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## Thesis of Master of Art in Political Science

### **PRICE OF FREEDOM: IMPROVING DOMESTIC REVENUES IN DEVELOPING COUNTRIES BY COMBINING DEMOCRACY WITH STATE EFFECTIVENESS.**

by

Jean-Francois Koly Onivogui

Under the Direction of Dr. Charles Hankla, PhD., Professor Associate

#### Abstract:

When it comes to improving tax revenues in developing countries, we do not have a clear understanding of whether it is more important to have democracy or state effectiveness. Two theories have prevailed in the literature; one is to focus on building strong states that can have financial autonomy, the other is to promote democracy with the assumption that democracy brings about economic growth. Yet for over four decades developing countries' tax to GDP ratio is still desperately low. On average, developing countries' tax to the GDP ratio is less than half that of the OCDE countries. This article contends that greater taxation outcomes result from the synergistic combination between democracy and state effectiveness. Empirical evidence from a time-series-cross-sectional dataset covering up to 120 countries during the 2003-2012 time period supports the conclusion that two attributes working together increase tax revenue by 16% because they force political leaders to focus on citizens by improving their political participation (democracy) and by meeting voters' basic needs (performance).

Index Words: Taxation, Democracy, State Effectiveness, Trust, Legitimacy

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2013

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A thesis Submitted in Partial Fulfillment of the Requirements of the Degree of

Master of Art in Political Science

in the College of Arts and Science

Georgia State University

2013

Thesis of Master of Art in Political Science

by

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## Dedication

To my loving parents, Iyee and Akaa, and to my extended family and friends: the Carpenters, the Claytons, the Groves, the Lairds, the Mathews, the O'Hanleys, the Onivogui, and the Wyses. Thank you for your love and support.

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Equally, my gratitude goes to the entire faculty and staff of the Department of political science of Georgia State University, especially to Tony Creighton, for being exemplary in service. Not only have they been available for discussion and consultation, but also they continue to approach their students with respect and thoughtfulness.

This thesis, like my journey in the United States, is the result of a collaborative effort. The support and assistance of my family and sponsors, Arthur and Eda Mathews, Owen Mathews, Joan Groves O'Hanley and Roy O'Hanley, Ann Clayton Leichles, Amy and Walter Carpenter, Peg and David Wyse, Cecile and Ed Laird, my elder brother Jacques Massayan Onivogui, are especially appreciated

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October 8, 2013

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Dr. Carrie Manning,  
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## **PRICE OF FREEDOM: IMPROVING DOMESTIC REVENUES IN DEVELOPING COUNTRIES BY COMBINING DEMOCRACY WITH STATE EFFECTIVENESS.**

*“The spirit of a people, its cultural level, its social structure, the deeds its policy may prepare—all this and more is written in its fiscal history” (Schumpeter [1918] 1954: 7).*

### **INTRODUCTION**

When it comes to improving the overall domestic tax revenue in developing countries, is it more important to have a democratic or an effective state? Do democracy and state effectiveness in combination synergistically produce greater tax return than either one of these political attributes acting alone? One of the main goals of democracy promoters in developing countries is to improve political freedom along with the improvement of domestic public finances. The underlying assumption of this goal being public finances will increase following the improvement of civil rights and liberties in developing countries. Recently, reliable measures of democracy have indicated that democracy has made great strides specifically in the developing world. The remaining question is the following: has taxation improved after a progress of democracy in developing countries?

Efforts to raise domestic revenues in developing countries in order to finance public goods have met with a long list of constraints, some political others structural.

Researchers and democratic activists alike have pointed to –among others – the lack of democracy, historical, geographical, or other socio cultural factors and have gone to a great length to find a solution to surmount these obstacles. However, despite applying

these solutions, the need to increase domestic revenue in developing countries remains a constant concern. In addition, public finance recovery is still desperately low. According to Baungard and Keen (2010), these internal revenue authorities recover – at best– no more than 30 cents for every dollar spent in developing countries. More importantly, these developing countries raise on average less than half of what OECD countries collect in tax to GDP. According to Helen Ehrhart, developing countries have an average of 12.5% of tax to GDP compared to 28% in OECD countries in the years 1990-2005. While there are a host of unanswered questions about how democracy would impact positively public finances in developing countries, this paper hones on just one: Under what conditions could the recent democratic improvement in developing countries bring about an increase in tax to GDP i.e, domestic revenue?

The motivation is twofold. First, even though the relationships between democracy and taxation have been of interest for well over two centuries, we are still not completely sure about how improvements of Freedom House scores translate to greater tax compliance. Second, exploring the impact of state effectiveness and its synergistic association with democracy is a worthwhile academic endeavor. The insight is that strengthening state effectiveness through performance and trust building between tax authorities and citizens improves citizens' tax compliance and tax collection. Yet, despite numerous studies on the relationship between taxation and democracy, we do not have a clear cut answer to the aforementioned question probably because the interdependence between democracy and state effectiveness has remained unexplored. Thus, it is fair to assume that the relationship between democracy and taxation in the developing world seems less clear empirically and has been less well examined.

This article argues that greater tax revenue (tax compliance and tax collection) is the outcome of the complementarity between democracy and state effectiveness working in tandem. Without an effective state, there can be no efficient taxation. This point, of course, is by no means novel. Several scholars of democracy and state building have called attention to the role of the state in the recent years (Tilly, 1975; O'Donnell, 1986; Przeworski, 1990; Linz and Stepan, 1996; Rose and Shin, 2001). What we would like to add to the literature is to provide an empirical substantiation to the theory explaining how democracy, combined with state effectiveness, increases citizens' trust in state legitimacy to extract revenues.

### ***Expectations***

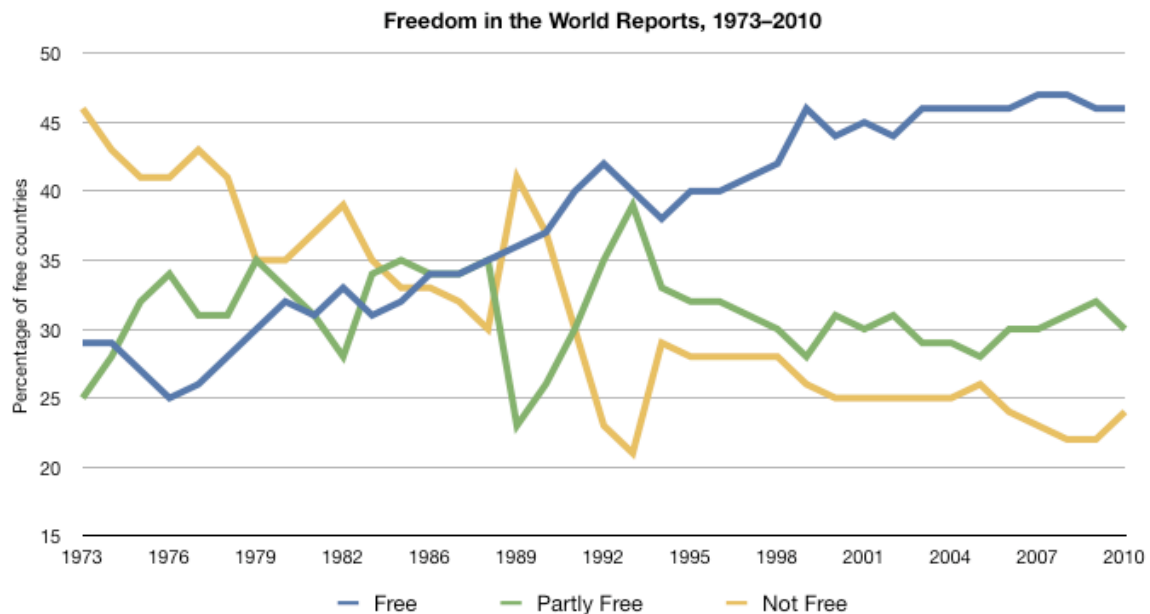
Exploring the relationship between democracy, state effectiveness and taxation, this study uses a sample of 120 countries (developed and developing) over the course of a decade (2003-2012). We find that the impact of democracy on taxation differs depending on whether the country is developing or developed (here, OECD members) after holding constant other variables such as the states' regulatory ability, their capacity to control for corruption, and their GDP per capita. Whereas democracy has a strong positive impact on taxation in OECD countries, it has virtually none to a negative effect on taxation in developing countries. On the other hand, state effectiveness has a very small effect on taxation across all units, OECD and developing countries alike. Yet, the major finding of this paper is that when state effectiveness is coupled with democracy, the combined effect increases the tax to GDP by 16% in developing countries. We call "Effective democracy" the interaction variable generated by combining democracy and state effectiveness.

This paper is organized as follows: the first section clarifies the meaning of concepts used in this study by providing specific definitions of democracy, state effectiveness and taxation. It also highlights briefly the importance and the recent trends of taxation in both developed and developing countries. The next section succinctly summarizes the extant theoretical and empirical literature connecting democracy to taxation. The third section constructs the main argument of the article, which is built on the works of Seymour Lipset's, Jonathan K.Hanson's, Shaoguang Wang's notions of state effectiveness. The fourth section provides a design and an empirical substantiation of the theoretical propositions made in the argument. The final section offers a discussion followed by concluding notes. Additional information can be found in the appendix.

## I. DEFINITIONS OF DEMOCRACY, STATE EFFECTIVENESS, AND TAXATION

**a) Definition of Democracy and State Effectiveness:** Both democracy and state effectiveness are multidimensional in nature. While recognizing this complexity, this study seeks to define these concepts in a manner that is not only generalizable but also captures the essence of the object under consideration. Starting with democracy, we follow the two-dimensional definition put forth by Robert Dahl (1971): contestation and inclusiveness. The first dimension refers to participation or more precisely the rights for virtually all adults to vote and contest for an office. The latter refers to the opposition's rights, or creating institutionalized channels for a meaningful opposition by those who are adversely affected by

government's policies (quoted in Hanson p.4). These two dimensions of democracy, rightly captured by Freedom House's measures, have notably increased the recent four decades in developing world (see Freedom House "Freedom in the World Report" 1973- 2010).



Like democracy, the concept of state effectiveness conveys different meanings depending on whether one refers to it as a legal, fiscal, military, welfare or administrative concept. Also, state effectiveness has been also widely used in economics, sociology, strategic and political science literature. This paper follows Lipset's definition of state effectiveness and measures it with the index created by the World Bank's World Governance Indicators (hereafter W.G.I). Lipset defines state effectiveness as the actual performance of government, the extent to which the system satisfies the basic function as most of its population and such powerful within it as business or army forces see it (p.65). Measured by the World Governance Indicators, Measured by the World Governance Indicators, state effectiveness captures the perception of the quality of public

services and the degree of state effectiveness from political pressure, quality of policy formulation and implementation, and the credibility of the government commitment to such policies (W.G.I Methodology p.4). Wang enumerates those public services that an effective state performs to be: defining a political community that has citizens' loyalty; protecting basic civil rights and liberties; cultivating trust between institutions, power holders and ordinary citizens; creating and maintaining a rule-based politics; vitalizing the civil society, and meeting people's basic demands (p.7).

**Definition and Importance of Taxation:** The World Bank defines taxes as “unrequited compulsory payments collected primarily by the central government” (World Bank 1988: 79). These imperative payments are distinct from other revenue sources including debts, entrepreneurial income, and user fees, in terms of obligations and administrative requirements (Lieberman, 2002 p.92). For Lorenz Von Stein, taxation represents both people's civic duty and the state's organizational ability to provide collective goods:

Taxes are conceptually entirely different from all other public revenue... Taxes can be said to represent the nation's entire civic sense on the economic plane.... In administering public property, the State is an independent economic agent with its own capital; fees and regalia represent a payment to the State in return for services rendered to individuals for the satisfaction of their individual needs. Taxation, by contrast, represents a field in national economic life where, by virtue of the State's constitution and administration, part of the individuals' economic income is withdrawn from them and becomes the community's economic income... (Von Stein [1885] 1964: 28)

Taxes have played three key roles the state-society relationship: taxes have been used as a device for state building, a solution for collective action problems underlying the provision of public goods, and a tool for distributive justice. These three dimensions of taxation are crucial in sustaining mature democracies and improving new ones. First,



from a practical point of view, tax extraction has been vital to the existence and the strength of states throughout history. To highlight this cardinal role of taxation, Lieberman (2002) uses the analogy of food. Revenues gathered from taxes are like nutrients for our body; if the state ceases to extract revenues it ceases to exist (p.92). Second, as a solution to collective action problems, not only does taxation help to finance public goods but also it vitalizes the social contract between governors and governed. By imposing a mandatory pecuniary contribution from citizens, revenue body gives to citizens the moral basis to hold the revenue body accountable, hence creating a “fiscal contract”. In other words, compliance to taxation provides citizens a genesis for their rights and responsibility to monitor the public funds. Cameron G Thies (2007) adds that this fiscal contract produces a democratic relation between states and citizens because these peaceful transactions (i.e., bargaining) become necessary to avoid coercive forms of revenues (these practices are considered incompatible with long-term democratic behavior (Rakner, p. 9). In short, as Rakner points out bargaining has contributed to build institutional capacity and political legitimacy in order to generate revenues from citizens in the Western democracies (p.3). Third, taxation is a political and financial device that performs a distributive justice function. As Guyer maintains, the collection and distribution of tax revenue implicitly or explicitly implicates policymaking in a society made up of individuals from different socio-economic backgrounds (Guyer, 1992).

### **Tax Trends in Recent Years**

When it comes to tax burden, the total fiscal effort as a share of the GDP, developing countries have paid around 1/3 of what OECD countries pay. Nonetheless, in general,

taxation has increased in both regions taking the average OECD tax to GDP from 24.3% to 31.5% (Ross, 2002) while the non OECD countries' average tax burden jump from 14.4% to 18.9% of the GDP. On the other hand, East Asian countries were more reluctant to raise their taxes than those in Latin American countries and Sub Saharan Africa. Although developing countries had lower taxes already in 1970s, Ross maintains that the oil booms contributed in plummeting the tax to GDP ratio in oil producing countries (Ross 2002, p.14.). ) Recently, authors such as Helene Ehrhardt contend that from the period 1990 -2005, the average tax to GDP in developing countries dropped to about 10% compared with the figure of 27% for the OECD countries.

Table 1: Tax Trends in the World 1970s- 2012

Regions	Average of Tax to GDP in Years	
	1970s-1999	2000- 2012
OECD countries	24.3% to 31.5%	28.9%
Developing Countries	14 % - 18%	10%

### **Colonial Legacy and Taxation in Developing Countries**

Based on data from the International Monetary Funds, developing countries have a lower direct tax rate compared to OECD countries. Scholars attribute this low tax revenue to a broken taxation culture in developing countries, which is arguably rooted in the following causes: colonialist legacy, post-independence nationalist ideologies, institutional

weakness, international aid and the actual political unwillingness to apply tax law. Specifically in Africa, taxation traces its roots to colonization, like many other aspects of the continent's political culture. Some scholars associate the negative African view of taxation with the continent's colonial legacy. Colonial powers extracted tax revenues using fairly brutal means in developing countries (Guyer 1992 p.43). Consequently, at the times of independence, populist leaders, inspired by nationalist ideologies, associated taxation with colonial rules. Guyer explains that at independence, taxation systems set up by colonial governments were dismantled by the new populist authorities, which lead to both the waning of state revenues and the weakening of states' nascent institutions. In addition, to gain more popularity from their citizens, some politicians banned taxation altogether (p.56). As a consequence, a host of issues followed as consequences of shrinking revenues. . In addition, to gain more popularity from their citizens, some politicians banned taxation altogether (p.56). A host of issues followed as consequences of shrinking revenues.

Moreover, this brutal colonial revenue extraction sowed the seed of states' lack of legitimacy in the newly independent countries. Pierre Englobert (2000) highlights this aspect in his article "Pre-Colonial institutions, Post-Colonial States, and Economic Development in Tropical Africa." He argues that since the new ruling class inherited the state from its former colonizers, rather than engaging in shaping it from within, they limit themselves at exploiting countries resource using similar tools as the colonizers. Hence, in developing countries, the state lacks legitimacy from the beginning. The state was not the result of a social contract or formed to reduce transaction costs. Instead, as Kasfir puts

it, “from colonizers to new ruling classes, the state has been and continues to be an instrument used to appropriate resources, a sort of “fountain of privilege” (1983p.123)

Detrimental implications of this lack of social contract and state’s legitimacy in developing countries include the pervasive distrust of governing bodies and the absence of a capable opposition. Opposition in such states did not form around particular policies, but around challenges to the government itself or even the very existence of the state. As a result, the rulers consolidated power by resorting to neo-patrimonial policies that enhanced their personal power through corruption, nepotism and clientelism at the expense of weakening state institutions (Englobert p.131). Another negative characteristic of tax culture in developing countries is the strategic choice that political leaders make by willingly and unfairly exempting some sections of the population seen as electorally important (Englobert 2000 p.134). Rakner and Gloppen highlight this phenomenon in Africa where, “the lack of political ability or political willingness to fully apply tax laws with full force to groups perceived as electorally important (p.19). Given this detrimental legacy of colonialism in developing countries, what can be done in order to improve citizens’ contribution to public finance? Let’s search a possible answer in the extant literature.

## II. DEMOCRACY AND TAXATION IN THE LITERATURE

Since the late 1960s, the relationship between democracy and taxation in developed and developing countries has figured prominently in several cross-national studies published in political science journals and books (Downs, 1960; DeSchweinitz, 1964; Levi 1988; Prezworski, Haggard, 1990; Peters, 1991; Steinmo, 1993, 1998; Chaudhry, 1997; Cheibub, 1998; Fauvelle-Aymar, 1999; Ross, 2002, 2006; Herb 2005;

Timmons, 2010; Ehrhart, 2012 etc..). This corpus of cross-national studies shows a theoretical disagreement among scholars about the impact of the type of regime on taxation or the effects of taxation on the type of representation. These diverging stances match only with the ambiguous empirical results leading the reader to an inconclusive consensus. Rather than recapitulate that vast literature, we focus on one single aspect of the relationship - namely- the extent to which democracy brings about an improvement of domestic revenues in developing countries. The progress in statistical software and econometrics techniques, combined with the large availability of data, has enabled scholars to conduct empirically sophisticated studies on the relationship between democracy and taxation in developing countries. Yet, the findings of these studies lack a consensus and span a continuum of a strongly positive relationship, a weak to no relationship, and a negative relationship. For convenience and simplicity we group the extant literature in three groups: the first group consists of scholars who claim that democracy induces a greater taxation (DeSchweinitz, 1964; Levi 1988; Steinmo, 1993, 1998; Cheibub, 1998); the second group that argues exactly the opposite, contending that democracy does not produce a successful taxation; instead, authoritarian regimes are better than democracy in improving internal revenues (Downs, 1960; Haggard, 1990; Przeworski, 1990; McGuire and Olson, Finlay, 1996). The last group sees no relationships, or at best a very weak one, between democracy and taxation (Meltzer, 1981; Profita et.al, 2009).

The gist of the first argument is better stated by Margaret Levi (1988). Democracy delivers greater taxation because it reduces the cost of the collective action problem through the mechanism of a collective bargaining and quasi-voluntary

compliance. For Levi, this quasi compliance affects the level of taxation because it minimizes the cost compliance and collection (1988). Particularly, democracy is more efficient in increasing taxation due to its single ability to provide the two pillars of quasi-compliance: the perception that there is a bargain and the existence of insurance that government will keep its side of the bargain (quoted in Cheibub. p.356). Emphasizing on citizens' control and monitoring over public spending in democratic regime, Cheibub notes that the incentive to raise and spend is greater in democracy because "democracy serves as an ideal benchmark in the sense that government are assumed to be perfect agents of the citizens [the principle]. Thus, in democratic regimes, citizens decide through some kinds of voting mechanism about the size of the government and have the right to the fiscal residuum" (p.356). Elsewhere, supporters of "democracy promotes better taxation hypothesis" argue that democracies can limit state intervention in the economy and are more responsive to public demands on areas such as education, justice, and health; thus they encourage citizens to willingly participate in the funding of public goods (Doucouliagos et. al, 2008).

Opponents of the "democracy impacts taxation positively hypothesis" reject the premises above. Stephen Haggard indicates at least three reasons that make authoritarian regimes have greater incentive to increase taxation. First they use force to resolve collective action problems. Second, they are free from any citizen monitoring processes. Third, dictators do not lend themselves to any kind of popular approval or rejection. Olson and McGuire (1991) contend that dictatorships are obliged to continually raise public revenues to fund their insatiable pattern of wasteful and unchecked spending. Haggard corroborating with Olson and McGuire states:

Since authoritarian political arrangements give political elites autonomy from distributionist pressures, they increase the government's ability to extract resources, provide public goods, and impose the short-term costs associated with efficient economic adjustment. Weak legislatures that limit the representative role of parties, the corporatist organization of interest groups, and recourse to coercion in the face of resistance should all expand governments' freedom to maneuver on economic policy (quoted in Cheibub p.354).

However, the proponents of the argument “authoritarian regimes produce better taxation” fail to clarify how does the ability to use force is translated into a higher capacity to implement specific tax policies. Also, as Cheibub demonstrates, to some extent, dictators are not immune from popular approval or discontent. Thus, the so-called autonomous attitude of authoritarian regimes is relative (p.358). Secondly, as for the argument about the sequence for political development, the author presents democracy and state effectiveness to be mutually exclusive. The purpose of this paper is to show that these two analytically distinct political attributes can work together synergistically to create an effective democratic state capable of raising better taxation in developing countries.

Yet, there are scholars who claim that the relationship between democracy and taxation is insignificant. For these authors, there is simply not enough empirical evidence to conclude one way or the other that democracy leads to taxation. For Meltzer and Richard (1981) it is impossible to predict if democracy or autocracy will lead to a bigger government size, and more progressive form of distribution. Similarly, Profeta et al. (2009) do not find any significant within-country effect of democracy and civil liberties on neither corporate indirect taxes nor social security contributions. Finally, authors such as Michelle D’Arcy (2012) point to the reverse of sequence in political

development stages between state building and democracy in developing countries.

For her, democratic regimes in developing countries give rights to citizens, who do not reciprocate by performing their civic duties. This weakens the government's ability to extract revenue from citizens

Collectively, these earlier efforts to identify and, in some cases, gauge the impact of democracy on taxation have considerably increased the visibility and relevance of the topic in the political economy subfield. Altogether, there is no doubt the previous authors deserve credits for undertaking research about the relationship between democracy and taxation in the developing world. Nonetheless, all of them sidestep the explanation of the tandem between state effectiveness and democracy to increase countries' tax to GDP ratio. Especially, from the perspective of understanding democracy and state effectiveness as two analytically separate political attributes and their respective impacts on taxation across countries in the developing world, each of the above approaches has shortcomings. In general, these efforts tend to:

- a. Include state effectiveness into democracy by using it as an embedded dimension of a democratic state; this leads to the neglect of state effectiveness that builds trust between citizens and democratic institutions through substantive performance and enhanced credibility.
- b. View the two concepts as two mutually exclusive entities in the sequence of political development in developing countries;
- c. Confuse strong states with authoritarian ones;
- d. Use metrics and methods that ignore the dynamicity of both democracy and effectiveness.



The present study corrects these shortcomings by proposing a theoretical argument substantiated by robust empirical evidence.

### III. THEORY

The major claim of this paper is that democracy and state effectiveness work better synergistically to improve taxation than either one of these factors acting alone. For a greater taxation, each of these two factors relies on the other in order to fully realize its potential. In this relationship, democracy supplies the motivation for power holders to deliver public service while state effectiveness provides the means (Hanson p.6). The underlying sub-argument is that citizens will show increased tax compliance because not only does government officials act substantively to sustain its credibility but also, in so doing, it expands its own legitimacy to extract revenues. When citizens see their tax authority as trustworthy and benefit from its performance, their willingness to act by “do their parts” increases. They become true citizens who have rights through democracy, have their basic needs met from their government’s substantive performances, and take on their civic duties by complying to tax policies (Torgler et. al, 2002).

The interplay between democracy and state effectiveness can be better understood when we compare tax compliance outcomes in developed countries to that of developing countries. The combination of democracy and state effectiveness results into a greater taxation in the OECD countries. The explanation follows the framework of “democracy brings economic growth theory” better articulated by Lake and Baum (2001): in a democratic system, a ready supply of alternative rulers and low costs of political participation induce rulers to commit close to the socially optimal level of spending on public resources. Similarly, democracy is claimed to facilitate the flow of

information and enables the formation of groups that can demand social services (Sen, 1999; McGuire 2010). Put simply, political leaders work to build a trust relationship between government and citizens, and government performs its duties. Wang enumerates these duties of state effectiveness to be the following: defining a political community that has a citizens' loyalty; protecting basic civil rights and liberties; cultivating trust between institutions, power holders and ordinary citizens; creating and maintaining a rule-based politics; vitalizing the civil society, and meeting people's basic demands (p.19-34).

Conversely, where democracy and state effectiveness do not work together, resources spent on building state legitimacy through public services are wasted due to institutional weakness or sheer lack of political incentives from power holders. That is, in the absence of institutions that can perform effectively, democratic processes – elections, recruitment of the executive and allocation of public goods tend to slide into a gigantic clientelistic network. Alternatively, in situations where states display sufficient material capacity but put no political pressure on rulers, public goods that were supposed to be delivered to the masses stay circumscribed to a coterie of power holders (Hanson p.7). Both situations – the lack of substantive performances and that of political incentive– result into the loss of perception that the government is credible and legitimate, even if democratic indicators are positive. In sum, the citizen feel abandoned for having to deal with numerous negative consequence of an ineffective state. As Wang puts it:

Where governments lack adequate regulative capacity [state effectiveness], again whether democratic or not, people there typically have to put up with frequent industrial accidents and environmental disasters, untreated water, broken draining system, chaotic traffic, appalling work conditions, tense labor-management relations, shoddy consumer products, horrendous medical services, and the like. The contrast between the two types of countries clearly points to the significance

of the state effectiveness (p.16).

This situation raises the question whether democracy is good for the poor. Bueno de Mesquita and Michael Ross have given some explanation as to why democracy has not delivered in poor countries. For Ross (2006), the great majority of poor people in developing countries lack the political power to hold rulers accountable. Instead, political competitions bind rulers only to the small urban middle class. Bueno de Mesquita (2003) finds that it is not the level of democracy *per se* that determines the level of spending allocated to the public goods but the size of the coalition on which rulers depend for remaining in power.

To summarize the argument, when democracy is combined with state effectiveness, the combination leads to a greater taxation because democracy provides the motivation for a political leader to build a political community while state effectiveness increases citizens' trust in the system and its legitimacy, resulting to greater tax compliance. To test empirically this proposition, I generate the following hypothesis:

*When democracy works in tandem with state effectiveness, the synergistic combination leads to a substantial increase in tax to GDP ratio in developing countries.*

#### IV. RESEARCH DESIGN AND METHODOLOGY

To evidence the above theoretical formulation, I use the quantitative analysis with the following design: My units of analysis consists of developing countries spread over the six continents, with a number of cases N=120. The period covered in this research start from 2003 to 2012. The dependent variable is country's tax to GDP ratio, and the main independent variable is the interaction variable that combines countries' level of democracy as measured by Freedom House and state effectiveness as measured by the

World Governance indicators (W.G.I). The alternative variables are democracy and state effectiveness acting individually. The control variables include countries' GDP per capita, control of corruption, and their regulatory ability.

Economic and tax-related data (countries' tax to GDP ratio) come from the World Bank dataset. They cover the decade from 2003 to 2012. Likewise, countries' governance effectiveness, state regulatory capacity and control of corruption data are drawn from the World Bank Governance Indicator dataset. Democracy measurement is taken from Freedom House website. The time span chosen in this article refers to the period seen in the literature as the post democratic transition in developing countries.

### ***Variable Operationalization***

The dependent variable is the countries tax to GDP ratio. The most important step in the construction of taxation as an indicator is the process of selecting and justifying which streams of revenue should be included and which should not. According to Lieberman, "these choices are based upon assumptions about incidence (who pays) and theoretically informed insights regarding what types of social and political dynamics affect revenue outcomes"(p.95). In choosing the tax to GDP ratio, we select the totality of each country's ability to collect revenues. Widely used by most political economists and other scholars involved in political and developmental studies, this indicator is constructed and interpreted as representing each society' overall fiscal effort, size, and capacity.

As Lieberman asserts, the choice of any kind of revenues comes with its advantages and negative consequences. The selection of the tax to GDP implies that incidence is much less important than the overall burden on society as a single, collective

actor. We put an emphasis on the tax burden felt by the public as taxpayers. Furthermore, this choice entails that taxpayers react to tax burden according to the *Mill's Hypothesis* in order to produce the political result hypothesized (see Index). Admittedly, some scholars prefer the direct tax, seen as the purest form. However, given the complications of measuring tax incidence, the choice to use total tax collections may be a reasonable strategy (Cheibub 1998 p.106). Finally, we choose the tax to GDP ratio as the principal dependent variable because it correlates positively with civil liberties and political rights.

a) **The independent variable:** Interaction between democracy and effectiveness.

b) **Alternative variables:** democracy and effectiveness acting individually.

The measure of the first alternative variable, democracy, in this article is each country's freedom score based on Freedom House's measure of democracy. Because we borrow the concept of freedom status from Freedom Houses' nomenclature, we follow its definition. Freedom status is the score obtained after averaging each country's rating of political rights and civil liberties (Freedom House p.3). In its 2012 report of Freedom in the world, Freedom House uses three broad categories of freedom status to classify countries: Free, Partly free and Not Free. According to Freedom House, a Free country is one where there is open political competitions, a climate of respect for civil liberties, significant independent civic life and independent media. Such a country's freedom status rating will be between 2 and 4. A Partly Free country is one in which there is limited respect for political rights and civil liberties with the freedom score between 6 and 8. Additionally, 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. Finally, Not Free countries, where the freedom score ranges from 9 to 14, are those in which basic political rights are absent and basic civil liberties are widely and systematically denied. We also follow Freedom House's increasing order and recode democracy in two categories: 1 = Free; 2 = Not Free.

The choice for Freedom House score is rooted in the fact its indexes capture political rights and civil liberties seen as the two overarching dimensions of democracy that has increased in the developing world. Freedom House contends that political rights enable people to vote freely for distinct alternatives in legitimate elections, compete for public office, join political parties and organizations, and elect representatives who have a decisive impact on public policies and are accountable to the electorate (Freedom House). As a consequent, the dimension of political rights is divided into three sub dimensions of the electoral processes, political pluralism and participation, and the functioning of government. As for the civil liberties dimension, it encompasses freedom of expression and belief, association and organizational rights, the rule of law, and personal autonomy and individual rights. These two components of the freedom score remind the reader of what the taxpayer receives upon demanding for more accountabilities and responsiveness.

Admittedly, critics have voiced that most of these sub-dimensions are slanted toward more classical liberal principles. Scholars such as Schneider and Schmitter (2004) contend that Freedom House overloads the concept of democracy with a host of characteristics that are all in one way or another related to democracy but are really facets of political liberalism, social justice, and security, which should not be confused with

democracy as a characteristics of the political process. For them the distinction is crucial in that democracy is about holding the government accountable to citizens, while liberal principles aim at decreasing the arbitrary encroachment of government—no matter how accountable it may be — in people’s private lives. In fact, they see the tenets of classical liberalism as precondition of democracy. A second criticism leveled at Freedom House’s measurement is that it equates administrative efficiency with democracy. However, real life experience shows democracies’ capacity to make and enforce decision may even be worse than that of dictatorships, where fewer actors are given opportunity to oppose or debate policies. As a result Freedom House’s critics (Schneider and Schmitter, Przerworki to enumerate few) subscribe to the minimalist definition of democracy, which emphasize the electoral competitiveness and accountability.

***c) Control Variables:*** Countries’ GDP per capita, state regulatory quality, and control of corruption.

*i. The GDP per capita:* The World Bank defines the GDP per capita as the gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars (W.B).

*ii. Regulatory quality* captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development (WGI).

*iii. Control of Corruption* captures perceptions of the extent to which public

power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Each of these variables, regulatory quality and control of corruption are index built by combining regulatory data from Both the Regulatory Quality and Control of Corruption are constructed by the W.G.I The WGI are composite governance indicators based on 30 underlying data sources. These data sources are rescaled and combined to create the six aggregate indicators using a statistical methodology known as an unobserved components model. A key feature of the methodology is that it generates margins of error for each governance estimate. Originally, WGI reports its measures in two ways: in the standard normal units of the governance indicator, ranging from around -2.5 to 2.5, and in percentile rank terms ranging from 0 (lowest) to 100 (highest) among all countries worldwide (WGI Methodology p.5). However, in order to gauge precisely the effects of state effectiveness, we rescale the measurement to range between 1 and 3. 1 capturing the value of weak state, 2 the value of moderately effective and 3 highly effective. The summary of variables' descriptive statistic is the table below:

Table 2: Summary of Descriptive Statistics

Variables	Obs	Means	Std. Dev.	Min	Max
Tax	1181	17.411	7.8468	0.1	61
democracy	1199	1.2	0.4273	1	2
lngdp	1185	14169	18181	111.2	11.6458
Effectivedem	1115	3.4757	1.4046	0	5
Regulatory Q.	1200	0.2837	0.9318	-2.34	2
Control Corrup	1200	0.1874	1.0575	-2.5	2.5
Effectiveness	1115	1.973	.1875	1	3



## METHODOLOGY

### a) Time-series- cross-section models

The nature of the question under investigation and the structure of the data lead us to use a Time-series- cross-section (T.S.C.S) models to measure the long term effects ( a decade from 2003 to 2012) of the interaction variable, “Effective democracy,” on taxation. According to Nathanael Beck (2004), a time-series- cross-section data is one type of repeated observation data that is commonly analyzed in political science and related disciplines. T.S.C.S. data is common in the analysis of data where repeated observations (often annual countries’ Freedom scores and effectiveness) are made on the same fixed political units (usually states or countries’ tax to GDP ratio). Although the linear equation of a T.S.C.S. model assumes that all units map the covariates into the dependent variable identically, the way to drop this assumption and allow each unit to have its own intercept is to add a term ( $\alpha_i$ ) to the equation. This can be done by adding a series of unit dummy variables to the specifications called ‘*fixed effects*’ (Beck, 2004). One consequence is the reduction of the degree of freedom. However, Neck contends that with a reasonably large T (say over 10), fixed effects do not use up an absurd number of degrees of freedom because as T gets bigger, we get better and better estimates of the fixed effects. Furthermore, according to Trivedi and Cameron, the fixed effect (FE) allows obtaining a consistent estimate of the marginal effect of the j th regressor. More important, the estimates obtained are time varying even if the regressors are endogenous (p.237). The fixed effect model is in the equation (1)

$$\gamma = \alpha + \beta\chi_{1t1} + \beta\chi_{2t2} + \beta\chi_{3t3} + \beta\chi_{4t4} + \dots + \beta\chi_{ntn} + \epsilon_{iT} \quad (1)$$

Where  $\gamma$  represents the dependent variable the tax to GDP ratio on which we regress the

following independent variables  $\chi_1$  to  $\chi_5$  the lagged dependent variable, democracy, state effectiveness, effective democracy( the interactive variable), the gdppercapital, the control of corruption, and the regulatory quality.  $\alpha$  represents the intercept and the  $\beta$ s represent the coefficients of the parameters.

Another T.S.C.S.model that estimates individual effect is the random effect. In the random effect model (RE), it is assumed that the intercept is purely random; a stronger assumption implied that the random effect singled out is not correlated with the regressors. Trivedi and Cameron indicate that one advantage of the (RE) model is that it yields estimators of all coefficients and hence marginal effects, even those of invariant regressors (p.255). Like in the fixed effect model, whereas both democracy and effectiveness did not appear to be statistically significant in the above model, effective democracy, the interactive variable has not only a positive coefficient but it is statistically significant as well. Nonetheless, we base our analysis solely on the outputs of the fixed effect model because Trivedi and Cameron recommend that the (RE) model's estimates are inconsistent if the post estimation, (i.e., the goodness of fit) tests indicate that the (FE) model is appropriate.

Yet with these results, comes the second challenge to modeling a T.S.C.S data—namely— the issue of serial collinearity caused by the dynamicity of time. In this case, scholars indicate to include the lagged dependent variable (Hendry, Pagan and Sargan, 1984; Hendry and Mizon, 1978) to solve the serial collinearity challenge. Following this recommendation, we lag the dependent variable for one year and test to see, if despite this operation, the interaction variable still matters. The results indicate that effective democracy remains a statistically significant upward driver of internal revenues in

developing countries. We complete the method section by using a Maximum Likelihood Estimation model, which provides robust standard errors.

After recoding the variable taken from the WGI (state effectiveness,) to start at 0 as the minimal value and 3 as the maximal value, we measure the impact of the interaction variable, “Effective democracy” on taxation using the three models, Fixed effects (FE) in the first column, Random Effect (RE) in the second column, and the Maximum (MLE) in the third one. The result table below displays each model’s outputs (each variable’s coefficient, statistical significance, and standard errors).

Table 3: Results of the Three Models: (FE), (RE) and (MLE)

EMPIRICAL RESULTS									
Variables	Models								
	Fixed Effects			Random Effects			MLE		
	Coef.	P-val.	Std. E	Coef	P-val	Std.E	Coef	P-val	Std. E
lagged tax	.962	0.00	.009	.960	0.00	.010	.95	0.00	0.10
Effective democracy	.161	0.00	.061	.155	0.00	0	.162	0.00	.058
democracy	-.195	0.30	.188	-.16	0.381	.185	-.20	0.294	.192
Effectiveness	.601	0.14	.380	.57	0.125	.373	.62	0.100	.382
Control corruption	.049	0.74	.151	.034	0.839	.149	.501	.643	.765
Gdp percapita	2.22	.622	3.52	2.72	5.52	5.5	2.67	631	5.5
Regulatory quality	-.079	0.61	.342	-.06	.694	.152	-.07	.543	.542

The log likelihood: -2173,9198

## DISCUSSION AND CONCLUSION

As shown in the above table, across the three models, in developing countries, democracy by itself has no effect on taxation; the P-Value is beyond the acceptable threshold (0.005). For instance in the Fix Effect model, democracy's P-value = 0.300, RE democracy's P-Value = 0.381, and 0.294 for the MLE for despite the robust standard errors. This finding corroborates the section of the theory, which maintains that mere increase in civil and political rights in developing countries is an insufficient condition to improve taxation. Equally, state effectiveness is not statistically relevant ( P-value = 0.14) despite having a positive intercept. The insignificance of the state effectiveness speaks to the institutional weakness and, or the lack of political willingness to substantively perform and to meet citizens basic needs in most developing countries. As for the control variables, the log gdp per capita, the control for corruption, and regulatory quality, neither of these variables prove to decrease the positive impact of the primordial independent variable: Effective democracy. The major finding of this investigation is that the synergistic combination of democracy and state effectiveness increases substantially tax revenue by 16% for both the FE model, and the MLE and 15% for the RE models. After a conclusive Hausman test, confirming that the null hypothesis is non significant ( P-Value 0.023), we use the 16% as the final output in term of revenue increase when democracy and state effectiveness work in tandem.

These results substantiate empirically the abundant scholarship on tax compliance. They point to the fact that a responsive government enhances both tax morale and tax compliance by increasing what Hetherington calls people's evaluation of government's performance relative to their normative expectation of how it ought to

perform( p.13). A government that commits itself in building trust through effective performance sends a strong signal to taxpayers that their demands have been taken into account. As Christine Fauvelle-Aymar (1999) argues, the three components of trust induced by democracy that influence taxpayers behavior and consequently the tax capacity of the government are government's legitimacy, i.e., citizens' approval of the government; government's efficiency, which refers to whether or not the government performance lives up to citizens' expectations; and government's credibility, which refers to the predictability and durability of government's actions (p.15).

## VII. CONCLUSION

On the outset of this study, we aimed at demonstrating that when democracy and state effectiveness work in tandem, the tax revenue increases because these two attributes force political leaders to focus on citizens by improving their political participation (democracy) and by meeting voters' basic needs (performance). State effectiveness combined with democracy will provide what Tilly(1975) calls “ internal homogenizations” (p.66) which entails the transformation of people's commitment and loyalty from smaller tribes, villages or petty principalities to a larger political system creating a common national culture of loyalty and commitment to a political community. In other words, this fundamental function will correct one of the most challenges in state building efforts highlighted in Joel Migdal's *States in Society(2001)*, the dispersed loyalty of citizens in developing countries. , when citizens see their tax authority as trustworthy and benefit from its performance, they are willing to contribute. They become true citizens who have rights through democracy, benefit from the performances

of their government, and take on their civic duties by complying to tax policies. In developing countries, the price of freedom is the investment required to establish a citizen's trust in her political community. How to build this trust through substantive performance is an interesting topic for future researches.

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*Stata outputs on the three models.*

```
. xtreg tax laggedtax democracy effective2 effectdem2 gdp,fe
```

```
Fixed-effects (within) regression      Number of obs      =      997
Group variable: year                  Number of groups   =         9

R-sq:  within = 0.9300                Obs per group: min =         87
      between = 0.6281                avg =              110.8
      overall  = 0.9269                max =              117

                                          F(5,983)           =    2612.72
corr(u_i, Xb) = -0.0154                Prob > F           =     0.0000
```

tax	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
laggedtax	.9624677	.0099404	96.82	0.000	.9429609	.9819745
democracy	-.1505164	.18113	-0.83	0.406	-.5059623	.2049296
effective2	.5722266	.374152	1.53	0.126	-.1620019	1.306455
effectdem2	.147862	.0552238	2.68	0.008	.039492	.2562321
gdp	2.22e-06	3.69e-06	0.60	0.547	-5.02e-06	9.46e-06
_cons	-.5779363	.7830492	-0.74	0.461	-2.114577	.958704
sigma_u	.50855338					
sigma_e	2.1012187					
rho	.05533602	(fraction of variance due to u_i)				

```
F test that all u_i=0:      F(8, 983) =      6.61      Prob > F = 0.0000
```

```
. xtreg tax laggedtax democracy effective2 effectdem2 gdp regulatory corruptcontrl,fe
```

```
Fixed-effects (within) regression      Number of obs      =      997
Group variable: year                  Number of groups   =         9

R-sq:  within = 0.9300                Obs per group: min =         87
      between = 0.6286                avg =              110.8
      overall  = 0.9269                max =              117

                                          F(7,981)           =    1862.75
corr(u_i, Xb) = -0.0153                Prob > F           =     0.0000
```

```
. xtreg tax laggedtax democracy effective2 effectdem2 gdp regulatory corruptcontrl,r
```

```
Random-effects GLS regression           Number of obs   =       997
Group variable: year                   Number of groups =         9

R-sq:  within = 0.9300                  Obs per group:  min =        87
      between = 0.6287                      avg =       110.8
      overall = 0.9269                      max =       117

                                           Wald chi2(7)    =   13122.75
corr(u_i, X) = 0 (assumed)              Prob > chi2     =     0.0000
```

tax	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
laggedtax	.9627297	.0101073	95.25	0.000	.9429196	.9825397
democracy	-.1626398	.185521	-0.88	0.381	-.5262543	.2009748
effective2	.573344	.3735161	1.53	0.125	-.158734	1.305422
effectdem2	.155893	.060691	2.57	0.010	.0369409	.2748451
gdp	2.72e-06	5.52e-06	0.49	0.622	-8.09e-06	.0000135
regulatory	-.0600034	.1527559	-0.39	0.694	-.3593995	.2393927
corruptcontrl	.0304923	.1496119	0.20	0.839	-.2627416	.3237262
_cons	-.5768157	.8590868	-0.67	0.502	-2.260595	1.106964
sigma_u	1.0110312					
sigma_e	2.1031933					
rho	.18770804	(fraction of variance due to u_i)				

