

Political development and tax revenues: Evidence from selected countries of Middle East

Parvaneh Salatin, Sahar Eslambolchi

Department of Economics, Azad University of Firoozkooh, Firoozkooh, Iran

Received for publication: 12 August 2013.

Accepted for publication: 07 October 2013.

Abstract

This paper investigated the impact of political developments (civil liberties index and political rights index) on tax revenues index (ratio of total tax revenues in real GDP) in some selected countries of Middle East for the period of 1990-2010. Results of hypothesis testing with generalized method of moments (GMM) in selected countries of Middle East between 1990 and 2010 indicated that Political development (civil liberties index and political rights index) had significant effect on the ratio of total tax revenue on real GDP.

Keywords: civil liberties index, political rights index, tax revenues, GMM.

Introduction

In essence, “Political development” is defined as increase capacity and efficiency of a political regime to do:

- Essential changes in the socio-economical structure of the society.
- Efforts in resolving individual and communal contradiction/ conflicts.
- Popular and democratic state framework.
- Democratic and basic social changes in the society.

In other words, political development is a prerequisite for achieving progress; relieve poverty and colonialism, structural reforms and improving the social and industrial sectors. Finally, it is a movement of previous unfavorable condition to better

condition for all. Political development is in direct relation with political participation culture, agitation and communication.

In this respect, various indexes are utilized to monitor political development; such as: “civil liberties” and” political rights”.

Civil liberties is the right of the individual to personal freedom, acquire property, Right to worship or religious rights, and freedom of expression. This concept is protected by the law, against interferences from the governments or any other such third parties.

Political rights are monitored as per the three paradigms: electoral process, political pluralism and participation, and functioning of government. Civil liberties are monitored as per four paradigms: freedom of expression and belief, associational and organizational rights, rule of law, and personal autonomy and individual rights. These aspects of political development are reported by the “Freedom House”.

Thus, the main purpose of this paper shall be analyze and measure the amount of impact, political development has on the tax revenues (with emphasis on the political rights and civil liberties index) in selected Middle East countries¹ between 1990 and 2010. For the following hypothesis test, the dynamic panel and generalized method of moments (GMM) has been adopted.

¹ Group of selected countries of the Middle East: Afghanistan, Armenia, Azerbaijan, Bahrain, Egypt, Georgia, Iran, Jordan, Kazakhstan, Kuwait, Lebanon, Qatar, Sudan, Syria, Turkey, Yemen, United Arab Emirates and Oman.

Corresponding author: Sahar Eslambolchi, Department of Economics, Azad University of Firoozkooh, Firoozkooh, Iran. E-mail: sahar.eslambolchi@gmail.com

- The relationship between political development (political development index and civil liberties Index) and Tax revenue is significant

Collected data in this paper are extracted from the statistics reported by The World Bank and Freedom House. Once, the theoretical basis and history of the report are discussed, the Model adopted is estimated by E-Views 6 and finally, Suggested political policy will be introduced.

Literature review

Recent revolutionary movements in the Middle East, called “Arab Spring” have highlighted the importance of the political rights and civil liberties and the elimination of dictatorship. Most Middle Eastern countries are oil rich states owned oil industry and the tax revenue plays a minor part in the state’s overall income.

Therefore, taxation is for some, non-existent or poorly practiced. Furthermore, oil rich states, does not consider accountability a virtue of the modern governance and in most cases, is not dependent on public taxation. Due to undemocratic state of the rulers, public expenditure of the so called natural resources is not under the scrutiny of any government or civil organizations and consequently prone to wide-spread corruption and injustice.

On the other hand, the public who do not contribute to the state funds “financial affairs” will not expect any accountability from the state, either. This mutated social structure, has contributed to the development of dictatorships in the Middle East.

Recently, modern democratic states are elected by the votes of the public voters, from among few candidates of different political parties. These candidates, are dependent on the public votes, therefore they will have to present some sort of guarantees to the demands of their constituency. For that promise to materialize, they will need a sufficient amount of Tax revenues. Vice versa, the public will expect responsibility and accountability from their elected representatives. This is in return for their vote and trust.

Some research findings show that substantial part of public spending depends on regime politics (democratic) model and interact with the distribution of income, the preferences of citizens and economic conditions (Boix,2003). Also, there are a significant relationship between the extension of voting rights and the size of government (Aidt *et al*, 2006).

Also, most research has shown that there was a

U-shaped relationship between democracy and the level of public spending (Every one of public expenditure measures includes government expenditures, education costs and social costs as a percentage of GDP) in democratic and non-democratic countries which respectively have the large and small states (Mulligan et al. 2004, Pi mper and Martin,2003). They argue that for low levels of democracy public spending is high to meet the requests of rents by the elites, while for high levels of democracy public spending is high due to popular demand of public goods.

Musgrave (1969) in his classical predictions stated that compared to democracies countries, autocratic states which directly control the economy and in particular the wage level, tax mechanism rather than relying on individual taxes sources of income relies on corporation tax. For describing this system, it is argued that the mature democracy is the result of greater reliance on income sources such as voluntary personal tax income.

Thus, the repressive governments cannot rely on this type of income sources, they were required to manufacturers and companies voluntarily cooperate in the tax on production or trade.

In democratic countries, the priority is on voluntary payments and the governments are based on personal income tax. But the undemocratic countries and at low levels of democracy, suppression has reduced the willingness of citizens to pay tax on individual income, As a result, property and trade tax as the only source of income remains for undemocratic governments.

Herb (2003) expresses that rentier states don’t need to their citizens tax and crucial link between citizens and their governments. Thus cannot be seen breaking a dimming the prospects for democracy. He pays particular attention to the possibility that there are both positive and negative effects of rentierism on democracy by using a cross-regional dataset, between 1972 and 2000. He does not find consistent support for the notion that there is a net negative effect of rentierism on the prospects that a country will be democratic. He finds that democracy scores in the surrounding region are strongly correlated with a country’s own democracy score.

Micheal L.Ross (2004), is expressed that taxation led to government representation in the past, Representative government first came about in early modern Europe when monarchs were compelled to relinquish some of their authority to parliamentary institutions, in exchange for the ability to raise

new taxes; similarly, the war for independence in the United States began as a rebellion against British taxes. Some scholars argue that a comparable process is occurring and pressure to increase taxes forces authoritarian regimes to acceptance of democracy. These claims have never been carefully tested. In Micheal L. Ross research, this claim has been tested among 113 countries in the period 1971-1997 by pooled time-series cross-national data. The results show that a single standard deviation increase in the ratio of taxes to government spending Rise 0.48 democracy scale. While this is somewhat smaller than the effects of Oil and Islam, it is about one-third larger than the influence of Catholic.

Helene Ehrhart (2009) has reviewed the relationship between democracy and domestic taxes in developing countries by using a panel of 66 developing countries over the period 1990-2005. The results show that Achieving to democracy matters is necessary in order to earn more domestic tax revenues which are much needed to finance public goods. It is used especially at the level of administrative constraints which is of importance to counter the government's propensity to cave in for special interests and to be insufficiently welfare minded. Also, she finds that high levels of democracy are specifically needed in natural resource rich countries to make natural resource rents contribute to higher domestic tax revenues and no longer be an impediment to a sustained tax system.

Paola Profeta, Riccardo Puglisi and Simona Scabrosetti (2010) explore the relation between political variables and tax revenue, public spending and their structure. For this purpose they made a new dataset for the period 1990-2005 with socio-economic and political variables and perform, and were estimated three regressions for three areas of the world (Asia, Latin America, America and Europe Union) which have recently experienced a democratic as well as economic transition. The results made it clear that tax revenue and tax composition, except for trade and property taxes are not significantly related to the strength of democratic institutions and civil liberties. Also, similar results were obtained on public spending except for social spending and defense expenditure. The study established Doubts about the channels of public policy which Structures policy through them can influence on economic development. In this model Tax revenues are a function of the democracy index, the index of civil liberties, socio-economic control variables and Dummy variables.

Analysis of the Trend of Variables

In following, the trend of non-weighted average indexes of civil liberties, political rights indexes and the ratio of total tax revenues on GDP are analyzed. These data are derived from freedom house and WDI in selected countries of Middle East from 1990-2010.

Arch Puddington(2013) in paper: "Democratic Breakthroughs in the Balance" by Selected data from Freedom House's annual survey of political rights and civil liberties expresses that The Freedom in the World survey provides an annual evaluation of the progress and decline of freedom in 195 countries and 14 related and disputed territories. The survey, which includes both analytical reports and numerical ratings, measures freedom according to two broad categories: political rights and civil liberties.

Political rights ratings are based on an evaluation of three subcategories: electoral process, political pluralism and participation, and functioning of government. Civil liberties ratings are based on an evaluation of four subcategories: freedom of expression and belief, associational and organizational rights, rule of law, and personal autonomy and individual rights.

Each country is assigned a numerical rating from 1 to 7 for both political rights and civil liberties, with 1 representing the most free and 7 the least free. The ratings are determined by the total number of points (up to 100) each country receives on 10 political rights questions and 15 civil liberties questions; countries receive 0 to 4 points on each question, with 0 representing the smallest degree and 4 the greatest degree of freedom.

The average of the political rights and civil liberties ratings, known as the freedom rating, determines the overall status:

- Free (1.0 to 2.5)
- Partly Free (3.0 to 5.0)
- Not Free (5.5 to 7.0)

A Free country is one where there is open political competition, a climate of respect for civil liberties, significant independent civic life, and independent media. A Partly Free country is one in which there is limited respect for political rights and civil liberties. Partly Free states frequently suffer from an environment of corruption, weak rule of law, ethnic and religious strife, and a political landscape in which a single party enjoys dominance despite a certain degree of pluralism. A Not Free country is

one where basic political rights are absent, and basic civil liberties are widely and systematically denied.

The methodology of the survey is grounded in basic standards of political rights and civil liberties, derived in large measure from relevant portions of the Universal Declaration of Human Rights. These standards apply to all countries and territories, irrespective of geographical location, ethnic or religious composition, or level of economic development. The survey does not rate governments or government performance per se, but rather the real world rights and freedoms enjoyed by individuals. Freedoms can be affected by state actions as well as by non-state actors,

including insurgents and other armed groups.²

According to chart (1), (2) and considering that larger numerical values (Closer to 7) Show unfavorable index of political rights and civil liberties and the smaller numeric values (Closer to 1) show a favorable state of civil liberties and political rights index, it can be stated that:

- In the selected Middle East countries, Sudan has the worst and Armenia has the best indexes in non-weighted average of civil liberties for the period: 1990-2010.
- In the same group Sudan and Syria, have the worst and Turkey has the best in Non-weighted average of political rights for the period 1990-2010.

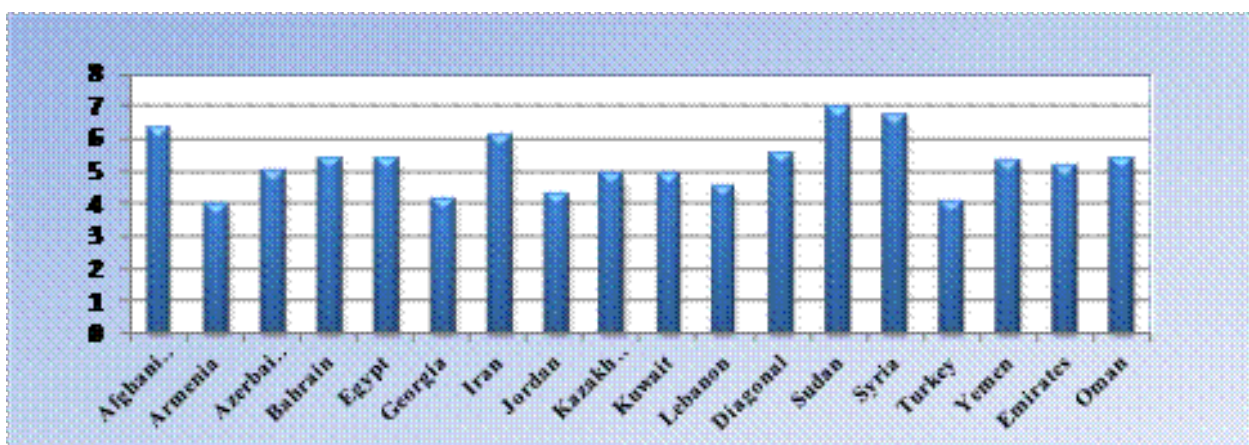


Chart 1. Analysis the trend of non-weighted average of civil liberties index in selected Middle East countries.



Chart 2. Analysis the trend of non-weighted average of political rights index in selected Middle East countries.

Furthermore; according to chart (3), the following can be concluded:

- Among the group of Middle East countries surveyed Qatar has the highest and Emirates has the lowest in non-weighted average ratio of Tax revenues GDP.

Introducing the model

The present research is based on the studies by Profeta, Puglisi, Scabrosetti (2010). This was also with con-

²Freedom House-2013

sideration of different variables' effects, utilizing the following formula:

$$TAX_{it} = \beta_0 + \beta_1 TAX_{i,t-1} + \beta_2 CL_{it} + \beta_3 CL_{i,t-1} + \beta_4 PR_{it} + \beta_5 PR_{i,t-1} + \beta_6 OPENNES_{it} + \beta_7 ENRO_{it} + \beta_8 GDP_{it} + \beta_9 GEX_{it} + U_{it}$$

In this formula:

TAX: ratio of total tax revenues over GDP

CL: civil liberty index

PR: political rights index

OPENNES: ratio of total import/export over GDP

ENRO: net rate of enrolment in primary school as a human capital index

GDP: rate of real Gross Domestic Product

GEX: ratio of government expenditure on GDP

U: Error term

i, t: country & time

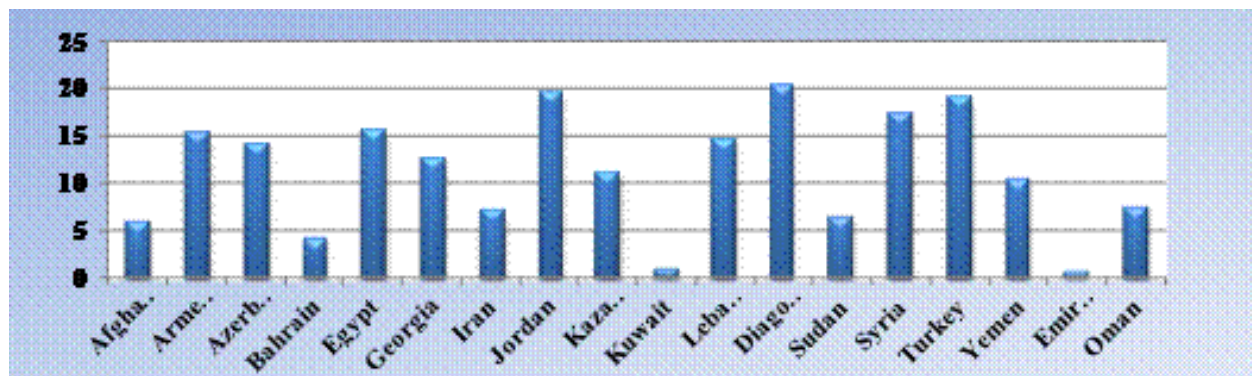


Chart 3. Analysis the trend of non-weighted average of the ratio of total tax revenues on GDP in selected Middle East countries.

Results

In this study, before estimating the model, panel's unit root test has been utilized to investigate stationary or non-stationary variables. The results are demonstrated in table 1.

Table (1) shows, according to fisher statistics, the ratio of total tax revenues on GDP, the civil liberties and political rights index, the net rate of enrolment in primary school, the ratio of government expenditure on GDP, the openness index and GDP are stationary in level. Therefore, null hypothesis of existence of unit root is rejected. As a result, stationary of data related to the selected Middle East countries, will be confirmed prior to the analysis of the research model.

Furthermore, results of the co-integration test, also shows that there is a long term relation between the variables used.

To continue, estimate of the equation in the selected Middle East countries, "GMM" - generalized method of moments - was used along with relying on the dynamic panel test. "GMM" method has been used in recent macroeconomics and financial studies. It, has a lot of advantages, for instance, researchers such as Beck, Levine and loayza(2000), have used this method to eliminate the time series data variations and have found that very useful.

GMM estimator is calculated individual specific effects in the model by entering a relevant delayed variable as an explanatory variable. It allows a better control on endogenous of the explanatory variables.

Table 1. Analysis the stationary or non-stationary of variables in selected Middle East countries.

Regression	TAX	CL	PR	ENRO	OPENNES	GEX	GDP
Fisher's statistics test (p value)	0.0493	0.0000	0.0000	0.0065	0.0002	0.0057	0.0000
Results	I0	I0	I0	I0	I0	I0	I0

Reference: findings of researcher

Table 2. Results of estimating the impact of political development indexes on tax revenues with GMM method in selected countries of Middle East between 1990 and 2010.

Dependent Variable: TAX (Ratio of total tax revenues on real GDP)		
Variables	Coefficients	T Statistic
(TAX) -1	0.7531	14.62
CL	-0.7950	-4.12
CL -1	-1.4206	-9.26
PR	1.5163	5.25
PR -1	3.0930	8.41
OPENNES	-5.7134	-5.66
ENRO	-0.1677	-5.85
GDP	0.0925	2.29
GEX	-0.0920	-1.95
J-statistic	25.3	

Reference: findings of researcher

The results of dynamic regression with generalized moment model (GMM) indicate that:

- Lagged ratio of total tax revenues on GDP has significant relationship with ratio of total tax revenue on GDP.
- The correlation between civil liberties index and ratio of total tax revenues on GDP is negative and significant in selected countries of Middle East.

Therefore, with the progress increase of civil liberty index (the quantitative amount is higher than and closer to 7, this indicates negative value and unfavorable conditions in civil liberties), the ratio of tax revenues on GDP decreases lower. Vice versa, regression decrease of civil liberties index (the quantitative amount is lower and closer to 1, this indicates positive value and favorable conditions in civil liberties), the ratio of tax revenues on GDP increases higher.

For explaining the mechanism, In the presence of freedom of speech and expression ideal condition (amounts less than and closer to 1), taxpayers are dealing with the government which is accountable, efficient and protector of individual rights, therefore, taxpayers are more willing to pay taxes and the tax revenues are increased. On the other hand, countries in which this index is (amounts higher than and closer to 7) and condition of civil liberties are not ideal, taxpayers are reluctant to pay taxes, the government in such countries, due to the nature of dictatorship, inefficiency and non-accountability, are faced with tax evasion, and cannot enforce taxation laws and regulations and the result is lower tax revenues. This negative and real relation, is remained when we consider lagged civil liberties index.

Element of lag, is for avoiding the correlation between variables and the analysis the impact of socio-political variables during the time.

- Political rights index has positive and significant relationship with the ratio of total tax revenues on GDP in selected countries of Middle East.

Therefore, with the increase in political rights index (the quantitative amount is higher than and closer to 7, this indicates negative value and unfavorable conditions in political rights), the ratio of tax revenues on GDP, increases too. Vice versa, a decrease in political Rights Index (the quantitative amount is lower and closer to 1, this indicates positive value and favorable conditions in civil liberties), the ratio of tax revenues on GDP decreases too.

To explain this mechanism further, it should be observed that in ideal condition of index, (Amounts less than and closer to 1), the governments are in need of public participation and voter attraction in the elections. Therefore, the state will introduce lower Taxes, on the other hand, if the Index of Political Rights worsens (amounts larger and closer to 7), the oppressing governments while, not counting on the public participation, will impose higher Taxes.

This Positive and significant relation, is remained when we consider lagged civil liberties index. Element of lag, is for avoiding the correlation between variables and the analysis the impact of socio-political variables during the time.

- Openness index has negative and significant relationship with the ratio of total tax revenues on GDP, in selected country of Middle East.

This negative relation is due to the improvement in the degree of economical openness, which results

in the increase of the ratio of total import/export on GDP. On one side, this requires decrease in import/export expenses, e.g.; lowering of Customs Tariffs. On the other side, special features of non-competitive markets and excessive import against low exports, results in damages to the productions and employments in local industry, which affects and lowers the tax revenues level.

- The correlation between the net rate of enrolment in primary schools and the ratio of total tax revenue on GDP is negative and significant, in selected countries of Middle East.

- The rate of real GDP growth and the ratio of total tax revenues on GDP have positive and significant relationship in selected countries of Middle East.

- Increase of real GDP, due to the improvement of production, employment and income levels, results in the increase of tax revenues.

- The correlation between the ratio of government expenditure on GDP and ratio of total tax revenues on GDP is negative and significant in selected countries of Middle East.

Therefore, with the increase in government expenditures, the ratio of tax revenues on GDP decreases. This relation highlights the mechanism of government's budget funds, which in the case of selected Middle East countries is through natural resources oil- gas- fossil Fuels-etc.

- Statistics of "Sargan Test" indicates that:

Distribution of χ^2 with equal degrees of freedom to excessive restrictions, causes the null hypothesis, "which states that, residuals are correlated with instrumental variable", to be rejected. According to the results of this test, the instrumental variables used in estimation of the models are reliable, thus, the authenticity of the end results are verified for analysis and definition.

Conclusions

This study is analyzing effects of political development, (with emphasis on the civil liberties and political rights) on the tax revenues, in the selected Middle East countries for the period 1990-2010. This research concludes that, with the improvement of civil liberties Index, taxpayers are more willing to pay their taxes. This fact is supported by the notion "state- accountability", when the governments are protectors of the individual liberties and social rights, and are transparent and responsible in the public expenditure of tax revenues, which are eventually and consequently increased.

Vice versa, dictatorships and governments with human right violation, who do not have an attitude, shall face Tax Evasion and the subsequent tax revenue reduction.

Furthermore, with the improvement in political rights, Middle East countries, while competing for voter sympathy, will promise a reduction in the taxes through their election campaign. On the other hand, with the absence of political parties, activists and state monopoly on the power, the need to social reform and improvement, such as, tax reduction, etc, will not be on the agenda.

Although, research in the fields of these two Indexes shows reluctance of the governments in improving social condition and worsening of the social rights, new political developments, like democratic movements in the Middle East, such as Arab Spring

In Egypt, Syria, Bahrain and Turkey, has cleared the way for such governments to concentrate on these social demands.

The following suggestions are in that contest:

- Reform in strict and unjustified Law and Judiciary. Formation of political parties, syndicates, unions, NGOs, and a halt to the prosecution of social activists.

- Reform in the Electoral Law, to establish a fair and competitive Election process and fair competition.

- Promote and establish, syndicate, unions, and NGOs in order to protect individual rights.

- Avoid self-centered attitude and promote social and plural approach.

- Reform of taxation law and regulations.

References

- Aidt, T. S., J. Dutta, E. Loukoianova (2006). Democracy comes to Europe: franchise extension and fiscal outcomes 1830-1938, *European Economic Review*, 50, 249-83.
- Beck, T.H.L., Levine, R., Loayza, N.(2000). *Financial intermediation and growth: Causality and causes*, Open Access publications from Tilburg University urn:nbn:nl:ui:12-3125519, Tilburg University.
- Boix, C. (2003). *Democracy and Redistribution*, Cambridge University Press.
- Ehrhart, H (2009). *Assessing the Relationship between Democracy and Domestic Taxes in Developing Countries*, Document de travail de la série - University of Auvergne.
- Freedom House. Freedom in the World 2013: Se-

- lected data from freedom house annual global survey. Downloadable form www.freedomhouse.org/publications.
- Herb, M. (2003). *Does Rentierism Prevent Democracy?*, Annual meeting of the American Political Science Association, Georgia State University, August 29–September 1–2003.
- Mulligan, C. B., R. Gil, X. Sala-i-Martin (2004) Do Democracies have Different Public Policies than Non Democracies?, *Journal of Economic Perspectives*, 18(1), 51–74.
- Musgrave, R. A. (1969). *Fiscal Systems*, New Haven: Yale University Press.
- Plümpert, T., Martin, C. (2003). Democracy, government spending, and economic growth, A political-economic explanation of the Barro effect. *Public Choice*, 117(1/2), 27–50
- Puddington, Arch. (2013). *Freedom in the World 2013: Democratic Breakthroughs in the Balance*. Downloadable form www.freedomhouse.org
- Profeta, P., Puglisi, R., Scabrosetti, S. (2010). *Does Democracy Affect Taxation and Government Spending? Evidence from Developing Countries*. Italian Society of Public Economics, Department of Economics, Statistics and right of the ‘University of Pavia.
- Ross, M (2004), Does Oil Hinder Democracy? *World Politics*, 53(3), 325–36.
- World Bank. World Development Indicators: CD-R, WDI (2010).