

## WORKING CAPITAL MANAGEMENT AND GLOBAL ECONOMIC POLICY UNCERTAINTY: EVIDENCE FROM TURKEY<sup>1</sup>

### İřLETME SERMAYESİ YÖNETİMİ VE KÜRESEL EKONOMİK POLİTİKA BELİRSİZLİĞİ: TÜRKİYE'DEN KANITLAR

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#### Öz

Bu alıřmanın amacı, daha önce incelenmemiř olan, küresel ekonomi politikası belirsizliğı ile iřletme sermayesi yönetimi arasındaki iliřkiyi Türkiye'deki imalat iřletmeleri çerçevesinde arařtırmaktır. alıřmada 187 adet imalat sektöründe faaliyet gösteren iřletmenin 16 yıllık finansal verilerinden oluřan örnekleme panel veri analizi uygulanmıřtır. alıřmanın sonucunda, küresel ekonomi politikası belirsizliğinin iřletmelerin iřletme sermayelerine daha fazla yatırım yapmasına neden olduğı tespit edilmiřtir. alıřmada, geliřmekte olan bir piyasada faaliyet gösteren Türk imalat iřletmelerinin, risklerini azaltmak ve operasyonel sürekliliklerini saėlamak için iřletme sermayesine daha fazla yatırım yaptıkları ortaya konmuřtur. Bunun yanı sıra, ilgili iřletmelerin küresel ekonomi politikası belirsizliğinin yüksek olduğı dönemlerde alacak tahsilat gün sayılarının, stok devir günlerinin ve ticari bor ödeme gün sayılarının da arttıkları tespit edilmiřtir. alıřmanın sonuçları, küresel ekonomik politika belirsizliğinin Türkiye'deki imalat sektöründe faaliyet gösteren iřletmeleri ihtiyatlı iřletme sermayesi finansman yönteminin kullanımına teřvik ettiğı ortaya konmuřtur.

**Anahtar Kelimeler:** İřletme sermayesi yönetimi, nakit döngüsü, küresel ekonomik politika belirsizliğı, panel veri.

**JEL Sınıflandırması:** D81, E60, G30, M40

#### Abstract

The aim of this study is to examine the unexplored association between working capital management and global economic policy uncertainty within the context of the Turkish manufacturing companies. Panel data regression analysis over a 16-year period, based on a sample of 187 listed manufacturing companies is employed in the study. The results suggest that companies increase their working capital investment due to an increase in global economic policy uncertainty. The study establishes that Turkish companies, which operate in an emerging market, prefer higher working capital to mitigate risks and ensure operational continuity. In addition, during periods of high global economic policy uncertainty, accounts receivable days, inventory turnover days, and accounts payable days increase. The findings show that global economic policy uncertainty induces conservative working capital management.

**Keywords:** Working capital management, cash conversion cycle, global economic policy uncertainty, panel data.

**JEL Classification:** D81, E60, G30, M40

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## 1. Introduction

The capacity of a company to effectively oversee its working capital is essential to its financial stability. Working capital management (WCM) primarily focuses on managing operational current assets and trade-offs (Yilmaz and Nobanee, 2023). According to Aldubhani et al. (2022), companies should sustain a convenient degree of liquidity to cover their short-term obligations and to guarantee the continuity of their day-to-day operations. The amount of liabilities of a company is influenced by its working capital requirements and financing decisions, which also signals the company's riskiness to external investors (Jabbouri et al., 2023). WCM emphasizes the management a company's short-term capital to fund ongoing operations (Singhania and Mehta, 2017). Nobanee et al. (2011) suggest that the effectiveness of WCM depends on the principle of releasing cash from accounts receivable, inventory and accounts payable. Additionally, this refers to speeding up collections and slowing down the payments to the limit. However, García-Teruel and Martínez-Solano (2007) argue that sustaining an optimum degree of working capital that strikes a balance between costs and benefits is essential for efficient WCM. It should be noted that efficient WCM relies on the strategic approach that the company decides to pursue. Additionally, the company's profitability, risk, and value are all significantly impacted by how it manages its working capital (Smith, 1980).

Several company - specific and macroeconomic factors affect a company's WCM strategy. The association between profitability and WCM has been heavily researched in both developed and developing countries (DeLoof, 2003; García-Teruel and Martínez-Solano, 2007; Nazir and Afza, 2009; Akbulut, 2011; Nobanee et al., 2011; Baños-Caballero et al., 2012; Altaf and Shah, 2017; Le et al., 2018; Amponsah-Kwatiah and Asiamah, 2020; Rey-Ares et al., 2021; Deari Kukeli et al., 2022; Karim et al., 2023). Various studies have investigated the factors that determine WCM policy of companies. The influence of macroeconomic factors and company - specific factors on WCM has been acknowledged by the authors of many studies (Manoori and Muhammed, 2012; Mutua Mathuva, 2014; Tahir and Anuar, 2016; Moussa, 2019; Jabbouri et al., 2023; Tiwari et al., 2023; Yilmaz and Nobanee, 2023). However, less emphasis was placed on the effect of economic policy uncertainty, that shape the company's operations and financial decisions, on WCM. The term "Economic policy uncertainty (EPU)" is mainly the possibility that upcoming policies may differ from existing policies and how these changes may have impact on macro- and microeconomic activities (Baker et al., 2016). Economic recession and a dynamic environment lead to EPU, which also has an additional negative impact on companies' development. Previous studies find that EPU impacts corporate cash holding (Demir and Ersan, 2017), firm investment level (Drobtetz et al., 2018; Kong et al., 2022), merger and acquisitions deals (Bonaime et al., 2018), cost of financing (Jens, 2017), dividend policy (Attig et al., 2021) and capital structure choice (Zhang et al., 2015).

Companies may change their WCM strategies for a variety of reasons when governments propose new economic policies to boost the macroeconomy, which creates significant uncertainty for the actual economy. The volatility of uncertainty in the economic environment can be a significant determinant of WCM. If EPU increases, access to external finance will be more difficult for companies, and companies prefer internally generated cash resources for investment (Duong et al., 2020). However, since increased policy uncertainty cause to a slowdown in operations, it may also lead companies to increase their working capital investment as they do not need to free up funds to invest in growth opportunities (Rehman et al., 2017).

This research aims to analyze the influence of global economic policy uncertainty on working capital management using a sample of 2509 firm-year observations covering the period 2007 – 2022 for manufacturing companies listed in Borsa Istanbul Stock Exchange (BIST). Economic policy uncertainty captures the uncertainty surrounding economic policy decisions, the timing and nature of policy actions, and the financial impacts of both policy actions and inactions (Baker et al., 2016). Since EPU has not been calculated for Turkey, global economic policy uncertainty (GEPU) is employed in this study (Hoque and Zaidi, 2019; Yu et al., 2021). One of the key global risk factors influencing the performance of the global financial markets is the risk of GEPU. The global economic policy uncertainty exhibits greater effects on the financing environment of companies. An increase in GEPU might cause companies to postpone their investments and consumers to delay making purchases (Kong et al., 2022).

Due to its rapid growth, the Turkish stock market is quite vulnerable to external shocks, such as uncertainty in global economic policies. Turkey, as an emerging economy, reacts more quickly than developed economies. Moreover, business operations and strategic decisions are directly impacted by Turkey's economic instability. Global economic shocks to the Turkish economy, such as rising interest rates and changes in energy prices, may cause significant pressure on companies' WCM. WCM is an appropriate topic for this study because most companies invest heavily in working capital, when recessions are caused by policy uncertainty, which in turn discourages investment, puts pressure on the financial system, affects consumer demand for goods, and impairs companies' productivity and financial stability.

The findings reveal that increased GEPU causes an increase in working capital investment in Turkey. The evidence also indicates that a rise in GEPU is linked to an increase in all components of working capital. These results

highlight that higher global economic policy uncertainty strengthens companies' incentives to increase investment in working capital and its components. The study suggests that the key factors influencing WCM in Turkish companies are leverage, firm size, and operating cash flow. This research adds to the literature regarding the topic of the linkage between GEPU and WCM, which has been less studied so far. In the literature, there are studies focusing on how EPU affects company - specific characteristics in developed and developing countries. However, this is the only study examining the influence of GEPU on WCM and its components. This study enriches the literature on the relevance of global economic policy uncertainty in the choice of the WCM strategy and highlights the importance of GEPU as a determinant of WCM behavior of companies. It also provides guidance on how companies should modify their WCM strategies in reaction to sudden policy changes in the global economic environment. Given that Turkey is an emerging market, the study offers unique empirical evidence.

The study's remaining sections are organized in the following manner: The previous literature is summarized in the Section 2. The sample data and methodology employed in the study were provided in the Section 3. The empirical results were presented and discussed in Section 4. The last section concludes the study and outlines the policy implications, and limitations.

## 2. Literature Review

WCM is one of the essential aspects of financial management, which shapes companies' operational efficiency and maintains the balance between liquidity and profitability (Amponsah-Kwatiah and Asiamah, 2020; Jabbouri et al., 2023). According to Altaf and Ahmad (2019), the aim of working capital policy is to determine the appropriate degree of investment in working capital and the sources of funding for working capital. WCM focuses on keeping the current assets and current liabilities in balance and providing significant support for the revenues or longitudinal cash flows of the companies (Afrifa and Padachi, 2016). The effectiveness of the WCM is based on the rule of ensuring adequate cash flow to meet short-term obligations and operating expenses (Sah et al., 2022). Eljelly (2004) suggests that excessive investment in current assets must be avoided, and the risk of failing to pay short-term obligations must be eliminated, to effectively manage working capital and this can be accomplished through planning and managing current assets and current liabilities. Consistent with the management of the operating cycle, WCM deals with inventory, accounts receivable, and accounts payable (Yilmaz and Nobanee, 2023). The WCM is noted by Smith (1980) to be important because of its impact on a company's value, riskiness, and performance.

Depending on the company's risk objectives and resources, different WCM strategies can be adopted by companies, including aggressive and conservative WCM strategies. Sustaining a higher level of current assets results in losses for the companies on all short-term investments. However, a company with a small amount of current assets, can be more susceptible to difficulties and may even fail quickly in managing its operations. This makes the company less able to cover its short-term liabilities and exposes the company to more liquidity risk (Aldubhani et al., 2022). Depending on the companies' risk objectives and resources, they can adopt an aggressive WCM strategy or a conservative WCM strategy to increase their profitability, create value, and eliminate risks. An aggressive WCM strategy is associated with minimizing working capital investment and utilizing suppliers' credit terms to obtain short-term financing (García-Teruel and Martínez-Solano, 2007; Altaf and Ahmad, 2019). Conversely, additional investment in working capital, which means holding higher levels of accounts receivable and inventories, and lower levels of accounts payable, is represented as conservative WCM strategy (Altaf and Shah, 2018). It is argued that under an aggressive WCM strategy, reducing inventory holding and keeping accounts receivable to the minimum level allows companies to invest the funds in elsewhere. Postponing payments to suppliers can be a flexible source of funding (Deloof, 2003). However, García-Teruel and Martínez-Solano (2007) argue that if a company adopts a conservative WCM strategy, increasing inventories and accounts receivable can stimulate sales, prevent production disruptions, and reduce supply costs, which will increase the company's profitability. Baños-Caballero et al. (2012) point out that an aggressive WCM strategy is related with low investment in working capital, which is a high-risk, and high-return approach, whereas a conservative WCM strategy is associated with heavy investment in working capital, which is a low-risk and low-return approach.

The macroeconomic environment plays a significant role in explaining the dynamics of working capital management (Smith, 1987). A slowdown in the economy raises significant doubts about the potential profitability of businesses. Wasiuzzaman and Arumugam (2013) argue that working capital managers must adopt an aggressive WCM strategy in times of economic fluctuations to maximize liquidity, prevent debt expenses, and guarantee day to day operations. According to Smith (1980), working capital levels fluctuate when inflation and interest rates are rising, making it challenging for companies to maintain a balance in operations. A different point of view contends that companies operate more slowly during economic downturns, which results in decreased sales and inventory turnover as well as an increase in days' receivables. Under such conditions, companies can necessitate a conservative approach of WCM and do not have to free up cash for new investments (Rehman et al., 2017).

Given the contradictory arguments between WCM and economic conditions, empirical evidence in general supports the fact that GDP growth rate is significant and negatively related to WCM (Akinlo, 2012; Azami and Tabar, 2016; Rehman et al., 2017). On the contrary, Baños-Caballero et al. (2014) argue that slow economic growth forces companies to have lower inventory and accounts receivable levels, which eventually lead to lower investment in working capital. Within the context of macroeconomic variables, economic policy uncertainty can play a relevant role in the effectiveness and efficiency of WCM. Economic recession leads to economic policy uncertainty, which has an additional negative influence on companies' strategic development (Jens, 2017). Companies may alter their WCM strategy for a variety of reasons.

When governments propose new economic policies to boost the macroeconomy, it creates economic uncertainty. Economic uncertainty also refers to the uncertainty regarding activities taken by the government that impact the economy. However, because uncertainty is characterized as being unobservable, it is challenging to quantify. "Economic policy uncertainty (EPU)" is an index developed by (Baker et al., 2016) that encapsulates uncertainty regarding who will decide on economic policy, what actions will be taken in terms of economic policy, when they will be taken, and how those actions will affect the entire economy. Specifically, the extent to which political and regulatory systems are responsible for the overall economic uncertainty is measured by economic policy uncertainty (Drobtetz et al., 2018).

When economic policy uncertainty prevails, businesses can prefer to hold more cash reserves to cover unexpected operational difficulties, which lowers their demand for external funding. This means that low investment in working capital can be considered as an efficient way when EPU increases. In contrast, managers can prefer high investment in working capital in order to reduce possibility of interruptions in production and price fluctuations in reaction to an increase in EPU. Despite the significance of the nexus between EPU and WCM, little is known about their relationship. Dbouk et al. (2020) find empirical evidence that increased EPU drives high levels of inventory, trade credits, and working capital. They suggest that WCM strategy choice depends on the level of macroeconomic uncertainty, and companies prefer to adopt a conservative WCM strategy. Jory et al. (2020) analyze the relationship between EPU and corporate trade credit, which is the vital component of working capital. They note that during periods of high EPU, companies shorten their receivables terms and face shorter payables terms for suppliers. On the contrary, Zeng et al. (2020) analyze the relationship between EPU and inventory holding, which is also an important component of working capital, and show that companies reduce inventory holdings during high EPU levels. Reyad et al. (2022) examine the impact of EPU on WCM for the US, UK, German, and Chinese companies. They demonstrate that during high levels of EPU, US, German, and Chinese companies choose to adopt aggressive WCM strategies. Conversely, UK companies prefer a conservative WCM strategy. Tarkom and Ujah (2023) examine the effect of GEPU on working capital decisions in sixteen countries. They indicate that companies adopt a conservative WCM strategy during periods of high GEPU. Given the contradictory and limited evidence on the effect of GEPU on WCM, the hypothesis is as follows:

*H1: Working capital management is related to GEPU.*

### 3. Sample Data and Research Methods

The study's population comprises manufacturing companies listed on Borsa Istanbul (BIST) from 2007 to 2022. Companies, that have at least four continuous time series observations during the period 2007-2022 are included in the study. Since inflation accounting is applied in Turkey as of 2023, the analysis does not include the financial data for 2023. The observations with missing values or errors are excluded, resulting in a final sample of 187 companies and 2509 company-years. The financial data is obtained from Thomson Reuters DataStream, and the extreme values of variables in the sample are winsorized at 1 and 99% percentiles. Since the listed companies have different initial public offerings (IPOs), the H1 is tested using an unbalanced panel regression model.

In order to investigate the impact of GEPU on WCM, the cash conversion cycle is used as a measure of WCM (Deloof, 2003; García-Teruel and Martínez-Solano, 2007; Baños-Caballero et al., 2010; Dbouk et al., 2020; Tarkom and Ujah, 2023). A company's cash conversion cycle (CCC) is the period that elapses between the ultimate recovery of cash collections from product sales and the cash expenditures on a company's purchase of productive assets (Richards and Laughlin, 1980). A long CCC is a sign of a conservative WCM since it reflects longer inventory sales and receivables collection days and shorter days' outstanding for payables. Conversely, a shorter CCC necessitates quick inventory sales, quick receivables collection, and delayed payables to free up liquidity (Jabbouri et al., 2023). CCC is used as the dependent variable and calculated as follows:

- Cash Conversion Cycle (CCC) = Accounts Receivable Days (ARD) + Inventory Turnover Days (INVD) – Accounts Payable Days (APD)
- Accounts Receivable Days (ARD) =  $365 / (\text{Net Sales} / \text{Average Accounts Receivable})$
- Inventory Turnover Days (INVD) =  $365 / (\text{Cost of Goods Sold} / \text{Average Inventory})$
- Accounts Payable Days (APD) =  $365 / (\text{Cost of Goods Sold} / \text{Average Accounts Payable})$

The main independent variable is global economic policy uncertainty (GEPU). Since an index of economic policy uncertainty for Turkey has not been developed, GEPU is applied in the study. The core measure of GEPU was established by Baker et al. (2016). The “Global Economic Policy Uncertainty (GEPU)” is derived from the GDP-weighted average of national EPU indices from 21 nations<sup>2</sup>. As the GEPU index is estimated monthly, the natural logarithm of the 12-month arithmetic average of the GEPU index is used.

Following the literature on WCM (Deloof, 2003; García-Teruel and Martínez-Solano, 2007; Nobanee et al., 2011; Baños-Caballero et al., 2012; Mutua Mathuva, 2014; Altaf and Shah, 2018; Chauhan and Banerjee, 2018; Le et al., 2018; Moussa, 2019; Ampomah-Kwatiah and Asiamah, 2020; Aldubhani et al., 2022; Deari et al., 2022; Jabbouri et al., 2023; Karim et al., 2023; Yilmaz and Nobanee, 2023), firm size (SIZE); the natural logarithm of total assets, leverage (LEV); ratio of total debt to total assets, profitability (ROA); ratio of net income to total assets, growth opportunity (GROWTH); change in sales over the previous year, and operating cash flow (OCF); operating cash flows to total assets are used as the independent variables to control for the company-specific characteristics. The main empirical model (Model 1) is estimated as follows:

$$(1) CCC_{i,t} = \beta_0 + \beta_1 CCC_{i,t-1} + \beta_2 GEPU_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \beta_7 OCF_{i,t} + YEAR + \epsilon_{it}$$

The following three models, in which the dependent variables are the components of CCC, namely, accounts receivable days (ARD), inventory turnover days (INVD), and accounts payable days (APD), are also estimated.

$$(2) ARD_{i,t} = \beta_0 + \beta_1 ARD_{i,t-1} + \beta_2 GEPU_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \beta_7 OCF_{i,t} + YEAR + \epsilon_{it}$$

$$(3) INVD_{i,t} = \beta_0 + \beta_1 INVD_{i,t-1} + \beta_2 GEPU_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \beta_7 OCF_{i,t} + YEAR + \epsilon_{it}$$

$$(4) APD_{i,t} = \beta_0 + \beta_1 APD_{i,t-1} + \beta_2 GEPU_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \beta_7 OCF_{i,t} + YEAR + \epsilon_{it}$$

Using dynamic panel data, the generalized method of moment (GMM) system estimation is applied to examine the effect of GEPU on CCC and its components. GEPU is considered as an exogenous factor; therefore, to tackle the endogeneity problem in the regression, a two-step GMM is employed (Arellano and Bond, 1991; Blundell and Bond, 1998). According to Roodman (2009), two-step GMM is more effective and resistant to autocorrelation and heteroscedasticity. In order to control for endogeneity, a two-step GMM including the one-period lagged values of the dependent variables as one of the independent variables, are included in the initial models (Wooldridge, 2001). Test statistics for the first-order and second-order autocorrelation, the Hansen test to check the validity of instruments, and the Sargan test of over-identifying restrictions are conducted (Arellano and Bond, 1991; Blundell and Bond, 1998).

Given that a certain degree of multicollinearity can arise, the multicollinearity is tested using the variance inflation factors (VIF). When estimating a regression coefficient, if the predictors are multicollinear, the VIF factors are calculated to quantify the increase in variance (Mutua Mathuva, 2014). Overall VIF is 1.248 below the threshold of 5-10 (Chatterjee and Price, 1977), indicating that multicollinearity does not exist.

## 4. Empirical Results

The results of the panel regression and correlation analyses are presented in this section along with the variables' summary statistics. A series of robustness checks are also conducted and presented in this section.

### 4.1. Univariate Results

Table 1 displays the descriptive statistics of the main variables. The sample companies' average CCC is 99 days, meaning that it takes more than three months to convert inventory to sales, collect money, and pay the money to suppliers. ROA has a mean of 6% and a standard deviation of 12%. The mean of leverage is 53%, whereas the mean of operating cash flow is 5%. For the firm size, the mean value is 8.5, which is greater than its standard

<sup>2</sup> [https://www.policyuncertainty.com/global\\_monthly.html](https://www.policyuncertainty.com/global_monthly.html), Erişim Tarihi: 03.12.2023

deviation (0.8). The growth range of sample companies varies widely between -1% and a maximum of 156%. The average growth rate is 33%.

**Table 1.** Descriptive Statistics of the Sample

	N	Std. Dev.	Mean	min	max	p25	p75
CCC	2479	99.291	97.895	-295.294	565.007	35.367	142.152
GEPU	2509	.169	2.214	1.844	2.503	2.084	2.332
ROA	2509	.12	0.060	-.518	.619	.003	.11
LEV	2509	.257	0.528	.036	2.94	.342	.695
SIZE	2509	.852	8.459	6.131	11.235	7.913	8.996
GROWTH	2480	3.342	0.325	-1	156.134	.03	.374
OCF	2509	.117	0.051	-.476	.627	-.01	.114

**Source:** Author's Work

The correlation among the variables is presented in Table 2. The correlation between CCC and the main independent variable GEPU is positive but not significant. The coefficient between CCC and ROA is not statistically significant and CCC has an anticipated positive sign. At the 1% significance level, leverage and firm size are negatively correlated with CCC. The correlation between CCC and growth rate is not significant, whereas CCC and OCF have a correlation coefficient of -0.218.

**Table 2.** Correlation Analysis of the Variables

Variables	CCC	GEPU	ROA	LEV	SIZE	GROWTH	OCF
CCC	1.000						
GEPU	0.013	1.000					
ROA	0.001	0.208***	1.000				
LEV	-0.206***	0.096***	-0.386***	1.000			
SIZE	-0.310***	0.264***	0.261***	0.155***	1.000		
GROWTH	-0.004	-0.002	0.031	0.000	0.037*	1.000	
OCF	-0.218***	0.026	0.351***	-0.094***	0.206***	-0.031	1.000

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Source:** Author's Work

## 4.2. Multivariate Results

Table 3 provides the results of the panel regression analysis. The link between WCM and GEPU is examined by applying a two-step GMM regression model. The association between components of CCC is also investigated. The first model aims to determine the impact of GEPU on CCC. The dependent variable is in Model 2 ARD, in Model 3 INVD, and in Model 4 APD. One-period lagged values of the dependent variables are incorporated as independent variables in all models to control for the potential serial correlation's effects (Blundell and Bond, 1998). For all the models, the Hansen test is conducted, and the statistics indicate that all instruments are exogenous. Additionally, autocorrelation tests indicate the absence of second-order autocorrelation (Arellano and Bond, 1991). It can be concluded that the consistency of the estimates and the validity of the instrumental variables are met.

**Table 3.** Results of GMM Models

Variables	CCC (Model 1)	ARD (Model 2)	INVD (Model 3)	APD (Model 4)
L.CCC	0.671*** (0.0374)			
L.ARD		0.611*** (0.0493)		
L.INVD			0.668*** (0.0443)	
L.APD				0.586*** (0.0475)
GEPU	71.07*** (17.30)	25.92*** (7.727)	68.40*** (15.34)	22.22** (9.286)
ROA	23.19 (31.53)	-30.23** (15.32)	-43.35* (23.94)	-84.95*** (18.49)
LEV	-72.56*** (16.53)	0.280 (8.184)	-39.50*** (14.55)	53.17*** (11.58)
SIZE	-9.242** (3.986)	-3.303 (2.113)	-10.83*** (3.851)	-5.561** (2.355)
GROWTH	-12.22 (8.880)	5.174 (5.509)	11.94* (7.064)	27.81*** (4.997)
OCF	-150.2*** (24.82)	-22.20* (11.97)	-65.55*** (15.23)	62.16*** (13.86)
Year dummy	YES	YES	YES	YES
Observations	2286	2286	2286	2286
Number of Comp	187	187	187	187
AR(1) p-value	0.000	0.000	0.000	0.000
AR(2) p-value	0.734	0.088	0.636	0.226
Hansen test p-value	0.365	0.405	0.286	0.314

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Source:** Author's Work

The findings indicate that in all models the lagged dependent variable CCC is positively related with CCC levels in the previous year (Mathuva, 2014; Dbouk et al., 2020; Mutua Reyad et al., 2022; Jabbouri et al., 2023; Sawarni et al., 2023; Yilmaz and Nobanee, 2023). Table 3 reveals that CCC is significant and positively related to GEPU. The results confirm that higher GEPU triggers companies to slow down the operations and to follow a conservative

WCM strategy. Companies' liquidity is drained when GEPU rises since it takes longer for them to turn their resources into cash (Tarkom and Ujah, 2023). According to Cheng (2019), the positive relationship between policy uncertainty and CCC can also be interpreted as an inefficient WCM. Moreover, this may indicate that there is a deterioration in the management of companies' working capital (Reyad et al., 2022).

For the control variables in Model 1, leverage is negatively associated with CCC at the 1% level of significance, revealing that companies with higher leverage have lower CCCs. This result is consistent with the previous studies (Baños-Caballero et al., 2010; Zariyawati et al., 2016; Chauhan and Banerjee, 2018; Dbouk et al., 2020; Jabbouri et al., 2023). Consistent with Manoori and Muhammed (2012), Moussa (2019), Jabbouri et al. (2023), Sawarni et al. (2023) and Tiwari et al. (2023), firm size shows a significant negative association with CCC. It can be argued that large companies have more negotiating leverage with suppliers and customers, which grants them better credit terms (Jabbouri et al., 2023). The findings demonstrate a significant negative relationship between CCC and operating cash flow at the 1% level. This strongly supports the notion that efficient WCM via a shorter CCC leads to a high degree of operating cash flow (Manoori and Muhammed, 2012; Moussa, 2019; Sawarni et al., 2023; Tiwari et al., 2023; Yilmaz and Nobanee, 2023). Finally, ROA as an indicator of company performance and companies' growth opportunities (GROWTH) are not found to be determinants of the CCC. The insignificant positive relationship between CCC and ROA supports Chauhan and Banerjee (2018), Rey-Ares et al. (2021) and Sawarni et al. (2023), who also found the relationship between ROA and CCC insignificant. Besides, GROWTH fails to be statistically significant, as a result, in line with Zariyawati et al. (2016).

In Models 2-4, the relationship between the components of CCC and GEPU is analyzed. In line with the results of Cheng (2019), Dbouk et al. (2020), Tarkom and Ujah (2023), ARD has a significant positive relationship with GEPU. The findings suggest that in times of high GEPU, companies adopt a conservative WCM strategy and lengthen their ARD to boost their sales (Dbouk et al., 2020). Additionally, the results show that INVD increases with GEPU, which is in line with the findings of Cheng (2019), Dbouk et al. (2020) and Tarkom and Ujah (2023). During periods of uncertainty, companies prefer to increase investment in inventories to prevent production disruptions and reduce the risk of stockouts (Deloof, 2003; García-Teruel and Martínez-Solano, 2007). Contrary to the results of Jory et al. (2020), high levels of GEPU increase the payable deferral period. An increased payable deferral period implies flexible payment terms or trade credit options. In times of high uncertainty, flexible payment terms can encourage manufacturing companies to purchase more and shift storage expenses to their own (Dbouk et al., 2020).

### 4.3. Robustness Checks

Several robustness tests are carried out to provide further support for the main results. The baseline regression is reestimated using alternative measures of uncertainty. Given that companies are sensitive to uncertainty, instead of the 12-month average of GEPU, the natural logarithm of GEPU as of December (GEPU\_DEC) is used as the main independent variable in Model 5. In Model 6, the main regression is conducted using the logarithm of the average world uncertainty index (WUI), which measures uncertainty by counting how often the term "uncertainty" appears in the quarterly country reports published by the "Economic Intelligence Unit" (Ahir et al., 2018) as the main independent variable. Finally, in Model 7 the world uncertainty index as of quarter 4 (WUI\_Q4) is used as an uncertainty proxy, and the effect of uncertainty on CCC is tested.

$$(5) CCC_{i,t} = \beta_0 + \beta_1 CCC_{t-1} + \beta_2 GEPU\_DEC_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \beta_7 OCF_{i,t} + YEAR + \epsilon_{it}$$

$$(6) CCC_{i,t} = \beta_0 + \beta_1 CCC_{t-1} + \beta_2 WUI_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \beta_7 OCF_{i,t} + YEAR + \epsilon_{it}$$

$$(7) CCC_{i,t} = \beta_0 + \beta_1 CCC_{t-1} + \beta_2 WUI\_Q4_{i,t} + \beta_3 ROA_{i,t} + \beta_4 LEV_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \beta_7 OCF_{i,t} + YEAR + \epsilon_{it}$$

As in initial analysis, two-step GMM method is applied. The Arellano-Bond test results demonstrate no autocorrelation, and the Sargan and Hansen test results show that all instrumental variables are exogenous, confirming the models' efficiency and accuracy. Table 4 displays the results of the robustness tests.



**Table 4.** Results of Robustness Tests

Variables	CCC (Model 5)	CCC (Model 6)	CCC (Model 7)
GEPU_DEC	55.02*** (15.28)		
WUI		48.84*** (11.07)	
WUI_Q4			43.98*** (10.21)
L.CCC	0.682*** (0.0370)	0.647*** (0.0419)	0.654*** (0.0411)
ROA	26.98 (31.15)	47.53* (28.17)	44.60 (28.16)
LEV	-73.95*** (16.98)	-55.55*** (15.25)	-59.48*** (15.55)
SIZE	-5.259 (3.508)	-16.96*** (5.349)	-14.34*** (4.866)
GROWTH	-12.84 (8.963)	0.278 (9.208)	-0.0492 (8.997)
OCF	-148.4*** (24.12)	-149.7*** (24.03)	-149.4*** (23.66)
Year dummy	Yes	Yes	Yes
Observations	2286	2286	2286
Number of Comp	187	187	187
AR(1) p-value	0.000	0.000	0.000
AR(2) p-value	0.833	0.764	0.778
Hansen test p-value	0.344	0.373	0.352

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Source:** Author's Work

Consistent with the earlier findings, the results in all models confirm that uncertainty has a significant positive effect on CCC. Consequently, companies prefer to invest more in working capital in periods of high uncertainty. The results strongly support the notion that Turkish manufacturing companies prefer lower returns and lower risks in periods of high uncertainty.

## 5. Conclusion

The effect of global economic policy uncertainty on company activities has become a significant concern due to recent political disagreements and economic crises. In this view, working capital management can be challenging when macroeconomic conditions are uncertain. Global economic policy uncertainty leads to restrictions on external financing, rising in interest rates, and lower in cash flow. During periods of uncertainty, working capital

management plays a vital role in maintaining day to day operations and fulfilling the balance between profitability and liquidity.

Notwithstanding the importance of the nexus between working capital management and global economic policy uncertainty, little attention has been paid to their relationship. This study aims to examine the effect of global economic policy uncertainty on working capital management and is based on a panel data regression analysis of 187 listed manufacturing companies in Turkey over a 16-year period. The results indicate that cash conversion cycle as the measure of working capital management is positively affected by global economic policy uncertainty. Moreover, the inventory turnover days, accounts receivable days, and accounts payable days are also positively associated with global economic policy uncertainty. The findings highlight the challenges that companies encounter when they try to sell their inventory, collect their receivables, and improve their credit reputation. The results reveal that levels of all individual components of working capital vary in accordance with the economic cycle's dynamic movement. Although accelerating cash collections and delaying cash payments is an indicator of efficient working capital management, it can be argued that Turkish companies, which operate in volatile market conditions, prefer high investment in working capital to decrease the risk of interruptions in their business operations.

In summary, this study has contributed to the knowledge on how global economic policy uncertainty affects working capital management and has important practical implications. Firstly, regarding companies' financial decisions related to investment, managers should recognize the importance of risk management in periods of uncertainty, develop a flexible working capital management strategy, and give equal attention to all components of cash conversion cycle. Managers should maintain the optimum level of cash conversion cycle to avoid large shocks from policy uncertainties and liquidity risks. Secondly, policymakers should focus on easing access to financing, controlling the short-run negative impacts of policy uncertainty, and providing special incentives to companies during periods of high uncertainty.

This study contributes to the existing literature on working capital management by analyzing the association of working capital management and global economic policy uncertainty. It shows that not only company-specific characteristics, also global economic policy uncertainty as a macroeconomic variable has an important impact on the working capital management strategy of Turkish companies. In addition, it is also empirically documented that policy uncertainty has a significant influence on the components of the cash conversion cycle. Several limitations of this study may offer opportunities for future research. Firstly, this study is limited to one country and further research should compare the relationship between working capital management and global economic policy uncertainty that involves companies in developed and developing countries. To generalize the results, the population of the study can be expanded with companies from other industries. Exploring the interaction between working capital management, global economic policy uncertainty, corporate governance, and ownership structure would certainly add value to the existing literature.

## References

- Afrifa, G. A., & Padachi, K. (2016). Working Capital Level Influence On Sme Profitability. *Journal Of Small Business And Enterprise Development*, 23(1), 44–63. <https://doi.org/10.1108/Jsbed-01-2014-0014>.
- Ahir, H., Bloom, N., & Furceri, D. (2018). The World Uncertainty Index. In *Ssrn Electronic Journal*. <https://doi.org/10.2139/ssrn.3275033>.
- Akbulut, R. (2011). An Application To Measure Impact Of Working Capital Management On Profitability In Firms In Manufacture Sector Quoted On Ise. *İstanbul University Journal Of The School Of Business Administration*, 40(2), 195-206.
- Akinlo, O. O. (2012). Determinants Of Working Capital Requirements In Selected Quoted Companies In Nigeria. *Journal Of African Business*, 13(1), 40–50. <https://doi.org/10.1080/15228916.2012.657951>.
- Aldubhani, M. A. Q., Wang, J., Gong, T., & Maudhah, R. A. (2022). Impact Of Working Capital Management On Profitability: Evidence From Listed Companies In Qatar. *Journal Of Money And Business*, 2(1), 70–81. <https://doi.org/10.1108/Jmb-08-2021-0032>.
- Altaf, N., & Ahmad, F. (2019). Working Capital Financing, Firm Performance And Financial Constraints: Empirical Evidence From India. *International Journal Of Managerial Finance*, 15(4), 464–477. <https://doi.org/10.1108/Ijmf-02-2018-0036>.
- Altaf, N., & Shah, F. (2017). Working Capital Management, Firm Performance And Financial Constraints: Empirical Evidence From India. *Asia-Pacific Journal Of Business Administration*, 9(3), 206–219. <https://doi.org/10.1108/Apjba-06-2017-0057>.

- Altaf, N., & Shah, F. A. (2018). Investment And Financial Constraints In Indian Firms: Does Working Capital Smoothen Fixed Investment? *Decision*, 45(1), 43–58. <https://doi.org/10.1007/S40622-018-0178-8>.
- Amponsah-Kwatiah, K., & Asiamah, M. (2020). Working Capital Management And Profitability Of Listed Manufacturing Firms In Ghana. *International Journal Of 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. *Review Of Economic Studies*, 58(2), 277–297.
- Attig, N., El Ghouli, S., Guedhami, O., & Zheng, X. (2021). Dividends And Economic Policy Uncertainty: International Evidence. *Journal Of Corporate Finance*, 66(November 2020), 101785. <https://doi.org/10.1016/J.jcorpfin.2020.101785>.
- Azami, Z., & Tabar, F. J. (2016). Investigating The Factors Affecting Working Capital Of Companies Using The Generalized Method Of Moments. *Bulletin De La Société Royale Des Sciences De Liège*, 85(1999), 1402–1415. <https://doi.org/10.25518/0037-9565.6143>.
- Baker, S. R., Bloom, N. & Davis, S. J. (2016). Measuring Economic Policy Uncertainty. *Quarterly Journal Of Economics*, 131(4), 1593–1636. <https://doi.org/10.1093/Qje/Qjw024>. Advance.
- Baños -Caballero, S., García-Teruel, P. J., & Martínez-Solano, P. (2010). Working Capital Management In Smes. *Accounting And Finance*, 50(3), 511–527. <https://doi.org/10.1111/J.1467-629x.2009.00331>.
- Baños -Caballero, S., García-Teruel, P. J., & Martínez-Solano, P. (2012). How Does Working Capital Management Affect The Profitability Of Spanish Smes? *Small Business Economics*, 39(2), 517–529. <https://doi.org/10.1007/S11187-011-9317-8>.
- Baños -Caballero, S., García-Teruel, P. J., & Martínez-Solano, P. (2014). Working Capital Management, Corporate Performance, And Financial Constraints. *Journal Of Business Research*, 67(3), 332–338. <https://doi.org/10.1016/J.jbusres.2013.01.016>.
- 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](https://doi.org/10.1016/S0304-4076(98)00009-8).
- Bonaime, A., Gulen, H., & Ion, M. (2018). Does Policy Uncertainty Affect Mergers And Acquisitions? *Journal Of Financial Economics*, 129(3), 531–558. <https://doi.org/10.1016/J.jfineco.2018.05.007>.
- Chatterjee, S., & Price, B. (1977). Regression Analysis By Example. New York: John Wiley & Son.
- Chauhan, G. S., & Banerjee, P. (2018). Financial Constraints And Optimal Working Capital – Evidence From An Emerging Market. *International Journal Of Managerial Finance*, 14(1), 37–53. <https://doi.org/10.1108/Ijmf-07-2016-0131>.
- Cheng, X. (2019). The Impact Of Economic Policy Uncertainty On The Efficiency Of Corporate Working Capital Management—The Evidence From China. *Modern Economy*, 10(03), 811–827. <https://doi.org/10.4236/Me.2019.103054>.
- Dbouk, W., Moussawi-Haidar, L., & Jaber, M. Y. (2020). The Effect Of Economic Uncertainty On Inventory And Working Capital For Manufacturing Firms. *International Journal Of Production Economics*, 230(July), 107888. <https://doi.org/10.1016/J.ijpe.2020.107888>.
- Deari, F., Kukeli, A., Barbuta-Misu, N., & Virvanuta, F. O. (2022). Does Working Capital Management Affect Firm Profitability? Evidence From European Union Countries. *Journal Of Economic And Administrative Sciences*. <https://doi.org/10.1108/Jeas-11-2021-0222>.
- Deloof, M. (2003). Does Working Capital Management Affect Profitability Of Belgian Firms? *Journal Of Business Finance And Accounting*, 30(3–4), 573–588. <https://doi.org/10.1111/1468-5957.00008>.
- Demir, E., & Ersan, O. (2017). Economic Policy Uncertainty And Cash Holdings: Evidence From Bric Countries. *Emerging Markets Review*, 33, 189–200. <https://doi.org/10.1016/J.ememar.2017.08.001>.
- Drobetz, W., El Ghouli, S., Guedhami, O., & Janzen, M. (2018). Policy Uncertainty, Investment, And The Cost Of Capital. *Journal Of Financial Stability*, 39, 28–45. <https://doi.org/10.1016/J.jfs.2018.08.005>.
- Duong, H. N., Nguyen, J. H., Nguyen, M., & Rhee, S. G. (2020). Navigating Through Economic Policy Uncertainty: The Role Of Corporate Cash Holdings. *Journal Of Corporate Finance*, 62(March), 101607. <https://doi.org/10.1016/J.jcorpfin.2020.101607>.
- Eljelly, A. M. A. (2004). Liquidity – Profitability Tradeoff: An Empirical Investigation In An Emerging Market.

*International Journal Of Commerce And Management*, 14(2), 48–61.  
<https://doi.org/10.1108/10569210480000179>.

García-Teruel, P. J., & Martínez-Solano, P. (2007). Effects Of Working Capital Management On Sme Profitability. *International Journal Of Managerial Finance*, 3(2), 164–177. <https://doi.org/10.1108/17439130710738718>.

Hoque, M. E., & Zaidi, M. A. S. (2019). The Impacts Of Global Economic Policy Uncertainty On Stock Market Returns In Regime Switching Environment: Evidence From Sectoral Perspectives. *International Journal Of Finance And Economics*, 24(2), 991–1016. <https://doi.org/10.1002/Ijfe.1702>.

[https://www.policyuncertainty.com/global\\_monthly.html](https://www.policyuncertainty.com/global_monthly.html), Erişim Tarihi: 03.12.2023.

Jabbouri, I., Benrqya, Y., Satt, H., Naili, M., & Omari, K. (2023). Determinants Of Working Capital Management For Emerging Markets Firms: Evidence From The Mena Region. *Journal Of Economic And Administrative Sciences*. <https://doi.org/10.1108/Jeas-06-2022-0142>.

Jens, C. E. (2017). Political Uncertainty And Investment: Causal Evidence From U.S. Gubernatorial Elections. *Journal Of Financial Economics*, 124(3), 563–579. <https://doi.org/10.1016/J.jfineco.2016.01.034>.

Jory, S. R., Khieu, H. D., Ngo, T. N., & Phan, H. V. (2020). The Influence Of Economic Policy Uncertainty On Corporate Trade Credit And Firm Value. *Journal Of Corporate Finance*, 64(April), 101671. <https://doi.org/10.1016/J.jcorpfin.2020.101671>.

Karim, R., Mamun, M. A. Al, & Kamruzzaman, A. S. M. (2023). Cash Conversion Cycle And Financial Performance: Evidence From Manufacturing Firms Of Bangladesh. *Asian Journal Of Economics And Banking*. <https://doi.org/10.1108/Ajeb-03-2022-0033>.

Kong, Q., Li, R., Wang, Z., & Peng, D. (2022). Economic Policy Uncertainty And Firm Investment Decisions: Dilemma Or Opportunity? *International Review Of Financial Analysis*, 83(July 2022), 102301. <https://doi.org/10.1016/J.irfa.2022.102301>.

Le, H.-L., Vu, K.-T., Le, T.-B.-N., Du, N.-K., & Tran, M. D. (2018). Impact Of Working Capital Management On Financial Performance: The Case Of Vietnam. *International Journal Of Applied Economics, Finance And Accounting*, 3(1), 15–20. <https://doi.org/10.33094/8.2017.2018.31.15.20>.

Manoori, E., & Muhammed, D. D. J. (2012). Determinants Of Working Capital Management. *Ssrn Electronic Journal*, 3(11), 15–24. <https://doi.org/10.2139/Ssrn.2179907>.

Moussa, A. A. (2019). Determinants Of Working Capital Behavior: Evidence From Egypt. *International Journal Of Managerial Finance*, 15(1), 39–61. <https://doi.org/10.1108/Ijmf-09-2017-0219>.

Mutua Mathuva, D. (2014). An Empirical Analysis Of The Determinants Of The Cash Conversion Cycle In Kenyan Listed Non-Financial Firms. *Journal Of Accounting In Emerging Economies*, 4(2), 175–196. <https://doi.org/10.1108/Jaee-10-2011-0045>.

Nazir, M. S., & Afza, T. (2009). *Impact Of Aggressive Working Capital Management Policy On Firms ' Profitability*. 19–31.

Nobanee, H., Abdullatif, M., & Alhajjar, M. (2011). Cash Conversion Cycle And Firm's Performance Of Japanese Firms. *Asian Review Of Accounting*, 19(2), 147–156. <https://doi.org/10.1108/13217341111181078>.

Rehman, A. U., Wang, M., & Kabiraj, S. (2017). Working Capital Management In Chinese Firms: An Empirical Investigation Of Determinants & Adjustment Towards A Target Level Using Dynamic Panel Data Model. *Afro-Asian Journal Of Finance And Accounting*, 7(1), 84–105. <https://doi.org/10.1504/Aajfa.2017.082930>.

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. <https://doi.org/10.1016/J.marpol.2021.104583>.

Reyad, H. M., Zariyawati, M. A., Ong, T. S., & Muhamad, H. (2022). The Impact Of Macroeconomic Risk Factors, The Adoption Of Financial Derivatives On Working Capital Management, And Firm Performance. *Sustainability (Switzerland)*, 14(21). <https://doi.org/10.3390/Su142114447>.

Richards, V. D., & Laughlin, E. J. (1980). A Cash Conversion Cycle Approach To Liquidity Analysis. *Financial Management*, 9(1), 32. <https://doi.org/10.2307/3665310>.

Roodman, D. (2009). How To Do Xtabond2: An Introduction To Difference And System Gmm In Stata. *Stata Journal*, 9(1), 86–136. <https://doi.org/10.1177/1536867x0900900106>.

Sah, N. B., Banerjee, A., Malm, J., & Rahman, A. (2022). A Good Name Is Better Than Riches: Family Firms

And Working Capital Management. *Journal Of Behavioral And Experimental Finance*, 33, 100599. <https://doi.org/10.1016/J.Jbef.2021.100599>.

Sawarni, K. S., Narayanasamy, S., & Padhan, P. C. (2023). Impact Of Earnings Management On Working Capital Management Efficiency. *Finance Research Letters*, 54(January), 103778. <https://doi.org/10.1016/J.Frl.2023.103778>.

Singhania, M., & Mehta, P. (2017). Working Capital Management And Firms' Profitability: Evidence From Emerging Asian Countries. *South Asian Journal Of Business Studies*, 6(1), 80–97. <https://doi.org/10.1108/Sajbs-09-2015-0060>.

Smith, J. K. (1980). Readings On The Management Of Working Capital. New York:West Publishing Company.

Smith, J. K. (1987). Trade Credit And Information Asymmetry. *The Journal Of Finance*, 42(4), 863–872.

Tahir, M., & Anuar, M. B. A. (2016). The Determinants Of Working Capital Management And Firms Performance Of Textile Sector In Pakistan. *Quality And Quantity*, 50(2), 605–618. <https://doi.org/10.1007/S11135-015-0166-4>.

Tarkom, A., & Ujah, N. U. (2023). Global Policy Uncertainty And Working Capital Management: Does National Culture Matter? *Technological Forecasting And Social Change*, 196(April 2023), 122869. <https://doi.org/10.1016/J.Techfore.2023.122869>.

Tiwari, S. C., Sayyad, M., Azam, M. S., & Sudesh, N. S. (2023). Determinants Of Wcm Of Indian Listed Firms: A Gmm Regression Approach. *Cogent Economics And Finance*, 11(1). <https://doi.org/10.1080/23322039.2023.2199550>.

Wasiuzzaman, S., & Armugam, V. C. (2013). Determinants Of Working Capital Investment: A Study Of Malaysian Publiclisted Firms. *Australasian Accounting, Business And Finance Journal*, 7(2), 63–83. <https://doi.org/10.14453/Aabfj.V7i2.5>.

Wooldridge, J. M. (2001). Applications Of Generalized Method Of Moments Estimation. *Journal Of Economic Perspectives*, 15(4), 87–100. <https://doi.org/10.1257/Jep.15.4.87>.

Yilmaz, I., & Nobanee, H. (2023). Determinants Of Cash Conversion Cycle In Mena Countries. *Managerial Finance*, 49(7), 1148–1168. <https://doi.org/10.1108/Mf-03-2022-0101>.

Yu, X., Huang, Y., & Xiao, K. (2021). Global Economic Policy Uncertainty And Stock Volatility: Evidence From Emerging Economies. *Journal Of Applied Economics*, 24(1), 416–440. <https://doi.org/10.1080/15140326.2021.1953913>.

Zariyawati, M. A., Annur, M. N., & Pui-San, N. (2016). Working Capital Management Determinants Of Small And Large Firms In Malaysia. *International Journal Of Economics And Management*, 10(2), 365–377.

Zeng, J., Zhong, T., & He, F. (2020). Economic Policy Uncertainty And Corporate Inventory Holdings: Evidence From China. *Accounting And Finance*, 60(2), 1727–1757. <https://doi.org/10.1111/Acfi.12511>.

Zhang, G., Han, J., Pan, Z., & Huang, H. (2015). Economic Policy Uncertainty And Capital Structure Choice: Evidence From China. *Economic Systems*, 39(3), 439–457. <https://doi.org/10.1016/J.Ecosys.2015.06.003>.