

The Role of Political Stability in Achieving Economic Development

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Abstract

Achieving economic development and increasing economic growth are among the priorities of policymakers in Egypt. The 25th of January 2011 was coincided with sharp decline in economic performance indicators. This resulted in highlighting the importance of studying the determinants of political and economic instability. In this context, the study aims to verify the hypothesis that the political instability and the decline of some institutional factor adversely affect economic growth and development (through estimating the potential effect by applying economic models on a large date set, after monitoring for the chronological order of political and economic events in Egypt during the three years following the revolution). The analysis in this study concluded that the cabinet reshuffle and the two composite indicators of political have a significant negative impact on economic growth and therefore on economic development. Changing the prime minister and/or occupying 50% of cabinet posts by new ministers within a year leads to a decline in the growth rate of GDP per capita by almost 1.39 percentage points. The study ends by suggesting the most importing mechanisms to support the political and economic stability that are strengthening the public trust in the government. Paying attention to the social dimensions if the economic decisions, adopting the concept of inclusive growth and promoting corporate governance due to its positive impact on economic development.

Keywords: Egypt, Political stability, economic development.

1. Introduction

Achieving economic development, increasing GDP per capita are continues concern of decision makers, as revolution of January 25 2011 affirmed these demands and made "bread" as its top priority. According to Ministry of planning and international cooperation's data, rate of real DDP decreased from about 5.1% in 2009-2010 to record about 1.9 % in 2010-2011, 2.2% in 2011-2012 and about 2.1 % during 2012-2013. Taking into consideration that population rate recorded about 2.3%, 2.2% and 2.8 % in 2011, 2012 and 2013 respectively as per data of Central Agency for Public Mobilization and Statistics (CAPMAS). This means, reduction of individual's average share in income.

In this regard, this study aims to analyse effect of political instability on economic development, through monitoring time line of political and economic events in Egypt during the past three years after the revolution. Purpose of this analysis is to understand the relation between them in the short term. The study depends on applying panel data models to define effect of different indexes on political instability and withdrawal of some institutional factors such as legal structure, protection of ownership rights on economic growth and stability on the long term. Some mechanisms through which political stability is achieved, thus economic development is promoted were also studied.

To define political instability, the study depended on some ministerial changes and indexes including number of assassinations, ministerial and constitutional changes, legislative election, governmental crises, demonstrations, coups and riots events. Rate of GDP per capita evaluated using fixed prices and US dollar is used by study, in addition to indexes of economic development as per definition of World Bank.

Following this section, the study contains four main sections: the first one discusses concept of political instability, monitoring and analysing important political events and their economic effect over the three years after the revolution of 25 January 2011. Third section shows used data and approaches to estimate effect of political instability and some other institutional factors on economic development; moreover, it shows important results concluded by study after applying of panel data model. Fourth section of study provided the analysis of the study included the mechanism to treat failures occurred due political instability and adopting of economic vision which is subject to inclusive growth approach and validating role of workers syndicates to form general policies. The last section concluded the research results providing some recommendation for the Egyptian government.

2. Political stability and Economic Stability: Concepts and definitions

Following events of January 25 2011, Egypt witnessed political and economic instability in different levels. The political instability was represented in changing of six prime ministers: Lieutenant General Ahmed Shafik, Dr. Essam Sharaf, Dr. Kamal Alganjoury, Dr. Hesham Kandil, Dr. Hazem Albiblawy and Eng. Ibrahim Mehleb. In

parallel with multi-governmental and ministerial changes, Egypt experienced low rate in different economic indexes, the matter which required discussing mutual effects as in political stability and economic instability.

Definitions related to political instability are varied. Some of which are tight to include only governmental stability, while others are wide enough to include institutional instability. The concept includes also different forms of political violence. Economic development may be represented by many indexes such as growth of GDP, average of individual's share in product, inflation rate, commercial openings, budget deficit, interest rate, exchange rate, stability of local currency, besides other economic indexes. Literatures analysed the relation between political and economic changes. Some believe that economic development is a main factor to political stability as development in general leads to improvement of individual's living level to contribute in return in promoting political and economic stability.

Second opinion believes that political stability is to be created as a main demand for economic development. Third opinion believes in a mutual relation between political stability and economic development, hence balancing between considerations to achieve each is to be observed. All of these opinions apply to the Egyptian status through different phases witnessed by the Egyptian society, after 1973 war openness, and after periods of terrorism fighting in the nineties. Based on economic development notion from political perspective, this section discusses different concepts of political instability and provides indexes used to measure economic development.

2.1 *Political stability and Economic Development: Main definition used by the study*

In this sub-section, the definitions of political instability and economic development are critically viewed and discussed.

2.1.1 Definition of Political stability

There is no agreement among researchers about political stability concept as it differs from country to another and from time to time within the same society. Political stability concept broadness is based on government stability (remaining for the entire election period) and stability of political regime (as the government is changed from the legal aspect according to constitution) in one side, and stability of internal legal and external stability (no external threats against country stability) in other side (Akongdit, 2013).

In terms of less broadened perspective, group of studies listed political stability in absence of political violation works. Based on images indicating political violation works, changes may be classified to many categories (Dimitraki, 2010): First Category includes all events threatening the country on both political and economic levels such as coups, revolutions, government crises. Second category includes events translating citizen's upset and non-satisfaction about political regime represented in many forms such as general strikes, riots, anti-government demonstrations. While the third category includes mutual violation events between disputed parties such as reaction of protestors against government policies such as guerrilla warfare, assassinations, and purges operations, in addition to other changes such as race discrimination, economic discrimination against racial minorities, civil wars and wars in neighbor countries.

Another group of studies referred to political instability by indicators of government stability (Haan and Clemens, 1996) and democracy converting (Benhabib and Spiegel, 1992). Some of these studies focused on monitoring period of government's ministries (Alesina et.al, 1996), turnover of executive authority and frequency of government's collapse to indicate political instability (Zureiqat, 2005).

The wide approach of political instability concept is the most common approach in the literature. It focuses on more complicated indexes which include seven significant indexes as follows (Qureshi et.al, 2010): General strikes, revolutions, riots, period of cabinet, governmental change, war and nature of political regime.

Based on variety of changes indicating political instability, it became common in the literature to use indexes cover different dimensions for political instability includes (Jong, 2006); **complete civil protest**: including assassinations, ministerial changes, civil wars, coups, main governmental crises, demonstrations, racial tensions. Executive changes, dividing, government stability, guerrilla warfare, internal disputes, main constitutional changes, medium civil disputes, secondary civil disputes, number of elections, polarisation, period of ruling paring remaining in regime, purgation, changes of regime, religious tensions, revolutions, riots, number of protesters who were removed from their office, strikes.

In addition, **political instability within political regime**, this means occurring of quick change in political regime itself such as government change and dissolution of parliament. Moreover, **instability of political regime**, it means occurring of main changes in form of political regime such as conversion of political system from one to another.

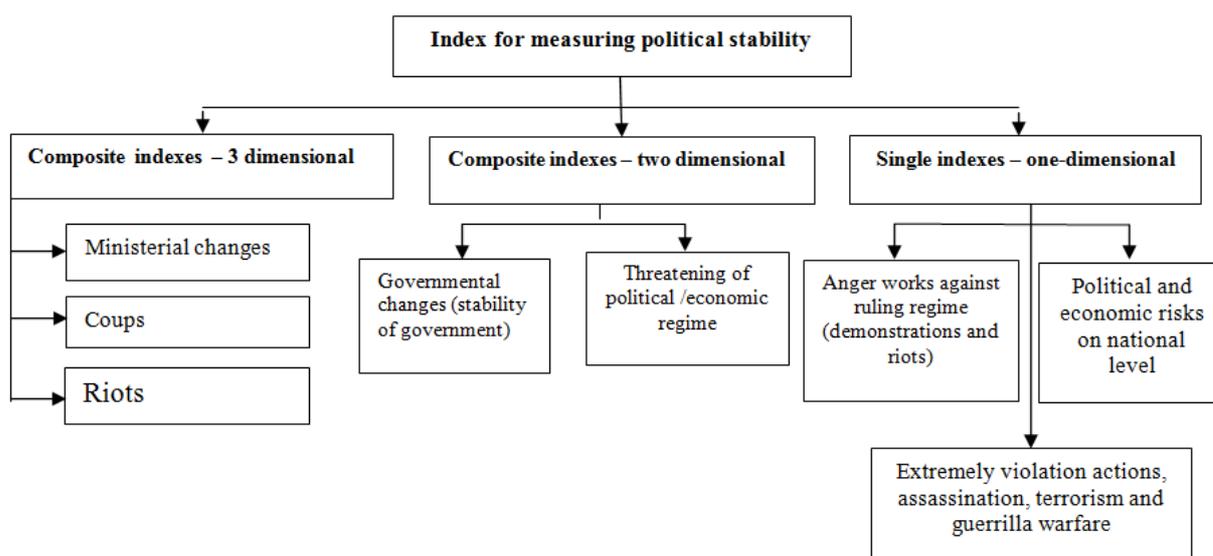


Figure No.1: Classification of political stability dimensions

Source: prepared by researchers based on

- Carmignani, Fabrizio (2003), "Political Instability, Uncertainty and Economics," *Journal of Economic Surveys*, 17(1) 1-54, Blackwell Publishing Ltd, Oxford, UK.
- Grier, Robin, and Luisa Blanco (2009), "Long Live Democracy: The Determinants of Political Instability in Latin America," *Taylor and Francis Group, Journal of Development Studies*, 45 (1): 76-95

Measuring of political instability concept acquires its importance from measuring different related dimensions. By reviewing the literatures of political economy, it is clear that variation of different dimensions relates to measuring of political instability concept. Some studies use two dimensions for political stability, first one related to political and social disturbances, such as demonstrations and riots. While the second dimension represents stability of government because of successive ministerial changes (Carmignani, 2003). Other group of studies classify index of political stability into **three main dimensions**: First dimension includes all events threaten the political and economic regime on national level such as coups, revolutions, crises and government, while second demission includes events that reveal anger from political regime such as general coups, riots and demonstrations against government. Third dimension reflects extreme violation actions by protesting individuals or by government as response of such protesting such as guerrilla warfare, assassinations and purges.

In summary, some studies used the tight concept of political stability as it implies absence of political violation actions represented in one variable, which is a coup event. While another group of studies used two or more variables to denote political instability such as political assassinations, war victims, revolutions, and war victims, strikes, demonstration, violation and coups (Easterly and Sergio, 1993). Figure No (1) shows a diagram of political instability concept used by the study.

2.1.2 Definition of Economic Development

In fact, there is no specific definition agreed upon by economists about macroeconomic development, however, there are many definitions show that economic development is the improvement of main macroeconomic indexes to avail macroeconomic environment support economic growth.

Global competitiveness report defines that macro development is achieved as a result of executing number of policies which increase immunity of national economy from shocks to provide supporting environment to achieve economic growth. When national economy suffers from currency fluctuation, increase of debts and inflation, economic crises and collapse of gross domestic product are resulted (Schwab and Martin, 2013). In accordance with international monetary fund (IMF), stable economic environment is considered a main factor to achieve high percentages of investment and growth in productivity. Stable environment is measured through predicted inflation rate, low real interest rate and somewhat stable exchange rate (IMF, 2014).

Regarding the World Bank, macroeconomic development is achieved when main economic relations are in balance. For example, balance between local demand and domestic product, general revenues and overhead expenses, saving and investment and payments balance (International Bank for Reconstruction and Development (IBRD), 2005).

It is noteworthy that there are no definite limits differentiating between status of macroeconomic development and undeveloped per economic variable; however, there is a group or connected selected factors of macroeconomic variables which include economic growth, inflation, trade balance deficit, current account deficit and Global cash reserve. All of the aforementioned factors show extent of macroeconomic development, whether

achieved or not (Bashir, 2012).

Moreover, it is common to use credit rating indexes which reflect ability of a country to pay debt interest and resulted installments to indicate for economic development. For example: after the 25th January revolution 2011, Egypt witnessed low credit rate of Egypt's long termed debts in foreign currency, but recently Egypt's credit rating was increased which shows economic recovery and improvement of its indexes.

In accordance with Maastricht Treaty, economic development is measured based on five main parameters as follows:

- **Inflation rate:** it means prices stability whereas their fluctuation leads to market uncertainty and more risks. In accordance with Maastricht treaty, inflation rate should not exceed 1.5 % comparing with inflation rate in three countries having minimum inflation rates.
- **Interest rate:** nominal long termed interest should not exceed 2% over the average of interest rate calculated for the three countries having minimum inflation rates.
- **Debt to GDP ratio:** It reflects government flexibility by using its tax revenues to meet local needs instead of paying the same to foreign creditors. In accordance with Maastricht treaty, local debt should not exceed 60% of GDP.
- **State general budget deficit:** In accordance with proximity standards declared by Maastricht treaty, deficit in the country general budget should not exceed 3% of GDP.
- **Currency stability:** as to allow importers and exporters to develop long termed strategies, to reduce investors needs to manage risks of exchange rate. To joint Euro area, the country should not reduce its currency value for two successive years as per Maastricht treaty.

It is worth noting that GDP per capita, is considered the most common standard for economic development in literatures (Pano, 2000). There are group of studies that use nominal exchange rate to indicate for economic development as it reflects market's status, response to gross changing economic circumstances (Satyanath, Shanker and Subramanian ,2004), while other studies use increase in inflation rate as an indicator for economic development (Aisen and Francisco,2007).

In brief, concept of macroeconomic development is a multi-dimensional concept and in not limited on stability of prices or good policies, but it also includes measuring of dimensions by good performance of real economy which requires reduction of economic cycles and recognition of long termed interest prices at reasonable levels and competitive exchange rate. This means that any concept of economic development is linked to effective use of economic policy tools to confront periodical fluctuation and reduction the possibility of imposing to external shocks (Ocampo, 2005).

2.2 Relationship between Political Stability and Economic development

Literatures monitored *three main opinions* regarding relation between political stability and economic development. Supporters of *first opinion* believe that achievement of economic development is considered a main factor for political stability as achievement of high levels of economic growth causes in return improvement of individuals living, which contributes in conversion to political and democracy change (Van de Walle, 1998). It is worth noting that this opinion was criticised as it is not necessary that high economic growth rate has impact on growth rate of all individuals in society. This criticism is established before events of 25 January during period of growth rates recognised in three years before revolution was about 6.9%.

Supporters of *second opinion* believe in necessity of political stability as a positive reflection to stabilise economic changes and applying of democracy rules being main factor for economic development (Robin and Blanco, 2009). Developments seen in Egypt since revolution of 25 January 2011 and over three years, assure the role played by political fact to effect on economic status. In fact, since the beginning of Egyptian revolution on the twenty fifth of January, many economists referred that main ruling case in Egypt is political instability and worsening of security status, which led to a halt in economic activity and appearance of obstacles facing achievement of tangible economic improvement under increasingly dependence of Egyptian Economy on the world, either in trading, investment or in tourism.

The *third opinion* believes in a mutual relation between political stability and economic development, which requires balancing between both of them (Zablotsky, 1996). Some people believe that high poverty level led to beginning of 25 January revolution, which demanded "bread" among substantial requirements. However, after removing former president "Mubarak", applying many ministerial changes, issuing constitutional declarations and performing elections, all of these events were accompanied by protests and riots, accordingly to bad deterioration in economic activity and complicating of problems suffered by Egyptian economy. As a result, production rate was reduced in many sectors, which in return increased unemployment rate and decreasing in national income. More violation events were in consequence such as Albaloon, Mohamed Mahmoud, Maspero, Cabinet, Etihadya and Sinai that witnessed combats between armed forces and police on one side and terrorism on the other. These events were followed by more demonstrations, protests and categorical demands. Moreover, rate of Egyptian pound decreased about 16% against foreign currencies and had bad effect on deficit value of the

country general budget, in addition to failure in procuring currencies to pay value of imported merchandises and creating a parallel market of official exchange rate, which reflects mutual relation between political stability, stability and economic growth.

In conclusion, uncertainty that is resulting from instability of political order, works on reducing private investment, and reducing economic growth. Uncertainty also can change type of investments which are executed or changing request of production factors and changing combination of National expenditure, therefore it has direct effect on growth, besides its effect on the investment. A lot of Theoretical and experimental studies suggest that political instability prevent economic development. Studies declare that political instability increases uncertainty of policies, which effect negatively on the decisions of production, increasing in the probabilities of changing the government is resulting in uncertainty of future decisions, so economic units that avoid dangers, may have recourse to take important economic decisions or leave the economic field and prefer to invest abroad.

2.3 Political and economic status in Egypt after the 25th January 2011 revolution

After the 25th January 2011 revolution, many social and political changes took place in Egypt, as a result of more protests of all kinds such as demonstrations, strikes and marches, which lead to a halt in production and work in most of economic activities and was accompanied by low security levels, causing negative effect on Egyptian economy, followed by financial and economic losses in national income. The most significant evidences of political instability within this period, those events related to changing of eight governments and many ministerial changes within one government, in addition to constitutional amendments and surveying for the same until a new constitution was issued in January 2014.

Table (1) summarises timeline for each change took place in government and ministerial changes accompanied each government, election and surveying for constitutional declaration within 25 January 2011-june 2014). It is worth noting that the common reason for subsequent change in governments is protests and categorical demands made through gathering strikes, demonstrations and protesting to reach unprecedented levels, estimated in some reports in 2012 to about 3817 protests, included all categories and denominations in society (Khalil et.al, 2012). Increased protests in Egyptian society contributed in creating numerous economic and social crises which were main cause of categorical demands and protesting in general. For example: repeated energy crises (diesel, natural gas and fuel), in addition to repeated electricity outage contributed in general in raising anger leading to hundreds of protest, road blockage, increase in transportation prices, road crowding, traffic jam, stopping of many factories, in addition to bread and wheat crises .

Regarding social aspect, denominational crises, political gaps on institutional, international and regional levels were enough to create many protests (International Development Centre (IDC), 2012). Table (2) shows the most significant economic effects resulted from deterioration of political status in Egypt during (25 January 2011- December 2013). National economy witnessed deterioration particularly seen in tourism, foreign trade and investment sectors. Net value of direct foreign investment in Egypt reduced during first year of the revolution to record \$2,189 billion comparing with about \$6,758 billion in 2009/2010 according to estimations of Egyptian Central Bank. Egypt credit rate was reduced by the international institution" Standard & Poor's" for four successive times within two months due to security disturbances, unclear political vision, which immediately had bad impact of Egyptian stock market. The following show one of the most significant economic impact resulted from bad political status in Egypt during (25 January 2011- December 2013):

Table (1): Most significant political events that took place in Egypt during (2011-2014)

Date	Governmental and ministerial changes
31.01.2011-03.03.2011	- Government of Lieutenant General Ahmed Shafik (Last prime Minister during regime of the former president Mubarak).
11-02.2011	- Regime collapsing of the former president Mubarak.
03.03.2011-30.11.2011	- Government of Dr. Essam Sharaf (known as revolution government).
13.02.2011	- Issuing of the first constitutional declaration
19.03.2011	- Surveying of constitutional amendments in Egyptian governorates under full judicial supervision and presence of 18.8 million electors. More than 14 million agreed on amendments.
30.03.2011	- Issuing of constitutional declaration replacing the Egyptian constitution after people agreement shown through survey.
21.07.2011-30.11.2011	- Second government of Essam Sharaf after conducting ministerial change of 14 ministers who related with formed regime due to wide protesting in Tahrir square, known as 8 th July strike. -Number of ministerial portfolios in Sharaf government was 32 ministerial portfolios. - Resignation on 21 th November 2011 after many demonstrations, particularly after Maspero, Mohamed Mahmoud and Cabinet events.
30.11.2011-02.08.2012	- Government of Dr. Kamal Alganoury (known as national save) -Number of ministerial portfolios in Dr. Kamal's government was 29 ministerial portfolios, increased to 33 ministerial portfolios after.
28.11.2011-11.01.2012	- First election of Egyptian People council after 25 th January revolution, performed in three phases from 28.11.2011 -11.01.2012 -This election was important as People and Shura councils were in charge to form a committee of 100 members to write the country new constitution
23-24 .05, 16-17.06.2012	-First presidential election after 25 th January revolution. First round of election was performed on 23& 24 th May 2012, while second round was performed on 16&17 th June 2012. Removed President (Mohamed Morsy) won then.
14.06.2012	- Dissolving of parliament and ruling by invalidity of People's council election law.
17.06.2012	-Issuing of complementary constitutional declaration of 30 th March 2011 declaration.
11.08.2012	- Revoking of constitutional declaration of 17 th June and issuing declaration of 11 th August.
02.08.2012 January 2013	- First Government of Dr. Hesham Kandil
21.11.2012	- Issuing of constitutional declaration 2012
08.12.2012	- Revoking of constitutional declaration issued on 22 th November and issuing the complementary constitutional declaration.
15.12.2012	- Survey on 2012 constitution.
January 2013	- Second government of Dr. Hesham Kandil and changing of 11 ministers to face economic deficit and crises.
May 2013	- Conducting of a ministerial amendment in Hesham Kandil's second government included 9 ministers.
02.06.2013	- Ruling of supreme constitutional court to dissolve Shura council.
30.06.2013	Beginning of 30 th June 2013 revolution against regime of precious president (Mohamed Morsy).
03.07.2013	- Removing of president (Mohamed Morsy). Constitution was temporarily ceased. Consultant Adly Mansour, president of constitutional court became the country president during transition period until election date, provided to have the authority to issue constitutional declarations. Lieutenant General (Then) Abdel-Fattah Elsisy declared future plan.
16.07.2013-01.03.2014	- Charging of new government under presidency of Dr. Hazem Albiblawy.
24.02.2014	- Resignation of Dr. Albiblawy's government.
01.03.2014	- Forming a new government under presidency of Ibrahim Mehleb, included 30 ministers. 17 ministers of previous government remained unchanged and 12 new ministers were added to the government. 5 ministries were integrated.
08.06.2014	Abdel-Fattah Elsisy was elected as the new president of Egypt

Source: Adapted by the researcher from Ministry of finance and Ministry of Managerial development publications (various issues)

First: in Tourism sector:

Tourism is considered the economic sector that was most affected by political status. Despite of value of Egyptian pound, competitiveness of tours prices in Egypt. In accordance with Ministry of Tourism data, the following phenomena, show effect of political status on tourism:

- Low rate of visiting tourists. Occupation in tours hotels witnessed decrease from 75.4% in 2010 to about 31.5% by the end of 2011. However, occupation rates showed improvement recently to record about 45% in 2013.
- Low rates of tours revenues from about \$12.5 billion in 2010 to record about \$8.8 billion in 2011. Tours revenues continued in collapsing to record about \$ 5.9 billion by the end of 2013.

Second: Regarding Investments:

- Indirect investments:

Surplus in investments net of securities portfolios reduced from about \$ 7.9 billion in 2009/2010 to be a deficit of about \$2.6 billion in 2010/2011. Such deficit continued until about \$5 billion in 2011/2012 in accordance with Egyptian Central Bank data. However, net of securities portfolios returned to increase in 2012/2013 as it recognized about \$1.5 billion.

Egyptian economy witnesses continues reduction in credit classification levels by "Standard and poor's" and Moody's Corporation "for Egyptian economy. In July 2013, Egypt's credit classification was stable with no deterioration until it increased again in November 2013.

- Direct Investments

Direct foreign investments flows to Egypt were highly reduced during 2010/2011 as they reached about \$2.2 billion comparing with about \$6.8 billion during 2009/2010. Private Sector investment formed about 61.8% of total investments during fiscal year 2010/2011. Such rate decreased to about 60.3% in 2012/2013 according to Ministry of Finance data.

The above-mentioned negative effects had their own impacts on macroeconomic changes, accordingly on deficit on the country's general budget. For example: low collections of investment revenue due to reduction of financial investments and interests on deposits abroad caused increased deficit in general budget, the matter which caused difficulty in obtaining external fund due to low level of credit classification of Egypt, deterioration of currency's value, escaping of direct and indirect foreign investments. As a result, burden of government to finance merchandises necessary for support increased. Total external debt reduced about 1.5% in 2011/2012 comparing with 2010/2011 to represent 13.5% of gross domestic product, hence, local general debt increased by 21.1% within the same period. However, after international classification institutions increased credit level of Egyptian economy due to subsidies granted by some Gulf countries during 2013, external debt rate increased about 25.7% during 2012/2013 compared to the previous year. Moreover, local general debt increased about 24.9% during the same period to represent 80.5% of gross domestic product (Ministry of Finance, 2015), the matter which indicates continues economic crises.

In summary, fiscal year 2012/2013 as at 30th June 2013 ended by decrease in economic growth to 2.1%, increase of unemployment rate to be 13.4%, more total deficit as percentage of gross domestic product, about 13.7%, in addition to increase of poverty rate about 26.3% according to gross poverty standard. Foreign cash reserve at Egyptian Central Bank reduced to be \$ 15 billion, while commercial balance deficit increased to be \$31.5 billion, production cost as a direct result of security instability and difficulty to obtain foreign cash to import raw materials necessary for production was increased. Economic activities in leading sectors important for growth such as converting industries, construction, building and tourism sectors decreased; trust in investment environment and unclear political and legal vision in the country (Ministry of planning and international cooperation, 2014).

Table (2): Follow up of the economic effects resulting from the political conditions changes in Egypt from January 25th 2011 to December 2013)

Issue	Economic Effects	Effect's strength	The time taken by the effect
Tourism sector	2011: The decline of the security condition in the first months following the January 2011 revolution, resulted in a great decline in the newcomer tourism movement as the recruitment rate in hotels decreased reaching around 31.5%, due to the decrease in tourists newcomers to Egypt, which decreased the full time staff incomes in this sector. Also the tourism revenues value decreased reaching around 8.8 billion dollars in 2011 against 12.5 billion dollars during 2010.	Very strong	immediate
Foreign direct investment	2011: The foreign direct investment flows decreased in Egypt as it reached around 2.2 billion dollars against around 6.8 billion dollars during 2009/2010 affected by the security and stability factors that negatively affected the investment environment.	Very strong	Immediate
Local prices	2011: The local prices increased significantly since the first precursors of the 25 th of January revolution, and the citizens' growing demand for food products.	Strong	Immediate
Public expenditure and Budget deficit to meet public claims	2011: The 25 th of January revolution was a port allowing access of hopeful public demands for social justice. as a result subsidies, pay and incomes public expenditure items increased. in kind subsidies to the poor continued and the governmental operating policies were amended to maintain the temporary staff and recruit new staff (senior graduates from previous years classes of (2003 to 2010) at the State administrative authority which resulted in a wide increase of expenditure (incomes item). In addition, establishing the National Care Center for martyrs and injured families that work in insuring all the treatment costs related to them and providing job opportunities for them. That resulted in the increase of the State's Budget deficit for the year 2011/2012, and the increase in the size of the public debt.	Strong	Immediate
Balance of payment and the International reserves	2011: The Egyptian balance of payments reached a deficit. Also the net International reserves declined in the Egyptian Central Bank in an attempt to relatively maintain the Egyptian pound's exchange rate against international currencies.	Strong	Gradual
Protests	2012: In Morsy's ruling, the protests' rate increased with the increasing hopes of the first elected civil president, however the regime failed to meet the citizens' aspirations and realizing their demands.	Strong	Gradual
Aviation movement	2013: The strikes following the 30 July revolution resulted in the continuation of decrease of the passengers' movement in Cairo airport to the least rates.	Strong	Immediate

Table (2) – Cont’d: Follow up of the economic effects resulting from the political conditions changes in Egypt from January 25th 2011 to December 2013)

Issue	Economic Effects	Effect's strength	The time taken by the effect
Credit Rating	2011: The international financial associations decreased the Egyptian credit rating three times in 2011 due to the continuation of uncertainty in the Egyptian economy.	Strong	Gradual
	2013: The international financial associations continued decreasing the Egyptian credit rating due to the government not taking the necessary measures to reduce the public budget deficit.	Strong	Gradual
	July 2013: The standard & poor's agency for credit rating maintained its rating for Egypt's sovereign debt as it is without decreasing it with a stable future approach due to the financial aids to Cairo from some Gulf States.	Weak	Immediate
	August 2013: The international rating association Standard & Poor's changed the future approach to Egypt from negative to positive.	Strong	Immediate
	In November 2013: The standard & poor's agency for credit rating raised its rating for Egypt's long and short term debts in local and foreign currencies, after the Egyptian authorities insured enough foreign cash to meet budget's financing needs and the foreign payments in a short term.	Strong	Immediate
Economic conditions	2012: The economic conditions declined as the total disbursement in the State budget grew to confront the emergency crises like the bread and fuel crises, the petroleum reserves declined by the increasing necessary cash demands to import petroleum substances in worldwide prices, which resulted in the diminishing Egyptian exports growth. Also the tax revenues decreased than its expected value due to the declining investment activity and the displacement of most of the foreign investment affected by the security instability conditions, turbulences, and the workforce strikes.	Strong	Gradual
Curfew	2013: The curfew period resulted (14 August – 12 November 2013) in an increase in the recession's depth from which the Egyptian economy suffers.	Strong	Immediate
	2013: the stores owners sector, labor by day and the labor of which a half was shedded or given days off or at least giving labor half of their wage for not shedding any of them till the conditions are stable and the sale and purchase status returns to its previous state before the curfew.	Strong	Immediate

Source: Prepared by the researchers based on the reports of the ministry of planning and international cooperation and the ministry of finance, various editions.

3. Data and used methodology

This section is reviewing used data and methodology to estimate political instability, and its effect on economic development. Used methodology is based on Dynamic Panel Data Models which is based on General Method of moments (GMM) for about 132 country, during the period from (1959-2014), and divided for equal intervals (Five Years), consequent and not mixed .

3.1 Data used in the Study:

The study relies on using Panel Data Models for about 132 countries, during the period (1959-2014). The study relies on using Logarithm growth rate, for the average GDP per capita (In US Dollars and fixed prices) as variable that expresses economic development. In addition, a composite index for economic development for variables (Natural logarithm for average GDP per capita) was estimated, enrolling in elementary education and

growth average of Natural logarithm of population.

Estimating political instability is based on a number of variables that were used to discover different dimensions of political instability. In this analysis, a comparison was between using single indicators (ministerial changes) and using alternative indicators to measure the definition of political instability, in order to verify the effect of used variables in the analysis. Composite index was subject to static examinations, to verify their precision in expressing political instability definition. First calculated indicator of political instability is based on number of variables including Assassinations, ministerial and constitutionality changes, number of Legislative amendments, Demonstrations and governmental crises. Whereas accounts of second indicator of political instability represented by Assassinations, ministerial and constitutionality changes, riots, number of Legislative elections, and Overthrows.

Database of World development indicators issued by the World Bank was used as source of total data of Gross domestic product (in USD and fixed prices), imports and exports of goods and services (in USD and fixed prices). Previous database also was used to estimate the investment rate to Gross domestic product, and governmental consumption of Gross domestic product, based on fixed creation of capital (in USD and fixed prices) and final Government Spending and consumption (in USD and fixed prices). In addition, United Nation Conference on Trade and Development (UNCTAD) data base was used to obtain the data of population and inflation Modifiers, which were estimated from standards numbers of consumer's prices, Table (3) is explaining some of Descriptive Statistics related to these variables.

Data estimated by (Barro and Lee, 2013) was used in the data of admitted individuals in primary education, from the age of 15 and above, Penn World Table, version 8 was also used to obtain human capital indicator per capita, based on years of admission in education and its return (Feenstra, , Inklaar and Timmer ,2013). It should be noted that, the study was relied on Data base of economic liberty which was issued by Fraser Institute , as it includes indicators that covers institutional dimensions, like indicator of government, indicator of legal structure, and protecting original acquisition during the period of (1970-2012). It is to be noted that linear interpolation¹ was applied to the indicators of government profile, legal structure and protecting intellectual property, to avoid problem of missing values, whereas economic liberty indicator in the world was issued every five years during this period (1970 – 2010).

The cross National Time Series Data Archive (CTNs)², is used to obtain data of political variables, including ministerial modifications, constitutional modifications, governmental crises, number of legislative elections, modifications of executive authority, demonstrations, riots, assassinations and overthrows. All of these variables were assessed as follow:

- **Ministerial modifications:** Number of times that new prime minister is hired or/and new ministers who occupied 50 % from the new positions during a year.
- **Constitutional modifications :** number of main modifications in the constitutional structure of the country, including extreme case that includes certifying a new constitution that includes changing missions of different governmental organisations (Like modifying presidential system into parliamentary system). But constitutional modifications that didn't includes essential effect on the governmental regime isn't considered.
- **Governmental crises (Mainly):** any situation that rapidly developed and form danger on the current regime, notwithstanding revolutions that seeks to destroy the regime.
- **Elections:** minimum Number of elections of the legislative council within a year. The variable includes legislative elections that will be done to fill vacancies in regular courses of elections, not regular elections in the council in total.
- **Modifications of the Executive Authority:** number of times in which responsible are changed.
- **Demonstrations:** any peaceful muster, and include at least hundred persons, mainly express objection for governmental policies, notwithstanding demonstrations that express external issues.
- **Riots:** any violent demonstration or even dispute that include more than 100 citizens using physical power.
- **Revolutions:** any change (or try of change "forcible or illegal" in the governmental power elite or any armed insurrection whether was successful or unsuccessful, aims to independence of central government.
- **Assassinations:** any assessing that has political motives or any tries to kill government or political official.

¹ Linear interpolation is used to solve problems of missing values of variables , using it also help to estimate value of variable (y), by sign of original variable (x), with calculating estimations of missing values, during period of time (t), which represents order of serial time of variable (x). Estimation of missing value (y_t) is calculated during point of time (t), based on available data of original variable (x₀) and (x₁), (x₀) should be older in the time order than (x₁) also (x₁) more recent in time serial than (x_t). Value of the new variable (y_t) is as following:

$$y_t = \frac{(x_1 - x_0)(t - t_0)}{(t_1 - t_0)} + x_0$$

² Databanks International (2013), "Cross National Time Series Data Achieve," <http://www.databanksinternational.com/>.

- **Overthrows:** number of additional constitutional modifications or obligatory changes of power elite or/and its actual control on authority structure inside the country during a year, this variable didn't include unsuccessful Overthrows.

It should be noted that average data per interval was calculated separately, for both of commercial openness, and governmental consumption rate of gross domestic product, investment / GDP ratio, indicator of government profile, legal structure indicator, protecting of property rights, admission in elementary education, inflation rate, indicator of economic development, and all political variables, in order to divide data into equal intervals (Five Years) consequent and not nested intervals. Whereas data of the end of the year for each time period, was used separately, in order to estimate data of gross domestic product, population and indicator of human individual capital.

3.2 Methodology of estimating the effect on political instability on Economic development:

This part of the study is discussing, the estimation of the effect of political instability on economic development, by using Dynamic Panel Data Models of 132 countries, including Egypt, and also offer the analysis of regression of dynamic panel data that regularly estimate long term effects, even in heterogeneous dynamic panel data.

Macro – economic development, according to World Bank indicates to externals that retards ability of prediction with the future of Macro – economic environment, which effect negatively on allocations decisions for supplies, also effects decisions on investment and development (IBRD, 2014). Macro – economic development appears in swings of main Macro – economic variables or un-continuous behavior of these variables. Literatures declare importance of studying Macro – economic variables, in estimating Macro – economic development, including GDP (In USD and fixed prices) beside average of inflation (Brian, 1998): So development average of individual's share of gross domestic product, (in USD and fixed prices), was used as indicator of economic development. Also inflation average was used as dependent variable (Hongyi and Zou, 2002). As inflation average is considered as economic development determinant (Brian, 1998).

The study also depends on composite index for economic development, based on Principal Component Analysis (PCA), the composite index includes both of natural logarithms for average of individual's share in gross domestic product and enrolling in primary education, natural growth of population logarithms average. Composite index for economic development and growth average of individual's share from gross domestic product are used, just to verify from precision and staidness of methodology that is used in the study.

Ministerial modifications is used a simple indicator that reflects a form of political instability. Two composite indicators were formed for political instability based on analysing main components, in order to form bigger collection of variables, in the form of linear interpolations that consist of smaller group of independent variables of linear interpolations (Dimitriou and Price, 2000). This Analytical technique mainly is based on, finding linear *synthesis between variables that are included in the indicator, and could include* variations in between, also may be transferred later into (factor scores)¹. Factor Scores represents weights that reflect relativity importance for each variable in forming the indicator².

Following evaluations indicates factor scores, related to composite index that are used to express political instability and economic development, whereas:

First: Composite index of political instability. (1)

0.35 no. of assassinations + 0.73 no. of ministerial modifications + 0.45 constitutional modifications + 0.41 no. of legislative elections + 0.63 no. of governmental crises + 0.39 no. of revolutions .

Second: Composite indicator of political instability (2)

0.19 no. of assassinations + 0.71 no. of ministerial modifications + 0.68 no. of constitutional modifications + 0.25 no. of riots + 0.35 no. of legislative elections + 0.69 no. of overthrows .

Third: Composite indicator of economic development:

-0.84 growth average of logarithm, individual's share from product + 0.07 investment rate to gross domestic product + 0.12 average of enrolling in primary education + 0.84 average of population growth.

Indicator of political instability reflects (1) sides of assassinations, ministerial and constitutional modifications, no. of legislative elections, and governmental crises and revolutions. Indicator of political instability (2) sides of assignments, ministerial and constitutional modifications, no. of legislative elections in addition to overthrows and riots.

¹ Stata Corp (2011), "Stata Release 12," Statistical Software, College Station, TX: StataCorp LP.

² To know more about this method read the study of Smith (2002). It is to be noted that Aisen And Veiga (2013), formed three indicators for instability of political system , and composite index of political instability

The study is based on methodology which is submitted by Aisen and Viega in work paper was published in European Journal of Political Economy (2013) to verify that political instability and regression of some other institutional variables negatively effect on the economic development. Both of the foresaid studies included measuring effects of politic stability on economic growth in a sample country from 169 countries, through applying standard model by analysing Dynamic Panel Data. The used methodology included verification of political instability negative effect assumption and other institutional variables on the economic development, based on Natural logarithm Dynamic Panel Data models estimate of average GDP per capita for about 132 countries during the period from (1959-2014), divided into equal intervals (Five Years) consequent and not nested. The study is based on Generalized Method of Moments in estimations of Dynamic Panel Data Regression, by STATA program and order xtabond2. Generalized method of moments is considered a methodology that is used to estimate the effects of political instability on economic development, to help solving problem of internal education related to variables .using tools of time values of political instability, the researcher calculates side effects of political stability on economic growth, independently from the Retrospective effect on economic development on political stability. Finally, it should be noted that eight models to estimate the effect of political instability on economic development were applied. The sixth models discussed the estimation of the effects of political instability on economic development. In this field we can use the (Augmented Solow Model), as a base of experimental model of economic development.

The model includes both of Initial income that can be estimated by the investment percentage to gross domestic product, average of population growth, human capital, as one of economic growth determinants (Enrique, 2009). The year included first six models that are used in studying the following variables as detailed ones (excluding reduced values of Natural logarithms for average of individual`s share in gross domestic product):

- Reduced values of Natural logarithms for average of individual`s share in gross domestic product. In USD dollars and fixed prices, literatures indicates that regression factor expected to be negative (Barro, 2013), which reflects data Approach. The conditioned approach indicates that the economic gap between countries with similar characteristics becomes narrower by time. This conditioned approach expresses the positive effect on economic development when reduced values of total actual GDP per capita (n fixed prices) are actually low
- Investment (Percentage of Gross Domestic Product): Regression factor supposed to be positive, when investment rate increased, averages of economic development is increased as well.
- Growth Average of population Natural logarithms: If we supposed that other factors are fixed, it is expected that increasing in average of population will be resulted in reducing average of individual`s share in gross domestic product, so regression factor will be negative.
- Amended Inflation: To avoid heteroskedasticity due to high variability in inflation rates, inflation calculation was amended to Log- Norm $(1 + \text{inflation}/100)$. Regression factor is expected to be negative, whereas literatures declare that increment in inflation is resulted in reducing averages of economic development (Barro, 2013).
- The first six models include legal structure indicator and protecting property rights as explained variable that reflects institutional sides, protecting property right helps, subjected to law, to achieve efficiency of markets work. When individuals and business men lose confidence in Implementing of contracts and protecting efforts of their productive activities, Motivations which push them to share in any productive activity will be reduced (Gwartney et.al, 2010).

First and forth model including ministerial modifications as variable that explain one of the sides of political instability, Second and fifth model including indicators of political instability (1), Third and Sixth model includes indicator of political instability (2). All signals of variables and indicators of political instability are expected to be negative. Fourth, fifth and sixth models are including governmental consumer spending (percentage of gross domestic Product), it is expected that large increment in governmental consumer spending results in competing the private sector, and effecting negatively on the economic development , so indicator of regression factor, is expected to be negative

Both of seventh and eighth models are aiming to estimate the effect of some political and institutional variables, on index indicator of economic development. a composite index for economic development was formed, based on Natural logarithms of the average GDP per capita and investment (percentage in the gross domestic product), and enrolling in the primary education, growth average of Natural logarithms of population. Reason that variable of enrolling in primary education has joined the economic development indicator, is that; most of literatures consider it one of the main determinants of economic development (Barro, 2003). Seventh and eighth model are including growth average of Natural logarithms of human capital indicator of person and government profile, as economic and institutional interpretive variables. Also number of legislative elections and ministerial modifications, constitutional modifications, modifications of executive authority, and revolutions, were used as interpretive variables in the seventh model; numbers of assassinations were added to them in the

eighth model.

Experimental model of economic development was formed, according to methodology that used in the studies of Aisen and Veiga (2013), as following:

$$\ln Y_{it} - \ln Y_{i,t-1} = \gamma \ln Y_{i,t-1} + \beta' X_{it} + \delta \text{PI}_{i,t} + \lambda' W_{it} + v_i + \mu_t + \varepsilon_{it} \quad (1)$$

$i = 1, \dots, N, \quad t = 1, \dots, T_i$

Whereas:

Y_{it} : Average GDP per capita of the country i in the end of period t

X_{it} : Direction of some economic variables that determines economic development.

$\text{PI}_{i,t}$: Proxy indicator of political instability.

W_{it} : Vectors of some political and institutional determinants of economic development.

$\gamma, \beta, \delta, \lambda$: parameters and vectors of model that will be estimated.

v_i : Country Specific Effect.

μ_t : Effects of time period .

ε_{it} : Wrong Limit.

Replacing $1 + \gamma = \alpha$, equation (1) will be as following:

$$\ln Y_{it} = \alpha \ln Y_{i,t-1} + \beta' X_{it} + \delta \text{PI}_{i,t} + \lambda' W_{it} + v_i + \mu_t + \varepsilon_{it} \quad (2)$$

$i = 1, \dots, N, \quad t = 1, \dots, T_i$

There are two ways to estimate dynamic model by equation no. (2), which are (Ordinary Least Squares) or (Generalized Method of Moments). In case of estimating dynamic, model in equation (2) by ordinary least squares, variable reduced values of sub-variable $Y_{i,t-1}$ will be determined endogenous, and this in case of fixed effects which is represented by v_i . This will result in assessment impartiality for using Dynamic Panel Data Models. So using Ordinary Least Squares will result incompatibility of the assessments of the model, whether in case of fixed effects or random effects because of relation between variable reduced values of sub – Variable $Y_{i,t-1}$ and Error limit ε_{it} . Even if values of Error limit were free from serial correlation. When available intervals T is big enough, the impartiality will become insignificant, that the problem totally disappear (Ruth and Owen, 1996). The models which are applied in the study include 11 periods of time, each of them cover 5 years Respectively, so problem of assessment impartiality still exist¹. Applying equation first difference for equation (2) is preferred to overcome foresaid problem, and get rid of negative effects of countries, which will solve assessment impartiality. Using not strictly exogenous variables will be determined endogenous, whereas first exogenous variables will be related to error limit. So (Generalized Method of Moments) – the way used to estimate Dynamic Panel Data Models – submit solution for previous problem, through using predetermined variables, first differential was calculated as helping variables, based on reduced values of internal values and sub values within two periods or more, and is determined for predetermined variables within one interval or more, external variables also can be used as helping variables.

Efficiency of (Generalized Method of Moments) can be increased through entering equation of original levels (before calculating first differential) in the model. if interpretive variable isn't related with individual effects, reduced value of first differentials could be used as assisting variables, this in case of equation of original levels .most of Literatures and approved studies based on (Generalized Method of Moments), are using intervals which are divided into equal and respectively intervals and not mixed.

To this regard, the study depends on issuing Dynamic Panel Data Models using (Generalized Method of Moments) for about 132 countries ,during the period from (1959- 2014) after dividing them into equal intervals respectively and not mixed .Interpretive Variables are used as internal variables. The study is using reduced values for consequent two intervals for these variables, as instruments in equations of first differential, in addition to using first differential that reducing these variables in levels equation.

4. Results of the study :

This section started with describing the data used in the study to detect any statistical problem before the primary analysis (Table3). This table discusses the results of the political instability effect on the economic development, by introducing observations number, average, variance, minimum value and maximum value of the study variables. By applying eight models of Dynamic panel data models, based on Generalized Method of Moments for about 132 countries, which their data are available during the period from (1959-2014), and divided into equal intervals (Five Years) Sequence and not nested.

First, Second and third models: Results of estimating the political instability effect on growth (as percentage of Gross Domestic Product) indicate that investment legal structure, and protection of property rights, have positive impact on economic growth, confirming the importance of protecting private property rights in the

¹ Literatures confirm that impartiality reaches 20 %, when value of T is reduced from 30.

frame of rule of law . Results set out in table (4), show that reduced values of Natural logarithms for average GDP per capita (initial Income), average Natural logarithms growth for population and rate of inflation, and have adverse moral effect on economic development.

Results of the **first model** show that, ministerial changes, (As indicator of political instability) have adverse moral effect on economic growth. When a new prime minister is appointed, or 50% of new ministerial positions are occupied with new ministers within a year, Growth average of GDP per capita is reduced with about 1.39 percentage point.

Table (4) shows that, ministerial modifications are the highest in political variables, concerning negative effect on Growth rate of GDP per capita. Assessments of **second model** reflect negative moral effect of assassinations, constitutional and ministerial modifications, number of legal elections, governmental crises, and revolutions on economic growth. When value of political instability indicator is increased (1) of one percent, Growth rate of GDP per capita is decreased by about 0.5 percent point. Third model shows that the one point increment in political instability indicator (2) – which include assassinations, ministerial and constitutional changes, riot, number of legislative elections and overthrows – is resulted in reducing, Growth average of GDP per capita with about 0.8 percentage point¹.

Table (3): Descriptive statistics of some variables used in analysis

Variable	observations number	Average	Variance	Minimum value	Maximum value
Natural logarithm growth rate to the average individual share from the Gross Domestic Product	1461	0.019	0.035	0.310-	0.235
Natural logarithm to the average individual share from the Gross Domestic Product	1655	7.923	1.620	4.449	11.899
Investment (a percentage in the gross domestic product)	1118	0.227	0.094	0.008	0.957
Governmental consumption expenditure (a percentage in the gross domestic product)	1133	0.161	0.068	0.013	0.479
Natural logarithm growth rate of the population	2070	0.093	0.077	0.221-	0.808
Adjusted inflation [natural logarithm (1+inflation/100)]	1395	0.133	0.312	0.167-	4.007
Natural logarithm to the human capital index per individual	1209	0.701	0.309	0.025	1.279
Enrollment in primary education	1595	34.471	18.437	0.500	89.805
Cabinet Reshuffles	1568	0.443	0.367	0.000	3.000
Political instability index (1)	1547	0.020-	0.838	1.011-	4.696
Political instability index (2)	1547	0.000	0.805	0.862-	6.630
Government size	1066	5.783	1.538	1.324	9.700
Legal structure and protection of patent rights ⁷	953	5.448	1.780	1.340	9.396
Legislative elections	1569	0.217	0.148	0.000	1.000
Assassinations	1757	0.169	0.654	0.000	10.400
Constitutional modifications	1575	0.106	0.190	0.000	1.000
Executive Power changes	1575	0.194	0.287	0.000	2.500
Demonstrations	1757	0.544	1.528	0.000	25.000
Economic stability index	931	0.000	1.199	2.765-	4.710

Sources: Researchers calculations depending on the world development index data base, International Bank.

Table (5) includes the assessments resulted from adding Government consumption expenditure (As percentage of Gross Domestic Product) to interpretive variables of previous three models. Results of Fourth, Fifth and sixth models show that although negative correlation between governmental consumption and Growth rate of GDP per capita , but it is significant . Results of fourth, fifth and sixth model confirm the assumption that political instability and regression of other institutional variables, effect negatively on economic development, based on three models, ministerial modifications is the highest in effecting negatively on Growth rate of GDP

¹ According to Data base CTNs – Egypt faced just one over through within the period (1959 – 2014), just one overthrow in 1961, which resulted in breakdown of United Arab Republic or what is known as Egyptian Syrian unit.

per capita , followed with the indicator of political stability (2).

Table (4): Assessments of the political instability, investment, and population and inflation indicators effect on the natural logarithm growth rate to the average GDP per capita

Variable	Morale Level		
	First Model	Second Model	Third Model
Values decelerating the Natural logarithm growth rate to the average individual share from the Gross Domestic Product	0.0095- *** (3.04-)	0.0087- ** (2.40-)	0.0092- *** (2.76-)
Investment (a percentage in the gross domestic product)	0.1687 *** (4.06)	0.1558 *** (3.57)	0.1499 *** (3.34)
Natural logarithm growth rate of the population	0.2937- *** (3.97-)	0.2925- *** (3.75-)	0.2751- *** (3.60-)
Adjusted inflation [Natural Logarithm (1+inflation/100)]	0.0138- * (1.72-)	0.0153- * (1.88-)	0.0144- * (1.86-)
Cabinet Reshuffles	0.0139- * (1.68-)		
Political instability index (1)		0.0051- * (1.66-)	
Political instability index (2)			0.0080- ** (2.22-)
Legal structure and protection of patent rights	0.0047 ** (1.99)	0.0044 * (1.93)	0.0046 ** (2.05)
Observations number	594	594	594
Countries number	132	132	132
Hansen Examination (Probability Value)	0.216	0.251	0.236
AR1 Examination (Probability Value)	0.000	0.000	0.000
AR2 Examination (Probability Value)	0.171	0.112	0.071

Source: Researchers' calculations

Remarks: The assessments of Generalized method of moments to the dynamic sectional time series samples during the period from (1959 – 2014). The interpretation modifications were used as interior modifications. Two decelerating values were used for the two periods of variations as variable instruments in the first difference equations in addition to the use of the first differences decelerating these variations in levels equation. ³ Two-step results using robust standards errors corrected for finite samples, in accordance with (Windemeijer's, 2005). ⁴ The brackets include statistics (t-statistics). The moral level in which the counter assumption is done is *** 1% and **5% and *10%.

Seventh and eighth model in table(6) of private results, show the forming of composite index for economic development, which include both of Growth average of GDP per capita and investment rate to gross domestic product, average of enrolling in education, average of population growth and used in the model as sub –Variable. The results show the consistence of negative effect of growth average of human capital on economic development, beside negative effect for both of executive authority modifications, and revolutions on economic development. In spite of negative effect for number of legal elections on economic development, nevertheless this effect is significant. Signs of other assessed signs for the rest of dependent variables didn't conform with assumption of negative effect for political instability on economic development, although the effect of the assassinations and constitutional modifications.

Table (5) : Assessments of the political instability, investment, population and inflation indicators effect on the natural logarithm growth rate to the average GDP per capita

Variable	Morale Level		
	First Model	Second Model	Third Model
Values decelerating the Natural logarithm growth rate to the average individual share from the Gross Domestic Product	0.0095- *** (3.04-)	0.0087- ** (2.40-)	0.0092- *** (2.76-)
Investment (a percentage in the gross domestic product)	0.1687 *** (4.06)	0.1558 *** (3.57)	0.1499 *** (3.34)
Natural logarithm growth rate of the population	0.2937- *** (3.97-)	0.2925- *** (3.75-)	0.2751- *** (3.60-)
Adjusted inflation [Natural Logarithm (1+inflation/100)]	0.0138- * (1.72-)	0.0153- * (1.88-)	0.0144- * (1.86-)
Cabinet Reshuffles	0.0139- * (1.68-)		
Political instability index (1)		0.0051- * (1.66-)	
Political instability index (2)			0.0080- ** (2.22-)
Legal structure and protection of patent rights	0.0047 ** (1.99)	0.0044 * (1.93)	0.0046 ** (2.05)
Observations number	594	594	594
Countries number	132	132	132
Hansen Examination (Probability Value)	0.216	0.251	0.236
AR1 Examination (Probability Value)	0.000	0.000	0.000
AR2 Examination (Probability Value)	0.171	0.112	0.071

Source: Researchers' calculations

Remarks: ¹ The assessments of Generalized method of moments to the dynamic sectional time series samples during the period from (1958 – 2012). ² The interpretation modifications were used as interior modifications. Two decelerating values were used for the two periods of variations as variable instruments in the first difference equations in addition to the use of the first differences decelerating these variations in levels equation. ³ Two-step results using robust standards errors corrected for finite samples, in accordance with (Windemeijer's 2005). ⁴ The brackets include statistics (t-statistics). The moral level in which the counter assumption is done is *** 1% and **5% and *10%.

It is to be noted that, consistence of the results of the study with literatures and previous applicable studies, whether indicators used in expressing the meaning of political instability are used, in the form of single variables or composite indicators . Same result is applied in case of measuring the effect according to one variable (Average of individual's share if gross domestic product) as indicator for economic development, or using index to explain economic development. Using composite index cover dimensions of most used expressions.

Table (6): Assessments of political instability variables effect on composite Economic stability index

Variable	Moral level			
	Seventh model		Eighth Model	
Independent variable: the composed economic development index				
Dependent variables:				
Natural logarithm growth rate to the human capital index per individual	42.466 (2.97)	***	40.398 (2.83)	***
Legislative elections	0.690- (1.12-)		0.937- (1.31-)	
Assassinations	0.023 (0.32)			
Cabinet reshuffles	0.650 (1.56)		0.518 (1.54)	
Constitutional modifications	1.804 (3.11)	***	1.901 (2.90)	***
Executive Power changes	1.708- (2.60-)	***	1.478- (2.35-)	**
Demonstrations	0.081- (2.07-)	**	0.087- (2.24-)	**
Government size index	0.274 (3.94)	***	0.268 (4.18)	***
Observations number	636		636	
Countries number	116		116	
Hansen Examination (Probability Value)	0.907		0.664	
AR1 Examination (Probability Value)	0.004		0.005	
AR2 Examination (Probability Value)	0.046		0.060	

Source: Researchers' calculations

Remarks: ¹ The assessment of Generalized method of moments to the dynamic sectional time series samples during the period from (1958 - 2012). ² The interpretation modifications were used as internal modifications. Two decelerating values were used for the two periods of variation as variables instruments in the first difference equation in addition to the use of the first differences decelerating these variations in levels equation. ³ Two-step results using robust standards errors corrected for finite samples, in accordance with (Windemeijer's 2005). ⁴ The brackets include statistics (t-statistics). The moral level in which the counter assumption is done is ***1% and **5% and *10%. ⁵ The Subsidiary variable was composed using the essential components analysis of the Natural logarithm growth rate to the average GDP per capita, the investment percentage in the Gross Domestic Product, the Enrollment in primary education and the Natural logarithm growth rate of the population.

In summary, the study shows negative effect of political instability on economic development on short term. This is clear in foreign investment flows decrease in Egypt from about \$11 billion during fiscal year 2009/2010 to about \$9.6 billion in 2012/2013, according to estimates of Egyptian Central Bank. Despite of decrease in subsidies, grants and social allowance about 18.9 % in 2009/2010 compared with previous year, the revolution year and successive years experienced increase of amounts allocated for subsidies, grants and social allowances for about 19.6% , 22% and 31.2% during 2010-2011, 2011-2012 and 2012-2013 respectively. Due to unstable political status, successive governments during and after January 25, 2011 were not able to adopt necessary policies to save subsidies and granting them to deserved. Gross deficit rate of the country general budget was about 13.7 % in 2012-2013 comparing to 8.1% in 2009-2010. Net of local debt as percentage of GDP increased to be 67.9% in 2012-2013 comparing to 49.7 % in 2009-2010. Data of Ministry of Finance indicates increasing of general external debt to be \$43.23 billion by the end of 2012-2013 to record its percentage to GDP about 17.3% comparing to about 15.9% in 2009-2010. These percentages reflected on unemployment increase recorded about 13.4% in 2013 as per data of Central Agency for Public Mobilization and Statistics

Results of study shows that by applying panel data models approved on general method of moments show that during (1959-2014), ministerial changes and the two composite indexes of political instability had negative moral impact on economic development. By appointing a new prime minister and /or occupying 50% of ministerial positions by new ministers within one year, reduction of GDP per capita of 1.39% was resulted. Study results also showed importance of promoting legal structure and protection of ownership rights to boost economic growth.

5. Conclusion

Egypt witnessed recently many political successive events such as the prominent event the twenty fifth of January 2011 revolution, cease of 1971 constitution application, constitutional declaration on the thirtieth of March 2011, followed by declaration of a new constitution by the end of 2012, cease of such constitution application on the third of July 2013. From January 2011 to June 2013, four prime ministers took position.

Successive political events occurred in parallel with most of economic indexes recession, such as economic growth, average of individual's share of GDP. Employment rates increased about 13.4% in 2013. Flows of direct foreign investment in Egypt reduced, Egyptian stock market stopped working for more than 39 successive sessions, in addition to significant losses incurred, gross deficit of the country's general budget and external debt increased as percentages of Gross domestic product. According to Ministry of Finance states that rates of net local debt increased comparing to GDP to record 67.9% in 2012/2013.

Numerous world databases were used to form sample of 132 countries which include development indexes data in world issued by World Bank. Data estimated by (Barro and Lee 2013), (Penn World Table version 8), database of economic freedom, CNTs database, to form a database of comprehensive cover for economic, political and institutional changes. To estimate political instability, the study depended on many ministerial changes as an indicator reflects one side of political instability, calculation of two complex indicators for political instability based on analysing the main components. First political instability indicator included assassination changes, number of ministerial and constitutional changes, number of legal elections, governmental crises and demonstrations. Political instability index guarantees assassinations, many ministerial and constitutional changes, riots, number of legal elections and coups.

The study used rate of average GDP per capita supported by fixed prices and dollar as an indicator for economic development. In addition to some other indicators of economic development such as: investment percentage comparing to GDP, governmental consumption expenditures as portion of GDP and rate of population growth. To analyse impact of each parameter of different changes for political instability- without integrating them in one complex index- on economic development, a complex index for economic development was estimated to include average of GDP per capita and investment percentage comparing with GDP and population growth rate and joining the primarily education.

Impact of each single parameter for political instability was tested through the estimated standard form. Results of the study confirm presumption of passive impact for political instability and recession of other political indexes on economic development. For example, removing of a prime minister and/ or occupying of 50% of ministerial positions by number of new ministers within in the same year lead to reduction of GDP per capita OF 1.39 %. Moreover, the results refer to importance of private ownership protection under law as a result of positive impact of legal structure index and protection of ownership rights on development. The results also show that changing of executive authority and demonstrations have negative impact on economic development.

Finally, the study is recommending providing some mechanisms to achieve political and economic stability, which are followed by promoting development. Among these mechanisms is role performed by labour syndicates to form general politics through syndicate freedom laws, effecting of social conversation channels between workers, employers and government, besides, directing of economic policies to achieve embrasive growth. Suggested mechanisms include also stability of charged government through promoting trust between the government and citizen through political and administrative reforms, applying of institutions governance, improving of social security networks to avoid passive implications of some economic policies.

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