# IT'S ALL POLITICS: THE POLITICAL ECONOMY OF NON-CORE COUNTRIES IN THE ERA OF GLOBALIZATION

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### ABSTRACT

# DAE JIN YI: It's All Politics: The Political Economy of Non-Core Countries in the Era of Globalization (Under the direction of Evelyne Huber)

The first paper, "Politics and Income Inequality: Does Politics Still Matter in New Democracies?" tests the hypotheses about the effects of political institutions on income inequality with unbalanced pooled time-series cross-sectional data that cover 37 fledgling democracies for 1975-2006. The evidence suggests that a parliamentary system and more years of democracy are substantially more likely to be associated with lower levels of income inequality, but a left government and proportional representation do not play a significant role in distributional outcomes. In the second paper, "No Taxation, No Democracy? Taxation, Income Inequality, and Democracy," using event history models to analyze a pooled dataset of regime transitions that cover all countries for 1970-2000, I find that taxation has a conditional impact on democratization, but not on democratic breakdown; higher taxation levels and greater income inequality should tend to promote democracy. Finally, in the third paper, "Asian Democracies and the Public Sector: The Political Economy of Globalization," analyzing a pooled dataset for the *domestic* public sector (excluding military spending) in 18 Asian countries for 1960-2005, I find that, in general, democracy is associated with larger size of government; in particular, partial democracies are likely to go through more speedy expansion in the domestic public sector as trade increases; yet, democracy and partial democracy appear to play a little role in reference to the increase in foreign direct investment. To my mother, who invested so much in me.

To the memory of my farther, from whom I inherited my passion for science.

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# **CHAPTER 1**

# POLITICS AND INCOME INEQULAITY: DOES POLITICIS STILL MATTER IN NEW DEMOCRACIES

How successfully are the variations of income inequality among countries explained using the factors relevant to politics? Although its "luster...is fading" (Winer and Hettich 2006, 448), the median voter model "has been the workhorse in the political economy for two decades" (Iversen 2006, 604). The canonical model proposed by Meltzer and Richard (1981) succinctly presents that democracy and unequal societies are likely to redistribute more than non-democracy and equal ones, respectively.

Yet, the model's simplicity and theoretical tractability come at a price. Empirically, the cross-national link between inequality and redistribution among advanced industrial countries is the reverse of what Meltzer and Richard (1981) formalize: Equal countries redistribute more than unequal ones, which is often referred to as the "Robin Hood paradox" (Lindert 2004). Analytically, it largely neglects much of the rich complexity through reducing the fundamentals of the politics of redistribution to one specific policy game in a unidimensional distributive space. Virtually most of their basic assumptions can be challenged on several theoretical grounds. First, the Meltzer-Richard model is "institution-free" (Beramendi and Anderson 2008, 7). Above all, it ignores the influences of political and economic institutions that form the rules of contestation among conflicting interests and that transfer this contestation to social policies. Arguably the most outstanding institutional factors concern government partisanship, electoral systems, and wage bargaining structures,

as I shall discuss.

Second, two assumptions of the Meltzer-Richard model that are related to the flagship principles of democracy are also problematic: One man has one vote; and everyone receives the same transfer (a universal flat-rate benefit). Capitalist economic structure based on inequalities in distribution of property and income would affect the largely uneven patterns of political influence. In such a context, it is logical to assume that the politics of redistribution is working based on "a one-dollar one-vote rule" (Alesina and Glaeser 2004, 59) instead of a nominal one-man one-vote rule. Accordingly, the poor may not be able to draw much redistribution away from the rich, and even if the poor succeed, a great deal of redistribution may be targeted at politically and economically powerful groups. This is particularly the case outside of advanced industrial countries.

Recognizing these costs and benefits of the Meltzer-Richard model, most recent comparative literature on the political economy of redistribution begins there, enjoying its benefits and then, to complement its limitations, moves into multidimensional approaches that absorb various types of institutional settings and revised assumptions. In particular, a number of theoretical contributions by political scientists and economists predict that the expansion and retrenchment of the welfare state have been influenced by a diverse set of political variables, such as partisan government (Esping-Andersen 1985; Hicks 1999; Hicks and Swank 1992; Huber, Ragin, and Stephens 1993; Huber and Stephens 2001; Iversen and Cusack 2000; Korpi 1989; Stephens 1979), the attributes of governments under different constitutions (Birchfield and Crepaz 1998; Crepaz 1998; Persson 2003; Persson and Tabellini 2003), and the electoral formula (Austen-Smith 2000; Iversen and Soskice 2006).

Yet, the reach of the empirical analysis is geographically limited in advanced

industrial countries. It is surprising there have been so few studies attempting to explain variation in political phenomena across new democracies, given that the spread of new democracies has come a long way around the world in the postwar era, they already outnumber old ones, and their specific political and economic development opens an important alternative within political economy. Most of the existing literature on income inequality has skirted this issue as well. Increased theoretical and practical curiosity notwithstanding, very little is known about the dynamics of income inequality in new democracies. Thus, my research tries both to test current theories of the political economy of redistribution as applied to new democracies and to provide an initial cross-national comparison of the implications of political institutions for redistributive outcomes.

Based on the theoretical debates and empirical findings from the literature on the Western welfare states, this article provides systemic empirical analysis of the effects of politics on income inequality in fledgling democracies for 1975-2006. By examining whether the dominant research paradigm explaining the role of the political variables is still valid in new democratic societies, the analysis helps contribute to developing more sophisticated and generalized theories of political economy. Answers to this question are very critical, especially for new democracies constructing rules of the political game from scratch.

#### Theories

The central idea in studies discussed here is that the policy outcome or the resolution of conflicts among the people who have different economic or political interests varies, hinging on the rules of the game or the political institutions that are in place. The essence of these institutions clearly creates a maneuverable area for economic interests and organized

groups to affect distributional policy. In what follows, I address four main political variables from the literature on the Western welfare state that are expected to play a decisive role in the distributional outcomes as well as levels of welfare spending: government partisanship, electoral systems, forms of government, and age of democracy.

#### Government Partisanship

The basic arguments of power resources theory (hereafter PRT) are that different classes in societies have different distributional preferences and that the distribution of these classes' power in societies primarily determines different distributional outcomes across countries (Esping-Andersen 1985; Garrett 1998; Hicks 1999; Huber, Ragin, and Stephens 1993; Huber and Stephens 2001; Iversen and Cusack 2000; Korpi 1989; 2006; Stephens 1979). Here, the lower classes, assumed to be inclining toward more egalitarian outcomes than the upper classes, are the main proponents for a more comprehensive and generous welfare state and can influence the policy consequences through organizing in two channels: the economy and politics. Their organizational strength in the market is reflected in the density and centralization of labor unions, and their organizational strength in the state is mirrored in the power of left parties in government. Accordingly, the power resources theorists claim that the level of labor union mobilization and the strength of left parties determine the size of distributive impact of the welfare state.

The positive correlation between the strength of left parties (and labor unions) and redistribution may be one of the strongest empirical generalizations we have in the comparative political economy of advanced industrial countries to date (Bartels 2008; Bradley et al. 2003; Hicks and Swank 1992; Kenworthy and Pontusson 2005). Although the

literature on partisanship has made substantial contributions to our understanding of the politics of redistribution, whether PRT really conveys a richer and more accurate picture of reality across advanced industrial societies is still an open question.<sup>1</sup> The influential academic and empirical efforts to complement a partial explanation of this unidimensional approach (PRT) has emphasized the multidimensional approaches that model the interplay between different sets of political and economic institutions and the distribution of income. Some, treating the power of left parties as endogenous, suggest solid theoretical and empirical grounds to justify the strong redistributive effect of political institutions, especially the type of electoral systems (Birchfield and Crepaz 1998; Iversen and Soskice 2006) that have, in turn, been influenced by earlier patterns of investment during the 19<sup>th</sup> century (Iversen and Soskice 2009); others, putting economic institutions at the center of the analysis, seek to find a more sophisticated explanation that focuses on the interactive effect of partisanship and economic institution, especially corporatism (coordinated market economies, or centralized wage bargaining), on distributive politics (Beramendi and Cusack 2008; Moene and Wallerstein 2003; Rueda 2008; Rueda and Pontusson 2000; Scheve and Stasavage 2009; Wallerstein 1999).

### Electoral Systems

Recent political science literature on alternative rules for electing a legislature often focuses on the two most important dimensions: district magnitude and the electoral formula (Lijphart 1994, 10). District magnitude determines the number of representatives elected in a district. The electoral formula specifies how votes are transferred into seats. Broadly, two

<sup>&</sup>lt;sup>1</sup> Recently, PRT was disputed empirically by Scheve and Stasavage (2009), who argue that the positive effects of centralized wage bargaining and partisanship on redistribution measured by top incomes ratios seem to disappear when the sample is extended to a longer time period, 1916-2000.

main types of electoral formulas are distinguished. The plurality system, also known as "first past the post," elects the candidate who wins the highest vote shares in a given constituency, whereas the proportional representation (PR) system distributes seats among parties in proportion to the vote quota they obtained.

Existing theoretical studies have derived specific expectations about the implications of the electoral systems on social policies: the *composition* and the *overall level* of spending (Persson and Tabellini 2000; 2003; Stromberg 2002). The winner of the election has the discretion to set policy, which is fundamentally influenced by the electoral systems. All of these works hypothesize that proportional systems (PR and larger districts) tend to develop multiparty systems and allow greater proportionality and minority representation than majoritarian electoral rules (plurality and single-member district).<sup>2</sup> With respect to the *composition* of spending, political players under PR are thus induced to put stronger emphasis on broad programs to obtain support from broad coalitions of the voters. Under majoritarian systems, by contrast, they may be concentrated in particular groups in particular districts, increasing local public-good provision and reducing general transfers, often dubbed as pork barrel spending.<sup>3</sup> This is intuitively clear. To put it simply, under proportional systems (PR and a single national district), a party needs 50% plus one of the total votes to have a majority in the legislature, whereas, under majoritarian electoral rules and a two-party system, a party needs only 25% plus one of the votes: If three parties are competing, the smallest possible share for a majority sharply decreases to around 17% of the vote (50%

<sup>&</sup>lt;sup>2</sup> Empirically, Perotti and Kontopoulos (2002) show that a multiparty system is one of the significant determinants of fiscal outcomes, particularly transfers, across Organization of Economic Co-Operation and Development (OECD) countries. Furthermore, Persson, Roland, and Tabellini (2007) present that PR loses its direct effect on government spending when the size of the government coalition is controlled.

<sup>&</sup>lt;sup>3</sup> See Weingast, Shepsle, and Johnsen 1981 for a formal work on this point.

votes in 34% of the districts).

Accordingly, under PR, government policy targets broader socio-economic groups through focusing on the broader and more universal redistributive programs. How to allocate social spending is a function of the different electoral systems. The empirical evidences by Lizzeri and Persico (2001), Milesi-Ferretti, Perotti, and Rostagno (2002), Persson and Tabellini (2003), Richard (2009), and Swank (2002) fit nicely with the logic above. Note that, however, it is a daunting task to differentiate empirically between broad vs. narrow welfare programs. In theory, the contrast between these spending programs is undisputed; in practice, less so. For instance, some spending on goods and services, like health and transportation, can be considered as not only general public goods but also local public goods. Furthermore, broad social transfer programs, such as unemployment insurance and pensions, can be targeted geographically if the major beneficiary of these programs is concentrated in certain districts. Therefore, it would be virtually impossible to estimate the total amount of each program provided by a variety of types of policies. This is particularly the case when it comes to applying this hypothesis to developing countries.

Although some of the aforementioned scholars have attempted to construct crosssectionally comparable measures of broad and narrow programs,<sup>4</sup> no single measure has apparently been sufficient to capture every nuance of these theoretically different programs. Yet, despite the dearth of empirically reliable measures, they move the analysis one step further. In this regard, my dependent variable, income inequality, can be one of the *indirect* proxy measures to see the effect of the alternative electoral systems on the types of welfare

<sup>&</sup>lt;sup>4</sup> Proxy measures for broad programs are the sum of social security payments, other transfers to families, and subsidies to firms (Milesi-Ferretti, Perotti, and Rostagno 2002) and social security and welfare spending by central government (Persson and Tabellini 2003). One measure for narrow programs is countervailing duties and complaints filed by the General Agreement of Tariffs and Trade/World Trade Organization (Richard 2009).

programs because broad programs should be associated with somewhat more equal redistributive impact, and vice versa.

With respect to the *overall level* of spending, it has been hypothesized that proportional electoral systems are associated with greater government spending. Austen-Smith (2000) formally argues that the electoral system tends to shape the total sum of taxation and spending. Assuming that more parties are represented under PR than under majority rule, with the PR voting system parties have strong incentive to produce higher redistributive taxation. The reason is that the decisive voters to determine the overall level of taxation vary: Under PR, redistributive policies are shaped mainly by the interests of the individuals with average employee income, but under majority rule, levels of government spending are largely determined by the individuals with median income. Therefore, political institutions matter in that they induce governments or parties to appeal to specific groups of the electorate who usually have different preferences for redistributive policies. The empirical results by Iversen and Soskice (2006), Milesi-Ferretti, Perotti, and Rostagno (2002), and Persson and Tabellini (2003) are consistent with this theoretical inference.

#### Forms of Government: Parliamentary vs. Presidential Systems

The government is basically a set of institutions or the rules of the game in which various economic or political interests and organized groups compete, compromise, and finally produce policies. The extent to which policies are chosen and partisanships are dominated tends to hinge upon the nature of these institutions. Constitutions specify the definitive attributes of these institutions to influence redistributive policies. The main concern of comparativists regarding constitutional designs is the separation of those powers

across different politicians and offices: parliamentary versus presidential regimes.

Surprising as it may seem, political scientists have not, until recently, devoted much effort to addressing the issue of constitutional effects, in particular parliamentary vs. presidential systems, on redistributive policies and outcomes. Indeed, analysis of the effects of alternative constitutions has a long intellectual history in comparative politics, but this research has typically remained within the domain of the political system, such as the breakdown of democratic systems. One reason may be that the issue does not appeal to comparative political economists who soak up the cutting-edge research in the field because they are typically focusing on advanced industrial countries where none but the United States is categorized as a pure presidential system (Lijphart 1999). When it comes to the difference between parliamentary and presidential systems, forms of government should be considered not as a variable but as a constant in the context of Western European countries.

Yet, this is not the case in new democracies. As I shall discuss later, they show a great deal of diversity of constitutions, enough to draw scholarly attention to one of the possibly significant determinants of redistributive outcomes. The only analytical model relating the forms of government and public finance has been developed recently by Persson, Roland, and Tabellini (2000). It has been posited that presidential regimes do not need the support of a relative majority, and their allocation of spending thus *narrowly* targets some powerful minorities instead of the joint interests of its constituency. In contrast, parliamentary regimes, pursuing a broader coalition of a majority of voters in the usually multiparty systems, incline toward *broad* programs that benefit various groups, which naturally lead to high taxes and high spending. Furthermore, it is likely that the common pool problem occurs more frequently in parliamentary systems (coalition governments), which leads to total

overspending.

From a data set including 17 developed democracies, Huber, Ragin, and Stephens (1993) found that presidentialism, as well as federalism, bicameralism, referenda, and majoritarian elections, has a strong negative effect on welfare state expenditures. The empirical result by Birchfield and Crepaz (1998) from a similar sample is mainly consistent with the theoretical strand discussed above: Collective veto points (parliamentary government and PR) tend to decrease income inequality, whereas competitive veto points (presidential government) tend to increase income inequality. More recently, Persson and Tabellini (2003), building on the more extended sample combining advanced and emerging democracies, derived similar empirical inference.

### Age of Democracy

Last but not least, I also include age of democracy as an explanatory variable in the empirical analysis. It is often supposed that institutions take time to exert an appreciable effect on political or socio-economic outcomes. Democracy may take some time to work as assumed, as well. One of the classic studies on democratization suggests that democracy may require a "habituation phase" to become fully established because it involves "a process of trial and error" (Rustow 1970, 358). Evolved into full, stable, or consolidated democracy (whatever one wishes to call it) it is required to show in itself proof of the efficiency of the democratic process for revolving conflicts within human groups. One study of the determinants of corruption, considered as one indicator of government performance, shows that levels of corruption are significantly higher in younger democracies than in older ones (Treisman 2000).

Therefore, relatively older democracies in my sample are expected to show better performance in public policies and to redistribute more than relatively younger democracies. This hypothesis is broadly consistent with Muller's (1988) finding. Huber et al. (2006) also found that "years of democracy" actually matters for reducing income inequality in Latin America. Their explanation from the perspective of PRT is that some length of democratic time would allow the underprivileged to build organizations in the form of political parties.

#### The Politics in New Democracies

The question that drives the analysis is whether the indicators relevant to politics, expected from the experiences of older democracies to be the key determinants of the diverse patterns of distributional outcomes, are still valid in explaining the distribution of income in fledgling democracies. We have some theoretical reasons for believing that young democracies might work differently from mature ones. First of all, the politics of parties differs. In the PRT world, partisan difference matters in redistributive politics because political parties are considered as programmatic, having deeply embedded roots in socioeconomic categories and enjoying a strong relationship with voters in terms of partisanship. Yet, this is not always the case in new democracies. It has been commonly argued that in new democracies, most of the parties compete for voters based on clientelist patterns rather than on coherent programmatic packages (see e.g., Hagopian 2009 and Kitschelt and Wilkinson 2007). It means that the linkage between voters and political elites is based not on the programs or ideology arising from socio-economic cleavages but on the cash payments, patronage jobs, pork barrel projects, or strong personalistic appeals. Accordingly, such an

inauspicious context in new democracies leads to weakly institutionalized parties and unstable party systems.

My concern in the analysis is, however, not the redistributive consequence of clientelism. Not only has the relationship between clientelism and redistribution been controversial, but it is also definitely well beyond of the scope of this study. Furthermore, this topic has been fleshed out with theoretical and empirical rigor in the recent literature, but none of the arguable issues about the links between clientelism and redistributive outcomes can be tested empirically due to the dearth of a reliable and valid cross-national data set on voters-political party linkage strategies. One important implication, which is certainly relevant for my purposes, of the fact that patron-client relationships are more pervasive than partisanship in new democracies is that the extent to which left parties are bound to respond to the redistributive demand of the rank and file may not be as great in advanced industrial countries. That is, their commitment to social policies varies, depending on electoral necessity or other nonideological factors. Thus, it can be expected that partisan difference may not make as significant a difference in redistributive politics as it does in advanced industrial countries.

Second, the configuration of political institutions differs. Some specialists on advanced industrial countries start from a strong empirical correlation among various political institutions. For instance, Iversen and Soskice show PR's deep affinity with left governments: Center-right governments constitute 75% of all governments in majoritarian countries, whereas the same is true of only 26% of all governments in PR countries among 17 advanced democracies between 1945 and 1998 (2006, 166, Table 1). Moreover, the strong relationship between government partisanship and electoral systems seem to be bundled with

a broader constellation of consensus democratic institutions, such as parliamentary systems, coalition governments, and multiparty systems (Lijphart 1999). However, the strong correlation is not limited to the domain of the political system. Two different worlds clearly appear when we extend our view to economic institutions, welfare states, and redistributive outcomes: Consensus democratic institutions have developed in tandem with corporatist interest representation, centralized wage bargaining, and relatively equal and high redistribution, whereas majoritarian democracies have coincided with plural interest representation, liberal market economies, and a high level of inequality; "varieties of capitalism, welfare states, and political institutions thus coevolve" (Iversen and Soskice 2009, 476).

As some leading scholars, e.g., Huber, Ragin, and Stephens (1993) and more recently McCarty and Pontusson (2009), point out, this multicollinearity among them makes most empirical efforts to explore the effect of each institution difficult. Due to this problem, comparative political economists face daunting challenges of finding the net causal effect of each institution on redistribution. Yet, as with partisanship, this is not the case in new democratic soils. Tables 1 and 2 show that there are no strong correlations among forms of government, electoral system, and government partisanship. The figures provided are the total number of years with the type of electoral systems in new democracies over the period 1975-2006, organized by alternative forms of government and government partisanship, respectively. In a stark contrast, as Table 1 indicates, parliamentary systems are associated with majoritarian electoral rules and presidential systems are increasingly associated with PR: Only one fourth of new democratic governments with a parliamentary system adopted PR, and nearly double the number of governments with a presidential system selected PR

rather than plurality. Table 2 does not confirm the strong empirical correlation between left governments and PR that arises from advanced industrial countries. The proportions of PR governments are almost the same regardless of government partisanship. They are seemingly indifferent. The heterogeneity of political institutions provides us a good empirical sample to address the question of political indicators' *net* effects on redistributive outcomes.

Theoretically, the sample of new democracies I collect reflects the second and third historical waves of democratization that have swept the world since 1943 (Huntington 1991). To draw an inference about the effects of politics on distributional outcomes in only new democracies, I first exclude 19 developed democracies that were surfing the first wave of democratization: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

Empirically, to define a democracy in the panel sample from 1975 to 2006, I rely on the Polity IV data set (Marshall and Jaggers 2007), which goes back to as early as 1800 and covers all independent countries with more than half a million population. This measure constitutes the difference between two discrete indicators, *Democracy* and *Autocracy*. The former scores institutionalized democracy from 0 to 10, with higher values associated with stronger democracies. Here, democracy is conceived by three main criteria: competitiveness and openness of executive recruitment; constraint on chief executive; and competitiveness of political participation.

Inasmuch as the Polity IV data set is not a dichotomous measure of democracy, the analysts are required to draw an arbitrary cutting point where democracy starts. The ways they have offered differ, for example, 4 and above (Brown and Hunter 1999), 6 and above

(Kaufman and Segura-Ubiergo 2001), or 7 and above (Rudra 2004). In this study, I use two different rules for including countries in the sample. As for the first, I apply a relatively generous criterion of democracy to embrace as many countries as possible. Ideally, if a country adopts a democratic institution, it should be in evidence whether the introduction of the institution appeared to have a significant impact. Thus, following Persson and Tabellini (2003) and Gerring, Thacker, and Moreno (2009), I include countries and years with positive values of combined *Polity Score*, which is derived simply by subtracting the *Autocracy* value from the *Democracy* value. This is defined as the *extended* sample. Although the number of countries that have (or had) experienced some democratic political game for at least one year is more than 100, data availability limits this analysis to annual observations from 37 new democracies (see Table A1).

Because I deal with only democratic country years, some countries access and depart from the sample at different years. Specifically, the shift toward authoritarianism was most dramatic in Latin America. For instance, some Latin American countries, such as Brazil, Chile, and Ecuador, experienced military coups during the 1970s.

This *extended* sample allows me to formulate the empirical models with much larger observations, but it contains some opaque countries, such as Estonia and Zambia, which have barely been treated as democracies in the existing literature. As a check for the robustness of the empirical results, I perform sensitivity analysis through imposing a more stringent threshold of democracy. Then, a more restrictive rule labels the *reduced* sample as those countries and years where the Polity IV score is more than or equal to 8. The reasoning for my choice of 8 and above as relatively more stable democracies is offered by Polity IV. In the data set, 8 points is a threshold to be considered a "mature and internally coherent

democracy," which satisfies the conditions of (a) "fully competitive" political participation, (b) "elective" executive recruitment, and (c) "substantial" constraints on the chief executive (Marshall and Jaggers 2007 *Dataset Users' Manual*). Among the 37 countries in my sample, only four had not reached the threshold of "mature" democracy from 1975 to 2006: El Salvador, Honduras, Mali, and Russia.

### Variables and Data

#### Distributional Outcome

The dependent variable, income inequality, comes from the GINI variable in the World Income Inequality Database (United Nations University-World Institute for Development Economics Research 2007). This is by far the most comprehensive GINI data set, including 4981 observations from 152 countries.<sup>5</sup> Because the data set is an accumulation of various surveys using different methods, implying that all the data are not of the same quality, and some countries have more than one observation for certain years, I develop the selection criteria to trim the data (see Appendix for a more detailed discussion). And then, to control for remaining potential measurement errors caused by variations of income sources, I use indicator variables: whether the definition of income is income (coded 1) or consumption (or expenditure) (coded 0), defined income is net (coded 1) or gross (coded 0) of taxes, information on the definition of gross versus net income exists (coded 1) or not (coded 0), and adjustment for household size has been made (coded 1) or not (coded 0).

# **Politics**

The model encompasses four main causal variables. It also contains control variables

<sup>&</sup>lt;sup>5</sup> For more information, visit http://www.wider.unu.edu/wiid/wiid.htm and look at the user's guide.

that, according to previous studies, are the most robust determinants of the dependent variable. To test the aforementioned claim, I include the following explanatory variables in the estimation equations. The variables of politics used in this article are constructed from *DPI2006 Database of Political Institutions* (Beck et al. 2007).<sup>6</sup>

The first explanatory variable refers to the chief executive's orientation with respect to the extent of state control of the economy, the left-right scale. I adopt two ways to operationalize this variable. First, conforming to custom, I build *Government Partisanship*, transforming the original strings to a 0 - 1 scale for easier interpretation. It gives the chief executive defined as communist, socialist, social democratic, or left-wing a score of 1; one defined as centrist a score of 0.5; and one defined as conservative or right-wing a score of 0. This manner of coding, however, may bring about significant measurement error if the key assumption that center government occupies the middle position between right and left governments is violated. For this reason, assuming partisanship as an ordinal variable, not a continuous one, I use two dummy variables, *Left* and *Center*, which allow us to see the net differences between left and right and between center and right.

As the second explanatory variable to look at the effects of constitutions on income inequality, I construct two dummy variables, *Parliamentary* and *Semi-Presidential*. *Parliamentary* is coded 1 for parliamentary systems and 0 for others. *Semi-Presidential* is coded 1 for assembly-elected presidential systems and 0 for others. If there is a single executive elected by popular vote or by an electoral college and there is no prime minister, the system is considered presidential. In countries with both a prime minister and a president, the system is presidential if a president can veto legislation and the parliament needs a

<sup>&</sup>lt;sup>6</sup> In their data set, it is not clear to categorize pure PR or pure plurality systems. Thus, I revised them from Persson and Tabellini (2003) and Reynolds, Reilly, and Ellis (2005).

supermajority to override the veto or if a president can appoint/dismiss prime minister and dissolve parliament.

To capture the diversity of the electoral formula, I use two variables. *PR* and *Mixed* are the dummies that reflect the basic classification of the electoral formula. *PR* is coded 1 if candidates are elected based on the ratio of voters obtained by their parties, and *Mixed* is coded 1 if legislators are elected using both plurality (a winner-take-all/first past the post rule) and PR.

Finally, to test the long-term effect of democratic rule, I also introduce two age variables, *Age of Total Democracy*, including both partial democracy (scoring from 1 to 7 on *Polity2*) and democracy (scoring from 8 to 10 on *Polity2*) and *Age of Democracy* (only democracy, excluding partial democracy), that are sums of years where (partial) democracy has been maintained without a break. I count age of democracy in a certain country from the first year with uninterrupted positive values (total democracy) or 8 and above (democracy) on the *Polity2* index up to 2006. Although some old democracies, such as Costa Rica (from 1841) and South Africa (from 1910), have experienced uninterrupted democratic rule since the 19<sup>th</sup> century or the early 20<sup>th</sup> century, I devise the year 1945 as the starting point of democratic rule for these old democracies. These variables are defined as Ages = (2006 - the first year of unbreakable [total] democracy)/62, so they are distributed in the range of 0 and 1.

Yet, this simple way to operationalize must be viewed with a degree of caution because some democracies went through long periods of democratic breakdown, and these countries may differ from those without democratic breakdown in terms of the effect of the length of democratic experience. I therefore settle on two dummy variables, *Previous Democracy* and *Previous Total Democracy*, which are coded 1 for countries with previous

(total) democratic experiences or 0 for others. Again, another caveat is that a few countries experienced democratic politics for a very short time; for instance, South Korea experienced just one year of democratic involvement in 1960. Hence, I do not count any previous democratic experiences or democratic breakdown of less than 3 years when I create these two dummies.

### Globalization

Globalization is far from a monolithic economic factor; it has been disaggregated into trade openness and global capital mobility (capital flows and foreign direct investment) in recent studies. First, international trade theory predicts that openness to trade and free capital flows induce an efficient allocation of scarce resources and produce dynamic economic development (Rodrik 1997; Williamson 1994). Following the Heckscher-Ohlin model of international trade, Stolper and Samuelson (1941) assume that expansion of trade adduces different distributional consequences to different factors, hinging on their relative scarcities, the given country's level of economic development, and its land-labor ratio. Higher trade openness is expected to benefit capital owners and skilled labor in advanced industrial countries that are relatively well endowed with them. In contrast, it is likely to hurt capital owners but benefit unskilled labor in the developing countries, because the former is scarce and the latter is abundant there (see also Rogowski 1987). Thus, their theorem predicts that trade should reduce inequality in developing countries but raise it in developed countries.

Stolper and Samuelson (1941) do not indicate an accurate mechanism through which trade may exert an influence on income distribution, whereas others present that trade reduces inequality because increased economic competition decreases the monopoly

privilege of the upper class (Birdsall 1988) or encourages a high level of labor productivity (Held et al. 1999). Trade openness in new democracies is expected to diminish income inequality, given the fact that most of advanced industrial countries are excluded from my samples. The measure of trade openness is the sum of the total imports and exports as a share of a country's GDP (trade openness = [imports + exports]/GDP).

Second, the capital mobility thesis claims that capital mobility effectively enhances the power of mobile business companies, deriving from the credible threat of capital flight, over national governments that seek to pursue generous social protection and the tax burdens needed to finance it (Bates and Lien 1985; Lindblom 1977). National governments no longer possess the autonomy to pursue independent macroeconomic strategies, and, under pressure for high interest rates and low taxes, the fiscal and monetary policies of governments of the left and right should converge in a highly financially integrated era (Garret and Lange 1991). Accordingly, neo-liberal reforms, such as liberalization, privatization, and deregulation, which follow financial openness, may hurt labor and raise income inequality (Held et al. 1999). Moreover, in the era of welfare retrenchment caused by globalization, the bargaining power of labor may be decreased and the wages of organized, middle-income workers are expected to be cut due to the direct investment activity of multinational corporations (Ietto-Gillies 1992).

In particular, among advanced industrial countries, the *outflow* of direct investment produces rising inequality by precipitating deindustrialization, which is the movement of the labor force from the industrial sector with higher average incomes to the service sector with lower average incomes (Alderson and Nielsen 2002; Nielsen and Alderson 1997), whereas among developing countries, the *inflow* of direct investment also increases inequality by

reducing labor force's bargaining power and promoting unemployment among unskilled labors (Jenkins 1996; Muller 1979). As in previous scholarship, *FDI Inflow*, measured as net inflows of foreign direct investment (FDI) as a share of a country's gross domestic product (GDP), is predicted to increase inequality in my sample of new democracies. The globalization data are taken from *World Development Indicators*.

#### Economic and Demographic Transition

Based on previous studies using pooled time series analysis (Alderson and Nielsen 1999; 2002; Huber et al. 2006; Nielsen and Alderson 1995; 1997; Rudra 2004), I construct several economic and demographic control variables to capture the effects most robustly associated with the income distribution, for which data are available for most of the countries and time periods. The first economic variable is the GDP per capita, defined as the log of GDP per capita (in constant dollars, Chain Index, expressed in international prices, base 2000), taken from the Penn World Tables. It is included with reference to Wagner's Law, which demonstrates that the call for redistribution tends to be income elastic. In addition, to see whether the Kuznets curve, which predicts that as a country develops, inequality of income seems to expose the specific patterns – the initial rise and consequent fall – exists (Kuznets 1955), the square of GDP per capita, GDP per capita  $(log)^2$ , are included. These variables are centered to control for collinearity. If the effects of GDP per capita (log) and GDP per capita  $(log)^2$  on inequality are positive and negative, respectively, we can believe that there would be the inverted U-shaped curve relationship between economic growth and inequality.

The second control variable is Sector Dualism, which I measure as the absolute

difference between the percentage of the labor force in agriculture and agriculture's share of the GDP. It stands for the average disparity in income between a low-productivity sector and a high-productivity sector. Previous researchers (Alderson and Nielsen 1999; 2002; Huber et al. 2006; Nielsen and Alderson 1995; 1997) have found evidence that sector dualism is significantly likely to have a positive impact on overall inequality. The last economic control variable is *Inflation*, which is expected to have a positive impact on inequality. Higher inflation contributes to reduce real wages, which is often more detrimental for workers employed in lower paying jobs. I adopt an additional method, the square root of the two-year prior moving average of a country's annual rate of inflation, to weaken the weights of annual eccentricity and higher values.

Changes in income inequality have been attributed also to demographic transition because it generates the oversupply of young unskilled workers, which results in more uneven diffusion of income. I use a measure of the percentage of the *Youth Population* under 15 years of age for the model, predicting that an increasing percentage of youth within a population will have a positive effect on income inequality. The diffusion of *Education* also can affect income distribution. The spread of education leads to higher economic development and less income inequality through providing workers with the opportunities for more lucrative and sophisticated employment. To the extent that this mechanism is at work in new democracies, I predict that the spread of education will have a negative effect on income inequality. *Education* is measured by the share of people with complete secondary education in the population aged 25 and over in Barro and Lee's database. One problem here is that the data are reported only in five-year bases. Thus, I fill in the missing data points by linear interpolation and extrapolation. This is justifiable because the levels of education in a

population do not vary much and tend to have linear movements. The data of the control variables above, *Sector Dualism, Inflation,* and *Youth Population*, except for *GDP per capita*, comes from The World Bank *World Development Indicator*.

#### Unidentified Region-Specific Factors

Of course, new democracies are not uniform. They are quite different from country to country and also from region to region, in terms of the socio-economic structures, the levels of income inequality, and the historically specific contexts. Here, three regional implications are of particular importance. First, one of the challenges I have faced is to consider the positive relationship between democracy and inequality in post-communist countries, which have produced spiraling inequality since 1989 regardless of economic performance or social and cultural assimilation to the West (Heyns 2005). In contrast to the transformation of the rest of the world, the post-communist transitions are unique because a national revolution that built new nation-states, a political revolution that replaced authoritarian regimes with democratic ones, and an economic revolution that induced market-oriented liberalization are occurring simultaneously, the so-called the triple transformation (Roeder 1999, 744). It means that rising income inequality in post-communist countries has happened amid the period of entering into global markets and the third wave of democratization.

The second concerns the historically distinctive context in Latin America. Latin America has remained the region with the worst system of distribution in terms of the depth and breadth of inequality, largely due to extraordinarily unequal land distribution that has continued since the colonial period without any significant land reforms. Large landholders

have dominated not only the agrarian sector but also the national economy (Rueschemeyer, Stephens, and Stephens 1992). High inequality in land distribution may increase income inequality in the urban sector by supplying plenty of unskilled labor and thus cheapening the average incomes of low-skilled workers (Huber et al. 2006).

Last but not least, contrary to Latin America, East Asia has presented a specific set of factors that contribute to economic development and equity. To promote the combination of high growth and equity, East Asian countries pursue specific policies such as the proinvestment (rather than anti-inflationary) macroeconomic policy, the strict control of FDI, the integrated pursuit of infant industry protection and export promotion, and the productivityoriented, as opposed to allocation-oriented, view of competition (Chang 2002, 229). In comparison with social and Christian democracy welfare models in Western European countries, this is odd, given that state provision of welfare services in East Asian countries was minimal, and that equality and the allocation-oriented (as opposed to productivity-oriented) view of competition has not been one of the main goals. In this context, social welfare has been considered as the responsibility of the family and the firm. Despite the growth of literature on an East Asian Model, the causal mechanisms that explain the link between economic development and equity still remain in a black box.

For these reasons, I include three regional dummy variables, *Post-Communist*, *Latin America*, and *East Asia*, to control for historical, region-specific effects on income inequality. In addition, I use two more dummy variables for region, *South and Southeast Asia* and *Africa*, treating Portugal and Spain as the reference category.

#### **Potential Problem: Endogeneity**

The standard regression is based on the assumption that the explanatory variables are exogenous, which means that unilateral cause-and-effect relationship between the predictors and the predicted, if any, is only inferred from the statistical models. Yet, in practice, this assumption is not satisfied in many situations, as it is more reasonable to think that two-way or simultaneous relationship between the dependent and explanatory variables, which makes the distinction between them of dubious value, occurs. Moreover, having an endogeneity problem, the standard regression method may not be applied in that the parameters estimated are biased and inconsistent, that is, they do not converge to their true population values no matter how large the sample size.

In my next paper, "No Taxation, No Democracy: Taxation, Income Inequality, and Democracy," I hypothesize that one of the factors that matter for democratization is also the different level of income inequality, which would generate the problem of endogeneity. To take into account this issue, I employ the following statistical treatment; all the explanatory variables are one-year lagged. Moreover, it can be assumed that this problem would be minor at best in my papers because political institutions focused in this paper are government partisanship, constitutions, and electoral systems but the ones in the next paper are political regimes, that is, democracy vs. authoritarianism. Strictly speaking, they cannot be equated, and should be analyzed as different factors in their relative contexts. More importantly, context differs. In this paper, my theoretical aim is to find some potential causal effects of the political institutions on income inequality only among *democracies* because my hypothesis is about whether democratic institutions are working as assumed. However, in the next paper, my leading goal is to examine whether the democratic effects of taxation tend to be relatively stronger in unequal *authoritarian* societies because event history models analyze the failures of authoritarian regimes assumed as patients. As for the reasons above, endogeneity may not generate some serious problems in my theoretical explanations.

#### **Model Specification**

To test the effects of the various types of political institutions on income inequality among fledgling democracies, I build on the innovations in the recent quantitative statistical studies and test the hypotheses with an unbalanced, pooled time-series cross-sectional data of inequality that cover 38 new democracies during the period, 1975-2006. I hypothesize that four main political variables (left partisanship, parliamentary government, PR, and longer experience of democracy) will be negatively associated with income inequality in new democracies, as assumed in the previous theoretical studies. Panel data are likely to come to the forefront of quantitative studies of most subfields of political science because they make it possible to draw systematic inferences of cross-sectionally and longitudinally diverse causal indicators by simultaneously analyzing both time invariant traits of countries (e.g., federalism or regime types), which avoid pure time-series studies, and cross-sectionally invariant characteristics of periods (e.g., exogenous shocks common to all countries such as global financial crises), which dodge simple cross-sectional studies (Hicks 1994).

Empirical results estimated from polled data using OLS (ordinary least squares) regression, however, are problematic because the assumptions of independence of the disturbance terms, errors, across observations are not likely to be satisfied. Four potential violations of OLS assumptions in pooled data are that the disturbance terms tend to be autocorrelated (serial correlation of errors), heteroscedastic (different variances across units,

panel heteroscedasticity), correlated across units due to exogenous shocks (spatial contemporaneous correlation of errors), and nonspherical in both the serial and the cross-sectional dimension (autocorrelated and heteroscedastic at the same time) (Plumper, Troeger, and Manow 2005). Although none of them biases the estimated coefficients, each of these problems tends to produce inefficient and biased standard errors for the coefficients (Greene 2003).

To control for the possibility of nonspherical disturbances, Beck and Katz (1995; 1996) introduce an econometric technique that runs an OLS regression with the lagged dependent variable plus unit and period dummies and calculates panel-corrected standard errors. Whether unit dummies and a lagged dependent variable should be included in the model is, however, still an open question because running an OLS model with them may remove some of the nonspherical disturbances problem, but it may also kill much of the beneficial story about the variables of interest. Thus, this widely used technique may run the risk of throwing out the substantial and theoretical baby with the residuals' and methodological bathwater.

Some concerns about the consequences of specifying unit dummies have been discussed. Even though the estimators of unit dummies absorb the effects of unobserved time invariant variables, generally they eliminate much of cross-sectional variation in the dependent variable by capturing the unit-specific variation in a unit-specific intercept. "Since this removes the average country effect, such a model focuses on the within-country variation over time, and the coefficients represent a cross-country average of the longitudinal effect" (Kittel and Winner 2005, 272). More specifically, the inclusion of unit dummies turns out to be questionable, first, if the model embraces variables that are constant over time for a given

unit or, second, if it tests the hypothesis about differences in the level of the exogenous variables. The first point is relatively well known. Due to almost perfect collinearity, unit dummies do not allow estimating the influence of time invariant explanatory variables, and then, accordingly, they often bias the estimate of largely time invariant variables (Beck 2001; Wooldridge 2001).

The second point is somewhat new. Plumper, Troeger, and Manow (2005) suggest that if the theory predicts the level effects of an exogenous variable on levels of the endogenous variable, unit dummies should not be included, because "unit dummies *completely absorb* differences in the level of explanatory variables across units" (p. 331, emphasis in the original). In my analysis, one of the main interests is whether the political variables capture cross-sectional variation of income inequality and one of the main hypotheses is about the effects of levels of the explanatory variables on the level of the dependent variable. Moreover, most of my key explanatory variables, *Parliamentary, Semi-Presidential, PR*, and *Mixed*, are almost constant over the time for most of the countries. From the reasons above, it seems clear that including unit dummies is not preferable in my models.

Additionally, whether to include or exclude in the model a lagged dependent variable that, in itself, is required to get rid of serial correlation of errors, has recently stimulated a lively debate in the literature. The key argument of some econometricians and applied researchers who are warning against the inclusion of a lagged dependent variable is that the autoregressive term may generate serious bias through capturing large parts of the trend in the dependent variable and pressing down the effects of the other variables because it falsely presumes identical persistent effects of all explanatory variables (Achen 2000; Greene 2003,

534; Huber and Stephens 2001; Plumper, Troeger, and Manow 2005, 335). In particular, when high serial correlation and high heavy trending exit in the explanatory variables, as often bedevil the panel world, a lagged dependent variable will dominate the regression equation even though it is theoretically uninteresting and meaningless.

For the reasons discussed so far, I employ OLS estimation using panel-corrected standard errors (PCSE) to deal with panel heteroscedasticity but do not include a lagged dependent variable and unit dummies. Following the recommendation of Plumper, Troeger, and Manow (2005), I use the Prais-Winsten transformation to eliminate serial correlation of errors, assuming first-order autocorrelation within panels (an AR1 process). "AR1 error models tend to absorb less time-series dynamics," thus they allow applied researchers to "explain not only cross-sectional variance and cross-sectional differences in changes, but also average changes in levels" (Plumper, Troeger, and Manow 2005, 343). All explanatory variables are lagged by one year to control for the potential exogenous effects of income inequality.

### **Results and Discussion**

Addressing the questions of how political institutions influence income inequality among new democracies, Tables 3 and 4 show the results of my analysis.<sup>7</sup> Each column presents the coefficients from a single ordinary least squares (OLS) regression with panelcorrected standard errors. Out of the five models in each table, the first four models add each of the four variables of politics individually, and the last one is a full model compiling every single variable of four political institutions that a priori reasoning suggests to be correlated

<sup>&</sup>lt;sup>7</sup> The dummy variable, *Previous Democracy*, is dropped in all models due to Gini's data availability. There are no data on the Gini in country-year observations that are coded as 1 for *Previous Democracy*.
with distributive outcomes. In each case, the model fit is quite good, with F values significant at better than the .0001 level. I used Stata's VIF command to check for multicollinearity; in nearly all cases the explanatory variables did not imply significant collinearity, with the exception of *Youth Population* and *Latin America* variables. A relatively high value of VIF does not necessarily induce high standard errors (Gujarati 2003, 363), and also it can be assumed that this problem would be minor at best in my analysis because each of these two variables is strongly significant in all models of Tables 3 and 4 (*Latin America*) or mostly significant in the analysis of Table 4 (*Youth Population*).

Recall that in the hypotheses, the more common theoretical expectation from the politics of redistribution among old democracies is that left government, parliamentarism, PR, and the more years of democratic experience should be associated with lower levels of income inequality. The results confirm some of these hypotheses and contradict others. On the one hand, a parliamentary system and ages of (total) democracy exert a negative and significant effect on the distributive outcome in Models 2, and 4, respectively, On the other hand, a left government and PR do not appear to be related to lower income inequality.

Going back to the theoretical claim and empirical finding from Muller (1988) and Huber et al. (2006) at the outset, mature democracy was expected to be associated with lower levels of income inequality. This hypothesis gains a substantial amount of support from my analysis in Table 3. From Model 5, it can be anticipated that a 10-year-old total democracy ( $0.016 \times 10 \times -8.7 = -1.39$ ) would have income inequality around 1.25 points lower than an emerging democracy ( $0.016 \times 1 \times -8.7 = -0.139$ ), and this pattern, a 1.25-point reduction in income inequality every uninterrupted 10-year democratic experience, would continue, *ceteris paribus*.

My results regarding two types of political institutions are rather ambiguous. Although parliamentarism shows an anticipated sign and reaches the standard threshold of statistical significance, PR does not contribute to income inequality in the expected direction and is not statistically significant. In the light of previous scholarship, this may be unexpected, given that the theoretical reasoning which has been placed on these two factors is almost the same: Parliamentarism and PR both should be associated with lower levels of income inequality because they target a relative majority group and pursue a broad social policy and more spending. However, parliamentarism only is the strongest factor in my empirical results in terms of statistical significance, as well as substantial impact. The choice of constitutions seems to make a crucial difference in income inequality around 7 points of GINI coefficient (from Model 5). Yet, PR is not functioning as parliamentarism. Why not?

One possible interpretation is that, as Persson and Tabellini point out, "allowing for a larger number of parties under proportional elections could allow parties that are more narrowly specialized to cater more effectively to the preferences of narrower interest groups" (2000, 218-9). This may be the case particularly in developing countries if the poor have no power for collective action. Specifically, if the poor are not the target of an appeal and the political parties are more interested in privileged groups, this increases the likelihood of worse redistributive outcomes under PR. Following this logic, it seems plausible that better measures of the number of parties will account for some of the residual variance in income inequality for new democracies. At this point in time, a substantive explanation of this puzzle is not straightforward and will need to be the focus of future research.

One interesting pattern from my analysis concerns the estimated effects of government partisanship. In this regard, several points deserve special emphasis. First, at

least for its redistributive effects across new democracies, it becomes clear that government partisanship should not be considered as a continuous variable, because, as displayed in Model 1 with its two dummies (*Left* and *Center*) instead of one continuous variable (*Government Partisanship*), left government is significantly associated with lower levels of income inequality but center government's effect on inequality appears to be even worse than right government's.<sup>8</sup>

Second, compared with right government, left government matters for reducing inequality (consistent with findings for advanced industrial countries), but its coefficient now becomes positive in Model 5, which includes all four political variables. This change in the sign of the coefficient suggests that the negative estimate of left government in Model 1 partly rests on the potential negative effects of other political variables on income inequality. Thus, Model 5 indicates that the net effect of left government may not be in the theorized direction in the context of new democracies. One likely explanation for this result is that, as discussed earlier, the extent to which left parties in new democracies are bound to respond the redistributive demand of the rank and file may not be as great in advanced industrial countries because they do not have deeply embedded roots in socio-economic categories and do not enjoy a strong relationship with voters in terms of partisanship.

Finally, it is counterintuitive that center government has less distributive effect on inequality than right government has. The reasons for this result are not immediately clear because there have been many fewer academic attempts to go deep into the topic of the center party. It will certainly need to be the currency of future research.

Some issues of robustness and sensitivity arise. First, some observers might suspect

<sup>&</sup>lt;sup>8</sup> Of course, when I first estimated models by including *Government Partisanship*, it did not move in the anticipated direction nor was it significant. The original regression outputs are available from the author upon request.

that the apparent link between political variables and income inequality is simply biased due to my too-generous criteria of democracy. Some cases included in my *extended* sample are only marginally democratic. I have to deal with this suspicion because it is plausible that formal political institutions might not be functioning well in the politics of redistribution in weak democracies. Furthermore, as Table 5 shows, partial democracies tend, in my estimated sample, toward right government or a presidential system in comparison with established democracies, which might create a systematic bias in empirical analysis.

To check the robustness of my results against this suspicion, I reestimate each specification in a *reduced* sample already discussed. The results for democracies only, reported in Table 4, yield little substantive difference. *Parliamentary, Semi-Presidential*, and *Age of Democracy* still retain strong statistical significance, and their substantial impacts also are slightly greater in magnitude. The coefficients of *PR* are still positive and even gain their statistical significance in the sample of stronger democracies. The interesting pattern of *Left* repeats here. In line with the cases of advanced industrial countries, *Left* holds a negative and statistically significant estimate in Model 1, but it loses its statistical significance when other political variables are used in Model 5. In sum, there is little evidence of a systematic bias that the empirical results might be biased due to the poorly functioning political institutions and an inclination toward the right-wing or presidential government of partial democracies.

In order to further assess the robustness of the results, I add government spending to test whether the public sector has a negative effect on inequality among democracies. From a worldwide sample, Lee (2005) finds that a larger public sector leads to relatively equal distributional outcome only in highly institutionalized democracies, but that this is not the case in nondemocracies and weakly institutionalized democracies. I do reestimate each

model, including each of two measures of the public sector size, measured by total central government spending and central government revenues as a fraction of GDP, derived from the International Monetary Fund (the International Financial Statistics database). Yet, these variables never achieve statistical significance and the estimates of the remaining terms are almost similar.

This is not a surprise because most of the new democracies in my sample are not democracies according to Lee's high threshold (*Polity2* score, 9). Although the gap in the numbers of country-year observations with *Polity2* scores 9 and 10 for new democracies in my sample and advanced industrial countries in Lee's model periods (1970-1994) might not be that large (290 and 409, respectively), the gap in the numbers of GINI observations with *Polity2* scores 9 and 10 between the two sample is much wider (48 and 202, respectively). This pattern clearly indicates that democracies in Lee's models are highly biased in favor of advanced industrial countries (80%), and thus the negative effect of the public sector on inequality does not show up in my models that exclude them.

A last issue concerns model specification. I conduct numbers of specification tests through excluding diverse control variables in the full equation (Model 5). To report all of the results would be a Sisyphean task. In sum, additional tests yield little substantive difference in the results of Tables 3 and 4. GINI coefficients' negative association with a parliamentary system and age of democracy is robust in almost all of these alternatives. Their effects on income inequality do not seem conditional on which specific control variables are involved in the model.

#### Conclusion

This section concludes by briefly summarizing the key points. This article focuses on the relationship between government partisanship, political institutions, age of democratic experience, and income inequality among new democracies. The analysis is inspired by the absence of theoretical arguments and empirical findings about the distributive effects of politics among new democracies in the existing literature. My inference is drawn from emphasizing the theoretical importance of the political variables and from differentiating their implication for redistribution between advanced industrial countries and new developing democracies. The evidence presented here suggests that, other things being equal, a parliamentary system and more years of democracy are substantially more likely to be associated with lower levels of income inequality, but left government and PR do not play a significant role in distributional outcomes. These results are robust to an alternative sample that includes only better democracies.

My analysis is preliminary, mirroring the current state of the art. The statistical findings should be considered as plausible but not a definitive causal relationship until further data are compiled and detailed case studies are accomplished. I intend this empirical work not to definitively explain which causal mechanisms actually affect outcomes but to raise some questions that will require further elaboration.

First, admittedly, one should take some empirical results with a grain of salt, for the analysis in this article represents limitations on capturing the complicated and nuanced aspects of political institutions. Most important, as for government partisanship, it follows the coding of Beck et al. (2007), which treats a governing coalition in Chile since the mid-1990s, Coalition of Parties for Democracy, as the right government. It is, however, clear that the Chilean government since the mid-1990s has been a center-left coalition and an ex-

president from 2000 to 2006, Ricardo Lagos, was a Socialist (Banks, Muller, and Overstreet 2008). This measurement error may be due partly to their focus on party identification with respect to economic policy. In this regard, it is very important to note that political scientists often scrutinize party platforms and party agendas concerning not only economic policy but also social policy, including social bases, class appeals, and ideological preferences for redistribution, when they classify parties as left and right.

Another example is forms of government. Empirically, a presidential system is far from monolithic; it varies considerably in the extent of the relative powers of the president and the legislature (Lijphart 1999; Shugart and Carey 1992). Chile, Brazil, and Colombia are categorized as the most powerful presidencies, whereas Romania, Bulgaria, and Argentina stand at the antipode. A parliamentary system also varies in terms of the relative agendasetting powers of the government and parliamentary committees (Strom 2008). Needless to say, the two binary variables used here, *Parliamentary* and *Semi-Presidential*, are not sufficient to capture much of the aforementioned diversities. Further work is needed to operationalize better measures of political institutions.

Next, what remains to be explained is the specific causal relationships by which the structure of the political institutions might influence distributive outcomes. The forms of government do result in the expected negative sign in the game of redistribution, but the electoral system does not. At this point, there is no good explanation for why the two features of the political institutions show a different profile. Besides, it is uncertain how political parties and partisanship are working across new democracies. It is hard to fill these theoretical and empirical lacunae without the aid of detailed and sophisticated case studies.

Last, what is missing in discussion thus far is a systematic inquiry into "varieties of

welfare capitalism" beyond advanced industrial countries. As mentioned at the outset, the mainstream of comparative political economy has focused on the effects of the economic structure on the patterns of welfare states and redistributive politics (Beramendi and Cusack 2008; Moene and Wallerstein 2003; Rueda 2008; Rueda and Pontusson 2000; Scheve and Stasavage 2009; Wallerstein 1999). The field for the varieties of capitalism of new democracies still remains as virgin soil, with the exception of Rudra (2007) who exploits and maps the political economies of developing countries. She discovers three different types of welfare states, including a productive welfare state, a protective welfare state, and a dual welfare state. Given systematic differences among welfare regimes of new democracies and the scant attention it has received in the existing literature, I contend that future studies must develop multidimensional approaches that merge domestic structures of politics and economy for deepening our theoretical understanding of the dynamics of redistribution.

In an age of global democratic transition, the specter of inequality looms especially large in academia when it comes to the politics of redistribution. A growing literature has examined, both theoretically and empirically, the extent and the nature of the politics of redistribution. Yet, that work has typically concerned consequences or correlations within the confines of old democracies. Relatively little scholarly attention has been devoted to the political economy of new democracies. It is almost novel to categorize the sample into old and new democracies. The academic scholarship should turn to the story of how new democracy is working. One simple factor makes it a reasonable and urgent choice: They are different and new. New democracies across the world provide a great deal of observable diversity that can provide precise empirical guidance, and, I believe, this diversity should be of interest to scholars and policy makers concerned with understanding the dynamic of

income inequality. Therefore, beyond the geographical narrowness of advanced industrial countries, focusing on the global phenomena of the spread of democracy, the need for investigation of new democracies as an alternative category sets a very interesting agenda for future research.

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# Table 1 Electoral System and the Number of Years with Forms of Government, 1975-2006

	_	Electoral System			Proportion of
		Majoritarian	Mixed	PR	PR Government
Forms of	Presidential	94	115	438	0.68
Government	Semi-Presidential	8	25	60	0.65
	Parliamentary	317	39	194	0.35

# Table 2 Electoral System and the Number of Years with Government Partisanship, 1975-2006

			Electoral System			
		Majoritarian	Mixed	PR	PR Government	
Government	Right	134	45	314	0.64	
Partisanship	Center	17	44	80	0.57	
-	Left	144	47	196	0.51	

	Model 1	Model 2	Model 3	Model 4	Model 5
Left	-1.518* (0.722) 2.252*				0.240 (0.942) 2.200*
Parliamentary	(1.025)	-3.268^			(0.998) -7.210***
Semi-Presidential		(1.797) -5.697***			(1.765) -2.998^
PR		(1.357)	0.871		(1.634) 1.197 (1.173)
Mixed			(1.242) 1.253 (1.995)		(1.173) -0.929 (1.425)
Age of Democracy			( )	-11.501*** (2.237)	-4.787* (1.964)
Age of Total Democracy				2.018 (2.894)	-8.676*** (2.676)
Previous Total Democracy				1.442 (1.485)	-0.361 (1.200)
Trade (log)	-1.994* (0.907)	-0.551 (0.777)	-1.125^ (0.606)	0.881 (0.884)	0.775 (0.940)
FDI Inflow	0.127 (0.116)	0.189* (0.089)	0.192* (0.092)	0.121 (0.083)	0.164 (0.121)
GDP per capita (log)	-4.255* (2.092)	-3.365^ (1.833)	-3.163^ (1.843)	-1.336 (1.565)	-2.776 (2.912)
GDP per capita (log) <sup>2</sup>	0.601 (0.904)	-5.544*** (1.007)	-4.807*** (0.935)	-4.666*** (0.947)	0.727 (0.837)
Sector Dualism	0.178*** (0.043)	0.191* (0.080)	0.201*** (0.063)	0.118** (0.045)	0.144* (0.057)
Inflation	0.063 (0.049)	0.031 (0.048)	-0.007 (0.043)	0.014 (0.048)	0.033 (0.034)
Youth Population	-0.287 (0.199)	-0.349 (0.217)	-0.204 (0.235)	0.112 (0.125)	-0.349 (0.263)
	(0.308) 2.002	(0.366)	0.935** (0.358)	(0.378)	-0.193 (0.384)
E. Asia $S = A cia$	-2.903 (1.865) 11.821***	-6.309* (2.752) 12.040***	-5.824 <sup>A</sup> (3.031)	-11.765**** (1.789)	-6.003** (2.437) 6.0770
Latin America	(2.337)	(3.645) 14 477***	(4.372)	(3.140) 10.962***	(3.630) 16.693***
Post-Communist	(1.880)	(2.716)	(2.848)	(2.393)	(2.639)
Africa	(1.554) 18.013***	(1.537) 10.743***	(1.698) 11.159**	(1.415) 4.054*	(1.548) 15.936***
Income	(3.061) 8.422***	(2.719) 7.192***	(3.705) 8.525***	(1.811) 4.345***	(3.807) 1.142
Net	(1.514) 0.419	(1.488) -1.212	(1.283) -1.550	(1.109) -2.804*	(1.116) -1.510
No Information	(1.429) -0.768	(1.194) -1.805	(1.265) -2.354	(1.345) -4.501***	(1.663) -3.101
Adjustment	(1.926) 6.952***	(1.394) 4.535***	(1.553) 4.445** (1.524)	(1.361) 1.404	(1.895) 3.170 <sup>^</sup>
Constant	(1.667) 28.661*** (6.102)	(1.330) 37.287*** (6.104)	(1.524) 28.229*** (5.845)	(1.114) 25.075*** (5.194)	(1.658) 45.095*** (7.030)
R-squared	0.9809	0.9761	0.9748	0.9782	0.9859
N of Countries	32	37	37	37	32
N of Observation	197	252	249	252	196

Table 3 Deter	minants of Inc	come Inequalit	v among Total	Democracy.	1975-2006
10010 0 2 0001					1

Note: Table entries are OLS estimates corrected for panel-specific autocorrelation. Panel-corrected standard

errors are included in the parentheses. All explanatory variables are one-year lagged. ^p  $\leq$  .10; \*p  $\leq$  .05; \*\*p  $\leq$  .01; \*\*\*p  $\leq$  .001.

	Model 1	Model 2	Model 3	Model 4	Model 5
Left	-2.068*				-0.565
	(0.815)				(0.816)
Center	1.409				(1.666)
Parliamentary	(2.012)	-8 076***			(1.000)
T amamentary		(1 404)			(2,659)
Semi-Presidential		-9.139***			-6.543**
		(1.875)			(2.480)
PR			3.964**		3.586*
			(1.390)		(1.566)
Mixed			2.716^		-0.770
			(1.524)	14.022***	(1.271)
Age of Democracy				-14.032***	-13.239***
Trade (log)	-5 0/0***	-1 224	_1 11***	(2.430)	(1.708)
Hade (log)	(1.177)	(0.925)	(0.826)	(1.082)	(1.247)
FDI Inflow	0.079	-0.026	0.015	0.035	0.057
	(0.133)	(0.094)	(0.089)	(0.090)	(0.120)
GDP per capita (log)	-4.892*	-8.047***	-7.364***	-6.542**	-8.166***
	(2.424)	(2.279)	(2.285)	(2.206)	(2.179)
GDP per capita $(\log)^2$	1.480	0.656	3.610^	1.135	2.340*
	(2.168)	(1.410)	(1.983)	(1.563)	(1.174)
Sector Dualism	0.158	0.072	0.069	0.004	-0.001
Inflation	(0.120)	(0.050)	(0.080)	(0.059)	(0.113)
Innation	(0.034)	(0.045)	(0.012)	(0.022)	(0.035)
Youth Population	-0.351	-0.817***	-0.464^	-0.393*	-0.946***
	(0.277)	(0.207)	(0.256)	(0.198)	(0.236)
Education	0.617	-0.213	1.602***	0.736^	-0.328
	(0.391)	(0.375)	(0.434)	(0.389)	(0.651)
E. Asia	1.566	-1.245	2.205	-1.752	3.570
	(3.272)	(2.525)	(3.079)	(2.341)	(2.324)
S. and S.E. Asia	$1/./41^{***}$	13.35/***	18.404***	10.039**	23.651***
Latin America	(3.139)	(3.031) 18 81/***	(3.373) 26.607***	(3.000) 22 1/10***	(3./00) 27.826***
Latin America	(2.437)	(2,314)	(3.090)	(2,345)	(3 659)
Post-Communist	-5.653***	-8.717***	-7.938***	-11.260***	-7.818***
	(1.406)	(1.328)	(1.366)	(1.394)	(1.350)
Africa	17.942***	14.845***	20.885***	14.238***	21.474***
	(3.194)	(2.438)	(3.797)	(2.538)	(4.906)
Income	8.092***	5.121***	7.538***	6.000***	1.795
NT (	(1.495)	(1.514)	(1.484)	(1.363)	(1.389)
Net	$2.974^{\circ}$	1.584	1.952	-2.039	1.482
No Information	(1.079)	(1.072)	(1.534)	(1.055)	(1.823)
No information	(2.228)	(1.860)	(2.393)	(2.050)	(1.652)
Adjustment	3.357*	3.228*	2.253	2.812	0.680
J · · · ·	(1.490)	(1.508)	(1.414)	(2.158)	(1.961)
Constant	43.776***	58.540***	35.703***	43.707***	63.185***
	(6.574)	(8.140)	(8.390)	(8.876)	(9.975)
R-squared	0.9770	0.9756	0.9743	0.9818	0.9874
N of Countries	28	29	29	29	28
N of Observation	152	184	181	184	151

Table 4 Determinants of Income Inequality among Democracy Only, 1975-2006

Note: Table entries are OLS estimates corrected for panel-specific autocorrelation. Panel-corrected standard errors are included in the parentheses. All explanatory variables are one-year lagged.  $^p \le .10$ ;  $^p \le .05$ ;  $^{*p} \le .01$ ;  $^{**p} \le .001$ .

	Partisanship		Constitution			Electoral System			
	Left	Center	Right	Parl.	Semi.	Presi.	PR	Mixed	Plural
Democracy	47.68	7.95	44.37	50.26	5.76	43.98	69.61	13.81	16.58
Partial Democracy	11.63	18.60	69.77	23.53	11.47	65.00	72.06	11.76	16.18

Table 5 Partisanship, Constitution, Electoral System, and the Percentage of Years with Democracy and Partial Democracy

# **CHAPTER 2**

# NO TAXATION, NO DEMOCRACY? TAXATION, INCOME INEQUALITY, AND DEMOCRACY

Does taxation promote democracy? Do levels of taxation and distribution of tax burdens lead to different types of political outcomes? It is widely accepted that taxation tends to promote the emergence of representative institutions. This theoretical argument has been developed from two different fields of democratization; one is a historical interpretation of state-building in early modern Europe and colonial America (e.g., Tilly 1990; 2004) and another, the so-called rentier state theory, is a qualitative exploration of the Middle East and North Africa (hereafter MENA), where authoritarian regimes still remain strong even in the era of the third wave of democratization (e.g., Ross 2001).

Although these ideas are well developed theoretically, few statistically systematic studies have attempted to account for the relationship between taxation and democracy. The only quantitative models to test the nexus between taxation and democracy have been recently developed by Ross (2004) and Herb (2005). Yet, not only are their empirical findings inconclusive, but they also share the same methodological problem, model misspecification, which I shall discuss later.

With the insufficiency of the empirical literature on the effects of taxation in mind, I wish to emphasize that the claim that a higher level of taxation is associated with more representative systems should be revisited. My analysis is distinctive, I believe, on both methodological and theoretical grounds. First, unlike empirical studies mentioned earlier, to

fit the data nature of democratic transition and my theoretical purposes, I employed event history analysis rather than ordinary least squares regression method (OLS). If there are good substantive reasons to think that some variables of interest influence democratization and democratic breakdown in different ways, statistical models designed by Ross (2004) and Herb (2005) may not be appropriate because estimates of those models attempt to account for those transitions simultaneously. Yet, the event history models presented here enabled me to distinguish between the effects of variables of interest on democratization (the survival of non-democracy) and their effects on democratic breakdown (the survival of democracy).

More important, my theoretical contribution is to attempt to refine such arguments by pointing out the ways in which taxation may bolster democracy. The starting point for the analysis is that taxation differences do affect a democracy. But I argue that these taxation differences will be influential only when some economic conditions are in place. More specifically, I hypothesize that the effects of taxation on democracy tend to be relatively stronger in societies with more inegalitarian structures of income distribution because higher income inequality can amplify the extent and depth of dissatisfaction citizens derive from higher levels of taxation. Previewing my empirical findings, the evidence presented here strongly help to buttress a key theoretical hypothesis, indicating that taxation has a conditional impact on democratization (but not the persistence of democratic regimes). According to the theory, higher taxation levels and greater income inequality should tend to promote democracy.

The following section reviews the relevant literature on democratization theory, focusing on the effects of taxation. After reviewing previous research, I offer my key hypothesis, a summary of the data used in my analysis, and my statistical technique: event

history models. I then present my own empirical findings from pooled time-series data of regime transitions that cover all countries from 1970 to 2000 if data are applicable. The last section concludes and proposes new agendas for future research.

#### **Taxation and Democracy**

The hypothesis that taxation tends to promote democracy is based on one strand of fiscal sociology that explores the dynamics of state-building in early modern Europe and colonial America (Ames and Rapp 1977; Ardant 1975; Braun 1975; Poggi 1978; and see, particularly, North and Weingast 1989 on England). The historical facts on which scholars have focused are that monarchies in England, France, Spain, and Austro-Hungary had to give up some of their authority to representative systems in exchange for the ability to raise new taxes. Also, it has been argued that three new taxes England imposed on America in the 1760s (the Sugar Act, the Stamp Act, and the New Townshend levies) were the catalyst for the rebellion against the British government.

The point on which theories associating taxation with the advent of democratic political systems focus is the bargaining between political elites who want to raise the money for warfare and citizens who want to wield certain political rights. Tilly (1990; 2004), in his study of middle and modern states in Europe, points out that, in the bargaining with the states that were in pursuit of revenues, citizens demanded more accountability from them and some influence over how their taxes were spent in exchange for new taxes. Kings and political elites, even though it was not their intention to form representative institutions, realized that it would be a more efficient and less costly way to build up large revenues if they made concessions to barons, clergy, gentry, and the bourgeoisie. Therefore, democracy arrived

amid rising bargaining among the main classes, which was triggered by a shortage of money due to increasing warfare in early modern Europe.<sup>9</sup>

The other strand from which the view that taxation tends to promote democracy has been generated is the rentier state theory, which is one of the tools to explain the robustness of authoritarian regimes in the MENA region. It has been argued that 'Middle Eastern exceptionalism' still dominates the main perspectives on democratization, civil society, or political culture in MENA. The third wave of democratization has been widespread since 1974, and democratic regimes have replaced authoritarian ones in approximately 30 countries in Europe, Asia, and Latin America (Huntington 1991, 21). MENA, however, has remained resistant to the third wave contagion. Only Israel, among 18 MENA countries, could be identified as a democracy in 2005. Discussions of the global waves of democratization consider the Arab world as impervious to democratization, and Arab countries have been ignored in research in the field of democratization.

The positive relationship between resource rents and the persistence of authoritarian regimes is the nuts and bolts of the literature on the rentier state theory (Anderson 1995; 2001; Beblawi 1987; Crystal 1990; Luciani 1987; 1994). The specific mechanisms through which rents might promote the durability of authoritarianism can be summarized in two categories. If we think of citizens as consumers and governments as suppliers, the first mechanism might be called *an effect of low demand*.<sup>10</sup> It suggests that when governments acquire the exceptional profits from natural resource extraction, "they are likely to tax their populations less heavily or not at all, and the public in turn will be less likely to demand

<sup>&</sup>lt;sup>9</sup> For an analytical model of the nexus between taxation and democracy, see Bates and Lien (1985).

<sup>&</sup>lt;sup>10</sup> I borrow my terminology, the effects of *low demand* and *high supply*, from Ulfelder's lexicon, "demand-side and supply-side explanations" (2007, 997).

accountability from – and representation in – their government" (Ross 2001, 332). Lisa Anderson (1995; 2001) argues that soft budget constraints resulting from external oil rents have left conditions in the region profoundly inauspicious for democracy. "(T)he availability of exogenous revenues releases governments from their reliance on domestic taxes for significant components of their income and, therefore, from many of the ordinary obligations of domestic accountability" (Anderson 1995, 32).

The second is through what might be dubbed an effect of high supply. "Windfall" (Beblawi 1987) or "manna from heaven" (Dunning 2008) derived from the sale of mineral resources tends to enables rentier governments to provide a wide range of free services to citizens, such as education, health care, and housing; therefore, these structures of patronage and the rentier economy have weakened the economic basis of potential opposition groups (Gause 1993). In theory, the contrast between these two types of mechanisms is somewhat clear-cut, but, in practice, they influence each other. Each tends to be the other side of the coin. The democratic effect of taxation will be relatively stronger if citizens are dissatisfied with fewer government benefits. In this context, whether citizens demand democracy is a function of two responses to the increase of taxes and the decrease of government expenditure (government service). This logic also matches the findings of public opinion studies, which suggest that the complaints of citizens regarding their government's low provision of public goods lead to political protest (Finkel and Muller 1998; Finkel, Muller, and Opp 1989; Muller, Dietz, and Finkel 1991). Thus, when we explicate and test a corollary of the rentier state thesis, "no taxation, no democracy," we should consider the size of the tax burden relative to government services.

It seems there is a grain of truth in this argument, but relatively little scholarly

attention pertaining to testing its validity and generality has been devoted to synthesizing systematic improvements in the field. As I show, samples selected for advocating the democratic effect of taxation have been limited in terms of historical and geographical aspects. Historically, only a few early modern Western countries (i.e., England, France, colonial America, Spain, and Austro-Hungary) have been selected as the examples of democracy facilitated by high level of taxation. Geographically, the hypothesis about the relationship between taxation and democracy has been isolated within the MENA specialists. Most of the researchers on democratization have ignored the riddle of the MENA democracy deficit and, broadly, "no taxation, no democracy" has existed as "a theoretical enclave" for years.

Although some quantitative models to test the nexus between taxation and democracy have been recently developed by Ross (2004) and Herb (2005), not only are their empirical findings inconclusive, but they also share the same methodological problem, that is, model misspecification. They both draw their conclusion from the OLS method, constructing somewhat different dependent variables from the Polity 98 dataset of Gurr and Jaggers (1999) or from Freedom House's democracy score, respectively. It continues to be a common practice to analyze the Polity and Freedom House data through the linear regression model. Yet, in addition to the important problem, mentioned earlier, of not differentiating between the effects of taxation on democratization and its effects on democratic breakdown, this widely accepted practice involves some serious systematic problems. Linear regression analysis makes a big assumption: The distances between adjacent categories are equal. But the Polity and Freedom House's democracy datasets were originally ordinal variables, with categories that can be ranked from low to high yet with unknown intervals between adjacent

categories, such as a Likert scale.<sup>11</sup> For instance, the distance between -5 and 0, in the degree of Autocracy, cannot be considered the same as the one between +5 and +10, in the degree of Democracy, in the Polity dataset.

If the implicit assumption that the intervals between adjacent categories are the same is false, then linear regression results may be biased and can be severely misleading. Both McKelvey and Zavoina (1975, 117) and Winship and Mare (1984, 521-23) show examples where a linear regression model of the ordinal dependent variable produces the biased coefficients and misleading results.<sup>12</sup>

Moreover, their empirical findings do not strongly support the democratic effect of taxation on democracy. Drawing from pooled time-series cross-national data from 113 countries between 1971 and 1997, Ross finds a statistical evidence to uphold the hypothesis that "higher taxes *relative to government services* tend make states more democratic," but does not find consistent support for the argument that "higher taxes *relative to income* lead to democratization" (2004, 247, emphasis in original). However, the test Herb carries out, focusing on rentierism which is measured by rent revenue as a percentage of total government revenues rather than the direct impact of taxation, does not support the argument that rentierism has a negative net effect on democracy.

My preliminary empirical results from the event history analysis also show that taxation does not significantly influence democratic transition.<sup>13</sup> In these specifications, the coefficients for taxation are positive (as expected, higher levels of taxation are associated

<sup>&</sup>lt;sup>11</sup> See Gleditsch and Ward (1997) and Vreeland (2003) for critiques of practices to handle the Polity and Freedom House data as continuous measures of democracy.

<sup>&</sup>lt;sup>12</sup> See Long (2005, chap. 5) for a more thorough discussion of this issue.

<sup>&</sup>lt;sup>13</sup> Its estimates are the same as those of Models 1 and 4 in Table 2.

with democratization), but they do not even approach statistical significance. These results therefore offer little support for the hypothesis "no taxation, no democracy." This countertheoretical evidence raises some possibility that will require further elaboration. One possibility is that the political consequences of taxation may not be constant across the countries, regardless of their economic conditions, especially income inequality which may condition the effect of taxation on democracy. It may be reasonable to infer that the worse the system of income distribution becomes, the easier citizens lose their temper with government's acts to increase the tax burden relative to government services. Therefore, the analysis needs to be extended to income inequality and to employ an improved methodology (e.g., the event history analysis). More systematic tests of the relationships among taxation, inequality, and democracy should be performed. These are the objectives of the analysis that follows.

## The Argument: Inequality Conditions the Effect of Taxation on Democracy

With the insufficiency of the literature on the effects of taxation in mind, theoretically, this paper systematically tests a hypothesis that derives the events called democratization and democratic breakdowns from a set of assumptions, arguing that the level of taxation in a society, together with the degree of the distribution of income, shapes underlying preferences for democracy. Before I address my key hypothesis further, I briefly review the literature on the effect of inequality on democracy.

Academic scholars committed to qualitative evidence seem to agree that relatively equal societies foster a democratic transition (Aristotle 1988; Dahl 1971; Huntington 1991; de Tocqueville 1990). More recently, Boix (2003), using a more sophisticated quantitative

method (and an analytical model) developed in tandem with available panel data on income inequality and the increasing concern for policy-wise implication of severe inequality, suggests that higher inequality decreases the possibility of a democratic transition because, with greater inequality, elites have a lot to lose by introducing democracy that will place a greater redistributive load on them, which makes democracy more costly and suppression more appealing for elites.

Contrary to the intellectual history mentioned above, Acemoglu and Robinson (2006), synthesizing their two earlier pieces (2000; 2001), address an inverted U-shaped relationship between inequality and the likelihood of democratic transition.<sup>14</sup> In fairly equal societies, a revolution becomes more costly for citizens because they already benefit from the current structure of the economy, so they do not claim any further rewards that may be offered by the democratic rules. In contrast, in fairly unequal societies, albeit it is highly reasonable to predict an intensification of the redistributive demand of citizens on the authority of non-democracy, the cost of redistributive taxation to elites in democratic politics and, accordingly, their animosity against democracy, should be higher. Hence, democratization may be less likely to happen in unequal societies. The researchers suggest that democratic transitions are more likely to occur as societies are located somewhere between the highest and lowest level of inequality, i.e., in the middle levels of inequality. "Here, the citizens are not totally satisfied with the existing system, and elites are not so averse to democracy that they resort to repression to prevent it" (Acemoglu and Robinson 2006, 37).

This literature on the effect of inequality on democratization parallels to some extent

<sup>&</sup>lt;sup>14</sup> It is very interesting that the results of their three works vary, even suggest opposite predictions. This may be analogous to the logic of the Hegelian dialectic: a thesis (a positive relationship between inequality and democratization, 2000), an antithesis (a negative one, 2001), and a synthesis (an inverted U-shaped one, 2006).

the one on the effect of taxation on democratization; although qualitative and analytical studies (except for Acemoglu and Robinson 2000; 2006) seem to agree that equal authoritarian societies are more likely to transition to democracy, the empirical results are controversial.<sup>15</sup> Probably the most serious problem with the current theories that link inequality to democratization is the extent to which causal mechanisms are chosen on the grounds of theoretical convenience. As Houle (2009, 593) points out, inequality has "two opposite ... effects on democratization" by influencing the preferences of elites and citizens in a contradictory way; inequality makes democracy less attractive to elites by increasing potential costs from redistribution but more appealing to citizens by increasing future booty from soaking elites. Despite these conflicting effects of inequality on democratization, scholars often pick up only one of the two opposite effects to bolster their theoretical inferences.<sup>16</sup>

The theoretical inference that inequality has competing effects on democratization does not mean that inequality, in practice, has no significant impact on it. It is entirely gratuitous to assert that two conflicting effects mainly find equilibrium by offsetting each other. Various factors can influence the balance of power between inequality's two effects, such that one dominates in a particular instance. In this analysis, I argue that at higher levels of taxation, as citizens' dissatisfaction grows, the costs to elites of repressing revolts will surpass the costs of redistribution, in which democratization is more likely. Therefore, if I put my key hypothesis another, but much similar way, taxation conditions the effect of inequality

<sup>&</sup>lt;sup>15</sup> For a review of empirical studies on this issue, see Houle (2009, Table 1).

<sup>&</sup>lt;sup>16</sup> Houle (2009, 595-98) argues that, contrary to its effect on democratization, inequality's effect on democratic breakdown (in his term, "consolidation") is straightforward; inequality increases the likelihood of democratic breakdown because it only influences the payoff of elites (increase in costs from redistribution) but not that of citizens.

on democratization.

Going back to my starting point, the analysis here privileges the economic condition of political regimes, not because these always play significant roles, but rather because the political effects of taxation should certainly depend on such an economic factor. The models suggest that the democratic effect of taxation is contingent upon the level of income inequality in a given society. At low levels of inequality, as income tends to be distributed in a more balanced way among individuals, the burden of taxation would be bearable to citizens and the effect of taxation on the likelihood of democratic transition would be at minor.

In contrast, in highly unequal societies, if elites do not intend to endure the potentially greater tax revenue of future democracy, the political outcome assumed is the status quo and the fiscal outcome predicted is the lower tax system to abbreviate the redistributive demand of citizens, like most of the authoritarian regimes in MENA. However, a high level of taxation is more likely to induce democratization in societies with a high level of inequality because the combination of high levels of taxation and highly unequal economic structure may aggravate the extent to which citizens want to soak elites. In this context, the cost to elites of repression becomes higher than the taxes that will be imposed on them. It is the credible threat of a revolution by citizens that eventually induce elites to accept democracy. In sum, my testable hypothesis emerging from my theoretical argument is that income inequality enlarges the democratic effect of taxation; in particular, the democratic effect of taxation may be stronger in societies with high degrees of income inequality, but it may not the case in relatively equal countries.

## Variables and Data

## **Regime Types**

Among the hot issues that show sharp disagreement in comparative research on democratic regimes is the choice of measures of democracy: dichotomous and graded approaches (Collier and Adcock 1999; Munck and VerKuilen 2002). In this study, following Przeworski et al. (2000) and Boix (2003), I apply a categorical measure of *Democracy* based on a distinction between authoritarian and democratic regimes. Deciding which logical treatment of democracy should be appropriate for what purpose (Collier and Adcock 1999). The theoretical rationale is obvious. Operationalization of categorical regime types allows me to investigate whether taxation reveals significant differences in terms of an effect on the regime transformation, hinging upon the degrees of income distribution among individuals. The methodological rationale is even clearer. It is fairly complicated to analyze and hard to interpret ordered ranked outcomes that have many categories, such as the Polity dataset (a 21-point scale) or the Freedom House's democracy scores (a 7-point scale), through the ordered choice models.

Yet, the world is not as simple as one might wish. To sketch the world as either democratic or authoritarian may ignore the possibility of an intermediate case, partial democracy, illiberal democracy, or whatever one wishes to call it. Both Huntington (1996) and Diamond (1996) point out that a growing number of countries exist "somewhere in the middle" of the "democratic-nondemocratic continuum" (Huntington 1996, 10). Also, some scholars note that the countries belonging to an intermediate category show different patterns of political and socioeconomic dynamics from either full democracies or full authoritarian regimes (Bacher 1998; Goldstone et al. 2000; Mansfield and Snyder 1995; Zakaria 2003).

To address these theoretical concerns, I employ a trichotomous measure of

democratization: Non-Democracy (ND), Partial Democracy (PD), and Democracy (D). Empirically, to define a democracy in the panel sample from 1970 to 2000, I divide regimes, the dependent variable, relying on the Polity IV dataset (Marshall and Jaggers 2007), into non-democracy (Polity value -10 to 0), partial democracies (+1 to +7), or democracies (+8 to +10). The reasoning for my choice of 8 and above as *Democracy* is offered by Polity IV. In the dataset, 8 points is a threshold for a "mature and internally coherent democracy," which satisfies the following conditions: (a) 'fully competitive' political participation, (b) 'elective' executive recruitment, and (c) 'substantial' constraints on the chief executive (Marshall and Jaggers 2007 *Dataset Users' Manual*).

Table 1 presents the dynamic of transition from one regime category to another. It shows the number of regime transitions that occurred in all countries during 1970-2000. The entries in parentheses in the diagonal cells indicate very stable countries: 46 stable nondemocracies (cell A), 8 stable partial democracies (cell E), and 28 stable democracies (cell I). The numbers in the off-diagonal cells denote 171 regime transitions of the six possible kinds. Appendix A displays the list of stable countries, as well as the countries and years in which regime transitions took place.

The table reveals that democratization (autocratic breakdown) accounts for the lion's share of regime transitions, which have occurred roughly four times more than democratic breakdown. In my operationalization, democratization includes the transformation of non-democracy into partial democracy or democracy (cells B and C, total 82), and democratic breakdown implies the transformation of democracy into partial democracy or non-democracy (cells G and H, total 22). Almost half of partial democracies move into

democracy (democratic consolidation,<sup>17</sup> cell F), and the other half move back into nondemocracy (backsliding, cell D).

## Taxation and Income Inequality

To fit the theoretical hypothesis above and to combine the effects of low demand and high supply, *Tax/Exp* is measured by total tax revenues as a percentage of total government expenditure, which covers all current and capital expenditures, including interest payments on past debts. Its theoretical implication is that citizens weigh the costs of funding the government against the benefits they receive. The data are from World Tax Database at the University of Michigan (http://www.bus.umich.edu/otpr/otpr/default.asp).

The variable of income inequality comes from the Gini variable in the World Income Inequality Database (UNU-WIDER 2007). This is by far the most comprehensive Gini dataset, including 4981 observations from 152 countries.<sup>18</sup> Because the dataset is an accumulation of various surveys with different methods, implying that all the data are not of the same quality, and some countries have more than one observation for certain years, I developed the following selection criteria to trim down the data.

First, I choose data produced with either clear income concepts or quality surveys, which are coded as 1 or 2 for the variable *Quality* in the dataset. I also drop any data that do not cover all areas, all population groups, and all age groups in those population groups (See *AreaCovr, PopCovr,* and *AgeCovr* in the users' guide). Then I choose data whose incomesharing units, *IncSharU*, are family or household, not individual. This is because I believe

<sup>&</sup>lt;sup>17</sup> I use the term *consolidation* in a general mode to denote regime change in which partial democracies move up the ladder. There are no theoretical connotations for the definition of this change.

<sup>&</sup>lt;sup>18</sup> For more information, visit <u>http://www.wider.unu.edu/wiid/wiid.htm</u> and look at the user's guide.
inequality is better measured by family or household incomes than by individual incomes. Another thing to be considered here is whether data have any equivalence scales, *Equivsc*, to take different family or household sizes into account. Finally, to magnify the number of observations and to smooth out annual anomalies, I employ a five-year average of adjusted Gini coefficients.

## **Control Variables**

In addition to the hypothesized variables, I incorporate two economic variables that are commonly theorized as the factors to affect regime transition. The first is the level of economic development (Boix and Stokes 2003; Lipset 1959: Przeworski et al. 2000), measured as the natural log of *GDP per capita* (in constant dollars, Chain Index, expressed in international prices, base 2000), taken from the Penn World Tables. As the second economic variable, I include rates of economic growth, *Growth Rate*, which is often expected to have a positive impact on the longevity of regimes (Gasiorowski 1995; Haggard and Kaufman 1995; Przeworski et al. 2000). I adopt an additional method, the square root of the two-year prior moving average of a country's annual rate of growth rate, to weaken the weights of annual eccentricity and higher values.

Consistent with conventions in the field, I also control for some social and cultural factors that have been found to influence the transition to and the survival of democracies. The first is ethnolinguistic fractionalization index, *ELF*, which is commonly theorized as a contributor to democratic breakdown (Muller and Seligson 1994). Data come from Roeder (2001). As the cultural variables, I include *Catholic* and *Muslim*, measured as the percentages of a country's population that are Catholic and Muslim. Previous researchers have found

evidence that democracy is less likely to flourish in countries with large Muslim populations in that Islam emphasizes authority and community over an individual's right and freedom (Barro 1999; Fish 2002; Lipset 1994; Salame 1994). In a similar vein, some studies have noted that there is a negative correlation between Catholic population and democracy (Cheibub 1998; Huntington 1991; Lipset 1994).

I also construct a variable, *Resource*, to account for the role of natural resources in regime transition, which is measured as the share of a country's gross national income derived from the depletion of energy resources (petroleum, natural gas, and coal) (See Bolt, Matete, and Clemens 2002). This variable captures the theorem of the "resource curse" (Ross 1999), in which the lion's share of national income from extractable natural resources is considered a boon for the prospects for authoritarian rule (Jensen and Wantchekon 2004; Ross 2001; Smith 2004; Ulfelder 2007). Furthermore, another dummy variable is added for countries that had experienced British colonial rule, of which inherited legal institutions seem particularly conducive to democracy. The data for *Muslim, Catholic*, and *British Colony* are from La Porta et al. (1999).

In addition, two international control variables are included. First, researchers seem to agree that trade openness matters in the choice of political regime, and this variable receives some empirical support in the literature (Epstein et al. 2006; Gasiorowski 1995), even though they disagree on how trade openness influences regime transition on theoretical grounds (see Boix 2003, 142-43). *Trade* is measured as the natural log of the sum of the total imports and exports as a share of a country's GDP. The data of *Growth Rate, Resource*, and *Trade* come from the World Bank *World Development Indicator*.

Second, the democratic domino theory asserts that democracy is contagious (Gasiorowski and Power 1998; Gleditsch and Ward 2006; Huntington 1991; Leeson and Dean 2009). Thus, I include two measures of the percentage of (partial) democracies in a country's region, *Regional Total Democracy* (partial democracy + democracy) and *Regional Democracy*. The former is employed in democratization specifications and the latter, in democratic breakdown specifications. Whereas regions are often divided according to either the Correlates of War coding (Lai and Melkonian-Hoover 2005; Reiter 2001) or Gasiorowski (1995; Bernhard, Nordstrom, and Reenock 2001), I divided the world into the following regions: Advanced industrial countries (Western Europe, North America, Australia, and New Zealand), Asia (including Fiji, Papua New Guinea, Solomon Islands), Latin America, Middle East and North Africa, Post-Communist countries, and Sub-Saharan Africa. This taxonomy may better fit the specific geopolitical history of regime transition in the world.

My final control variable is a measure of a country's experience of regime change. Past democratic transition or breakdown brings political learning that affects the prospects for regime transition (Acemoglu and Robinson 2001; Huntington 1991). To operationalize a country's history with regime transition, I construct two variables, *Previous Democratic Transition* and *Previous Democratic Breakdown*, which are the total number of previous experiences with democratization (ND  $\rightarrow$  PD or D) and democratic breakdown (D  $\rightarrow$  PD or ND), respectively, that a country has experienced since 1960. As the variables that count the number of regional (partial) democracies, the former is used in democratization specifications and the latter in democratic breakdown specifications.

### **Potential Problem: Endogeneity**

The standard regression is based on the assumption that the explanatory variables are exogenous, which means that unilateral cause-and-effect relationship between the predictors and the predicted, if any, is only inferred from the statistical models. Yet, in practice, this assumption is not satisfied in many situations, as it is more reasonable to think that two-way or simultaneous relationship between the dependent and explanatory variables, which makes the distinction between them of dubious value, occurs. Moreover, having an endogeneity problem, the standard regression method may not be applied in that the parameters estimated are biased and inconsistent, that is, they do not converge to their true population values no matter how large the sample size.

In my previous paper, "Politics and Income Inequality," I hypothesize that one of the factors that matter for the level of inequality are also the different styles of political institutions, which would generate the problem of endogeneity. To take into account this issue, I employ the following statistical treatment; all the explanatory variables are one-year lagged. Moreover, it can be assumed that this problem would be minor at best in my papers because political institutions focused in this paper are political regimes, that is, democracy vs. authoritarianism, but the ones in the previous paper are government partisanship, constitutions, and electoral systems. Strictly speaking, they cannot be equated, and should be analyzed as different factors in their relative contexts. More importantly, context differs. In this paper, my leading goal is to examine whether the democratic effects of taxation tend to be relatively stronger in unequal *authoritarian* societies because event history models analyze the failures of authoritarian regimes assumed as patients. However, in the previous paper, my theoretical aim is to find some potential causal effects of the political institutions on income inequality only among *democracies* because my hypothesis is about whether

democratic institutions are working as assumed. As for the reasons above, endogeneity may not generate some serious problems in my theoretical explanations.

#### **Model Specification**

I employ event history analysis to address the question: What affects the duration of non-democracies, partial democracies, and democracies? Event history analysis has become common in empirical work on democratization over the past few years (Bernhard, Nordstrom, and Reenock 2001; Epstein et al. 2006; Feng and Zak 1999; Gasiorowski 1995; Lai and Melkonian-Hoover 2005; Pevehouse 2002; Przeworski et al. 2000; Reiter 2001; Ulfelder 2007). Called a wide variety names, such as duration model, survival model, failure-time model, or reliability model, event history analysis enables one to answer a more extensive set of questions than conventional analyses by using information about the number, timing, and sequence of changes in the dependent variable; it enables one to find not only causes but also patterns of change concerning the time to the occurrence of an event (Box-Steffensmeier and Jones 2004; Box-Steffensmeier and Zorn 2001).

All event history models have in common the goal of accounting for the hazard rate inherent in some phenomenon. The hazard rate is generally taken to be a function of two components: first, a set of independent variables or covariates, which are related to the hazard rate in a log-linear fashion, and a baseline hazard rate, which represents its underlying behavior. In mathematical form,

$$\lambda(t) = \exp(x'\beta)\lambda_0(t),$$

where  $\lambda$  is the overall hazard rate,  $\lambda_0$  is the baseline hazard rate, and *x* is a vector of covariates with associated coefficients  $\beta$ .

Based on the theoretical assumption and the structure of the data, I use two different methods of event history analysis. First, one distinctive characteristic of data in this study is that a country can experience events – democratic transition, democratic breakdown, consolidation, or backsliding, in my models – more than once. This is problematic if the traditional duration model is used to estimate multiple events data because the traditional model assumes that the event times are independent. This assumption is highly likely to be violated in multiple event data. If we do not address correlation among repeated transitions, the standard errors will be underestimated. Thus, I employ a repeated-failures variant of the standard duration model, which adjusts the variance of the parameter estimates by clustering on subjects to account for the repeated nature of the data (Box-Steffensmeier and Jones 1997; Box-Steffensmeier and Zorn 2002; Kelly and Lim 2000; Wei and Glidden 1997). A robust covariance matrix in models with repeated events is given by

$$V = \Gamma^1 G' G \Gamma^1$$
,

where  $\Gamma^1$  is the estimated covariance matrix and *G* is a matrix of the group efficient score residuals.

Whereas the first method of event history analysis concerns the multiple occurrences of the *same* events, that is, democratization or democratic breakdown, the second method concerns the multiple events of *different* types. If partial democracies are patients, they tend to fail either to democracy or to non-democracy. Interested in the different ways in which a partial democracy may fall, I may assume that different covariates can affect one kind of event occurrence, but not another. For instance, in my study, I can trace whether and how key covariates, that is, levels of taxation and income inequality, may influence the regime transitions of partial democracies toward non-democracy or democracy in the different ways. If I find that a variable of interest has a positive effect on transition to democracy but a negative effect on transition to non-democracy, this may support the robustness of my conclusion.

Thus, for this analysis, I employ an independent competing risks model to catch multistate processes among Cox competing risks specifications.<sup>19</sup> It assumes stochastic independence, which means that risks associated with each of the different events act independently. This assumption is analogous to independence of irrelevant alternatives (IIA) in discrete choice modeling. Estimation of an independent competing risks model is somewhat straightforward. In this analysis, I estimate separately two different univariate Cox models, first consolidation and then backsliding models, while treating one regime transition of interest as complete and the other as censored. In addition to computational convenience, another reason for adopting this method is that the independent risks models "provide estimates of the hazard shapes which, at least in mean values, approximate the true shapes" (Sueyoshi 1992, 52) even in the case in which the assumption of independence is not correct.

### Results

I proceed to analyze the results from three sets of analyses that focused on the potential causes of democratization (the survival of non-democracy,  $ND \rightarrow PD$  or D), democratic breakdown (the survival of democracy,  $D \rightarrow PD$  or ND), and the backsliding (PD  $\rightarrow ND$ ) or democratic consolidation (PD  $\rightarrow D$ ) of partial democracy, respectively. In the test for multicollinearity through employing Stata's variance inflation factor (VIF) command, I find no hint of significant collinearity, given that none of the variables has a VIF score of

<sup>&</sup>lt;sup>19</sup> David and Moeschberger (1978) provide general discussions of competing risks models. For an example of an independent competing risks model, see Zorn and Van Winkle (2000), and for some methodological shortcomings of this approach, see Gordon (2002).

more than 3. Tables 2 and 3 display the main results of my analysis, and the results clearly support my argument that the influence of taxation on democracy is contingent upon the level of income inequality. The failure events for the models in Table 2 are the transitions of non-democracy into (partial) democracy and those in Table 4 are the transitions of democracy into partial democracy or non-democracy.

As a robustness check, I utilize both a Cox semi-parametric model and a Weibull parametric model. The main difference between these two models is whether the distributional form of time dependence is specified. The Cox model is more flexible due to having no assumptions about a functional form of the baseline hazard rate, making it an appropriate strategy for many applications, whereas the Weibull model produces parameter estimates and a relatively easy way to interpret the baseline hazard rate.<sup>20</sup> To compare Cox and Weibull estimates, the first three columns of estimates in each table report the Cox model results<sup>21</sup> and the other three columns give the Weibull estimates. The coefficients assess the impact of the explanatory variables on the hazard rate. As such, a positive sign implies that an increase in the value of the explanatory variable leads to an increase in the hazard rate, indicating shorter survival time, and a negative sign implies that the hazard rate experiencing the failure event is proportionally lower, indicating longer survival time.

Among the control variables, one interesting pattern from the democratization and democratic breakdown models concerns the estimated effects of *GDP per capita*. Models in Table 2 suggest that *GDP per capita* has positive coefficients but is marginally significant in only Models 2 and 5, indicating that there is no statistically strong evidence that economic

<sup>&</sup>lt;sup>20</sup> On the issue of model selection, see Box-Steffensmeier and Jones (2004, chap. 6).

<sup>&</sup>lt;sup>21</sup> For the Cox models, I employ the Efron method for the approximation of the partial likelihood function because it provides a more accurate approximation than the Breslow method when a large number of tied cases exist.

development leads non-democracies to become (partial) democracies more quickly. Models in Table 4 indicate that *GDP per capita* has negative and statistically significant effects on prospects for a democratic breakdown, implying that higher economic development increases the probability of the democratic survival. Taken together, the results suggest that economic development may not increase strongly the likelihood that non-democracies will transition to democracy, but it causes democracies, once established, less likely to break down to partial democracies or non-democracies. This is clearly consistent with the "exogenous" theory of democratization coined by Przeworski and his colleagues (Przeworski and Limongi 1997; Przeworski et al. 2000).

The significance of the control variables for *Regional Total Democracy* and *Regional Democracy* remains consistent across the six models of each table, strengthening the overall impression of the democratic domino theory that the increase in neighboring (partial) democracies is exerting considerable impact on whether the regimes in question will survive or collapse; countries surrounding democratic neighbors tend to undergo a transition to democracy and, once they succeed, maintain their democratic systems. The coefficients of *Muslim* go in the expected direction and reach the standard thresholds of statistical significance across all models in Table 2, but they do not retain significance in the Cox models in Table 4. It means that as Muslims over the whole population increase, the chance of democratization is likely to decrease. However, the likelihood of democratic survival is not significantly associated with rising Islamic population.

The first explanatory variable of theoretical interest, *Tax/Exp*, does not achieve statistical significance throughout all models. Whereas it takes on the anticipated signs, e.g., positive in democratization Models 1 and 4 in Table 2 and negative in democratic breakdown

Models 7 and 10 in Table 4, implying that higher levels of taxation boost the rate of failure for democratization but reduce it for democratic breakdown, one may not infer that higher levels of taxation appear to be systematically related to more democratic regimes, because its coefficient is not significant.<sup>22</sup>

As the second variables of interest, *Inequality* and its square, *Inequality*<sup>2</sup>, retain the anticipated signs in Models 2 and 5 in Table 2, and the joint test of the null hypothesis that *Inequality* and *Inequality*<sup>2</sup> have no explanatory power is rejected at the 10% level in only Model 5. Although this is not a statistically strong impact, we can get a clearer understanding of how the effect of inequality on democratization varies by rewriting Model 5 as follows:

 $\lambda(t) = \exp(.005 \times Inequality - .0005 \times Inequality^2 + \text{everything else})\lambda_0(t)$ 

The equation above shows that inequality has an inverted U-shaped effect on the likelihood of democratic transition and the vertex of this curve lies at a 5 point, which was originally equal to a 42.88 Gini score (5 + 37.88 [Gini's mean value in the estimation sample]) because the variable of *Inequality* was centered before I constructed its square variable. From this calculation, one can conclude that, at low levels of inequality, the increase in income inequality tends to increase the likelihood of democratization until the Gini index reaches a 42.88 point. For instance, the Philippines, Portugal, and Thailand were hovering over this spot of income inequality when they experienced democratization in 1986, 1975, and 1974, respectively. After that point, however, as societies become more unequal distributive structures, their chance to evolve toward democracy tends to decrease. By and large, there seems to be some evidence to support Acemoglu and Robinson (2006)'s final hypothesis, though weakly significant.

 $<sup>^{22}</sup>$  I also run the model with 5-year or 10-year lags of *Tax/Exp*, following Ross (2004), but do not find its statistical significance.

The effect of *Inequality* on democratic breakdown is somewhat different. Table 4 illustrates that the effect of inequality on democratic breakdown is more straightforward than its effect on democratization. In the specifications of democratic breakdown, I did not include a square term of inequality because in theory, none hypothesizes a nonlinear relationship between inequality and democratic breakdown, and, in practice, the coefficient of *Inequality*, without its square term, is strongly statistically significant. As conventional wisdom, inequality is not good for the stability of a democracy: Its strongly significant and negative signs indicate that higher levels of inequality are likely to increase the likelihood of democratic breakdown. All in all, this analysis finds some evidence in favor of the previous predictions: Inequality affects the likelihood of democratization in an inverted-U shape as theorized by Acemoglu and Robinson (2006); in addition, it harms democracy as the indicator to facilitate the instability of established democracy, which largely echoes the empirical finding of Houle (2009).

My leading hypothesis is to examine whether taxation triggers the failure of regimes in question in conjunction with the levels of income inequality. This is achieved by multiplying the appropriate pairs of explanatory variables, here Tax/Exp and *Inequality*, and including the product term,  $Tax/Exp \times Inequality$ . Models 3 and 6 suggest that taxation's interaction terms with inequality have a significant positive effect on democratization, but Models 9 and 12 indicate that their statistical significance seems to disappear, though their substantial directions (negative) of coefficients do match what I hypothesize when it comes to the models of democratic breakdown. These estimates largely confirm the key part of my argument: Taxation and inequality seem to exert a discernible, interactive impact on the failure of non-democracies in the sense that the existence of one factor strengthens the

influence of the other. More specifically, higher levels of taxation with rising inequality have a facilitating effect on democratization, but their democracy-friendly effects, once democracies are established, appear to remain weak and insignificant.

To see how the effects of taxation on democratization vary across the different levels of inequality, I start by finding the Gini values that correspond to the mean, one standard deviation below the mean, and one standard deviation above the mean. Because the variable of *Inequality* is centered, these values are approximately -10, 0, and 10, respectively (its standard deviation in the estimation sample is 10.66). The effect of taxation at a given value of  $\alpha$  inequality is given by  $\beta_1 + a\beta_2$ , which comes from the form of Model 3 in Table 2 ( $\beta_1$  is a parameter of *Tax/Exp* and  $\beta_2$  is one of *Tax/Exp* × *Inequality*). The relevant null hypothesis,  $H_0: \beta_1 + a\beta_2 = 0$ , can be tested by employing the following test statistic:

$$t = \frac{\hat{\beta}_1 + a\hat{\beta}_2}{\hat{\sigma}_{\hat{\beta}_1 + a\hat{\beta}_2}}$$

where

$$\hat{\sigma}_{\hat{\beta}_{1}+a\hat{\beta}_{2}} = \sqrt{\hat{\sigma}^{2}_{\hat{\beta}_{1}} + \hat{\sigma}^{2}_{\hat{\beta}_{2}} + 2a\hat{\sigma}_{\hat{\beta}_{1},\hat{\beta}_{2}}}$$

Table 3 presents the test statistics obtained by substituting  $\alpha$  with the values -10, 0, and 10, along with their statistical significance when referred to *t*-distribution with n - K - 1degrees of freedom. <sup>23</sup> The last statistic substituted by 10, one standard deviation above the mean, is only statistically significant at the level of 5%. This pattern indicates that an increase of taxation appear to help promote democratization if countries suffer relatively higher levels of income inequality, a Gini score of approximately 47, but that its effect on democratization

<sup>&</sup>lt;sup>23</sup> It is straightforward to get a *t*-test on the effect of *Tax/Exp* when *Inequality* is at its mean value. The parameter of *Tax/Exp* in Model 3 can be directly evaluated because it captures the effect of *Tax/Exp* when *Inequality* is at 0, which is its centered mean.

does not remain on the edge of statistical significance if countries enjoy the middle level or equal distributive structures.

Table 5 shows the results of estimation for the probability that partial democracies consolidate or collapse. At first glance, compared with backsliding, models of democratic consolidation provide few hints as to the potential factors that aid democratic consolidation. Note first that among the explanatory variables, *GDP per capita* is the strongest factor to influence the likelihood of both consolidation and backsliding: Higher GDP per capita is a promoting factor for democratic consolidation and also an inhibiting factor for backsliding. Democratic neighbors and previous democratic experience do not influence the likelihood of consolidation, but (partially) democratic neighbors and previous democratic neighbors and previous democratic neighbors and previous democratic breakdown strongly stabilize partial democracies. Turning to the variables of interest, levels of taxation and inequality, and their interaction term do not make partial democracies more likely to consolidate or collapse.

Admittedly, it is plausible to suspect that the empirical findings can be biased simply due to failing to control for regional differences that are closely correlated with the variations of inequality and taxation. As argued earlier, regime transitions have not only been affected by a region's specific geopolitical contexts, but the extents of taxation and inequality also vary virtually across regions. As Table 6 shows, levels of taxation in MENA (49%), in which almost all countries are robust non-democracies, are much lower than those of other regions – almost half of advanced industrial democracies (84%) – and levels of income inequality in Latin America, in which democracies are among the most fragile, are the worst in the world, no matter how one measures them. The hypothesized negative link between lower taxation and non-democracies and the apparent positive link between higher inequality and

democratic breakdown may be due to the effects of being from MENA and Latin America, respectively, on both of the dependent and the explanatory variables.

To check the robustness of my empirical findings against these potential spurious relationships, I also reestimated each specification, including regional dummies. If regional contexts serve as a source of spuriousness, the observable implication is that the statistical significance should dwindle with their inclusion. Yet, this is not the case. As reported in Table 7, the significance and estimated signs of the explanatory variables of interest barely change. Accordingly, the conditional effect of taxation on democratization and the negative effect of inequality on democratic breakdown do not seem simply a proxy for regional differences.<sup>24</sup>

## **Discussion and Conclusion**

This article has returned to the theory linking levels of taxation with democracy. In doing so, it has reappraised the central argument of taxation's effect on regime transition, focusing on the role of income inequality as a factor mediating the influence of taxation. Contrary to fiscal sociology and the rentier state theory discussed earlier, my event history analysis does not support their core claim. Higher levels of taxation are not linearly associated with the survival of democracy as well as the regime transition to democracy. In line with Acemoglu and Robinson (2006), I also find an inverted U-shaped relationship between income inequality and the likelihood of democratization: Non-democracies that enjoy a relatively equal distribution of income or suffer highly unequal distributional structures are substantially less likely to transition to democracy, other things being equal. In

<sup>&</sup>lt;sup>24</sup> It is interesting that *GDP per capita* becomes strongly significant in all models when regional dummies are controlled.

addition, higher levels of income inequality decrease the likelihood that democracies will remain democracies.

The main contribution of my analysis is to link taxation to income inequality in the study of the impact of factors affecting the survival of regime types, and to show how one reinforces the other. My results show that taxation and inequality act in synergy to promote democratization. More specifically, the interactive influence of taxation and inequality works in a different way. It is not necessarily the case that an increase in taxation leads to improved chances of democratization when inequality is low. Yet, in highly unequal countries, it is an increase in taxation that is associated with higher plausibility of democratization. Confirming my hypotheses, this new discovery provides new insight on the study of democratization.

Employing trichotomous measures of democracy, this article may cast new light on the significance of the intermediate category, that is, partial democracy. In line with Epstein et al. (2006), it is clear that a dichotomous classification of democratic regimes may not be appropriate for capturing most of the real-world diversity in regime transition. Categorizing countries into non-democracies, partial democracies, and democracies, I evaluate how the explanatory variables work in the democratic consolidation and backsliding phases as well as the democratization and democratic breakdown phases. GDP per capita, which appears to follow an "exogenous" route of democratization (Przeworski and Limongi 1997; Przeworski et al. 2000), significantly increases the prospects of existing partial democracies, both by enhancing democratic consolidation and by inhibiting backsliding. However, some other factors, which are considered as strongly robust causes of democratization and democratic breakdown, do not affect the survival of partial democracies, especially in the consolidation phase.

A question then arises: What makes partial democracies move up or down the ladder? As shown in Table 1, more volatile than other regimes types, partial democracies seem to move at random (36 cases of backsliding vs. 31 cases of consolidation). In an era of worldwide democratization, few questions have greater theoretical and practical importance than that concerning partial democracies. Yet, relatively little scholarly attention has been devoted to their specific mechanisms for their movement. Theoretical explanations of democratization may be of little use if one does not acknowledge this intermediate category. The need for this kind of investigation sets a very interesting agenda for future research.

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	Number of Transitions to				
From	ND	PD	D	Total (Transitions Only)	
Non-Democracy	A (46)	B 69	C 13	82 Democratization	
Partial Democracy	D 36 Backsliding	E (8)	F 31 Consolidation	67	
Democracy	G 11	H 11	I (28)	22 Democratic Breakdown	

Table 1 Matrix of Regime Transitions, 1970-2000

# Table 2 Determinants of Democratization, 1970-2000

	Cox Analysis <sup>a</sup>			Weibull Analysis			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
Tax/Exp	0.382		0.070	0.427		0.209	
1	(0.441)		(0.425)	(0.280)		(0.266)	
Inequality		0.008	0.009		0.005	0.005	
1 5		(0.008)	(0.010)		(0.005)	(0.005)	
Inequality <sup>2</sup>		-0.0008*	-0.001*		-0.0005*	-0.001*	
1 5		(0.0004)	(0.0005)		(0.0002)	(0.0003)	
Tax/Exp $\times$ Inequality			0.074*			0.035^	
I I J			(0.033)			(0.019)	
GDP per capita (log)	0.171	0.252*	0.192	0.072	0.144*	0.078	
	(0.142)	(0.111)	(0.150)	(0.083)	(0.069)	(0.085)	
Growth Rate	0.012	-0.039	-0.040	0.009	-0.022	-0.019	
	(0.035)	(0.029)	(0.032)	(0.020)	(0.017)	(0.016)	
Trade (log)	0.008	0.138	0.178	-0.036	0.042	0.040	
× <i>U</i> ,	(0.140)	(0.128)	(0.159)	(0.085)	(0.083)	(0.089)	
Catholic	-0.002	-0.0005	-0.002	-0.0008	-0.0003	-0.001	
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	
Muslim	-0.018**	-0.013**	-0.015*	-0.014**	-0.009**	-0.010*	
	(0.007)	(0.004)	(0.007)	(0.005)	(0.003)	(0.005)	
ELF	0.053	0.363	0.082	-0.010	0.201	0.005	
	(0.291)	(0.278)	(0.295)	(0.190)	(0.174)	(0.184)	
Resource	-0.017	-0.018	-0.013	-0.011	-0.012	-0.006	
	(0.017)	(0.012)	(0.015)	(0.011)	(0.008)	(0.008)	
British Colony	0.375*	0.192	0.281^	0.280**	0.156^	0.204*	
5	(0.151)	(0.139)	(0.147)	(0.104)	(0.089)	(0.098)	
Regional Total D	1.176**	1.291***	0.907**	0.599*	0.645**	0.440*	
0	(0.432)	(0.366)	(0.297)	(0.250)	(0.208)	(0.182)	
Previous D Transitions	-0.163	-0.066	-0.182	-0.101	-0.043	-0.102	
	(0.125)	(0.093)	(0.127)	(0.071)	(0.053)	(0.067)	
Constant				-289.996***	-209.466***	-265.377***	
				(56.094)	(60.067)	(61.016)	
Observations	1564	2283	1140	1564	2283	1140	
Countries	84	130	75	84	130	75	
Log Likelihood	-3586.063	-5768.626	-2711.382	7235.223	10276.69	5975.254	
Chi-Square	110.49	194.95	73.64	65.79	109.78	43.39	

Note: Table entries are coefficients. Robust standard errors with clustering on the country are contained in parentheses. Prob>chi2 = .0000 for all models. ^p  $\leq$ .10; \*p  $\leq$ .05; \*\*p  $\leq$ .01; \*\*\*p  $\leq$ .001. <sup>a</sup> Note that Cox models do not contain a constant. It is absorbed into the baseline hazard.

Idelle	er rest studistics of run Emp deross Emit		or meome mequ	unity	
		$\beta_1 + a\beta_2$	Statistic	р	
	One standard deviation below the mean, -10	-1.4107	-1.411	>.10	
Gini	The mean, 0	0.070	0.160	.869	
	One standard deviation above the mean, 10	2.298	2.298	<.05	

Table 3 t-Test Statistics of Tax/Exp across Different Levels of Income Inequality

	Cox Analysis			Weibull Analysis			
	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	
Tax/Exp	-0.454		0.647	-0.281		0.338	
	(0.416)		(0.829)	(0.299)		(0.624)	
Inequality		0.027***	0.038**		0.019***	0.027*	
1 2		(0.008)	(0.015)		(0.005)	(0.011)	
$Tax/Exp \times Inequality$			-0.085			-0.038	
1 1 5			(0.068)			(0.052)	
GDP per capita (log)	-0.453**	-0.466***	-0.617**	-0.304**	-0.288***	-0.459**	
	(0.151)	(0.102)	(0.211)	(0.109)	(0.074)	(0.154)	
Growth Rate	-0.034	0.013	-0.037	-0.020	0.019	-0.020	
	(0.036)	(0.032)	(0.054)	(0.023)	(0.020)	(0.038)	
Trade (log)	0.213	-0.035	0.131	0.073	-0.068	0.055	
	(0.275)	(0.158)	(0.320)	(0.198)	(0.115)	(0.247)	
Catholic	-0.0004	-0.004	-0.011*	0.001	-0.002	-0.006	
	(0.005)	(0.003)	(0.005)	(0.004)	(0.002)	(0.004)	
Muslim	0.003	0.002	0.001	0.001	0.0004	-0.0004	
	(0.004)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	
ELF	0.345	-0.443	0.481	0.259	-0.285	0.435	
	(0.433)	(0.351)	(0.710)	(0.295)	(0.243)	(0.528)	
Resource	0.009	0.015***	0.015	0.005	0.010***	0.010	
	(0.009)	(0.004)	(0.020)	(0.007)	(0.003)	(0.015)	
British Colony	-0.705*	-0.639***	-1.266***	-0.462^	-0.448***	-0.947***	
2	(0.350)	(0.201)	(0.312)	(0.240)	(0.138)	(0.253)	
Regional Democracy	-3.276***	-2.368***	-2.410***	-2.712***	-2.059***	-2.225***	
0	(0.569)	(0.432)	(0.627)	(0.408)	(0.323)	(0.516)	
Previous D Breakdown	0.731*	0.404*	0.817**	0.574**	0.338**	0.661***	
	(0.311)	(0.175)	(0.295)	(0.201)	(0.124)	(0.205)	
Constant				14.228***	-125.163^	20.902***	
				(1.174)	(75.080)	(1.557)	
Observations	1564	2283	1140	1564	2283	1140	
Countries	84	130	75	84	130	75	
Log Likelihood	-2010.814	-3919.671	-1046.259	4139.114	7107.650	2409.148	
Chi-Square	179.23	257.01	155.12	159.40	200.95	151.46	

Table 4 Determinants of Democratic Breakdown, 1970-2000

*Note*: Table entries are coefficients. Robust standard errors with clustering on the country are contained in parentheses. Prob>chi2 = .0000 for all models.

 $^{n}p \leq .10; *p \leq .05; **p \leq .01; ***p \leq .001.$ 

	Cox Analysis						
	Consolidation			Backsliding			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
Tax/Exp	-0.878		-1.173	-0.167		1.171	
-	(0.747)		(0.775)	(0.391)		(1.043)	
Inequality		-0.014	-0.026		-0.001	0.001	
		(0.013)	(0.016)		(0.009)	(0.024)	
Inequality <sup>2</sup>		-0.001	-0.001				
		(0.001)	(0.001)				
$Tax/Exp \times Inequality$			0.087			-0.147	
I I J			(0.101)			(0.094)	
GDP per capita (log)	0.725**	0.590**	0.441^	-0.328*	-0.276*	-0.890***	
1 1 1 1 1 1 1	(0.277)	(0.189)	(0.254)	(0.153)	(0.130)	(0.223)	
Growth Rate	0.091	0.076^	0.054	0.014	0.055	0.138^	
	(0.061)	(0.043)	(0.060)	(0.039)	(0.038)	(0.079)	
Trade (log)	-0.051	-0.055	-0.184	0.245	-0.064	-0.051	
11000 (10g)	(0.199)	(0.198)	(0.219)	(0.251)	(0.165)	(0.299)	
Catholic	0.0004	0.002	0.002	0.006	0.002	0.006	
Cumono	(0.002)	(0.002)	(0.002)	(0.007)	(0.004)	(0.009)	
Muslim	-0.014	-0.021*	-0.018	0.004	0.006*	0.003	
	(0.104)	(0.010)	(0.015)	(0.006)	(0.003)	(0.011)	
FLF	-0.155	0.268	-0.059	-0.273	-0.584	-1.098*	
	(0.390)	(0.338)	(0.417)	(0.352)	(0.356)	(0.540)	
Resource	0.011	0.005	0.020	0.004	0.013**	0.010	
Resource	(0.024)	(0.019)	(0.021)	(0,009)	(0.005)	(0.018)	
British Colony	0.182	0.185	0.133	-0.650	-0.131	-0.808	
Diffusil Colony	(0.174)	(0.170)	(0.209)	(0.477)	(0.251)	(0.899)	
Pagional Domocracy	0.666	0.429	0.538	(0.477)	(0.251)	(0.077)	
Regional Democracy	(0.421)	(0.343)	(0.422)				
Pagional Total D	(0.421)	(0.3+3)	(0.422)	_1 078***	-1 613***	-1 478*	
Regional Total D				(0.604)	(0.478)	(0.632)	
Provious D Transitions	0.202	0.170	0.277	(0.004)	(0.478)	(0.032)	
Previous D Transitions	-0.293	-0.179	-0.277				
	(0.255)	(0.173)	(0.208)	0.025*	0.074**	1 275**	
Previous D Breakdown				-0.933*	$-0.974^{+++}$	$-1.5/3^{++}$	
Observation	1120	1617	026	(0.442)	(0.324)	(0.434)	
Observations	70	1017	920	52	1144	390 42	
Countries	70	2000 651	04	JZ 1079.947	7/	43	
Log Likelinood	-2/98.218	-3888.031	-2187.844	-10/8.84/	-1984.310	-422.000	
Chi-Square	111.12	253.46	113.72	81.00	109.19	93.33	

# Table 5 Regime Change of Partial Democracy, 1970-2000

*Note:* Table entries are coefficients. Robust standard errors with clustering on the country are contained in parentheses. Prob>chi2 = .0000 for all models.

^p  $\leq .10; *p \leq .05; **p \leq .01; ***p \leq .001.$ 

	Tax/Exp	Inequality
Advanced Industrial Countries	0.84	30.0
Africa	0.71	43.4
Asia	0.71	38.8
Latin America	0.78	52.8
MENA	0.49	36.9
Post-Communist Countries	0.77	30.3

Table 6 Means of Tax/Exp and Inequality by Region

# Table 7 Democratization and Democratic Breakdown with Regional Dummies, 1970-2000

	Cox Analysis						
	Democratization			Democratic Breakdown			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
Tax/Exp	0.346 (0.444)		0.009 (0.452)	-0.478 (0.427)		0.661 (0.857)	
Inequality		-0.006 (0.009)	-0.007 (0.010)		0.037*** (0.009)	0.061*** (0.018)	
Inequality <sup>2</sup>		-0.001 (0.0004)	-0.001 (0.001)		(,	()	
$Tax/Exp \times Inequality$			0.057^(0.033)			-0.073 (0.076)	
GDP per capita (log)	0.524*** (0.150)	0.400*** (0.119)	0.488*** (0.152)	-0.469** (0.178)	-0.522*** (0.119)	-0.609** (0.237)	
Observations	1564	2283	1140	1564	2283	1140	
Countries	84	130	75	84	130	75	
Log Likelihood Chi-Square	-3541.726 143.09	-5738.851 197.06	-2689.731 99.58	-2002.606 119.95	-3881.682 210.43	-1031.143 122.15	

*Note*: Table entries are coefficients. Robust standard errors with clustering on the country are contained in parentheses. Prob>chi2 = .0000 for all models.

 $p \le .10; *p \le .05; **p \le .01; ***p \le .001.$ 

### CAHPTER 3

## ASIAN DEMOCRACIES AND THE PUBLIC SECTOR: THE POLITIICAL ECONOMY OF GLOBALIZATION

Despite the steady growth of literature addressing the relationship between globalization and subjects relevant to government expenditures, substantial differences remain across theoretical arguments and empirical findings (Adsera and Boix 2002; Avelino, Brown, and Hunter 2005; Cameron 1978; Esping-Anderson 1996; Garret 2001; Hicks 1999; Hicks and Swank 1992; Huber and Stephens 2001; Iversen and Cusack 2000; Katzenstein 1985; Kaufman and Segura-Ubiergo 2001; Pierson 2001; Rodrik 1997; 1998; 1999; Rudra 2002; Rudra and Haggard 2005; Swank 2002). The heated controversy in this group is over whether globalization has eroded national economy, has reduced nation-states' political latitude, and has led to convergence into neoliberal economic and social policies around the world, which has often been called the debate between the efficiency hypothesis versus the compensation hypothesis.

To account for the inconclusive results found between globalization and government expenditures, contemporary research has developed theoretical explanations in which domestic political institutions mediate the impact of globalization on government expenditure. In a sample of advanced industrial democracies, one possibility that causes cross-national differences is that the power of left political parties and the working class varies across countries (Boix 1998; Bradley et al. 2003; Garrett 1998; Hicks and Swank 1992; Huber and Stephens 2001; Korpi 1983; 1989; Kwon and Pontusson 2003; Swank 2002). Because it is plausible that globalization has generated new political constituencies for leftist policies among the losers, left parties have the political incentives to pursue redistributive social policies. Following a power resources theory of the welfare state, main focuses are on the importance of class-based actors and the relative distribution of political capacities across them as central pictures of welfare state politics. The features of democratic political institutions facilitate the mobilization of class-based actors, cross-class coalitions, and programmatic coalitions in defense of the welfare state.

In the studies that expand the sample beyond advanced industrial democracies, arguably the most conspicuous factor concerns democracy (Adsera and Boix 2002; Avelino, Brown, and Hunter 2005; Brown and Hunter 1999; Garrett and Nickerson 2005; Huber et al. 2006; Kaufman and Segura-Ubiergo 2001; Rudra and Haggard 2005). Because social welfare spending is a function of government policies and democratic governments are more likely responsive for the demands of broad swathes of society, in particular those of the rank-andfile, democracies set up welfare programs to compensate global market losers to gain their political support. From these recent political economy studies, it is reasonable to predict that if democracies are working as assumed, they do a better job, to varying degrees, than nondemocracies at protecting the welfare of their own people in the era of globalization.

Is this the case in Asia? Are Asian democracies, facing global market competition, operating at the level of other Western European democracies, at least in the area of social welfare policies? To date, no one has drawn a direct inference about the mediating effects of democracy on the public sector in Asia. As the first systematic and empirical analysis focused solely on Asian countries, this paper starts from skepticism about Asian democracies. There are good reasons to suspect the progress and prospects of democracies in Asia. First, the

quality of democracies is relatively low. It is likely that the political institutions of Asian democracies are not as effective or strong as those of Western European democracies, which can counterbalance the influence of economically and politically privileged groups. Second, as I shall discuss later, Asian democracies are *blue*. Throughout much of the post-war period, mainly conservative right parties have dominated Asian politics without any significantly powerful left parties. Finally, the systematic pattern of political engineering in the region seems headed in the opposite direction to proportionality which is claimed to be linked to larger government.

This paper investigates the mediating impact of democracy on the size of the public sector of Asian governments in the era of globalization. I explore this issue through an analysis of government expenditures in a time-series cross-sectional analysis of 18 Asian countries from 1960 to 2005. Based on data availability, the sample comprises yearly data for Bangladesh, Cambodia, China, India, Indonesia, Japan, South Korea, Laos, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand, and Vietnam. As a road map for what is to come, I first situate my work within previous theoretical and empirical studies. Next, I describe the data and the models employed here and then present the empirical results. The final section discusses and concludes.

### **Democracy and Its Expenditure: A History of Theories**

Many scholars develop guiding political economic models, in which democracies produce more public goods and improve an egalitarian distribution of income, by illuminating the democratic institution mechanism itself, such as electoral competition and the expansion of political participation (Acemoglu and Robinson 2006; Boix 2001; 2003;

Bueno de Mesquita et al. 2003; Deacon 2008; McGuire and Olson 1996; Meltzer and Richard 1981). The simplest but most important analytical model, relating democratic institutions and redistribution, comes from Romer (1975), Roberts (1977), and Meltzer and Richard (1981), who focus on the effects of electoral competition.<sup>25</sup> This model assumes, following the well-known work of Hotelling (1929) and Downs (1957), that the median voter is the critical voter to determine the size of government, which is measured by the share of income redistributed. It implies that the size of government hinges on the relationship between mean income and the income of the decisive voter, depending on the regime type. Whereas before the spread of the franchise, the median voter may be one of the rich or the upper class, after democratization the median voter may favor political actors who are committed to higher taxes and more redistribution because the individual may be a belowaverage income earner in an unequal society. In sum, democracy with universal suffrage and majority rule in tandem with an economically unequal society is likely to urge the government to redistribute income more equally and to provide more public goods to numerous low income earners.

In an extension of the model of Meltzer and Richard (1981), Boix (2001; 2003) and Acemoglu and Robinson (2006) have developed the framework of the nexus between democracy and redistribution. Analyzing the dynamic of the advent of democracies and authoritarian regimes as a consequence of different levels of inequality and different asset mixes in the economy, Boix (2003) builds a comprehensive theory to explain the distributional results of different political regimes: Democracies prefer more economic redistribution because they support a broader range of interests of the masses, whereas

<sup>&</sup>lt;sup>25</sup> Boix (2003), Persson and Tabellini (2000, chap. 6), and Drazen (2000, chap. 8) provide overviews of this issue.

authoritarian regimes do not because they bolster the interests of the elite. Examining the creation and consolidation of democracy, Acemoglu and Robinson (2006) also construct a sophisticated yet simple model that suggests democracy is preferred by the majority of citizens and is more prone to redistribution.

Another line of inquiry investigating the redistributive effects of democracy focuses on lobbying and the influence of interest groups and activists who provide political resources to certain parties in exchange for policy compromises.<sup>26</sup> The classic studies of the existence and role of interest groups date back to Olson (1965) and Becker (1983). Organized interest groups contribute to parties and politicians in a more or less direct attempt to influence their policy formulation through a variety of political actions. Lobbying and campaign contributions are prime examples. As interest groups have overcome the collective action problem, they can bias policy more significantly toward themselves than non-organized groups can.

This model of lobbying implies, first, that the distribution of government spending becomes more unequal in societies with a number of well-defined interest groups because lobbying draws the government to ignore the welfare of unorganized individuals, and, second, that redistribution is likely to be greater in democracies than non-democracies because, in principle, democracies produce larger numbers of powerful independent interest groups. Discussion of the first implication, the general phenomenon of concentrated benefits and dispersed costs, is beyond the scope of this essay. As for the second implication, studies of interest groups argue that, intuitively, organized interest groups get more than unorganized ones, but lobbying does not distort the provision of public goods that influences unorganized individuals and anyone else, both as taxpayers and as beneficiaries, because "lobbies might

<sup>&</sup>lt;sup>26</sup> For an overview, see Grossman and Helpman (2001) and Persson and Tabellini (2000, chap. 7).

plausibly consist of individuals with a high preference for the public good, who have a higher stake on the policy outcome and hence are more likely to overcome the free-rider problem of getting organized" (Persson and Tabellini 2000, 174). As a consequence, lobbying brings about higher levels of government spending.<sup>27</sup>

Most of the empirical findings from the samples of all but Asia are consistent with theoretical inference above.<sup>28</sup> Lindert (1994), examining data from the late 19<sup>th</sup> and early 20<sup>th</sup> centuries (1880-1930), reaches the conclusion that the expansion of the voting franchise helps interpret the rise of redistribution among mostly Organization Economic Co-operation and Development (OECD) countries after World War I. The analysis of U.S time series data (1950-88) by Husted and Kenny (1997) shows that the rise of voting rights is positively associated with the growth of redistributive programs in U.S state and local governments. A sequence of the empirical work on Latin America also suggests that democracy funds welfare spending on some subcategories at higher levels than non-democracy.<sup>29</sup> Finally, Stasavage (2005) shows robust empirical evidence that democracy has provided more spending on education from his sample of 44 African countries.

Besides the region-specific studies above, some cross-regional studies support the claim that democracies are likely to produce more welfare spending than authoritarian

<sup>&</sup>lt;sup>27</sup> Empirical work has, however, failed to support the second implication, a tight nexus between interest group activity and the size of government (Holsey and Borcherding 1997). Results are often conflicting; in addition, the fact that there is little consensus on how to measure interest group influence makes the theoretical hypothesis difficult to evaluate.

<sup>&</sup>lt;sup>28</sup> A small number of empirical studies have disputed these political economic models, including two early contributions of Jackman (1975) and Peltzman (1980), and more recently Mulligan, Gil, and Sala-i-Martin (2004).

<sup>&</sup>lt;sup>29</sup> The extent to which subcategories are positively associated with democracy varies. For instance, democracy increases aggregated social spending (Brown and Hunter 1999), education and health spending (Kaufman and Segura-Ubiergo 2001), or education and social security spending (Avelino, Brown, and Hunter 2005). All of them above and Stasavage (2005) as well seem to reach a consensus on a positive effect of democracy, at least, on education spending in Latin America and Africa.

governments. Probably the most connected with the topic of this paper, they find evidence that, with respect to increasing globalization, democracies ensure higher levels of welfare spending than authoritarian regimes, based on panel data for 65 developing and developed countries (Adsera and Boix 2002), for 57 developing nations (Rudra and Haggard 2005),<sup>30</sup> and for all developing countries (Nooruddin and Simmons n.d.), and on cross-sectional data for middle-income countries (Garrett and Nickerson 2005). As stressed earlier, there is no systematic and empirical research on Asian countries to date. How have globalization and democratization influenced the size of the public sector of Asian countries? Have governments of different types produced different social policies in the period of globalization?

### **Democracies in Asia: Reality**

From the broader comparative perspective, the discussion about advanced industrial countries brings up several contrasts in light of the working mechanism of Asian democracies to respond to globalization by increasing social protection. The first is the low quality of Asian democracies. As the cross-regional factor, many democracies in the developing world have poor governance, which induces poor policy performance and disillusioned citizens. One of the issues in the region is the government's lack of transparency. Figure 1-1 and 1-2 clearly show that most of the democracies in Asia and Latin America are suffering the chronic disease of rampant corruption. The first thing to notice is that the degrees of

<sup>&</sup>lt;sup>30</sup> Rudra and Haggard report that "democracies do not show a consistent tendency to spend more in the face of increasing trade openness" but "authoritarian governments clearly spend less" (2005, 1041). Although they do not report that democracy has a robust and significant effect on welfare spending in the face of globalization, democratic and authoritarian regimes act quite differently. Democracy makes a difference. From the sample of developed and developing countries, Lake and Baum (2001) also find that democracies do provide a higher level of public services than non-democratic countries. Democracy works.

corruption seem to fail to distinguish sharply between two different political regime types. In this regard, democracies do not make any significant difference. Although in theory the mechanisms of democracy, such as electoral systems and broad participation, seem to function as a major catalyst to more equitable societies, in practice democratic institutions in developing countries do not work well (Beitz 1981). This is because, in Beitz's arguments, social-background inequalities would affect the large, uneven patterns of political influence. The poor are so powerless in the political games with the privileged class that they do not have any buffer to protect their interests.

Second, the color of Asian democracies differs from that of Western European countries. At the risk of being simplistic, it is plausible to note that Western European politics performs a *violet* duet, with its mixture of *red* left parties and *blue* right parties, whereas Asian politics plays a *solo*, composed mainly of conservative right parties. Accordingly, Asian democracies may be called *blue* democracies. The experience of advanced industrial countries suggests that partian politics and the underlying power balance between social interests still matter and can deflect the forces of globalization. By contrast, in many Asian countries, the functional cleavages around economic interests still appear to play a minor role as a basis of party formation or identification (Randall 2001; Sachsenroder 1998).

Historically, confrontation with (ex)communist countries, such as China, North Korea, and Vietnam, and, geopolitically, the fact that most of the modernizing authoritarian rulers – Park Chung Hee in South Korea, Chiang Kai-shek in Taiwan, Lee Kuan Yew in Singapore, Suharto in Indonesia, and Ferdinand Marcos in the Philippines – were allies of the United States in the Cold War has formulated the narrow ideological spectrum of political party systems in Asia, which intensely leans toward the conservative right position. Organized

labor and left parties have been much weaker, and in the course of the crisis and the following structural reforms, have become debilitated even further. None of the Southeast and South Asian democracies has yet reached a certain point of economic development to accompany the creation of a large working class. They all are poor. GDP per capita in 2003 or 2004 in most of the partial and full democracies in the region was less than \$5,000, except for Thailand (\$7,274 in 2003).

Although three East Asian democracies, Japan, South Korea, and Taiwan, are highincome economies, one of the essential characteristics of the East Asian model is that organized labor has been politically and systematically excluded from the socioeconomic coalitions (Pempel 2002). For example, in South Korea, which is one of the most developed countries in East Asia, the emergence of a sizable industrial labor force has had minimal impact on the party system. So far, no significant labor-based party has emerged. Hence it is entirely gratuitous to assert that parties represent class interests in Asian countries.

Last, the region's systematic pattern of political engineering diverges from advanced industrial countries and even other developing countries, such as Latin America and Eastern Europe. Whereas the literature on electoral reform argues that the global trend has been toward greater proportionality in electoral systems (Colomer 2004; Farrell 2001), an identifiable "Asian model" of electoral democracy has been characterized by "aggregative electoral politics, centrist political competition, and, in some cases, nascent two-party systems" (Reilly 2007, 1351).

Asian democracies of Japan, Taiwan, South Korea, Indonesia, the Philippines, and Thailand have converged on a certain type of electoral system, focusing on efficiency as opposed to representation, preferring majoritarianism, and engineering political stability. For

instance, Japan, South Korea, Taiwan, Thailand, and the Philippines have adopted mixedmember majoritarian (MMM) electoral systems, which are highly disproportional forms in this region because most representatives are elected from local districts and a much smaller ratio from a party list (for more details about MMM, see Reynolds, Reilly, and Ellis 2005). Given that the size of redistributive spending tends to depend upon the result of electoral systems and the class coalition among democracies and that, accordingly, a proportional representation system with three parties redistributes more than a majoritarian two-party system (Iversen and Soskice 2006), heading in the direction of disproportionality seems to be one of the reasons to suspect redistributive functions of Asian democracies.

### The Political Economy of Globalization

Two basic positions have come along over the controversy on the impacts of globalization on welfare spending of national governments. The conventional perspective about the constraining function of globalization on a national economy is labeled the efficiency hypothesis or the globalization thesis, and an alternative angle about the incentives for government interventions to protect people's welfare is called the compensation hypothesis.

Proponents of the globalization thesis hold that greater exposure to trade puts national economies under increasing competition pressures and only liberal market policies can be viable, so that state intervention in the economy, which will lead to inefficiency, cannot be sustained. More specifically, the capital mobility thesis claims that capital mobility effectively enhances the power of mobile business companies over national governments that seek to pursue generous social protection and the tax burdens needed to finance it (Bate and
Lien 1985). National governments no longer possess the autonomy to pursue independent macroeconomic strategies, and under the pressures for high interest rates and low taxes, the fiscal and monetary policies of governments of the left and right should converge in the highly financially integrated era (Garret and Lange 1991). Without effective capital controls, monetary expansion will lead to capital outflows prompted by an instant switch to other markets with higher interest rates. Fiscal expansion is also costly due to higher interest payments. With investors' credible threat of exit, increases in capital tax rates are regarded as self-destructive because capital can easily be relocated.

These efficiency-based perspectives predict that globalization may contribute to smaller government, reduced government provision of social services, reduced government revenue-raising capacity, and lower levels of unionization. The globalization thesis seems supported by the increase of neoliberal policy programs and the welfare retrenchment in the United States, the United Kingdom, New Zealand, and Australia during the 1980s.

Whereas proponents of the globalization thesis focus on the increased *exit* threats of mobile capital and on the increased competition pressures, opponents have called for attention to the *voice* of the losers and their increasing demands for compensation. As Swank (2002) makes clear, the heart of the globalization thesis is an argument about "diminished democracy," or the general diminution of the ability of democratically elected governments to pursue social policy goals. The impact of the exposure to trade has, on the contrary, led smaller corporatist countries to respond by expanding the public economy with strong economic performance (Cameron 1978; Katzenstein 1985).

In the era of global markets, the intervention of governments in the economy by increasing social spending may remain viable both politically and economically. The political

reason is that social dislocations, uncertainty and unequal distributive outcomes resulting from international markets cause the possibility of political instability, and then governments facing this threat may have an incentive to compensate citizens for higher levels of economic insecurity by providing welfare transfers accordingly. The economic reason is that globalization may also lead governments to consider public investment in human capital to increase worker productivity. In this context, social expenditures may function as collective goods to business groups, which would be essential to sharpening international competitive power, and also may bring about the social and political stability that is attractive to investment (see Kaufman and Segura-Ubiergo 2001). In this regard, increased welfare spending may not be necessarily inefficient in the face of economic globalization.

The literature on globalization and welfare spending, in particular, in the advanced industrial democracies is voluminous. Yet, its main empirical findings are still inconclusive. Neither of the extreme positions – the globalization thesis and compensation thesis – is well vindicated empirically. Some scholars have revealed that the expansion of welfare expenditures still continue in the era of globalization (Crepaz and Moser 2004; Garrett and Mitchell 2001; Ha 2008; Rodrik 1998; Swank 2002; Swank and Steinmo 2002). Others have failed, however, to find any clear positive relationships, and indeed they have showed some negative ones between globalization and the welfare state (Allan and Scruggs 2004; Ansell 2008; Burgoon 2001; Korpi and Palme 2003; Rodrik 1997). In addition, some studies have demonstrated that optimistic and pessimistic visions of the causal primacy of globalization in deciding the welfare state are significantly overstated (Brady et al. 2005; Iversen and Cusack 2000). In all likelihood, controversial findings owe, to some degree, to the differences in the conceptualization and operationalization of the key factors (Ha 2008). I believe it is not

surprising, given that, as at least one cause of mixed findings, there are a myriad of ways to measure the subjects relevant to the welfare state and globalization.

The comparative study of developing countries is of recent vintage, but its empirical findings may converge into a somewhat single point, that is, a negative effect of globalization on the extent of social welfare spending (Kaufman and Segura-Ubiergo 2001; Rudra 2002; Wibbels 2006; Wibbels and Arce 2003).<sup>31</sup> Most often, the contemporary scholars have developed theoretical explanations in which a relatively strong negative effect of globalization is explained by domestic economic or political institutions: "secular shifts in the preferences and relative power of business sectors" (Kaufman and Segura-Ubiergo 2001, 571); different patterns of integration into global markets, that is, how to respond to global income shocks (Wibbels 2006), the difference of the bargaining power of labor (Rudra 2002); and finally, union movements and left political parties (Wibbels and Arce 2003).<sup>32</sup>

If the story goes like this, what would be the implication of globalization in the public sector in Asia? Like the relationship between regime type and the public sector, much less research has attempted to explain variations among Asian countries in the size of government and the redistributive process with regard to the purported rise of globalization. As a preliminary step, we can empirically evaluate its effects through displaying bivariate correlations between globalization and the public sector. Figures 2 and 3 present scatterplots of government spending against trade openness (log) and FDI, respectively. The domestic government spending appears to be closely and positively related to trade openness. A plot of

<sup>&</sup>lt;sup>31</sup> The exception would be the positive relationships between the rise of trade openness and some subcategories of social spending, especially education spending. For instance, Avelino, Brown, and Hunter (2005) find a strong positive effect of trade on the spending of education and social security in Latin America, and Ansell (2008) notes its positive effect on the spending of education among developing countries as well.

<sup>&</sup>lt;sup>32</sup> All of these options are briefly discussed in Wibbels (2006).

spending against FDI has a similar shape, which is not as strong as the one with trade but suggests that there is a positive association between them. These results are consistent with the compensation thesis.

## Variables and Data

## **Dependent Variables**

To estimate the impact of democracy on the size of government, the subsequent empirical analysis draws upon a data set including the 1960-2005 time period in 18 Asian countries. I employ multiple indicators of the public sector provided by government. My primary measures are total central government spending as a fraction of GDP and central government revenues as a fraction of GDP, derived from the International Monetary Fund (the International Financial Statistics [IFS] database). Yet, this data set has a well-known disadvantage for large-N studies of public spending: Annual data are available only for central government spending. This problem can cause a serious problem for the analysis, if the sample has a number of federal governments and fiscal decentralization has been widespread in these systems. Fortunately, it can be assumed that this problem would be minor at best in my analysis, because there are only two federal governments in Asia, India and Malaysia. I deal with this issue by adding the dummy variable of *Federalism* to control its potential effects.

Furthermore, one more concern is the IFS data set's availability. Although this data set provides almost every year's observations for most OECD countries, it offers a relatively small number of observations for Asian countries from 1960 to 2005 (about 350 observations). For a larger sample, I accept general government final consumption

expenditure from the World Development Indicator (World Bank), which consists of the sum of the purchase of goods and services by all levels of government (about 600 observations). It should be noted, however, that I use this measure as a rough proxy for government's efforts to redistribute because it does not include income transfers, which is a substantial part of what I am interested in theoretically.

Most theories of the public sector rarely take notice of the components that affect the scope of military spending. Instead, my analysis is based on the nature of domestic spending. Given that I am concerned with redistributional differences among political regimes as to the proper role of government with respect to global economic openness, I measure the domestic public sector by excluding military spending from three types of government's spending. Two critical reasons are worth noting. In theory, because military spending is the typical case of a public good and is contingent upon external conditions such as the Cold War and severe military tension with other countries, it has no connection with a government's attitude to mediate the effects of globalization on people's welfare and to compensate the losers in global competition (see especially Berry and Lowery 1987; Blais, Blake, and Dion 1993; and Peters and Klingman 1997).

In practice, Asia would be the case in which inferences from the total government expenditure might be problematic. Figure 4 presents the numbers of democracy and partial democracy, as well as the average of military spending among Asian countries from 1960 to 2005. As Figure 4 shows, the global wave of democratization swept Asia in the late 1980s and early 1990s. The differentials in the number of total democracy (D + PD) are especially stark. In fact, its number increased from 5 in the early 1980s to 13 in the early 1990s. Most important, this regional democratic transition coincided with a global transformation, the end

of the Cold War, which influenced a government's mindset to decide the level of expenditure. As one may expect, the average of military spending picks up in the early 1980s (4.6% in 1982) and then declines steadily to date (1.9% in 2005), which implies the opposite pattern of democratization.<sup>33</sup>

Thus, it would be possible to underestimate a new democracy's efforts to compensate groups that lose out from globalization if we do not deal with the global trend of the decline of military spending. Table 1 also confirms my concern by reporting the means of military spending of various regime types. Democracies clearly spend less on military affairs than others: On average, non-democracies (3.37%) are prone to spend 150% more than democracies (2.2%). In this paper, among two frequently used data sets from the US Arms Control and Disarmament Agency (ACDA) and Stockholm International Peace Research Institute (SIPRI), I consult the data of military spending from SIPRI because it regularly provides a data set of standardized amounts (military spending/GDP) for a large number of countries and consecutive years.

I choose to look at total expenditures rather than narrower measures of specific types of public expenditures. I do not set aside the likelihood that democracy may be of more importance in certain fields than in others. Rather, it is needed to study disaggregated figures to show more sophisticated picture of the causes of government growth. It is, however, the broader size of government measures that concerns me in the analysis. It is suitable to focus on the total sum of such specific expenditures if the outcomes of political and economic transformations are to be fully appreciated. My hypothesis concerns to what extent government expenditures are chosen on the ground of the assumed mechanisms of different

<sup>&</sup>lt;sup>33</sup> The sharp decline of military spending during 1973-74 does not reflect any global and regional trends. It is due to data availability. One bellicose country, South Vietnam, leaves the sample in 1972 but another bellicose one, North Korea, joins in 1975.

political arrangements. Moreover, governments do have more than one way to compensate the sector of the economy. Esping-Andersen (1990) argues that, among his "three worlds" of welfare capitalism, the social democratic world of Scandinavia and the conservativecorporatist world of the Benelux countries both led to generous welfare states. But the social democratic welfare states emphasize the generous provision of public services such as education, health, and daycare, whereas the conservative-corporatist models count on income transfer programs. When I think about the size of government, these two worlds do not matter, and it is thus appropriate to employ the total expenditures.

Figure 5 shows a bird's eye view of domestic government spending in Asia for the period 1960-2006. Its extent varies a great deal, across both time and place. The mean value of central government spending for domestic affairs is 13.84% of GDP, with a standard deviation of 5.92%. The range is around 35%, from 2.78% (in Myanmar) to 37.78% (in Singapore) (see Table A1). Two are particularly noteworthy: First, the spread drifts upward over time, but, in contrast to the global pattern, i.e., the steady growth of the public sector (Boix 2001), its mean in Asia remains flat; second, the pace and trend vary also by country, as displayed in Figure 6. Only in three countries, South Korea, Malaysia, and Nepal, has the domestic public sector expanded steadily, whereas in four countries, China, Myanmar, Pakistan, and Sri Lanka, it has shrunk constantly.

### Independent Variables

In delving into the effects of globalization, I divide it into two categories: *Trade openness* and *FDI*. The importance of these flows to a country differs hinging on their magnitude relative to the size of the domestic economy. Accordingly, globalization in this

article is operationalized by the level of trade integration and FDI inflows as a percentage of GDP: here, the measure of trade openness is the sum of the total imports and exports as a share of a country's GDP (trade openness = [imports + exports]/GDP), FDI inflows is the value of net inflows of FDI as a share of a country's GDP. The globalization data are taken from *World Development Indicators* (World Bank 2009).

It has been a considerable challenge for scholars to deal conceptually with a great variation of post-authoritarian regimes that have emerged beyond advanced industrial countries because the "diminished subtypes" (Collier and Levitsky 1997) of democracy vary greatly from one another, in terms of degrees of democracy and conceptual emphasis. In this study, I use two different conceptions of democracy to move beyond the dichotomous categories of democracy and authoritarianism and to perceive the different degrees of democracies and the different extents of democratization in the developing world: democracy and partial democracy.

Empirically, to define a democracy in the panel sample from 1960 to 2005, I rely on the Polity IV data set (Marshall and Jaggers 2005), which goes back to as early as 1800 and covers all independent countries with populations of more than half a million. This measure constitutes the difference between two discrete indicators, *Democracy* and *Autocracy*. The former scores institutionalized democracy ranging from 0 to 10, with higher values associated with better democracies. Here, democracy is conceived by three main criteria: competitiveness and openness of executive recruitment, constraint on chief executive, and competitiveness of political participation.

Inasmuch as the Polity IV data set is not a dichotomous measure of democracy, the analysts are required to draw an arbitrary cutting point for where democracy starts. The ways

they have offered differ, for example, 4 and above (Brown and Hunter 1999), 6 and above (Kaufman and Segura-Ubiergo 2001), or 7 and above (Rudra 2004), among others. To develop the qualitative categories of democracy, I constructed two dummy variables dividing combined *Polity Scores*, which is derived simply by subtracting the *Autocracy* value from the Democracy value, in two: Partial Democracy is coded 1 for any country scored from 1 to 7 on *Polity Scores* index, 0 for others; and *Democracy* is coded 1 for any country scored 8 or above, 0 for others. Although a cutting point of Partial Democracy, Polity Score 1, might be considered as much more generous than others, operationalization of this variable fits nicely with my theoretical assumptions and hypotheses, which focus on the democratic institution mechanism itself, such as electoral competition and the expansion of political participation, to see the relationship between democracy and redistribution. Accordingly, this quantitatively broad conceptualization of democracy allows me to investigate whether election and participation make a significant difference in terms of an effect on the change of the size of the public sector. The reasoning for my choice of 8 and above as *Democracy* is offered by Polity IV. In the data set, 8 points is the threshold to be a "mature and internally coherent democracy," which satisfies the following conditions: (a) "fully competitive" political participation, (b) "elective" executive recruitment, and (c) "substantial" constraints on the chief executive (Marshall and Jaggers 2005 Dataset Users' Manual).

# **Control Variables**

Alongside the main variables of interest, several economic and demographic control variables traditionally used in the public sector and government spending literature are included in order to tailor the models to Asian countries. The first economic variable is the

*GDP*, defined as the log of Gross Domestic Product per capita (in constant dollars, Chain Index, expressed in international prices, base 2000), taken from the Penn World Tables. *GDP* is included in the equation to take into account Wagner's Law, which predicts that economic development will be accompanied by an upswing in public expenditure. But it should be noted that the size of the public sector may not be increasing linearly in tandem with economic development with no gradation. If a country reaches a certain threshold of economic development, the velocity of the public sector's expansion might not be constant or its trend might even veer to a different direction. For the possibility of the curvilinear relationship between them, the square of GDP,  $GDP^2$ , is added. As the last economic control variable, I control also for the annual *Growth Rate* of GDP per capita to manage economic volatility's effect on government expenditure.

The first demographic control variable is the percentage of *Elderly Population* who is 65 years old or older. Both health care and social security spending, a large component of which is public pensions, are sensitive to how many people are old, thus I would expect that a higher percentage of elderly people are positively associated with government expenditure. I also use for a measure of the percentage of the *Youth Population* which is under 15 years of age for the model predicting spending on health and education. Last, following previous studies that showed a negative relationship between the load of government and country size due to economies of scale in the service of public goods (Alesina and Wacziarg 1998), I account for population, *Total Population (log)*. The data of all control variables above, except for GDP per capita, comes from The World Bank *World Development Indicator*.

I also construct three time-specific dummy variables, *1<sup>st</sup> Oil Crisis*, *2<sup>nd</sup> Oil Crisis*, and *Financial Crisis*, to control for exogenous shocks. Unmeasured forces of the world economy

might influence the size of the public sector in all countries in a similar way at a given time point. External factors, such as the Oil Crisis, and global economic changes, such as the Asian financial crisis, might exert a potential influence in such a synchronous fashion. To address the possibility of spatial contemporaneous correlation of errors, I introduce timespecific factors into the models in the form of a dummy variable for the *1<sup>st</sup> Oil Crisis* (1973-74) and the 2<sup>nd</sup> Oil Crisis (1979-80), except for two oil exporting countries (Indonesia and Malaysia). As it is plausible to expect that the impact of an increase in oil prices differs between oil exporting and oil importing countries, I develop the variable of Oil Exporter, in which Indonesia and Malaysia are coded 1 during the first and second oil crises. As for the *Financial Crisis*, the five countries hit hardest by the crisis, Indonesia, Malaysia, the Philippines, South Korea, and Thailand, are coded 1 from 1997 to 1998, and the rest of years and the rest of the countries are coded 0.

Finally, my regressions include two unit-specific dummy variables to take into account the effects of the different type of political and economic regimes: *Left Totalitarian* and *Federalism*. I use a dummy variable for *Left Totalitarian* countries because they have claimed and showed universal provision of basic social insurance and services through the state. The broad scope of entitlements in left totalitarian countries generates strong public belief that any capitalist countries, at least in the developing world, could not surpass them in terms of the generosity of social policies. For this reason, China, Laos, Mongolia and Vietnam are coded 1 in the variable of *Left Totalitarian*.<sup>34</sup> As the last dummy variable to control fiscal decentralization, I construct *Federalism*, which has been theorized as one of the

<sup>&</sup>lt;sup>34</sup> Mongolia is coded 1 only before 1991 because its totalitarian regime collapsed in 1991. Cambodia had also experienced socialist systems from the middle of the 1970s to the early 1990s. But, I do not need to deal with that case, because there are no data on all of four dependent variables in Cambodia during these periods.

factors slowing the expansion of the public sector among advanced industrial countries (Castles 1999; Obinger, Leibfried, and Castles 2005). India and Malaysia, classified as federal, are coded 1 and the rest of the countries are coded 0.

#### **Model Specification**

To test the mediating effects of Asian democracy on government spending in the era of globalization, I specify a basic empirical model, and test the hypotheses with an unbalanced pooled time-series cross-sectional data of the public sector, providing varying numbers of observations and the time span for different countries according to data availability, which cover 18 Asian countries during the period from 1960 to 2005. Panel data are likely to come to the forefront of quantitative studies of most subfields of political science because they make it possible to draw systematic inferences of cross-sectionally and longitudinally diverse causal indicators by simultaneously analyzing both time invariant traits of countries (e.g., federalism or regime types), which avoid pure time-series studies, and cross-sectionally invariant characteristics of periods (e.g., exogenous shocks common to all countries such as global financial crises), which dodge simple cross-sectional studies (Hicks 1994).

Empirical results estimated from pooled data using OLS (ordinary least squares) regression, however, are problematic because the assumptions of independence of the disturbance terms, errors, across observations are not likely to be satisfied. Four potential violations of OLS assumptions in pooled data are that the disturbance terms tend to be autocorrelated (serial correlation of errors), heteroscedastic (different variances across units, panel heteroscedasticity), correlated across units due to exogenous shocks (spatial

contemporaneous correlation of errors), and nonspherical in both the serial and the crosssectional dimension (autocorrelated and heteroscedastic at the same time) (Plumper, Troeger, and Manow 2005). Although none of them biases the estimated coefficients, each of these problems tends to produce inefficient and biased standard errors for the coefficients (Greene 2003).

To control for the possibility of nonspherical disturbances, Beck and Katz (1995; 1996) introduce an econometric technique that runs an OLS regression with the lagged dependent variable plus unit and period dummies and calculates panel-corrected standard errors. Whether unit dummies and a lagged dependent variable should be included in the model is, however, still an open question because running an OLS model with them may remove some of the nonspherical disturbances problem, but it may also kill much of the beneficial story about the variables of interest. Thus, this widely used technique may run the risk of throwing out the substantial and theoretical baby with the residuals' and methodological bathwater.

Some concerns about the consequences of specifying unit dummies have been discussed. Even though the estimators of unit dummies absorb the effects of unobserved time invariant variables, generally they eliminate much of cross-sectional variation in the dependent variable by capturing the unit-specific variation in a unit-specific intercept. "Since this removes the average country effect, such a model focuses on the within-country variation over time, and the coefficients represent a cross-country average of the longitudinal effect" (Kittel and Winner 2005, 272). More specifically, the inclusion of unit dummies turns out to be questionable, first, if the model embraces variables that are constant over time for a given unit or, second, if it tests the hypothesis about differences in the level of the exogenous

variables. The first point is relatively well known. Due to almost perfect collinearity, unit dummies do not allow estimating the influence of time invariant independent variables, and then, accordingly, they often bias the estimate of largely time invariant variables (Beck 2001; Wooldridge 2002).

The second point is somewhat new. Plumper, Troeger, and Manow (2005) suggest that if the theory predicts the level effects of an exogenous variable on levels of the endogenous variable, unit dummies should not be included, because "unit dummies *completely absorb* differences in the level of independent variables across units" (p. 331, emphasis in the original). In my analysis, one of the main interests is whether democracy captures cross-sectional variation of the public sector and one of the main hypotheses is about the effects of levels of the independent variables on the level of the dependent variable. Moreover, one of my key explanatory variables, regime types, is time invariant for old democracies, such as Japan and India, and two control factors, *Left Totalitarian* and *Federalism*, are also constant over the time. From the reasons above, it seems clear that including unit dummies is not preferable in my models.

Additionally, whether to include or exclude in the model a lagged dependent variable that, in itself, is required to get rid of serial correlation of errors, has recently stimulated a lively debate in the literature. The key argument of some econometricians and applied researchers who are warning against the inclusion of a lagged dependent variable is that the autoregressive term may generate serious bias through capturing large parts of the trend in the dependent variable and pressing down the effects of the other variables because it falsely presumes identical persistent effects of all independent variables (Achen 2000; Greene 2003, 534; Huber and Stephens 2001; Plumper, Troeger, and Manow 2005, 335). In particular,

when high serial correlation and high heavy trending exit in the independent variables, as often bedevil the panel world, a lagged dependent variable will dominate the regression equation even though it is theoretically uninteresting and meaningless.

For the reasons discussed so far, I employ OLS estimation using panel-corrected standard errors (PCSE) to deal with panel heteroscedasticity but do not include a lagged dependent variable and unit dummies. Following the recommendation of Plumper, Troeger, and Manow (2005), I use the Prais-Winsten transformation to eliminate serial correlation of errors, assuming first-order autocorrelation within panels (an AR1 process). "AR1 error models tend to absorb less time-series dynamics," thus they allow applied researchers to "explain not only cross-sectional variance and cross-sectional differences in changes, but also average changes in levels" (Plumper, Troeger, and Manow 2005, 343). All independent variables are lagged by one year to control for the potential exogenous effects of the public sector.

### **Results**

Tables 2 and 3 display the main results on how democracy and globalization affect the size of the public sector. In Table 2, central government spending and domestic central government revenue are employed as my key dependent variables, as mentioned earlier, and in Table 3, general government consumption expenditure and total government spending are introduced for a larger sample and to illustrate how the results would be different when the military spending is included, respectively. Each column presents the coefficients from a single OLS regression with PCSEs. Out of the three models of each dependent variable, the first includes all the indicators of democracy and globalization without interaction terms

(Models 1, 4, 7, and 10). The second uses the indicators of democracy, partial democracy, trade openness, and their interaction effects (Models 2, 5, 8, and 11), and then the last substitutes FDI for trade openness in the same composition as the second (Models 3, 6, 9, and 12).

Focusing first on Table 2, I begin with the control variables. The coefficients of *GDP per capita* and its square usually retain the anticipated signs (four out of six models) and the joint tests of the null hypothesis that GDP per capita and its square have no explanatory power are rejected at least the 1% level in all but Model 1. For instance, the F(2, 288)-statistic in Model 2 is equal to 18.16, which is significant at the .001 level. Taking things by and large, there seem to be some evident to support my earlier assumption that economic development has an inverted-U curve relationship with the domestic public sector.

One economic control variable, *Growth Rate*, and three time-specific variables, *Financial Crisis*, 1<sup>st</sup> Oil Crisis, and 2<sup>nd</sup> Oil Crisis, fail to reach standard threshold of statistical significance in most of the models. No effect of the Asian financial crisis is worth noting. It did not cause significant retrenchment of the public sector commitments in new democracies. During the late 1990s, with the exception of one non-democracy (Indonesia), in a partial democracy (Malaysia) and democracies (the Philippines, South Korea, and Thailand), neither fiscal deficits nor high inflation loomed large (Green and Campos 2001, 311 Table 1). Moreover, these countries recovered from the downturn relatively quickly compared with the decade-long recessions in Latin America.

One demographic variable, *Total Population*, and one unit-specific dummy variable, *Left Totalitarian*, all contribute to the public sector in the expected direction, and they reach the standard threshold of statistical significance in most of the models. Although *Left* 

*Totalitarian* embraces four socialist regimes in Models 7, 8, and 9 in which government consumption is used as a dependent variable, it includes only China in Table 2 due to the limited availability of IFS data. Thus, my models predict that China would have a domestic public sector around 4% to 8% bigger than others, *ceteris paribus*. One variable of some interest is the countervailing effects of federalism, meaning that federalism is associated with a larger public sector. This null finding is at odds with much of the conventional expectation, but empirically, it is not uncommon. The likely explanation of this result is that a common pool problem may be embedded in the decision-making processes in federal systems: The incentives of lower levels of government are to spend more and take more transfers and subsidies from federal governments because federal systems often infer that local governments make a decision on how much they spend, whereas federal governments make a decision on how much they spend, whereas federal governments make a decision on how much they spend, whereas federal governments make a tert of *Federalism* on the public size seems to reflect the bigger size of government in Malaysia.

One concern on the control variables is multicollinearity. Indeed, two demographic variables, *Elderly Population* and *Youth Population*, are somewhat highly correlated (around .60), which becomes difficult to find statistically significant effects, even if they are really there, due to variance inflation that causes the standard errors to increase. Fortunately, it can be assumed that this problem would be minor at best in my analysis because the variance inflation factor (VIF) scores of these two variables are around 9 or 10, whereas those of most variables of interest are pretty low. In addition, even in the presence of multicollinearity, the OLS estimators are still best linear unbiased estimates (BLUE) (Greene 2003). Moreover, the sign and significance of *Elderly Population* and *Youth Population* 

estimates are sensitive to alternative specifications of the model, suggesting they are not very robust.

Turning now to the substantive variables highlighted in the general discussion of the public sector, the first finding is that globalization does not have a uniform impact. The effect of trade on the public sector is, as expected, positive and slightly statistically significant in Model 1, whereas the signs of FDI's coefficients are negative and significant in Models 1 and 3. With respect to trade openness, this is not a surprise at least in the Asian context. As displayed in Table A2, the most autarkic countries, India (17.03% in trade openness) and Japan (21.37%), are old democracies with relatively lower levels of the domestic government spending, 9.24% and 10.29%, respectively; whereas Singapore (411.67% in trade), Malaysia (129.00%), and Mongolia (111.57%), which are the most dependent on the global market, are an old non-democracy and new democracies with relatively higher levels of domestic government spending, 22.89%, 18.42%, and 29.70%, respectively.

With respect to FDI, my result regarding its negative effects on the domestic public sector seems puzzling, given the earlier expectation derived from Figure 3 that depicts a positive line between them. One more figure provides some clues to explain it. The individual country series in Figure 7 demonstrates how the relationship between government spending and FDI varies by country: In only five countries (Korea, Malaysia, Mongolia, Nepal, and Thailand), the increase of FDI is associated with higher levels of government spending, whereas in seven countries (Bangladesh, Cambodia, China, India, Indonesia, Pakistan, and Sri Lanka), it is related to lower levels of government spending and in two countries (Japan and Singapore) it is irrelevant to the size of government. Interestingly, the nexus between FDI and government spending, which would look positive if every

observation were compiled together as in Figure 3, is actually negative or indifferent in most of the countries when it is disaggregated by country as in Figure 7.

In a nutshell, Table 2 lends strong support to the mixed findings of previous empirical work. Like the compensation view, Asian countries that are more exposed to the global market have larger public economies, whereas, like the capital mobility thesis, Asian countries that are more dependent on FDI have smaller public economies. In particular, this is wholly consistent with trade openness' positive effect among OECD countries (Cameron 1978) and among a global sample of countries (Rodrik 1998). My empirical finding suggests that different types of economic globalization appear to encounter different governmental responses.

Another finding of theoretical interest is that the coefficients of democracy and partial democracy are positive and, at least, marginally significant, indicating that democratic political systems are associated with larger government. Their coefficients, as expected, lose to some extent an effect and statistical significance when total government spending (including military spending) is employed in Model 10. This comparison verifies the likelihood of my earlier apprehension that the differential effect of regime types seems to be blurred if military spending is not dealt with in empirical models. Of note, although the impact of democracy is slightly greater than that of partial democracy, the statistical significance of partial democracy is more powerful than that of democracy, which conflicts with the conventional wisdom that the extent of redistribution of a well-functioning democracy is likely to be more robust and consistent than that of a partially functioning democracy, compared with that of a non-democracy.

The marginally significant estimates for the effects of democracy on the domestic

public sector are due largely to some odd cases, India and Japan. As discussed earlier, those countries have enjoyed high levels of democratic institutions at the same time their lower levels of government spending have remained intact. The gist of this pattern is illustrated by Figure 8, which plots a country's *Polity2* index (from -10 to 10 [more democratic]) against domestic government spending. The distribution and a curvilinear line suggest that democracies do not differ from partial democracies in terms of government spending. To see the statistical difference between democracy and partial democracy, I run a Wald test,  $H_0$ : D = PD = 0, after each of regressions from Model 1 to Model 6. None of the resulting test statistics are significant in the entire models, indicating the effects of democracy and partial democracy are not significantly different. This changes, however, when general government consumption is employed as a dependent variable in Model 7. Democracy does a much better job than partial democracy in terms of the extent of an impact and statistical significance. Again, of crucial importance may be India and Japan. In contrast to government spending and revenues, they provide relatively higher levels of general government consumption (7.27% and 12.89%, respectively; its mean for the entire sample is 8.06%).<sup>35</sup>

It should be noted that lower-order interaction-term coefficients in models with multiplicative terms must be interpreted with a degree of caution (see Braumoeller 2004). The coefficients of democracy and partial democracy in Models 1 and 4 demonstrate the impacts of (partial) democracy on the public sector *in general*, whereas those in models with multiplicative terms show the impacts of (partial) democracy on the public sector *in general*, whereas those in models with

<sup>&</sup>lt;sup>35</sup> Some observers might suspect that the results of the models on government consumption become different from the ones on government spending because the numbers of cases being analyzed are different. To deal with this issue, I reestimate the models on government consumption with the same cases as the ones on government spending. Inasmuch as numerous coefficients and standard errors should be included in each Model, a simpler way to present the results is displayed in Table A3, in which only the results for the variables of interests are reported. Their estimates and significance are almost similar.

trade or FDI is equal to zero." Accordingly, from the general effects of (partial) democracy displayed in Models 1 and 4, we can draw an inference that democracy matters. Substantially, the coefficients of a (partial) democracy in models with multiplicative terms indicate that regime types appear to have a positive impact on the size of government when countries come to Asia's average levels of trade or FDI because I centered those variables before I constructed the interaction terms.

My last key hypothesis is about whether the effects of globalization on the growth of the public economy vary, hinging on the regime type. This is accomplished by including the regime type variables and their multiplicative interaction with the trade openness or FDI variables. As noted earlier, I center the variables of regime type and globalization before I run a regression because this strategy tends to introduce sizable multicollinearity among the variables. In these regressions, of crucial importance is the interaction term. The most striking facet of Table 2 is that the trade openness' interaction terms with regime types have mainly a significant positive effect on the domestic public sector, whereas FDI's interaction terms seem to exert little discernible impact and appear sensitive to which dependent variable is used. The story about more redistributive partial democracies is likely to continue: The coefficients suggest that the substantive effects of partial democracy are in fact greater (almost two times) and more strongly significant than those of democracy. That is, my empirical results provide that partial democracies in Asia, as trade openness increases, are likely to go through more speedy expansion in the domestic public sector; yet, democracy and partial democracy appear to play a little role with regard to an increase in FDI.

## Discussion and Conclusion: Has My Skepticism Gone Too Far?

This paper seeks to find new empirical evidence for understanding different types of democratic regimes in a range of countries in Asia and make an important contribution to the literature by departing from the conventional focus on advanced industrial countries. I began by asking whether democracies in Asia would be working as theorized in the era of globalization. Unlike my previous skepticism, my answer, in summary, is that Asian democracies address the challenge of trade openness through expanding the size of the domestic public sector. One of my core theoretical hypotheses is that a democracy spends more as trade openness increases, and I have shown here that this political mediating effect is reflected in policy. This effect is robust and substantively large: On average, the transition from non-democracy to (partial) democracy corresponds to around an additional two percentage points of GDP spent in the domestic public sector. My analysis strongly supports existing theoretical claims regarding the importance of democracy in building the extent of the public sector. This is consistent with previous empirical studies also focusing on the developing world (Adsera and Boix 2002; Garrett and Nickerson 2005; Nooruddin and Simmons n.d.; Rudra and Haggard 2005).

Studies on the political economy across Asian countries are needed, I believe. The first reason is simple. To date, few systematic investigations have been conducted on the effects of globalization and democratization on Asian government expenditures in the comparative perspectives. Surprisingly, the lack of comparative perspectives in the studies on Asia has not been limited to the subject of social policies. Hardly any studies have attempted to account for cross-national variations of, in particular, democratization or economic development across Asian countries. It is scarcely demanding to find the answer to the paradox of why such common processes, which have been used in the regional studies of

Western Europe, Latin America, and even the Middle East, have been employed so rarely among Asian countries.

No region of the world shows greater variations in political regime types, socioeconomic development, the size of population, religions, and colonial experience than does Asia. In terms of regime types and levels of economic development, it encompasses very affluent old democracy (**Japan**)<sup>36</sup>; indigent old democracies (**India** and *Sri Lanka*); newly industrialized democracies (South Korea and Taiwan); indigent new democracies (Bangladesh, Cambodia, Indonesia, and Mongolia); a rich authoritarian regime (Singapore); the most economically energetic non-democracy (China); poverty-stricken authoritarian regimes (Laos, Myanmar, and Vietnam); and the most isolated communist country of the world (North Korea). In terms of religions, it comprises most of the major religions of the world: Buddhism (Mongolia, Thailand, Cambodia, Laos, Nepal, and Myanmar); Catholicism (the Philippines); Confucianism (South Korea, Taiwan, North Korea, and China); Hinduism (India); and Islam (Indonesia, Bangladesh, and Malaysia). Finally, in terms of colonial experience, it also shows wide variation: Britain (Bangladesh, Malaysia, Nepal, Myanmar, and Singapore); China (Mongolia); France (*Cambodia*, Laos, and Vietnam); Japan (South Korea, Taiwan, and North Korea); Portugal and Netherlands (Indonesia); Spain and the United States (the Philippines); and no colonial experience (Japan, Thailand, and China) (Banks, Muller, and Overstreet 2008).

These diversities bring up one plausible answer to the question of why there has been very little in the way of a comparative analysis across several Asian countries. Asia varies too

<sup>&</sup>lt;sup>36</sup> Democracies (from 8 to 10 on *Polity* of Polity IV data set, 2005) are in bold and partial democracies (from 1 to 7) are in italics. Scores are as follows. *Bangladesh* (6), Bhutan (-6), *Cambodia* (2), China (-7), *East Timor* (6), **India** (9), **Indonesia** (8), **Japan** (10), **South Korea** (8), Laos (-7), *Malaysia* (3), **Mongolia** (10), Myanmar (-8), Nepal (-6), Pakistan (-5), the **Philippines** (8), Singapore (-2), *Sri Lanka* (5), **Taiwan** (10), **Thailand** (9), and Vietnam (-7).

much and contains a relative abundance of crucial deviant cases (e.g., China, India, or Singapore). Area or regional studies are often based on Mill's method of difference or most similar systems design (Przeworski and Teune 1970, 33) in which a host of similar factors in a particular geographical region are effectively controlled and the focus is on looking for some distinctive ones countries do not share. This method controls for common features of a certain region such as the level of economic development, culture, and history, while the remaining dissimilarities denoted in the various independent variables unravel the variation in the dependent variables. As I showed earlier, Asia is not well suited for the most similar systems design because Asian countries do not share much. Instead, Asian countries have been assigned categories, depending on the theoretical and methodological justification: Japan is often compared with other advanced industrial democracies (Gould 1993); China and India are considered as the best for a case study; and South Korea and Taiwan, and newly industrialized countries (NICs) fit nicely with most different systems design that identifies a particular outcome that is to be explained, such as democratization or economic development, respectively (see e.g., Deyo 1987; Haggard 1990).

As well answering the need to fill the aforementioned gap in empirical studies, the Asian case would be of more interest to comparativists at least as far as the topics of public economies. The ability of governments to maintain existing spending or to undertake new commitments is conditional on economic performance (Haggard and Kaufman 2008). Good macroeconomic performance provides governments more leeway to continue or expand existing welfare spending. Bad economic performance and financial crisis, by contrast, limit governments' ability to pursue generous welfare spending. Even when governments have the best intentions to spend more, fiscal constraints associated with slow growth and crisis are

prone to reduce the ability of the government to make credible commitments to expand, or even continue, the public spending.

Concerning this, Asian countries have enjoyed the most favorable economic conditions. They experienced robust economic growth until the financial crisis of 1997-98, and this strong fiscal position may bring new and old democracies in Asia the wherewithal for the growing public sector. Latin America, by contrast, does not have this luck. Facing far harsher economic constraints, countries in Latin America experienced deep economic decline during the debt crisis of the 1980s and a comeback of financial crises in the 1990s and early 2000s. The measure of an economic growth rate presented in Figure 9 captures some important cross-regional difference in this regard. Compared with Latin America and advanced industrial countries, Asian countries continued on a higher growth trajectory throughout the period.

This is not to say that the public sector grows linearly in tandem with good economic conditions. Rather, a favorable economic environment would be the sine qua non for a government to implement some policies. When this condition is not satisfied, governments cannot pursue specific policies even if they want to, whereas when this condition is satisfied, it is governments' choice to expand or retrench the public sector. The positive economic context in Asia may, I believe, allow us to test the net effect of democracy on the size of the public sector. Among regions, Asia may be an ideal case for providing quasi-experimental evidence on this topic. Due to these two reasons, a study focusing on Asian public economy is worthy of note.

The argument and findings raise several questions that will require further elaboration on several theoretical and empirical grounds. First, the model clarifies some abnormal cases,

compared with my main finding that Asian democracies are more responsive to demands for government provision than non-democracies. India and Japan are the only two Asian countries in which democratic institutions have a long history of being relatively wellfunctioning, but they provide seemingly lower levels of the domestic public sector. Case studies are vital for revealing why and how they have continued to maintain a small public sector. Appreciating the specific mechanisms and their economic and political effects tend to rest on detailed and sophisticated qualitative studies.

Another interesting agenda is how to integrate arguments about compensation and the capital mobility thesis. Governments appear to respond to trade openness according to the compensation thesis and to FDI according to the capital mobility thesis. We have no good synthesis to explain why trade openness and FDI influence government spending in different ways. Understanding the rationale behind such a mixed combination and the political and economic dynamic of instituting globalization heterogeneity may be a crucial building block for future research.

Finally, going back to my earlier skepticism, has my doubting gone too far? A growing literature suggests that countries that typically accept formal democratic institutions have a big public sector as well as generous welfare programs. My analysis of the domestic public sector across countries and across time in Asia shows this squarely. Even though Asian democracies are weak, blue, and disproportional, they are still democracies. It does not mean that my skepticism was wrong, but rather that the welfare-unfriendly characteristics of Asian democracies may affect some other different features of the public sector. These characteristics do not make a difference in the overall amount of government expenditure. However, the way in which governments allocate what they spend may differ, depending on

the quality of institutions, partisanship, and electoral systems. Public spending that is increasing in democracies may fail to serve its intended goals to compensate the losers and alleviate the inequality, which I have not captured in my model. The consequences of the generous gestures of democracies deserve more scholarly attention. To draw a complete picture of redistributional politics, we need to accumulate knowledge about not only how democracies facing an international context act differently but also the consequences of their attempts, if any.

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Regime Types	Observations	Mean	Std. Dev.	Min	Max
Democracy	187	2.2	1.42	.6	6.2
Partial Democracy	192	2.73	1.58	.7	8.1
Non-Democracy	293	3.37	2.04	.4	11.3

Table 1 Military Spending in Asia by Regime Type, 1960-2005
	Government Spending			Government Revenue			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
Democracy (D)	1.148^	1.183^	2.291**	1.987*	1.191^	1.982**	
	(0.695)	(0.606)	(0.892)	(0.796)	(0.707)	(0.770)	
Partial Democracy (PD)	0.698*	1.056***	0.631^	1.787***	1.737***	1.618***	
-	(0.277)	(0.277)	(0.366)	(0.431)	(0.430)	(0.415)	
Trade (log)	1.020^	2.417***		0.309	2.036***		
	(0.545)	(0.498)		(0.749)	(0.576)		
FDI	-0.213**		0.024	-0.335**		-0.170	
	(0.069)		(0.105)	(0.121)		(0.104)	
$D \times Trade (log)$		1.634*			1.190		
		(0.792)			(1.003)		
$PD \times Trade (log)$		3.349***			3.358***		
12		(0.582)			(0.864)		
D × FDI		(0.00)	0.491^		(0.000)	-0.307	
DATE			(0.282)			(0.227)	
PD × FDI			0.092			-0.150	
			(0.122)			(0.175)	
GDP per capita (log)	1 164^	1 883**	2 298***	-0.020	0.024	0.723	
ODI per capita (log)	(0.598)	(0.610)	(0.714)	(0.514)	(0.704)	(0.702)	
<b>GDP</b> per capita $(\log)^2$	-0.084	-0 594**	(0.714) 0.345	_1 282***	-1 642***	-1 158**	
ODF per capita (log)	(0.305)	(0.105)	(0.372)	(0.283)	(0.338)	(0.388)	
Crowth Data	(0.303)	(0.195)	(0.372)	0.0040	0.0750	0.107	
Glowill Kale	(0.020)	(0.024)	(0.003)	(0.054)	(0.030)	-0.107	
Total Domulation (log)	(0.030)	(0.023)	(0.041)	(0.034)	(0.039)	(0.039)	
Total Population (log)	-1.131	-0.333	-2.200	-2.094	-1.337***	-2.432	
	(0.327)	(0.228)	(0.342)	(0.441)	(0.355)	(0.413)	
Elderly Population	-0.757*	0.081	$-1.772^{****}$	0.985**	1.203***	0.504	
W ID I.	(0.344)	(0.415)	(0.386)	(0.345)	(0.451)	(0.362)	
Youth Population	-0.258**	0.046	-0.406***	0.089	0.119	0.045	
	(0.096)	(0.086)	(0.108)	(0.079)	(0.084)	(0.106)	
Financial Crisis	-0.696	-0.866	-1.542*	1.522	1.216	1.294	
st	(0.583)	(0.578)	(0.699)	(1.090)	(1.003)	(1.064)	
1 <sup>st</sup> Oil Crisis	0.490	-0.293	0.190	-2.489**	-0.433	-1.821	
nd	(0.488)	(0.442)	(1.025)	(0.900)	(0.589)	(1.396)	
2 <sup>nd</sup> Oil Crisis	0.880^	0.938*	0.500	0.692	0.765	0.667	
	(0.474)	(0.447)	(0.691)	(0.591)	(0.599)	(0.975)	
Oil Exporter	1.392	1.284	1.360	3.684*	3.393*	3.718*	
	(0.915)	(0.853)	(0.915)	(1.701)	(1.531)	(1.684)	
Left Totalitarian	4.176*	1.467	8.086***	7.131***	3.552	8.233***	
	(1.798)	(1.961)	(2.015)	(2.210)	(2.509)	(2.403)	
Federalism	4.737***	0.740	3.724***	5.506***	2.438**	4.396***	
	(0.975)	(0.714)	(0.907)	(1.183)	(0.940)	(1.152)	
Constant	44.775***	17.561*	73.098***	44.835***	30.411***	54.805***	
	(8.667)	(7.287)	(9.208)	(8.857)	(7.849)	(8.637)	
R-squared	0.8318	0.8525	0.7528	0.7117	0.7499	0.6482	
N of Countries	14	15	14	14	14	14	
N of Observations	226	291	255	223	279	252	

Table 2 Determinants of the Domestic Public Sector

*Note*: Table entries are OLS estimates corrected for panel-specific autocorrelation. Panel-corrected standard errors are included in the parentheses. All independent variables are one-year lagged.  $^p \le .10$ ;  $^p \le .05$ ;  $^{**}p \le .01$ ;  $^{**}p \le .001$ .

				Total Government Spending			
	Government Consumption			(+ Military Spending)			
	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	
Democracy (D)	1.970***	1.964***	2.634***	0.569	1.041	2.041*	
	(0.430)	(0.445)	(0.559)	(0.671)	(0.672)	(0.876)	
Partial Democracy (PD)	0.658**	0.709*	0.896***	0.545^	1.060***	0.255	
	(0.207)	(0.321)	(0.220)	(0.321)	(0.328)	(0.386)	
Trade (log)	0.914	0.323		1.532^	2.045***		
	(0.743)	(0.487)		(0.793)	(0.592)		
FDI	-0.008		0.005	-0.128^		0.002	
	(0.060)		(0.075)	(0.076)		(0.111)	
$D \times Trade (log)$		1.498**			1.102		
		(0.572)			(1.026)		
$PD \times Trade (log)$		0.653			3.242***		
		(0.543)			(0.700)		
$D \times FDI$			0.302			0.383	
			(0.268)			(0.288)	
$PD \times FDI$			-0.023			0.088	
			(0.073)			(0.123)	
GDP per capita (log)	-0.198	0.360	0.029	2.417**	4.015***	3.607***	
2	(0.989)	(0.813)	(0.732)	(0.903)	(0.754)	(0.855)	
GDP per capita $(\log)^2$	-0.165	-0.474	-1.012***	0.454	0.606^	0.614	
	(0.336)	(0.299)	(0.236)	(0.570)	(0.363)	(0.447)	
Growth Rate	-0.021	-0.026^	-0.019	0.006	0.004	-0.018	
	(0.018)	(0.014)	(0.018)	(0.030)	(0.025)	(0.041)	
Total Population (log)	-0.827*	-1.285***	-0.731*	-1.161**	-0.264	-2.172***	
	(0.387)	(0.378)	(0.293)	(0.441)	(0.339)	(0.413)	
Elderly Population	0.815***	0.947***	1.148***	-1.002*	-0.573	-2.254***	
	(0.232)	(0.194)	(0.188)	(0.430)	(0.602)	(0.489)	
Youth Population	0.106	0.093	0.155	-0.052	0.287*	-0.288*	
	(0.134)	(0.098)	(0.097)	(0.105)	(0.117)	(0.115)	
Financial Crisis	-0.065	-0.025	0.002	-0.966	-0.932	-1.629*	
-	(0.313)	(0.296)	(0.350)	(0.629)	(0.630)	(0.790)	
1 <sup>st</sup> Oil Crisis	-0.598*	-0.021	-0.500	0.086	-0.488	0.033	
- 4	(0.272)	(0.193)	(0.315)	(0.628)	(0.486)	(1.074)	
2 <sup>nd</sup> Oil Crisis	-0.338	-0.283	-0.343	1.061*	0.509	0.803	
	(0.207)	(0.188)	(0.221)	(0.439)	(0.507)	(0.620)	
Oil Exporter	0.123	0.264	0.207	1.987*	1.821*	2.061*	
	(0.363)	(0.445)	(0.371)	(0.977)	(0.926)	(1.003)	
Left Totalitarian	2.233	5.115*	2.727	6.279*	6.487**	10.714***	
	(3.336)	(2.546)	(3.220)	(3.145)	(2.533)	(2.828)	
Federalism				2.036^	-1.447	3.260***	
_			11.005	(1.059)	(1.060)	(0.983)	
Constant	16.169	23.681*	11.308	42.888***	14.000	73.927***	
	(9.969)	(9.456)	(7.041)	(10.392)	(9.937)	(10.219)	
R-squared	0.5757	0.5917	0.5393	0.8277	0.7277	0.7346	
N of Countries	17	17	17	14	15	14	
N of Observations	403	515	432	231	298	260	

Table 3 Determinants of the Domestic Public Sector, contd.

*Note*: Table entries are OLS estimates corrected for panel-specific autocorrelation. Panel-corrected standard errors are included in the parentheses. All independent variables are one-year lagged.  $p \leq .10$ ;  $p \leq .05$ ;  $p \leq .01$ ;  $p \leq .01$ ;  $p \leq .01$ .



Figure 1-1 Democracy and Corruption Perceptions Index (2007) in Asia

Source: Transparency International. Corruption Perceptions Index (2007). http://www.transparency.org/policy\_research/surveys\_indices/cpi/2007 (April 20, 2008)



Figure 1-2 Democracy and Corruption Perceptions Index (2007) in Latin America



Figure 2 Domestic Government Spending and Trade Openness (log) in Asia

Figure 3 Domestic Government Spending and FDI in Asia





Figure 4 Trends of Democratization and the Average of Military Spending in Asia 1960-2005

Figure 5 Domestic Government Spending in Asia, 1960-2006





Figure 6 National Trends in Domestic Government Spending in Asia, 1960-2006

Figure 7 National Trends in FDI in Asia, 1960-2005





Figure 8 Domestic Government Spending and Polity2 Index

Figure 9 Growth Rate by Region 1960-2007



Source: World Development Indicator

#### Appendix I-1

#### Trimming Income Inequality (Gini)

First, I choose data produced with either clear income concepts or quality surveys, which are coded as 1 or 2 for the variable *Quality* in the data set. I also drop any data that do not cover all areas, all population groups, and all age groups in the population groups (See *AreaCovr, PopCovr,* and *AgeCovr* in the users' guide). Then I choose data whose income-sharing units, *IncSharU*, are family or household, not person. This is because I believe inequality is better measured by family or household incomes than by personal incomes. Another thing to be considered here is whether data have any equivalence scales, *Equivsc,* to take different family or household sizes into account. Although the vast majority of the countries have adopted certain scales, some countries, such as Yugoslavia, Singapore, Mauritius, Japan, Malawi, Barbados, and Hong Kong, have no data with equivalence scales. This may imply that the GINI values for the countries are not sufficiently accurate, but I still decided to include their data because the inaccuracies are at least consistent and can be dealt with the dummy variable of *adjustment*. Where countries have data with and without equivalence scales, I choose the data having greater numbers of observation.

By conducting a series of the procedures discussed above, we now have GINI data that are with high quality, consistent, and comparable. Because there are still some countries that have more than one observation for certain years, however, I add a couple of further selection criteria to resolve the problem. First, observations with higher quality, which are coded 1 rather than 2 in *Quality*, are chosen. Then, the data are further narrowed down with the following order of income concepts: disposable income > monetary disposable income > gross monetary income. The first two are preferred to the last two, because

they show real incomes after taxes and transfers. Among the first two, disposable income is the most preferred because it provides the most accurate and comparable measure that includes both monetary and non-monetary sources of income. Meanwhile, between the two pre-tax and pre-transfer income concepts, gross income is preferred to monetary gross income because it captures more comprehensive sources of income.

If we still have more than one observation for certain years of countries, then I look at equivalence scales and choose data by the following order: square root > OECD scales (see again the user's guide for the specific formulas) > per capita. The first two are preferred to the last because they consider the economy of size in their weighting. Suppose that we have a family or household with 10 members. Then, dividing its income by 10 may result in depreciation of the real life condition of the family because some living costs can be saved by living together. This problem is dealt with by the first two scales, producing higher income levels for the family. The choice of square root over OECD scales is based on a practical consideration. That is, I follow the scale of the Luxemburg Income Studies whose income inequality data have been considered as the most accurate and comparable in OECD countries. Finally, if we still have not reached a data set with one observation per year, I use the income-sharing unit variable, *IncSharU*, as the final selection tool. Here, household unit is preferred to family unit because the former is a more comprehensive concept and can cover people dwelling together both with and without family bonds.

### **Appendix I-2**

								Years
				~	Semi-			of Total
~	~~~~		~	Parliam	Preside			Democr
Country	GINI	Left	Center	entary	ntial	PR	Mixed	acy "
Botswana	55.6	0	0	1	0	0	0	41
Ghana	32.3	0	0	0	0	0	0	15
Mali	28.0	0	l	0	0	0	0	15
Mauritius	37.9	l	0	1	0	0	0	39
Avg. Africa	38.5		0.50		0.07			20
South Korea	33.5	0	0.53	0	0.05	0	I	30
Avg. East Asia	33.8	0.01	0	1	0	0	0	
India	31.9	0.81	0	l	0	0	0	57
Indonesia	36.7	n.a.	n.a.	0	1	1	0	8
Malaysia	49.9	n.a.	n.a.	l	0	0	0	50
Philippines	48.5	0	1	0	0	0	0.33	48
Sri Lanka	45.5	0.45	0.55	0.25	0	1	0	59
Thailand	44.4	0	0	0.93	0	0	0	31
Avg. SS.E. Asia	42.8	0.20	0.20	0	0	0.56	0.44	
Bolivia	60.3	0.30	0.30	0	0	0.56	0.44	25
Brazil	59.5	0.52	0	0	0.05	1	0	26
Chile	54.9	0	0	0	0	1	0	31
Colombia	57.2	0	0.71	0	0	1	0	50
Costa Rica	46.0	0.52	0	0	0		0	62
Ecuador	58.4	0.76	0.05	0	0	0.65	0.35	43
El Salvador	52.5	0	0.24	0	0	1	0	25
Guatemala	52.4	0	0	0	0.10	1	0	29
Honduras	55.1 42.2	0 71	0	0	0.30	1	0	27
Jamaica	43.3	0.71	0	1	0	0	0	48
Mexico	52.2	0.58	0	0	0	0	1	13
Panama	55.9	0	0	0	0	1	0	31 19
Paraguay	50.8	0 22	0 17	0	0	1	0	10
Peru Trinidad	52.2	0.22	0.17	0	0	1	0	41
	40.2	0.55	0	1	0	0 70	0 20	45
Avg Latin Amorica	49.1 52 0	0.04	0	0	0	0.70	0.50	49
Avg. Latin America	22.9	0.17	0	0.20	0.71	1	0	17
Duigaila Czach Ban	25.2 25.0	0.17	0	0.29	0.71	1	0	17
Uungary	25.9	0.54	0	1	0 11	1	0	14
Deland	23.1	0.70	0	0.89	0.11	1	1	10
Pomania	32.0 31.1	0.4	02	1	0.11	1	0	10
Romania	12 5	0.4 n.o	0.2 n.a	1	0	1	1	17
Slovek Ben	42.J 25 2	11.ä.	п.а. Л	1	0	1	1	13
Slovania	23.2 23.2	1	0.07	1	0	1	0	14
Avg Post Communist	23.2 20 0	0.00	0.07	1	U	1	0	10
Portugal	36.6	0.44	0	0.75	0	1	0	32
Snain	32.3	0.44	018	0.75	0	1	0	31
Avg Others	34.5	0.54	0.10	0.24	0	1	0	51
Avg. Others	34.5							

Table A1 Country Means for the Variables of Interest Used in Regression Analysis, 1975-2006

*Note*: Countries whose names are italicized are excluded in the sample of democracy only.

a) The sum of years of democratic experience (including partial democracy) from 1945 to 2006.

#### **Appendix II-1**

**Descriptive Statistics on Transitions** 

A. Stable ND:

Afghanistan, Algeria, Angola, Bahrain, Bhutan, Burundi, Cameroon, Chad, China, Congo-Kinshasa, Cuba, Egypt, Equatorial Guinea, Eritrea, Gabon, Germany East, Guinea, Iraq, Jordan, Kazakhstan, Kenya, Korea North, Kuwait, Kyrgyzstan, Laos, Liberia, Libya, Mauritania, Morocco, Oman, Qatar, Rwanda, Saudi Arabia, Singapore, Somalia, Swaziland, Syria, Tajikistan, Togo, Tunisia, Turkmenistan, UAE, USSR, Uzbekistan, Vietnam, and Yemen.

B. ND  $\rightarrow$  PD:

Albania 1990, 1997, Argentina 1973, Armenia 1998, Azerbaijan 1992, Bangladesh 1991, Benin 1991, Brazil 1985, Burkina Faso 1977, Cambodia 1990, 1998, Central African Republic 1993, Comoros 1990, 1996, Congo-Brazzaville 1992, Croatia 1999, Djibouti 1999, Dominican Rep 1978, El Salvador 1982, Ethiopia 1994, Fiji 1990, Ghana 1970, 1979, 1996, Greece 1974, Guatemala 1986, Guinea-Bissau 1994, 1999, Guyana 1992, Haiti 1990, 1994, Honduras 1980, Hungary 1989, Indonesia 1999, Iran 1997, Ivory Coast 2000, Korea South 1987, Lesotho 1999, Madagascar 1991, Malawi 1994, Mali 1992, Mexico 1994, Mongolia 1990, Mozambique 1994, Nepal 1990, Nicaragua 1990, Niger 1991, 1999, Nigeria 1979, 1999, Pakistan 1972, Paraguay 1989, Peru 1979, 1993, Philippines 1986, Poland 1989, Portugal 1975, Romania 1990, Sierra Leone 1996, Spain 1976, Sudan 1986, Taiwan 1992, Tanzania 2000, Thailand 1974, 1978, Turkey 1983, Uganda 1980, Yugoslavia 2000, and Zambia 1991. C. ND  $\rightarrow$  D:

Argentina 1983, Bolivia 1982, Bulgaria 1990, Chile 1989, Czechoslovakia 1990, Ecuador 1979, Lesotho 1993, Pakistan 1988, Panama 1989, Senegal 2000, Thailand 1992, Turkey 1973, and Uruguay 1985.

D. PD  $\rightarrow$  ND:

Albania 1996, Argentina 1976, Armenia 1996, Azerbaijan 1993, Belarus 1995, Burkina Faso 1980, Cambodia 1997, Chile 1973, Comoros 1976, 1995, 1999, Congo-Brazzaville 1997, Ecuador 1970, Ghana 1972, 1981, Guatemala 1974, Guinea-Bissau 1998, Guyana 1978, Haiti 1991, 2000, Korea South 1972, Lebanon 1975, Nigeria 1984, Pakistan 1970, 1999, Philippines 1972, Sierra Leone 1971, 1997, Sudan 1970, 1989, Thailand 1971, 1976, 1991, Uganda 1985, Uruguay 1972, and Zimbabwe 1987.

E. Stable PD:

Estonia, Georgia, Macedonia, Malaysia, Moldova, Namibia, Russia, and Ukraine.

F. PD  $\rightarrow$  D:

Argentina 1999, Botswana 1987, Brazil 1988, Colombia 1974, Croatia 2000, Cyprus 1974, Dominican Rep 1996, Gambia 1990, Greece 1975, Guatemala 1996, Hungary 1990, India 1977, Korea South 1998, Madagascar 1992, Mexico 2000, Mongolia 1992, Nicaragua 1995, Niger 1992, Pakistan 1973, Peru 1990, Philippines 1987, Poland 1991, Portugal 1976, Romania 1996, Slovak Republic 1998, Solomon Islands 1990, South Africa 1993, Spain 1978, Sri Lanka 1970, Taiwan 1996, and Turkey 1989.

G. D  $\rightarrow$  ND:

Bangladesh 1974, Fiji 1987, Gambia 1994, Lesotho 1970, 1998, Niger 1996, Pakistan 1977, Peru 1992, Solomon Islands 2000, and Turkey 1971, 1980.

H. D  $\rightarrow$  PD:

Argentina 1989, Colombia 1995, Ecuador 2000, Gambia 1981, India 1975, Madagascar 1998, Pakistan 1997, Sri Lanka 1978, Turkey 1997, Uruguay 1971, and Venezuela 1999.

I. Stable D:

Australia, Austria, Belgium, Canada, Costa Rica, Czech Republic, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Jamaica, Japan, Latvia, Lithuania, Mauritius, Netherlands, New Zealand, Norway, Papua New Guinea, Slovenia, Sweden, Switzerland, Trinidad, United Kingdom, and United States.

# Appendix III-1

Variable	Observations	Mean	Std. Dev.	Min	Max
Domestic Central Gov. Spending	354	13.84	5.92	2.78	37.78
Domestic Central Gov. Revenue	339	15.45	4.72	6.10	35.22
Domestic General Gov. Consum.	608	8.06	3.40	-0.55	27.94
Military Spending	672	2.86	1.82	0.40	11.30
Democracy	816	0.23	0.42	0.00	1.00
Partial Democracy	816	0.24	0.43	0.00	1.00
Trade (log)	674	3.69	0.81	0.43	6.14
FDI	514	2.10	3.23	-2.76	20.06
GDP per capita (log)	710	7.72	1.03	5.81	10.29
Growth Rate	714	3.60	4.18	-26.36	16.15
Total Population (log)	818	17.38	1.74	13.77	20.99
Elderly Population	818	4.43	2.25	2.06	20.25
Youth Population	818	36.94	7.63	13.78	46.46

Table A1 Overall Summary Statistics

## **Appendix III-2**

	Government Consumption				
	Model 1	Model 2	Model 3		
Democracy (D)	1.982**	1.740***	2.111**		
	(0.770)	(0.420)	(0.450)		
Partial Democracy (PD)	0.698*	0.757*	1.158**		
- · · ·	(0.277)	(0.344)	(0.388)		
Trade (log)	0.879	0.457			
	(0.811)	(0.744)			
FDI	-0.043		0.034		
	(0.163)		(0.105)		
$D \times Trade (log)$		1.203**			
		(0.451)			
$PD \times Trade (log)$		0.483			
( <i>U</i> ,		(0.443)			
$D \times FDI$			0.232		
			(0.328)		
$PD \times FDI$			-0.152		
			(0.153)		
			()		
R-squared	0.6797	0.6947	0.6373		
N of Countries	14	15	14		
N of Observations	226	291	255		

Table A2 Determinants of the Domestic Public Sector

*Note*: Table entries are OLS estimates corrected for panel-specific autocorrelation. Panel-corrected standard errors are included in the parentheses. All independent variables are one-year lagged.  $^{p} \le .10$ ;  $^{*}p \le .05$ ;  $^{**}p \le .01$ ;  $^{**}p \le .001$ .