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ECONOMIC ENTRENCHMENT AND GROWTH IMPEDIMENTS IN JORDAN

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SUSTAINABLE DEVELOPMENT GOALS
AND EXTERNAL SHOCKS IN THE MENA REGION:

FROM RESILIENCE TO CHANGE IN THE WAKE OF COVID-19

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Economic Entrenchment and Growth Impediments in Jordan

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Abstract

The purpose of this paper is to understand the impediments of corporate growth in Jordan focusing on the role of corporate ownership structure and political connections as possible means for economic entrenchment. Using hand-collected data, I measure ownership concentration by the sum of direct and indirect ownership which takes into account the capital owned via pyramid structures and trace firm's political connections. Based on the research that shows that deviations between corporate ownership and control can lead to inefficient allocation of capital and obstruct market development and economic growth, I formulate hypotheses that predict that concentration of firm's capital in the hands of single or few shareholders who are politically connected will prevent firms from growing. I find weak evidence that politically connected firms invest more in assets but there is strong evidence that politically connected firms perform worse than non-connected firms. There is also a weak evidence that as the percentage of firm's capital owned by the largest shareholder increases the firm borrows less. Finally, I find no evidence that ownership concentration and political connections are substitutes to each other. However, there is evidence that these results are sensitive to the time periods before and after the financial crisis of 2008.

2021

Introduction

Economic entrenchment is the distortion in a country's public policy regarding property rights protection and relevant institutions that results when individual's political influence depends on what he controls rather than what he owns (Morck, Wolfenzon, and Yeung, 2005). Morck et al., 2005 state that "*Economic entrenchment is a self-sustaining, stable equilibrium that seems to characterize some, but not all oligarchic capitalist economies. The stark divergence between high and low income economies appears to result from the latter becoming trapped in weak property rights regimes characterized by economic entrenchment*.". Except for the United States and the United Kingdom, deviation between shareholder's ownership and control rights has been the dominant feature of corporate ownership structures in most of the countries around the world including the MENA countries (La Porta et al., 1999, among others). The reasons behind this deviation include: shares with superior voting rights, pyramid structures, and cross holdings among firms in a business group. Because indirect ownership structures amplify owners' control, they lead to governance problems that are important on the macroeconomic level most important of which is economic growth. Although previous research presents vast country-specific evidence on the economic consequences of economic entrenchment, little, if any, country-specific and cross-country evidence exists for MENA countries. Thus, this paper aims at providing this evidence.

The Berle and Means, 1932 view of widely held corporations seems to be largely unrealistic today as the ownership of corporations in most of the countries, excluding the United States and the United Kingdom, is concentrated in the hands of single or few shareholders. However, controlled firms, as opposed to widely held firms, still have agency problems similar to those that exist in widely held firms but the way that agency problems are manifested and their consequences in the two types of firms are quite different. For example, when firm A is owned by a shareholder through another firm B (i.e., a pyramid structure), the shareholder can end up having controlling rights in firm B that far exceed his ownership stake. This, in turn, enables the controlling shareholder to divert firm B's resources to benefit firm A in which he is entitled to receive larger portion of its gains at the expense of the minority shareholders of firm B (i.e., tunneling). This pyramid structure of corporate ownership has been found prevalent in most of the countries including European, Asian, Latin American, and Middle

Eastern countries (La Port, 1999). In the Middle East countries, the controlling shareholders in pyramid ownership structures are mostly families who further enforce their control by appointing a family member as the CEO and/or as a member of the board of directors of the controlled firms. The negative consequences of indirect control of firms through pyramid structures go beyond merely expropriating minority shareholders' rights. Morck et. al, 2005, argue that pyramid structures can lead to inefficient allocation of capital and hinder capital market development and economic growth.

Besides using indirect control ownerships, controlling shareholders can amplify their personal benefits from corporate ownership through building relationships with politically influential government officials. In, at least, some Middle Eastern countries, controlling families create networks to lobby against the government in order to extract preferential treatments including tax exemptions, prevention from competition, access to profitable markets, and securing government procurement contracts. Such behavior has been recognized in the literature as political connections that corporations may establish with government officials in exchange for benefits that come in many monetary and non-monetary forms like bribes and support in election campaigns. Extant research finds that political connections are most prevalent in countries with weak legal systems but the results of its consequences have been mixed (See Leuz and Oberholzer-Gee, 2006, and Johnson and Mitton, 2003, among others).

In this paper, I investigate the association between corporate ownership structure, measured by the direct and indirect ownership percentage of the large(st) shareholder(s) and firm's growth[1]. In examining this relationship, I not only control for the firm's political connections but also allow firm's ownership concentration to interact with its political connections. In doing so, I use both static and dynamic panel data specifications and provide robustness checks to validate the results.

This paper contributes to existing literature along several dimensions: first, I provide evidence on the impact of firm's ownership structure and political connections on its growth from a MENA country from where such evidence virtually does not exist. Second, I relate two

[1] Lemmon and Lins, 2003, show that firm's ownership structure plays a significant role in determining corporate insider's ability to expropriate minority shareholders.

distinct lines of literature, the corporate ownership and political connections, by allowing measures of ownership and political connections to interact as far as firm's growth is concerned. Third, I provide country-specific evidence on the nature and shape of corporate ownership and political connections that might help in explaining the mixed results obtained in previous research.

The paper proceeds as follows: in section two, I outline the relevant literature and develop the hypotheses. Section three discusses the data and the methodology. Section four presents the empirical results and robustness checks and section five concludes the paper.

Corporate ownership and political connections in Jordan: A Brief

Most of the publicly traded corporations in Jordan are controlled by single or few shareholders who are usually wealthy families that enforce their control by appointing family members as members of the board of directors and/or executive managers. Recently, the government has enacted many regulations that aim to improve the corporate governance mechanism of public corporations. However, these regulations often overlap and contradict and, therefore, need to be thoroughly reviewed. Besides, the existing regulations are not efficiently enforced due to weak court system[2].

Recently, political connections of business elites has received much attention and discussion whether in the local or foreign media most of which received attention due to the cases brought to court by the Audit Bureau and the Jordan Integrity and Anti-corruption Commission but no reliable analyses of the nature of political connections or its consequences exist to date.

Literature Review and Hypotheses Development:

A growing line of literature shows that the ownership structure of corporations in most of the countries, excluding the United States and the United Kingdom, is concentrated especially when the country's commercial laws follow the French origin civil law (La Porta et. al, 1998). Concentration of ownership in the hands of families is the most dominant feature in most of the European, Asian, and Latin American countries (La Porta et. al, 1999) and a similar feature

[2] Bino et. al, 2016provide detailed analyses of corporate ownership in Jordan and discussions of relevant regulations.

is also found for some Middle Eastern countries. Bino et. al, 2016, show that that most of the Jordanian corporations are not only owned by wealthy families but also have a family member as the CEO and/or serving as member of the board of directors. Family firm are found more likely to experience credit restrictions and the more concentrated is the firm's capital in the hands of the family the more likely is the firm to be rationed by banks (Murro and Peruzzi, 2019). Furthermore, Eugster and Isakov, 2019 find that outside investors receive a premium for holding shares of family firms as they are exposed to the specific agency problems present in family firms. Anderson et. al, 2012 find that family firms devote less capital to long-term investments than firms with diffuse ownership structure. Family firms prefer investing in physical assets relative to riskier R&D projects. Dittmar et. al, 2003 find that investors in countries with poor shareholder protection cannot force managers to disgorge excessive cash balances.

It is natural to expect that the private sector in any country has the incentive to influence public policy in a way that enables it to gain privileges that can range from preferential tax and control treatments to securing government procurement contracts possibly at manipulated prices. This kind of behavior of the private sector is more expected in countries where the legal system is weak and inefficiently enforced which enables public corporations to behave in rent-seeking manner. One of the earliest work to understand the theoretical implications of rent-seeking can be traced back to Murphy et. al, 1993 who argue that rent seeking is costly especially at higher level because it can become self-sustaining and, therefore, can significantly reduce economic growth. Consistent with this argument, Morck et. al. 2000 find that entrenched corporate control can lead to slow growth. Morck et, al. 2005 argue that pyramid ownership structure amplify firm's political influence that can distort public policy. More recently, Desai and Olofsgard, 2011 argue that politically influential firms face improved business environment but are less likely to invest even if they earn higher profit. They find that politically influential firms benefit from weaker legal restrictions greater pricing power.

The cross-country empirical evidence on corporate political connections is relatively limited. Faccio, 2006 finds that political connection are, in fact, prevalent among larger firms in many countries especially those that are perceived as highly corrupt and in countries that impose

restrictions on foreign investment. Boubakri et. al, 2012 find that politically connected firms have lower cost of equity capital suggesting that they are less risky than non-politically connected firms. Bliss and Gul, 2012 find similar evidence in Malaysia.

The country-specific evidence on political connections comes from Malaysia and Indonesia as these countries offer unique settings for political connections research. Using stock price behavior around events preceding the health conditions of the former president of Indonesia, Suharto, Fisman, 2001, finds that stock prices of firms connected to Suharto are more affected than other firms. Leuz and Oberholzer, 2006 find that politically connected firms are less likely to have publicly traded foreign securities. The evidence that comes from Malaysia finds that the market value of firms that are connected to the Prime Minister Mahatir have gained an estimated $5 billion (Johnson and Mittion, 2003). Fraser et. al, 2006 find that political patronage is positively linked with leverage especially when the firms are larger and more profitable. Bliss and Gul, 2012 find positive association between market to book ratio and leverage for politically connected firms. Pham, 2019 finds that politically connected firms have information advantage as their cost of equity is less sensitive to rising economic policy uncertainty.

Based on the results outlined above, I hypothesize:

H1: Corporate ownership concentration and firm's political connections are substitutes to each other.

H2: There is a negative relationship between the percentage of firm's capital owned by the large(st) shareholder and firm's growth in assets.

H3: Firm's politically connections have a negative impact on the growth of its assets.

H4: Firm's political connections are negatively related to its performance.

H5: Firm's political connections are negatively related to its leverage.

Data & Methodology:

The data used in this paper come from the Jordanian stock market, the Amman Stock exchange (henceforth, ASE) over the period 2004-2017. Jordan represents an ideal setting to investigate the corporate ownership structure in general and firm's political connections in particular as likely impediments to economic growth for several reasons. First, compared to most of other MENA countries, Jordan has the largest number of firms listed on the capital market and is one of the largest MENA stock markets in terms of market capitalization as a percentage of GDP. Second, the ASE has been found to be a relatively stable market and the closest of the MENA markets to market efficiency (Lagoarde-Segot, 2009). Third, using network analysis, Siemon, 2018 finds that Jordan has the largest numbers of director-interlocks, direct ownership ties, and family groups.

Because the data needed for this paper are not compiled in a way that enables collecting the variables directly, I hand-collect the data from the financial statements and ownership structures of the public corporations listed on ASE. The annual reports published by the listed corporations disclose the identities and holdings of shareholders who own 5% or more of the firm's capital and the identities of the members of board of directors and the executive managers and their holdings and the holdings of their relatives of the firm's shares. This enables me to collect both the direct and indirect ownership percentages of the shareholders. Following conventional practices in previous research, I treat owners who belong to the same family as one shareholder. In fact, most of the Jordanian corporations are owned by families who also have at least one family member who is either a member on the board of directors or appointed in an executive position. Whenever the ownership structure of the firm includes a public or private firm as an owner, I trace the ownership of the owner-firm to determine whether other shareholders of the firm have an additional stack in the firm through the owner-public or private firm. Corporate ownerships by the government are rather limited due to the privatization of most of the state owned enterprises during the time period 1996-2006 and institutional ownerships are virtually nonexistent. However, the social security fund has recently been actively involved in acquiring significant ownership stacks in public and private firms. The social security fund has a specialized investment unit managed by investment committee members who are appointed by the government. Therefore, for the purposes of this

paper, I treat public corporations that are controlled by the social security fund as government controlled firms.

To determine firm's political connections, I search whether the chair of the board of directors or one or more of its members, the general manager, or a large shareholder has served as government official (minister, parliament member, or high-rank public official) or has any ties with government officials. In many cases, determining firm's political connection is straightforward while in other cases it is not. To provide better understanding of ownership and political connection variables, I present an example next.

The publicly held firm Mediterranean Tourism Investment Company has the ownership structure shown in figure 1.

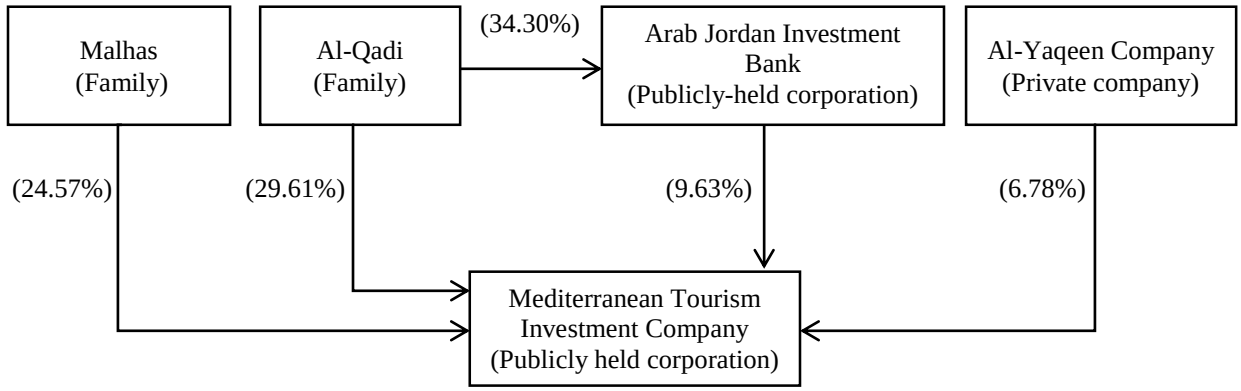

Figure 1: The ownership structure of the publicly held corporation Mediterranean Tourism Investment Company. The number shown in parenthesis are the ownership percentages or the cash flow rights of the largest shareholders specified in the boxes.

The ownership percentages of the two families shown in figure 1 are calculated by summing up the percentage of direct ownerships of all family members. Using a 20% or 10% cutoff points to determine the controlling shareholder, the Mediterranean Tourism Investment Company has two controlling shareholders (Al-Qadi family and Malhas family). However, Al-Qadi family controls the private firm (Al-Yaqeen Company) and the publicly held bank (Arab Jordan Investment Bank) as Al-Qadi family owns 34.30% of the bank's capital. Therefore, Al-Qadi family is using a pyramid ownership structure and, as a result, has an indirect ownership stack in the Mediterranean Tourism Investment Company bringing its total ownership percentage to 39.69%. Another way to look at the ownership structure shown in

figure 1 is to calculate the voting rights rather than cash flow rights of the controlling family (Al-Qadi). This can be done, in this case, by summing up the ownership percentages of Al-Qadi family (29.61%), the Arab Jordan Investment Bank (9.63%), and the Al-Yaqeen Company (6.78%) which is equal to 46.02% since these two corporations are controlled by Al-Qadi family. Thus, the controlling family's owns 10.08% of the Mediterranean Tourism Investment Company indirectly and has voting rights that exceed its total ownership percentage by 6.33%.

To determine whether the Mediterranean Tourism Investment Company is politically connected, I search the identities of the members of board of directors and the executive managers of the Mediterranean Tourism Investment Company and of its large shareholders. Following previous research, I classify the firm as politically connected if one or more of the members of board of director and/or executive managers of the firm or its large shareholders has served in influential government position (minister, member of the parliament, or high-rank official) or closely tied with politically connected people. In the example shown in figure 1, Mediterranean Tourism Investment Company is classified as politically connected because the general manager of the private firm controlled by Al-Qadi family has served as minister. In fact, in this particular example, I find that Al-Qadi family has always appointed a politically influential person as the general manger of Al-Yaqeen Company.

Measurement of ownership concentration:

To measure firm's ownership concentration, I use the sum of direct and indirect ownership percentage of the largest and the three largest shareholders. The indirect ownership is calculated for firms where one or more of the large shareholders has ownership in the firm through a pyramid structure.

Measures of political connections:

I use two main measures of firm's political connections: the first measure is similar to that used by Fraser et. al., 2013, who use government direct ownership of equity of a firm to capture the economic dimension of political patronage. I supplement this measure by adding government indirect ownership because the use of indirect ownership structures (i.e.,

pyramids) is prevalent in Jordan. However, I limit this measure only to firms where the government is the largest shareholder, which makes this measure similar to that used by Faccio, 2006. The second measure of firm's political connection used in this paper is an indicator variable that is equal to one if one or more of the members of the board of director, executive manages, or a large shareholder(s) is or has served as a minister, member of the parliament, high-rank public official and zero otherwise.

The Empirical Model:

I use the following empirical specification:

$$G_{it} = \alpha + \beta_1 Own_{it} + \beta_2 PC_{it} + \beta_k X_{it} + \beta_l Z_i + \varepsilon_{it}$$

where

G_{it} : is the growth rate of firm's assets for firm *i* in year *t*.

Own_{it} : is the direct and indirect ownership percentage of the largest shareholder(s) for firm i at year *t*.

PC_{it}: is a measure of firm's political connection. Fist, as an indicator variable that is equal to one if the firm is politically connected in year t and second an indicator variable if the largest shareholder of the firm is the government.

X_{it} is a matrix of control variables that include: firm size, leverage, cash balance, performance, and retained earnings.

Z_i is a matrix of time-invariant explanatory variables that are firm-specific.

The parameters of the model will be estimated using static as well as dynamic panel data models. Investigation of the existence of unobserved firm- and country-specific variables will be conducted using the Lagrange multiplier test. Tests of whether the unobservable variables are correlated with the regressors will be based on the Hausman test and Wooldridge (2010) and Mundlak (1978) auxiliary regression that does not assume homoscedasticity and allows

for time effects. To allow for the dynamism of the ownership concentration and governance variables, the bias-corrected fixed effects (BCFE) regression will be used. Thus, the explanatory variables in the BCFE will include lagged value(s) of the ownership concentration and governance variables.

Empirical Analysis:

First, I look the historical behavior of the sample corporations' performance, growth, and leverage. As shown in figure 2, the overall performance of all firms has been declining since 2005. Both the return on assets and return on equity are very low and wander around 2%.

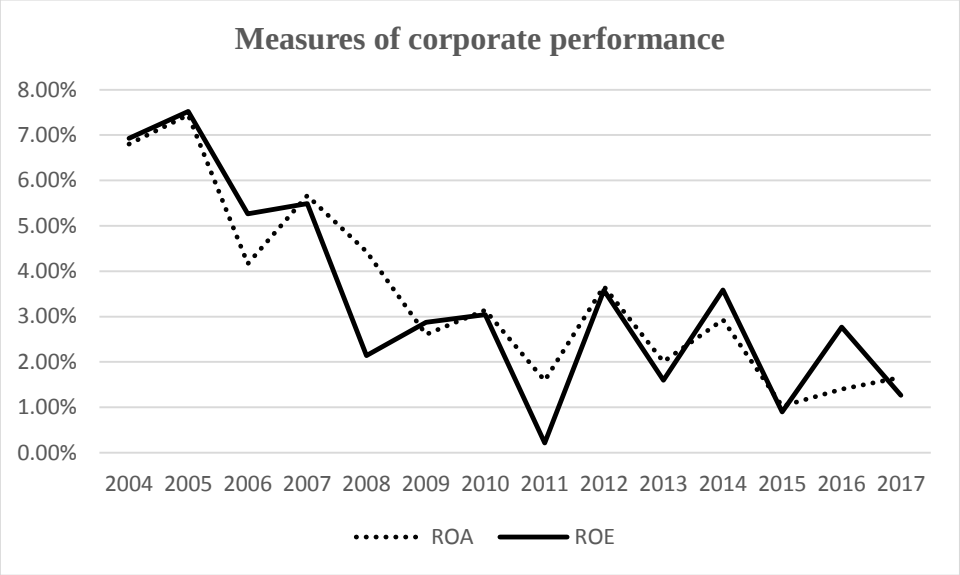

Figure 2

Figure 3 shows that growth in firm's assets and sales have decreased significantly following the financial crisis of 2008. In fact, the growth in sales has been negative since 2015.

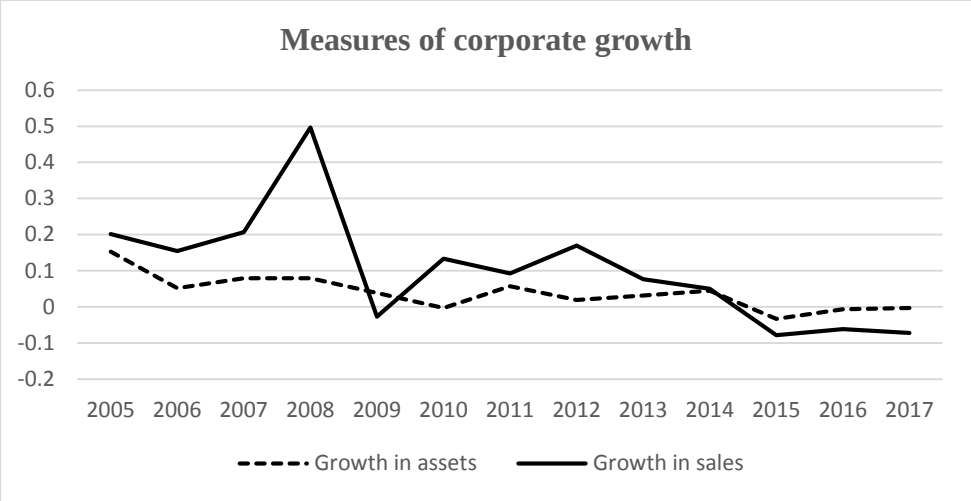

Figure 3

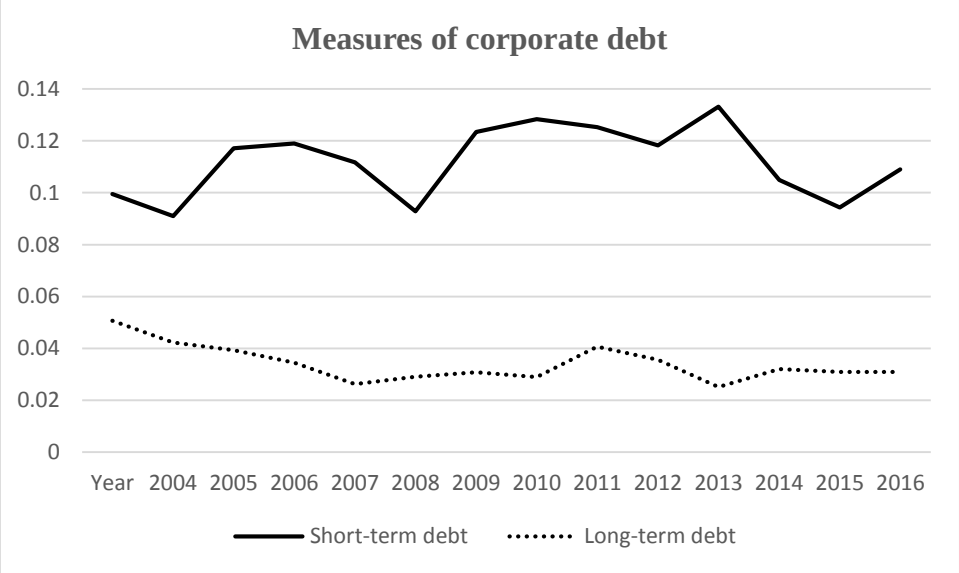

Figure 4

Table 1: Descriptive Statistics.

Largest is the sum of the direct and indirect percentage of firms' capital owned by the largest shareholders. LargThr is the sum of the direct and indirect percentage of firms' capital owned by the largest three shareholders. STD/TA is firm's short-term debt divided by total assets. LTD/TA is firm's long-term debt divided by total assets. TD/TA is firm's total debt divided by total assets. SGR is the growth in firm's sales calculated as the natural logarithm of $(Sales_t - Sales_{t-1})$. Assegr is the growth rate in firm's total assets. Tobin's q is calculated as sum of market value of equity minus book value of equity plus total assets divided by total assets. Payout ratio is dividend payout ratio calculated as dividends per share divided by its earnings per share. Div/Sales is firm's cash dividends divided by sales. Div/Equity is firm's dividends divided by book value of equity. EPS is firm's earnings per share calculated as the net income divided by number of shares outstanding.. ROE is return on equity calculated as net income divided by total equity. ROA is return on assets calculated as net income divided by total assets. Size is firm's size measured as the log of book value of total assets. AsseTan is firm's assets tangibility calculated as total assets less current assets divided by total assets. Cash is firm's cash status measured as ending cash balance divided by total assets. RE/TE is calculated as retained earnings divided by total equity.

Variable	Obs	Mean	Median	Std.Dev	Min	Max
Largest	498	0.3346	0.3015	0.1760	0.056	0.974
largThr	498	0.5307	0.5521	0.1869	0.062	0.974
STD/TA	498	0.1117	0.0849	0.1100	0	0.611
LTD/TA	498	0.0346	0	0.0650	0	0.366
TD/TA	498	0.1464	0.1313	0.1295	0	0.611
SGR	489	0.0218	0.0224	0.1512	-0.874	0.875
AssetGr	445	0.0451	0.0274	0.1636	-0.421	1.241
MTOB	480	1.6451	1.2458	1.2771	0.176	12.014
Payout	497	0.4529	0.3300	0.5410	0	3.497
EPS	498	0.1061	0.0630	0.2930	-0.628	3.182
ROE	498	0.0354	0.0468	0.1545	-1.450	0.572
ROA	498	0.0264	0.0292	0.0837	-0.450	0.433
Size	498	7.2165	7.1737	0.5460	5.928	8.974
AsseTan	498	0.5351	0.5070	0.2462	0.073	0.991
Cash	498	0.0548	0.0207	0.0852	0	0.970
RE/TE	498	0.0147	0.0630	0.2994	-1.999	1.176

Table 2: Correlation Analysis

All variables are as defined earlier. *, **, *** denote significance at the 10%, 5%and 1% levels, respectively.

	Largest	LargThr	EPS	SGR	ROA	STD/TA	LTD/TA	TD/TA	Size	AsseGr	AsseTan	Cash
LargThr	0.849***											
llEPS	0.059	0.070										
SGR	-0.011	-0.017	0.209***									
ROA	-0.075*	-0.001	0.672***	0.266***								
STD/TA	-0.095**	-0.113**	-0.232***	0.015	-0.226***							
LTD/TA	0.189***	0.203***	-0.143***	-0.044	-0.179***	0.069						
TD/TA	0.007	-0.001	-0.265	-0.008	-0.277***	0.884	-0.210***					
Size	0.154***	0.028	0.329***	0.137***	0.162***	-0.016	0.111**	0.038				
AsseGr	0.028	0.009	0.124***	0.160***	0.213***	0.122***	0.055	0.130***	0.077*			
AsseTan	0.204***	0.202***	-0.042	0.053	-0.181***	-0.273***	0.344***	-0.072	0.386***	0.0074		
Cash	0.068	0.091**	0.211***	-0.056	0.195***	-0.291***	-0.156***	-0.321***	0.0295	0.004	-0.145***	
RE /TE	-0.052	-0.068	0.514***	0.208***	0.59***	-0.210***	-0.245***	-0.294***	0.353***	0.097**	-0.052	0.216***

Table 3: Descriptive Statistics and mean and median differences for politically- and non-politically- connected firms. PC-firms are politically connected firms and non-PC are non-politically connected firms. All variables are as defined earlier. Mean differences test are T-tests while median differences test are Wilcoxson signed rank tests. *, **, *** denote significance at the 10%, 5%and 1% levels, respectively.

	PC-firms		Non-PC-firms	
Variable	Mean	Median	Mean	Median
Largest	0.3748**	0.3865**	0.3257	0.2990
largThr	0.6240	0.5950	0.5101	0.5282
STD/TA	0.0721	0.0168	0.0849	0.1100
LTD/TA	0.0333	0	0	0.0650
TD/TA	0.1054	0.0465	0.1313	0.1295
SGR	0.0021	0.0148	0.0224	0.1512
AssetGr	-0.0007	0.0081	0.0274	0.1636
MTOB	2.2840	1.8175	1.2458	1.2771
Payout	0.5859	0.7131	0.3300	0.5410
EPS	0.0927	0.0769	0.0630	0.2930
ROE	0.0429	0.0568	0.0468	0.1545
ROA	0.0351	0.0497	0.0292	0.0837
Size	7.2906	7.4611	7.1737	0.5460
AsseTan	0.6143	0.7416	0.5070	0.2462
Cash	0.0936	0.0471	0.0207	0.0852
RE/TE	0.0984	0.0656	0.0630	0.2994

Table 4: Descriptive Statistics and mean and median differences for government- and non-government-controlled firms. GC-firms where the largest shareholder is the government and non-GC-firms are firms where the largest shareholder is non-government. All variables are as defined earlier. Mean differences test are T-tests while median differences test are Wilcoxson signed rank tests*, **, *** denote significance at the 10%, 5%and 1% levels, respectively.

	GC-firms		Non-GC-firms	
Variable	Mean	Median	Mean	Median
Largest	0.3748*	0.3865*	0.3257	0.2990
largThr	0.6240	0.5950	0.5101	0.5282
STD/TA	0.0721	0.0168	0.0849	0.1100
LTD/TA	0.0333	0	0	0.0650
TD/TA	0.1054	0.0465	0.1313	0.1295
SGR	0.0021	0.0148	0.0224	0.1512
AssetGr	-0.0007	0.0081	0.0274	0.1636
MTOB	2.2840	1.8175	1.2458	1.2771
Payout	0.5859	0.7131	0.3300	0.5410
EPS	0.0927	0.0769	0.0630	0.2930
ROE	0.0429	0.0568	0.0468	0.1545
ROA	0.0351	0.0497	0.0292	0.0837
Size	7.2906	7.4611	7.1737	0.5460
AsseTan	0.6143	0.7416	0.5070	0.2462
Cash	0.0936	0.0471	0.0207	0.0852
RE/TE	0.0984	0.0656	0.0630	0.2994

Table 5: The association between ownership concentration and asset growth. The dependent variable in all specifications is firm's growth in assets. PC is an indicator variable that equal to one if the firm is politically connected and zero otherwise. All variables are as defined earlier. T-statistics are calculated using White Heteroskedasticity robust standard errors clustered at the firm level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Variables	**Model 1**	**Model 2**	**Model 3**
Constant	0.022	0.027	0.016
Largest	-0.085	-0.073	-0.031
PC		-0.052*	0.027
Largest × PC			-0.216*
ROA	0.605**	0.601**	0.601**
SGR	0.202	0.198	0.192
Leverage	0.454**	0.448**	0.453**
RE/TE	0.044	0.047	0.048
Cash	0.293***	0.309***	0.324***
Crisis			
Firm effect	Yes	Yes	Yes
Time effect	Yes	Yes	Yes
R^2	0.10	0.11	0.11

Table 6: The association between ownership concentration and Leverage. The dependent variable in all specifications is firm's growth in assets. PC is an indicator variable that equal to one if the firm is politically connected and zero otherwise. All variables are as defined earlier. T-statistics are calculated using White Heteroskedasticity robust standard errors clustered at the firm level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Constant	-2.004***	-1.971***	-2.041***	-2.041***
Largest	-0.156	-0.159	-0.171*	-0.171*
PC		-0.030	-0.067	-0.067
Largest × PC			0.192	0.192
ROA	-0.279**	-0.287**	-0.290**	-0.290**
SGR	0.044	0.045	0.045	0.045
Size	0.312***	0.309***	0.318***	0.318***
RE/TE	-0.120***	-0.119***	-0.120***	-0.120***
Cash	-0.268***	-0.267***	-0.278***	-0.278***
AsseTan	0.018	0.012	0.009	0.009
Crisis				-0.042
Firm effect	Yes	Yes	Yes	Yes
Time effect	Yes	Yes	Yes	Yes
R^2	0.07	0.07	0.07	0.07

Table 7: The association between ownership concentration and Return on Assets. The dependent variable in all specifications is firm's growth in assets. PC is an indicator variable that equal to one if the firm is politically connected and zero otherwise. All variables are as defined earlier. T-statistics are calculated using White Heteroskedasticity robust standard errors clustered at the firm level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Constant	-0.401	-0.354	-0.418	-0.418
Largest	-0.033	-0.039	-0.048	-0.048
PC		-0.056***	-0.086**	-0.086**
Largest × PC			0.158	0.158
TD/TA	-0.158***	-0.159***	-0.159***	-0.159***
RE/TE	0.150***	0.151***	0.149***	0.149***
Size	0.067	0.062	0.070	0.070
Crisis				-0.040**
Firm effect	Yes	Yes	Yes	Yes
Time effect	Yes	Yes	Yes	Yes
R^2	0.40	0.38	0.38	0.38

References

- Anderson., R. A. Duru., D. Reeb. 2012. “Investment Policy in Family controlled firms”, ***Journal of Banking and Finance***, 36, 1744-1758.

- Berle, A. A., and G. C. Means. 1933. "The Modern Corporation and Private Property". New York, Macmillan Co.

- Bino, A., D. Abu-Ghunmi, M. Tayeh, and D. Shubita. 2016. "Large Shareholder's Identity and Stock Price Synchronocity: Evidence from a MENA Market". ***International Journal of Financial Research*** 7, 1, 1-19.

- Bliss, M., and F. Gul. 2012. "Political Connections and Leverage: Some Malaysian Evidence". ***Journal of Banking and Finance*** 36, 2344-2350.

- Boubakri, N., O. Guedhami, D. Mishra, W. Saffar. 2012. "Political Connections and the Cost of Equity Capital". ***Journal of Corporate Finance*** 18, 541-559.

- Carneya, R, T. Child, and X. Li. 2020. "Board Connections and Crisis Performance: Family, State, and Political Networks". ***Journal of Corporate Finance*** 64, 1-24.

- Chen., C. Y. Li, D. Luo, and T. Zhang. 2017. "Helping Hands or Grabbing Hands? An Analysis of Political Connections and Firm Value". ***Journal of Banking and Finance*** 80, 71-89.

- Claessens., S. and B. Yurtoglo., 2013. “Corporate Governance in Emerging Markets: A Survey”. ***Emerging Markets Review***, 15, 1-33.

- Dang. V., E. So, and I. Yan. 2018., "The Value of Political Connection: Evidence from the 2011 Egyptian Revolution". ***International Review of Economics and Finance*** 56, 238-257.

- Desai. R and A. Olofsgard. 2011., “The Costs of Political Influence: Firm-Level Evidence From Developing Countries“. ***Quarterly Journal of Political Science***, 6: 137–178.

- Dittmar., A. J. Mahrt-Smith., and H. Servaes., 2003. “International Corporate Governance and Corporate cash Holdings”. ***Journal of Financial and Quantitative Analysis***. 38, 1.

- Eugster., N. and D. Isakov. 2019., “Founding Family Ownership, Stock market returns, and Agency Problems”. ***Journal of Banking and Finance*** 107, 1-20.

- Faccio. M., “Politically Connected Firms”. ***American Economic Review*** 96, 369-386.

- Fraser. D., H. Zhang., and C. Derashid. 2006., “Capital Structure and Political Patronage: The Case of Malaysia”. ***Journal of Banking and Finance*** 30, 1291-1308.

- Hearn, B. 2014. "The political institutional and firm governance determinants of liquidity: Evidence from North Africa and the Arab Spring". ***Journal of International Markets, Institutions and Money*** 31, 127-158.

- Heydemann. S. 2004. "Networks of Privilege in the Middle East". Palgrave MacMillan, 133-165.

- Hu. R., K. Khondkar, K. Lin, J. Tan. ***Forthcoming***. "Do Investors Want Politically Connected Independent Directors? Evidence from their Forced Resignations in China". ***Journal of Corporate Finance*** 61.

- Johnson, S., R. La Porta, F. Lopezde-Silanes, and A. Shleifer. 2000. "Tunneling." ***American Economic Review***, 90(2): 22–27.

- Johnsona. S., and T. Mitton. 2003. "Cronyism and Capital Controls: Evidence from Malaysia". ***Journal of Financial Economics*** 67, 351-382.

- Kalpper, L. F., & Love, I. 2004. "Corporate Governance, Investor Protection, and Performance in Emerging markets". ***Journal of Corporate Finance***, 10, 5, 703-728.

- Khaw. K., R. Zainudin, R. Rashid. 2019. "Cost of debt financing: Does political connection matter? ". ***Emerging Markets Review*** 41, 1-17.

- Kubinec. R. 2018. "Patrons or Clients? Measuring and Experimentally Evaluating Political Connections of Firms in Morocco and Jordan". ***ERF working paper*** No. 1280.

- La Porta, R., F. Lopez-de Silanes, and A. Shleifer. 2008. "The Economic Consequences of Legal Origins." ***Journal of Economic Literature*** 46:285–332.

- Lemmon., M. and K. Lins. 2003. "Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis". ***The Journal of Finance*** 58, 4, 1445-1468.

- Leuz, C., and F. Oberholzer-Gee. 2006. "Political Relationships, Global Financing, and Corporate transparency: Evidence from Indonesia". ***Journal of Financial Economics*** 81, 411-439.

- Murro., P. and V. Peruzzi. 2019. "Family Firms and Access to Credit. Is Family Ownership Beneficial?". ***Journal of Banking and Finance*** 101, 173-187.

- La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. 1999. "Corporate Ownership around the World". ***The Journal of Finance***, 54, 2, 471-517.

- La Porta, R., Lopez-De-Silanes, F., & Shleifer, A., 2002. "Government Ownership of Banks". ***The Journal of Finance***, 57, 1, 265-301.

- La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. 2006. “What Works in Securities Laws”. ***The Journal of Finance***, 61, 1, 1-32.

- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. 2000. “Investor Protection and Corporate Governance”. ***Journal of Financial Economics***, 58, 1&2, 3-27.

- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. W. 1997. “Legal Determinants of External Finance”. *The Journal of Finance* 5, 3, 1131-1150.

- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. 1998. “Law and Finance”. ***Journal of Political Economy***, 106, 6, 1113-1151.

- Lagoarde-Segot, T. 2009. “Financial Reforms and Time-varying Microstructure in Emerging Equity Markets”. ***Journal of Banking & Financ*** 33, 10, 1755-1769.

- Murphy. K., A. Shleifer, and R. Vishny. 1993. “Why is Rent-seeking So Costly to Growth?” AEA papers & proceedings, 409-414.

- Morck. R., D. Stangeland., and B. Yeung. 2000. "Inherited Wealth, Corporate Control, and Economic Growth The Canadian Disease?" National Bureau of Economic Research Conference Report, Chapter 11.

- Pan. X., and G. Tian. 2020. “Political Connections and Corporate Investments: Evidence from the Recent Anti-corruption Campaign in China “.***Journal of Banking & Finance***, 119, 1-15.

- Pham., Anh. 2019. “Political Risk and Cost of Equity: The Mediating Role of Political Connection”. ***Journal of Banking and Finance*** 56, 64-87.

- Phan. D., C. Tee., and V. Tran. 2020. "Do Different Types of Political Connections Affect Corporate investments? Evidence from Malaysia". ***Emerging Markets Review*** 42, 1-13.

- Schoenherr. D. 2016. "Political Connections and Allocative Distortions".

- Siemon., Michael. 2018. "Price Synchonicity, Inter-Firm Networks, and Business Groups in the Middle East and North Africa". ***Economic Research Forum***. Working Paper.