Interstate Competition and Political Stability

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Abstract

Previous theories of globalization have examined factor mobility's effect on the political conflict between social classes. But factor mobility also increases competition between state rulers in providing services for citizens. I ask how this interstate competition affects the process of political change. In a simple model, interstate competition substitutes for democracy, by forcing rulers to invest in public goods so as to avoid capital and labor leaving the country. As a result, citizens are less willing to struggle for democracy, and rulers are less willing to oppose it, when interstate competition is strong. Therefore, there is less conflict over the level of democracy. The theory is tested on a post-war panel of countries, using neighboring countries' financial openness as a proxy for factor mobility. As the theory predicts, states experience fewer changes in their level of democracy when their neighbors are financially open.

Keywords: political competition, dictatorship, democracy, transitions

JEL classification: D72, H77

"Supposing I'm now 21, 22, what would I do? I would not be absorbed in wanting to change life in Singapore....Why should I go and undertake this job and spend my whole life pushing this for a lot of people for whom nothing is good enough? I will have a fall-back position, which many are doing – have a house in Perth or Vancouver or Sydney, or an apartment in London..." – Lee Kuan Yew

1   Introduction

In recent history, it has become easier for capital and labor to move between countries. How does this affect the political process within individual countries? Political scientists have answered this question with models of conflict between social classes (Rogowski, 1989; Boix, 2003; Acemoglu and Robinson, 2006). Doing so, they have assumed that the state faithfully serves the interest of the class in power. This paper takes a different approach, and examines the vertical conflict between rulers and ruled. Rulers in every country are imperfect agents of their principals, the citizens. They have their own interests; unless they are constrained, they may pursue them at the expense of the governed. As a result, factor mobility not only affects economic competition between producers in different countries, it also increases competition between rulers themselves. Understanding how globalization affects politics means understanding how competition *between governments* affects politics. One fundamental effect is the reduction of slack within the political system itself: when labor and capital can exit easily from their rule, rulers can extract less rent from the political process. Thus, mobility can be a substitute for another way to limit rulers' extraction – the democratic process, which allows the orderly replacement of bad governments. Since factor mobility is a substitute for democracy, citizens have less demand for democracy when factors are mobile. Similarly, rulers have less incentive to resist democratic reforms, because factor mobility limits the potential gains from doing so. The overall effect of globalization is to reduce conflict over the level of democracy. As a result, political systems are simply less prone to change, either towards or away from democracy.

Putting political agency back into the picture is especially likely to yield better theory in the many developing countries where unconstrained, predatory rulers are a central feature of politics. It also has

practical implications. For instance, the recently-launched Charter Cities Foundation encourages rich and poor countries, working in partnership, to set up charter cities – new statelets with settled laws and sound management, to which citizens could migrate. This is explicitly meant as an alternative to the normal political process of "change from within" (Charter Cities Foundation 2009). Existing theory has little to say about how the implementation of these radical ideas would affect politics in surrounding states. This paper attempts to fill that gap.

I develop my approach in a simple formal model on the lines of Olson (1993). Self-interested rulers are bandits. Democracy provides a benefit: bandits can be replaced by their (potentially superior) rivals. It also has a cost: bandits who expect to be replaced have a shorter time horizon and are less likely to make investments which increase growth and the future tax base.[1] In general, the optimal level of democracy balances these two forces. Interstate competition affects this trade-off. By imposing a minimum welfare level which a ruler must satisfy in order to prevent labor and assets moving to more attractive regimes, it makes self-interested rulers less harmful, and so lessens the benefit of democracy. As a result, interstate competition and democracy are substitutes for citizens; more of one means citizens demand less of the other.[2] On the other hand, external competition constrains rulers and limits their profits, making it less beneficial to stay in office. Therefore, an increase in external competition lowers rulers' willingness to fight against democratization. Putting these incentives together, there is more (less) underlying conflict over the level of democracy as external competition falls (rises). In a very simple model of political change, more underlying conflict means more shifts, both up and down, in the level of democracy. Thus, the theory predicts that in countries where factors can easily exit, both kinds of shift should be rarer.

I test this prediction on a panel of countries in the postwar period. To mitigate the problem of endogeneity, I examine the effect of neighboring countries' financial openness on the number of changes in a country's level of democracy. When their neighbors are more open, countries indeed experience fewer changes in the level of democracy: there is strong evidence that democratic breakdown becomes less likely, and some evidence that democratization becomes less likely.

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[1]Bates (2008) makes this argument in depth for the case of modern Africa.

[2]However, the free market in jurisdictions is not a panacea. As I show later (Section 3.6), very high levels of interstate competition can harm citizen welfare by encouraging rulers to plunder rather than invest.

2 Literature Review[3]

Scholars examining the effect of factor mobility have focused on its distributional consequences, and have seen politics as a process of conflict, negotiation and coalition between social groups. For instance, Rogowski (1989) uses the Stolper-Samuelson theorem to predict coalitions between capital, land and labor: in any country, relatively scarce factors will ally to oppose free trade, and relatively abundant factors to support it. The link between factor mobility and democratization has been explained with a similar logic. Democratization occurs when the rich decide to share power with the poor, because the costs of repression are too high (Boix, 2003), and/or because democratization allows the rich to make credible long-term commitments to redistribution (Acemoglu and Robinson, 2006). The cost of democratization, for the rich, is that the newly-empowered majority will introduce high levels of redistributive taxation. Capital mobility reduces the threat of this taxation, since overtaxed assets can be moved out of the country. As a result, capital mobility makes democratization less costly to the rich, and it should therefore lead both to more democratizations and to fewer breakdowns of democracy.

The political model underlying these theories is that political outcomes reflect the balance of power between different social groups. However, in many countries, especially developing countries, politics is not driven by exogenously given social classes. Instead, social interests are vulnerable to state predation. Because the rule of law is not entrenched, rulers cannot commit not to expropriate profits. Indeed, this political economy has been put forward to explain the "Leontief paradox" that factors such as skilled labor and capital do not flow from rich to poor countries (where they are relatively scarcer), but from poor to rich (Eaton and Gersovitz, 1984; Olson, 1996). In these settings, the distributional impacts of international openness may be secondary to the fact that openness limits rulers' expropriation. The implications for democratization will be correspondingly different.

Since Tiebout (1956),[4] an economic literature on local government has examined whether exit alone can induce efficiency in production of public goods.[5] The overall conclusion is negative (Westhoff,

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[3]Existing empirical work on the link between factor mobility and democratization is discussed in Section 4.

[4]And earlier: "The division of Europe into a number of independent states ... is productive of the most beneficial consequences to the liberty of mankind.... The object of [a modern tyrant's] displeasure, escaping from the narrow limits of his dominions, would easily obtain, in a happier climate, a secure refuge, a new fortune adequate to his merit, the freedom of complaint, and perhaps the means of revenge." (Gibbon, 1776)

[5]Here "local" means governments with a possibility of exit. For a thorough review see Scotchmer (2002).

1977; Epple and Zelenitz, 1981; Bewley, 1981). However, perhaps because the literature has centred on subnational governments within democratic countries, there has been little examination of how intergovernmental competition affects political forms.[6] This paper shows how interstate competition changes citizens' and rulers' demand for democracy, and draws predictions about the twin processes of democratization and democratic breakdown.

In general, horizontal and vertical conflict surely both play a role in shaping political struggle, so the perspective advanced here ought to to complement, not replace existing explanations. The conclusion suggests how further research might integrate class- and agency-based models of political change. In this paper, I focus on the logic of political agency only.

3 A Model of Interstate Competition

To show how interstate competition affects the demand for democracy, this section develops a simple one-factor, one-country model. There are two actors, a representative citizen and a ruler. (All conflicts of interest between citizens are abstracted away in favor of the vertical conflict between citizens and rulers.) In the first stage, actors make choices affecting the level of democracy. Then, policy is made within the resulting political system.

3.1 The first stage

Denote the level of democracy by $d \in [0, 1]$. Controversy abounds as to whether democracy is a continuous or dichotomous variable. Here, d measures the probability that citizens can remove an unattractive incumbent. Thus, d can represent the probability of a fair election in a democracy, or the probability of a chance to revolt in a dictatorship. (One underlying model in a dictatorship could be that leaders are removed when political activists solve a coordination problem, which they do with probability d, and when the populace support the activists.) d therefore represents something slightly broader than democracy, encompassing both natural and institutionalized ways to replace a ruler; all that is required is that

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[6]A notable exception is Hirschman (1970), who argues that the availability of exit may weaken "the art of voice". Here, I simply argue that exit lowers the demand for voice.

sometimes, citizens and rulers will get the chance to change the level of d.

Thus, the initial level of democracy is $d = \underline{d}$. With probability π, the ruler may choose to decrease d by up to some small value Δ, by paying a cost c drawn from a distribution with full support on $\mathbb{R}_+$. Otherwise (i.e. with probability $1 - \pi$), the citizens may increase d by up to Δ, by paying a cost c drawn from a (different) distribution with support on $\mathbb{R}_+$.[7] After this stage the level of d is fixed and the game proceeds.

3.2 The policy game

The government output is the level of public investment. The ruler makes a costly investment $L > 0$. There is then an election with probability d. After the election, the (perhaps new) ruler extracts a tax or rent of $\tau \geq 0$. For simplicity, and to focus on the effect of asset mobility, I set no upper limit on τ, and assume no deadweight losses. Citizen utility is $-\tau + f(L)$ where f is increasing and concave and satisfies the Inada conditions $f(a) \to \infty$ as $a \to 0$, $f(a) \to 0$ as $a \to \infty$. $f(0) = 0$. L could stand for different decisions. For instance, it might be a costly investment in nationbuilding or public infrastructure, perhaps financed out of earlier taxes that could otherwise be consumed as rent. Or it might simply represent refraining from early rent extraction, which would harm economic growth (captured by f).

Rulers, whether incumbents or newly elected, are Good with probability γ and Bad otherwise. Good rulers receive utility $-\tau + f(L) - L$, i.e. they have the same utility as citizens, plus their cost of effort. Bad rulers receive utility $\tau - L$: they enjoy the rents from taxation. (If citizens send assets abroad, good rulers receive $\underline{u} - L$ and bad rulers receive $-L$. If bad rulers are replaced, they receive $-L$ utility.) Ruler type is observed at election time, so that elections allow bad rulers to be replaced.[8]

The terminology of "good" and "bad" ruler types ought not to be taken literally. Ruler motivations might indeed vary because of intrinsic character differences, but also for other reasons. For instance, "good" types may be effectively constrained by a party apparatus which internalizes the economic benefits of

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[7]A more complex simultaneous game is imaginable. For instance, both citizen and rulers might choose a level of activity, and the level of democracy would be a stochastic outcome. The simple form chosen here represents the idea that sometimes, one side has an informational advantage over the other, and may leverage this to make a change unilaterally.

[8]Another approach would be to have no types, and to have a shock to the ruler's popularity so that rulers are not always reelected. This alternative would produce the same substantive results.

investment, while bad types are able to evade these constraints and rule in their personal interest. Or, good types may have time horizons beyond their expected stay in office, and may therefore be concerned to expand the economy. The essential requirement is that elections have a role in selecting rulers, so that citizens' future welfare may depend on the election result.[9]

So far, nothing limits rent extraction τ. The key independent variable which fulfils this role is the level of political competition from other states. Thus, having observed τ, citizens can keep their assets in the country, or send them abroad; if they do they receive welfare of $\underline{u}$. The interpretation is that assets can be moved to another country, with different levels of the public good and rent extraction, for some cost. $\underline{u}$ can be broken down as

$$\underline{u} = f(L_F) - \tau_F - C, \tag{1}$$

where L_F and τ_F are policy parameters of the other country and C is the cost of moving assets.[10]

To understand what $\underline{u}$ means in practice, consider three neighboring countries in South-East Asia. Indonesia is the world's fourth-most populous country, with a diverse population, speaking either local languages or Indonesian. Malaysia is considerably smaller and has a larger Chinese minority. Singapore, which split from Malaysia in 1963, is a tiny city-state which thrives on international trade; Chinese are in the majority and English is an official language. It is fair to say that an average Indonesian worker would find it harder to exit his or her country than an average Malaysian, who would in turn find it harder than a Singaporean. Similarly, Singapore relies on footloose foreign direct investment; Malaysia does so to some degree, and Indonesia much less (UNCTAD 2009). Singapore's capital, like its labor, is more mobile than that of Malaysia, which is more mobile than that of Indonesia. Thus, Singapore has the highest $\underline{u}$, Malaysia has an intermediate level, and Indonesia has the lowest $\underline{u}$.

The analysis excludes rulers themselves changing $\underline{u}$ by imposing border controls, emigration restrictions and so forth. This undoubtedly happens, but the assumption here is that some factors affecting interstate competition – such as transport costs or global capital markets – are beyond the ruler's influence, and that many societies and economic systems make total control over emigration hard to achieve, just as

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[9]Jones and Olken (2005) provide evidence that leaders' identities matter to their countries' economic performance.

[10]I assume that the public good in a country benefits the owners of assets employed in that country, i.e. one cannot move one's asset abroad and enjoy the public good at home.

many advanced societies find it hard to control immigration. In any case, allowing the ruler to change $\underline{u}$ would generate fairly unsurprising predictions: $\underline{u}$ would be raised until the cost of doing so outweighed the cost of providing public investment.

3.3 Ruler behaviour

The game is solved by backward induction. After the election, good rulers choose $\tau = 0$ and citizens migrate if $\underline{u} > f(L)$. Bad type rulers choose the maximum τ that satisfies the migration constraints (if no τ does this their choice is irrelevant and $\tau = 0$ anyway since they can extract no taxes): $\underline{u} = f(L) - \tau$, hence $\tau = f(L) - \underline{u}$. At the election, citizens reelect good rulers and only good rulers, since they extract less rent.

Before the election, good types solve $\max_L f(L) - L$, making an investment of L^* where $f'(L^*) = 1$. I assume $f(L^*) \geq \underline{u}$, i.e. a good ruler can invest enough to prevent migration. Bad types solve

$$\max_L (1 - d)(f(L) - \underline{u})_+ - L. \tag{2}$$

Here, $(x)_+$ means $\max\{0, x\}$. If $f(L) - \underline{u} < 0$ then the ruler receives no tax after the election since citizens migrate. Otherwise, $f(L) - \underline{u}$ is the tax after the election.

Intuitively, democracy seems likely to increase welfare, by removing bad type rulers. However, there is a counteracting force. Even bad types have an incentive to invest, since this efficient choice allows them to extract more rent after the election than they lose immediately. In other words, they balance the attractions of rent now against the benefits of future rents from investment now, if they remain in office. These future benefits decrease when d increases. This is the well-known story of the "stationary bandit" (Olson, 1993). It is particularly relevant in emerging democracies, where stable party systems have not yet evolved. Parties which can expect to regain office after losing an election may have long-term incentives to invest.[11]

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[11] For evidence that short-termism reduces democratic performance, see Tavares and Wacziarg (2001).

The bad type ruler's investment is as follows. Define $\hat{L}$ as the solution to

$$f'(\hat{L}) = 1/(1-d). \tag{3}$$

$\hat{L}$ is decreasing in d and is no more than the socially optimal investment L^*; if $d = 0$, $\hat{L} = L^*$. The ruler either invests this much, or nothing.

Claim 1. The bad type ruler invests $\hat{L}$ if $\hat{L} < (1-d)(f(\hat{L}) - \underline{u})$. Otherwise he invests 0.[12]

The bad ruler's equilibrium investment is a function of the level of democracy, and of interstate competition. Write it as $L_B = L_B(d, \underline{u})$. Observe that $L_B \leq L^*$ always, that L_B is decreasing in d[13] and that $L_B = L^*$ if $d = 0$: a completely secure dictator invests optimally in the public good, since he will be able to claw back all the benefit by extracting more rent. Insecure dictators invest less than the optimum.

3.4 Citizen welfare

Given ruler behaviour, we can now compute citizen welfare and answer the fundamental question: how do changes in $\underline{u}$ affect the tradeoff between different levels of democracy? Citizen utility is

$$U_{CIT} = \gamma f(L^*) + (1-\gamma)[d\gamma \max\{f(L_B(d,\underline{u})), \underline{u}\} + (1-d\gamma)\underline{u}]. \tag{4}$$

The first term gives utility from a good type ruler who is always reelected. The second term gives utility from a bad type ruler. $d\gamma$ is the probability of the event that there is an election, *and* the bad ruler is replaced by a good one. If so, the good type extracts no rent and the citizens may achieve higher utility than $\underline{u}$. Otherwise, the bad type always extracts rent until citizens are just indifferent between moving assets and staying where they are (or has invested so little that the citizens move assets anyway). The benefit of the good type coming in varies depending on the investment decision taken by the bad type. If this was low, perhaps because the bad type expected to be thrown out by the citizens, then even the good ruler will be unable to achieve very high citizen welfare. On the other hand, if the bad type invested

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[12]Proofs are in the Appendix.
[13]As shown in the Appendix.

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more, expecting to recoup his investment, then the good ruler will be able to build on this investment and achieve high welfare. The trade-off: bad types only invest much if they are unlikely to be replaced.

Returning to our Asian examples, each has had notable rulers. Indonesia experienced Suharto, whose rule brought economic growth but who embezzled public funds on a massive scale. Malaysia has had a democracy with a single ruling party; Mahathir bin Mohamed was Prime Minister for twenty years. Singapore, of course, has been ruled by Lee Kuan Yew, who is quoted above. If we compare the unconstrained behaviour of the two dictators, and judge by the GDP growth figures, Lee's performance overshadows that of Suharto. The model would explain this as follows: on coming to power, Lee inherited a trading state with highly mobile capital and labor, leaving him little scope for rent extraction beyond paying his family large salaries. Suharto, by contrast, inherited a milch cow. Lee, more than Suharto, needed to develop his state's economy in order to reap the rewards.

The main predictions of this paper come from the case where bad type rulers have some incentive to make an investment. Section 3.6 discusses the other case, where external competition is so high that bad rulers prefer to make no investments. The following two Lemmas show that, in the central case, an increase in $\underline{u}$ makes democracy less appealing for the citizens. In economic terms, external competition and democracy are substitutes. Formally, the two parameters have decreasing differences for the citizens (see Ashworth and de Mesquita 2006). The reason is simple: an increase in $\underline{u}$ forces the bad ruler to extract less rent, so the benefit from democracy of replacing the bad ruler with a good one is less. However, democracy still lowers the bad ruler's investment by the same amount. Overall, the net benefit of democracy decreases. It is easy to show this. Differentiating (4) by d gives the marginal benefit of democracy:

$$(1-\gamma)\gamma\left[\left(f(\hat{L})-\underline{u}\right)+d\left(\frac{\mathrm{d}f(\hat{L})}{\mathrm{d}d}\right)\right]. \tag{5}$$

Inside the square brackets, the first term is the benefit from throwing out bad rulers and replacing them by good ones. The second term is the loss caused because the bad type lowers his investment. A higher $\underline{u}$ lowers the first term but not the second.

Lemma 2. *If the bad ruler invests positively in equilibrium, then the marginal benefit of d for citizen utility is decreasing in $\underline{u}$.*

This Lemma is the hinge of the argument. It shows that external competition makes democracy less attractive for citizens. The bad ruler's case is the opposite. (When the ruler is good, neither citizens nor rulers ever change d, since the ruler would always be reelected: this accords with the intuition that good rulers do not generate radical political opposition.) Since external competition shrinks the rent that can be extracted after the election, and democracy lowers one's chances of getting that rent, more external competition makes democracy less bad.

Lemma 3. *If the bad ruler invests positively in equilibrium, then his utility decreases in d, but his marginal utility loss from an increase in d is decreasing in $\underline{u}$.*

3.5 The political stage

The two Lemmas above show that a higher level of external competition will make both sides' stakes in the level of democracy lower. Citizens will gain less from achieving an increase in democracy, and rulers will lose less from granting it; rulers will gain less, and citizens will lose less, from lowering the level of democracy.

Recall that in the political stage, with probability π, the ruler may change d by paying a cost c drawn from a distribution with full support. He will do so if c is less than the resulting increase in his welfare. Lemma 3 shows that, because the ruler gains less from a decrease in d when $\underline{u}$ is higher, the maximum cost the ruler will pay is also lower when $\underline{u}$ is higher. Similarly, with probability $1 - \pi$ the citizens may change d. Lemma 2 shows that when $\underline{u}$ is high the benefit to citizens of an increase in d is smaller, so citizens will take fewer opportunities to change d. Therefore, there are less changes to democracy when d is higher.[14]

The next Proposition confirms this.

Proposition 4. If the bad ruler would invest positively for all $d \in [\underline{d} - \Delta, \underline{d} + \Delta]$, a small increase in external competition $\underline{u}$ results in fewer increases and fewer decreases in the level of democracy d, and a small decrease in external competition results in more increases and decreases to d.

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[14]The logic depends on the unilateral nature of the choice to change d. If both citizens and rulers made choices simultaneously in the political stage, the effect of $\underline{u}$ on equilibrium outcomes might be indeterminate. (More change might occur when both actors exert less effort.) However, if the probability of any change increases in the effort levels of both actors, then the result is likely to hold.

The Asian cases illustrate this point. Figure 1 shows yearly changes in Polity IV over the postwar period in the three countries. Singapore has been completely stable – there have been no internal revolutions or coups since independence. Malaysia experienced a drop in its score in 1969, after a race riot led to the introduction of repressive laws and a never-lifted state of emergency. Indonesia's graph reflects its political turbulence: increasing repression under Sukarno, followed by the bloody anti-Communist purge of the 1960s and the rise of Suharto, and a democratic revolution in the wake of the Asian financial crisis. The countries most exposed to interstate competition have seen the least internal turmoil.

[Figure 1 about here]

Proposition 4 makes no prediction about the relative size of the effect of external competition on increases and decreases in d; that will depend on the political opportunity structure. For example, if opportunities for the ruler to reduce d never arrive, but there are many opportunities for citizens to push for greater democracy, then external competition will have little effect on decreases in d, but a large effect on increases in d.

3.6   Extractive rulers and state collapse

Although it is not the focus of the empirics, the case when bad rulers make zero investment is also interesting. Here, external competition is so high that no investment by the bad ruler can reach it, and still be more profitable in expectation than simply choosing zero investment. This is a situation of state collapse, followed by massive emigration. The past decade's events in Zimbabwe are a good example. Mugabe's government pillaged firmland and gave it to their supporters, while debasing the currency; as a result, an estimated 3.4 million people left Zimbabwe, out of a population of about 10 million (Meldrum, 2007).

I do not investigate democracy's effect on citizen welfare in this case. The true benefit of democracy in these situations is presumably that replacement rulers may begin to make their own investments over longer periods, and this is not modeled in the framework here. The effect of $\underline{u}$ on citizen utility is more

interesting, however. Rewrite Claim 1's condition for zero investment as

$$(1-d)[f(\hat{L}) - \underline{u}] - \hat{L} \le 0. \tag{6}$$

When (6) holds, citizen utility conditional on a bad type incumbent is just $\underline{u}$; since bad rulers always lead to asset mobility, it helps if asset mobility is better. However, as $\underline{u}$ increases past the point where (6) holds with equality, investment jumps downward from $\hat{L}$ to 0. Furthermore, at this point, $\hat{L} > 0$.[15] Therefore, using the relevant part of (4), conditional citizen utility also jumps downwards to $d\gamma f(\hat{L}) + (1 - d\gamma)\underline{u}$.

Thus, interstate competition is no panacea. While reasonable levels of competition may discipline rulers and force them to invest, too strong competition encourages a strategy of plunder. This suggests an interesting explanation for the problems of Zimbabwe, and perhaps of some Central American countries: their prosperous neighbors (a resurgent South Africa; the US) may damage them by destroying incentives for responsible government.

4 Evidence

Proposition 4 predicts more changes both towards and away from democracy when external competition is low.[16] This gives the following hypotheses:

Hypothesis 1a. Democratic reforms will be more likely when states are insulated from external competition.

Hypothesis 1b. Changes away from democracy will be more likely when states are insulated from external competition.

4.1 Empirical Design

Research to test these hypotheses faces three major challenges. First, the key dependent and independent variables are difficult to measure. Democracy has been conceptualized and measured in different ways;

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[15]Shown in the Appendix.

[16]I assume that the case of state collapse in Section 3.6 is exceptional.

on the other hand, there are no direct measurements of the level of external competition, i.e. of the return from moving assets to another state. Second, there are clear dangers of endogeneity. The opportunities for capital and labor to exit a country may be influenced by a state's politics, which may in turn be influenced by the level of democracy. Lastly, since many factors influence political change, there may be omitted variable bias: different levels of external competition may correlate with unmeasured variables which also affect democracy.

Existing empirical work relating globalization to democratization has used different strategies to address these problems. Boix (2003) uses industrial structure (share of agriculture in GDP) to proxy for asset specificity (hence, asset mobility) in a long panel of countries. He finds that countries with greater specificity are more likely to experience a breakdown in democracy, but not less likely to experience a democratization.[17] This is compatible with the argument advanced here. However, it is unclear that agriculture's GDP share only affects the political process via asset specificity. Rudra (2005) estimates globalization's effect on democracy conditional on welfare spending, while Li and Reuveny (2002) measure various aspects of globalization including trade and FDI. These studies deal with endogeneity by lagging the independent variables, which may not be sufficient.

Eichengreen and Leblang (2006) examine the effect of capital controls (as well as trade) in a country on democratization. To avoid the problem of endogeneity to policy, they instrument these with those of other countries. Their dynamic results are broadly in line with my predictions, though weak (ibid., Table 11). However, since capital controls affect capital mobility in both origin and destination countries, it is hard to imagine a process that leads from own-country capital controls to democratization without also separately leading from other countries' capital controls to democratization (and thus violating the exclusion restriction). Similarly, their other instruments (country size, inflation, budget deficits and currency crises) are *a priori* unlikely to satisfy the exclusion restriction, although they do test the instruments collectively for overidentification.

In short, existing results are broadly compatible with my hypotheses, but are not conclusive. A fresh look at the data therefore seems worthwhile. My strategy is as follows. Firstly, I use two measures of democracy: Polity IV, and the Przeworski et al. (2000) measure, as updated by Cheibub, Gandhi and

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[17]Models 3A and 3B, page 80.

Vreeland (2009). Polity IV is a rather broad measure of democracy, compared to my theoretical focus on the possibility of leadership replacement. However, most of its components ought to relate to this possibility, and in addition, because Polity is a continuous measure from -10 to 10, it is more sensitive to small changes in the level of democracy. The Przeworski measure is coarser, but less subjective. My dependent variable is a dummy taking the value 1 when either the Polity or the Przeworski democracy score changed in a given country-year.

Any appropriate measure of $\underline{u}$ ought to come from one of the components of $\underline{u}$ in equation (1). One possible measure would be wages or returns on capital in neighboring countries, compared to own-country returns. However, there is likely to be considerable endogeneity, since instability may affect wages and returns to capital in a country. To avoid this problem, one can instead measure C, the cost of moving assets.

For labor mobility, an ideal measure would be the strictness of immigration policy over time in different countries.[18] However, no such measure exists. Until it does, exogenous measures of labor mobility will be hard to find.[19] Therefore, in this section I focus on capital mobility. For this, my independent variable is the Chinn-Ito measure of capital openness. This is a *de jure* measure, available from 1970 onwards and based on IMF data on legal controls on capital inflows and outflows. The variable of interest, i.e. the real cost of moving capital between countries, will be affected by the level of these controls in both origin and destination countries. However, controls in the origin country are clearly endogenous to policy, which may in turn be affected by political changes. Instead, I use the average score of a country's neighbors (those within 1000 miles distance), weighted by each neighbor's GDP. So, my key independent variable is:

$$NbrOpenness_{i,t} = \frac{\sum_j GDP_{j,t} Openness_{j,t}}{\sum_j GDP_{j,t}}$$

where the sum ranges over all countries within 1000 miles. The logic is that foreign investment levels, like trade, have been shown to be strongly affected by distance between countries (Blonigen, 2005): thus, changes in capital controls will have most effect in nearby countries which are likely destinations

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[18] An initial step in this direction is the information on country policies collected in Mayda (2009).
[19] Earlier versions of this paper used distance from major migration hosts as a proxy for ease of migration.

for assets seeking a safe haven. Also, using neighbors' mobility lowers the danger of endogeneity. Although it cannot be absolutely guaranteed that capital controls are unaffected by constitutional change in neighboring countries, the assumption is defensible.

To mitigate omitted variable bias, I include country fixed effects. These are likely to account for many factors affecting a country's political stability which change little over time, such as ethnic fractionalization or the presence of mineral exports. The country fixed effects mean that the independent variable becomes changes in the level of neighbors' capital controls: since these changes are likely to have an impact only in the medium- to long-term, I use averages of neighbor capital controls over the past five years. As further controls, I include: *Polity* and its square or the Przeworski *Democracy* measure (lagged one year), logged country *GDP*, average Polity IV measure for neighboring countries over the previous five years (*Nbr Polity*), and logged average GDP for neighboring countries over the previous five years (*Nbr GDP*). To model time-dependence in changes to the dependent variable, I include natural cubic splines in time since last change to or from democracy, and also dummies for five-year periods.

Lastly, OECD countries are excluded from the panel, since almost all are stable democracies, and would be unlikely to change under any circumstances.

I run logit regressions. While fixed effects remove bias due to unobserved, time-constant omitted variables, they also reduce efficiency by ignoring the information contained in differences between countries. Indeed, country effects account for about 80% of the variation in *Nbr Openness* (R^2: 0.7934). So, at first I exclude country fixed effects and controls, running a simple bivariate logit on *Nbr Openness*; then I include the controls, then controls plus fixed effects (estimated using conditional logit). The following equations summarize the regressions:

$$\log\left(\frac{p_{it}}{1-p_{it}}\right) = \alpha + \beta_1\overline{NbrOpenness}_{i,t-1...t-5} + \varepsilon_{it}$$

$$\log\left(\frac{p_{it}}{1-p_{it}}\right) = \alpha + \beta_1\overline{NbrOpenness}_{i,t-1...t-5} + \beta_2\overline{NbrPolity}_{i,t-1...t-5} + \beta_3\overline{NbrGDP}_{i,t-1...t-5} + \beta_4 GDP_{it}$$
$$+ Demctrl_{i,t-1}\,\vec{\gamma} + Time_{i,t}\,\vec{\delta} + \varepsilon_{it}$$

$$\log\left(\frac{p_{it}}{1-p_{it}}\right) = \alpha_i + \beta_1\overline{NbrOpenness}_{i,t-1...t-5} + \beta_2\overline{NbrPolity}_{i,t-1...t-5} + \beta_3\overline{NbrGDP}_{i,t-1...t-5} + \beta_4 GDP_{it}$$
$$+ Demctrl_{i,t-1}\,\vec{\gamma} + Time_{i,t}\,\vec{\delta} + \varepsilon_{it}$$

where p_{it} is the probability of a change in the *Democracy*, or *Polity*, score in country *i* at year *t*; *Demctrl* is either *Democracy*, or a vector with *Polity* and its square; and *Time* is the vector of period dummies and

natural splines.

4.2 Results

For a first look at the data, Figure 2 plots the density of *Nbr Openness* for country-years in the sample, splitting these by their initial *Democracy* score (on the Przeworski measure) and by whether they experienced a transition, i.e. a change in the *Democracy* score. For democracies, in particular, countries which experienced a transition clearly had less open neighbors. The pattern for dictatorships is similar but less striking.

[Figure 2 about here]

The first set of regression results is shown in Table 2. For the *Democracy* dependent variable, the coefficient on *Nbr Openness* is consistently negative and significant, as the theory predicts. For the *Polity* dependent variable, it is only significant in the bivariate specification.

[Table 2 about here]

The lack of significance in the *Polity* regressions could arise because changes in Polity are capturing something other than real changes in the level of democracy (minor reforms, or measurement error by the coders), or because the *Democracy* results are spurious. To investigate further, these regressions were rerun twice, with alterations to the dependent variable: (1) only counting a change in the level of democracy if the Polity score moved by 3 or more points and (2) only counting a change if Polity moved by 3 or more points, *and* the head of state was removed by irregular means, according to the Archigos dataset of political leaders (Goemans, Gleditsch and Chiozza, 2009). Using only large changes does not affect the significance of *Nbr Openness*.[20] However, as Table 3 shows,when only large changes combined with irregular removal of the head of state are counted, the results change: the coefficient on *Nbr Openness* becomes much larger, and is significant in the fixed effects specification. This suggests that the weak results from the *Polity* regressions are due to consensual reforms that result in small changes to the Polity score, and/or to subjective coding decisions.

[Table 3 about here]

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[20]Results available on request.

It is unlikely that changes to the level of democracy arise similarly in democracies and dictatorships, and it is clearly of interest whether asset mobility has the same effect in each case. To investigate this, I run a dynamic logit model, allowing the effects of the independent variables to vary depending on whether the country is a democracy. Thus, the estimations become:

$$\log\left(\frac{p_{it}}{1-p_{it}}\right) = \alpha + \beta_1 Democracy_{i,t-1} + \beta_2 \overline{NbrOpenness}_{i,t-1...t-5} + \beta_3 \overline{NbrOpenness}_{i,t-1...t-5} Democracy_{i,t-1} + \varepsilon_{it}$$

$$\log\left(\frac{p_{it}}{1-p_{it}}\right) = \alpha + \beta_1 Democracy_{i,t-1} + \beta_2 \overline{NbrOpenness}_{i,t-1...t-5} + \beta_3 \overline{NbrOpenness}_{i,t-1...t-5} Democracy_{i,t-1}$$
$$+ Controls_{it} \overrightarrow{\gamma} + Controls_{it} Democracy_{i,t-1} \overrightarrow{\delta} + \varepsilon_{it}.$$

$$\log\left(\frac{p_{it}}{1-p_{it}}\right) = \alpha_i + \beta_1 Democracy_{i,t-1} + \beta_2 \overline{NbrOpenness}_{i,t-1...t-5} + \beta_3 \overline{NbrOpenness}_{i,t-1...t-5} Democracy_{i,t-1}$$
$$+ Controls_{it} \overrightarrow{\gamma} + Controls_{it} Democracy_{i,t-1} \overrightarrow{\delta} + \varepsilon_{it}.$$

[Table 4 about here]

Results are shown in Table 4.[21] In each model, the first column shows the effect of the independent variables on the odds of a dictatorship becoming a democracy, and the second column shows their effect on the odds of a democracy becoming a dictatorship. The table clarifies the effect of *Nbr Openness*. As the theory predicts, this is negative for both kinds of transitions. However, the coefficient on dictatorships is much smaller in size, and becomes insignificant in the fixed effects specification. Thus, democracies appear to be stabilized by their neighbors' financial openness, while the evidence that the same holds true for dictatorships is weaker.

To check the robustness of this result, I reran the dynamic logit including some further independent variables which are often supposed to affect the probability of transitions. Table 5 shows the results. Model 1 includes a variable for urbanization. Model 2 includes population and country size. The effects of *Nbr Openness* do not change significantly in either model. In further robustness checks, I varied the sample, by including OECD countries and by excluding Soviet countries. Again, results are not substantively different.[22]

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[21]Dynamic fixed effects logit models suffer from bias if the initial value of the dependent variable is correlated with the fixed effects (this is the "initial conditions problem"). To avoid this, I also ran a random effects model controlling for per-country averages of the IVs, as in Wooldridge (2005). Results were substantively similar to the fixed effects estimations. Also, the fixed effects model is very similar to a model in which the dependent variable is the logged odds of country i being a democracy at time t, rather than the logged odds of a transition at time t. (The two models are not identical, since the country fixed effects have different interpretations.) Again, running this model gives substantively the same results.

[22]Results available on request.

[Table 5 about here]

Lastly, to show the substantive size of the results, Figure 3 plots the predicted probabilities of a transition for each of the sample countries in the year 2000, against their predicted probabilities if their value of *Nbr Openness* over the past 5 years had been one standard deviation higher.[23] The lines show roughly the proportional change in probabilities: democracies would be about 1/3 as likely to experience a transition, and dictatorships would be about 3/4 as likely.

[Figure 3 about here]

4.3 Interpretation

The cross-country evidence shows that countries were significantly less likely to experience transitions to or from democracy when their neighbors had recently been financially open. This effect is most clear for breakdowns in democracy. Coefficients are smaller for democratic transitions, and fail to achieve significance in the fixed effects specification. Thus, the evidence supports Hypothesis 1b, and offers weaker support for Hypothesis 1a.

It is interesting to consider how alternative theories might explain the link between asset mobility and changes in democracy. One theory is that economic growth leads to transitions, and that neighboring countries' openness to capital increases wealth in a way not captured by GDP. However, Table 4 shows that within a country, higher GDP is associated with greater democratic stability but not with transitions to democracy. The same holds for neighboring countries' openness. Thus, a mechanism affecting democratic stability via increasing GDP cannot be ruled out, but theories in which wealth causes democratizations are not supported. Another theory claims that financial openness is associated with the spread of democratic ideas. The control on neighbors' Polity scores is meant to capture this effect. Table 4 shows that neighbors' Polity scores are indeed associated with democratizations. However, there is no evidence that neighbors' financial openness causes democratizations: if anything, the reverse. Lastly, financial openness might alter the industrial structure, increasing the power of the urban bourgeoisie. Controlling for urbanization (Model 1 in Table 5) does not change the effect of financial openness, and

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[23]Since conditional logits cannot be interpreted in terms of unconditional probabilities, the estimation without fixed effects was used, i.e. Model 2 in Table 4.

indeed urbanization appears to increase the likelihood of democratic breakdowns. Nevertheless, other unobserved changes in social structure cannot be ruled out.

In short, while factor mobility's effect on democracy is strongly supported in this data, it may work via a different mechanism from the one proposed here. However, most extant theories predict that globalization should be positively associated with democratization as well as democratic stability, while the theory here predicts an association with stability of both democracies and dictatorships, and in this sense is closer to what the data shows.

5 Conclusion

In the political economy literature to date, globalization has been understood as a process which benefits some groups in society and harms others, leading to class or factor coalitions which seek to extend or mitigate its effects, and encouraging democratization by protecting capital owners from redistributive taxation. This leaves out an important part of the story, which is that factor mobility forces states' rulers to compete more in providing services to those under their rule. This paper examines the political implications, arguing that interstate competition substitutes for internal competition. When democracy has costs as well as benefits – as may be the case in many developing countries (Bates, 2008) – increasing external competition will alter the tradeoffs for citizens, lowering their demand for democracy so that there is more political stability but also less democratization. When democracy has been established in a country, the same logic lowers rulers' incentives to attempt antidemocratic coups, since their level of rents will be limited even in an autocracy by external competition. Overall, there is simply less to fight over when factor mobility constrains the sovereign. The evidence shows that factor mobility is indeed associated with fewer breakdowns in democracy, and there is some evidence that it also causes fewer democratizations.

For political scientists, the view of globalization as heightened competition between state apparatuses leads to further interesting research possibilities. In particular, future work could focus on integrating redistribution and agency concerns. How do elites weigh the risks of unconstrained dictatorship against those of taxation by the poor under democracy, and how does their exit option affect this trade-off?

Another development would be to analyse how and when rulers choose to increase the costs of exit, for instance by limiting visas, imposing capital controls or policing their borders. Lastly, there are cases where factor mobility seems linked to political pathologies. For instance, in Fiji, ethnic tensions may have been exacerbated by the ease of exit (if it is easy to leave, it may also be easy to force others out); while in Zimbabwe, as described in Section 3.6, the mass exodus of workers to South Africa may have pushed rulers towards a strategy of short-term plunder. Qualitative case studies would help develop our understanding of these more complex dynamics.

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Appendix 1: Proofs

I first prove that the bad type ruler invests either $\hat{L}$ or 0.

Proof. $\hat{L}$ is the interior maximizer of $(1-d)(f(L)-\underline{u})-L$. If $L > 0$ and $f(L) - \underline{u} \leq 0$ then the ruler receives $-L$ utility and would prefer to set $L = 0$. Otherwise, if $L > \hat{L}$, then by concavity of (2), the ruler could reduce L a little and increase his expected utility; if $L < \hat{L}$, then by concavity, the ruler could increase L and increase his utility. □

Using this I prove Claim 1:

Proof. From (2), investing $\hat{L}$ gives

$$(1-d)(f(\hat{L})-\underline{u})_+ - \hat{L}$$

while investing 0 gives

$$(1-d)(-\underline{u})_+.$$

If $\underline{u} \leq 0$ then these become $(1-d)(1-\underline{u}+f(\hat{L})) - \hat{L}$ and $(1-d)(1-\underline{u})$ respectively. Since $(1-d)f(\hat{L}) - \hat{L} > 0$ by the definition of $\hat{L}$ and by concavity of f, $\hat{L}$ gives more utility.

If $\underline{u} > f(\hat{L})$ the two expressions become $-\hat{L}$ and 0 respectively; investing 0 is preferred since costly effort will not prevent migration.

If $0 < \underline{u} < f(\hat{L})$ then the expressions are $(1-d)(f(\hat{L})-\underline{u}) - \hat{L}$ and 0. Rearranging gives the condition in the Claim.

Lastly I show that if $(1-d)(f(\hat{L}) - \underline{u}) > \hat{L}$ then $\underline{u} \le f(\hat{L})$, and that if $\underline{u} \le 0$ (and $\hat{L} > 0$) then $(1-d)(f(\hat{L}) - \underline{u}) > \hat{L}$. Therefore, the condition in the Claim covers all three cases.

If $(1-d)(f(\hat{L}) - \underline{u}) > \hat{L}$ then $\underline{u} \le f(\hat{L})$, since otherwise $(1-d)(f(\hat{L}) - \underline{u}) < 0 \le \hat{L}$. If $\underline{u} \le 0$ and $\hat{L} > 0$ then $(1-d)(f(\hat{L}) - \underline{u}) \ge (1-d)f(\hat{L}) > \hat{L}$. The second inequality holds because $\hat{L}$ solves $f'(\hat{L}) = 1/(1-d)$ and f is strictly concave. $\qquad\square$

I next show that $L_B(d, \underline{u})$ is decreasing in d and that there is a discontinuous jump downwards at the crossover point from investing $\hat{L}$ to investing 0.

Proof. First remember that $\hat{L}$ is decreasing in d. Next, recall that zero investment occurs when $\hat{L} \ge (1-d)[f(\hat{L}) - \underline{u}]$. This is true when $\underline{u}$ is high enough; it is then no longer worthwhile for the ruler to invest. It is also true for high enough d. To see this, differentiate the LHS of (6) with respect to d to give

$$\underline{u} - f(\hat{L}).$$

(The effects of d on $\hat{L}$ cancel out since $f'(\hat{L}) = 1/(1-d)$.) This expression increases in d. If $\underline{u} > 0$, when d is high enough it will be positive, so that an increase in d increases the LHS of (6); but if so (6) must hold in any case, since $\hat{L} \ge 0 \ge (1-d)[f(\hat{L}) - \underline{u}]$. For lower values of d it becomes negative (since as $d \to 0$, $\hat{L} \to L^*$, and $f(L^*) > \underline{u}$), and if so a further decrease in d will increase the LHS of (6) and may make the inequality false. Also, at the crossover point, $\hat{L} > 0$ unless $d = 1$, by definition of $\hat{L}$. (Indeed, at $d = 1$ (6) always holds with equality.) But if there is another crossover point, it must have $d < 1$. Hence $\hat{L} > 0$ at the crossover point.

Thus, for given $\underline{u}$, either $L_B(d, \underline{u}) = 0$ always, or $L_B(d, \underline{u})$ starts at L^*, decreases until the inequality holds, at which point $\hat{L}$ is positive, and thereafter is constant at 0. $\qquad\square$

Finally the Lemmas are proved.

Proof of Lemma 2

Proof. When the bad ruler invests positively, $L_B = \hat{L} > 0$. From Claim 1 it can be seen that this holds for an open subset of the parameters $\underline{u}$ and d. So we can set $L_B = \hat{L}$ on an open subset around any given d and $\underline{u}$. Since $\underline{u} < f(\hat{L}) = f(L_B)$ by the conditions in Claim 1, citizen utility can be rewritten as

$$\gamma f(L^*) + (1-\gamma)[d\gamma f(L_B(d,\underline{u})) + (1-d\gamma)\underline{u}]$$

Differentiating this by d gives the expression in (5). Differentiating again by $\underline{u}$ gives

$$\frac{\partial^2 U_{CIT}}{\partial d \partial \underline{u}} = -(1-\gamma)\gamma < 0,$$

since $\hat{L}$ is constant in $\underline{u}$. The negative cross-partial suffices to show decreasing differences. $\square$

Proof of Lemma 3

Proof. From (2), the ruler's utility can be written $U_B = (1-d)(f(\hat{L}) - \underline{u}) - \hat{L}$, since $f(\hat{L}) - \underline{u}$ by the conditions for positive investment in Claim 1. As before, this holds on an open interval around our parameters. Differentiating this first by $\underline{u}$ then by d gives $\frac{\partial^2 U_B}{\partial d \partial \underline{u}} = 1 > 0$, which shows increasing differences. To show that U_B is decreasing in d, apply the Envelope Theorem: $\frac{\partial U_B}{\partial d} = -(f(\hat{L}) - \underline{u}) < 0$. $\square$

Proof of Proposition 4

Proof. The ruler decreases d (by the maximum amount Δ, since his utility is decreasing in d) if

$$U_B(\underline{d} - \Delta) - c \geq U_B(\underline{d}),$$

and this defines a cutpoint

$$\bar{c} = U_B(\underline{d} - \Delta) - U_B(\underline{d}) = -\int_{\underline{d}-\Delta}^{\underline{d}} \frac{\partial U_B}{\partial d}(d)\, \mathrm{d}d$$

below which the ruler changes d. The condition in the Proposition, combined with the previous Lemmas, shows that $\frac{\partial^2 U_B}{\partial d \partial \underline{u}} > 0$ for all $d \in [\underline{d} - \Delta, \underline{d} + \Delta]$. Therefore, an increase (decrease) in $\underline{u}$ decreases (increases) $\bar{c}$. Since the distribution of costs has full support on $\mathbb{R}_+$, the probability that $c \leq \bar{c}$ is strictly less (more) if $\underline{u}$ increases (decreases).

The argument for the citizens is almost identical and is omitted.[24] $\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad$ $\square$

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[24]If citizens could choose to decrease d, they might do so in certain cases, since their marginal benefit from democracy (5) is not always positive. The game excludes this possibility; I assume it is unlikely in practice, since democracy would never increase to a level which nobody wanted.

Tables and Figures

Variable	Definition	Source
Polity	POLITY2 score	Polity IV 2008 dataset (Marshall, Jaggers and Gurr, 2009)
	Note: Periods of anarchy (-77 in POLITY1) were coded as missing	
Democracy	Democracy score	Cheibub, Gandhi and Vreeland (2009)
Financial openness	KAOPEN score	Chinn and Ito (2008)
GDP	Real GDP per capita	Gleditsch (2002) via QOG dataset (Teorell, Holmberg and Rothstein, 2008)
Head of state irregular exit		Archigos dataset (Goemans, Gleditsch and Chiozza, 2009)
Distances		cshapes dataset (Weidmann, Kuse and Gleditsch, 2010)
Urbanization	% population urban	Vanhanen (2003) via QOG dataset (Teorell, Holmberg and Rothstein, 2008)
Population		Penn World Tables (Heston, Summers and Aten, 2006)
Country size		cshapes dataset (Weidmann, Kuse and Gleditsch, 2010)

Table 1: Data sources

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Estimation	Logit	Logit	Conditional (FE) logit	Logit	Logit	Conditional (FE) logit
DV: changes to...	Democracy	Democracy	Democracy	Polity	Polity	Polity
(Intercept)	-3.957 ***	-0.828		-2.058 ***	-0.735	
	(0.133)	(1.589)		(0.069)	(0.902)	
Nbr openness	-0.540 ***	-0.434 **	-0.739 **	-0.143 *	-0.062	0.000
	(0.127)	(0.156)	(0.236)	(0.064)	(0.079)	(0.118)
GDP		-0.102	-2.687 ***		-0.128	-1.069 ***
		(0.165)	(0.811)		(0.084)	(0.321)
Nbr GDP		-0.133	2.293 *		0.084	0.610
		(0.211)	(1.106)		(0.113)	(0.426)
Lag Democracy		-0.546	-0.332			
		(0.338)	(0.506)			
Nbr Polity		0.003	-0.028		0.019	-0.029
		(0.027)	(0.056)		(0.018)	(0.029)
Lag Polity					-0.020 †	-0.051 **
					(0.012)	(0.018)
Lag Polity^2					-0.017 ***	-0.019 ***
					(0.003)	(0.004)
N	4126	3555	1266	3436	2995	2585
# Countries	169	145	45	141	126	102
AIC	880.941	717.024		2464.114	2016.077	
BIC	931.542	1062.887		2513.250	2448.416	
$\log L$	-432.471	-302.512		-1224.057	-936.039	
Wald			110 on 13 df			105 on 17 df
			p = 0.000			p = 0.000
R^2			0.046 (Max 0.333)			0.039 (Max 0.578)

Clustered standard errors in parentheses

† significant at $p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$

Omitted: splines of time since last change to/from democracy (or increase/decrease in Polity), five-year dummies

Table 2: Logit regressions

	Model 1	Model 2	Model 3
Estimation	Logit	Logit	Conditional (FE) logit
DV	Large changes in Polity + leader irregular exit		
(Intercept)	-4.863 ***	1.682	
	(0.205)	(2.717)	
Nbr openness	-0.616 **	-0.344	-0.932 *
	(0.215)	(0.288)	(0.437)
GDP		-0.161	-2.663 *
		(0.270)	(1.286)
Nbr GDP		-0.377	1.814
		(0.346)	(1.217)
Nbr Polity		0.006	0.013
		(0.054)	(0.077)
Lag Polity		0.066 †	0.073
		(0.035)	(0.050)
Lag Polity^2		-0.009	-0.008
		(0.008)	(0.012)
N	4107	3006	644
# Countries	171	127	23
AIC	443.575	362.027	
BIC	494.139	794.629	
$\log L$	-213.788	-109.013	
Wald			469 on 17 df, p = 0.000
R^2			0.039 (Max 0.290)

Clustered standard errors in parentheses

† significant at $p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$

Omitted: splines of time since last shift to/from democracy, five-year dummies

Table 3: Logit regressions: large changes in Polity + irregular leadership exits

	Model 1		Model 2		Model 3	
Estimation	Logit		Logit		Conditional (FE) logit	
DV: changes...	... to democracy	... from democracy	... to democracy	... from democracy	... to democracy	... from democracy
(Intercept)	-3.799 ***		-2.963			
	(0.143)		(1.831)			
Lag Democracy	-0.608 *		7.364 *			21.443 **
	(0.253)		(3.603)			(7.022)
Nbr openness	-0.333 *	-1.102 ***	-0.334 †	-1.128 ***	-0.434	-1.578 **
	(0.137)	(0.211)	(0.183)	(0.314)	(0.519)	(0.510)
GDP			0.207	-1.175 ***	-0.736	-3.981 ***
			(0.224)	(0.289)	(0.867)	(1.105)
Nbr GDP			-0.282	0.357	2.815 †	3.518 *
			(0.241)	(0.551)	(1.565)	(1.663)
Nbr Polity			0.064 *	-0.071	0.173 *	-0.078
			(0.031)	(0.053)	(0.082)	(0.101)
N	4125		3555		1266	
# Countries	169		145		45	
AIC	878.228		689.706			
BIC	979.425		1282.613			
$\log L$	-423.114		-248.853			
Wald					184 on 23 df	
					p = 0.000	
R^2					0.099 (Max 0.333)	

Clustered standard errors in parentheses

† significant at $p < .10$; $^* p < .05$; $^{**} p < .01$; $^{***} p < .001$

Omitted: splines of time since last shift to/from democracy, five-year dummies

For Model 3, the estimation with cubic splines did not converge; quadratic splines were used instead

Table 4: Dynamic logits

	Model 1		Model 2	
DV: changes...	... to democracy	... from democracy	... to democracy	... from democracy
Lag Democracy		23.369 *		34.622 ***
		(9.367)		(8.967)
Nbr openness	-0.734	-1.531 **	-0.863	-2.585 **
	(0.703)	(0.498)	(0.563)	(0.871)
GDP	-1.211	-5.592 ***	-0.403	-4.403 ***
	(1.101)	(1.696)	(0.842)	(1.301)
Nbr GDP	2.591	3.899 †	3.409 *	3.448 *
	(2.417)	(2.236)	(1.452)	(1.538)
Nbr Polity	0.126 †	-0.255	0.121 *	-0.171
	(0.075)	(0.156)	(0.062)	(0.156)
Urbanization	0.075	0.137 **		
	(0.048)	(0.047)		
Log population			-2.829	-4.228 *
			(1.891)	(1.930)
Log size			-8.116 ***	-7.252 **
			(2.352)	(2.345)
N	909		1201	
# Countries	39		43	
Wald	482 on 23 df		488 on 27 df	
	p = 0.000		p = 0.000	
R^2	0.119 (Max 0.349)		0.112 (Max 0.340)	

Clustered standard errors in parentheses

† significant at $p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$

Omitted: splines of time since last shift to/from democracy, five-year dummies, continent/decade dummies (model 3).
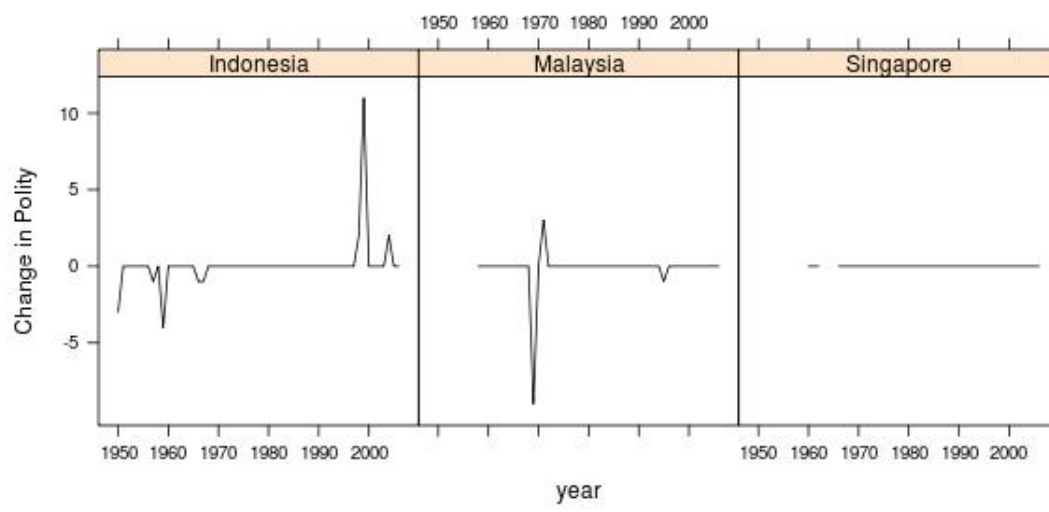
Table 5: Robustness

Figure 1: Yearly changes in Polity IV score for 3 Asian countries
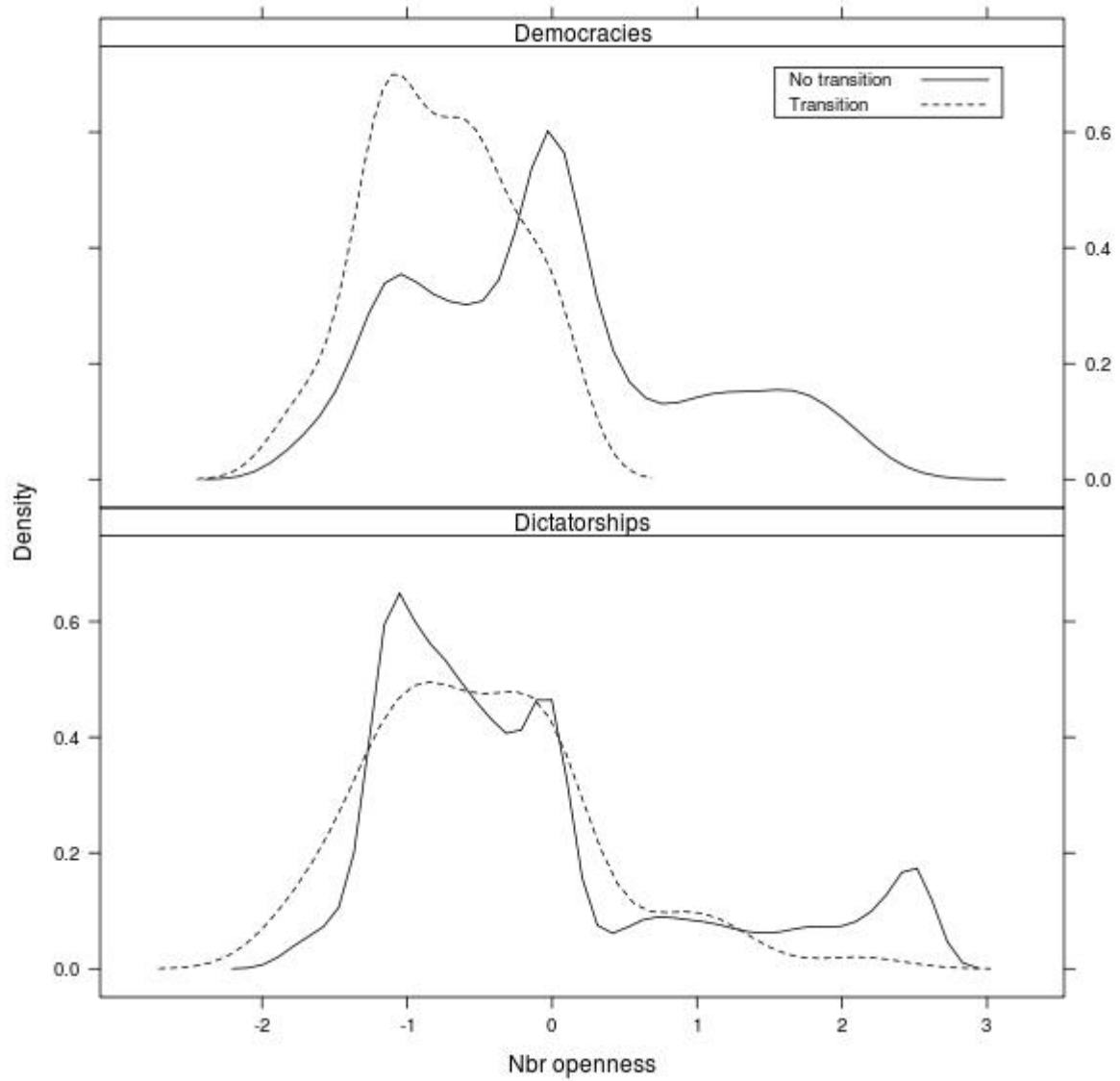
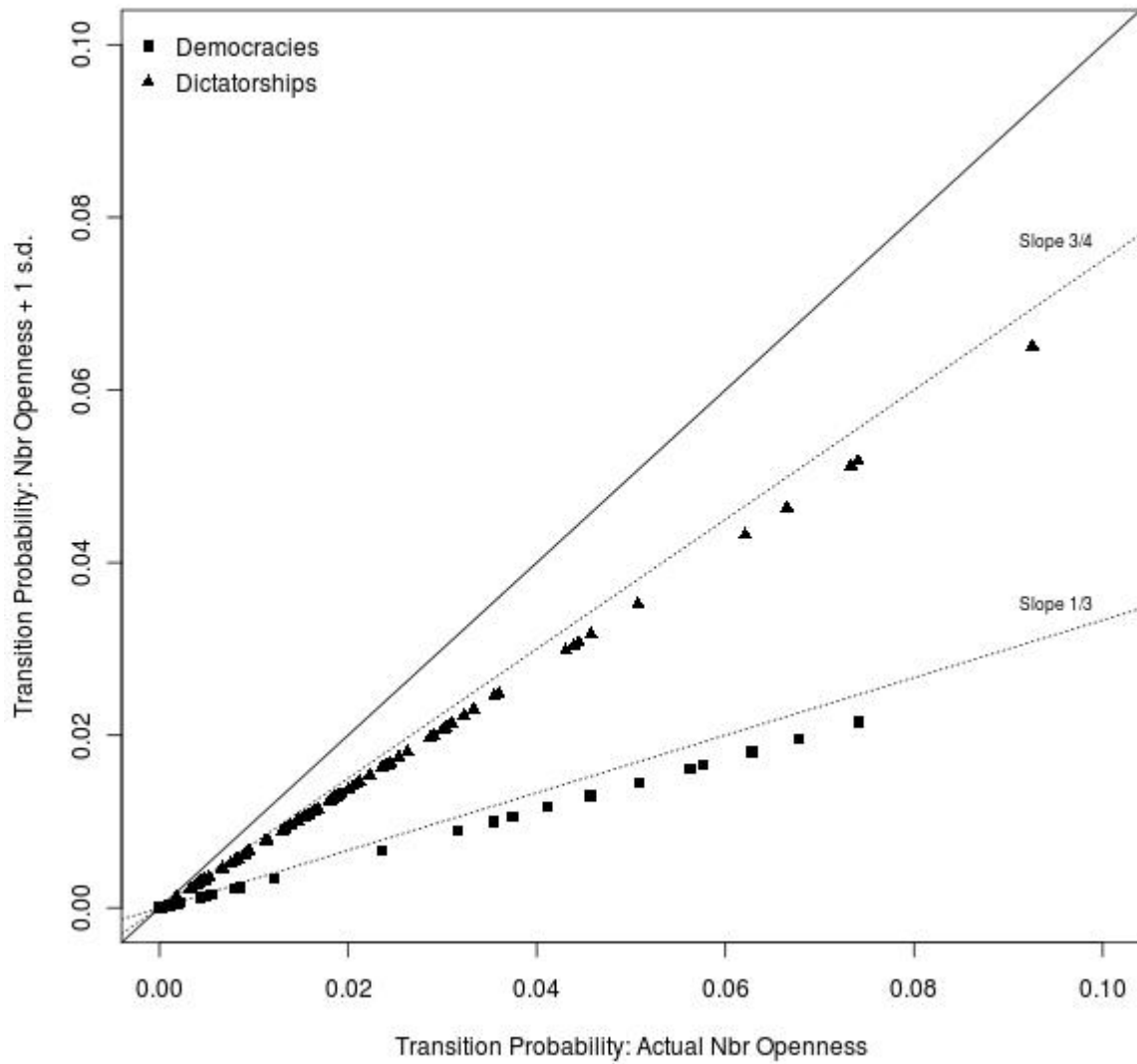Figure 2: Density plots of *Nbr Openness*

Figure 3: Predicted probabilities of a transition, year 2000 countries