PARLIAMENTARY VERSUS PRESIDENTIAL POLITICAL SYSTEM: OPTIONS FOR POST JANUARY 2011 EGYPT

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Parliamentary versus Presidential Political System: Options for post January 2011 Egypt

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The debate on the merits of the parliamentary system of government versus the presidential system has been going on for many years now. Recently the topic attracted increased empirical attention with studies that looked at the impact of the system of government on different political, economic, and social aspects. This work adds to the literature a study that, using a global data set, empirically analyzes the effects of the choice of government system on income inequality, the level of political freedom, and the level of civil liberties in a society in general with an application to Egypt in particular.

The empirical analysis revealed a strong relationship between parliamentarism as a political system and income equality, political rights and civil liberties in a society. The parliamentary system of government appears to be advantageous, compared to the presidential system, in its effect on the three main aspects under evaluation.
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# Contents

Acknowledgement ........................................................................................................... iii  

I. Introduction ................................................................................................................... 1  

I. Conceptual Framework .................................................................................................. 5  

Concepts .......................................................................................................................... 6  

II. Literature Review ......................................................................................................... 8  

Theoretical Debate .......................................................................................................... 8  

Empirical Studies ........................................................................................................... 14  

III. Methodology .............................................................................................................. 18  

Variables and data ......................................................................................................... 18  

IV. Results ......................................................................................................................... 24  

The Full Model .............................................................................................................. 24  

The Restricted Model ..................................................................................................... 28  

The Functional Form Model .......................................................................................... 29  

Correlation Matrix ........................................................................................................ 31  

V. The Options for Egypt .................................................................................................. 32  

VI. Conclusion .................................................................................................................. 37  

References ....................................................................................................................... 39
I. INTRODUCTION

On the early morning of Tuesday 25 January 2011, Tahrir Square in central Cairo was witnessing an unusual build-up of security forces. The build-up was not in preparation for the celebrations by the security forces of their “Police Day” but in anticipation of the march that was to take place on that day. A march that was called for by different activists groups through web based social media in protest against police brutality and human rights abuses by the security forces that were seen to have escalated in recent years. A march that, 18 days later, would cause the collapse of the Hosni Mubarak regime that ruled Egypt for thirty years. The Egyptian people have finally revolted against dictatorship.

For observers of the Egyptian political scene, several inter-related factors have led to this popular uprising, which was sparked by the different youth groups and was massively supported by ordinary Egyptians from all social stratifications. Several tactical errors on part of the regime have contributed to its astonishing collapse. Those factors that resulted in the call for protest have been building-up for years because of the poor performance of the Mubarak regime on almost all fronts. They are best summarized by the most prevalent slogan that was chanted in the early days by the protesters that represented their fundamental demands: dignity, freedom, and social justice.

This slogan, while epitomizing the basic demands of the revolutionaries, reflects on the main shortcomings of the Mubarak regime and the outcomes of its policies throughout its hegemony over the Egyptian life for three decades. The abuse of basic human rights of Egyptians at the hands of the security apparatus under the protection of the everlasting state of emergency and under the excuse of protecting the state against acts of terrorism; the suppression of political rights and freedom of expression, the manipulation of the democratic process to paint a façade of democracy while
maintaining the hegemony of the ruling party; the steady deterioration of all aspects of public service; the spread of corruption to endemic proportions; and finally the deterioration in the standards of living of ordinary Egyptians and the stark inequality in income distribution are all but the underpinnings of the inevitable change.

The success of the people’s revolution in Egypt in peacefully forcing President Mubarak out of office on 11 February 2011 initiated movement on two tracks: the process of dealing with the past in terms of investigating and prosecuting the pillars of the fallen regime for alleged crimes of corruption and abuse of authority on one hand, and the process of reshaping the political landscape and the economic and social future of Egypt on the other.

The latter process is the concern of this work. More specifically, the institutional design of the political system to be adopted in the new constitution and its effects on the extent of success in achieving the goals of January the 25th revolution, namely dignity, freedom and social justice. Dignity as represented by the respect of human rights of the Egyptian people. Freedom as represented by the basic freedoms of belief expression, assembly and affiliation. Social Justice as represented by alleviation of poverty and income disparity, control of corruption and extension of social welfare.

The process of reshaping the Egyptian political arena was initiated by the constitutional declaration that was announced by the Supreme Council of the Armed Forces (SCAF) who are in charge of the country during the interim period. This period which started by Mr. Mubarak relinquishing his position, will end with the election of a new president and a new parliament who are to form a constituent assembly with the mandate of drafting a new constitution for the republic within six months of its appointment. Simultaneously, and without delay, scholars, political pundits, analysts and writers embarked on a new and fresh debate for the first time in as many as six decades. Should we abolish the presidential system in favor of the parliamentary system? Which system is better suited for the accomplishment of the aspiration of the revolution? Which
system is more likely to result in the consolidation of the new democracy that the people are set to establish? Which system will prevent the re-emergence of autocracy? Which system will not bring back a new Pharaoh? The answer to those questions is the general object of this work. The choice between the presidential or the parliamentary system of government, the advantage of one system over the other in terms of addressing the specific demands of the Egyptian revolution: dignity, freedom, and social justice are the main themes of inquiry that this work is set to explore.

Egypt has been adopting a semi-presidential system of government, since the 1952 revolution by the Free Officers, which is similar to the French system at least in form. Reality of government is, however, different since Egypt polity is not regarded as a democracy, even during the later years of the Mubarak regime with all the elections and the opposition parties and opposition press which provided a façade of democracy. Before July 1952, Egypt was a parliamentary monarchy. This fact contributed to the discourse about the advantages and disadvantages of the different systems. Many believe that the parliamentary system is too cumbersome and requires and advanced and mature state of democratization that is far from obvious in present day Egypt. Others contend that this system, the parliamentary, is not foreign to the Egyptian polity, they claim that in fact it was the system that prevailed during the most democratic times that Egypt has experienced during its political history, namely in the period between the two world wars.

Opponents of the parliamentary system of government argue that at this transitional stage Egypt needs a strong executive capable of leading the country through the turmoil of transition from autocracy to democracy and emphasize the need to attain a maximum level of separation of powers that is embodied by the presidential system. On the other hand, parliamentarists argue back that the presidential or the semi-presidential system that was adopted in Egypt since 1952 contributed directly to the unchecked hegemony by the president on all aspects of government including the legislature and the judiciary. A fact that many believe was the ultimate cause of all the ailments of government that plagued the political, economic and social life of the Egyptians for six
decades. Both side of the debate have convincing arguments and show equal conviction to their views. An analysis that studies the available theoretical and empirical contribution of scholarship on the issue and links it all to the Egyptian conditions and the goals set by the revolution and aspired to by the Egyptian people. It is that analysis that this work intends to furnish. A review of the available literature on the topic followed by an empirical analysis of the relationship between parliamentarism and dignity, freedom and social justice represented by civil liberties, political freedom and income equality.

**Research Question**

The purpose of this work is to answer the main question of which system of government should Egypt choose at this crossroads instance in its history. Should it retain the current presidential system? Alternatively, should it go towards a European style parliamentary system?

This leads to other queries namely: how does the choice of parliamentary or presidential systems as the political regime for the country affect income inequality?

How does the political regime affect the citizens’ exercise of their political rights?

How does the political regime affect citizens’ civil liberties?

To answer these questions, we use a multi-varient regression analysis to find the relationship between economic inequality, political rights and civil liberties as dependant variables and parliamentarism as the main regressor plus a host of control variables, which include per capita income, level of illiteracy, political culture and other related variables.
I. CONCEPTUAL FRAMEWORK

Figure 1 Conceptual Framework
"Democracy is a political regime where the will of the people becomes the law of the country.” (Lane & Ersson, 2003, p. 2).

This is the definition of democracy used for the purpose of this inquiry. As depicted in the graphic representation in figure (1), democracy is the intervening and moderating political process. For this process to function and produce the expected outcomes in a sustained manner, certain inputs are required. Those are represented by the general categories of independent variables. The scholarship is rich with studies of the independent variables that affect the sustenance and functioning of a democratic system. The depicted broad categorization entails most if not all those variables. It is important to stress here that direct causality is not to be inferred by the arrows in the diagram. The relationship between the independent variables and the measure of democracy as a dependant variable is of a complex, associative nature at best in most studies.

The outcomes of a consolidated democratic regime can be regarded as a manifestation of the success of a democracy through good governance. Governance is another intervening and moderating process that translates the will of the people through the laws of the land into the desired outcomes that eventually lead to the desired quality of life that the people will. Scholars have studied the effects of the various independent variables under the specified categories on governance as a dependant variable, yielding interesting results most of which confirm the intuitive speculation that good governance is associated with democracy as defined here.

Governance however, is still a process and is not regarded as a goal in itself. It is through good governance that the desired outcomes of democracy are realized. Such outcomes can be represented under the four main groups; the categories of dependant variables. Those outcomes under the broad categories are what lead to the quality of life
aspirations of the people. It is interesting to note the feedback loop depicted by the white arrows going back to the independent variables. The realization that outcomes of good governance are themselves inputs to democracy make the assertion that the process is a self-reinforcing mechanism an obvious one.

The purpose of this work is to characterize the relationship between the choices of political regime, parliamentary or presidential, which fall under the category of independent variables of institutional conditions in the diagram, and the outcomes of good governance that best translate the fundamental demands of the Egyptian revolution, specifically: civil liberties, political rights and equality. Those outcomes fall under the main categories of economic development, political development and human development. Specific variables represented by published indices are used and are discussed in more detail in the methodology section of this document.
II. LITERATURE REVIEW

The literature is abundant with theoretical debate over the merits of parliamentarism versus presidentialism as a constitutional arrangement or aspect of institutional design for transitioning countries. Such debate has lasted for a long time despite the observed differences in outcomes of the two systems and their effects on governance in general and policy making in particular. Scholars and political scientists in Europe and America as early Woodrow Wilson and Walter Bagehot have deliberated over the impact of the consolidation or separation of power as the main characteristic of the form of government on elections and campaigns, on parties’ behavior, on the courts and the bureaucracies (Lijphart, 1992; Mainwaring and Shugart, 1997; Skach 2005). In recent years however, several studies have been conducted on the practical effects of constitutional arrangements on different variables that cover areas of human development, political development and economic development in societies. The issues range from the impact of parliamentarism on agricultural policies to its effects on the environment and passing through several other important outputs of public policy in between. The said studies utilized cross-national and panel data over time to delineate the effects of parliamentarism on the different dependant variables mentioned, some drawing a causal relationship and others simply indicating association. The literature on the subject can be divided into two main categories: theoretical debate and empirical analysis. The following review is thus adopting a similar division.

Theoretical Debate

While scholars and policy makers agree on the important impact that constitutional arrangements, in particular the type of political regime, have on a polity they differ in the outcome of adopting one form of government or the other and the impact that that may have on public policymaking (Gerring et al, 2009; Tsebilis, 2000). Such
differences can be attributed to the contrasting nature of the two main forms of
government under study.

**The Presidential System**
The main feature of the presidential system is the direct election of the president by the
people for a fixed term in office. Different countries have different arrangements for the
number of bids a president can make for re-election. For example, the USA has a fixed
four-year term and the president can be elected for one additional term only. Mexico on
the other hand allows the president to be elected for one term of six years with no
possibility of re-election.

Under the presidential system, the bureaucracy is managed by the top executive yet has
double accountability to the president and to the parliament.

Another important distinction of the presidential system is the fact that the executive
cannot be discharged except through impeachment or a revolution perhaps. The
president, in purely presidential systems is the head of government and the head of the
state, whereas in semi-presidential systems the prime minister shares the head of
government position.

The underlying principle of the presidential system is the separation of powers doctrine.
The power is shared between the president as the head of the executive branch and the
parliament as the legislative branch. There are different opinions on the viability of this
believe that the concept of separation of power weakens government, especially in the
presence of fewer strong parties in parliaments due to double legitimacy and defused
accountability issues.

**The Parliamentary System**
Under the parliamentary system, the people elect their representatives to parliament
who then form the government. There may be a president or a monarch who is the
symbol of the state and normally have ceremonial but not government duties. The
parliament has a dual authority, legislative and executive through the cabinet.
The government needs the support of the legislature in the form of a vote of confidence, and can be removed from office at any time through the vote of no confidence. The bureaucracy is controlled and managed by one coherent entity and does not have a dual reporting as the case of the presidential system. The president or the monarch selects a prime minister who is entrusted with forming a cabinet from members of the majority party or a coalition of parties in the parliament.

The main underlying principle in a parliamentary system is the concept of fusion of power. Contrary to the presidential system where power is diffused between the executive branch and the legislature, in the parliamentary system, power is concentrated and government is a collegial affair. According to many scholars (Horowitz, 1990, Lipset, 1990, Stepan & Skach, 1993) the separation of powers is an essential element in a democracy, providing checks and balances to limit the powers of government and protect the rights of the people.

Based on the above characteristics, each system is expected to react differently and have different impact on to the requirements of good governance, prudent policymaking, executive powers, party systems, and the consolidation and endurance of democracy (Sartori, 1997, Ackerman, 2000).

The consolidation and the endurance of democracy received the most attention in the theoretical debate that went on over the years. Of the many who studied the effects of institutional design on the consolidation and endurance of democracies and the merits of choosing a particular system over the other is Juan Linz. In his seminal work published in 1990 in the Journal of Democracy Linz argued for parliamentarism as more conducive to democratic consolidation and endurance than presidentialism especially in cases where there is multipartyism and political cleavage (Linz, 1990a; Elgie, 2004). This conclusion is based on the view that presidentialism is inherently flawed because of its three main features of rigidity, multiple legitimacy, and the zero-sum nature of its electoral process (Ackerman, 2000; Linz, 1990b). Rigidity arises from the fixed term of the elected president who is elected for a definite term in office and cannot be removed except through impeachment. This inflexibility according to
Linz can be a threat to the consolidation of the democracy. This is because it does not allow for adjustment in course, or changes that may be needed to address emergent circumstances especially in the case of the sudden absence or incapacitation of the executive leaving someone who may have been elected separately or even appointed by the departing president without regard to their ability to govern.

The second issue with presidentialism is what is known as double legitimacy (Linz, 1990a; Ackerman, 2000) which refers to the fact that in such systems both the president and the legislature are elected separately and normally directly by the people. Legitimacy in claimed by both institutions and in the case where the legislature is formed by a majority that is opposed to the political orientation of the president conflict is likely to arise. Such conflict can lead to policy stalemates and may threaten the endurance of the democracy, as was the case with many countries in Latin America in the 1970s where because of the impasse the armed forces had to intervene or mediate, permanently in some cases, which resulted in the collapse of the democracy (Linz & Valinzuela, 1994)

The third point raised by Linz against presidentialism is its “zero-sum-game” nature or “winner-takes-all” mentality which results in the exclusion of losers, albeit with a narrow margin, from government. In contrast, parliamentary systems, while giving the executive role to the wining majority, often include minority parties. This argument is furthered by stressing the exclusionary nature of presidentialism and the intolerance of elected presidents towards political opposition and, in addition, the fact that presidentialism tends to personalize the executive rather than institutionalize it (Linz, 1990b).

Such arguments against presidentialism and its effects on democratic consolidation and stability are shared by many scholars including Fred Riggs who criticized the principle of separation of powers being the fundamental feature of the presidential system as seriously flawed (Riggs, 1994). This view is also supported by Stephan and Skach (1993) and Bruce Ackerman (2000) who was an advocate of parliamentarism and a
main opponent of the concept of separation of powers (Ackerman, 2000; Stepan & Skach, 1993).

The preceding arguments were not without criticism however, Arend Lijphart (1992, 1999) and Donald Horowitz (1990) contented that while parliamentarism was empirically observed to lead to less democratic breakdown when compared with presidentialism, attributing the higher rate of failure to consolidate to the type of regime as a single explanatory variable is misleading in the least. Horowitz and others argued that presidentialism was not inherently a weak system in its own right but it is the combination with other factors, such as electoral system for example, that yield the unfavorable results, a fact the Linz chose to ignore according to Horowitz (Horowitz, 1990; Lijphart, 1995). This theme of reasoning was further developed by others like Matthew Shugart and John Carey (1992) and by Scott Mainwaring (1993).

In this view, it was necessary to explore the institutional features of regime types in connection with issues like electoral systems, party systems and the constitutional power of the executive. The subsequent scholarship expanded the list of control variables in the study of factors that affect democratic consolidation and endurance to include electoral systems, culture, ethnic and religious cleavage, multipartyism, democratic history, and the degree of institutionalization to name a few. This leads to the conclusion that democratic stability and endurance is dependent on several factors in addition to the regime type. The correlation between the different variables plays an active role in determining the probability of democratic survival. Theoretically, one cannot stipulate that the parliamentary systems are inherently more conducive to the consolidation of democracy or that presidentialism is less favorable a condition to the survival of democracy without taking into consideration other parameters or independent variables that may interact differently to yield different outcomes (Lipset, 1990).
This theoretical debate was expanded to look at other dependant variables in addition to democratic consolidation and regime stability as effects of institutional design and regime type. The shift to expand the debate and introduce governance as a dependant variable, was first noted when Weaver and Rockman published a paper on what affects governance. The study of the impact on institutional design on the performance of government should include other variable as indicated by earlier authors studying the institutional effects on democratic consolidation. Federalism, electoral rules, and the role of the judiciary were variables that needed to be introduced according to Weaver and Rockman (Elgie, 2004; Gerring et al, 2009; Weaver & Rockman 1993).

To summarize then, the theoretical debate over the merits of parliamentarism or presidentialism has been ongoing for more than two decades now. Many scholars and writers have dedicated volumes to the matter defending one view or the other. The one thing that most of those studies agreed on was that institutions do matter, whether to democratic consolidation or to governance and policymaking. The other noticeable theme is that institutional design in terms of the type of political regime should not be regarded in isolation from other independent variables like electoral rules, party system, democratic history, political culture and ethno-religious fragmentation.

The conclusion that one can draw from the above is that there is not a one-size-fit-all solution to the question as to which system is better. The suitability of a particular system or the other depends on the unique features of the particular polity in question. The fundamental difference between the parliamentary system and the presidential system is the degree of separation of powers between the legislature and the executive branches. The majority of scholars prefer, on a theoretical level, the consolidation of power as opposed to the diffusion of it, which would allow the parliamentary system, ceteris paribus, to yield higher probability of democratic survival and better governance and policy choices.
The section that follows takes off from the theoretical debate to discuss some of the main empirical studies that were conducted as part of the discourse in the past decade or so in the attempt to identify the effects of institutional choice and performance on specific policy outcomes of democratization, consolidation and stability.

**Empirical Studies**

**A. Governance**

An important empirical study that was published in 2009 dealt with the effect of parliamentarism on specific elements of “good governance” (Gerring et al, 2009). The authors analyzed a cross-country data set to test the effects of institutional design in terms parliamentarism versus presidentialism on fourteen different dependant variables that represent the main policy areas of political, economic, and human development. The researchers claim that given the multitude of factors that affect the working of a polity, it is not possible in their opinion to present a plausible conceptual schema that can infer causality. They offer, however, to reverse the inquiry process by conducting the empirical test on the data and then provide an explanatory theory. They base the use of this methodology on the premise that when it comes to the working of the government it is easier to measure inputs and outputs than to infer a specific causality mechanism (Gerring et al, 2009; Persson & Tabellini, 2003).

In choosing the array of dependant variables that could represent good governance, the researchers identified a set of indicators that can be measured and that have an impact on the quality of governance. They chose to expand the list of dependant variables to cover as many governance indicators as they can reasonable justify improving the confidence levels in the results. They divided the dependant variable into three groups: political development group, economic development group and human development group. Under political development variables, they included two measures of corruption, a measure of bureaucratic quality, and three indicators related to government effectiveness, political stability and the rule of law. Under the second
category, the researchers included a total of five measures of economic development namely the number of land telephone lines per 1000 people, imports in the form of import duties collected as a percentage of total trade, total trade as a percentage of GDP, the country’s risk rating, and the country’s prosperity as measured by the real per capita GDP. The third and final category included three measure of human development: infant mortality rate, life expectancy and an illiteracy measure (Gerring, et al, 2009; Haggard, 2001; Kaufmann et al, 2010)

For control variable the authors revert to the literature to pick some standard independent variables that cover political, geographic, cultural and economic conditions in addition to some non standard ones that they include because of their possible effect on governance such as a country’s democratic history. A country’s geographic region and proximity to the equator were among the independent variable that was introduced. They assigned latitude in absolute terms a logarithmic scale to control for economic development, where according to La Porta et al (1999) countries away from the equator tend to have better economic development. The resource curse or a measure of economic rent was also included although some claim that this could have mixed results because while economic rent could hinder good governance, it improves economic development, which is conducive to good governance, so the effect could be a cancellation out of the impact of this variable.

Running the regression model, Gerring et al (2009) display some good results on the relationship between parliamentarism and the different governance outcomes. $t$ and F statistics appear to show a good model fit with $R^2$ values ranging from 0.47 to 0.9. Analysis of the results shows the following:

Parliamentarism appears to be positively correlated with certain aspects of political development but not with the same levels of robustness.
In the areas of economic development, parliamentarism seems to be associated with better telecommunications infrastructure, better investment rating, higher levels of per capita GDP and better openness to trade. Areas of human development under study showed positive association with parliamentarism in two out of three cases namely infant mortality and life expectancy. In summary, it was found that parliamentarism is distinctly advantageous compared to presidentialism when it comes to governance in general. Most cases indicated a strong positive correlation with good governance as defined by the selected dependant variables. The authors conclude that the empirical evidence that was presented in their study point to the fact that parliamentary systems of government are more advantageous to good governance than presidential systems in most policy areas under study, especially economic and human development areas. Gerring et al, (2009) proceeded to infer a causality to explain why institutional design affects policy outcomes. Drawing on the literature available on the matter, and introducing their own analysis, the authors stipulate that parliamentarism is superior to presidentialism for better governance because of its capacity as a system to function as coordinating agents. Good governance, they argue, is about coordinating efforts for providing solutions to multiple, and in most cases, conflicting rationalizations between the different groups and the society as a whole. Parliamentarism appears to be better equipped to resolve such conflicts because of its inclusive nature, which integrates diversity and encourages compromise and agreement (Gerring et al, 2009; Ackerman, 2001; Eaton, 2000; Hammond et al, 2003; Persson & Tabellini, 2003).

B. Democratic Stability

Lawrence (2000) tackled the question of which system is inherently less stable and representative, the presidential or the parliamentary system. His approach was to look at democracies over a period that started after World War II across the world and use quantitative analysis techniques to see the effect of institutional design on stability of the regime. In order to control for other variables that have been identified by the
scholarship to contribute to the stability of a regime, Lawrence included those variables in his model based on nine basic hypothesis derived from the literature on the topic. First, he contends that lower income countries tend to have less stable regimes. Lawrence used log per capita GDP to control for the country’s economic development variable. Second, the connection to the global markets through trade is an important factor for regime stability. The relative percentage of exports and imports to a country’s GDP is used here as an independent variable. Third, the effective number of parties in the parliament is believed to affect the degree of stability of the regime especially in presidential systems. Lawrence uses the measure of the effective number of parties developed by Laakso and Taagepera (1979). Fourth, Lawrence adds that the states that are more homogeneous are more stable than the ones that have greater heterogeneity. An indicator of religious fractionalization named ethno-linguistic fractionalization is used to operationalize this variable. Fifth, higher population countries tend to be more stable than less populated countries. In addition, a history of authoritarian rule will tend to make a country less stable according to Lawrence. Finally, the type of regime is important for the stability of the democracy which is the main variable under study by the article and is used to test for the main hypothesis of his the work and that is regime type matters for stability. Stability in that regard is represented by Lawrence as rate of regime breakdown as the dependant variable. Running a regression model for hundred regimes, and analyzing the results, Lawrence concludes that the results concur with Shugart’s and Carey’s argumentation that presidentialism is not inherently unstable as was advocated by Linz and others (Lawrence, 2000; Horowitz 1990; Shugart & Carey, 1992).
III. METHODOLOGY

The purpose of this research is to determine the relationship between the institutional design in terms of the choice between the presidential and the parliamentary systems of government and indicators of equality, civil liberties and political rights which represent the fundamental demands of the Egyptian revolution namely dignity, freedom and social justice. The quantitative analysis is conducted using cross-sectional data in a multi-variant regression model. The data set is constructed from varied data sources. The choice of dependant and independent variables is discussed below.

Variables and data

A. The Dependant Variables

The dependant variables chosen to represent the fundamental demands of the Egyptian people and their code, in parenthesis, in the regression models are:

1. Gini Coefficient (giniqual) of household income inequality (Deiniger & Squire, 1996) is a measure of economic inequality in the society and is probably one of the most pressing issues of discourse in the Egyptian society presently. In recent decades, the rich got richer and the poor got poorer because of poor policy choices, corruption and abuse of power by government officials. This makes economic inequality the most important dependant variable to be studied here. The data is obtained from the World Bank dataset as shown herein after.

2. Political Rights (polrite) world index is a measure of the degree of political freedom in terms of the extent of freedom and fairness of elections. Whether those who are elected rule, are there competitive parties, and do the opposition parties have actual power and play an important role. Can the minority groups exercise their rights freely all on a scale from 1 to 7 with 1 being the highest levels of achievement.
3. Civil liberties (civilib) world index from is a 1-7 index with 1 being the highest rating and 7 being the lowest measures freedom of expression, assembly, association, education, and religion in a country. Countries with the highest score have generally been characterized by an established and equitable system of rule of law, economic freedom and values of equal opportunity.

B. The Main Regressor
The main independent variable is the institutional design feature in terms of the choice of presidential or parliamentary systems. That is the main regressor for our study of the effect of institutional choice on the welfare of the people of Egypt in general and on the essential dependant variables discussed earlier. We use the term parliamentarism (parliam) to represent the variable of institutional choice, which is codified as 1 for purely parliamentary system of government, in which the legislature is elected by the people and it forms the government. In this case, there is no separation of powers when it comes to policy making under this system... An example of this system would be the Westminster model of government in the United Kingdom. We assign 0 for the other systems, which include the semi-presidential system where the executive is the president who is directly elected by the people, and there is a head of government and a legislator who are also elected by the people. An example of that system would be the current Republic of France. In addition, the purely presidential system where policymaking is divided between the legislature and the president who are elected separately by the people and the example would be the United States system of government. Control variables are included in the model to reduce the bias and improve the analysis. The choice of control variables is also based on the attempt to simulate the prevailing Egyptian conditions to reflect a closer resemblance to reality.

C. The Control Variables
1. Electoral rules whether majoritarian, mixed or proportional representation is an essential control variable because of its tight correlation with the political regime
type. We select two variables out of three to be controlled for and that is proportional representation (prorep) and majoritarian/plurality representation (majorep) as dummy variables.

2. Per capita GNP in logarithmic format (LPCGNP) is included as an independent variable to control for the economic affluence of the country, source of data is the World Development Indicators of the WB. This control variable was used by several researchers in that format based on its effect on the efficacy of governance and policymaking (Lawrence, 2000; Gerring et al, 2009, La Porta et al, 1999).

3. Uncertainty Avoidance Index (ucavoid) is a measure a society’s tolerance for uncertainty and ambiguity. It reflects the society’s acceptance of others and its tolerance of opposing opinions, a basic ingredient of a successful democracy and an important cultural control variable. High uncertainty avoiding societies tend to rely on rules and regulations and are generally more bureaucratic than countries that welcome uncertainty as opportunity for innovation (Hofstede, 2009).

4. Individualism Index (individ) measures the degree to which individuals are integrated into groups. This is another dimension of culture that affects the political and policymaking process and hence an important control variable (Haggard & Haggard, 2010; Hofstede, 2009).

5. Power Distance Index (pwrdist): This is an index that measures the acceptance of the people to power being separated and unequally divided. Societies with high power distance indices accept that fact that the ruling elite monopolize power. (Hofstede, 2009).

6. Masculinity (mascul) index measures the degree a society in general behaves with the masculine traits of assertiveness and competitiveness. (Hofstede, 2009).

7. Size of the population (popsize) is regarded as an important parameter in the stability of the democracy and is therefore included here as a control variable (Lawrence, 2000).

8. Degree of secularism (secular) of the polity represented in a binary format with 1 representing secular states, where state and church are separated and all citizens are
treated equally regardless of their religious or ethnic affiliation, and 0 for all other forms.

9. Adult literacy rate (adlitrcy) is believed to be an important variable to control for the education levels and the effects it has on political rights and civil liberties.

10. The dominant religion in the country (muslim), in terms of the percentage of the population, which belong to a particular faith is an important control variable since religion plays a very important role in many countries and it is essential to take it into account if we are to understand the effects on public policy and individual freedoms.

11. Corruption Perception Index (CPI) is an index that measures the degree of corruption in a country based on the perception of people doing business and dealing with officials. This index is important to control for since we believe that it can affect the inequality index.
### Table 1- Summary of Variables and Sources

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Scale</th>
<th>Source</th>
</tr>
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</table>
| GINEQUAL     | Gini Inequality Index              | 0 to 100, 100 is perfect inequality | Human Development Report 2010 from UNDP; http://hdr.undp.org/en/statistics/
<p>| POLIRITE     | Political Rights Index             | 1 to 7, 1 most free, 7 least free | Freedom House world report; <a href="http://www.freedomhouse.org/uploads/press_release/fiw07_charts.pdf">http://www.freedomhouse.org/uploads/press_release/fiw07_charts.pdf</a> |
| CIVILIB      | Civil Liberties Index              | 1 to 7, 1 most free, 7 least free | Freedom House world report; <a href="http://www.freedomhouse.org/uploads/press_release/fiw07_charts.pdf">http://www.freedomhouse.org/uploads/press_release/fiw07_charts.pdf</a> |
| PARLIAM      | Political System of Government     | 1 for parliamentary system, 0 for other systems | CIA the World Fact Book; <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html">https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html</a> |
| PROPREP      | Electoral System                   | 1 for PR, 0 for other           | Institute for Democracy and Electoral Assistance (IDEA); <a href="http://www.idea.int/esd/glossary.cfm">http://www.idea.int/esd/glossary.cfm</a> |
| MAJOREP      | Electoral System                   | 1 for Majoritarian/Plurality, 0 for other | Institute for Democracy and Electoral Assistance (IDEA), <a href="http://www.idea.int/esd/glossary.cfm">http://www.idea.int/esd/glossary.cfm</a> |
| CPI          | Corruption Perception Index        | 0 to 10, 10 is least corrupt     | Transparency International Report 2010; <a href="http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results">http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results</a> |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Scale</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWRDIST</td>
<td>Power Distance Index</td>
<td>0 to 100; high numbers indicate acceptance of power distance</td>
<td>Geert Hofstede Cultural Dimensions; <a href="http://www.geert-hofstede.com/index.shtml">http://www.geert-hofstede.com/index.shtml</a></td>
</tr>
<tr>
<td>INDIVID</td>
<td>Individualism Index</td>
<td>0 to 100; high numbers indicate high individualism and less collectivism</td>
<td>Geert Hofstede Cultural Dimensions; <a href="http://www.geert-hofstede.com/index.shtml">http://www.geert-hofstede.com/index.shtml</a></td>
</tr>
<tr>
<td>MASCUL</td>
<td>Masculinity Index</td>
<td>0 to 100; high numbers indicate high masculinity</td>
<td>Geert Hofstede Cultural Dimensions; <a href="http://www.geert-hofstede.com/index.shtml">http://www.geert-hofstede.com/index.shtml</a></td>
</tr>
<tr>
<td>UCAVOID</td>
<td>Uncertainty Avoidance Index</td>
<td>0 to 100; high numbers indicate high uncertainty avoidance affinity</td>
<td>Geert Hofstede Cultural Dimensions; <a href="http://www.geert-hofstede.com/index.shtml">http://www.geert-hofstede.com/index.shtml</a></td>
</tr>
</tbody>
</table>
IV. RESULTS

The Full Model

The main regression model used to investigate the relationship between the political system and the set of dependant variable of interest can be presented by the functions shown below.

\[
Giniqual = \beta_0 + \beta_1 \text{parliam}_i + \beta_2 \text{prorep} + \beta_3 \text{majorep}_i + \beta_3 \log(\text{popsiz}_i) \\
+ \beta_5 \text{adlitrcy}_i + \beta_6 \text{secular}_i + \beta_7 \text{muslim} + \beta_8 \text{CPI}_i + \beta_9 \text{pwrdist}_i \\
+ \beta_{10} \text{individ}_i + \beta_{11} \text{mascul}_i + \beta_{12} \text{ucavoid}_i + \beta_{13} \log(\text{pcgnp}_i) + \mu
\]

\[
POLRITE = \beta_0 + \beta_1 \text{parliam}_i + \beta_2 \text{prorep} + \beta_3 \text{majorep}_i + \beta_3 \log(\text{popsiz}_i) \\
+ \beta_5 \text{adlitrcy}_i + \beta_6 \text{secular}_i + \beta_7 \text{muslim} + \beta_8 \text{CPI}_i + \beta_9 \text{pwrdist}_i \\
+ \beta_{10} \text{individ}_i + \beta_{11} \text{mascul}_i + \beta_{12} \text{ucavoid}_i + \beta_{13} \log(\text{pcgnp}_i) + \mu
\]

\[
CIVILIB = \beta_0 + \beta_1 \text{parliam}_i + \beta_2 \text{prorep} + \beta_3 \text{majorep}_i + \beta_3 \log(\text{popsiz}_i) \\
+ \beta_5 \text{adlitrcy}_i + \beta_6 \text{secular}_i + \beta_7 \text{muslim} + \beta_8 \text{CPI}_i + \beta_9 \text{pwrdist}_i \\
+ \beta_{10} \text{individ}_i + \beta_{11} \text{mascul}_i + \beta_{12} \text{ucavoid}_i + \beta_{13} \log(\text{pcgnp}_i) + \mu
\]

Due to data limitations and the fact that the main regressor and the most of the control variables are dummy variables it was not possible to get meaningful results using panel data. We ran a linear multi-variant regression on cross sectional data averaging values for Gini coefficients and other parameters over the years 2000 to 2010 and obtained the resulting estimates summarized in table 2 below.
The above table listing the resulting estimates and \( t \)-statistics for the full model shows some interesting outcomes. First, R-squared for the three functions indicates good model fit. For the inequality index (GINEQUAL), we have an R-squared of 50% and several statistically significant independent variables. Our main regressor (PARLIAM) representing the political system has a \( t \)-ratio of (-2.857) which is significant even at 99% confidence level in a 1-tailed test and shows a negative effect of about 5% on the inequality index. Since the Gini index is scaled from 0 to 100 with perfect inequality at
100, a negative effect indicates an improvement in equality direction when a parliamentary system is adopted.

The next statistically significant independent variable at 95% confidence level in a 1-tailed test is secularism of the state (SECULAR). The data shows that states, which have secular governments, have an improved inequality index by about 5%. Concurrently, countries with a predominantly Muslim population show a better inequality figure by about 4.6%. The remaining control variables do not show statistical significance at the specified confidence levels. Electoral rule does fail the significance test at 95% confidence level but makes it at 90% and shows that it is positively correlated with Gini index which means that PR system of elections is statistically less conducive to equality than other systems.

Observing the political rights (POLRITE) analysis, we note that our main regressor is still quite significant and maintains its positive effect on political rights of citizens. The coefficient returned is -0.924, which means that the parliamentary system improves the political rights index by 0.924 points or 13.2%. Similarly, electoral systems indicators show statistical significance at 95% levels and display a negative effect of the political rights index meaning a positive effect on political freedom. Proportional representation appears to improve the index by 1.462 points or a hefty 20%. Other positive contributors to political rights are adult literacy rate (ADLITRCY), the corruption level as designated by the corruption perception index (CPI), and the degree of individualism in the society (INDIVID), however their effects on political rights although statistically significant are not as high as that of the political (PARLIAM) and electoral systems (PROREP, MAJOREP).

An interesting observation to make here is the insignificance of secularism of the government, coupled with the high negative effect of a predominantly Muslim population on the political freedom of the citizens. This can be seen from the high t-
ratio on the (MUSLIM) control variable, which indicates its significance, and its high effect on (POLRITE) of 1.17 points or 16.7% increase in the index.

On civil liberties (CIVILIB), the effects of the independent variables are in line with the preceding discussions. While parliamentarism is statistically significant, it has a lesser effect than PR electoral system (PROREP). Proportional representation improves the civil liberties index by 1.104 points or 15.77% compared to .648 or 9.25% in the parliamentary system case, and .005 points or .07% deterioration as the effect of (LPCGNP) on political rights and .0057 points or .08% on civil liberties. The effect of the predominance of the Muslim population in a state returns the same significance and negative effect on civil liberties as noted in the case of political rights were the index deteriorates by .859 points or 12.2%.

It is clear from the above that we have good fit of variables in the full model and clear statistical significance of our main regressor and several of our control variables. The association of the dependant variables with the main independent variable and the control variables is in line with the initial thesis of the effect of institutional design and the choice of the parliamentary system of government given the conditions represented by the control variables discussed. In order to test those results for sensitivity and robustness we included two additional models. The restricted model and the functional form model herein discussed below.
To further test the full model, certain control variables are dropped and the regression re-run under the same functional forms to yield the following:

\[
Ginequal = \beta_0 + \beta_1parliam_i + \beta_2adlitracy_i + \beta_3secular_i + \beta_4muslim_i + \beta_5CPI_i + \beta_6\log(pcgnp_i) + \mu
\]

\[
Polrite = \beta_0 + \beta_1parliam_i + \beta_2adlitracy_i + \beta_3secular_i + \beta_4muslim_i + \beta_5CPI_i + \beta_6\log(pcgnp_i) + \mu
\]

\[
Civilib = \beta_0 + \beta_1parliam_i + \beta_2adlitracy_i + \beta_3secular_i + \beta_4muslim_i + \beta_5CPI_i + \beta_6\log(pcgnp_i) + \mu
\]

Table 3- Restricted Model Estimates

<table>
<thead>
<tr>
<th>Variables</th>
<th>GINIQUAL Coeff.</th>
<th>t-Ratio</th>
<th>POLRITE Coeff.</th>
<th>t-Ratio</th>
<th>CIVILIB Coeff.</th>
<th>t-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARLIAM</td>
<td>-4.079</td>
<td>-2.334</td>
<td>-1.015</td>
<td>-3.599</td>
<td>-0.733</td>
<td>-3.341</td>
</tr>
<tr>
<td>ADLITRCY</td>
<td>-0.049</td>
<td>-0.819</td>
<td>0.011</td>
<td>1.079</td>
<td>0.007</td>
<td>0.935</td>
</tr>
<tr>
<td>SECULAR</td>
<td>-3.796</td>
<td>-2.462</td>
<td>-0.167</td>
<td>-0.673</td>
<td>-0.153</td>
<td>-0.792</td>
</tr>
<tr>
<td>MUSLIM</td>
<td>-6.674</td>
<td>-3.609</td>
<td>1.502</td>
<td>5.005</td>
<td>1.124</td>
<td>4.815</td>
</tr>
<tr>
<td>CPI</td>
<td>-0.606</td>
<td>-1.093</td>
<td>-0.387</td>
<td>-4.328</td>
<td>-0.386</td>
<td>-5.559</td>
</tr>
<tr>
<td>LPCGNP</td>
<td>-0.633</td>
<td>-0.575</td>
<td>-0.133</td>
<td>-0.759</td>
<td>-0.092</td>
<td>-0.676</td>
</tr>
<tr>
<td>Obs.</td>
<td>130</td>
<td></td>
<td>147</td>
<td></td>
<td>147</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.24</td>
<td></td>
<td>0.514</td>
<td></td>
<td>0.566</td>
<td></td>
</tr>
</tbody>
</table>

From the above it can be noted that the restrictions have not affected the significance of the main independent variable (PARLIAM) with high t-ratios for the three regressions on (GINEQUAL), (POLRIT), and (CIVILB). The positive effect of the parliamentary system is evident in the three cases with 4.079% improvement in equality, 1.015 points or 14.5% improvement in political rights and .733 points or 10.47% improvement in civil liberties compared to other systems of government namely the presidential and semi-presidential.
Secularism remains significant on equality with a t-ratio of -2.642 and a positive effect on equality of 3.76% while it remain insignificant on political rights and civil liberties which is similar to the full model. Simultaneously, countries with a predominantly Muslim populations show a sustained significance and influence of that variable positively on equality by 6.67% and negatively on political rights and civil liberties with 21.4% and 16% deterioration respectively. Corruption appears to be more significant than in the full model and its effect on equality, political rights and civil liberties remain positive in the three cases and in agreement with the full model. The one variable that seems to have been affected by the restriction of the model is Log (PCGNP), which does not remain significant at 95% confidence levels or lower as shown by the t-ratio and the failure to reject the null hypothesis in contrast with the full model.

The Functional Form Model

\[
Ginqual = \beta_0 + \beta_1parliam_i + \beta_2prorep_i + \beta_3majorep_i + \beta_3 \log(\text{popsiz}_i)
+ \beta_5 \text{adlitrcy}_i + \beta_6 \text{secular}_i + \beta_7 \text{Muslim}_i + \beta_8 \log(CPI_i)
+ \beta_9 \log(pwdist_i) + \beta_{10} \log(\text{individ}_i) + \beta_{11} \log(\text{mascul}_i)
+ \beta_{12} \log(ucavoid) + \beta_{13} \log(\text{pcgnp}_i) + \mu
\]

\[
Polrite = \beta_0 + \beta_1parliam_i + \beta_2prorep_i + \beta_3majorep_i + \beta_3 \log(\text{popsiz}_i)
+ \beta_5 \text{adlitrcy}_i + \beta_6 \text{secular}_i + \beta_7 \text{Muslim}_i + \beta_8 \log(CPI_i)
+ \beta_9 \log(pwdist_i) + \beta_{10} \log(\text{individ}_i) + \beta_{11} \log(\text{mascul}_i)
+ \beta_{12} \log(ucavoid) + \beta_{13} \log(\text{pcgnp}_i) + \mu
\]

\[
Civilb = \beta_0 + \beta_1parliam_i + \beta_2prorep_i + \beta_3majorep_i + \beta_3 \log(\text{popsiz}_i)
+ \beta_5 \text{adlitrcy}_i + \beta_6 \text{secular}_i + \beta_7 \text{Muslim}_i + \beta_8 \log(CPI_i)
+ \beta_9 \log(pwdist_i) + \beta_{10} \log(\text{individ}_i) + \beta_{11} \log(\text{mascul}_i)
+ \beta_{12} \log(ucavoid) + \beta_{13} \log(\text{pcgnp}_i) + \mu
\]
Table 4 - Functional Form Estimates

<table>
<thead>
<tr>
<th>Variables</th>
<th>GINIQUAL</th>
<th>POLRITE</th>
<th>CIVILIB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>t-Ratio</td>
<td>Coeff.</td>
</tr>
<tr>
<td>PARLIAM</td>
<td>-4.714</td>
<td>-2.716</td>
<td>-0.954</td>
</tr>
<tr>
<td>PROPREP</td>
<td>3.878</td>
<td>1.777</td>
<td>-1.458</td>
</tr>
<tr>
<td>MAJOREP</td>
<td>0.078</td>
<td>0.032</td>
<td>-0.86</td>
</tr>
<tr>
<td>LPOPSIZE</td>
<td>0.151</td>
<td>0.236</td>
<td>-0.072</td>
</tr>
<tr>
<td>ADLITRCY</td>
<td>0.116</td>
<td>1.259</td>
<td>-0.029</td>
</tr>
<tr>
<td>SECULAR</td>
<td>-4.461</td>
<td>-2.07</td>
<td>-0.19</td>
</tr>
<tr>
<td>MUSLIM</td>
<td>-3.642</td>
<td>-1.606</td>
<td>1.391</td>
</tr>
<tr>
<td>LCPI</td>
<td>-1.558</td>
<td>-0.489</td>
<td>-1.332</td>
</tr>
<tr>
<td>LPWDST</td>
<td>1.532</td>
<td>0.679</td>
<td>0.44</td>
</tr>
<tr>
<td>LINDIVID</td>
<td>-3.388</td>
<td>-1.861</td>
<td>-0.267</td>
</tr>
<tr>
<td>LMASC</td>
<td>3.874</td>
<td>2.162</td>
<td>-0.197</td>
</tr>
<tr>
<td>LUCAVOID</td>
<td>-1.289</td>
<td>-0.578</td>
<td>-1.276</td>
</tr>
<tr>
<td>LPCGNP</td>
<td>-0.765</td>
<td>-0.531</td>
<td>0.349</td>
</tr>
<tr>
<td>Obs.</td>
<td>73</td>
<td>82</td>
<td>82</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.526</td>
<td>0.741</td>
<td>0.783</td>
</tr>
</tbody>
</table>

To further test the model for sensitivity and robustness, the functional forms of the appropriate variables are changes as shown in the three model functions above. The full model is restored and the variables corruption perception index (CPI), power distance (PWDIST), individualism (INDIVID), masculinity (MASCUL), and uncertainty avoidance index (UCAVOID), are form changed to log format and the regression rerun yielding the results listed in table (4). Changing the functional form leaves the main regressor robust and resilient displaying very little change in its significance and associative effects on the three dependant variables under analysis. Other control variables do not appear to be affected greatly by the change in functional form from level - level to level-log format. The next test conducted is for the correlation between the variables and is shown in table 5 below which shows slight correlation between electoral rules proportional representation (PROREP) and majoritarian representation (MAJOREP), and between power distance index (PWDIST), individualism (INDIVID) and corruption perception index (CPI).
# Correlation Matrix

## Table 5- Full Model Pearson Correlations

<table>
<thead>
<tr>
<th></th>
<th>GINIQUAL</th>
<th>PARLIAM</th>
<th>PROPREP</th>
<th>MAJOREP</th>
<th>LPOPSIZE</th>
<th>ADLITRCY</th>
<th>SECULAR</th>
<th>MUSLIM</th>
<th>CPI</th>
<th>PWRDIST</th>
<th>INDIVID</th>
<th>MASCUL</th>
<th>UCAVOID</th>
</tr>
</thead>
<tbody>
<tr>
<td>GINIQUAL</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARLIAM</td>
<td>0.452</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPREP</td>
<td>0.128</td>
<td>0.092</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAJOREP</td>
<td>-0.066</td>
<td>-0.124</td>
<td>-0.651</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPOPSIZE</td>
<td>0.017</td>
<td>-0.188</td>
<td>-0.286</td>
<td>0.192</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADLITRCY</td>
<td>-0.094</td>
<td>0.21</td>
<td>0.219</td>
<td>-0.366</td>
<td>-0.209</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECULAR</td>
<td>-0.388</td>
<td>0.202</td>
<td>0.012</td>
<td>-0.12</td>
<td>0.29</td>
<td>0.413</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSLIM</td>
<td>-0.06</td>
<td>-0.147</td>
<td>-0.194</td>
<td>0.135</td>
<td>0.089</td>
<td>-0.518</td>
<td>-0.382</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td>-0.431</td>
<td>0.375</td>
<td>0.196</td>
<td>-0.169</td>
<td>-0.332</td>
<td>0.577</td>
<td>0.4</td>
<td>-0.353</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PWRDIST</td>
<td>0.378</td>
<td>-0.445</td>
<td>-0.203</td>
<td>0.081</td>
<td>0.26</td>
<td>-0.408</td>
<td>-0.282</td>
<td>0.361</td>
<td>-0.69</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDIVID</td>
<td>-0.513</td>
<td>0.374</td>
<td>0.038</td>
<td>-0.032</td>
<td>-0.048</td>
<td>0.42</td>
<td>0.478</td>
<td>-0.177</td>
<td>0.672</td>
<td>-0.659</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MASCUL</td>
<td>0.05</td>
<td>0.107</td>
<td>-0.319</td>
<td>0.055</td>
<td>0.23</td>
<td>0.048</td>
<td>0.018</td>
<td>0.022</td>
<td>-0.11</td>
<td>-0.001</td>
<td>0.099</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>UCAVOID</td>
<td>0.211</td>
<td>-0.107</td>
<td>0.314</td>
<td>-0.458</td>
<td>-0.041</td>
<td>0.129</td>
<td>-0.088</td>
<td>-0.099</td>
<td>-0.226</td>
<td>0.221</td>
<td>-0.209</td>
<td>0.096</td>
<td>1</td>
</tr>
</tbody>
</table>
V. THE OPTIONS FOR EGYPT

As shown in the preceding section, parliamentarism appears to be statistically a better system of government in terms of its effects on income inequality, political rights and civil liberties in the society. The data has shown that the choice of the parliamentary system has positive effects on the income inequality index improving it by about 5% when compared with other systems of government. One can also infer from the data that the parliamentary system is also more conducive to the political rights index and the civil liberties index in the countries that adopt that system compared to the countries that adopt the presidential or the semi presidential system on a statistical level. How does this empirical evidence relate to Egypt in its transitional phase to democracy? Let us first apply our estimated econometric functions to Egypt’s case.

From the full model, we can write the estimated functions as follows:

\[
\text{GINIQUAL} = 38.24 - 5.084 \text{parliam} + 3.795 \text{prorep} - .013 \text{majorep} \\
+ .118 \log(\text{popsize}) + .098 \text{adlitrcy} - 4.938 \text{secular} \\
- 4.569 \text{muslim} - .782 \text{CPI} + .034 \text{pwdist} - .076 \text{individ} \\
+ .078 \text{mascul} - .037 \text{ucavoid} - .105 \log(\text{PCGNP})
\]

Plugging the current values for Egypt for the regime type being semi presidential, electoral process is majoritarian, and the government is non-secular in function (1) above yields a GINI Coefficient of 39.15. Now, changing the political regime to parliamentary, the government to secular and maintaining the majoritarian or mixed electoral system results in an estimated Gini of 29.09 or an improvement of 10.06%.

\[
\text{POLRIT}E = 5.846 - .924 \text{parliam} - 1.462 \text{prorep} - .841 \text{majorep} \\
- .069 \log(\text{popsize}) - .034 \text{adlitrcy} - .031 \text{secular} \\
+ 1.17 \text{muslim} - .238 \text{CPI} + .014 \text{pwdist} - .017 \text{individ} \\
- .009 \text{mascul} - .0028 \text{ucavoid} + .5 \log(\text{PCGNP})
\]
Applying the same procedure on function (2) above for political rights index estimation we find that adopting a parliamentary system with proportional representation and a secular government could improve Egypt’s standing on political rights as per the PR index by 1.57 points or 22 percent.

\[
CIVILIB = 4.511 - 0.648 \text{ parliam} - 1.104 \text{ prorep} - 0.597 \text{ majorep} \\
- 0.018 \text{ LOG popsiz} - 0.031 \text{ adlitrcy} - 0.087 \text{ secular} \\
+ 0.859 \text{ muslim} - 0.298 \text{ CPI} + 0.009 \text{ pwdist} - 0.018 \text{ individ} \\
- 0.005 \text{ mascul} - 0.02 \text{ ucavoid} + 0.57 \text{ LOG(PCGNP)}
\]

Similarly, a choice of a parliamentary system with proportional representation and a secular government could improve the estimated civil liberties index by 1.24 points or 17.7 percent.

If we are to summarize the above estimations, we conclude that from a statistical point of view the adoption of the parliamentary system with proportional representation and secularizing the state could yield the following results:

- An estimated improvement of 10% on the GINI index of inequality
- An estimated improvement of 22% on the political rights index
- An estimated improvement of 17.7% on the civil liberties index

Should Egypt adopt the parliamentary system as a system of government based on the above empirical evidence? Some scholars and political analysts believe not (Shorbagui, 2011; Shobaki, 2011). Opposition to the parliamentary system in favor of a presidential or semi-presidential systems is based on the following facts, assumptions and assertions:

First, after six decades of authoritarian rule in Egypt, it is difficult to expect existing political parties and the new parties, some of which are in the process of registration, to start practicing a full fledged democratic process that requires years of active participation. A parliamentary system would require a high level of political maturity and established institutions to perform, a fact that many believe is not present in Egypt at this time.
Second, the many parliamentary, Shoura Council, local centers, and other elections that took place in the elapsed decades have been characterized by the predominance of tribalism, and fraud. This is viewed as an indication to many that the voters are not yet at the required level of democratic maturity that is necessary for the success of a parliamentary system.

Third, with the current resurgence of the Islamists movements led by the Muslim Brothers after the collapse of the old regime in Egypt, and the results of the March 19 referendum on the constitutional amendments and the appeal to the voters’ religious orientation by the different political forces campaigning for or against the amendments raised concerns about the expected parliamentary elections. Many secularists expect the coming parliament to be dominated by those groups, and they fear that a parliamentary system would give the Islamists unchecked hegemony over the political life in the country.

Fourth, observers of the Egyptian political scene post the January 2011 revolution note that the deteriorating security situation in the country coupled with the persistent fifty percent quota for farmers and workers in the parliament would not be conducive conditions for electing a representative parliament. The argument here is that such unfavorable conditions would result in a parliament that is incapable of legislating and governing the country.

Fifth, some analysts (Nafaa, 2011, Shorbagui, 2011, Shobaki, 2011) advocate the concept of separation of powers between the executive and the legislature branches of government as being a more suitable system for Egypt given its political history and cultural heritage. They base their arguments on the fact that Egypt’s history of centuries of centralized government headed by a single personal leader supported by a loyal bureaucracy is strong evidence that that is the successful formula especially at critical times of transition and turmoil. The troubled Lebanon example is often cited in arguments about the suitability of a parliamentary system to the countries in the region. The concern here is that a fragmented parliament would not be able to sustain a coalition long enough to steer the country in such difficult times. To many the
leadership of a single, strong handed, president with a fairly elected legislature is the preferred direction at this point in the history of Egypt. Interestingly, it is with that last point that the proponents of the parliamentary system of government start their arguments against the presidential system for Egypt (Eisaa, 2011, Hamzawy, 2011, Gad, 2011). The view is that the presidential system is the malaise not the cure. Cultural and political history of the country and the region provide no evidence of a successful presidential system that was adopted and did not turn into an autocracy. The concepts of checks and balances, separation of powers, and the proper role of the legislature in a presidential republic lack any support in historical reality in Egypt and the rest of the Arab countries. The rulers inevitably turn, on their own accord or in most cases by the people they rule, into dictators. In Egypt, historically, presidentialism invariably led to authoritarianism.

Refuting the other arguments presented by proponents of the presidential system, analysts (Ackerman, 2011, Eisaa, 2011, Hamzawy, 2011) believe that the presidential system will actually play to the hands of the Muslim Brothers. With their level of organization and the religion based popular support, the Brothers will not only control the parliament but also the presidency, despite that fact that they have announced repeatedly that they will not have their own nominee. Their support to a particular candidate will have a considerable efficacy in deciding the next president provided the Armed Forces do not intervene. On another level, the concept of a supreme leader is fundamental in the Islamists ideology. The argument that the Egyptian voters are not yet “democratically mature” enough to build a successful parliamentary system is refuted on two levels. First, maturity comes with practice. Spending additional years under a presidential system which may or may not turn into an autocracy will only maintain the level of current political apptitude of the voters rather than raise it especially if the legislature is dominated by the group that has the keen interest in maintaining power. Second, many forget that for a short yet effective period of its history, Egypt did have a parliamentary system of government that represented Egypt’s golden age of liberalism. The parliamentary system then forced different factions of the
society to coalesce for the government of the country and the affirmation of the will of the people. Instead of creating a leadership cult, the parliamentary system create a leadership coalition (Ackerman, 2011).

Another important feature of the parliamentary system which is often used against it is its lack of stability. The fact the the president cannot be removed from office except through impeachment, or a revolution, while a parliamentary government can be removed by a vote of no confidence at any time actually should be an argument for and not against the parliamentary system. The people will be stuck with an incompetent president in a presidential system but will not be stuck with a bad government in a parliamentary system. Additionally there is the issue of accountability. Proponents of the parliamentary system argue that accountability is lost in a proper presidential system between the legislature and the executive, whereas in a parliamentary system, and because the parliament forms the government from its member whether the are the majority holders or through coalitions, accountability is consolidated not diffused. This diffusion of accountability, among others, was a main problem with the past Egyptian regime where the president used the prime minister as a ready scape goat in cases of severe popular pressure demanding the performance of government.
VI. CONCLUSION

The purpose of this work is to analyze the effects of the choice of the system of government on the different important aspects in society. Additionally it is to apply the findings to the current situation in Egypt after the January 2011 removal of the regime and evaluate the implications given the current political, economic and social conditions. Should Egypt retain the current presidential system? Alternatively, should it go towards a European style parliamentary system? Our attempt to answer this query took us through a conceptualization step followed by a survey of the different prominent studies conducted on the topic. The literature is rich with arguments for and against either system. We have discussed some of the main arguments about the merits and shortcomings of the systems and we included two empirical studies that quantitatively analyzed the effects of choice of political regime on the stability and survival of the democracy and on several elements of good governance.

The main effort to find an answer to the pertinent question is the quantitative analysis of the effects of the choice of a particular government system on three important aspects a society that are chosen to represent the underlying demands of the people of Egypt as declared during the January 2011 peaceful revolution. Those aspects are income inequality, political rights and civil liberties. We used a multi variant regression model on cross sectional data averaging a period of ten years from 2000 to 2010. We controlled for other variables that are thought to play a part in the effect on the main dependant variables and that are relevant to the Egyptian circumstances.

Our analysis yielded some interesting results that confirm our initial thesis that the parliamentary system has a positive effect on the chosen parameters. The empirical results show that parliamentarism, the main independent variable, affects income inequality positively, ceteris paribus, with an estimated 5% improvement on the inequality measure. The results also show that, statistically, parliamentarism is
estimated to improve political rights index and civil liberties index by estimated values of up to 15%. Applying the model to the specific case of Egypt, the results are in line with the predictions of the general model.

After a discussion of the various opinions on the suitability of either system of government to Egypt is made and taking into account the results of the empirical analysis it is our contention that at this point in its transition to democracy and given the historical, cultural, social and political circumstances it appears that Egypt may be better off moving towards a parliamentary democracy.
REFERENCES


