meet the permanent resource demands of the cash conversion cycle [8–10]. The authors [7] argue that effective working capital management supports companies' sustainability by focusing on investments in cash, inventory, accounts receivable, accounts payable, and other short-term obligations. Thus, a key responsibility of financial managers is to maintain adequate liquidity, preventing financial stress that could compromise the organization's sustainability.

The authors [11,12] argue that investment in working capital depends on factors related to the company's financing strategy, considering the costs and benefits of the investment. This suggests that CEOs seek an optimal investment [12,13].

Previous studies show that specific factors such as the size of the company, financial leverage, asset tangibility, and other exogenous factors such as the type of industry in which the company competes, internal product growth, and the active interest rate in the economy [14,15] affect the decision to invest in working capital. On the other hand, less

researched factors that affect investment in working capital and that are related to the gender and age of the CEO and the political–economic uncertainty in emerging countries are being considered for their relevance in investment decisions [4].

The topic of working capital management within SMEs has received limited attention from researchers [13], despite the significant economic and social impact of these organizations [16]. The authors in [17] highlight how the structure and composition of corporate governance play a crucial role in regulating short- and long-term financing policies for working capital investments, which in turn affects a company's financial performance. Notably, one of the key findings is the impact of the CEO's gender on the profitability of smaller firms in emerging markets, a subject for which the existing evidence remains scarce and inconclusive [18].

Furthermore, ref. [19] suggests that firms tend to hold more cash when they face more uncertainty. This behavior is explained by the existence of cash flow risks [19,20], stock market volatility [14,21], investment opportunities [22], and refinancing risks [23]. Moreover, uncertainty is explained by macroeconomic risks such as economic policy uncertainty (EPU) [24,25]. For example, the authors [26] claim that EPU is due to changes in fiscal and monetary policy, as well as other regulatory policies that affect markets [27].

Inconsistencies in the findings render research on working capital management and its determinants inconclusive, generating the need for new explanations and causal relationships. This is relevant in Latin America, where persistent political and economic risks have led to restrictions that, in turn, have fostered corrupt practices, impacting market conditions that have affected the management of companies, especially, the management of working capital in companies [28].

Chile's economy has become one of the most prosperous in Latin America, thanks to a series of public policies that consolidate a national and international agenda. These policies have allowed Chile to promote investment and foster integration into global markets [29]. However, economic policy uncertainty (EPU) has been increasing, driven mainly by domestic rather than global political factors. Therefore, this research studies how the risks associated with economic policy uncertainty (EPU) and new regulations that promote more gender equity could influence business decisions, in particular, the decision on working capital in SMEs [26,30].

As for the methodology used in this investigation, a panel data methodology with fixed effects was applied. The key findings indicate a positive and statistically significant relationship between EPU and working capital investment, particularly when firms operate in more competitive environments. In terms of gender, the results show that having a female CEO is negatively and significantly associated with working capital investment, with a similar pattern observed among younger CEOs. The paper is structured as follows: Section 2 provides a literature review, Section 3 describes the data and methodology, Section 4 discusses the results, and Section 5 presents the conclusions.

2. Literature Review

Nowadays, the management of working capital is one of the most relevant financial decisions due to its impact on the value of a company [31], as well as in corporate risk management and maximization of shareholder wealth [32,33]. Achieving these aims requires adequate liquidity to finance business operations [5,33]. Adequate management of working capital is understood as a measure of the financial health of a company, which focuses on the combination of current operational assets and liabilities, such as cash, accounts receivable and inventory, providers, and accounts payable. One line of research argues that increasing investment in working capital, particularly through inventory management, can foster sales, cover the price of inputs, and reduce purchasing costs [6,34,35].

Working capital can also be understood as the cash conversion cycle, defined as the average investment in accounts receivable and inventories, minus spontaneous financing provided by suppliers [36,37]. Another measure of working capital is the excess of current

assets over current liabilities, which includes components such as cash, accounts receivable, inventories, accounts payable, and current debt [15,38–40].

The Economic Policy Uncertainty Index, EPU, was developed by [26] and is a measure of macroeconomic uncertainty caused by fiscal policy issues, monetary policy, national security, financial regulations, social service programs, and trade policies, among other relevant variables [41,42]. Studies on the effects of EPU on business decisions have found that firms reduce their investment levels when facing riskier environments [43,44]. Additionally, variations in the EPU affect the cost of financing and restrictions on access to credit [41], and therefore, access to financing markets will depend on the strategic capabilities of the company [45].

It has also been observed that when economies face high levels of uncertainty, consumer spending declines, negatively impacting firms' performance [46] and influencing their investment decisions [47,48]. Therefore, understanding how Economic Policy Uncertainty (EPU) affects firms' decisions regarding investment in working capital is crucial, given its impact on the business operating cycle [42]. EPU influences investment in working capital and its components. As uncertainty increases, firms tend to boost sales by adopting less conservative credit policies, which in turn increases their investment in working capital [42,49–52]. Based on this, we propose the following hypothesis:

H1. *A positive and significant relationship is observed between investment in working capital and the Economic Policy Uncertainty.*

According to [51], companies operating in highly competitive industries tend to increase their working capital investments in response to greater competition, as delaying such investments can negatively impact their long-term competitiveness. Heightened competition elevates the demand for cash for precautionary reasons, serving as a strategy to deter new entrants into the market [52,53]. In this context, companies will increase their cash reserves to strengthen and maintain their competitive position, leading to higher investments in working capital. Based on this, we propose the following hypothesis.

H2. *Companies increase their investment in working capital as the competition they face in their industry increases.*

The characteristics of an organization's CEO are crucial, as they influence the strategic decision-making processes within the company. In this regard, the CEO's gender becomes a particularly important variable to consider [54]. The gender of the CEO has garnered significant interest among researchers, with evidence suggesting that it is related to investment and financing policies, including working capital management [55,56]. Furthermore, the inclusion of female CEOs can enhance a company's image, potentially fostering a competitive advantage and aligning with emerging gender equity policies [57,58].

The gender and composition of the Board are important factors, as they promote more balanced investment decisions [59]. In terms of risk management and control, it has been observed that female CEOs tend to exhibit more ethical and conservative decision-making behaviors, which may be attributed to psychological and behavioral differences compared to their male counterparts [60].

According to [61], female CEOs can enhance a company's decision-making process due to their management skills and ability to reduce agency costs [62]. Additionally, ref. [63] finds that organizations with greater female representation on their boards of directors tend to have lower levels of working capital investment compared to their male counterparts, suggesting more efficient working capital management. Furthermore, ref. [64] highlights that companies with higher female participation on their boards perform better, which can be explained by more efficient working capital management.

According to [65] propose that women have a weak and positive influence on long-term finance, but a weak and negative impact on short-term performance was observed [66]. They find that their incorporation could have a positive, negative, or zero effect on performance. However, evidence on the relationship between the gender of the CEO and

investment in working capital is scarce, especially in Latin America [18]. Therefore, we postulate the following hypothesis:

H3. *The presence of women CEOs allows companies to maintain lower investments in working capital than their male peers, allowing the company to perform better.*

3. Data and Research Methodology

3.1. Data and Study of Variables

For this research, we propose using one dependent variable, investment in working capital, three independent variables, and seven moderating variables. The dependent variable, working capital, WK, is calculated as the excess of current assets over current liabilities. As for the independent variables, the gender of the CEO, his age, AGE_CEO, the economic policy risk, and EPU are considered. Control variables are also incorporated, such as the level of indebtedness, LEV, the size of the company, SIZE, the operational cash flow, OCF, the sales growth, GRO, and the active interest rate of the economy, RATE [33,43] as well as a control by industry, grouping them into 4 types; natural resources and mining, industrial and production, construction, and finally trade and/or services (see Table 1).

Table 1. Measurement of variables and descriptive statistics.

Variables	Abbreviation	Detail and Operationalization
Working capital	WK	Current assets minus current liabilities to total assets
CEO	CEO	Variable dummy that equals 1 when CEO is a woman female CEO
AGE_CEO	AGE_CEO	Natural logarithm age CEO
Economic policy uncertainty	EPU	Economic Policy Uncertainty Index in Chile
Leverage	LEV	Total debt to total assets
Size	SIZE	Natural logarithm of total assets
Operational cash flow	OCF	Earnings after tax plus annual depreciation to total assets
Growth	GRO	Percentage of change in sales with respect to the previous year
Active interest rate	RATE	Active interest rate in Chile
Firm age	AGE	Firm age firms
Capital expenditure	CAPEX	Capital expenditures divided into total assets

Source: Prepared by the authors.

3.2. Methodology

This research uses data retrieved from the Fifth Longitudinal Business Survey, which include 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 (accessed on 1 January 2023). The final sample considered 12,839 businesses, since they have complete data for all variables included in this study: 1077 belong to the natural resources industry, 1139 to manufacturing, 828 to construction, and 9795 to trade and services sectors. We also collected the active interest rate for each year from World Bank data (https://datos.bancomundial.org/indicador/FR.INR.LEND) (accessed on 1 January 2023). In order to confirm the hypotheses of this study, a panel-analysis method was used [6]. The data were entered into and tabulated using STATA 17 statistical software, and to validate our hypotheses, we proposed to follow [18,67].

The Hausman test was conducted to determine if we would employ fixed or random effects in our regressions of the proposed models [68]. Also, we have included a set of fixed effects at different aggregation levels to control for the unobservable time-invariant

and industry-invariant fixed effects. The fixed effects were included at the year level and industry $\varepsilon_{i,t}$ is the error term [69,70].

So as to confirm the objectives and hypotheses of this research, we propose estimating the following equations, which will then consider the effects of the Economic Policy Uncertainty index, the level of intensity of industry competition, and the gender of the company's CEO. The following equations are proposed to evaluate the hypotheses of this study.

$$WK_{i,t} = \alpha + \beta_1\, EPU_{i,t} + \beta_2\, LEV_{i,t} + \beta_3\, SIZE_{i,t} + \beta_4\, OCF_{i,t} + \beta_5\, GRO_{i,t} + \beta_6\, RATE_{i,t} + \beta_7 AGE_{i,t} + \beta_8 CAPEX_{i,t} + Fixed\ efects + e_{i,t} \quad (1)$$

$$WK_{i,t} = \alpha + \beta_1\, EPU_{i,t} + \beta_2\, EPU^2_{i,t} + \beta_3\, LEV_{i,t} + \beta_4\, SIZE_{i,t} + \beta_5\, OCF_{i,t} + \beta_6\, GRO_{i,t} + \beta_7\, RATE_{i,t} + \beta_8 AGE_{i,t} + \beta_9 CAPEX_{i,t} + Fixed\ efects + e_{i,t} \quad (2)$$

$$WK_{i,t} = \alpha + \beta_1\, CEO_{i,t} + \beta_2\, AGE_CEO_{i,t} + \beta_3\, EPU_{i,t} + \beta_4\, EPU^2_{i,t} + \beta_5\, LEV_{i,t} + \beta_6\, SIZE_{i,t} + \beta_7\, OCF_{i,t} + \beta_8\, GRO_{i,t} + \beta_9\, RATE_{i,t} + \beta_{10} AGE_{i,t} + \beta_{11} CAPEX_{i,t} + Fixed\ efects + e_{i,t} \quad (3)$$

Another factor that can lead to errors in estimates is the existence of endogeneity, which occurs when one or more independent variables correlate with the term error. To solve this problem, the literature suggests the use of lagging variables in a period [71,72].

3.3. Descriptive Characteristics of the Data

Table 2 presents the Pearson correlation coefficients for the variables, and the results generally indicate no evidence of multicollinearity. Upon examining the correlation matrix for the variables of interest, a negative and significant correlation of −0.101 is found between having a female CEO and working capital investment (WK). This suggests that companies led by female CEOs tend to maintain lower levels of working capital investment compared to those led by male CEOs. Similarly, a negative and significant correlation of −0.095 is observed between CEO age (AGE_CEO) and working capital investment (WK), indicating that younger CEOs tend to allocate less to working capital than their older counterparts. Conversely, a positive and significant correlation of 0.189 is found between Economic Policy Uncertainty (EPU) and working capital investment (WK), implying that firms tend to overinvest in working capital when confronted with higher levels of economic risk.

Table 2. Correlation matrix.

Variables	WK	CEO	Age_CEO	EPU	LEV	SIZE	OCF	GRO	RATE	AGE	CAPEX
WK	1.000										
CEO	−0.101 *	1.000									
AGE_CEO	−0.095 *	0.020	1.000								
EPU	0.189 *	−0.037 *	−0.045 *	1.000							
LEV	0.057 *	−0.025	−0.037 *	0.005	1.000						
SIZE	0.113 *	−0.110 *	−0.153 *	0.043 *	0.109 *	1.000					
OCF	0.006	0.015	0.001	0.007	0.004	0.046 *	1.000				
GRO	0.106 *	−0.047 *	−0.038 *	0.287 *	−0.006	0.018 *	0.005	1.000			
RATE	0.584 *	−0.086 *	−0.079 *	0.706 *	0.006	0.071 *	0.008	0.268 *	1.000		
AGE	−0.031 *	0.009	0.161 *	−0.002	−0.021 *	0.275 *	0.010	−0.014	−0.012	1.000	
CAPEX	0.015	−0.019	−0.065 *	0.007	0.090 *	0.026 *	0.006	0.000	0.003	−0.043 *	1.000

Source: * $p < 0.1$. Source: Prepared by the authors.

Table 3 provides descriptive statistics for the variables. On average, companies invest 13.6% of their total assets in working capital (WK) to support their operations. However, it is also noted that some firms report negative net investments in working capital, ranging from −1% to as much as 81% of total assets. In terms of CEO gender, 19.6% of CEO positions are held by women, and the average CEO age is 51.7 years, with ages ranging from 20 to 91. Regarding Economic Policy Uncertainty (EPU), the average value is 0.366, with a minimum of 0.191 and a maximum of 0.642.

Table 3. Descriptive statistics.

Variables	Obs	Mean	Std. Dev.	Min	Max
WK	12,839	0.136	0.211	−0.001	0.81
CEO	12,839	0.196	0.278	0	1
AGE_CEO	12,839	51.723	11.819	20	91
EPU	12,839	0.366	0.191	0.167	0.642
LEV	12,839	0.099	0.208	0	10
SIZE	12,839	14.529	2.832	0	31.686
OCF	12,839	−1.265	147.798	−16,322	1
GRO	12,839	0.573	2.539	−1	94.638
RATE	12,839	0.045	0.006	0.04	0.056
AGE	12,839	18.845	12.285	1	192
CAPEX	12,839	0.058	0.085	0	0.497

Source: Prepared by the authors.

In line with the objectives of the survey on Chilean SMEs, which seeks to promote reforms to strengthen global competitiveness and improve market performance, CEOs were consulted about the level of competition in their respective industries. With this information, this research has estimated how companies adjust their investment decisions in working capital based on the level of competition. The CEOs were asked to classify the level of competition as high, medium, or low.

When analyzing the perception of competition by industry in which the companies participate (see Table 4), the firms maintain a slightly lower investment when they face greater competition. In this sense, companies invest 12.02% of their assets in working capital (WK) when competition is high, 13.8% when competition is medium, and 13.9% when competition is low. In addition, a similar behavior with the standard deviation in working capital was 19.7%, 21.3%, and 21.5% respectively. Furthermore, we observe that the average age among CEOs is similar; however, slightly higher in those companies with less competitive pressure. A similar situation is observed when comparing their standard deviations. Also, we observed that the highest presence of female CEOs is when companies face less competition.

Table 4. Descriptive statistics by level of competition.

Variable	Obs	Mean	Std. Dev.	Min	Max
High competition					
WK	2027	0.122	0.197	0	0.809
CEO	2027	0.181	0.252	0	1
AGE_CEO	2027	51.506	11.74	20	88
EPU	2027	0.365	0.192	0.166	0.0641
Medium competition					
WK	4194	0.138	0.213	0	0.81
CEO	4194	0.18	0.272	0	1
AGE_CEO	4194	50.966	11.8	20	91
EPU	4194	0.365	0.192	0.166	0.0641
Low competition					
WK	6618	0.139	0.215	−0.001	0.81
CEO	6618	0.207	0.288	0	1
AGE_CEO	6618	52.106	11.835	20	89
EPU	6618	0.365	0.192	0.166	0.0641

Source: Prepared by the authors.

4. Results and Discussion

4.1. Relationship Between Investment in Working Capital and the Economic Policy Uncertainty Index

Table 5 presents the results of the regression models (1) measuring the relationship between EPU and working capital investment, and the details of the estimation are shown in columns 1, 2, and 3. The results indicate that EPU affects working capital. The coefficient values are statistically significant at 1.240, 1.507, and 2.036 at the 1% level. Column 1 shows the base relationship, indicating that EPU has a positive effect on SMEs' working capital, and similar results are shown in columns 2 and 3. This result tells us that companies invest too much when they face greater risks as a way to compete in their industry. Therefore, we cannot reject hypothesis 1, in which a positive and significant relationship is observed between investment in working capital and EPU.

Table 5. Relationship between investment in working capital and the Economic Policy Uncertainty Index.

	Model (1)	**Model (2)**	
VARIABLES	**(1) WK**	**(2) WK**	**(3) WK**
EPU	1.240 ***	1.507 ***	2.036 ***
	(0.0154)	(0.0184)	(0.0441)
EPU2		−0.243 ***	−0.295 ***
		(0.0102)	(0.0115)
L.LEV			−0.00555
			(0.0187)
L.SIZE			−0.0112 **
			(0.00475)
L.OCF			−0.00567
			(0.00545)
L.GRO			0.00108
			(0.000660)
L.RATE			−17.70 ***
			(1.368)
L.AGE			−0.0236
			(0.0368)
L.CAPEX			0.0310
			(0.0373)
CONSTANT	−0.241 ***	−0.355 ***	0.480 ***
	(0.00437)	(0.00631)	(0.139)
Observations	12,839	12,839	12,839
R-squared	0.690	0.724	0.736
Company FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$. Source: Prepared by the authors.

This result is in line with that proposed by [42] who find that companies facing higher levels of uncertainty increase their working capital investment to mitigate the negative effects of market uncertainty and attempt to maintain their financial performance [46]. This result is according to [49,50], who find that firms, when facing a higher EPU, implement more liberal sales policies that increase accounts receivable and investment in working capital. Higher EPU creates opportunities and challenges for companies, affecting their operational activities and investment in working capital due to its implementation.

In search of a non-linear relationship between EPU (EPU2) and investment in working capital, (2) was estimated (see Table 5). The coefficients for this relationship are negative and statistically significant, measuring −0.243 and −0.295 at 1%, which indicates the existence of an optimal level of investment. Columns 2 and 3 show the existence of this non-linear relationship and tell us that firms overinvest up to a certain EPU risk level, and

then disinvest when the risk level exceeds a certain threshold. This result is in line with that proposed by [43,44]. The benefits are observable at an early stage, since, with successive increases in EPU, firms will reduce their investment levels due to increasing economic and financial constraints and frictions [70].

Leverage (LEV), operating cash flow (OCF), sales growth (GRO), company age (AGE), and investment in physical capital (CAPEX) do not show a statistically significant influence. However, these variables are considered relevant in the literature when analyzing working capital investment [43,44]. Additionally, the probability of the joint significance test (F) for the model is 0.0000, indicating that the variables, as a whole, explain the dependent variable. Therefore, they have been included in the model estimation.

The size shows an inverse relationship with working capital to −0.0112 and a significance of 0.05%, which is shown in column (3). The result indicates that larger companies invest less in working capital than smaller companies. Larger companies can negotiate better than smaller companies with their suppliers and customers, which allows them to gain a competitive advantage over companies that maintain a lower investment in working capital [14,15].

Regarding the effect of the interest rate (RATE), a significant negative relationship is observed in column (3). This result shows that when faced with increases in the interest rate, the company reduces its investments in working capital.

4.2. Relationship Between Investment in Working Capital and Level of Competition

Considering the level of competition affecting investment in working capital, (2) was estimated for the three levels of competition, high, medium, and low. See Table 6 and columns (1), (2), and (3), respectively. A positive and significant relationship is observed between EPU and investment in working capital for each level of competition at 1%. The existence of a non-linear relationship between EPU (EPU2) and working capital is similarly observed at 2.007, 2.001, and 1.936 at a significance level of 1%. Therefore, our results show that when companies face higher EPU, they tend to overinvest in working capital, especially when the market in which they compete is more competitive.

Table 6. Relationship between investment in working capital and the Economic Policy Uncertainty index moderated by level of competition.

VARIABLES	High Competition Coefficient	Medium Competition Coefficient	Low Competition Coefficient
	(1) WK	(2) WK	(3) WK
EPU	2.007 ***	2.001 ***	1.936 ***
	(0.0851)	(0.0790)	(0.0504)
EPU2	−0.264 ***	−0.298 ***	−0.292 ***
	(0.0220)	(0.0201)	(0.0129)
L.LEV	0.0123	0.0302 *	0.0374 ***
	(0.0197)	(0.0166)	(0.00742)
L.SIZE	0.00263 **	0.00273 **	0.00524 ***
	(0.00103)	(0.00109)	(0.000650)
L.OCF	−0.00127	−0.0138	−0.00779
	(0.00387)	(0.0106)	(0.00538)
L.GRO	−0.00256 **	−0.000574	4.60×10^{-5}
	(0.00112)	(0.00119)	(0.000573)
L.RATE	−22.96 ***	−22.29 ***	−12.48 ***
	(2.496)	(2.380)	(1.572)
L.AGE	−0.00919 *	−0.00206	−0.00818 ***
	(0.00486)	(0.00450)	(0.00286)
L.CAPEX	0.00695	0.00273	0.00935
	(0.0348)	(0.0299)	(0.0200)

Table 6. *Cont.*

VARIABLES	High Competition Coefficient	Medium Competition Coefficient	Low Competition Coefficient
	(1) WK	(2) WK	(3) WK
CONSTANT	0.463 ***	0.369 ***	0.00126
	(0.0877)	(0.0844)	(0.0553)
Observations	6618	4194	2027
Company FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: Prepared by the authors.

This result is understood as a protective measure to maintain their operations and discourage the entry of new competitors from entering the market, by increasing sales, accounts receivable, and, in other words, working capital. These results are consistent with what was proposed by [52,53]. Following these results, we cannot reject hypothesis (2), since it is observed that companies increase their investment in working capital as the competition they face in their industry increases.

4.3. Relationship Between Investment in Working Capital and CEO Age

The CEO's gender is vital in company decisions, including investment in working capital, and therefore, is an aspect to consider in financing and investment decisions. Regarding the effects of CEO gender on investment in working capital, (3) was estimated. See Table 7 and columns (1), (2), and (3), respectively. A negative and significant relationship of −0.234, −0.0954, and −0.0320 at 1% is observed between the gender of the CEO when she is a woman and the investment in working capital. Our findings suggest that female CEOs are more conservative than males when investing in working capital. This result shows that female CEOs require a lower level of investment in working capital than their male counterparts since they achieve higher levels of investment turnover and, therefore, require lower investment in working capital than male CEOs [66,68]. Following these results, we cannot reject hypothesis (3), since it is observed that companies increase their investment in working capital as the competition they face in their industry increases.

Table 7. Relationship between investment in working capital and the CEO.

	(1)	(2)	(3)
VARIABLES	WK	WK	WK
CEO	−0.234 ***	−0.0954 ***	−0.0320 **
	(0.0207)	(0.0160)	(0.0147)
AGE_CEO		−4.948 ***	−0.904 **
		(0.0957)	(0.446)
EPU			2.300 ***
			(0.0684)
EPU2			−0.365 ***
			(0.0175)
L.LEV			−0.0305
			(0.0205)
L.SIZE			−0.0137 **
			(0.00537)
L.OCF			−0.00120
			(0.0109)
L.GRO			0.000648
			(0.000928)
L.RATE			−25.53 ***
			(1.686)

Table 7. *Cont.*

VARIABLES	High Competition Coefficient	Medium Competition Coefficient	Low Competition Coefficient
	(1) WK	(2) WK	(3) WK
L.AGE			−0.0612
			(0.0440)
L.CAPEX			−0.107 **
			(0.0517)
CONSTANT	0.151 ***	19.42 ***	4.451 **
	(0.00470)	(0.373)	(1.779)
Observations	12,839	12,839	12,839
R-squared	0.486	0.701	0.813
Company FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$. Source: Prepared by the authors.

As for CEO age, a negative and significant relationship with working capital investment of −4.948 and −0.904 at 1% and 5% can be observed. Table 7 in columns (2) and (3) shows these effects. Our results indicate that younger CEOs are willing to invest less in working capital than their older peers. The literature proposes that young executives are motivated by building a reputation as capable and successful, which leads them to underinvest in order to achieve better performance [73]. In this sense, ref. [74] find that younger CEOs are less likely to be recognized and, generally, work in smaller companies, which favors the search for more aggressive financing strategies.

5. Conclusions

The efficiency in working capital enables companies to maintain adequate resources to finance their operations. This research offers new insights into working capital management in SMEs. It specifically examines how changes in economic and gender policies have impacted one of the most developed countries in Latin America: Chile. The findings indicate that companies adjust their investments, particularly in working capital, in response to the characteristics of their CEOs and the risks they face.

When companies encounter higher economic policy risk (EPU), they increase their working capital investments as a strategy to mitigate potential adverse effects and capitalize on opportunities created by these changes. Moreover, the gender and age of the CEO are significant factors. It has been observed that female CEOs generally invest less than their male counterparts, a trend attributed to their more conservative and efficient management styles. Another noteworthy conclusion pertains to the CEO's age; younger CEOs are often more inclined to make smaller investments compared to older CEOs, reflecting stronger financial management capabilities.

Moreover, this research contextualizes working capital investment within the competitive environment faced by companies, revealing that firms tend to increase their working capital investments when confronted with heightened competition.

Furthermore, a significant non-linear relationship is observed between economic policy uncertainty (EPU) and working capital investment, suggesting the existence of an optimal level of investment. The control variables OCF, GRO, and CAPEX are recognized in the literature as relevant determinants of working capital investment, but they were not found to be statistically significant in this study. However, they were included in the estimations. In contrast, the variables LEV, SIZE, RATE, and AGE demonstrate a significant relationship with working capital investment.

Management of working capital provides companies with a strategic resource that supports sustainability, making it essential for managers to consider the factors influencing this investment. Proper working capital investment enhances performance by allocating

the necessary resources to ensure optimal operations, thus promoting sustainable growth. Therefore, businesses must give careful attention to the management of working capital.

Despite the importance of research findings, several limitations need to be addressed in further studies. Specifically, this study was based on financial statement data. Incorporating market-based variables could improve certain financial metrics, and access to SME data from different countries could improve the quality and depth of the results; hence, conclusions would be more generalizable. For further research, we propose collecting data from other countries in the region and beyond, which would broaden the scope and applicability of the study.

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