

11-4-2013

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# Trapping the Tigers: Regulation of Market Entry and the Rule of Law in SE Asia

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**Keywords:** economic development; rule of law; barriers to entry; SE Asia; informal markets

## 1. Introduction

Businesses in SE Asia often operate in the informal marketplace: transactions occur in a cash economy, taxes are rarely collected and enterprises are not represented in any formal, legal sense. Enterprises without legal standing face a challenge to expanding their businesses because their businesses do not officially exist. Entrepreneurs therefore cannot use their assets as collateral for small-business loans, license proprietary techniques, contract with other firms to sell products or safely reinvest their own profits- all because entrepreneurs have no guarantee of a legally binding contract. The informal market in SE Asian countries is vibrant and growing, but enterprises in these countries suffer from a regulatory glass ceiling on growth; state regulation hinders formal entry into the marketplace and undermines business expansion. For example, in SE Asia it takes an average of 88 days, requires 11 different steps and costs 920 dollars (in a region where per capita GDP is only \$2800) to legally register a business. This translates into about a third of one's annual income and a quarter of a year's time compared to a US average of four days, three different steps and 151 dollars (Djankov et. al., 2002). On average, SE Asian governments have created relatively high barriers to formally register a business, thus raising the costs of official registration, decreasing the incentives to register and leaving businesses stuck in the informal sector.

Previous research shows high barriers to market entry in developing countries generally stem from public officials' desires to create rents, capture them and/or enrich themselves by soliciting bribes (Djankov, et. al., 2002). Relatively high SE Asian barriers likely serve two central purposes: first, high barriers enrich public officials as they exercise their gatekeeping authority. Second, high barriers to entry serve as a form of crony capitalism protecting political allies from market competition (Kang, 2002). In this case, SE Asian countries' relatively high state capacity compared to countries in other developing regions such as Latin America or Africa allows for a strong "grabbing hand" (Frye and Shleifer, 1996) as well as the protection of favored firms through barriers to market entry.

Missing legal protections for informal businesses in SE Asia render entrepreneurs vulnerable to public officials who can extort money from business owners or confiscate an entire firm. Such behavior is common and shows how high barriers to formal entry in the marketplace harm property rights and contract enforcement. Limited property rights and unenforceable contracts increase the risk of doing business and thus limit investment. Diminished investment in turn decreases economic growth for society as a whole. This problem impacts state revenues as well: countries have great difficulty to collect taxes from informal businesses, which represent a large share of employers in many SE Asian countries.<sup>1</sup> State services that might reduce poverty or stimulate growth through improvements in infrastructure or social spending are underfunded as a result. In short, economic development in SE Asia is much slower than it could be from both private and public perspectives because many of the region's countries are missing the rule of law.

Private investment thrives when countries commit to property rights, contract enforcement, and equitable protection for all citizens under the law (Barro and Gordon 1983, North and Weingast 1989, Mauro 1995, Stasavage 2002, Frye 2004). Whether the rule of law exists in a country influences economic development because the costs and risks of doing business depend on whether property rights are protected and contracts are enforced.<sup>2</sup> Economic decisions are based on these costs and risks. The state cannot convince firms to invest unless it commits to rules protecting property

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<sup>1</sup> An average of 63% of the population in SE Asia is currently employed in the informal sector according to one estimate. (Charmes, 2012). See North and Thomas (1973) for a general description of this argument.

<sup>2</sup> See North and Weingast (1989), De Soto (1989, 2000), Keefer and Stasavage (2003) among many others.

and enforcing contracts. However, generating a *credible* commitment to these rules is difficult. Actors within the state (certain elected officials, bureaucrats, etc.) often have both motive and opportunity to violate property rights, fail to enforce contracts and provide preferential treatment to favored litigants in the judicial system. Officials in some political systems stand to gain financially from nationalizing profitable industries and enforcing contracts in their own favor to profit at the expense of private sector partners. Third, officials often have political motives to protect property rights and enforce contracts selectively to reward their allies and punish their opponents. The important and elusive nature of credibility raises the question: what generates credible commitment to the rule of law?

I present evidence that increasing the barriers to market entry results in decreasing perceptions of the rule of law in SE Asia. I argue the high costs of registering businesses undercut property rights and contract enforcement- two essential elements of the rule of law. I limit my analysis to SE Asian countries for both theoretical and practical reasons. First, SE Asian countries exhibit wide variation in their levels of political democracy as well as their levels of economic development. The limits political democracy places on politicians and bureaucrats are tied to both the rule of law and economic development in Political Science and Economics research (Maravall and Przeworski, 2003, North and Thomas, 1973, North, 1980, North and Weingast, 1989). Yet SE Asian countries such as Singapore and Vietnam score poorly on democracy measures while enjoying high economic growth rates (Polity, 2012; World Bank, 2012). SE Asian countries score an average of 3 on the -10 to 10 point Polity scale (10 is most democratic and -10 is least), but feature mean economic growth rates of 6% from 2003 to 2011 (compared to a global average of 4% for the same time frame, UN, 2013). This data suggests at least *some* political actors in SE Asia make credible commitments to *some* investors' rights in the absence of strong democratic political institutions that apply to society as a whole. SE Asia therefore provides leverage on the question of how states can begin to establish credibility- potentially before political institutions are strong or fair enough to generate that credibility on their own. This distinction is important for SE Asian countries, but also for shifting the global debate on the impact of political institutions away from arguments surrounding blunt dichotomies like democracy vs dictatorship and toward assessments of how states functions in practice, irrespective of regime type.

Second, SE Asia is useful as a practical environment for studying market entry and perceptions of governance. SE Asia features predominantly developing countries facing endemic poverty and poor governance. Geography, climate and other factors may weaken economic development in the region, but these factors are difficult to alter directly through policy and change slowly, if at all (Acemoglu et. al., 2000, Hausman, 2001). In contrast, lowering the costs of registering a business is a policy reform governments can implement over a matter of months. Determining whether the barriers to formally registering a business, which are high in SE Asia and other developing countries, influence the rule of law and in turn economic development may therefore be critical for designing policies to overcome growth challenges around the world. Of course, there are many other policies that might influence the rule of law aside from barriers to entry. My argument in this paper is only that differences in the hurdles entrepreneurs must overcome from one SE Asian country to the next are important for perceptions of governance- especially concerning property rights and contract enforcement.

The remainder of the paper proceeds as follows: first I provide a rationale for why high barriers to entry undermine the rule of law. Next, I describe the data I gather to test this argument and the models I use to estimate relationships between barriers to registering a business in SE Asia and the rule of law. Finally, I discuss the results of statistical estimation and their implications for the rule of law in the region.

## 2. Theory

Previous scholarship in political science and economics focuses on how the structure of political institutions generates credible policy commitments (Persson and Tabellini, 2003, North and Weingast, 1989, Stasavage, 2002). For example, scholars believe democratic political institutions render commitments to protect property rights and contract enforcement credible because democratization, among other things, is a process that places constraints on the chief executive and encourages oversight by the electorate (Kunicová and Rose-Ackerman, (2005). Similarly, Brown et. al. (2011) connect ideological polarization to control of corruption in democracies. Under these frameworks, democracies create incentives for politicians to hold one another accountable. However, rent-seeking behavior may actually increase in the early stages of democratization because democratic accountability mechanisms are not yet established

in practice (Khan and Jomo, 2000); institutions present in form might not yet function as advertised. This implies that public officials' behavior will only be constrained after a country achieves a certain level of democratization. Scholars use similar arguments to identify higher levels of the rule of law in democracies compared to non-democracies as well, although often not immediately following a democratic transition (Olken, 2008, Keefer and Khemani, 2005).

Arguments for democratic political institutions dominate the literature on credible commitment, yet they neglect an important element of governance: the laws on the books and the way public officials enforce them (Maravall and Przeworski, 2003, Tsebelis, 2002, Andrews and Montinola, 2004). This omission is important because many developing countries contain rules and regulations that may be enforced for the sole purpose of enriching the enforcer. Secure property rights and contract enforcement at the national level are often disconnected from the average entrepreneur's experience. I argue the public's experience with policy implementation is at least as important for perceptions of the rule of law as the rules on the books are.<sup>3</sup> The relative ease or difficulty with which a business can legally operate is therefore likely more important for generating perceptions of the rule of law than national-level rules purporting to protect the private sector. For example, local entrepreneurs in Indonesia may know little about the checks and balances enshrined in Indonesia's post-Suharto constitutional amendments of the late 1990s and early 2000s. National-level reforms do not always extend down to the local level and may not be written or publicized in a way the average citizen understands. Furthermore, even if the average small-business investor does understand new, national-level rules, such investors would likely have little experience with how the rules function in practice because Indonesia's political reforms stem from a relatively recent democratic transition. Entrepreneurs in Indonesia thus have few reasons to trust new, national-level democratic political institutions with protecting their property and enforcing their contracts unless they witness local officials changing illiberal behavior after the democratic transition.

Many SE Asian countries retain illiberal policies and practices following democratic transitions. However, public officials who oppose political liberalization in SE Asia have often embraced some aspects of economic liberalization in a drive to spur economic development (and retain power). Economically liberalizing countries face a challenge to attract investors and convince them of the sanctity of their investments in spite of the lack of constraints preventing officials from seizing private property or taxing it at confiscatory rates. The same countries have incentives to lower the barriers to formal entry into the marketplace. Yet, some SE Asian countries also retain a bureaucracy eager to seek rents and regulate market entry more fervently than ever. For example, Vietnam welcomes foreign investment in a burgeoning manufacturing sector while simultaneously increasing the cost for Vietnamese citizens to formally register a business over the last decade (World Bank, 2012). These trends reflect the distinction between macroeconomic liberalization, which is common throughout SE Asia, and a clear lack of micro-legal liberalization, which is uncommon outside of Singapore. The negative impact of micro-illiberalism on the rule of law applies to democracies and non-democracies alike: countries with higher barriers to entry will have fewer formally registered businesses. Consequently these businesses will be relatively unprotected from government expropriation. Perceptions of the rule of law will suffer as a result- regardless of national regime type.

My argument here is similar to Haggard et. al. (2008) as well as Haggard and Tiede (2010) who demonstrate the relevance of informal institutional arrangements that precede and perhaps supersede constitutional rules for state credibility and economic development. Furthermore, these scholars contend political order and personal security may be tied more closely to stable economic growth than formal political institutions or corruption scores for developing countries. This literature informs my investigation of the rule of law in several ways. First, it provides the impetus for exploring the relative ease with which individuals formally registered their businesses on the rule of law as opposed to using formal political institutions alone as an independent variable. Second, it pushes me to disaggregate the rule of law concept and evaluate the role barriers to market entry may play on the constituent parts of the rule of law- some of which Haggard et. al. (2008) and Haggard and Tiede (2010) argue are more important for economic development than others.

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<sup>3</sup> Measures of the rule of law are based on the perceptions of survey respondents and thus, indirect. However, the rule of law is important because entrepreneurs make economic decisions based on whether they perceive the government's commitment to the rule of law as strong or weak. Measures of the rule of law that use investors' and other observers' perceptions (like the World Bank's) therefore provide valuable information concerning how important actors think about the rule of law and presumably, how they act.

There is evidence entrepreneurs' direct experience with local government influences economic decisions and in turn, economic development. Some regulation of business registration is desirable to assess the impact of business operations (e.g. for health or environmental considerations) and prevent socially detrimental enterprises from operating. Yet, too much regulation drives businesses underground without providing any social benefits. The extra regulation in this case only provides opportunities to enrich officials operating regulatory tollbooths (Djankov et. al., 2002). Hernando de Soto (1989, 2000) argues high barriers to registering a business harm economic development around the world. Djankov et. al. (2002) and later the World Bank collect data on barriers to entry and provide evidence developed countries have much lower barriers to entry than developing countries. Alesina et. al. (2005) and Nicoletti and Scarpetta (2003) follow this scholarship and show how high barriers to entry are tied to low levels of investment and productivity- even in the OECD countries.

Khan and Jomo (2000) provide a caveat to the tollbooth theory and highlight the ways rent seeking can encourage efficiency and economic development in SE Asia. They argue bribes may allow entrepreneurs to circumvent costly regulations without any loss of socially useful revenue for the state. I do not argue with Khan and Jomo's claims, but contend the process of forcing entrepreneurs to either conform to costly regulations or pay bribes to circumvent those regulations undermines the rule of law. The pathway to formalization through bribery may indeed be more efficient for firms than if they were to abide by official regulations. However, both pathways harm the rule of law. In the first case, many entrepreneurs cannot afford the high costs of regulation and therefore never formally register their businesses. These entrepreneurs are vulnerable to officials' extortion and their businesses are insecure. Perceptions of property rights, contract enforcement and the rule of law suffer as a result. In the second case, entrepreneurs who can afford bribes to register their businesses still must lower their perceptions of the rule of law because they have to break the law to gain legal protection for their enterprise.

The above example shows how barriers to entry are not just proxies for the rule of law, but influence the rule of law directly. In this sense, public officials who insist entrepreneurs must observe every aspect of the registration process, no matter how many steps it may include, are upholding the law. These officials may believe they are *improving* the rule of law by enforcing the laws on the books. However, such officials push entrepreneurs into legal limbo by upholding needlessly restrictive laws surrounding business registration. Entrepreneurs then become victims of organized criminals or other public officials who extort money, tax arbitrarily and confiscate businesses. The result is lower ratings of the rule of law across an entire society in places where it is difficult to register one's business.

### 3. Measurement and Data Analysis

I construct a dataset encompassing the years from 1996 to 2010 to examine whether the barriers to registering a business influence assessments of the rule of law in SE Asia. I then estimate several statistical models of the rule of law using this data. The models include the average barriers to registering a business, the level of political democracy in a country and a number of economic and social control variables. I include a full discussion of the variables, their measurement and their sources below.

#### *Dependent Variable: The Rule of Law*

My dependent variable is the World Bank's rule of law indicator. The World Bank's aggregate measure reflects the responses to questions regarding investors', risk analysts' and country-experts' experience with the enforcement of property rights, contracts, equality under the law and crime in over 200 countries (Kaufmann, et al., 2012). The measure ranges from -2.31 (low rule of law) to +2.36 (high rule of law) and is scaled to a zero global mean and uniform standard deviation for each year's data. In SE Asia, the mean rule of law score is -0.25. Singapore, at 1.70 has the highest mean score for the measure and Myanmar, at -1.51 has the lowest. In comparison, the US has a mean score of 1.54.

#### *Independent Variable: Barriers to Entry*

The primary independent variable is the barriers to formally registering a business in each country. I use data from the World Bank's *Doing Business* surveys, which build on Djankov et. al.'s (2002) pioneering study. The World Bank collects data on the average time it takes to formally register a business, the number of official steps to complete the registration process and the average cost of official registration recorded for countries around the world on an annual basis. The mean time it takes to register a business for the SE Asian countries is 88 days. In the United States, for



comparison, it takes an average of four days. The SE Asian country with the greatest average time to register a business is Indonesia at 128 days. The country with the lowest average time is Singapore at 22 days. The registration *process* in the region consists of an average of 11 different steps. The country requiring the greatest number of steps to register a business is Vietnam, with 16 steps, while the least is Singapore with 6 steps. The process in the US entails an average of three steps. Finally, the mean expenditure to register a business in SE Asia is \$920. Registration costs most in Singapore, with mean charges of \$3525.<sup>4</sup> It costs least in Thailand, with \$125 worth of fees. For comparison, the average cost to register a business in the US is \$151. These costs are in constant dollars and reflect the extraordinarily high cost of business registration in SE Asia because mean GNI/capita in the region in my data is \$2,800 for the timeframe in my study. This indicates registering a business costs about a third of one's annual salary in SE Asia, on average.<sup>5</sup>

I use the mean number of steps to register a business as my central proxy for barriers to market entry, but also report the results of estimation using the average time in days to register a business and the average direct costs associated with that registration in Table Ia of the Technical Appendix.

### *Democracy*

Previous literature provides a rationale for linking political democracy at the national level and the rule of law. I argue against the relationship between regime type or any other political institution at the national level and the rule of law. However, I control for democratic political institutions at the national level and test whether the conventional wisdom on democracy finds support in the SE Asian context. The variable I use comes from the Polity IV dataset (2012) and generates autocracy and democracy scores ranging from 0 to 10 for each country in my dataset on an annual basis. I use a reconfigured, continuous scale where 10 is the highest possible level of democracy and -10 the lowest. Laos has the lowest mean score of -7 while the Philippines has the highest, at 8.

### *Control Variables:*

#### Perceptions of Corruption

I argue high barriers to entry result in greater opportunities for corruption among public officials. For example, officials can use their gatekeeping positions to solicit bribes in exchange for skipping or completing steps toward business registration. It is entirely possible officials with the power to make policy will create extra rents in the formalization process and then seek those rents. In this sense, a country's level of corruption is likely to influence its rule of law score- and potentially condition the influence of barriers to entry on the rule of law. I therefore include the World Bank's Control of Corruption measure in models of the rule of law.<sup>6</sup> The World Bank's corruption variable is similar fashion to its Rule of Law indicator. Countries fall between -2.25 (no control of corruption) to 2.45 (full control of corruption). Singapore registers the maximum score for countries in my data with a mean score of 2.16 while Myanmar has the minimum, with a mean score of -1.60. I also interact the corruption measure with barriers to entry and present the model with the interaction term in Table IIIa of the Technical Appendix.

#### Ethnic Fractionalization

I control for the level of ethnic fractionalization (EF) in SE Asia when estimating a relationship between barriers to entry and the rule of law. Eifert et. al. (2010), Habyarimana et. al. (2007) and Posner (2004) highlight the ways politicized ethnic divisions can undermine public goods provision, cooperation and the rule of law. Ethnic, clan and tribal divisions often take precedence over national identity in ethnically heterogeneous societies and may impact the credibility of national policies. For example, EF can lead to opaque business transactions involving the government based on ethnic ties and broad mistrust of the bureaucracy due to ethnic clientelism (Van de Walle, 2001). Touchton (2013) finds the rule of law decreases as ethnic fractionalization increases around the world.

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<sup>4</sup> Singapore, it should be noted, has a much higher per capita income than other countries in the region (\$61,000, controlling for PPP in 2012, compared to \$9430 for Thailand and \$2360 for Cambodia Source: World Bank).

<sup>5</sup> It should also be noted this calculation does not take into account the highly unequal distribution of income in the region- the reality is likely to reflect an even greater disparity between an average entrepreneurs annual income and the cost to formally register a business.

<sup>6</sup> I do not include it in models of economic development due to concerns for multicollinearity with the rule of law.

SE Asia features several countries where ethnic divisions may undermine the rule of law. In some cases, such as Malaysia, preferences for in-group (Malay) business ownership are codified and enforced (Sorens, 2010). In other cases, members of the Montagnard minority populations in Vietnam, Laos, Thailand and Myanmar have long been the targets of discrimination by public officials (Jones, et. al., 2002, Laumgarumsari, 2000). In some cases a religious component is present in discrimination as well, for instance between Hindu and Muslim practitioners in Indonesia, Christians and Muslims in the Philippines or Buddhists and Muslims in Thailand. These divisions could also undermine protection of property rights, contract enforcement and the rule of law for minority populations in the region.

The ethnic fractionalization variable I employ stems from Alesina et. al.'s 2003 dataset. Alesina et. al. calculate the likelihood that two randomly-selected individuals in a country belong to the same ethnic group. I use data from 2003, but EF does not change quickly; Roeder (2001) establishes this argument by comparing countries' EF values in 1985 with those of the same countries in 1961. I perform a robustness check with respect to the EF data's validity and reliability by comparing my results with new estimates using Fearon's (2003) data. The results of the regression analysis are very similar: all coefficients have the same direction, same levels of statistical significance and similar magnitudes.<sup>7</sup>

### Colonial Legacy

The courts' ability to protect minority interests against powerful executive or legislative impulses hinges on an *independent* judiciary more prevalent under Common Law systems than in countries using Civil Law frameworks (La Porta et. al. (2002) and Djankov et. al. (2002)). I include a measure of the type of legal code colonial powers imposed in SE Asia in my statistical models to determine if this legacy is connected to the rule of law. The British left behind common law legal institutions in Brunei<sup>8</sup>, Malaysia, Myanmar, Singapore and Papua New Guinea (coded "1"). The French left behind civil law institutions in Cambodia, Laos and Vietnam as did the Dutch in Indonesia and the Spanish in the Philippines (which maintained civil law under American colonization as well). These countries are coded "0".

### Log of Gross Domestic Product (per Capita).

I account for a common competing explanation for connections between democracy and the rule of law: namely, that these connections simply reflect wealthy countries' functioning legal and economic systems and the fact these countries happen to be democracies. I include a measure of wealth in my models to control for this possibility. A country's wealth may also condition the influence of barriers to entry on the rule of law: the rule of law may not suffer due to high barriers to entry in relatively wealthy countries, whereas the same official barriers may undermine the rule of law in relatively poor countries. I create an interaction term between a country's barriers to market entry and its wealth to test this possibility. I capture wealth through the log of each state's per capita Gross Domestic Product recorded for each year in the database. GDP per capita is in 2005 dollars and is adjusted for purchasing power parity (World Bank, 2012).

### Leadership Instability

The relative stability of leaders may impact both the rule of law and economic development. For example, stable leadership under Lee Kwan Yew in Singapore, Suharto in Indonesia or Mahathir Mohamad in Malaysia may have helped these countries generate long-term commitments to property rights and contract enforcement, as well as to achieve economic growth outside of formal institutional boundaries. I control for this possibility by including a measure of the annual turnover of political leaders in SE Asian countries over the course of the timeframe under investigation. The data comes from the World Bank's Database of Political Institutions (Beck, et. al., 2012) and records the percentage of veto players who leave their offices in a given year. The maximum score is 1, for Indonesia in 1999, reflecting Suharto's resignation the previous year (the DPI designates Suharto as the only Indonesian veto player in 1998). The minimum score is 0, which covers most countries for most years where elections or resignations transferring power do not occur. Indonesia in 2004 reflects this as 2003 was not an election year and all DPI-designated veto-players remained in office.

<sup>7</sup> See Table IIa of the Technical Appendix.

<sup>8</sup> Brunei also uses a secondary, Sharia Law legal system for certain civil cases such as divorce and other social issues.

## Trade Openness

Finally, I include a measure of trade openness to distinguish the ways SE Asian governments commit to multinational corporations (MNCs) from the ways public officials interact with domestic entrepreneurs trying to register their businesses. It would be a mistake to assume countries relatively open to foreign MNCs would also accommodate their own citizens who want to register a business. Some countries, like Singapore, encourage foreign firms to produce goods for export markets using local labor, but also encourage domestic firms to compete in the same markets. However, many of the other countries in SE Asia, such as Vietnam, are eager to attract foreign direct investment to build factories for exports, but have very high barriers to entry for domestic entrepreneurs interested in exporting. In effect, these countries have auctioned off monopoly status for Export-Oriented Industrialization to foreign firms that have the resources to purchase it. The government has not necessarily made a credible commitment to these firms, but it has convinced them that the rewards from monopoly status outweigh the risks of state expropriation. I therefore control for the level of trade openness so as not to conflate commitments made to MNCs with commitments made to domestic entrepreneurs. The variable I use comes from the United Nations Conference on Trade and Development Statistics Division (2013) and shows the average value of imports plus exports as a percentage of nominal GDP. The maximum score is Singapore, with trade valued at 422.25% of nominal GDP, whereas the minimum is Laos, with trade valued at 54.39% of nominal GDP.

The following table presents summary statistics for the independent and dependent variables in all statistical models.

[Insert Table I Here]

## Model Specification and Estimation

I estimate models of the rule of law using a multi-faceted strategy. First, I model the rule of law using time-series, cross-sectional (TSCS) regression with panel corrected standard errors. I also estimate a second model using OLS with robust standard errors as a robustness check on the first model.<sup>9</sup> However, several of my independent variables, such as barriers to entry, a country's wealth and levels of corruption may be endogenous. In these cases, levels of the rule of law (the dependent variable) could influence levels of the independent variables. Additionally, unobserved variables could influence both independent and dependent variables. In either case, biased, inconsistent statistical results connecting independent and dependent variables through OLS could obscure actual connections between variables and mislead researchers. I disentangle the variables, provide evidence for the direction of causality and account for potential omitted factors influencing both independent and dependent variables by supplementing TSCS and OLS models with an instrumental variables (IV) approach to modeling the rule of law.<sup>10</sup>

I use nominal interest rates to instrument for effective barriers to entry. As interest rates decrease, borrowing to open a business becomes easier and may shift barriers to entry. I follow previous research on regulation of entry and argue the purposes of such barriers are to create rents and allow rent-seeking and/or corrupt behavior, as opposed to protecting the public in some way (Djankov, et. al., 2002). Effective barriers to entry may rise when interest rates fall because more people can afford to register a business- demand for business permits increases and, given the government's strict control of the supply of these permits, the price of business registration will rise. Alternately, public officials could all lower the price of registration when interest rates fall and profit from the increased volume of registrants. Exploring the cross-national determinants of business regulations is a new area of research and the

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<sup>9</sup> There is a debate as to the appropriateness of time-series, cross-sectional regression and panel-corrected standard errors when the dependent variable (in this case the rule of law) does not change very rapidly over time. Furthermore, my data contains many more cross-sectional observations than temporal observations. In these cases the data more closely resembles a cross-section than a time-series or a balanced panel. Times series, cross-sectional (TSCS) estimation with panel-corrected standard errors (PCSEs) might bias the estimates and limit inferences. I therefore also estimate a model using ordinary least squares and robust standard errors appropriate for cross sectional data and present the results along with TSCS, PCSE estimation. The coefficients and significant levels are quite similar across both estimation techniques.

<sup>10</sup> Instrumental approaches rely on identification of new, exogenous variables, known as instruments, that are correlated with the endogenous variable (barriers to entry, corruption, GDP), with the other covariates held constant at their means. However, the instruments cannot be correlated with the error term in the regression equations (see Heckman, 2008, Miguel, et. al., 2004, Acemoglu et. al., 2000, Sovey and Green, 2011).



factors influencing the systematic creation of these barriers outside of a competitive political environment in wealthy democracies are not well known. In this case, I test whether interest rates influence barriers to entry as a way to resolve concerns for endogeneity in modeling the rule of law. I do not believe interest rates violate the exclusion principle for instrumental variables: I know of no studies connecting nominal interest rates to the rule of law.<sup>11</sup> I therefore collect data on annual, mean nominal interest rates for each country in the dataset (IMF, 2012) to estimate a two-stage, least squares instrumental variables model of the rule of law.

I use annual changes in global economic growth (World Bank, 2012) as an instrument for a country's wealth, which could result from a country's rule of law. Global growth rates influence national growth rates- especially in the export oriented economies of SE Asia. However, annual changes in global economic growth do not impact annual perceptions of the rule of law (except, perhaps through national growth rates).

I do not instrument for Polity scores in estimating relationships between barriers to market entry and the rule of law. Democracy and regime type in general are plausibly exogenous to the rule of law in SE Asia. Theoretically, the concept of the government upholding the law is separate from the concept of electing one's leaders in competitive elections. The observation countries in the region often feature relatively low Polity scores, but high ROL scores (e.g. Singapore, Malaysia) and relatively high Polity scores, but low rule of law scores (Indonesia, Philippines) reflects this assertion empirically.<sup>12</sup> The rule of law may influence democracy globally or among developed countries in general, but SE Asia may be distinct in this respect. I therefore do not instrument for Polity score in my models.

Finally, corruption may be endogenous to the rule of law, but the two concepts are also correlated in my data at the .86 level, indicating those responding to World Bank surveys may be referencing the same underlying concept. This is consistent with Haggard et. al.(2008) and Haggard and Tiede's observation (2010) that rule of law scores are heavily weighted toward corruption perceptions. I do not believe these two concepts are identical, but I find it difficult to imagine a useful instrument connected to corruption, but not the rule of law given their high correlation in my dataset. In this case I also do not instrument for corruption for fear the potential downside of a weak instrument outweighs the problem an endogenous control variable might present for OLS estimation (Stock et. al., 2002). However, I report the results of estimation with and without the corruption variable in Table II.

[Insert Table II Here]

[Insert Table III Here]

Beyond barriers to entry, I also estimate a model of economic growth in SE Asia to determine whether the rule of law is indeed connected to the size of a country's economy. I estimate this model in three ways, using Two-Stage Least Squares Instrumental Variables Regression as above.

I follow existing literature and use the origin of each country's legal system as an instrument for the rule of law (US State Dept., 2013). Djankov et al. (2002, 2003) and La Porta et. al. (1997, 1999) demonstrate the relevance of Civil vs. Common Law systems for the amount of legal formalism in a country as well as its investment climate. Touchton (2013) connects the origin of a country's legal system with the rule of law directly. In all cases, countries using British Common Law experience higher levels of the rule of law and a stronger investment climate than countries using Civil Law (usually former French, Spanish, Portuguese and in SE Asia, Dutch colonies). The origin of legal systems satisfies the first condition of a good instrument in that it is related to the endogenous independent variable (the rule of law), but previous research shows it is not directly related to economic growth (Acemoglu and Johnson, 2003). The legal system satisfies the second condition for a good instrument in that colonial governments imposed the legal system on colonies and it is therefore exogenous to economic growth.

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<sup>11</sup> Interest rates in SE Asia are often connected to rates in larger economies such as the U.S., UK, China, etc. and are not likely to have direct influence on aspects of the rule of law such as contract enforcement, property rights or street crime. Furthermore, interest rates and market entry regulations can change very quickly- often from day to day and individual to individual. In contrast, perceptions of the rule of law are sticky- they are resistant to change in one country over time. Short term interest rate changes, then, are a potentially useful instrument because they are unlikely to influence rule of law scores for this reason as well.

<sup>12</sup> This is similar to Haggard et. al. (2008) and Haggard and Tiede's (2011) argument that formal political institutions do not function as advertised in the developing world, and, by extension, SE Asia.

[Insert Table IV Here]

#### 4. Results and Discussion

Analysis of SE Asian data provides evidence of a strong negative relationship between barriers to entry and the rule of law. Increasing the barriers to entry in the marketplace lowers perceptions of the rule of law. This relationship is statistically significant at the .01 level and robust to different modeling techniques as well as different model specifications.<sup>13</sup> The effect of barriers to entry on the rule of law is substantively important as well as statistically robust in all of my models: moving from the mean number of steps it takes to formally register a business in SE Asia to one standard deviation above the mean results in a decrease in assessments of the rule of law equivalent to moving from Malaysia (0.35) to Thailand (0.10), using the OLS model (with corruption, no interactions) in Table II and holding all other variables constant at their means. Of course, there are other differences between Malaysia and Thailand that contribute to each country's rule of law rankings. For instance, these two countries' different rule of law scores could reflect the relative sense of lawlessness Thailand has experienced following the 2006 military coup, massive street protests and military crackdowns. The calculation above only suggests differences in the average hurdles entrepreneurs must overcome represent important factors in perceptions of governance and that my estimates are similar to the difference between Thailand and Malaysia, two countries moving in the opposite direction regarding the rule of law over the last decade.

My results also show barriers to entry are not just a proxy for the rule of law in a statistical sense: the results of first stage estimation in a 2SLS framework are statistically significant and the F statistics for the instrumental variables regressions are above 10, suggesting the instruments are relatively strong (Stock, et. al., 2002, Angrist and Pischke, 2008). The second stage regression estimates showcase the statistically significant connection between instrumental variable estimates of barriers to market entry, a country's wealth and the rule of law- this suggests the relationship between barriers to entry and the rule of law in TSCS and OLS estimation does not result from endogeneity or omitted variable bias.

Finally, the Durbin-Wu-Hausman statistic in Table III above indicates I cannot reject the null hypothesis that Barriers to Entry are exogenous to the Rule of Law (Baum et. al., 2007). Other observations provide support for this position in the sense barriers to entry change rapidly within countries whereas rule of law scores are very slow to change. Even if rule of law levels influence the base level of entry regulation, these regulations change much more quickly than the rule of law afterward, indicating relatively static rule of law scores are not causing relatively dynamic market entry regulations.<sup>14</sup> Given these considerations, I take seriously the estimates of barriers to entry's influence on the rule of law using TSCS and OLS estimation.

The result for an interaction between barriers to entry and wealth show that barriers to entry are not as much of a problem for the rule of law as countries become wealthier: the coefficient in Table II, Model II provides evidence rule of law scores improve as wealth and barriers to entry increase together. Similarly, Table IIIa in the Technical Appendix shows how the rule of law improves when barriers to entry and corruption increase together. The coefficients on the GDP and corruption variables alone are much larger than for the interaction terms, suggesting barriers to entry still drags down the impact of controlled corruption and wealth for the rule of law. However, this result is similar to France or other European countries with high barriers to entry, but high rule of law scores.

Beyond the region's barriers to entry in the marketplace, the results of my analysis show Polity scores have no statistical impact on assessments of the rule of law in SE Asia. This finding contrasts with previous literature arguing for a strong connection between democracy and the rule of law around the world (Maravall and Przeworski, 2003, Andrews and Montinola, 2004, North and Weingast, 1989). Previous scholarship argues the rule of law and political democracy are mutually constitutive and develop in parallel. The rule of law reinforces trust in government under this framework, which strengthens democratic institutions that in turn improve the rule of law. However, SE Asia has a

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<sup>13</sup> The results are similar using other indicators for barriers of entry- I obtain similar results using the average time for business registration and the average financial outlay for registration as dependent variables. I include models using these variables in Table Ia of the Technical Appendix.

<sup>14</sup> However, it is still possible an underlying set of unknown factors might influence both entry regulations and rule of law levels even if barriers to entry are plausibly exogenous under some circumstances.

relatively short experience with political democracy compared to other developing regions like Eastern Europe or Latin America. Additionally, scholars consider many democratic transitions in SE Asia to be partial at best (Polity, 2012, Kingsbury, 2005) and scores in the region are volatile (Polity, 2012). Meanwhile, economic growth rates have remained relatively high in the region indicating continued investment in markets with little shift in the World Bank's rule of law scores - even as levels of democracy rise and fall. SE Asian democracy scores that exhibit wide in-country variation over time therefore cannot explain relatively stable in-country rule of law scores. Yet, disparate levels of democracy coupled with relatively constant economic expansion in the region indicate some public officials must be making a commitment using rules and strategies beyond those found exclusively in democratic political institutions. This assertion is in line with broader arguments that investors' direct experience with local governance, as measured by the relative ease of formally registering a business, carries more weight for perceptions of the rule of law and ultimately their investment decisions than national-level political institutions.

Trade openness does not have a statistically significant connection with the rule of law in my data. This suggests assessments of the rule of law in SE Asian countries are not based on the relative ease with which foreign firms can build a factory and export products made there or sell products made abroad in SE Asian markets. As anticipated, the wealth of a country has a strong, positive relationship with the rule of law whereas the levels of ethnic fractionalization and leadership instability have strong negative relationships with the rule of law. These results support previous research on wealth, ethnic fractionalization and the rule of law (Posner, 2004, Alesina et. al., 2003, Easterly and Levine, 1997, Touchton, 2013).

The results I present in Table IV connect the rule of law to economic development in SE Asia. Table IV demonstrates the strong connection between the origin of a country's legal system and the rule of law for the SE Asian countries in my sample as a first step toward 2SLS-IV estimation of the rule of law's influence on economic growth.<sup>15</sup> Second stage estimates show the rule of law has a strong, positive, statistically significant relationship with the size of a country's economy. This is consistent with scholarship on the rule of law and shows that SE Asia is similar to the rest of the world from an economic perspective- even if the lack of statistical connection between democratic institutions and the rule of law renders SE Asia different from other regions from a political perspective.

#### *Additional Robustness Checks: Disaggregating the Rule of Law*

I model the rule of law's components using additional data to determine the extent to which barriers to entry are associated with specific aspects of the rule of law. I take this step for two reasons. First, Haggard et. al. (2008) and Haggard and Tiede (2010) find low correlations between different rule of law components such as property rights and protection from violence. It is therefore possible barriers to market entry impact different aspects of the rule of law in different ways, if at all. I test my arguments on several components of the rule of law using the World Bank's contract enforcement surveys, its Control of Corruption index as well as the WHO's international homicide data. The models and estimation techniques I use are similar to those in Table II of the main paper. The results, which appear in Tables IVa and Va of the Technical Appendix, demonstrate barriers to market entry have statistically significant connections with perceptions of property rights and control of corruption. However, there is no statistical connection between barriers to entry and the rate of violent crime in my data, suggesting barriers to entry matter more for some elements of the rule of law than others.

Next, I evaluate whether barriers to entry influence people to remain in the informal economy- a key component of my causal argument connecting barriers to entry with the rule of law and economic development.<sup>16</sup> Table VIa presents the results of estimation for this model using the International Labor Organization's estimates of the percentage of urban laborers working in the informal economy, which covers the timeframe of my study (ILO, 2011). I find barriers to market entry have a strong, positive statistically significant connection to the informal economy.

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<sup>15</sup> A statistically significant connection to the rule of law and an F statistic over 10 demonstrate the strength of the origins of a country's legal system as an instrument for the rule of law in my data.

<sup>16</sup> I use TSCS and OLS estimates to perform this evaluation; barriers to entry may be endogenous to the size of the informal economy, but these two concepts are correlated at .81 in my data. It is difficult to conceive of an instrument correlated with barriers to entry that is unrelated to the informal economy. The causal direction and the prospect for omitted variable bias are therefore not entirely clear or resolved in this case.

## 5. Conclusion

Democracy is associated with economic development around the world, but many of SE Asia's least democratic countries are the most economically developed. Similarly, democracy is connected to the rule of law around the world, but democratic countries in Southeast Asia do not feature greater protection for property rights and contract enforcement than non-democratic countries. My research moves this discussion away from a simple distinction between democratic and dictatorial regime types and from formal political institutions in general. I demonstrate the connection between entrepreneurs' direct experience registering their businesses generates perceptions of the state's commitments to the property rights and contract enforcement, regardless of regime type. High barriers to market entry keep entrepreneurs in the informal economy, which in turn generates decreased expectations for protection of their property or enforcement of contracts. In this case enforcing a few inefficient legal regulations actually undermines the effectiveness of economically important aspects of the law.

My results also speak to how credibility can come from different sources. Globally, democracy is one way governments make credible commitments to the rule of law by using political institutions to limit the power of public officials. However, in SE Asia many governments are undemocratic, illiberally democratic, or just recently democratic at the national level. Generating credible commitments to the rule of law through national political institutions is not an option for most countries in the region: institutional solutions to bring about the rule of law through national-level constitutional changes or changing the way votes translate into legislative seats will fail to at the local level unless they take into account reality of how regulatory policy is implemented.

Instead, all governments can signal their commitments to property rights and contract enforcement by how they set barriers to formally registering a business and in turn either promote or undermine the rule of law and economic development.

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Table I  
Descriptive Statistics for Independent and Dependent Variables, SE Asia, 1996-2010

<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Dependent Variables</b>		
The Rule of Law	-0.25	0.49
GDP/Capita, PPP	8.44	1.17
Size of Informal Economy	0.42	0.13
<b>Independent Variables</b>		
Barriers to Entry:		
Cost of Business Registration	953	527
Number of Steps to Register	11	5
Average Time to Register	88	19
<b>Control Variables</b>		
Polity Score	0.9	3.08
GDP/Capita, PPP (logged)	8.44	1.17
Ethnic Fractionalization	0.37	0.12
Control of Corruption	-0.53	0.30
Colonial Origins	0.50	0.53
Leadership Instability	0.10	0.18
Trade Openness	135.96	86.71
<b>Instrumental Variables</b>		
Interest Rates (for barriers to entry)	6.21	2.52
Legal Origins (for wealth)		
Logged Settler Mortality (for wealth)	4.82	1.05
Logged Population Density (for wealth)	0.77	1.15

Table II  
SE Asian Rule of Law Scores Regressed on Barriers to Entry, Political, Economic and Social Variables (1996-2010)

Variable	TSCS Coeff./ (PCSE)	TSCS Coeff./ (PCSE)	OLS w/Robust SEs	OLS w/Robust SEs (no corruption)
Barriers to Entry	-0.05 (0.01)**		-0.07 (0.01)**	-0.09 (0.02)**
Barriers to Entry*GDP		0.02 (0.01)*		
Polity	0.03 (0.02)	0.02 (0.02)	0.05 (0.03)	0.05 (0.04)
GDP/capita (logged)	0.41 (0.07)**	0.21 (0.09)*	0.27 (0.01)**	0.35 (0.03)**
Barriers to Entry		-0.04 (0.03)		
Ethnic Fractionalization	-1.25 (0.36)**	-1.18 (0.22)**	-0.94 (0.15)**	-1.04 (0.19)**
Control of Corruption	1.04 (0.07)**	0.96 (0.07)**	1.09 (0.02)**	
Colonial Legacy	0.13 (0.03)**	0.08 (0.03)*	0.08 (0.04)*	0.10 (0.02)**
Leadership Instability	-0.51 (0.15)*	-0.55 (0.19)*	-0.47 (0.15)*	-0.44 (0.17)*
Trade Openness	0.03 (0.02)	0.02 (0.02)	0.02 (0.01)*	0.05 (0.03)
Rule of Law (Lagged)	0.29 (0.08)**	0.31 (0.05)**		
Constant	-3.16 (0.02)**	-3.06 (0.11)**	-2.99 (0.01)**	-3.08 (0.14)**
Country, Year Fixed Effects	Included	Included	Included	Included
Observations	116	116	116	116
Adjusted R <sup>2</sup>	0.83	0.85	0.92	0.68

Panel Corrected and Robust standard errors in parentheses: \* significant at 5%; \*\* significant at 1%

**Table III**  
SE Asian Barriers to Market Entry (1S) and the Rule of Law (2S) regressed on Political, Economic and Social Variables (1996-2010) using Two Stage, Least Squares Instrumental Variables Regression

Variable	1SLS, Number of Steps as DV, OLS, Robust SEs	1SLS, GDP as DV, OLS, Robust SEs	2SLS, Rule of Law as DV, OLS, Robust SEs
Interest Rates (instrument for barriers to entry)	-1.12 (0.08)**		
Annual Change in Global Economic Growth (instrument for GDP)		2.74 (0.33)**	
Estimated Number of Steps from 1SLS			-0.09 (0.02)**
Estimated Log GDP/Capita from 1SLS			0.25 (0.04)**
Number of Registration Steps		0.38 (0.10)**	
GDP/capita, PPP (logged)	-4.06 (0.27)**		
Polity Score	0.17 (0.13)	0.11 (0.03)**	0.14 (0.09)
Ethnic Fractionalization	0.52 (0.15)**	-1.02 (0.19)**	-1.03 (0.08)**
Control of Corruption	-2.64 (0.09)**	1.36 (0.05)**	1.02 (0.01)**
Leadership Instability	-1.36 (0.92)	-0.27 (0.04)**	-0.32 (0.11)*
Trade Openness	0.06 (0.04)	0.28 (0.12)*	0.06 (0.04)
Constant	5.62 (0.35)**	0.85 (0.16)**	-2.88 (0.26)**
Country, Year Fixed Effects	Included	Included	Included
Observations	116	116	116
Adjusted R <sup>2</sup>	0.47	0.34	0.68
F	32.51	26.84	
Durbin-Wu-Hausman			0.62, p = 0.29

Robust standard errors in parentheses: \* significant at 5%; \*\* significant at 1%

**Table IV**  
SE Asian Rule of Law Scores (1S) and log GDP/Capita (2S) regressed on Political, Economic and Social Variables (1996-2010) using Two Stage, Least Squares Instrumental Variables Regression

Variable	1SLS with Rule of Law as DV, OLS, Robust SEs	2SLS, with log GDP/Capita as DV, OLS Robust SEs
Legal Origins (instrument for the Rule of Law)	0.72 (0.04)**	
Estimated Number of Steps from 1SLS		-0.06 (0.02)**
Polity	0.09 (0.04)*	0.07 (0.03)*
Ethnic Fractionalization	-1.26 (0.20)**	-0.41 (0.13)**
Control of Corruption	1.03 (0.01)**	0.92 (0.05)**
Leadership Instability	-0.50 (0.21)*	-0.29 (0.13)*
Trade Openness	0.11 (0.06)	0.10 (0.02)**
Constant	-1.97 (0.14)**	0.68 (0.31)*
Country, Year Fixed Effects	Included	Included
Observations	116	116
Adjusted R <sup>2</sup>	0.59	0.55
F	48.60	
Durbin-Wu-Hausman		11.63, p = 0.023

Robust standard errors in parentheses: \* significant at 5%; \*\* significant at 1%