

# The Regulation of Exit: Political Economy of Passport Costs

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## 1. Introduction

The freedom of international travel could be restricted not only by visa requirements of destination countries, but also by the costs of compliance with regulations of exit in the countries of origin, first and foremost of obtaining a passport for foreign travel. Such costs exhibit profound variations around the world – from a fraction of a per cent of the GDP per capita to over 100%, and have a strong impact on international migration flows (McKenize, 2007).

These variations can be explained, among other factors, by regulatory quality and government effectiveness – passport costs, alongside other administrative barriers, are lower in countries with more efficient governments, with modest regulatory burdens and competent public services. Government effectiveness in its turn is positively associated with governments' accountability to the society, and hence one should expect a negative correlation of passport costs with democratic performance. This however is not the case – while five out of six measures of institutional quality of the “Governance Matters” project (Kaufman, Kraay, Mastruzzi, 2010) exhibit, with appropriate controls, statistically significant negative associations with passport costs, no such association is found for the “Voice and accountability” index which measures the state of democracy. This exception is particularly puzzling, given that for other kinds of regulation, including the regulation of entry, regulatory burden is usually lighter in nations with higher democratic standards, such as checks and balances and political competition (Djankov et al., 2002).

We argue in this paper that an association between democracy and the regulation of exit still exists, but is non-linear and hence not captured by a conventional correlation analysis. For stronger democracies one can observe the usual negative association between regulatory burden and democratic quality – when bureaucracy becomes somewhat less accountable to the society, it starts abusing its regulatory powers to extract rent. However such association does not extend onto weak democracies and autocracies – over this range of political regimes the cost of passports flattens and even shows sign of declining when democratic quality drops from intermediate to low levels. Some countries with authoritarian forms of government protect the

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freedom of exit (by inter alia low passport costs), which is in stark contrast with most of other rights and freedoms that are curtailed.

We offer a theory of such inverted u-shaped association between democracy and the regulation of exit and show that this theory finds support in data. Unexpectedly low passport costs in poor democracies and autocracies are explained by the willingness of wealthy elites to maintain the freedom of exit as a political safety valve. No-hassle exit releases abroad population and labor who are dissatisfied with economic (and perhaps also political) conditions in their home countries; exit is thus offered to the disenfranchised masses as an alternative to suppressed voice. Although the freedom of exit comes at a cost to the ruling class, as it reduces the rent that would have been otherwise generated by excessive regulation of exit, and makes labor less captive, such losses are recouped by reduced political risks, safeguarding elite's assets, and preserving the status quo.

The rest of this abstract is organized as follows. In the next section we briefly discuss the political economy of regulation which is relevant to our case. In the section that follows a simple model is outlined that explains the possibility of reduced exit costs in imperfect democracies and autocracies. Our dataset is described in Section 4, and estimation results presented and discussed in Section 5. Section 6 concludes.

## **2. Political economy of the regulation of exit**

Passports are issued by national governments as proofs of identity and nationality of the bearer for the purposes of international travel. With a few exceptions passports are required to enter a foreign country, and often also to legally leave the country of origin. Passports are therefore necessary to exercise the freedom of movement which is proclaimed in many national constitutions and international covenants; in particular the Universal Declaration of Human Rights affirms the right to leave and return to one's own country.

Passports are means of regulation of international travel, and as any regulation, they are intended to prevent "market failures" such as false or mistaken identity, breach of contract, illegal trafficking, etc. Passport costs thus can be explained by the "public interest" theory (Pigou, 1938; see also Djankov et al., 2002), which treats regulation as a means of controlling negative externalities in the interests of society. In such case passport fees should not exceed the screening, processing, and production costs of issuing travel documents. Alternately regulation of exit could be abused as a means to create and extract rent in the interests of bureaucracy and the ruling class. In such case the rent can be captured in the form of inflated fees well above the legitimate costs (such surplus is essentially a tax on the exit), excessively onerous requirements

and procedures, long processing time and other obstacles which usually invite corruption as a means to expedite the process.

Whether a regulation serves public interests or is captured by the elites, usually depends on the state of democracy. Capture of regulation is a symptom of a lack of democratic accountability. When political institutions are not sufficiently inclusive, economic institutions are turned by the ruling class into means of rent-extraction (Acemoglu, Robinson, 2012). This can be illustrated by the regulation of entry (Djankov et al., 2002), when according to De Soto (2003), excessive red tape keeps valuable production assets de facto owned by the masses away from the formal sector. Masses are not able to put their assets into efficient use and hence suffer economic losses. These losses are partly captured by the rich who enjoy the economy of scale advantages in clearing the inflated regulatory barriers and get higher returns to their assets (Polishchuk, 2012). Such captured institutions are usually inefficient, being negative-sum games, since the transfer of wealth from the masses to the elites entails deadweight losses. In a similar vein elites could use inefficient institutions to manipulate in their favor factor prices and in particular to suppress the cost of labor (Acemoglu, 2006); notice that this can be accomplished inter alia by an excessive regulation of exit.

All of the above suggests that higher passport costs should be expected in less democratic countries, or, put differently, that democratic deficit should lead to stricter regulation of exit, as it is the case with the regulation of entry (Djankov et al., 2002). When society's control over the government weakens, bureaucrats can extract more rent from the regulation of exit, and in doing so have support of business elites who benefit from cheaper labor. However there are limits to the growth of barriers to exit even in the absence of democratic control. Bureaucrats, at least if they act in a consolidated fashion, would not push such barriers past the peak of the Laffer curve, whereas large asset owners would be concerned about political risks caused by impoverished population locked within national borders. If these risks escalate sufficiently steeply in relation to the economic benefits of cheaper labor, and/or if the elites' business interests do not require abundant cheap labor, the elites would prefer to limit further increase of the barriers to exit well before the rent extraction opportunities are exhausted. In such case interests of the elites and masses are aligned, and the elites use their clout to keep the cost of exit in check.

Most of the time elites and masses have divergent preferences over institutions and policies – elites prefer rent-extracting institutions, while the masses value inclusive ones (Acemoglu, Robinson, 2012). However in certain instances such conflict of interests is absent, e.g. when elite groups have a stake in economic growth (Djankov et al., 2002), need commitment to long-term investments in the presence of a hold-up problem (Acemoglu, 2006), or seek insurance against losing out in inter-elite competition (Lizzeri, Persco; 2004; Polishchuk, Syunyaev, 2013).

Regulation of entry is one such example – here, too, when masses lack political representation, elites could be acting in their interests, and the elites’ influence over institutions leads to socially (second-best) desirable outcomes.

### 3. A model

Consider an economy with a constant returns to scale production function  $Y = F(K, L)$ , where the function  $F$  meets standard “neoclassical” conditions. The economy is populated by a unit continuum of agents each of whom has a unit of labor and some amount of capital. The total stock of labor is hence equal one, and we assume that the total stock of capital is normalized to unity, too. Capital can be invested only domestically, while labor can seek employment at home or abroad. When all labor is employed domestically, the market-clearing wage is  $\underline{w} = F_L(1, 1)$ , whereas employment abroad earns a higher wage  $\bar{w}$ . The going wage  $w \in [\underline{w}, \bar{w}]$  equals  $w - \Delta$ , where  $\Delta \in [0, \bar{w} - \underline{w}]$  is the cost of clearing the regulation of exit.

The domestic employment  $L(w)$  with wage  $w$  satisfies the equation  $F_L(1, L(w)) = w$ ; the function  $L(w)$  is monotonically decreasing. Social welfare as a function of  $w$  is  $S(w) = F(1, L(w)) + w(1 - L(w))$ . One can easily check that  $S(w)$  monotonically increases in  $w$ , and the social optimum obtains when  $w = \bar{w}$ , i.e. when exit is costless.

Direct payoff of an agent with capital ownership  $k$  when the market wage is  $w$  equals  $w + kh(w)$ , where  $h(w) = F_K(1, L(w))$  is the rate of returns to capital. Notice that  $h'(w) = -L(w)$ . For agents with capital endowments below the average, i.e.  $k \leq 1$ , their payoff monotonically increases in  $w$ , and hence such agents prefer the socially optimal regulation of entry. At the same time sufficiently wealthy capital owners could be interested in higher exit barriers, as most of their earnings are in capital income which increases when wages are suppressed.

Lower wage  $w < \bar{w}$  with some exit barriers generates rent  $R(w) = (\bar{w} - w)(1 - L(w))$  which is appropriated by the government. The government chooses the cost of exit  $\Delta$ , or what is the same, the domestic wage  $w$ , from the following maximization problem

$$\max_{w \in [\underline{w}, \bar{w}]} R(w) + \alpha S(w), \quad (1)$$

where  $\alpha \geq 0$  is a measure of democratic accountability. This formulation assumes away for the time being any influence activities of interest groups.

For robust democracies with  $\alpha \geq 1$  the government chooses socially optimal regulation of exit  $\Delta = 0$ . When democratic quality falls below this threshold, barriers to exit pop up. One can easily check that over the range  $\alpha < 1$  the optimal solution of problem (1) monotonically declines in  $\alpha$  (and exit barriers increase) up to the level  $w^0$  (reached at the limit when  $\alpha \rightarrow +0$ )

which maximizes the rent and corresponds to the top point of the Laffer curve. This explains why the barriers to exit, as most of other regulatory barriers, could be rising when democracy gets weaker.

Initially wealthy capital owners share the interest of bureaucracy in tighter regulation of the exit, as the latter pushes up  $h(w)$ . Such gains however get progressively smaller since the function  $h(w)$  is convex. At the same time growing barriers to exit mount political risks caused by poverty and the double jeopardy of the masses which are denied voice *and* exit. Suppose that such risks reduce the (expected) payoff per unit of capital by  $g(w)$ , where the function  $g(\cdot)$  is monotonically decreasing, convex, and such that  $g(\bar{w}) = g'(\bar{w}) = 0$ . Notice that while the marginal gains to wealthy asset owners from lower wages decline, their marginal losses due to political risks become steeper, and hence the net gains of wealthy asset owners from the regulation of exit reach a peak beyond which further rise in exit barriers would hurt economic elites. Denote such peak  $w^* \equiv \arg \max_{w \in [\underline{w}, \bar{w}]} [h(w) - g(w)]$  and assume that the curve  $g(w)$  is sufficiently steep so that  $w^0 < w^* < \bar{w}$ ; additionally assume that the function  $h(w) - g(w)$  is single-peaked. Large capital assets owners don't want to see wages declining below  $w^*$ , and yet such decline should be expected at the low end of government accountability, more precisely, for  $\alpha < \alpha^* < 1$ , where  $\alpha = \alpha^*$  is the level of democratic accountability for which the solution of problem (1) is  $w = w^*$ .

To prevent losses due to political risks, wealthy elites need to lobby the government to make it refrain from raising excessive barriers to exit. Lobby formation involves a collective action problem, which is more likely to be solved by the elites than by the masses, since the former are much less numerous and have stronger stakes in influencing government policies (Olson, 1965). We employ a menu auction model of lobbying (Grossman, Helpman, 1994). Assume that wealthy capital owners that collectively hold the share  $\gamma \leq 1$  of the total capital stock have organized themselves into a lobby and offer the government a contribution  $C = C(w)$  which is contingent on government's policy  $w$ . Further assume that the lobby's contribution schedule is "truthful", i.e. of the form  $C(w) = \max[0, \gamma K_0 (h(w) - g(w)) - B]$ , where  $B$  is an appropriately chosen "anchor". Here  $\gamma K_0 (h(w) - g(w))$  is the lobby's aggregate payoff (for simplicity we ignore the relatively insignificant part of the payoff formed by the wages of lobby participants). The government's problem is now modified as follows:

$$\max_{w \in [\underline{w}, \bar{w}]} R(w) + \alpha S(w) + \gamma (h(w) - g(w)). \quad (2)$$

One can verify that the optimal solution of problem (2), if it is in the range  $w < w^*$ , monotonically increases in  $\gamma$ , so that an increase in the share owned by members of the lobby makes lobbyists more successful in preventing excessively high barriers to exit.

Share  $\gamma$  in its turn is inversely related to the level of government accountability  $\alpha$  (we still assume  $\alpha < \alpha^*$ ). Indeed, as democracy gets more dysfunctional, the unaccountable bureaucracy raises the barriers to exit further and further above what is optimal for the economic elites. If no business lobby is formed, exit barriers will keep rising to dangerously high levels, and the no-lobbying “default point” becomes less and less acceptable to the wealthy class. Growing political risks strengthen the elites’ incentive to resolve the collective action problem and by joint efforts avert the threat. An increase in  $\gamma$  in response to lower  $\alpha$  produces a counteracting effect of the democratic quality on the exit barriers, since the optimal solution of problem (2) now decreases in  $\alpha$  and increases in  $\gamma$ . If the second effect is stronger than the first one, a *decline* of the barriers to exit in response to a decline in democratic quality could be expected at the lower range of government accountability.

The above suggests that the association between democracy and barriers to exit could indeed be non-linear (more exactly, non-monotonic). Initially a decrease in the democratic quality leads to higher exit barriers, since the society cannot properly control its rent-seeking bureaucracy, and economic elites have no reasons to interfere. This upward trend however is reversed once business lobbies get involved, which leads to an inverted U-shaped curve.

Share  $\gamma$  in problem (2) should also be expected to increase in the concentration of capital ownership. Such association is based on two mechanisms. First, when a small group of agents controls a large share of capital assets, it is easier for group members to agree on a joint action in defense of their common interest. Second, high capital ownership by elite members raises their stakes in controlling political risks and hence makes participation in a collective action more likely. Hence in the range of poor democracies and autocracies higher economic inequality should be expected to pull down the barriers to exit.

Equilibrium barriers to exit are also affected by technologies. Suppose that the production function  $F$  depends, in addition to capital and labor, on a parameter, in which the productivity of labor is monotonically increasing. One can show that the barriers to exit in the range of poor democracies will also be monotonically increasing in such parameter. The intuition behind this result is clear: if labor becomes less valuable for the national economy, wealthy capital owners will be willing to release more of it abroad for the sake of preserving political stability. Notice that in the upper range of democratic quality where the barriers to exit are driven solely by the rent extraction motive, lower labor productivity in fact increases the opportunity for rent extraction and could thus lead to higher barriers.

Losses caused by political risks, in their turn, are higher when population is better educated – more educated individuals easier turn into “political men” (Lipset, 1960) and more likely to demand democratic reforms (Glaeser, Ponzetto, Shleifer, 2007). Level of education hence

pushes the costs of political risks up, and if the same is true about marginal costs, then the equilibrium wage in problem (2) will be higher. Hence in poor democracies education should be negatively associated with the barriers to exit.

The above analysis summarizes as follows. In the range of somewhat imperfect democracies ( $\alpha^* < \alpha < 1$ ) barriers to exit and democratic quality move in the opposite directions. Economic inequality and the level of education are not expected to have in this range a particular impact on the exit barriers.

In the range of poor democracies and autocracies ( $\alpha < \alpha^*$ ) the picture is qualitatively different. The association between democratic quality and the regulation of exit is not any longer clear-cut, since a decline of government accountability to the society brings about a countervailing force, i.e. more vigorous lobbying of economic elites. If the second effect is sufficiently powerful, then exit barriers could be declining as democracy gets progressively weaker. Furthermore in this range of political regimes exit barriers should be expected to be lower in countries with lower labor productivity, greater economic inequality (reflecting concentration of capital ownership) and more educated population.

We now bring these hypotheses to cross-country data.

#### **4. Data**

Our data on the costs of exit are from McKenzie (2007), where a dataset of passport costs in 127 countries around the world, collected by the World Bank in 2005, is presented and analyzed. The dataset contains official fees for issuing a passport. Obviously such fees are only a part of the total costs borne by the regulation of exit; other, perhaps more significant cost items, are time and expenses of the collection of necessary documents supporting a passport application, as well as time and efforts spent to implement steps and procedures necessary to obtain a passport. Last but not least, getting a passport, especially without a long wait time, could involve bribes which should also be counted as costs of the regulation of entry. Some countries impose additional regulatory or legal restrictions on exit (such as e.g. obtaining an “exit visa”), or charge exit fees payable by these countries’ nationals each time they go abroad. Ideally all these costs should be factored in, but the available data on cost components other than official passport fees is much more limited. Fortunately different measures of regulatory hurdles – fees, time, and the number of procedures – are strongly correlated with each other (Djankov et al., 2002), reflecting the government’s general stance on the regulation of exit, so cross-country variations of passport costs should be a good proxy of total exit costs variations.

According to McKenzie (2007), passport fees exhibit profound variations across the world, from zero to over \$300, so obviously in some countries governments subsidize or even completely cover production and processing costs, while in other countries they charge a markup, to tax those traveling abroad. Even more dramatic are the variations of passport fees per GDP per capita – from 0 to 125%.

To study the association between passport fees and political institutions, we measure the latter by the Polity IV index which characterizes a system of government in the scale from “fully institutionalized autocracy” to “fully institutionalized democracy”.<sup>3</sup> Our other explanatory and/or control variables are GDP per capita (from the World Development Indicators (WDI) dataset), share of population with secondary education (WDI), trade as a percentage of GDP (WDI), legal origin (La Porta, et al., 1997) and the Gini coefficient (United Nations Economic data). As in McKenzie (2007), we also use measures of governance from the “Governance matters” (Kaufmann et al., 2010) project as potential factors explaining the variation of passport costs. A summary statistics of our data is presented in Table 1.

Table 1. Summary statistics

	Mean	Std. Deviation	Min	Max	N
Passport costs, USD	49.6	44.0	0	333.6	127
Passport costs, % GNI per capita	4.9	13.9	0	125	127
Polity 4 index	0.66	0.32	0	1	163
GDP per capita, USD	17 502	12 832	912	52 435	127
Education, secondary %	89.02	21.12	27.41	149.29	127
Trade to GDP ratio	0.79	0.56	0.22	4.23	144
French legal origin	0.42	0.50	0.00	1.00	127
High skilled emigration, %	21.6	24.0	0.37	89.2	127
Gini coefficient	0.39	0.09	0.23	0.60	92
Voice & Accountability	0.19	0.93	-1.69	1.66	125
Political stability	0.06	0.94	-2.39	1.5	125
Government Effectiveness	0.23	0.97	-1.64	2.13	125
Regulatory quality	0.24	0.89	-1.81	1.85	125
Control of corruption	0.18	1.02	-1.52	2.33	125

<sup>3</sup> <http://www.systemicpeace.org/polity/polity4.htm>



## 5. Estimation results

Our main explanatory variable is the relative passport cost per GDP per capita (as in (Djankov et al., 2002), we normalize the absolute costs in relation to the GDP per capita to account for the discrepancy between wealthy and poor countries; McKenzie (2007) reports a statistically significant positive correlation between passport costs and GDP per capita).

In a regression of relative passport costs (per GDP per capita) on the Polity VI index with the above controls the measure of democracy comes out insignificant (similarly the Voice and Accountability index of the “Governance Matters” project is statistically unrelated to passport costs – see McKenzie, 2007). However significance at the 1% level immediately returns once the square of Polity IV is added, and the coefficient signs indeed indicate an inverted u-shaped relation (Column 1 of Table 2). Once we add log GDP per capita as a control (and later log GDP per capita squared – see Column 2), Polity IV coefficients get smaller and somewhat less significant, but keep their signs and at least 10% significance in all subsequent specifications when additional controls are added one-by-one (Columns 3-7). Furthermore the coefficients of interest remain robust to adding such controls.

Therefore data show that the passports costs indeed initially rise as the democratic quality goes down from “fully institutionalized democracies”, but then such upward trend is reversed, and further decline of democratic quality all the way to “fully institutionalized autocracies” is accompanied by declining passport costs (Figure 1). Therefore our conjecture of a non-linear association between democracy and passport costs is confirmed not just theoretically, but also empirically.

Table 2. Democracy and passport costs

	Dependent variable: <i>Log Passport costs, % GNI per capita</i>						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Polity4	8.376*** (1.159)	2.089* (1.203)	2.033* (1.077)	2.589** (1.164)	2.479** (1.053)	1.805* (1.042)	2.886** (1.331)
Polity4 squared	-8.566*** (0.975)	-2.259** (1.098)	-2.304** (0.983)	-2.836** (1.080)	-2.841*** (0.969)	-2.122** (0.951)	-3.312*** (1.220)
Log GDP per capita		-0.549*** (0.0682)	-3.197*** (0.514)	-3.102*** (0.532)	-3.349*** (0.500)	-3.147*** (0.496)	-3.439*** (0.611)
Log GDP per capita squared			0.153*** (0.0296)	0.157*** (0.0303)	0.166*** (0.0289)	0.152*** (0.0285)	0.172*** (0.0363)
Education, secondary %				-0.623* (0.346)			
Trade, % GDP					-0.267*** (0.0934)		
French legal origin						0.285*** (0.0962)	
Gini coefficient							-0.111 (0.675)
Constant	0.349 (0.284)	5.883*** (0.722)	17.13*** (2.264)	16.41*** (2.316)	17.68*** (2.198)	16.76*** (2.187)	17.84*** (2.553)
Observations	109	109	109	106	109	109	87
R-squared	0.548	0.721	0.778	0.791	0.794	0.795	0.781

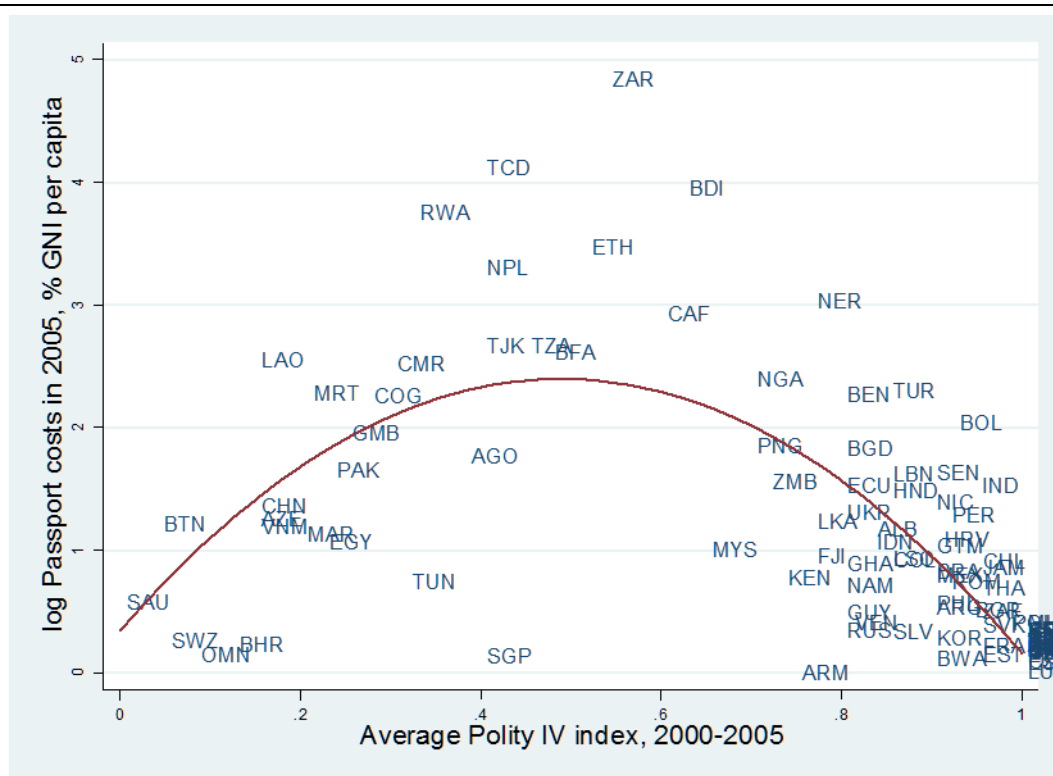


Figure 1. Rise and decline of passport costs

Control variables in the above regressions have the expected sign. After passport costs are normalized per GDP per capita, the coefficient of GDP per capita is still significant and *negative* – in wealthier countries passport costs are relatively lower (recall that according to MacKenzie (2007) absolute passport costs rise in income, but do so with elasticity less than unity). Passport costs are lower in more educated countries and in countries with more open economy. French legal origin pushes passport costs up (and hence affects the regulation of exit similarly to the regulation of entry – French legal origin countries are more heavily regulated overall (Djankov, et al., 2002)). Notice that for the full sample the Gini coefficient comes out insignificant.

According to the theory set forth in Section 3, passport costs are shaped by different forces and effects in more and less democratic countries. To test this empirically, we divide our sample in two sub-samples of stronger democracies and weak democracies and autocracies, and perform for each of them regressions of passport costs on explanatory and control variables. Estimation results are reported in Tables 3 and 4.

Table 3. Passport costs for stronger democracies

	Dependent variable: <i>Log Passport costs, % GNI per capita</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
Log GDP per capita	-0.348*** (0.0696)	-0.541*** (0.117)	-0.575*** (0.0840)	-0.438*** (0.0620)	-0.332*** (0.116)	-0.290*** (0.101)
Polity4	-5.093*** (1.536)					
Log Capital per worker		0.0208 (0.0893)				
Gini coefficient			-0.0510 (0.650)			
Education, secondary %				-0.305 (0.320)		
Government effectiveness					-0.183** (0.093)	
Regulatory quality						-0.223** (0.105)
Constant	8.879*** (1.142)	5.603*** (0.527)	6.165*** (0.984)	5.054*** (0.497)	3.849*** (1.054)	3.503*** (0.912)
Observations	45	42	46	62	61	61
R-squared	0.731	0.720	0.629	0.597	0.591	0.608

For stronger democracies the Polity IV coefficient is negative and significant at the 1% level; this corresponds to the descending branch of the curve presented on Figure 1. This is also consistent with our theory – a less accountable state finds more opportunities for rent extraction, but the remaining democratic accountability, albeit weekend, put limits to such attempts. The coefficients of the capital-to-labor ratio and economic inequality are very small and statistically insignificant. Education turns out insignificant for this group of countries as well. Finally, direct

measures of the quality of governance, such as government effectiveness and regulatory quality, have negative and significant coefficients, which is in agreement with McKenzie (2007).

Similar estimations for poor democracies and autocracies produce markedly different results. First of all, Polity IV coefficient turns positive (reflecting the ascending branch of the curve on Figure 1), and its significance falls below 10% (p-value equals 0.115). Both of these findings are consistent with the theory: in weak democracies rent extraction could go too far, and this triggers influence activities of wealthy elites which are opposed to excessively high entry barriers; the likelihood and force of such reaction both increase as the level of democracy keeps declining. However, in the presence of the opposite direct and indirect (through lobbying) effects the net impact of democratic quality on the barriers of exit is less pronounced.

Unlike stronger democracies, for the sub-sample of poor democracies economic inequality has an economically and statistically significant negative effect on passport costs. This confirms another prediction of the theory – higher concentration of wealth facilitates a collective action of economic elites to prevent excessive barriers to exit.

Table 4. Passport costs for weak democracies and autocracies

	Dependent variable: <i>Log Passport costs, % GNI per capita</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
Log GDP per capita	-0.763*** (0.0790)	-0.389** (0.169)	-0.606*** (0.108)	-0.532*** (0.134)	-0.626*** (0.112)	-0.578*** (0.110)
Polity4	0.922 (0.568)					
Log Capital per worker		-0.355** (0.143)				
Gini coefficient			-2.426* (1.315)			
Education, secondary %				-0.132** (0.0541)		
Government effectiveness					-0.344* (0.196)	
Regulatory quality						-0.481** (0.201)
Constant	8.167*** (0.678)	7.758*** (0.716)	7.486*** (0.978)	6.742*** (0.865)	6.550*** (0.982)	6.124*** (0.961)
Observations	64	51	46	61	64	64
R-squared	0.615	0.629	0.481	0.625	0.609	0.624

The impact of the capital-to-labor ratio on passport costs is also negative and statistically significant. Prevalence of capital over labor is a sign that labor is inessential for the economy, perhaps due to steeply declining labor productivity, and such technologies, in accordance with our theory, lead to lower exit barriers. This result should be interpreted with caution, since the capital-to-labor ratio could be shaped by various forces; furthermore a reverse causality is

possible, whereby lower exit barriers could increase the capital-to-labor ratio due to massive emigration of labor. Notice however that no such effect is observed for the sub-sample of stronger democracies, which lends some support to the political economy interpretation.

It is noteworthy that for poor democracies and autocracies education turns out statistically significant and reduces passport costs; recall that no such effect was observed for stringer democracies. As it was argued in the theory section, this can be explained by stronger propensity of more educated masses to resort to political protest in response to poor economic conditions, and hence stronger incentives for the elites to defuse voice by facilitating exit (especially since it is easier for educated individuals to seek employment abroad).

Finally, direct measures of the quality of governance remain significant for strong and weak democracies alike – efficient public administration lowers the costs of exit regardless of political regimes.

## **6. Concluding comments**

Acemoglu and Robinson (2012) argue that a lack of democracy leaves economic institutions in the hands of the elites, and the latter usually opt for rent-extracting, rather than inclusive, institutions. This dictum is clearly illustrated by the regulation of entry, but with the regulation of exit the picture is more complex, and in non-democracies economic elites could have the incentive to protect the freedom of exit. The difference can be explained by converging or diverging preferences of three groups of actors – masses, elites, and bureaucrats. In a non-democracy the state is not controlled by the masses, but could be influenced (indeed, captured) by the elites. In the case of regulation of entry both elites and bureaucrats are interested in higher entry barriers, albeit for different reasons – bureaucrats are driven by rent-extraction motive, whereas elites achieve better condition and less competition for their businesses. In the case of regulation of exit such affinity of interests has its limits, especially if the national economy is less labor-intensive (e.g. dominated by a resource sector), and denial of the masses of both voice and exit is fraught with serious political risks. In such cases the elites rationally prefer to keep exit unobstructed, and exercise to this end their influence over the state. Passport costs around the world clearly illustrate such outcome.

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