Effects of Privatization on Economic Growth in the MENA Countries over the Period 1999-2014

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Abstract
The transference of economic activities to the private sector and the government withdrawal of its economic activities are introduced as dominant solutions to today's economic problems and growth in countries, over the past two decades. This strategy -which takes place in order to return the government activities to the private sector known as privatization- can make fundamental changes in behavior and nature of the economic activities. Unlikely to the previous studies, which have been extremely done so far regarding the effects of privatization but in micro scale there are still few studies regarding the practical experiences of the privatization in different countries, in macro scale.This researchdemonstrates the effects of privatization on economic growth with controlling of critical Levine and Renelt (1992) growth models, as well as, empirical findings from previous studies, about MENA countries, for the period between 1999-2014 and by using of the FGLS method.
The results show that the impact of private sector on economic growth has been negative.
Keywords: Privatization, Economic Growth, MENA Countries, Levine and Renelt (1992) Growth Model
JEL Classification: O53, O40 ,C33.

Introduction
Locating on the pathof economic growth and development has been always one of the main concerns for developing countries, because to promote level of life, economic and social indicators should be improved, and this is not possible but in the light of economic development. On the other hand, different strategies exist to achieve economic growth that

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to select one of them as a development strategy, for each of them, abilities, weaknesses and areas required and the economic capabilities of each country in implementing it should be well considered to adopt a policy that is more in harmony with the requirements of society (Razvi et al., 2011:137-162). One of the policies is to implement privatization programs of state-owned enterprises by authorities and statesmen. In other words, in addition to privatization of state-owned enterprises will be considered as a foundation necessary for economic growth and development, it will be also considered a meansto change the structure of the economy, the role of private enterprises and increasing competition (Razavi,2004:15-22).Therefore, the study tested the hypothesis that if privatization has a positive impact on economic growth in the MENA countries in the period under consideration. The study is applied in terms ofpurpose and is descriptive-causal in terms of method. In this study, the paneldata of MENA countrieshas been used over the period (1999-2014). The data for this study are taken from the World Bank. It should be noted that the analysis tools in this study are STATA12 and EXCEL 2010.

Theoretical Framework

Theoretical principles concerning privatization in the economy are associated with the following three theoretical principles: Property rights theory, Principal-agent theory, and Public choice theory. The main assumption of privatization theories is that the free forces of market increase the efficiency of a firm.

Property rights theory states that people should respect the allocation of resources in social and economic relations. Owners of companies should address the losses they cause to others against the profit they gain (Starr, 1988). In fact, property rights establish a claim for its personal owners concerning the properties of a private company (Hanke, 1987). It can be said that since managers of public companies have no right to claim for the company's revenues, their managerial efficiency is lower than that of private companies due to lack of any motivation (Megginson, 2005). Alchian believes that public companies are essentially inefficient because their owners (i.e., citizens) who are scattered have no motive to supervise on the performance of mangers of those companies (Alchian,1965).

In the Public Choice Theory it is assumed that the internal motives of individuals make them seek reasonable maximization of desirability whether in the market or in the policy (Hodge, 2000; Abu Shair, 1997).

One of the characteristics of such companies is the execution of public companies' rules which is imposed on managers. This can be contradictory to the efficiency of such companies. Basically, politicians disturb the activities of public companies. They mostly encourage efficiency in those companies to gain votes (Buchanan, 1972).

As for the public choice theory, in the principal-agent theory it is also assumed that managers of both public and private companies seek to maximize the desirability of the owners of companies. But the point which makes a difference between private and public companies is that moral hazard and adverse selection are less likely in the private companies. External mechanisms (corruption control) and internal mechanisms (motivating the board of directors) are used to minimize such problems (Cuervo and Villalonga, 2000).

Shleifer (1988) believes that higher motivation of private managers towards innovation leads to higher efficiency of most private firms as compared to public firms. Agency theories show that since private firms have clear objectives, it is easier for its owners to audit managers' performance (Vickers and Yarrow, 1998; Dharwadkar et al, 2000) and that managers perform better in private companies than in public companies. Therefore, privatization theories are

based on the fact that public companies are inefficient because of their high exchange costs – the costs for protection and execution of ownership and goods right.

Ultimately, it can be said that privatization is the result of expecting the betterment of firms' activities by changing mechanisms the effect on the motivation of managers through institutional differences (Laffont and Tirole, 1991).

Plane (1997) and Barnett (2000) came to the conclusion that privatization had positive and significant effects on economic growth. This is while Filipovice (2005) and Cook and Uchida (2003) drew opposite results. Besides the effects of privatization and economic growth, Barnett (2000) also investigated the relation between privatization and economic and financial modifications for 18 countries out of which 12 were developing countries. He showed that privatization was relevant to macroeconomic modifications that would be fulfilled by a higher economic growth and lower unemployment. Gupta et al. (1999) reviewed various methods of privatization in the transition economies and reported that privatization promotes economic efficiency and growth. Zinnes et al. (2001) make the same argument in their analysis of the impact of privatization on economic growth in the transition economies of Eastern Europe. They report that change of ownership is not enough to ensure the success of privatization. More important, Zinnes et al.'s (2001) report that the mere change of ownership from the public to private sector may have a negative impact on transitional economies.

The study concludes that only when there is deep privatization that improved performance could be assured (Samuel adams, 2006).

There are many theoretical economic benefits that are connected to the process of privatization. One of the main reasons why countries pursue privatization is in order to reduce the size of the existing government, based on the idea that many governments have become too large and overextended, consisting of unnecessary layers of bureaucracy. Therefore, many countries require restructuring in order to improve efficiency, which can be achieved through privatization. The private sector responds to incentives in the market, while the public sector often has non-economic goals. In other words, the public sector is not highly motivated to maximize production and allocate resources effectively, causing the government to run high-cost, low-income enterprises. Privatization directly shifts the focus from political goals to economic goals, which leads to development of the market economy (Poole, 1996). The downsizing aspect of privatization is an important one since bad government policies and government corruption can play a large, negative role in economic growth (Easterly, 2001). By privatizing, the role of the government in the economy is reduced, thus there is less chance for the government to negatively impact the economy (Poole, 1996).

Privatization can have a positive secondary effect on a country's fiscal situation. As Easterly discusses, privatization should not be used to finance new government expenditures and pay off future debts. Instead, privatization enables countries to pay a portion of their existing debt, thus reducing interest rates and raising the level of investment. By reducing the size of the public sector, the government reduces total expenditure and begins collecting taxes on all the businesses that are now privatized. This process can help bring an end to a vicious cycle of over-borrowing and continuous increase of the national debt4 (Poole, 1996).

Along with creating incentives, privatization gives ownership to a larger percentage of the population. Given the level of established property rights, individuals become more motivated and driven to work on and invest in their property since they are directly compensated for their efforts. Therefore, privatization will cause an increase in investment for yet another reason (Poole, 1996). Furthermore, state ownership leads to crowding-out of

investment from the private sector. In order to retain a monopoly in a particular industry, state enterprises prevent the private sector from getting to credit (Cook and Uchida, 2003). Additionally, privatization leads to an increase in foreign direct investment which can potentially play a significant factor in the quest for growth. Foreign investment has "positive spillovers of improved technology, better management skills, and access to international production networks" (World Bank, 2002). Easterly stresses the importance of the possible benefits from technological improvements as well as the spillover effect created from new innovations. In fact, Easterly presents the theory and examples of how underdeveloped countries might have an advantage over developed countries when it comes to new technology. He points out the possibility that underdeveloped countries have less invested in old technology, and are therefore more willing to invest in new technology5. Thus, foreign direct investment could potentially have multiple positive effects on the growth of underdeveloped countries.

Methodology

There does not exist a consensus theoretical framework to guide empirical work on growth, and existing models do not completely specify the variables that should be held constant while conducting statistical inference on the relationship between growth and the variables of primary interest. This has produced a diverse and sometimes unwieldy literature, in which few studies control for the variables analyzed by other researchers.

Variables used in this study were selected based on previous studies experimental findings and theoretical discussions, as well as study byLevine and Renelt(Levine and Renelt, 1992 Pp.942-963). Theyshowed variables which impact on economic growth has been proved by many researchers with Z and variables that are usually used in most regressions with I and different parameters than can be acceptable index to describe interest rates with M. In other words, the researchers in this studyanalyzed and studied the sensitivity of a large number of variables that a vast set of growth studies is focused on them, such as macroeconomic variables (such as investment), political variables (such as revolutions, coups and civil liberties), fiscal policy variables (such as government spending and tax revenues), monetary policy variables (such as money supply growth rate and standard deviation of inflation) and trade variables (such as openness and black market exchange rates) on economic growth, and the distinction between Z and I is due to the above reason. In this study, researchers ignored the classification of previous theoretical studies and to evaluate the effectiveness have used a variety of economic variables in the cross-country growth regressions. According to Levin and Renelt, more than 50 variables are found in at least one regression that are significantly correlated with the economic growth. They used regression equation using cross-country data and using data of 119 countries in the period of 1960-1989 by entering the independent and linear explanatory variables:

$$Y= a_1 I + a_2 M + a_3 Z + u \quad (1)$$

In general, the desired model in this study includethe standard variables that were used in some previous studies and application developmentliterature. In this study, according to Filipovic studies (2005) and some variables effective in the development model of Levine and Renelt (1992), a regression model is generally considered as following:

$$Y= c_1 B + c_2 GDPI + c_3 POP + c_4 GOVC + c_5 SAVE + c_6 EDUC + c_7 INF + c_8 GOVB + c_9 DEBT + c_{10} PRIV + c_1 REEXCHRATE + U \quad (2)$$

Table 1: Definition of variables

GDP	Gross domestic Product
GDPI	Gross domestic Product in the first year of the period under review (1999)
POP	Population growth rate
GOVC	ratio of government consumption to GDP
SAVE	Share of savings to GDP
EDUC	Enrollment rates in high school
INFL	Inflation of consumer prices
GOVB	total national debt as a percentage of GDP in
DEBT	Central government debt relative to GDP
PRIV	Share of proceeds from privatization to GDP
REEXCHRATE	Real exchange rate

Findings

Mena region includes the major producing countries located in the Middle East and North Africa. The region consists of 60% of oil and 45% of gas resources in theworld and is considered as the oldest areas of oil recovery in the world. However, on the one hand, oil reserves of countries in this region has been reduced more than other parts of the world and wear of drilling equipment and oil extraction isalso more pronounced and on the other hand, given the high dependence of the economy in this regionon oil and being affected bythe global economy has made this study to examine the status of the private sector in these regions.
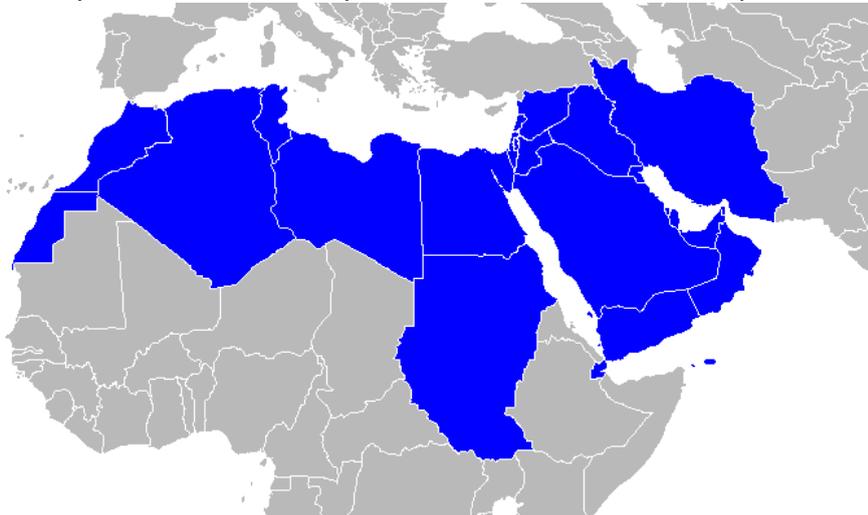
Figure 1: Map of MENA region

As stated in stipulating model, the study has used variables including inflation, education, government debt, government costs and savings, population, gross domestic product in 1999 and the exchange rate as the control variable and privatization variable as explanatory variable that in the following, the result of the model is estimated. Table 2 shows a final software report of the estimates. It should be noted that the estimate is obtained after the related tests.

Table 2: Results of estimation by FGLS

dependent variable	GPD										Wald statistic
Explanatory variables	INFL	GOVB	EDUC	debt	GOVC	SAVE	POP	LOGGDPI	Reexchrate	priv	
Coefficient	0.205	0.007	0.132	0.015	0.573	0.426	-1.61	0.425	0.242	-0.02	354.88
SD	(0.152)	(0.063)	***(0.043)	** (0.007)	(0.358)	***(0.075)	***(0.184)	(0.239)	** (0.07)	(0.022)	(00.0)

Findings resource - numbers in parentheses indicate the standard deviation.

* Significance at 10% level

** Significance at5% level

*** Significance at 1% level

Privatization aiming at increasing economic efficiency and growth is one of the issues of interest for policy makers and economists in recent decades. But this doesn't seem very significant according to the results estimated about the MENA countries and has not found its place. Because, this insignificance is developed as most of these countries rely on their natural resources and having good economic growth and spending it on non-productive sectors and lack of attention to the country's development by the private sector and the lack of its empowerment and about its negative relationship, Cook and Yuichiro(2003) show that it is due to a lack of reform in government regulations.

In 1992, Mankiw, David Romer and David Weil suggested that if human capital is entered into the Solow model, it will be consistent with experimental evidence. By human capital, they mean education, training and differentskills. In this study, the variable "percent of people enrolled in high school" is used for an indicator of human capital. As shown in Table 2, the estimation results suggest that variable at the significance level of 1% has a positive effect on economic growth. The results show that the variable has a positive effect on economic growthin 1% significance level.

There are two approaches in relation to population: first a negative attitude, second a positive attitude. According to neoclassical theory, increasing population growth rate will reduce the per capita rate. In this theory, population growth determines the growth of the systemexogenously. In Solow theory, presence of a positive growth rate for the population is essential to explain the process of economic growth, but once the economic system determined its growth path based on an exogenous rate of population growth, any increase in the rate of population growth (compared to the previous rate) will determine less per capita capital and GDP per capita for the economy and according to the golden rule theory (Phelps) and utility golden rule (Cass, Koopmans), increased population growth increased economic growth. According to the above,it is according to neoclassical theory, and by increasing population it significantly affect the reduction of growth rate of economic per capita.

In theories of economic growth, it is often argued that the more the level of savings in the countryis increased, it means more supply of capital resourceswhich increases the availability of capital resources for investors and economic activists and facilitates the investment process.The natural result of this trend is increasing the level of investment in the country that will enhance the production and economic growth. This is also true in relation to the

MENA countries and by increasing savings, per capita growth has increasedin the significance level of 1%.

There are two major views on the economic effects of the budget deficit. Traditional view and the view of Ricardian equivalence theory fans. Ricardo believed that increasing the budget deficit is due to increased government spending, which, however, should be paid now or later.So,reducing taxes caused by policy of budget deficit has no effect on consumption and savings and through this, other economic variables such as economic growth will be left unchanged, while supporters of the traditional view believe that consumers thought that current tax cut that caused budget deficit and are financed through loan will increase their income; but consumers are myopic and don't fully understand the concept of a budget deficit and do not properly analyze it; because they believe that future taxes have no impact ontheir current consumption. Therefore, they increase their consumption and as a result, their savings will be reducedand thereby, it affectsthe economic growth. So, the relationship between budget deficit and economic growth in the MENA countries followed the traditional view and at a significance level of 5% has a positive significant effect on economic growth.

MENA member states that oftenhave a monoculture oil economic are more influenced by external factors' changes. One of these factors is the real exchange rate .What has been reported in the results indicates a positive impact on economic growth. So that by increasing the real exchange rate and consequently an increase in the price of oil exports, economic growth rates will be significantly increased (at 5% significance level).

What is shown in Table 2 is insignificance of effectiveness of the costs andstate budget balance along with inflation in none of significance levels on economic growth.

Conclusions

Privatization is the method of displacing assets and functions from public to private sector and it seems thatit has a major role in economic growth based on the capability of the individuals. Today, privatization is issued by many different political systems and is distributed in every region of the world. Privatization process can be an effective way to make fundamental change in formal structure and establishing property rights. Free market economy is well-defined to a large extent on property rights. In this regard, Hernando de Soto says modern market economy develops the growth due to massive formal property rights, low-costexchange, specialized force training and more productivity.

Nevertheless, this study examined the effects and impact of the private sector on the economic growth rate. The results show that the impact of private sector on economic growth has been negative. This may be due to a lack of reform in rules and not empowering the private sector. It should also be noted that the effect has no significant impact on economic growth in none of the significance levels, indicating the lack of a proper place for the private sector in the MENA countries.

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