



# **The Moderating Impact of Political Connections on the Relationship Between Cash Holdings and Firm Viability in Emerging Economies: Empirical evidence from Egypt**

*By*

**Nesma Ahmed El-Shayeb**

Assistant Professor of Accounting, Faculty of Commerce, Cairo University

[nesma\\_ahmed\\_elshayeb@foc.cu.edu.eg](mailto:nesma_ahmed_elshayeb@foc.cu.edu.eg)

***Scientific Journal for Financial and Commercial Studies and  
Researches (SJFCSR)***

Faculty of Commerce – Damietta University

Vol.4, No.1, Part 1., January 2023

**APA Citation:**

El-Shayeb, N. A. (2023). The moderating impact of political connections on the relationship between cash holdings and firm viability in emerging economies: Empirical evidence from Egypt, *Scientific Journal for Financial and Commercial Studies and Research*, Faculty of Commerce, Damietta University, 4(1)1,69-103.

**Website:** <https://cfdj.journals.ekb.eg/>

Dr. Nesma Ahmed El-Shayeb

---

---

**The moderating impact of political connections on the relationship between cash holdings and firm viability in emerging economies: Empirical evidence from Egypt**

*Nesma Ahmed El-Shayeb*

**Abstract**

The main purpose of this paper is to examine the impact of cash holdings on the viability of Egyptian listed firms. In addition, it investigates the moderating impact of political connections on the relationship between cash holdings and firm viability in the emerging market of Egypt. This study covers the period spanning 2014 to 2019. The results indicate that firms' cash holdings level has a significant positive impact on a firm's viability within Egyptian firms. Moreover, political connections variables after the Arab Revolution period were found to have no direct relationship with firms' viability. While the interaction between the first political connection measure; political connectivity and cash holdings have a significant negative impact on firm viability due to negative reactions from the market that tries to reduce corruption and improve its political environment. However, the interaction between cash holding and the second political connection measure; political strength, was found to have a significant positive impact on firm viability. This positive impact could be interpreted by using a different measure for political connection. Further, the increase in the number of politicians will support the good reputation of those firms in such period and its interaction with the cash would help improve firms' viability eventually. Cash holding might be a crucial mean of sustaining Egyptian firms' viability. This study provides useful managerial implications and contributes to the ongoing debate about the impact of cash holdings on corporate performance.

**Keywords:** Cash holding, Political connection, Firm viability.

## **1. Introduction**

Over the past decades, there is a trend to considerably increase cash holdings by companies around the world (Dittmar, Mahrt-Smith, & Servaes, 2003; Bates, Kahle, & Stulz, 2009). Additionally, a growing literature followed this trend and aimed to investigate the determinants and consequences of firms' cash holdings (Xie & Zhang, 2020). Therefore, corporate cash holdings issues have attracted the attention of researchers and stakeholders, especially after the 2008 financial crisis. Recently, many firms have adopted a strategy to accumulate significant levels of cash which raises questions about the reasoning behind this strategy (Diaw, 2021). Cash is often considered the "blood" of an enterprise and provides the necessary support for its daily operations (Opler et al., 1999; Dittmar, Mahrt-Smith, & Servaes, 2003; Dimitropoulos et al., 2020).

Therefore, holding cash would help the enterprises to maintain liquidity to face emergencies and take advantage of investment opportunities, thereby avoiding the need for external financing and preventing the cash shortage caused by loan restrictions and severe financial conditions (Opler et al., 1999; Dimitropoulos et al., 2020; Qin et al., 2020). Despite that, there is another view arguing about the financial power of these cash holdings firms or the waste of investment opportunities due to holding cash (Diaw, 2021).

In addition, there are claims that cash holdings could have an overall impact on firms' performance. They could have a positive impact by providing firms with a sustainable competitive advantage, which, in turn, leads to superior performance, serve shareholders' interests through generating financial flexibility, reducing transaction costs, and supporting financing growth opportunities with lower-cost internal funds (Kusnadi, 2019; Marwick, Hasan, & Luo, 2020). However, other prior studies found a negative impact of holding cash on performance and viability based on agency conflict theory where the excess cash can lead to problems of opportunism and tunnel corporate cash reserves to serve their personal interests (Kim, Mauer, & Sherman, 1998; Opler et al., 1999; Jabbouri & Almustafa, 2020).

The following section of the introduction will discuss the motives of holding cash by companies, cash holding related theories, political connections meaning within a developing country like Egypt, and finally state the motivation for the current study.

### **1.1.Motives of Cash Holdings**

Determining the optimal level of cash reserve to hold is a critical decision to have a positive impact and avoid any negative implications. The debate on high cash holding is traced back to Keynes (1936), who was the first to show the major motives of holding cash reserves. These motives are diminishing transaction costs from not having to liquidate assets when facing a payment, and to avoid the loss of underinvestment because of limited funds. However, the economy and market might not be so efficient, especially in developing countries, then holding cash might imply various risks and costs. Researchers have also argued that a firm's cash-holding policy is also a substance of managerial preference when managers do not act in the best interests of shareholders (Akhtar et al., 2018). Prior literature on cash holdings suggests there are different motives for firms to hold cash. These motives could be summarized in transaction costs motive, precautionary motive, speculative motive, and predation motive.

Transaction costs motive indicates that firms should have sufficient cash to satisfy day-to-day operations as the shortage in cash would result in bearing transaction costs (Miller and Orr, 1966; Dittmar, Mahrt-Smith, & Servaes, 2003; Li et al., 2020). These costs could be costs to liquidate assets or raise funds from the capital market (Han & Qiu, 2007; Akhtar et al., 2018; Dimitropoulos et al., 2020). Then managers have motives to hold excess cash to make their payments and finance growth opportunities at a lower cost (Myers & Majluf, 1984; Karpuz, Kim, & Ozkan, 2020). Another motive is the precautionary motive which is regarded as a hedge against possible cash shortages (Lins, Servaes, & Tufano, 2010; Clarkson, Gao, & Herbohn, 2020). Holding cash to meet unexpected contingencies that firms may face in the future is considered a precaution (Akhtar et al., 2018). This precaution would help firms to finance their future uncertain activities and investments that would require significant disbursements and avoid missing profitable investment opportunities if the other financing sources are costly or unavailable (Opler et al., 1999; Bates, Kahle, & Stulz, 2009; Dimitropoulos et al., 2020; Marwick, Hasan, & Luo, 2020; Li et al., 2020).

In addition, some firms hold cash based on a speculative motive to bet on possible opportunities as firms that face cash shortages might mitigate their future investment such as take-over or acquisition opportunities in the future (Kim et al., 1998; Opler et al., 1999; Ozkan & Ozkan, 2004; Akhtar et

al., 2018; Diaw, 2021). In competitive industries predation, the motive is considered the main motive as firms hold cash to take the first mover advantage if they have similar investment opportunities as their competitors. In this case, the costs of cash holdings would be less than the costs of failure to invest in a project compared with a competitor (Haushalter, Klasa, & Maxwell, 2007; Tran, 2020).

## **1.2.Cash Holdings & Theory**

Various theories in the literature could explain firms' cash holding decisions. For example, the agency theory postulates that managers decisions to hold more cash to pursue their interests at the expense of shareholders (Jensen, 1986). Where firms with serious agency issues accrue cash even though they do not have good investment opportunities (Jensen, 1986; Pinkowitz, Stulz, & Williamson, 2006; Harford, Mansi, & Maxwell, 2008; Xie & Zhang, 2020). This could lead to irrational spending, reckless investment decisions, and a lower corporate value which increases the cash holding costs, known as agency costs (Marwick, Hasan, & Luo, 2020; Dimitropoulos et al., 2020). Pecking-order theory could also provide a base to explain cash-holding decisions. This theory poses the problem of financing in the existence of adverse selection. This theory claims that cash holding decisions are affected by the information asymmetry between managers and outside parties (Myers & Majluf, 1984). High information asymmetry would make firms subject to more restrictions on external financing which would enhance managers to hold excess cash to depend on internal rather than external financing (Dimitropoulos et al., 2020).

Another theory is the trade-off theory that argues the level of cash holdings is influenced by firms' attempt to balance between marginal costs and benefits of cash holdings (Diaw, 2021). The opportunity costs of holding too much cash, as it provides little or no returns and the financial distress costs caused by deficiencies in cash to take advantage of future investment opportunities (Ferreira & Vilela, 2004; Akhtar et al., 2018; Kim, Woods, & Kim, 2013; Diaw, 2021). These costs are compared with the benefits of having cash on hand to take advantage of future investment opportunities when external financing is restricted or more costly (Kim, Woods, & Kim, 2013). Stakeholder theory provides a ground to explain firms' cash holdings level as cash is mainly used to cover daily operations which are connected to firms' stakeholders (i.e., suppliers, creditors, customers, etc.). Since

**Dr. Nesma Ahmed El-Shayeb**

---

---

maintaining a well-established relationship with a firm's stakeholders proved to be essential to firms' sustainability and prospects, then they hold cash to fulfill their obligations to their stakeholders which in turn would strengthen their market access, increase their competitive advantages, and improve their financial performance (Dimitropoulos et al., 2020).

Finally, an important theory that could explain the relationship between political connection and cash holding is the expropriation theory. This theory argues that firms can protect their assets by holding less cash when they are susceptible to the money-grabbing behavior of governments and officials use threats of regulation to seek bribes and extort liquid assets (Stulz, 2005; Xie & Zhang, 2020). It could be noted that if there is high agency conflict and information asymmetry between insiders and outsiders according to agency theory and pecking order theory, firms would hold a higher level of cash. Further, trade-off theory and stakeholder theory support that to take advantage of available growth opportunities, build competitive advantage, and avoid financial distress or cash shortfalls, hence, firms would hold excess cash. However, expropriation theory supports holding less cash in case of being subject to expropriation and money-grabbing behavior from governments and officials. Accordingly, this research will investigate the impact of having political connections as a moderator between holding excess cash and firm viability.

### **1.3. Political Connections**

Political connections in developing countries with emerging markets have a vital role in economic activities, as these countries are characterized by higher government intervention, weak legal systems, and weak investor protection (Faccio, Masulis, & McConnell, 2006; Fan, Wong, & Zhang, 2007; Li et al., 2020). Accordingly, political connections could be in the favor of one firm at the expense of others in the same economy (Li et al., 2019). Since, cash is directly associated with firms' operating activities, investing policies, and financing decisions, firms should manage their cash holding policy to enhance liquidity and mitigate transaction costs (Bates, Kahle, & Stulz, 2009; Al-Najjar, 2013; Chen et al., 2015; Xie & Zhang (2020). The political connection might affect firms' cash holding policy. Politically connected firms benefit from the reduction of regulatory transaction costs through having more favorable tax treatment, relaxed market entry regulation, and government subsidies (Claessens, Feijen, & Laeven, 2008; Keefe, 2019).

Those politically connected firms could have better planning for their investments and create more cash flows by effectively reducing political risk (Li et al., 2020). Moreover, political connection improves firms' legitimacy and visibility. Some investors consider these politically connected firms as having a prestige that helps them yield a higher market value, improve their profitability, and increase investor confidence (Faccio, Masulis, & McConnell, 2006; Chen et al., 2018). Accordingly, there is an assumption that politically connected firms in less developed countries with a higher level of corruption adopt financial policies that support holding a lower level of cash. This assumption is consistent with Caprio, Faccio, & McConnell (2013) finding that firms operating in a more corrupt environment have less cash reserve.

However, another stream of studies indicates that firms operate in emerging economies with market imperfections, poorer investor protection, less developed institutions, and higher policy uncertainty tend to hold more cash (Dittmar, Mahrt-Smith, & Servaes, 2003; Al-Najjar, 2013; Chen et al., 2015). As the intervention of the government is more prevalent in emerging markets and could impact firms significantly when bureaucracy is more severe. When officials pursue their private or political goals, they will intervene, more frequently, in business activities. Consequently, firms' overall costs increase and the motive for holding cash is strengthened (Shao, Hernández, & Liu, 2015; Xie & Zhang, 2020).

Egypt as a developing country during the period from 2011 to 2014 has witnessed the well-known Arab revolution that has played a vital role in changing the political structure of the country and increasing the people's awareness. This revolution led to the collapse of huge political entities, subsequently, resulting in the downfall of economic entities associated with them as the economic and political systems were linked (Abdel-Fattah, El-Shayeb & America, 2020). Successive leaders in Egypt since then are making huge efforts to fight corruption in the country.

#### **1.4. Motivations of the current study**

This research seeks to investigate the relation between Egyptian firms' financial policy of cash holdings, political connection, and their impact on firm viability for several important reasons. First, Egypt provides a unique environment based on the recent changes in political and economic structure. This will extend the literature on the impact of the changes in the political

environment on the firm's performance. Second, firms' financial policies differ due to some socio-economic factors since Egypt is a country within the MENA region, which has suffered from political and social unrest compared to developed markets (Al-Najjar, 2013; Gennaioli et al., 2013; Favara et al., 2017; Jabbouri & Almustafa, 2020; Xie & Zhang, 2020). Third, consider the impact of anti-corruption efforts, which have intensified in developing countries, especially after the revolutions. Fourth, extend the limited literature in emerging markets that examined the relationship between cash holdings and firm performance (Al-Najjar & Clark, 2017; Li, Qiao, & Zhao, 2019; Jabbouri & Almustafa, 2020).

The rest of the paper is organized as follows: the second section provides a discussion of the related literature on the topic and states the research hypotheses. The third section describes the data sources and sample selection. The fourth section is devoted to the variable measurements. The fifth section states the research models. The sixth section discusses the empirical findings, while the last section concludes the paper and provides suggestions for future research.

## **2. Literature Review and Hypotheses Development**

In this section, we review the prior research considering two main elements: (1) the impact of cash holdings on firm viability, and (2) how the firms' political connection moderates the relationship between cash holdings and firm viability.

### **2.1. The Impact of Cash Holdings on Firms' Viability and Performance**

Even if, over the past two decades, the investigation of the relationship between cash holdings and the firm performance had a great interest worldwide in both the academic and the financial communities, still it appears to be controversial. The reason behind this controversy is that holding cash could have its drawbacks besides its benefits which would affect the firm performance and viability. Accordingly, results in the literature remain inconclusive regarding the impacts of cash holdings on firm viability.

For instance, several studies document that holding excess cash has a positive impact on the firm (Dittmar, Mahrt-Smith, & Servaes, 2003; Chang & Noorbakhsh, 2006). These studies assert that cash-holding firms could finance their investments internally, particularly when credit conditions are tightened, and external financing is more expensive (Jabbouri & Almustafa, 2020). In addition, Lins, Servaes, and Tufano (2010) concluded that firms held non-operational cash as a guard against future cash flow shocks and as general-purpose insurance. When measuring the impact of cash holding on one of the attributes of firm performance is profitability, Anowar (2016) found that liquidity has a bidirectional causality with the firms' profitability, measured by ROA, based on 40 listed firms on the Dhaka Stock Exchange for the period 1998 to 2013. A more recent study by Dimitropoulos et al. (2020) analyzed the impact of cash holdings on the profitability and distress risk or viability of SMEs. The empirical results revealed that cash holding has a positive impact on the profitability and viability of Greek SMEs. Also, evidence suggests that the positive impact of cash holding on corporate financial performance is more significant for SMEs relative to large firms.

Moreover, studies on the MENA region and Gulf countries support this positive impact. For example, Jabbouri and Almustafa (2020) examined the impact of corporate cash holdings, of 414 non-financial firms listed in twelve MENA emerging markets over the 2004–2018 period, on firm performance. Their study also examined how national governance quality shapes the interaction between corporate cash holdings and firm performance. Their results reported that there is a significant positive relationship between cash holdings and firm performance. Alnori, (2020) studied the relationship between corporate cash holdings and financial performance for all listed non-financial firms in Saudi Arabia, over 2005–2016. The study results indicate that cash holdings have a significant impact on firms' performance.

The other stream of studies contends that holding excess cash would increase agency conflict between managers and outsiders, in the absence of impactive governance mechanisms. Some of these studies found that holding cash would harm the firm, performance, profitability, and value (Luo & Hachiya, 2005; Dittmar and Mahrt-Smith, 2007; Fr\_esard and Salva, 2010; Gao, Harford, & Li, 2013). Tran (2020) argued that the negative impact of cash holding is attributable to managers' attempts, in countries with poor shareholders' rights, to overinvest this free cash flow in value-destroying projects instead of disbursing cash to shareholders. Other studies found no

**Dr. Nesma Ahmed El-Shayeb**

---

---

causal relationship between liquidity, in general, and one of the attributes of firm performance is firms' profitability (Olawaju and Adeyemi, 2015; Dabiri et al., 2017). However, Dabiri et al. (2017) result in the United Kingdom indicated that there is a co-integration between liquidity and profitability in the long run.

A recent study by Kong, Musah, & Agyemang, (2019) conducted on quoted non-financial firms in Ghana aimed to explore the interactions between liquidity and the financial performance or firms' viability. Their study revealed that when the firm's financial performance is measured by ROA there is a significant relationship between liquidity and firms' financial performance. While, when measured by ROE, the relationship is insignificant. The authors recommend that if firms proficiently hand their liquid resources this would improve their final bottom line. In addition, another study by Li et al. (2020 b) in the developing country of Ghana examined the relationship between liquidity and the viability of quoted 15 non-financial establishments for the period 2008 to 2017. This study found that generally, liquidity has a significant adverse impact on the firm's Return on Equity (ROE), while, if liquidity is surrogated by the cash flow ratio it has an insignificant positive impact on ROE.

Accordingly, the relationship between cash holding and firm viability reflected by its performance might differ with changes in the type of measures used and with the level of development of the country. For instance, the MENA region and its emerging markets are characterized by several similar characteristics as under-developed institutions, weak investor protection, a lax regulatory environment, weak governance mechanisms, and market illiquidity, which would impact firms' policy regarding liquidity management (Al-Najjar, 2013; Alnori, 2020). Hence, firms in the MENA region are motivated to hold more cash to avoid costly external finance (Jabbouri & Almustafa, 2020). Since Egypt is one of the developing countries within the MENA region, it is anticipated that cash holdings would positively relate to firms' performance. This anticipation is based on the positive relationship between cash holdings and performance that is found in the majority of emerging market studies.

**Dr. Nesma Ahmed El-Shayeb**

---

---

In addition, firms' motives to hold cash vary between periods of financial expansion and periods of financial turmoil (Dimitropoulos et al., 2020). Hence, it is expected that after the revolutions and with a new political environment and economic reforms firms would depend more on their cash reserves to maintain their daily operations, meet their commitments on a timely basis, and even improve their financial performance using less expensive financing sources (Dengleri et al., 2019). Therefore, the results of prior research induce the current research to consider whether there is a relationship between cash holdings and firm viability in Egypt, especially after the changes in the political environment. Accordingly, the first study hypothesis states that:

**H1:** There is a significant positive impact of cash holdings on Egyptian firms' viability.

## **2.2. The Moderating Role of Political Connections between Cash Holdings and Firms' Viability**

Several previous studies provide empirical evidence on the positive impact of cash holdings on firms' performance or viability. However, this relationship might depend on some internal factors (firm characteristics) and external factors (institutional factors). These internal factors such as firm growth opportunity, the risk profile, and financial constraints (Jensen, 1986; Opler et al., 1999). Furthermore, various institutional factors such as investor protection, corruption in an economy, and financial market efficiency could influence the positive impact of cash holdings on a firm's performance and value (Dittmar, Mahrt-Smith, & Servaes, 2003; Chen, 2011; Thakur & Kannadhasan, 2019). La Rocca and Cambrea (2019) results based on a sample of 261 Italian firms from 1980 to 2015 support that the accumulation of cash would have a positive net impact on performance. However, the authors indicated that the sign and intensity of this relation can be affected by several moderating factors. These moderating variables could strengthen or weaken the value of cash holdings and their impact on firms' performance.

Despite that few prior studies consider the role of political connection as one of the internal factors as a moderator that might affect the positive impact of holding excess cash on firm performance. The existence of political connections could weaken such an impact. This preceding assumption considers firms with political connections as higher risks firms. Therefore, managers should raise firms' cash holding levels to protect firms against

**Dr. Nesma Ahmed El-Shayeb**

---

---

contingencies and be aware of financing constraints due to risks (Qin et al., 2020). The current study aims to study whether the high risks that impact their cash holding decision would also affect their performance.

For example, Duchin and Sosyura (2012) findings revealed that more connected firms received more political preferences regarding their funding requirements. Despite that, the investment performance of such firms was found to be much lower than that of unconnected firms. Hence, it could be argued that political connection leads to lower investment performance and lower overall performance. A recent study by Kusnadi (2019) in emerging markets, indicates that cash held by politically connected firms, in countries with high levels of corruption, yields a negative reaction from the market. Similarly, Thakur & Kannadhasan (2019) study conducted in 16 emerging market economies, using data set of 4236 firms, investigated how corruption affects both cash holdings and cash value. They argued that cash holdings should have a value-enhancing impact on firms in countries with a low level of perceived corruption. They found that cash holdings add value to the firms, however, this value is not significant when firms are operating in a high corrupted environment with low investor protection. Their results support the early findings of Méon and Sekkat (2005) that corruption has negative impacts on firm growth and investment separately.

Alternatively, another stream of studies provided an argument that firms make political connections with government officials and benefit from the corrupt environment to gain access to external finance through preferential treatment or favorable credit terms (Claessens, Feijen, & Laeven, 2008; Chen et al., 2013; Tahoun, 2014; Thakur & Kannadhasan, 2019). The early study of Fisman (2001) that examined the value of political connectedness within Indonesian firms found that the primary factor in determining profitability is political connectedness. Faccio, Masulis, & McConnell (2006) study demonstrated that firms with political connections get preferential access to financing in economic distress times. Moreover, Goldman, Rocholl, and So (2008) study, in the United States, reveals a significant positive association between stock returns, as a measure of firm valuation and market performance, and politically connected directors' nomination.

**Dr. Nesma Ahmed El-Shayeb**

---

---

In addition, several studies that included firms' political connections variables to examine the access to loans, credit terms, and long-term performance showed that firms do benefit from political connections (Faccio, Masulis, & McConnell, 2006; Li, Qiao, & Zhao, 2019). Accordingly, politically connected firms would have more financial flexibility and less requirement to hold excess cash by mitigating various types of risks that their firms might confront (Bates, Kahle, & Stulz, 2009; Ren & Zhao, 2020) and supporting their viability.

Based on the above discussion, the literature supports the need to consider the impact of the moderating factors that could influence both the sign and the intensity of the relationship between holding excess cash and firm viability. Political connections could strengthen or weaken the value of cash holdings by promoting new investment opportunities or seizing growth opportunities in the presence of financial constraints (La Rocca & Cambrea, 2019). Accordingly, the current study provides an attempt to the extent of the limited literature that considers whether the interaction of political connection with cash holdings could change the impact on firm viability within the Egyptian context considering the government's anti-corruption efforts, especially, after the Arab Revolution and the attempts to have a new political environment and economic reform. Hence, the following hypothesis tests the impact of cash holding on firms' performance while considering political connection as a moderating variable.

**H2:** Political connection moderates the relationship between cash holdings and Egyptian firms' viability.

### **3. Data sources and sample selection**

The targeted population to test our hypotheses are all non-financial publicly traded companies listed in EGX-100 as of August 2019. Companies listed in EGX-100 represent the target population as they represent the most active companies within the Egyptian stock exchange market. Financial companies are excluded as they are subject to different reporting requirements. The sample period is 6 years begins from 2014 to 2019 as it represents the most recent years after the Arab revolutions and the beginning of economic and political stability. All financial data were collected from firms' annual reports and disclosure reports using Thomson Reuter's database. For consistency and comparability reasons, the sample includes only firms that prepare their financial statements at the end of the calendar

Dr. Nesma Ahmed El-Shayeb

year (31<sup>st</sup> of December). Firms with incomplete data are also excluded. Accordingly, the final sample that was utilized in the analysis consists of 187 firm-year observations.

**Table (1): Sample Description**

Description	Number of firms	Number of observations
Initial sample	100	600
<b>Less:</b>		
Banks	10	60
Other financial institutions	15	90
Companies' financial year ends on June 30 <sup>th</sup>	18	108
Companies with missing data	24	144
Missing years/observations for some companies		11
<b>Final sample</b>		<b>187</b>

#### 4. Variables Measurements

This section clarifies all the measurement methods used to express the variables included in the proposed financial models: dependent variable, moderator variable, independent variables, and control variables.

##### 4.1. Dependent variable: Firm Viability (FV)

Following the prior literature by Dimitropoulos et al. (2020) and La Rocca et al. (2018), to measure the dependent variable that is firm viability, which is measured by anticipating the likelihood of financial distress using the "Altman Z-score" formula for publicly traded firms. This variable is estimated as:  $Z\text{-Score} = 1.2(A) + 1.4(B) + 3.3(C) + 0.6(D) + 1.0I$ . Where: A= Working Capital / Total Assets, B = Retained Earnings/ Total Assets. C= Earnings Before Interest & Taxes (EBIT) / Total Assets, D= Market Value of Equity / Total Liabilities, E= Sales / Total Assets. A "Z-Score" below 1.81 represents a company in distress. While a "Z-Score" between 1.81 and 2.99 represents the caution zone. Finally, a "Z-Score" over 3.0 represents a company with a safe balance sheet. This means that the higher the "Z-score" the more viable is the firm.

## **4.2. Independent variables**

### **4.2.1. Cash holdings (Cash-Hold)**

Same as prior literature (Chen et al., 2014; Xie et al., 2017; Xie & Zhang, 2020; Clarkson, Gao & Herbohn, 2020), firms' cash holdings variable "*Cash-Hold*", is computed as cash and cash equivalents scaled by the total assets at the end of the year "*t*" for the firm "*i*".

### **4.2.2. Political connection**

Political connection is measured, in the current study, using two proxies. The first measure is political connectivity; "*Pc-connect*" which is a dummy variable defined as (1) if one or more of the firm's large shareholders is an institution under governmental control, also if the current CEO or chairman or any top administrators is or was a government official or a member of the parliament or a minister, or is "closely-related" to top politicians, and (0) otherwise at year "*t*" (Boubakri, Cosset & Saffar, 2008; Xie & Zhang, 2020; Abdel-Fattah, El-Shayeb & America, 2020). The second measure for political connections is political strength; "*Pc-strength*". This measure identifies the intensity of the connection by considering the number of political connections in the firm "*i*" at year "*t*". This variable is the absolute number of politically connected members (Egghe, 2019; Abdel-Fattah, El-Shayeb & America, 2020).

## **4.3. Control variables**

Considering the prior literature, Opler et al. (1999), Caprio, Faccio & McConnell (2013), Wasiuzzaman (2014), Chen et al. (2014), Dimitropoulos et al. (2020), and Xie & Zhang (2020), the following control variables are included in the study model: Size (natural logarithm of total assets), Leverage (total debt divided by total assets), NWC (net working capital divided by total assets).

### **4.3.1. Size**

Size is included as a control variable as most of the literature agreed on the assumption that larger firms do not need to hold excess cash as they have easier access to financial markets and finance compared with smaller firms. Hence, it is expected that small firms hold more cash to avoid financial distress and improve their performance and viability (Chang & Noorbakhsh, 2006; Dimitropoulos et al., 2020). In contrast, there is another assumption in the literature that large firms are more likely to have more cash in hand based

**Dr. Nesma Ahmed El-Shayeb**

---

---

on the nature of the operation (Ferreira & Vilela, 2004; Opler et al., 1999; Al-Najjar, 2013; Wasiuzzaman, 2014; Diaw, 2021). Size is measured as the natural logarithm of total assets.

#### **4.3.2. Leverage (LEV)**

The prior literature suggests that the relationship between leverage and cash holdings is uncertain it could be either negative or positive (Wasiuzzaman, 2014). The positive relationship view indicates that firms with high leverage ratio are subject to financial distress or bankruptcy and might face difficulties in refinancing or accessing the capital market, hence they prefer holding more cash (Dimitropoulos et al., 2020) to improve their viability and avoid financial distress. In contrast, the supporter of the negative view indicates that firms with a high leverage ratio might have less information asymmetries that will help obtain finance from the capital market, thus those firms would hold less cash (Ferreira & Vilela, 2004; Kim et al., 2013) that would have a negative impact on firm viability. The leverage ratio is measured as the ratio of total debts to total assets.

#### **4.3.3. Net working capital (NWC)**

When evaluating firms' liquidity, a positive net working capital is considered a substitute for cash. As firms would intend to hold less cash when it has alternative sources of liquid assets (Ferreira & Vilela, 2004; Wasiuzzaman, 2014; Diaw, 2021). Thus, it is expected that networking capital would have a negative relationship with cash holdings level based on the static trade-off theory and a positive relationship with firm viability. However, a positive relationship can also exist if firms have short cash conversion cycles, it will free up cash from the working capital cycle and so increases the amount of cash held (Jani et al., 2004; as in Wasiuzzaman (2014). Consequently, net working capital can either have a positive or a negative impact on the cash holdings level an inverse relationship with firm viability. Net working capital is measured by dividing (inventories + debtors – creditors) over total assets.

## 5. Research Models

In order to test the research hypotheses and examine the impact of cash holdings on firms' viability, the following first regression model will be applied, where (i) denotes the firm, (t) the year, and ( $\epsilon$ ) is the error term:

$$FV = \alpha + \beta_1 \text{Cash-Hold} + \beta_2 \text{PC-connect} + \beta_3 \text{PC-strength} + \beta_4 \text{SIZE} + \beta_5 \text{LEV} + \beta_6 \text{NWC} + \epsilon_{it} \dots\dots\dots \text{Model (1)}$$

The second model considers the interaction between political connection and cash holdings that captures the impact of cash of politically connected firms on firms' financial viability.

$$FV = \alpha + \beta_1 \text{Cash-Hold} + \beta_2 \text{PC-connect} + \beta_3 \text{PC-strength} + \beta_4 \text{Cash-Hold} * \text{PC-connect} + \beta_5 \text{Cash-Hold} * \text{PC-strength} + \beta_6 \text{SIZE} + \beta_7 \text{LEV} + \beta_8 \text{NWC} + \epsilon_{it} \dots\dots\dots \text{Model (2)}$$

## 6. Data Analysis and Discussion of Results

In this study, four statistical techniques were applied to analyze the empirical data using the Statistical Package for the Social Sciences (SPSS, ver. 26.0). There were Descriptive analysis, Pearson's correlation, Variance inflation factor, and Regression modeling.

### 6.1. Descriptive Statistics

This section presents the descriptive measures of each of the study's continuous variables. The descriptive analysis provides the mean, the standard deviation, the minimum value, the maximum value, and the range. The results of the descriptive analysis are represented in Table (2). In addition, Table (3) shows the descriptive statistics of dummy variable political connection that include the frequency, the percent, and the cumulative percent.

**Table (2): Descriptive Statistics**

	<b>N</b>	<b>Range</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>FV (Z-score)</b>	187	10.324	-.554	9.770	2.1668	2.0915
<b>Cash-Hold</b>	187	.4762	.00172	.478	.0875	.09495
<b>PC-Strength</b>	187	10	0	10	2.88	2.416
<b>SIZE</b>	187	3.258	4.758	8.0165	6.5744	.7780
<b>LEV</b>	187	.9176	.1351	1.0528	.547	.2203
<b>NWC</b>	187	1.325	-.582	.7427	.1032	.2396

Dr. Nesma Ahmed El-Shayeb

For the sample firms, descriptive statistics show that the z-score as a measure of firms' viability, ranges from (-.554) that is firms with an extreme financial distress position to (9.77) that is firms with a very safe balance sheet as it is above (3). However, the Z-score mean is (2.1668) which shows that on average the firms try to be in the caution zone between (1.81) and (2.99). The cash holdings variables range from (.00172) firms with few cash holdings to (.478) that represents firms with high levels of cash holdings. Nevertheless, the mean of cash holdings variable (.0875) reveals that on average cash holdings within the sample firms are not high as it is near 9% of total assets. Regarding the political strength that is measured by the number of politically connected members, the maximum number is (10) members, while the minimum is zero as no politically connected members within the firm. On average three members exist within the sample firm.

In addition, the mean value of the firm Size variable is (6.57). The range of the size within the sample is from (4.758) to (8.0165) that indicates that the sample firms vary in size that reflect the Egyptian market firms. The mean of the leverage variable reveals that on average firms have a high leverage ratio as they finance 54.7% of their assets through debts. The range of net working capital, that is sometimes considered a substitute for cash, is from (-.582) to (.7427). This range implies that the sample firms vary widely between a negative net working capital to very high positive net working capital. However, the mean value indicates that firms on average include 10% of liquid assets that could substitute cash holdings.

**Table (3): Descriptive Statistics of "PC- connect" as a dummy variable**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	35	18.7	18.7	18.7
	1	152	81.3	81.3	100.0
	<b>Total</b>	187	100.0	100.0	

From table (3) it can be noted that the frequency of not politically connected observations is 35 (18.7%) while the frequency of politically connected observations is 152 (81.3%). Hence, it is observed that the majority of firms in the sample are politically connected firms.

## **6.2. Pearson Correlation Test**

Table (4) presents the results of using Pearson's Correlation with a two-tailed significance test. The most correlated variables with a Z-score as a measure of firm viability at (0.01) level with positive relations are cash holdings, networking capital, and the interaction between cash holdings and political connection variables. In addition, Z-score correlates with leverage and size at (0.01) level with negative relations.

The cash holdings variable positively correlates with networking capital at (0.01) level and negatively correlates with leverage and size at (0.01) level and (0.05) level, respectively. Political connection and political strength variables positively correlated with firm size at (0.01) level. The leverage variable positively correlates with size at the (0.01) level and negatively correlates with networking capital at the (0.01) level. The size variable is negatively correlated with networking capital at the (0.01) level.

## **6.3. Variance Inflation Factor**

To check the existence of significant multicollinearity among the independent variables the Variance Inflation Factor (VIF) test is used. As demonstrated in Table (5), the tolerance values for the two regression models are greater than (0.10) and (0.20) and the (VIF) values of all variables are lower than 5 or 10 (Dodge, 2008). The results indicate that no multicollinearity problem exists between the variables.

**Table (4): Correlations among Variables**

		FV (Z-score)	Cash-Hold	PC- connect	PC-strength	LEV	SIZE	NWC	Cash-Hold * PC-connect	Cash-Hold * PC-strength
FV (Z-score)	Pearson Correlation	1								
	Sig. (2-tailed)									
Cash-Hold	Pearson Correlation	.536**	1							
	Sig. (2-tailed)	.000								
PC- connect	Pearson Correlation	.051	.060	1						
	Sig. (2-tailed)	.487	.417							
PC-strength	Pearson Correlation	-.021	-.107	.574**	1					
	Sig. (2-tailed)	.776	.144	.000						
LEV	Pearson Correlation	-.507**	-.221**	.131	-.007	1				
	Sig. (2-tailed)	.000	.002	.074	.923					
SIZE	Pearson Correlation	-.314**	-.151*	.382**	.450**	.497**	1			
	Sig. (2-tailed)	.000	.040	.000	.000	.000				
NWC	Pearson Correlation	.564**	.428**	.011	-.114	-.602**	-.348**	1		
	Sig. (2-tailed)	.000	.000	.881	.122	.000	.000			
Cash-Hold * PC- connect	Pearson Correlation	.422**	.809**	.398**	.077	-.132	.023	.332**	1	
	Sig. (2-tailed)	.000	.000	.000	.295	.073	.753	.000		
Cash-Hold * PC- strength	Pearson Correlation	.358**	.586**	.401**	.519**	-.118	.169*	.185*	.762**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.109	.021	.011	.000	

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

\* . Correlation is significant at the 0.05 level (2-tailed).

Dr. Nesma Ahmed El-Shayeb

**Table (5): Variance Inflation Factor**

**Panel A: 1<sup>ST</sup> Regression Model**

Model	Collinearity Statistics	
	Tolerance	VIF
Cash-Hold	.801	1.248
PC- connect	.599	1.669
PC-strength	.516	1.938
LEV	.467	2.143
SIZE	.542	1.846
NWC	.519	1.928
Dependent Variable: FV (Z-score)		

**Panel B: 2<sup>nd</sup> Regression Model**

Model	Collinearity Statistics	
	Tolerance	VIF
Cash-Hold	.246	4.072
PC- connect	.344	2.908
PC-strength	.214	4.670
Cash-Hold * PC-connect	.111	9.002
Cash-Hold * PC-strength	.158	6.320
LEV	.457	2.188
SIZE	.531	1.885
NWC	.517	1.934
Dependent Variable: FV (Z-score)		

**6.4. Multivariate Analysis**

Multivariate regression analysis was used for the two models of this study. The first model tests the relationship between firm viability, cash holdings, political connections variables, and the control variables. The second model considers the impact of all variables in model one besides the impact of the interaction between cash holdings and the political connections variables on firms' viability.

**6.4.1. Results of the Relation between Cash holdings, Political connections, and Firms' viability**

The first model examines the impact of Cash holdings and Political connections on firms' viability. The results of the multiple regression analysis for this model are shown below in Table (6). According to the results in Table

**Dr. Nesma Ahmed El-Shayeb**

(6); the full regression model explains 48.7% of the change in firms' viability variations. This value of "R<sup>2</sup>" might be acceptable in the field of social science as several other variables may affect firm viability other than those included in this model. Table (6) results reveal that firm cash holdings level has a significant positive impact on a firm's viability. Further, leverage was found to have negative significant relationships with firms' viability at (0.01) level. While networking capital was found to have a positive significant relationship with firms' viability at (0.01) level.

These results are consistent with Dittmar, Mahrt-Smith, & Servaes (2003), Chang and Noorbakhsh (2006) who supported the positive relationship between cash holdings and firm performance, and Dimitropoulos et al. (2020) that reveals that there is a positive impact of cash holdings on the profitability and viability of Greek SMEs and Jabbouri and Almustafa (2020) who conducted their study in twelve MENA emerging markets and found that the positive impact exists when external financing is more expensive. Hence, the first hypothesis that "There is a significant positive impact of cash holdings on Egyptian firms' viability" is accepted.

**Table (6): Multiple Regression Analysis of the Relationship between Cash holdings, Political connections, and Firms' viability**

<b>Model (1) Summary</b>					
	<i>R</i>	<i>R<sup>2</sup></i>	<i>Adjusted R<sup>2</sup></i>	<i>Std. Error</i>	
	.698	.487	.469	1.524	
<b>Panel B: Coefficients</b>					
<b>Independent variables</b>	<u><i>Unstandardized Coefficients</i></u>		<u><i>Standardized Coefficients</i></u>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t-value</i>	<i>Sig.</i>
(Constant)	3.997	1.100		3.635	.000
Cash-Hold	8.163	1.314	.371	6.210	.000
PC- connect	.377	.369	.071	1.023	.308
PC-strength	.044	.064	.051	.688	.492
LEV	-2.311	.742	-.243	-3.114	.002
SIZE	-.292	.195	-.109	-1.496	.136
NWC	1.975	.647	.226	3.051	.003
<b>Dependent Variable: FV (Z-score)</b>					

Dr. Nesma Ahmed El-Shayeb

---

---

#### **6.4.2. Results of the impact of Cash holdings, Political connections, and the interaction between Cash holdings and Political connections on Firms' viability**

The results of multiple regression of the second study model show that the model explains 50.1 % of the variation of the firms' viability. Results in table (7) reveal that political connection measured by firm connectivity has a significant positive impact on firm viability at (0.05) level. The interaction of cash holding and political connection first measure, as a dummy variable, has a significant negative impact on firm viability at (0.05) level. This result is similar to Kusnadi (2019) and Thakur & Kannadhasan (2019) studies where cash held by politically connected firms, in countries with high levels of corruption, yields a negative reaction from the market which would affect its viability.

However, the interaction between cash holding and the second political connection measure; political strength, was found to have a significant positive impact on firm viability at (0.05) level. Considering the two preceding results together, they indicate that just the existence of politicians with the company and even if there is the availability of cash would affect firm viability negatively. While the increase in the number of politicians involved with the company with the availability of cash would reverse the results and enhance the firm viability and results in a positive impact that is consistent with Fisman (2001) and Goldman et al. (2008) studies. In addition, the firm leverage and networking capital were found to have a significant positive relationship with firms' viability at (0.01) level same as Al-Najjar (2013) and Diaw (2021). Therefore, the second hypothesis that "*Political connection moderates the relationship between cash holdings and Egyptian firms' viability*" is accepted.

**Dr. Nesma Ahmed El-Shayeb**

**Table (7): Multiple Regression Analysis of the impact of Cash holdings, Political connections, the interaction between Cash holdings and Political connections on Firms' viability**

<b>Model (2) Summary</b>					
	<i>R</i>	<i>R2</i>	<i>Adjusted R2</i>	<i>Std. Error</i>	
	.708	.501	.479	1.5099	
<b>Panel B: Coefficients</b>					
<b>Independent variables</b>	<b><u>Unstandardized Coefficients</u></b>		<b><u>Standardized Coefficients</u></b>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t-value</i>	<i>Sig.</i>
(Constant)	3.656	1.113		3.286	.001
Cash-Hold	9.322	2.353	.423	3.962	.000
PC- connect	.976	.483	.183	2.022	.045
PC-strength	-.127	.099	-.147	-1.287	.200
Cash-Hold * PC- connect	-7.409	3.750	-.314	-1.976	.050
Cash-Hold * PC- strength	2.256	1.019	.295	2.214	.028
LEV	-2.543	.743	-.268	-3.421	.001
SIZE	-.230	.195	-.086	-1.178	.240
NWC	1.947	.642	.223	3.030	.003

**Dependent Variable: FV (Z-score)**

## **7. Conclusions**

The main aim of this study is to examine the impact of cash holdings on the financial viability of Egyptian listed firms. In addition, it investigates the moderating role of political connections on the relationship between cash holdings and firm viability in the emerging country of Egypt. This study covers the period that represents the most recent years after the Arab revolutions and the beginning of economic and political stability from 2014 to 2019. The final sample consists of 187 firm-year observations. The results indicate that firms' cash holdings level has a significant positive relationship with a firm's viability same as Jabbouri and Almustafa (2020) study in twelve MENA emerging markets. These results can be justified based on the ground that there is a strict debt contract requirements and external financing is more expensive than holding

**Dr. Nesma Ahmed El-Shayeb**

---

---

cash in such a period. In addition, this result confirms the pecking order theory that a high information asymmetry in such a period would make firms subject to more restrictions on external financing which would enhance managers to hold more cash. However, political connections during this period after the revolution were found to have no relationship with firms' viability. The existence of political connections, during this period, has not improved firms' viability as the helping hands view as a motive for political connections have changed after the revolution. This change is due to the various attempts to have political and economic reforms and to reduce corruption within the Egyptian context.

The results of the statistical analysis also revealed that leverage has a negative significant relationship with firms' viability. This result indicates that the higher the level of debts the more the firms are subject to financial distress and, consequently, the negative impact on firm viability and performance. This result is due to market imperfections in developing countries compared with developed countries. While networking capital was found to have a positive significant relationship with firms' viability, this result is consistent with the assumption that networking capital act as a substitute for cash holding. Hence, it has a positive impact on firm viability same as cash holdings. These results of the control variables are consistent with Dittmar, Mahrt-Smith, & Servaes (2003), and Chang and Noorbakhsh (2006).

Moreover, the current study examined whether the political connection moderates the relationship between cash holdings and firms' viability by considering the interaction of cash holdings with political connection variables. The second model reveals that when the interaction variables are added to the first model some relationships become slightly significant as political connection measured by firm connectivity has a significant positive impact on firm viability at (0.05) level. While the interaction between this variable and cash holdings has a significant negative impact on firm viability at (0.05) level. These preceding results indicate that even if the firm holds more cash but has political connections, this will negatively affect its viability due to negative reactions and feedback from the market in countries that try to reduce corruption and improve their political environment. These results are consistent with recent studies by Kusnadi (2019) and Thakur & Kannadhasan (2019).

**Dr. Nesma Ahmed El-Shayeb**

---

---

However, the interaction between cash holding and the second political connection measure; political strength, was found to have a significant positive impact on firm viability. This result implies that just the existence of politicians with the company and even if there is the availability of cash would affect firm viability negatively based on the overall reaction from the market or consider those politically connected firms trying to benefit from corruption. In contrast, the increase in the number of politicians involved with the company with the availability of cash would remarkably reverse the results and enhance the firm viability and results in a positive impact.

This positive impact could be interpreted by using a different measure for political connection. Where the increase in intensity due to the increase in the number of politicians will support the good reputation and prestige of those firms and the interaction of this variable with the existence of cash would help their viability eventually by yielding a higher market value, improving their profitability, and increase investor confidence, especially in countries with a low level of perceived corruption. In addition, the firm leverage and networking capital were found to have a significant positive relationship with firms' viability same as Al-Najjar (2013) and Diaw (2021). Finally, the first and second hypotheses of the current study are accepted.

The current study represents an attempt to contribute to the literature that tries to reveal the consequences of holding cash in a developing country that is subject to political and economic reforms. Furthermore, it tried to extend the limited literature on the moderating role those political connections might have between the firm financing decision to hold cash and their impacts on firms' viability. The results conclude that firms' cash holdings level has a significant positive relationship with a firm's viability and the interaction between cash holdings and political connections measured by political strength improves firms' viability. These results may benefit the managers of firms in taking their financing decision that might affect their investments and daily transactions as it could improve their firm's viability. The results of the current study could also be valuable to market participants such as investors, financial analysts, and auditors, as they highlight the importance of considering the firm's financial policy and political connections in evaluating its viability and ability to avoid

**Dr. Nesma Ahmed El-Shayeb**

---

---

financial distress. Finally, in countries with recent political and economic reforms, policymakers and regulators should try to improve minority investor protection and increase market confidence by ensuring firms' viability by avoiding financial distress and reducing corruption in the economy.

## **8. Research limitations**

The current study is subject to some limitations. First, it focused on a single country; Egypt, hence the results could not be generalized to other countries with different legal, political, and economic environments. Second, the results obtained might differ by using different measures for the study variables. Third, the current study didn't consider some internal factors that could affect firms' viability as ownership structure and other governance practices within the sample firm.

## **9. Future research**

There are prospects for future research that consider various factors that might affect the relationship between cash holdings and firms' viability. For example, the level of corruption in the economy, ownership structure, corporate social responsibility efforts, and corporate governance practices. Furthermore, the relationship between cash holdings and firms' viability could be considered in other countries which also face the consequences of the Arab Revolutions. Another opportunity for future research is to consider the relationship between cash holdings and firms' viability within the financial sectors. Furthermore, applying different proxies for the variables might yield different results.

## 10. References

- Abdel-Fattah, H. A-N., El-Shayeb, N. A., & America, H. E. S. A. (2020). Examining the Relationship between Political Connections, Related Party Transactions, and Firm Value in Egyptian Listed Companies: Empirical Study. *International Journal of Academic Research in Business and Social Sciences*, 10(9), 393-413.
- Akhtar, T., Tareq, M. A., Sakti, M. R. P., & Khan, A. A. (2018). Corporate governance and cash holdings: the way forward. *Qualitative Research in Financial Markets*. Vol. 10 No. 2, 2018 pp. 152-170.
- Al-Najjar, B. (2013). The financial determinants of corporate cash holdings: Evidence from some emerging markets. *International business review*, 22(1), 77-88.
- Alnor, F. (2020). Cash holdings: Do they boost or hurt firms' performance? Evidence from listed non-financial firms in Saudi Arabia. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(5), 919-934.
- Anowar, Z. (2016). Capital structure and profitability of Bangladeshi firms: A causal investigation. *Universal Journal of Accounting and Finance*, 4(4), 130-135.
- Bates, T. W., Kahle, K. M., & Stulz, R. M. (2009). Why do U.S. firms hold so much more cash than they used to?. *The Journal of Finance*, 64(5), 1985-2021.
- Boubakri, N., Cosset, J. C., & Saffar, W. (2008). Political Connections of Newly Privatized Firms. *Journal of Corporate Finance*, 14 (5), 654-673.
- Caprio, L., Faccio, M., & McConnell, J. J. (2013). Sheltering corporate assets from political extraction. *The Journal of Law, Economics, & Organization*, 29(2), 332-354.
- Chang, K., & Noorbakhsh, A. (2006). Corporate cash holdings, foreign direct investment, and corporate governance. *Global Finance Journal*, 16(3), 302-316.

**Dr. Nesma Ahmed El-Shayeb**

---

---

- Chen, R. R., Guedhami, O., Yang, Y., & Zaynutdinova, G. R. (2020). Corporate governance and cash holdings: Evidence from worldwide board reforms. *Journal of Corporate Finance*, 65, 101771.
- Chen, Y., Dou, P. Y., Rhee, S. G., Truong, C., & Veeraraghavan, M. (2015). National culture and corporate cash holdings around the world. *Journal of Banking & Finance*, 50, 1-18.
- Chen, Y., Chen, D., Wang, W., & Zheng, D. (2018). Political uncertainty and firms' information environment: Evidence from China. *Journal of Accounting and Public Policy*, 37(2), 39–64.
- Chen, D., Li, S., Xiao, J. Z., & Zou, H. (2014). The effect of government quality on corporate cash holdings. *Journal of Corporate Finance*, 27, 384-400.
- Chen, N. (2011). Securities laws, control of corruption, and corporate liquidity: International evidence. *Corporate Governance: An International Review*, 19(1), 3-24.
- Clarkson, P., Gao, R., & Herbohn, K. (2020). The relationship between a firm's information environment and its cash holding decision. *Journal of Contemporary Accounting & Economics*, 16(2), 100201.
- Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics*, 88(3), 554–580.
- Dabiri, A. M., Yusof, R. M., & Wahab, N. A. (2017). Profitability and liquidity of Islamic banks in the United Kingdom. *Asian Journal of Multidisciplinary Studies*, 5(4), 66–71.
- Dengleri, K., Lois, P., Thrassou, A., & Repousis, S. (2019). Industry application of assessment and forecasting theories through comparative financial analysis: The case of Greek pharmaceutical industries under crisis conditions. In *The synergy of business theory and practice*, 175-198. Palgrave Macmillan, Cham.
- Diaw, A. (2021). Corporate cash holdings in emerging markets. *Borsa Istanbul Review*, 21(2), 139-148.

**Dr. Nesma Ahmed El-Shayeb**

---

---

- Dimitropoulos, P., Koronios, K., Thrassou, A., & Vrontis, D. (2020). Cash holdings, corporate performance and viability of Greek SMEs: Implications for stakeholder relationship management. *EuroMed Journal of Business*, 15(3), 333-348.
- Dittmar, A., & Mahrt-Smith, J. (2007). Corporate governance and the value of cash holdings. *Journal of Financial Economics*, 83(3), 599–643.
- Dittmar, A., Mahrt-Smith, J., & Servaes, H. (2003). International corporate governance and corporate cash holdings. *Journal of Financial and Quantitative analysis*, 38(1), 111-133.
- Dodge, Y. (2008). *The concise encyclopedia of statistics*. Springer Science & Business Media.
- Duchin, R., & Sosyura, D. (2012). The politics of government investment. *Journal of Financial Economics*, 106(1), 24-48.
- Egghe, L. (2019). *Political connections and tax avoidance analysis in Belgium*. Unpublished Master dissertation, Ghent University.
- Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailout. *The Journal of Finance*, 61(6), 2597–2635.
- Favara, G., Morellec, E., Schroth, E., & Valta, P. (2017). Debt enforcement, investment, and risk taking across countries. *Journal of Financial Economics*, 123(1), 22-41.
- Fan, J. P. H., Wong, T. J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of Finance and Economics*, 84(2), 330–357.
- Fisman, R. (2001). Estimating the value of political connections. *American economic review*, 91(4), 1095-1102.
- Ferreira, M.A. and Vilela, A.S. (2004). Why do firms hold cash? Evidence from EMU countries. *European Financial Management*, 10 (2), 295-319.
- Frésard, L., & Salva, C. (2010). The value of excess cash and corporate governance: Evidence from US cross-listings. *Journal of financial economics*, 98(2), 359-384.

**Dr. Nesma Ahmed El-Shayeb**

---

---

- Gao, H., Harford, J., & Li, K. (2013). Determinants of corporate cash policy: Insights from private firms. *Journal of Financial Economics*, 109(3), 623-639.
- Gennaioli, N., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2013). Human capital and regional development. *The Quarterly journal of economics*, 128(1), 105-164.
- Goldman, E., Rocholl, J., & So, J. (2009). Do politically connected boards affect firm value?. *The review of financial studies*, 22(6), 2331-2360.
- Han, S. and Qiu, J. (2007). Corporate precautionary cash holdings. *Journal of Corporate Finance*, 13(1), 43-57.
- Harford, J., Mansi, S. A., & Maxwell, W. F. (2008). Corporate governance and firm cash holdings in the US. *Journal of financial economics*, 87(3), 535-555.
- Haushalter, D., Klasa, S., & Maxwell, W. F. (2007). The influence of product market dynamics on a firm's cash holdings and hedging behavior. *Journal of Financial Economics*, 84(3), 797-825.
- Huang, P., Guo, J., Ma, T., & Zhang, Y. (2015). Does the value of cash holdings deteriorate or improve with material weaknesses in internal control over financial reporting?. *Journal of Banking & Finance*, 54, 30-45.
- Jabbouri, I., & Almustafa, H. (2020). Corporate cash holdings, firm performance and national governance: evidence from emerging markets. *International Journal of Managerial Finance*. 1743-9132.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, 76(2), 323-329.
- Keynes, J.M. (1936). *The General theory of employment, interest and money*, Harcourt Brace, London.
- Kusnadi, Y. (2019). Political connections and the value of cash holdings. *Finance Research Letters*, 30, 96-102.
- Karpuz, A., Kim, K., & Ozkan, N. (2020). Does financial reporting regulation influence the value of cash holdings?. *Journal of Empirical Finance*, 59, 52-67.

**Dr. Nesma Ahmed El-Shayeb**

---

---

- Kim, C., Mauer, D.C. and Sherman, A.E. (1998). The determinants of corporate liquidity: theory and evidence. *Journal of Financial and Quantitative Analysis*, 33(3), 335-359.
- Kim, J., Woods, D., & Kim, H. (2013). Identifying the financial characteristics of cash-rich and cash-poor restaurant firms: a logistic regression analysis. *Tourism Economics*, 19(3), 583-598.
- Keefe, M. O. (2019). A theory of political connections and financial outcomes. *International Review of Economics & Finance*, 61(5), 108–127.
- Kong, Y., Musah, M., & Agyemang, A. O. (2019). Liquidity and Financial Performance: A Correlational Analysis of Quoted Non-Financial Firms in Ghana. *International Journal of Trend in Scientific Research and Development*, 3(5), 133-143.
- Li, X., Fung, A., Fung, H. G., & Qiao, P. (2020)a. Directorate interlocks and corporate cash holdings in emerging economies: Evidence from China. *International Review of Economics & Finance*, 66, 244-260.
- Li, K., Musah, M., Kong, Y., Adjei Mensah, I., Antwi, S. K., Bawuah, J., ... & Andrew Osei, A. (2020)b. Liquidity and firms' financial performance nexus: panel evidence from non-financial firms listed on the Ghana Stock Exchange. *SAGE Open*, 10(3), 2158244020950363.
- Li, X., Qiao, P., & Zhao, L. (2019). CEO media exposure, political connection and Chinese firms' stock price synchronicity. *International Review of Economics & Finance*, 63(9), 61–75.
- Lins, K. V., Servaes, H., & Tufano, P. (2010). What drives corporate liquidity? An international survey of cash holdings and lines of credit. *Journal of financial economics*, 98(1), 160-176.
- Marwick, A., Hasan, M. M., & Luo, T. (2020). Organization capital and corporate cash holdings. *International Review of Financial Analysis*, 68, 101458.
- Méon, P. G., & Sekkat, K. (2005). Does corruption grease or sand the wheels of growth?. *Public choice*, 122(1), 69-97.

**Dr. Nesma Ahmed El-Shayeb**

---

---

- Miller, M. H., & Orr, D. (1966). A Model of the Demand for Money by Firms. *The Quarterly Journal of Economics*, 80(3), 413-435.
- Mortal, S., Nanda, V., & Reisel, N. (2020). Why do private firms hold less cash than public firms? International evidence on cash holdings and borrowing costs. *Journal of Banking & Finance*, 113, 105722.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
- Opler, T., Pinkowitz, L., Stulz, R. and Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, 52(1), 3-46.
- Olarewaju, O. M., & Adeyemi, O. K. (2015). Causal relationship between liquidity and the profitability of Nigerian deposit money banks. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(2), 165–171.
- Ozkan, A. and Ozkan, N. (2004). Corporate cash holdings: an empirical investigation of UK companies. *Journal of Banking and Finance*, 28 (9), 2103-2134.
- Pinkowitz, L., & Williamson, R. (2004). What is a dollar worth? The market value of cash holdings. *Unpublished working paper, Georgetown University*.
- Pinkowitz, L., Stulz, R., & Williamson, R. (2006). Does the contribution of corporate cash holdings and dividends to firm value depend on governance? A cross-country analysis. *The Journal of Finance*, 61(6), 2725-2751.
- Potì, V., Pattitoni, P., & Petracchi, B. (2020). Precautionary motives for private firms' cash holdings. *International Review of Economics & Finance*, 68, 150-166.
- Qin, X., Huang, G., Shen, H., & Fu, M. (2020). COVID-19 pandemic and firm-level cash holding—moderating impact of goodwill and goodwill impairment. *Emerging Markets Finance and Trade*, 56(10), 2243-2258.

**Dr. Nesma Ahmed El-Shayeb**

---

---

- Ren, H., & Zhao, X. (2020). Anticorruption, political connections, and corporate cash policy: Evidence from politician downfalls in China. *Emerging Markets Review*, 45, 100745.
- La Rocca, M., & Cambrea, D. R. (2019). The impact of cash holdings on firm performance in large Italian companies. *Journal of International Financial Management & Accounting*, 30(1), 30-59.
- Luo, Q., & Hachiya, T. (2005). Bank relations, cash holdings, and firm value: evidence from Japan. *Review of Pacific Basin Financial Markets and Policies*, 28(4), 61-73.
- Stulz, R. M. (2005). The limits of financial globalization. *The Journal of Finance*, 60(4), 1595-1638.
- Shao, Y., Hernández, R., & Liu, P. (2015). Government intervention and corporate policies: Evidence from China. *Journal of Business Research*, 68(6), 1205-1215.
- Thakur, B. P. S., & Kannadhasan, M. (2019). Corruption and cash holdings: Evidence from emerging market economies. *Emerging Markets Review*, 38, 1-17.
- Tran, Q. T. (2020). Corruption and corporate cash holdings: international evidence. *Journal of Multinational Financial Management*, 54, 100611.
- Tran, Q. T. (2020). Financial crisis, shareholder protection and cash holdings. *Research in International Business and Finance*, 52, 101131.
- Wasiuzzaman, S. (2014). Analysis of corporate cash holdings of firms in Malaysia. *Journal of Asia Business Studies*, 8(2), 118-135.
- Xie, X., Wang, Y., Zhao, G., & Lu, W. (2017). Cash holdings between public and private insurers—a partial adjustment approach. *Journal of Banking & Finance*, 82, 80-97.
- Xie, J., & Zhang, Y. (2020). Anti-corruption, government intervention, and corporate cash holdings: Evidence from China. *Economic Systems*, 44(1), 100745.

---

---

**تأثير الروابط السياسية على العلاقة بين الاحتفاظ بالنقد وقابلية الشركة على  
النمو في الاقتصادات الناشئة: دليل عملي من مصر**  
د. نسمة أحمد الشايب

**المستخلص**

الغرض الرئيسي من هذا البحث هو دراسة تأثير سياسة الاحتفاظ بالنقد على استمرارية الشركات المصرية المدرجة بالبورصة. بالإضافة إلى ذلك، تم دراسة التأثير المعدل للروابط السياسية على العلاقة بين الاحتفاظ بالنقد وقدرة الشركات المصرية على النمو والبقاء. تغطي هذه الدراسة الفترة الممتدة من ٢٠١٤ إلى ٢٠١٩. وتشير النتائج إلى أن مستوى الاحتفاظ بالنقد بالشركات المصرية له تأثير إيجابي كبير على قابلية الشركة على النمو والاستمرار. علاوة على ذلك، تبين أن متغيرات الروابط السياسية بعد فترة الثورة العربية ليس لها علاقة مباشرة بقدرة الشركات على البقاء. بينما التفاعل بين مقياس الارتباط السياسي الأول؛ الاتصال السياسي، والاحتفاظ بالنقد له تأثيراً معنوي سلبى على قابلية الشركة على الاستمرار بسبب ردود الفعل السلبية من السوق التي تحاول الحد من الفساد وتحسين البيئة السياسية المصرية. ومع ذلك، وجد أن التفاعل بين الاحتفاظ بالنقد ومقياس الارتباط السياسي الثاني؛ القوة السياسية، له تأثير إيجابي معنوي على قابلية الشركة على النمو والاستمرار. ويمكن أن يرجع هذا التأثير الإيجابي لاستخدام مقياس مختلف للارتباط السياسي. حيث إن الزيادة في عدد السياسيين من شأنها أن تدعم السمعة الطيبة لتلك الشركات خاصة في تلك الفترة وتفاعلها مع الاحتفاظ بالنقد سيساعد في تحسين قدرة الشركات على الاستمرار في نهاية المطاف. قد يكون الاحتفاظ بالنقد سياسة نقدية هامة تدعم قابلية الشركات المصرية على النمو والاستمرار. ولذلك توفر هذه الدراسة توجه إداريا مفيدا فميا يخص السياسة النقدية وتساهم في النقاش المستمر حول تأثير سياسة الاحتفاظ بالنقد على أداء الشركات.

**الكلمات المفتاحية:** الاحتفاظ بالنقد، الروابط السياسية، قابلية الشركة على النمو والاستمرار