

CES PAPERS – OPEN FORUM
2014-2015

DICTATORS DON'T COMPETE: AUTOCRACY,
DEMOCRACY, AND TAX COMPETITION

AUTHORS: PHILIPP GENSCHER, HANNA
LIERSE, AND LAURA SEELKOPF



Minda de Gunzburg
CENTER FOR EUROPEAN STUDIES
HARVARD UNIVERSITY

THE MINDA DE GUNZBURG

CENTER FOR EUROPEAN STUDIES
AT HARVARD UNIVERSITY



OPEN FORUM CES PAPER SERIES

The open forum CES paper series is designed to present work in progress by current and former Center affiliates and papers presented at Center's seminars and conferences. Any opinions expressed in the papers are those of the authors, and not of CES.

Editors:

Grzegorz Ekiert and Andrew Martin

Editorial Board:

Philippe Aghion

Peter Hall

Roberto Foa

Alison Frank

Torben Iversen

Maya Jasanoff

Jytte Klausen

Michele Lamont

Mary Lewis

Michael Rosen

Vivien Schmidt

Kathleen Thelen

Daniel Ziblatt

Kathrin Zippel

AUTHORS

Philipp Genschel, Hanna Lierse, and Laura Seelkopf

BIOGRAPHY

Philipp Genschel holds a joint chair in European Public Policy at the Department of Social and Political Science and at the Schumann Centre for Advanced Studies, both at the European University Institute.

Hanna Lierse completed her PhD at the University of Hamburg in 2011. Since then she works as a postdoctoral fellow at the research centre on the transformation of the state located in Bremen.

Laura Seelkopf holds an MA degree from the University of Konstanz and a PhD from the University of Essex. Currently, she works as a postdoctoral research associate at the Center for Social Policy Research, University Bremen.

ABSTRACT

It pays to be a tax haven. Ireland has become rich that way. Why do not all countries follow the Irish example, cut their capital taxes and get wealthy? One reason is structural. As the economic standard model of tax competition explains, small countries gain from competitive tax cuts while large countries suffer. Yet not all small (large) countries have low (high) capital taxes. Why? The reason, we argue, is political. While the economic standard model implicitly assumes competing governments to be democratic, more than a third of countries world-wide are non-democratic. We explain theoretically why autocracies are less likely to adjust to competitive constraints and test our argument empirically against data on the corporate tax policy of 99 countries from 1999 to 2011. Our findings shed light on how domestic institutions and global markets interact in economic policy making.

Dictators Don't Compete: Autocracy, Democracy, and Tax Competition

1. Why are not all countries tax havens?

Tax havens are rich. On average, the GDP per capita of tax havens (i.e. countries, that make a sustained effort to attract mobile foreign capital by low or zero tax rates) is twice as high as that of non-tax havens (Dharmapala and Hines 2009, 1061). Why do not all countries cut their capital taxes and get wealthy?

Economic theory provides a partial answer. The economic baseline model of tax competition suggests that the incentives to compete vary with country size (Keen and Konrad 2012; Wilson 1999). Small states can gain from tax competition: Poaching foreign tax base is potentially welfare-enhancing for them. Large states, by contrast, lose in welfare terms. They are better off farming domestic tax resources. According to this logic, we should expect small countries to engage in aggressive tax competition but not large ones. Indeed, tax havens are generally small.

The largest country on most tax haven lists is Switzerland with a population size of 7.5 million (Dharmapala and Hines 2009, 1067). Yet, most countries are small. The global median country size is just 6 million, i.e. slightly smaller than Switzerland and considerably smaller than the global average size of 32 million (WorldBank 2013, data based on the year 2010). But not all small countries adopt low tax strategies. And not all large countries keep their capital taxes up even though economic theory predicts low international competitive pressure. Why? Why do not all countries adjust their capital taxation to international competitive constraints?

The answer, we argue, is politics. Governments' incentives to adjust to tax competition are conditioned by domestic institutions. Democratic governments are institutionally constrained to be sensitive to the welfare implications of their tax policies. Hence, they tend to cut taxes if their country is small enough to potentially profit from tax competition and tend to keep rates up (or cut them by less) if their country is large. Autocratic governments, by contrast, have fewer incentives to adjust to their competitive environment because their governments are less concerned about the general welfare of their populations and less able to lure in foreign capital by low taxes.

Our analysis, using panel data on the corporate tax rates of 99 countries over the period 1999-2011, contributes to the literature in three ways. First, it introduces regime differences into the economic literature on tax competition. As we explain theoretically and show empirically, democracies and autocracies react differently to tax competition. While democracies compete along the lines suggested by economic theory, autocracies do not. Democracies are susceptible to competitive pressure while autocracies are largely immune to it. Contrary to what is sometimes suggested in the economic literature (Edwards and Keen 1996), tax competition has little disciplining effect on corrupt and predatory regimes.

Second, our analysis adds nuance to the institutionalist literature in comparative political economy. It supports the basic claim that domestic institutions mediate between international constraints and national policy responses, but shows that same institutions do not always produce same effects. Institutional effects vary in countries' structural position in the international economy, and more particularly in country size: While democratic institutions translate the competitive constraints of global markets into strong downward pressure on capital taxes in small countries they insulate tax rates from competitive downward pressure in large countries. Ignoring the interaction effect between structural conditions (country size) and domestic institutions (regime type) leads to the systematic underestimation of both factors.

Finally, our analysis challenges key assumptions in the political science literature on globalization. Most of this literature takes for granted that international economic integration constrains the policy autonomy of national governments either by increasing economic risk and driving up voters' demand for social protection (so-called compensation thesis) and/or by triggering a competitive race to the bottom that undermines governments' ability to supply social protection (so-called efficiency thesis). We show that economic globalization can also have the reverse effect. It enhances national policy options – but only in small democracies. The effect of international capital mobility is more ambiguous than the globalization literature acknowledges. Ignoring this ambiguity leads to underestimating the effects of international market integration on domestic outcomes.

The rest of the paper is organized into four sections. The following section 2 reviews the economic baseline model of tax competition. It explains why country size matters for competitive incentives. Section 3 introduces domestic institutions. It explains why democratic governments are generally more responsive to competitive incentives than autocratic governments. Section 4 tests our argument against evidence on global corporate tax competition. Section 5 summarizes our findings and discusses theoretical and political implications.

2. The economics of tax competition

While the economic literature on tax competition is extensive (see Genschel and Schwarz 2011; Keen and Konrad 2012, for recent reviews), most of it starts from the same baseline model. In its simplest form, this model is about two identical countries sharing one internationally mobile tax base, capital (Wilson 1999; Zodrow and Mieszkowski 1986). The tax policies of both countries are interdependent because one country's capital tax revenue depends on the other country's capital tax rate: higher taxes in country A swell country B's revenues by pushing a

larger share of mobile capital towards B; lower taxes in A depress B's revenues by poaching capital from B. This interdependency triggers a 'race to the bottom' in taxation as each country tries to attract capital from the other. In equilibrium, capital tax rates are lower in both countries than they would otherwise be.

The normative implications of the baseline model are controversial (see Edwards and Keen 1996, for a summary). Some argue that the competitive race to the bottom undermines efficiency by constraining the ability of benevolent governments to supply optimal levels of tax-financed public goods (Wilson 1999; Zodrow and Mieszkowski 1986). Others insist that tax competition enhances efficiency by limiting the ability of predatory governments to over-tax domestic society (Brennan and Buchanan 1980; Weingast 1995). The causal logic of the baseline model is uncontroversial though. There is general consensus that governments of all stripes are forced to compete under conditions of economic integration.

The baseline model has been extended in various ways. Perhaps the most important extension concerns the influence of country size (Bucovetsky 1991; Kanbur and Keen 1993). In a symmetric setting of same-sized countries, the baseline model predicts that both countries face the same incentives to cut taxes and suffer equal welfare losses in the non-cooperative equilibrium. In an asymmetric setting, however, the smaller country faces stronger incentives to cut tax rates than the larger country and suffers a smaller welfare-loss in the competitive equilibrium. Indeed, if the difference in country size is large enough, the smaller country is better off under tax competition than in its absence. There is a structural "advantage of 'smallness'" (Wilson 1999, 288) in tax competition.

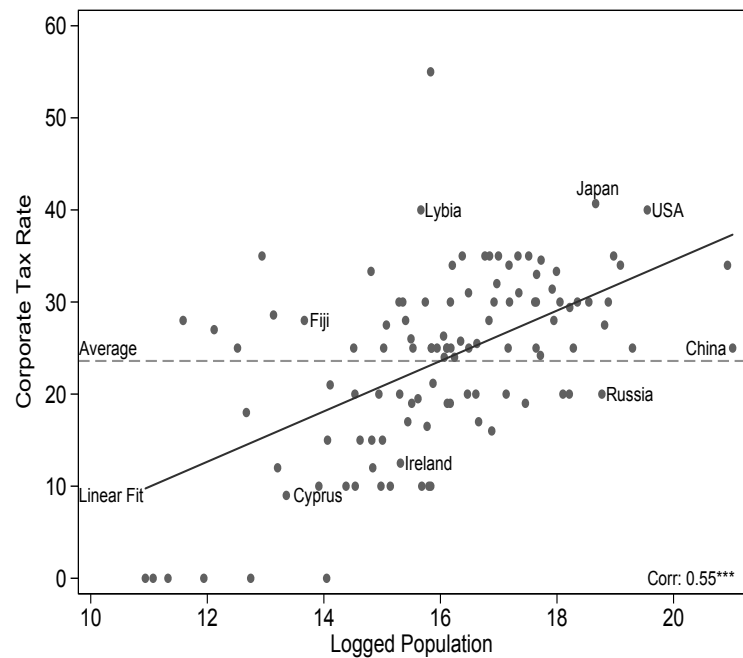
Why is small size a competitive advantage? Intuitively, in pondering capital tax cuts governments have to weigh the costs in terms of lost revenue from domestic capital against the benefits associated with capital inflows from the other country. In the small country with a narrow domestic capital tax base and lots of foreign

capital to attract, the cost-benefit ratio is more likely to be favorable than in the large country with lots of domestic capital to lose and little foreign capital to win. Slightly more formally, a tax cut in country A has two opposite effects. First, it increases the net (after-tax) rate of return on capital in A. This attracts mobile capital from country B. The capital inflow increases A's capital-labor ratio, and, by implication, depresses the gross (before-tax) rate of return on capital in A (because capital becomes more abundant relative to A's labor supply). Second, the outflow of capital to A decreases the capital-labor ratio in B. This pushes up the gross rate of return on capital (because the scarcity of capital increases relative to B's labor). In a symmetric setting, both effects contribute equally to the international equalization of the net rate of return: A's capital-labor ratio rises to the same extent as B's ratio falls. In an asymmetric setting, by contrast, the capital-labor ratio of the small country reacts more strongly to a change in tax rates than the ratio of the large country. Since the denominator (labor) is smaller than in the large country, a unit change in the numerator (capital) has a bigger influence on the ratio. Hence, the smaller it is the more country A benefits more from a tax cut (in terms of an improved capital-labor ratio) and the more it suffers more from a tax rise (in terms of a deteriorating capital-labor ratio) (Bucovetsky 1991; Keen and Konrad 2012, 6-8; Wilson 1999, 278-279).

In summary, the large country has less to win from a tax cut (and less to fear from a tax hike) because the cut triggers strong countervailing reactions in the rest of the world (i.e. in the small country). These reactions dampen the incentive effect of the cut (and the disincentive effect of the hike). The large country thus faces a less elastic capital supply than the small country and has less incentive to compete in tax cutting, all else equal. In the non-cooperative equilibrium, the small country undercuts the large country's tax rate and ends up with a disproportionately large share of the mobile capital tax base. This does not necessarily imply higher capital tax revenues (because the small country's capital tax rate is low and possibly close to

zero). But it pushes up the capital-labor ratio, fuels labor demand and thus leads to higher employment, higher wages and, eventually, to higher tax revenues from labor and consumption. In this way, not only capital profits from tax competition but labor as well – in the small country. The bill is paid by labor in the large country. It suffers twice from the tax-driven outflow of capital to the small country: first in terms of less tax financed redistribution from the reduced domestic capital stock and, second, in terms of depressed labor demand, employment levels and wages due to the fall of the capital-labor ratio.¹

Figure 1: Country size and corporate tax rate of 113 countries, 2011. Sources: KPMG (2007-2011) and World Bank (2013)



As a first empirical cut, figure 1 compares the corporate tax rates of 112 countries in 2010. The rates are significantly related to country size as the baseline model predicts: small countries like Cyprus and Ireland undercut the rates of large countries such as Japan, and the United States.² However, the correlation is far from perfect because some small countries such as Fiji and Libya have substantially higher rates than much larger countries such as China, and Russia. Why do not all countries follow the logic of the

baseline model? The answer we propose in the next section is politics: countries' reactions to tax competition are conditioned by domestic political institutions.

3. The politics of tax competition

Clearly, we are not the first to investigate the link between tax competition and domestic institutions. A large literature in comparative political economy has analyzed how domestic factors including the number and ideological range of veto players (Basinger and Hallerberg 2004; Ganghof 2006), the structure of electoral institutions (Hays 2003, 2009), the partisan composition of government (Garrett 1998; Garrett and Lange 1991), budget constraints (Ganghof 2000; Genschel 2002; Swank and Steinmo 2002), welfare regime (Campbell 2005), variety of capitalism (Swank 2013) or equity norms (Plümper, Troeger, and Winner 2009) shape national responses, slow down the international race-to-the-bottom, and allow for more capital taxation under conditions of tax competition than the baseline model would seem to suggest.

While this literature has proven extremely versatile and informative, it suffers from two important limitations. First, it is narrowly focused on advanced Western democracies (for exceptions see: Cao 2010; Li 2006). This is problematic because roughly a third of the countries of the world is not democratic (Geddes, Wright, and Frantz 2012, 26). As we will show, autocratic governments are generally less responsive to international tax competition than democracies. Second, even though the literature usually controls for country size, it ignores its nonlinear causal properties. This leads to flawed results because, as we will also show, the effect of domestic regime type on tax rate setting interacts with country size. While democratic institutions bias governments towards high capital taxes in large countries, they push governments towards low taxes in small countries. In this section we develop a model that improves on both limitations. The model builds on the economic baseline model but adds institutional variety in terms of

regime differences between autocracies and democracies. The model shows that democracies are generally more responsive to tax competition than autocracies.

The key difference between democracies and autocracies is in who has a say in government selection and policy making. Democracy is “government of the people, by the people, for the people” (Lincoln). Autocracy is government of the elite, by the elite, for the elite. Democratic regimes are “inclusive” (Acemoglu and Robinson 2012; Bueno de Mesquita et al. 2003). They ensure “open access” to the political process (North, Wallis, and Weingast 2009), “political equality” among citizens (Acemoglu and Robinson 2006), electoral accountability of the government (Przeworski 1991) and the rule of law (Weingast 1997). Nondemocratic institutions, in contrast, are exclusive. They restrict access to political decision making, institutionalize political inequality between incumbent elites and disenfranchised masses, and insulate the government from political checks and balances and legal constraints.

Why does the difference between democracy and autocracy matter for tax competition? Simplifying greatly, the literature suggests two potentially relevant effects. Some authors highlight the incentive effect of political regimes on the policy choices of government: democratic institutions incentivize governments to provide efficient, welfare-enhancing and inequality-reducing public goods to the general public, while autocratic institutions encourage wasteful and inequality-enhancing discrimination and rent-seeking on behalf of constituent elites (Acemoglu and Robinson 2006; Acemoglu and Robinson 2012; Bueno de Mesquita et al. 2003). Other scholars emphasize the constraining effect of political regimes on government discretion: democratic institutions restrict discretion by subjecting the government to electoral accountability, political checks and balances, and the rule of law; autocratic institutions enhance discretion by insulating the government from political and legal constraints. As a consequence, autocracies have more policy flexibility in the short-

run but democracies can more easily commit to long-term policy stability and property rights protection (Olson 1993; Przeworski 1991; Schultz and Weingast 2003). As we will argue next, both mechanisms, incentives and constraints, help explain why democracies are generally more willing and more able to adjust to international tax competition than autocracies.

3.1 The willingness to compete

Theories emphasizing the incentive effect of domestic regimes start from the assumption of office-seeking governments: Governments want office; they need political support in order to gain and maintain office; and they use their policy-making power to pay off their supporters (Acemoglu and Robinson 2006; Bueno de Mesquita et al. 2003). The policies they choose vary in the preferences and needs of the support groups on whom they depend for political survival.

Democracies depend on mass support because all citizens have a say in government selection and formation primarily through free and fair elections but also through the freedom of expression and the freedom of association. The dependence on mass support forces democratic governments to target their policies at the interests of a broad majority of citizens as represented, under a range of plausible assumptions, by the median voter (Meltzer and Richard 1981). The median voter is typically poorer than the national average, and relies mostly on wage income (Rudra and Haggard 2005, 1018). Her interests are often best served by efficient policies that increase mass incomes before taxes and by broad-based redistributive programs that increase mass incomes after taxes and transfers.

Autocracies depend on minority support because only a select few have a say in government formation such as, for instance, the members of the royal family, military officers, bureaucratic elites, or domestic business elites. All other citizens are formally or factually excluded from politics because there are no elections as in Saudi Arabia, because voting rights are restricted as in Apartheid South Africa, because elections are

rigged as in Tajikistan, or because opposition groups are repressed as in Qatar. Hence, short of the threat of a general revolution, the survival of autocratic governments depends on their ability to serve the special interests of their constituent elites. The elites are typically richer than the majority. They often rely on domestic capital income as, for instance, the Russian oligarchs, or enjoy privileged access to public rent-income as managers of state owned-enterprises (China), as members of the security forces (Fiji), as public bureaucrats (Singapore) or as members of privileged ethnic groups or religious sects (Syria). The best way to serve the interests of the elites is often by targeted discrimination and redistribution in their favor.

The implications for tax competition are straight forward: democratic governments have an incentive for competitive tax cutting if this benefits the majority, i.e. the median voter; autocratic governments have an incentive to compete if this benefits their elite supporters.

Consider democracies first. According to the baseline model the welfare effects of tax competition vary with country size. In small democracies, the median voter gains because the disadvantage of competitive constraints on fiscal redistribution from domestic capital is more than compensated by the positive effects of tax-induced capital inflows: higher employment, higher wages, buoyant tax revenues. This creates an incentive for governments to cut capital taxes that often dominates ideological preferences for high capital taxation. The Irish Labour Party, for instance, has been a staunch supporter of low Irish corporate tax rates since the onset of the European Single Market in 1993: “Labour in government introduced the 12.5 percent corporation profits tax rate, and we will insist that it remains in place” (Labour 2011, 15). In the same vein, Denmark’s social-democratic government promotes cutting the Danish corporate tax rate well below the level of neighboring countries as part of its 2013 “Growth Plan DK” (Bomsdorf 2013). Rhetoric aside, this is the same strategy, Paraguay’s conservative President Nicanor Duarte used in 2004 to give his country a competitive edge (NOTIMEX 2004) or that

Austria's right-wing coalition, supported by the social democratic opposition, used in 2005 to gain an advantage over its large neighbor Germany (Format 2003). In *large* democracies, the median voter loses from tax competition because the negative effect of less redistribution from a shrinking domestic capital tax base is compounded by the economic disadvantages of capital outflows: depressed labor demand, stagnating wages, shrinking revenues. These negative effects create an incentive for governments to go slow on tax competition and restrict capital tax cuts. Tellingly, all initiatives to reign in "harmful" tax competition in Europe and worldwide have come from large countries such as Germany, France, the UK and most importantly the United States (Genschel and Schwarz 2011, 359-363). Also, the left-right divide on corporate tax issues is often more pronounced than in small democracies. Think, for instance, of Francois Hollande's bid during the French Presidential elections 2012 to shift the tax burden from small business to large corporations (Hollande 2012, Point 6 of Hollande's presidential program). Another example is the decision of Mexico's left-leaning government in 2013 to suspend the mild corporate tax cuts adopted by its conservative predecessor and to increase other capital taxes to consolidate the budget (Day 2013).

The reactions of autocratic governments to tax competition depend on the ruling elites' preference for capital inflows. These preferences are not systematically related to country size. Small autocracies will exploit their structural advantage of smallness if this serves the interests of their rulers, as arguably in Singapore where the government relies heavily on foreign capital and multinational corporations to gain autonomy from domestic society (Khondker 2008; Verweij and Pelizzo 2009). But autocracies will ignore the advantage of smallness, if capital inflows are politically irrelevant or detrimental for the government. Military dictatorships, for instance, are often more concerned about short-term increases of the defense budget than about long-term growth prospects: the first priority of Fiji's military regime upon usurping power in 2006 was a 39 percent pay rise

for the armed forces, not tax-induced capital inflows (Narsey 2012). Small autocracies may also want to keep capital taxes high because they lack mass loyalty and therefore depend on easily administered tax handles like the corporate tax (Winer and Kenny 2006, 187) or because high tax rates are a handy instrument to reward loyal supporters through selective tax exemptions (Dharmapala and Hines 2009, 1063).

Likewise, large autocracies lack systematic incentives to keep their capital taxes up. Russia, Kazakhstan, and China are examples of large autocracies with corporate tax rates substantially below what the baseline model would seem to suggest. In summary, democratic majorities are more sensitive to the broad welfare implications of tax competition than the minorities on which autocratic governments rely for political support. As a consequence, democratic governments are generally more willing to adjust to tax competition than autocracies. As we will argue next, they are also more able to adjust.

3.2 The ability to compete

Theories emphasizing the constraining effect of domestic regimes on government discretion start from the assumption of risk-averse capital. Capital owners will only invest if they have credible guarantees against future expropriation including indirectly through tax hikes, corruption or embezzlement. While governments have an incentive to promise investment-friendly policies *ex ante*, the credibility of these promises varies in the institutional constraints on governments' ability to renege on them *ex post*. Two types of constraint are particularly important: the rule of law and constitutional constraints including electoral accountability and political checks and balances (Keohane, Macedo, and Moravcsik 2009; North, Wallis, and Weingast 2009; Olson 1993; Schultz and Weingast 2003).

The rule of law provides insurance against the arbitrary violation of property rights by the government or by third parties. It is an integral element of de-

mocracy because respect for the law, an independent judiciary, and an effective court system are essential not only for property rights protection but also for safeguarding the constitutive openness and inclusiveness of the democratic system (Li 2006, 64; North, Wallis, and Weingast 2009, 26; Olson 1993, 571; Przeworski 1991, 14). The rule of law prevents incumbent governments from dodging elections, from manipulating electoral institutions, or from repressing the opposition through selective infringements of individual and collective rights including property rights. The rule of law is inherently in tension with autocracy because autocracy implies that different rules apply to the government and the governed. While various autocracies including Imperial Germany in the 19th century or contemporary Singapore have achieved high levels of property rights protection, the credibility of legal guarantees is generally lower than in stable democracies because ultimately the law remains at the discretion of the government (e.g. North, Wallis, and Weingast 2009, 75).

While the rule of law restricts the means for expropriating private property to legal instruments such as taxation, constitutional constraints restrict governments' use of such instruments. Electoral accountability in future elections constrains governments' ability to renege on popular policies in the present (Alesina 1988). At the same time, institutional separations of power (federal structures, bicameral legislatures, coalition agreements, constitutional courts etc.) force the government to accommodate various veto players in the policy process. This makes policy change difficult in general (Mattes and Rodríguez 2013, 3), and makes wasteful and unpopular policy change difficult in particular. For policy proposals that do not appeal to a broad range of interests are particularly likely to be blocked by veto players. Of course, democratic governments can still renege on their promises – but only if the breach of promise enjoys broad political support.

Autocracies lack political checks and balances. While the government is politically accountable to

its supporters, this fails to ensure long-term policy predictability because the range of supporters may change. The government may be toppled by a competitor relying on a different support coalition or decide to reshuffle its own. In either way, the change can be radical and abrupt (Olson 1993). Just think of the rapid disempowerment of the Russian Oligarchs under Putin (Appel 2008).

The constraining effects of political regimes matter for international tax competition because tax competition involves risky investments: direct investments in location-specific production facilities in low tax countries; direct investments in management and service operations (holding companies, headquarter services, sales centers, financial services companies) that serve as receiving ends of international profit-shifting into low-tax countries;³ portfolio investments that investors conceal from tax authorities at home and therefore cannot easily repatriate.⁴

Given the risky investments involved, democracies enjoy a general advantage in tax competition. The rule of law ensures tax-driven investors against tax policy abuses such as Russia's arbitrary use of tax evasion charges for undercutting BP's grip on Russian oil companies (Belton 2008). Even capricious dictators usually prefer keeping their loot in sober democracies like Switzerland to entrusting it to another capricious dictator. Given their rule of law credentials, democracies can attract (or retain) more capital at any given tax rate than autocracies (Dharmapala and Hines 2009, 1065): they pull in more capital at low rates, and lose less capital at high rates. Autocracies have to offer more in terms of tax concession in order to achieve the same effect in terms of capital investments (Jensen 2003; Li 2006).

The effect of constitutional constraints is more ambiguous. On the one hand, electoral accountability and political checks and balances increase the credibility of low tax guarantees in small democracies. Their inbuilt bias towards centrist policies favors tax cuts over tax hikes because, according to the base-

line model, the majority in a small country gains from low and suffers from high capital taxes. This makes a reversal of low tax policies unlikely. Not by accident, the corporate tax is the only major tax the Irish government never considered raising during the recent fiscal crisis. On the other hand, constitutional constraints reduce the credibility of low-tax guarantees in large democracies. Given the unfavorable effects of low capital tax rates on the median voter, the inbuilt bias towards centrist policies facilitates tax raises. Tellingly, the only country in the OECD that had a higher corporate tax rate in 2013 than twenty years earlier in 1993 is large: France.

Given the lack of constitutional constraints, the tax policies of autocratic regimes are generally less predictable and more susceptible to abrupt change than in democracies. Fiji's 5000 percent tax hike on foreign water producers in 2013 is a graphic example (Lester 2010). Promises of low capital taxation are less credible than in (small) democracies.

In summary, there is a "democratic advantage" (Schultz and Weingast 2003) in tax competition. On the one hand, the rule of law enables democracies to attract or retain more capital at any given tax rate than autocracies. On the other hand, constitutional constraints ensure the long term stability and predictability of tax policies in general and add credibility to promises of low capital taxation in small democracies in particular.

3.3 Empirical implications

According to our model, tax competition induces democracies but not autocracies to follow the logic of the economic baseline model. Autocracies are less willing to adjust to competitive constraints because the low inclusiveness of their political institutions makes them largely insensitive to the welfare penalties of non-adjustments. Also, autocracies are less able to adjust because the relative lack of rule of law guarantees and constitutional constraints undermines the credibility of long-term policy commitments and lessens the supply of tax-

sensitive international capital at any given tax rate. The empirical implications of the model are straightforward. First, we should observe that democracies align their capital tax rates to country size: small democracies have systematically lower rates than large democracies (in line with the economic baseline model). Second, tax rates in autocracies should be unresponsive to country size: small autocracies should not have systematically lower rates than large autocracies (in contrast to the baseline model)

Third, the responsiveness of intermediate regimes in between pure democracy and pure autocracy varies in the relative inclusiveness and openness of their political institutions: the tax rates of more inclusive and constitutionally constrained regimes should be more responsive to differences in country size than the rates of less inclusive and constrained regimes.

4. Evidence: corporate tax competition with differences in regime type

In this section, we test our model against data on corporate tax rates in 99 countries, 1999 to 2011. The findings support the theory: the more democratic (autocratic) countries are, the stronger (weaker) is the association between corporate tax rate and country size. Small democracies systematically undercut the taxes of large democracies, but small autocracies do not have significantly lower tax rates than large autocracies. We first introduce our variables and estimation strategy (4.1), then turn to the regression analysis (4.2), and finally discuss the robustness of our findings (4.3).

4.1. Research Design

Dependent Variable

Our dependent variable is the statutory corporate tax rate. While governments have various instruments of capital taxation, the corporate tax rate is arguably the most important. On the one hand, the corporate tax is a main revenue raiser in its own right and a crucial backstop to the revenue raising capacity of personal taxes on income and wealth⁶. To "many voters the corporation tax is a linchpin of any progres-

sive tax system” (Slemrod 2004, 1172). On the other hand, the statutory rate is an important determinant of the effective corporate tax burden⁷, and the single most powerful tax incentive for cross-border FDI and profit-shiftings. While other variables including the corporate tax base and the tax system also matter, big accounting firms such as KPMG or PricewaterhouseCoopers focus on the statutory corporate tax rate when comparing the business-friendliness of national tax systems (e.g. KPMG 2007-2011; PWC 2013-2014).

We checked five data sources on corporate tax rates: the OECD tax database (OECD 2013), the KPMG corporate tax survey (KPMG 2007-2011), the World Tax Database (Ross), the (IMF 2013) and World Development Indicators (Cao 2010). The OECD data is the most detailed and sophisticated but is limited to OECD member states⁹. We used it as a benchmark for checking the reliability of the other sources. The KPMG data correlates almost perfectly (0.98) with the OECD (2013) data, whereas the other three sources correlate below 0.75. We thus choose the interpolated KPMG corporate tax rate as our dependent variable.

A more comprehensive analysis would also include so-called special corporate tax regimes, i.e. selective tax reductions for specific corporate forms, functions, and investments. Arguably, special tax regimes constitute a powerful alternative to low corporate tax rates in the competition for foreign companies and profits (Keen 2001; Kemmerling and Seils 2009). Yet comparative time series data on special tax regimes is not available. We use Li’s cross-sectional data set on selective incentives in 53 developing countries to triangulate our results. We find that autocracies generally provide more incentives than democracies (Li 2006). But we find no relationship between the number of incentives and country size (see Figure A2 in appendix). Hence, if small autocracies have higher statutory corporate tax rates than small democracies, as our model predicts, this is not because they compete by other means (i.e. by incentives rather than

rates). We are confident, therefore, that the omission of special tax regimes does not bias our results.

Independent Variables

The most common indicator of country size is population because the size of the population reflects the size of a country’s labor endowment (e.g. Bucovetsky 1991). Since arguably the effect of national labor endowments on corporate taxation is subject to diminishing returns, we follow the standard practice in the literature and use the natural logarithm of population as our measure of country size (Dharmapala and Hines 2009). The data is from the World Bank (2013). A possible objection to the population size measure is that it systematically overrates the size of population-rich but capital-poor countries such as India or China.

The most common indicator of regime type stems from the Polity IV project (Marshall, Jaggers, and Gurr 2011). Rather than treating democracy and autocracy as a binary distinction, Polity conceptualizes it as a gradual scale ranging from purely democratic to purely nondemocratic and purely autocratic to purely non-autocratic regimes. Country scores on this scale reflect the inclusiveness of selection institutions and the constraints they impose on executives. We convert the Polity scale to exclusively positive values running from zero (fully autocratic) to 20 (fully democratic). We use the polity2 score, which interpolates transition periods, treats interregnum periods as neutral (10) and codes foreign interruptions as missing cases.

Unfortunately, Polity excludes micro-countries with populations of 500 000 inhabitants or less. Yet, if this exclusion should bias our results at all, the bias is downwards i.e. against our expectations because it excludes many notorious low tax havens such as the Cayman Islands (54 000 inhabitants) or Liechtenstein (37 000 inhabitants). Hence, Polity provides a hard test for our argument. Yet, as a robustness check, we use two alternative measures of regime type that include smaller states: the “voice and accountability” variable from the World Bank’s good governance indicators (Kaufmann,

Kraay, and Mastruzzi 2012) and Freedom House’s political rights variable (FreedomHouse 2013).

Controls

In our robustness checks, we enter a number of control variables that previous studies identified as potential determinants of corporate tax rates. First, we include the Chinn-Ito-Index (2008) of capital account openness as more open economies are likely to be more susceptible to international tax competition: countries with fewer barriers should have lower corporate tax rates. Second, we bring in a yearly lag of the row-standardized distance-weighted spatial lag of the corporate tax rate as the competition for inward investment is likely to be more intense among neighboring than among distant countries. Third, we control for GDP per capita because wealthy countries tend to have higher taxes and a more effective tax administration (WorldBank 2013). Fourth, we enter health care spending as a percentage of GDP and GDP growth as indicators of expenditure requirements and revenue buoyancy (WorldBank 2013). Fifth, we include the share of agriculture in national accounts as a proxy for the monetization and, hence, taxability of the economy (WorldBank 2013), and the share of tax revenues in total government revenues (IMF 2013) as a control for the availability of non-tax sources of revenue for instance from resource extraction (Burgess and Stern 1993; Tanzi and Zee 2000). Finally, we include two institutional variables – investor protection (WorldBank 2013) and regime durability (Marshall, Jaggers, and Gurr 2011) – that could potentially influence corporate tax rates independently of the political regime type.

We test our argument by a random effects GLS model with splines to control for the temporal downwards trend in corporate taxation. As a robustness check we run an AR1 model to account for temporal dependence. Given our interest in the effects of two slowly changing variables (country size and regime type), our main model neither includes fixed effects nor first differences. Yet, even taking out the averages by in-

does not change our main findings. The model is very robust to different specification and measurements.

4.2. Findings

Table 1 shows the regression results for four different model specifications.

Table 1: The Effect of Country Size and Regime Type on Corporate Tax Rates

	(1)	(2)	(3)	(4)
	No Interaction	Main Model	Fixed Effects	AR1
Country size	2.21*** (0.44)	-0.26 (0.66)	0.14 (1.87)	0.56 (0.70)
Regime Type	0.067 (0.071)	-2.98*** (0.62)	-3.35*** (0.84)	-1.77*** (0.68)
Interaction		0.18*** (0.037)	0.21*** (0.049)	0.100** (0.040)
Observations	1,166	1,166	1,166	1,166
Countries	99	99	99	99
R2	0.24	0.25	0.24	0.17

Standard errors in parentheses. Constant and splines not reported.

*** p<0.01, ** p<0.05, * p<0.1

The first model estimates the additive effect of country size (i.e. population size) and regime type (i.e. polity score) on corporate tax rates. The findings support the economic baseline model: larger countries have higher corporate tax rates. Regime type, by contrast, does not seem to matter for taxes. The picture changes, once we include the interaction effect of country size and regime type in the main model (2): regime type becomes significant and changes signs, while country size does the opposite. The interaction effect on tax rates is positive and significant. Since the interaction effect is difficult to interpret by coefficients alone, we graph it in figure 2.

Figure 2: Conditional Effect of Regime Type on the Corporate Tax Rate depending on Country Size

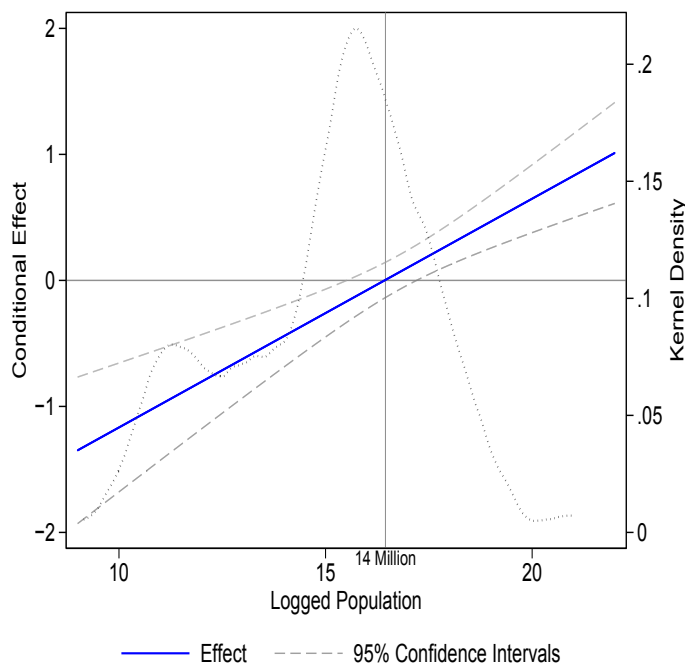


Figure 2 plots the marginal effect of a change in regime type (i.e. a one-point change on the Polity scale toward more democracy) on the corporate tax rate for all relevant country sizes. It shows that the sign and the magnitude of the effect crucially depend on country size. The effect switches signs at a population of around 14 million, i.e. a country roughly the size of the Netherlands. The smaller a country is from this point downwards, the stronger becomes the negative effect of regime type, i.e. the lower is the corporate tax rate as countries become more democratic¹⁰. The opposite applies to countries

larger than 14 million. Here, the larger and the more democratic a country is, the higher is the corporate tax rate. The conclusion is in line with our model: democracies react more strongly to tax competition than autocracies at both, small and large, country sizes. Figure 3 further illustrates this finding.

Figure 3: Predicted Corporate Tax Rates for Small and Large Autocracies and Democracies, holding all other Variables at their Mean

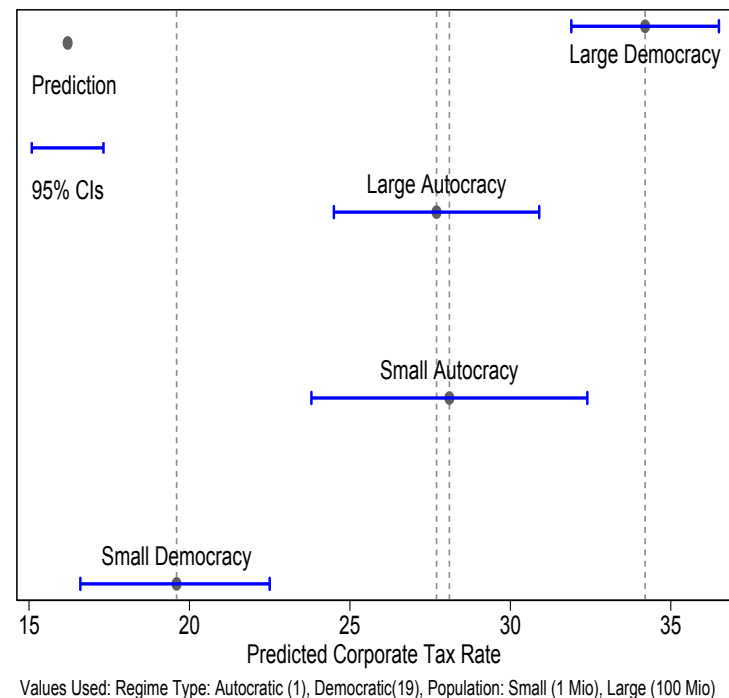


Figure 3 compares the predicted corporate tax rates of four hypothetical countries. The small democracy (1 million of population, Polity score of 19) has the lowest and the large democracy (100 million of population) has the highest predicted rate. The rate difference is large and significant. The predicted rates of the small and the large autocracy (1 million and 100 million of population respectively, Polity Score of 1) are in between both extremes, i.e. significantly higher than those of the small democracy and considerably lower than those of the large democracy. Yet they hardly differ from each other. Conclusion: Democracies are responsive to the structural constraint of country size, autocracies are not.

Figure 3 focuses on cases of pure democracy and pure autocracy¹². But, pure autocracies are empirically

rare. Only 11 countries in our sample of 99 countries were full autocracies (Polity Scores of 5 or lower) in 2010. All other non-democratic countries were intermediate regimes with moderate Polity Scores (5 to 15). What do our regression results say about their responsiveness to competitive constraints?

Figure 4: Conditional Effect of Country Size on the Corporate Tax Rate depending on Regime Type

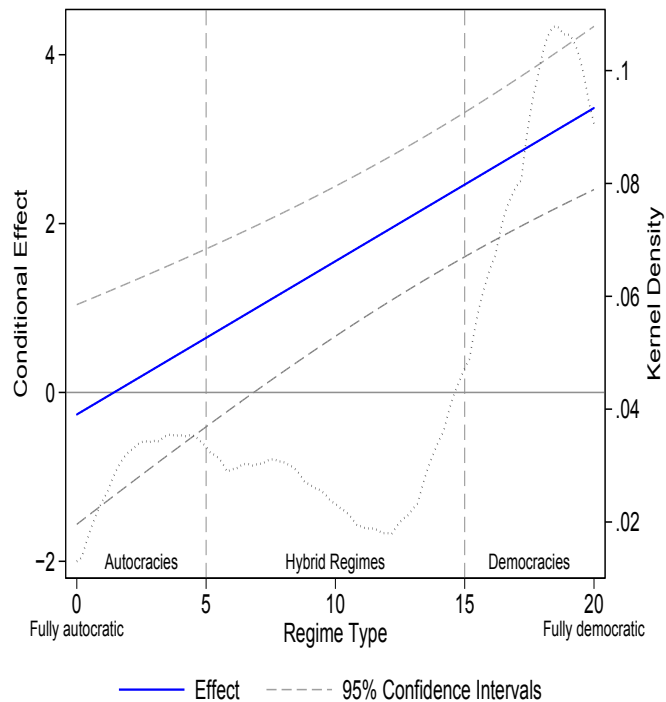
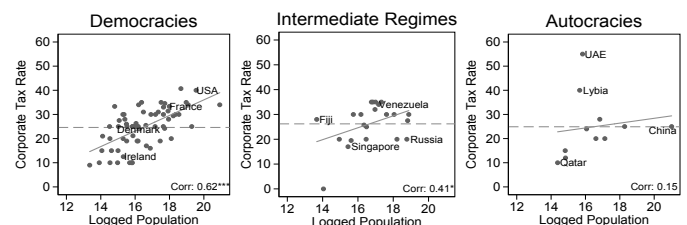


Figure 4 graphs the marginal effect of country size on corporate tax rates for different regime types. As before, country size has no significant effect on corporate tax rates in autocracies (Polity Score of 5 or less) but a strong and significant positive effect on tax rates in democracies (Polity Score of 15 or more). Yet, country size also has a significant effect on intermediate regimes with Polity Scores larger than 7. While non-democratic regimes are, on average, less able and willing to adjust to tax competition than democracies, most intermediate regimes do adjust to some degree. Singapore is a prominent, if rather singular, example of an authoritarian country successfully competing as a low tax haven for multinational companies (KMPG 2011).

4.3 Robustness

Our regression results suggest that a country's propensity to adjust its tax rate to its country size increases steadily as the country moves from autocratic to more democratic. This is a striking result given widespread concerns about a possible curvilinear relationship between regime type and public welfare. There is an important body of research arguing that intermediate regimes in between pure autocracy and democracy are more susceptible to government irresponsibility and policy mayhem than pure autocracies. Some authors find, for instance, that intermediate regimes are more conflict-prone than either pure autocracies or pure democracies (Fearon and Laitin 2003, 85; Hegre et al. 2001; Mansfield and Snyder 2005, 273). Others claim that intermediate regimes are more conducive to predatory government than pure autocracies (Buena de Mesquita et al. 2003, 68; Zakaria 2003, 15). In this perspective, we should expect intermediate regimes to be less responsive to international tax competition than autocracies, not more. Is our finding of a linear regime effect a methodological artefact? To investigate this question we separate our sample into three subsamples (full autocracies, full democracies, and intermediate regimes) using the usual cut-off points on the Polity scale ¹³. Figure 5 plots corporate tax rates against country size separately for each sub sample.

Figure 5: Country size and corporate tax rates in 99 countries by regime type, 2010. Sources: KPMG (2007-2011), World Bank (2013), and Marshall et al. (2011)



The picture that emerges from figure 5 is compatible with the linear regime effect graphed in figure 4. Among the autocracies, corporate tax rates vary widely and are essentially unrelated to country size. Among the democracies, tax rates correlate strong-

ly with country size. The tax policies of the intermediate group are in between: the range of tax rates is more restricted than among the pure autocracies but the association with country size, while weakly significant, is less pronounced than among democracies. As an additional check, we regress the corporate tax rate on country size separately for each of the three sub-samples for all available country-years 1999-2011 (see appendix table A2). The same pattern emerges as in figures 4 and 5: tax rates in intermediate regimes are more responsive to country size than in autocracies but less responsive than in democracies. This supports our claim of a linear regime effect in tax competition.

Our regression results are also robust to a whole range of different modeling strategies. As table 1 illustrates, including fixed effects instead of random effects (model 3) or using an auto-regressive model rather than splines (model 4) does not change the interaction effect of country size and regime type on the corporate tax rate. The effect is also robust to different samples and operationalizations. Table A3 (appendix) applies our main model to five different subsamples (Latin America, Middle East & North Africa, South Asia, Sub-Saharan Africa, as well as all Non-OECD countries). The effect is robust over all these subsamples, indicating that they are not driven by any particular country or world region.

Table A4 (appendix) shows our model with different measurements of country size (GDP) and regime type (the World Bank's "voice and accountability" index and Freedom House's political rights variable). While, there are differences in effect size, especially for the political rights variable, these differences only reflect the different scales used. The substantive effect remains unchanged.

Table A5 (appendix) shows the main model with additional control variables. Again, the key findings remain unchanged. Most controls have the expected sign but are not consistently significant or completely insignificant (openness, growth, agriculture, tax revenue, health spending). Perhaps most importantly, the two institutional controls (durability and investor protection) have no significant effect on corporate tax rates, supporting our notion that the credibility of legal guarantees does not vary independently of

5. Theoretical and political implications

Why do not more governments adopt low or zero capital taxes to reap the benefits of international capital inflows even though the experience of many tax havens suggests this as a way to get rich? The economists' response refers to structural differences between countries: small countries benefit from competitive tax cutting; large countries don't. Yet not all small countries follow a low tax strategy, while some large countries do. What drives these seemingly inefficient tax rate choices? As we have argued in this paper it is political regime differences. Democracies have an incentive to adjust tax rates to international competitive constraints as proxied by their country size, while autocracies do not. Autocracies are less willing to adjust because their low inclusiveness makes them insensitive to the welfare penalties of non-adjustments. At the same time, they are also less able to adjust because the relative lack of constitutional constraints on government discretion undermines their ability to make credible long-term policy commitments: at any given tax rate they attract less capital than democracies. There is not only an advantage of smallness in tax competition but also an advantage of democracy.

We tested our explanation against corporate tax rate data for 99 countries. The evidence supports our argument. As our regressions show, the corporate tax rates of democracies vary systematically in country size while the corporate tax rates of autocracies are insensitive to country size. The sensitivity of tax rates to country size increases steadily, as countries become relatively more democratic.

Our findings contribute to at least three bodies of literature: the economics literature on tax competition, the comparative political economy literature on varieties of domestic institutions, and the general political science literature on globalization.

Take the economics literature first. According to the economic baseline model the logic of tax competition works equally for countries of different regime type. As our findings show, this is not the case. Institutions matter. Democracies are more sensitive to their competitive environment than autocracies and

hence more likely to conform to the predictions of the baseline model. Apparently democratic governments do in fact care for the well-being of their people and adjust their tax policies accordingly. That's the good news. The bad news is that tax competition has no disciplining effect on autocratic rulers. Because they are autocratic, they care less for the general welfare implications of their tax policies and hence are less easily deterred by adverse international consequences of their domestic tax policy choices. Contrary to what some economists argue (Brennan and Buchanan 1980; Edwards and Keen 1996; Weingast 1995), tax competition cannot simulate by external pressure the tax policy constraints of domestic democracy.

The comparative political economy literature on varieties of capitalism (Hall and Soskice 2001), democracy (Hays 2009), welfare regimes (Esping-Andersen 1990) or tax regimes (Campbell 2005) focuses almost exclusively on institutional differences between advanced OECD countries. There is nothing in our results to suggest that these differences don't matter for corporate taxation. The results do suggest, however that these differences matter less than the differences between democracies and autocracies. While we observe a high level of consistency among the corporate tax rates of democracies, we find considerable variance among the non-democratic regimes. Perhaps the comparative political economy literature should take more interest in the varieties of autocracy and link them up more systematically with established research on varieties of democratic countries in order not to miss the global wood for all the OECD-trees.

Our findings also suggest that, contrary to the 'varieties of' literature, similar domestic institutions can have dissimilar policy effects depending on a country's structural position in the international economy: While democratic institutions exert downward pressure on capital taxation in small countries they are associated with relatively high capital taxes in large countries. Neglecting this interaction leads to false negatives. For instance, the fact that the general downward trend in corporate tax rates in core OECD countries has not been associated with a general downward trend in corporate tax revenues has been interpreted as proof that the competition does not affect governments' revenue raising ability (Garrett 1998; Garrett and Mitchell 2001; Swank 2002).

This may be misleading. Our findings rather suggest that tax competition affects the revenue raising capacity of countries differently: it raises revenues in small, but decreases revenues in large countries. International competition has important effects which, however, cancel out in a global perspective.

Another potentially important example of a false negative is the widespread claim that party effects on redistributive policies are increasingly difficult to identify (Garrett and Mitchell 2001, 173; Hays 2003, 99; Lierse 2012; Swank 2013, 23). A standard explanation is that globalization constrains the viability of leftist policy agendas of domestic redistribution. Our findings suggest that it may not be so much as the contradictory incentives of globalization for left parties in small and large countries that explain this result. While in small democracies, the left has an incentive to forego domestic redistribution from national capital in favor of international redistribution through foreign capital inflows, in large democracies the left has an incentive to continue favoring domestic redistribution. Hence, left parties in the former will generally be open to cross-class coalitions with capital, while left parties in the latter will seek to mobilize labor against capital. As a consequence, party differences matter very little in small countries but gain in salience as countries grow larger.

Finally, our findings speak to the broad political science literature on globalization. This literature generally assumes that the rise of global markets increases pressure on national governments. Some say, global markets increase economic insecurity and thus raise political demand for social protection (compensation thesis). Others claim that globalization exerts downward pressure on taxation and thus undermines the ability to fund social protection (efficiency thesis). In either way, the burden on national policy increases. Our analysis highlights by contrast that globalization has different effects for different countries. It suggests that autocracies are generally less constrained by global market pressures than democracies because their domestic institutional set insulates the government from both mass demands for compensation and the welfare costs of economic inefficiency. Democracies are more constrained but the direction of the constraint varies in country size. For small

democracies, the constraint is beneficial. They profit from the asymmetric redistributive effects of international tax competition because the competition-induced capital inflow reduces political demand for social compensation (by stimulating the labor market) while at the same time improving the ability to pay for social compensation (by enlarging the domestic tax base). Large democracies suffer from the reverse effects. In contrast to other forms of international competition (security dilemma, tariff wars), tax competition is a form of competition, small countries can actually win. The good news is that most countries are small. The bad news is that most people live in large countries and have to pay the bill.

ENDNOTES

1. All predictions of the baseline model depend crucially on the assumption that capital generates labor demand in its country of (source) taxation. This assumption is unproblematic as long as countries compete over real investment in productive assets. It is less straightforward, however, when the competition is about financial capital (bonds, bank claims, equity, corporate paper profits, intangible assets, etc.) because financial capital is not directly and physically tied to real activity. Indirectly, however, it also creates labor demand. This is partly because financial capital boosts demand for financial services. Financial services are associated with high-skilled jobs, contribute to human capital formation and are subject to considerable agglomeration economies, as examples such as Switzerland, Luxembourg, Ireland or Singapore demonstrate. Also, tax-induced inflows of financial capital often bring real capital in their wake. There are various reasons for this. One is regulatory. Large Western democracies like the United States, Japan, Germany and the UK have elaborate anti-avoidance legislation in place that disallows companies to park profits and capital in subsidiaries in low tax countries unless these subsidiaries perform some minimally useful economic functions beyond tax minimization. Hence, if companies want to profit from low tax rates abroad they have to make sure that subsidiaries in low tax jurisdictions do a little more than just stripping affiliated companies in high tax jurisdictions of tax base. Keen and Konrad (2012:20) conclude that the insights of the baseline model “seem reasonably robust to the mix between real and paper shifting of tax bases”.

2. Measuring country size by GDP rather than population does not change the picture. See Appendix figure A1.

3. Multinational companies engaging in profit shifting from subsidiaries in high tax countries to subsidiaries in low tax countries are vulnerable to tax increases in the latter because these would put the profitability of the entire multinational group at stake. This gives the governments of low tax countries some leverage for extortion.

4. Efficiency-driven investors (i.e. capital owners investing abroad for the purpose of exploiting non-tax locational advantages) can usually rely on the assistance of their home country if the host country defrauds them. Tax-driven investors (i.e. capital owners investing abroad in order to minimize taxes at home) usually cannot. Since the very purpose of their investment is to deny revenue to the home country, the home country has little reason to defend these investments against encroachment by the host country.

5. For the summary statistics of all variables see table A1 in the appendix.

6. In the absence of a corporate tax, individual income owners could use corporations as onshore tax shelters for instance by retaining profits in companies or by reclassifying labor income as capital income. By preventing such abuse, the corporate tax backs up the personal income tax. The effectiveness of this backstop function hinges crucially on the statutory corporate tax rate, for as long as the corporate tax rate is lower than the top personal income tax rate there is an incentive to shift personal income into the corporate sector (Ganghof & Genschel 2008: 61).

ENDNOTES

7. Duane Swank (2013: 17) reports that statutory corporate rates are strongly correlated (correlation coefficient .90-plus) with effective average tax rates on highly profitable enterprises in his sample of 18 OECD-countries.

8. In deciding where to declare taxable profits, multinational companies seek to use all allowances and deductions available in any jurisdiction. Having done so, any excess profit is taxed at the statutory rate. Hence it is the statutory rate which is central in determining the location of profit (Devereux & Sørensen 2006: 6).

9. For instance, the OECD (2013) includes not only national corporate taxes but also subnational business taxes on corporate profit. This can make a dramatic difference. As indicated by IMF data (2013), the German national corporate tax is only 15 percent but this ignores substantial subnational business taxes. Including these subnational taxes, the OECD (2013) arrives at an overall German corporate income tax rate of 30 percent.

10. Please note from the kernel density also pictured in the graph that the majority of countries is smaller than 14 million. Thus, more countries (but not people) are in a structural position to benefit from tax competition.

11. All Polity Scores refer to the transformed 0-20 scale.

12. Pure democracies have a Polity Score of 20, pure autocracies have a score of 0).

13. Polity Scores for full autocracies range from 0 to 5, for full democracies from 15 to 20, and for intermediate regimes from 6 to 14 on our transformed 0-20 scale.

REFERENCES

- Acemoglu, Daron , and James A. Robinson. 2012. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Random House.
- Acemoglu, Daron, and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. Cambridge: Cambridge University Press.
- Alesina, Alberto. 1988. Credibility and policy convergence in a two-party system with rational voters. *American Economic Review* 78: 796-807.
- Appel, Hilary. 2008. Is it Putin or Is it Oil? Explaining Russia's Fiscal Recovery. *Post-Soviet Affairs* 24 (October-December): 301-323.
- Basinger, Scott J., and Mark Hallerberg. 2004. Remodeling the Competition for Capital: How Domestic Politics Erases the Race to the Bottom. *The American Political Science Review* 98 (2): 261-276.
- Belton, Catherine. 2008. "BP Russia chief in corporate tax probe." In *Financial Times*. Moscow.
- Bomsdorf, Clemens. 2013. "Denmark to Cut Corporate Tax Rate." In *The Wall Street Journal*.
- Brennan, G. , and J.M. Buchanan. 1980. *The power to tax: Analytical foundations of a fiscal constitution*. Cambridge: CUP.
- Bucovetsky, S. 1991. Asymmetric Tax Competition. *Journal of Urban Economics* 30 (2): 167-181.
- Bueno de Mesquita, B. , Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge, MA: The MIT Press.
- Burgess, Robin, and Nicholas Stern. 1993. Taxation and Development. *Journal of Economic Literature* 31 (2): 762-830.
- Campbell, John L. , ed. 2005. *Fiscal Sociology in an Age of Globalization: Comparing Tax Regimes in Advanced Capitalist Countries*. Edited by Victor Nee and Richard Swedberg, *The Economic Sociology of Capitalism*. Princeton: Princeton University Press.
- Cao, Xun. 2010. Networks as Channels of Policy Diffusion: Explaining Worldwide Changes in Capital Taxation, 1998-2006. *International Studies Quarterly* 54 (3): 823-854.
- Chinn-Ito-Index. 2008. A New Measure of Financial Openness. *Journal of Comparative Policy Analysis* 10 (3): 309-322.
- Day, Jones. 2013. "Mexican Tax Reform Update." In, ed. Jones Day Publications.
- Dharmapala, Dharmika, and James R. Hines. 2009. Which countries become tax havens? *Journal of Public Economics* 93 (9-10): 1058-1068.

REFERENCES

- Edwards, Jeremy, and Michael Keen. 1996. Tax competition and Leviathan. *European Economic Review* 40: 113-134.
- Esping-Andersen, G. 1990. *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.
- European Commission. 2001. *Company Taxation in the Internal Market*. COM(2001)582 final.
- Fearon, James, and David Laitin. 2003. Ethnicity, Insurgency, and Civil War. *American Political Science Review* 97 (1): 75-91.
- Format. 2003. "SPÖ fordert vorziehen der Steuerreform." In *Das Portal für Wirtschaft, Geld und Politik: Format-at*.
- FreedomHouse. 2013. "Freedom in the World: Country Ratings 1972-2012."
- Ganghof, S. 2000. "Adjusting National Tax Policy to Economic Internationalization: Strategies and Outcomes." In *From Vulnerability to Competitiveness: Welfare and Work in the Global Economy, Volume II*, eds. F. W. Scharpf and V. A. Schmidt. Oxford: Oxford University Press. 597-664.
- . 2006. *The Politics of Income Taxation. A Comparative Analysis of Advanced Industrial Countries*. Colchester: ECPR Press.
- Ganghof, Steffen, and Philipp Genschel, 2008. Taxation and Democracy in the EU. *Journal of European Public Policy* 15 (1), 58-77.
- Garrett, G., and P. Lange. 1991. Political responses to interdependence: what's "left" for the left? *International Organization* 45 (4): 539-564.
- Garrett, Geoffrey. 1998. *Partisan Politics in the Global Economy*. Cambridge: Cambridge University Press.
- Garrett, Geoffrey, and D. Mitchell. 2001. Globalization, government spending and taxation in the OECD. *European Journal of Political Research* 39 (2): 145-177.
- Geddes, Barbara, Joseph Wright, and Erica Frantz. 2012. "New Data on Autocratic Regimes." In *Authoritarian Regimes*. PennState University.
- Genschel, P. 2002. Globalization, Tax Competition, and the Welfare State. *Politics & Society* 30 (2): 245-275.
- Genschel, P., and P. Schwarz. 2011. Tax competition: a literature review. *Socio-Economic Review* 9 (2): 339-370.

REFERENCES

- Hall, Peter A., and David Soskice. 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
- Hays, Jude C. 2003. Globalization and Capital Taxation in Consensus and Majoritarian Democracies. *World Politics* 56 (1): 79-113.
- . 2009. *Globalization and the New Politics of Embedded Liberalism*. Oxford: Oxford University Press.
- Hegre, Havard, Tanja Ellingsen, Scott Gates, and Nils Petter Gleditsch. 2001. Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816–1992. *American Political Science Review* 95 (1): 33-48.
- Hollande, Francois. 2012. *Election Présidentielle 2012: Mes 60 Engagements Pour La France*. IMF. 2013. "Government Finance Statistics." In: International Monetary Fund.
- Jensen, Nathan M. 2003. Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment. *International Organization* 57 (03).
- Kanbur, R., and M. Keen. 1993. Jeux-Sans-Frontieres - Tax Competition and Tax Coordination When Countries Differ in Size. *American Economic Review* 83 (4): 877-892.
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2012. "The Worldwide Governance Indicators, 2012 Update. Aggregate Indicators of Governance 1996-2011."
- Keen, M. 2001. Preferential regimes can make tax competition less harmful. *National Tax Journal* 54: 757-62.
- Keen, M. , and K. A. Konrad. 2012. The theory of international tax competition and coordination. Working Paper July 2012 (06).
- Kemmerling, Achim, and Eric Seils. 2009. Managing Conflict in Corporate Tax Competition between EU Member States. *West European Politics* 32 (4): 756-773.
- Keohane, R. O., S. Macedo, and A. Moravcsik. 2009. Democracy-enhancing multilateralism. *International Organization* 63 (4): 1-31.
- Khondker, Habibul Haque. 2008. Globalization and State Autonomy in Singapore. *Asian Journal of Social Science* 36: 35-56.
- KMPG. 2011. *Singapore: Preferred gateway to Asia and beyond*. KPMG International.
- KPMG. 2007-2011. "Corporate and Indirect Tax Rate Survey 2007-2011." In: KPMG International Cooperative.

REFERENCES

- Labour. 2011. Labour's Plan for Stability and Growth Budget.
- Lester, Simon. 2010. "Expropriation through taxation?" In: International Economic Law and Policy Blog.
- Li, Quan. 2006. Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors: A Cross-National Analysis. *The Journal of Politics* 68 (1): 62-74.
- Lierse, Hanna. 2012. European Taxation during the Crisis: Does Politics Matter? *Journal of Public Policy* 32 (3): 207-230.
- Mansfield, Edward D., and Jack Snyder. 2005. *Electing to Fight: Why Emerging Democracies Go to War*. Cambridge: MIT Press.
- Marshall, Monty G. , Keith Jagers, and Ted R. Gurr. 2011. "Polity IV Project: Political Regime Characteristics and Transitions, 1800-2010," Version p4v2011.
- Mattes, Michaela, and Mariana Rodríguez. 2013. Autocracies and international cooperation. *International Studies Quarterly*.
- Meltzer, A. M., and S. R. Richard. 1981. A Rational Theory of the Size of Government. *Journal of Political Economy* 89 (5): 914-927.
- Narsey, Wadan. 2012. "An evil budget: laced with deceit." In: Wadan Narsey on Fiji - for fairness and freedom.
- North, Douglass C., John Joseph Wallis, and Barry R. Weingast. 2009. *Violence and social orders. A conceptual framework for interpreting recorded human history*. Cambridge: CUP.
- NOTIMEX. 2004. "Acude Nicanor Duarte al congreso y urge tramite de leyes economicas." In Agencia Mexicana de Noticias (NOTIMEX): Agencia Mexicana de Noticias, NOTIMEX.
- OECD. 2013. OECD Tax Database.
- . 2013. "OECD Tax Database: Corporate and capital income taxes." In.
- Olson, M. 1993. Dictatorship, Democracy, and Development. *The American Political Science Review* 97 (3): 567-576.
- Plümper, Thomas, Vera E. Troeger, and Hannes Winner. 2009. Why Is There No Race to the Bottom in Capital Taxation? *International Studies Quarterly* 53 (3): 761-786.
- Przeworski, Adam. 1991. *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. Cambridge: Cambridge University Press.

REFERENCES

- PWC. 2013-2014. "Worldwide tax summaries." In: Pricewaterhousecoopers.
- Ross, Stephen M. "World Tax Database." In. Michigan: School of Business at the University of Michigan.
- Rudra, Nita , and Stephan Haggard. 2005. Globalization, Democracy, and Effective Welfare Spending in the Developing World. *Comparative Political Studies* 38: 1015.
- Ruiz, Fernando , and Marcel Gerard. 2010. Is there evidence of strategic corporate tax interaction among EU countries? . MPRA Paper (10094).
- Schultz, Kenneth A., and Barry R. Weingast. 2003. The democratic advantage: Institutional foundations of financial power in international competition. *International Organization* 57 (1): 3-42.
- Slemrod, Joel. 2004. Are corporate tax rates, or countries, converging? *Journal of Public Economics* 88: 1169-1189.
- Swank, D., and S. Steinmo. 2002. The new political economy of taxation in advanced capitalist democracies. *American Journal of Political Science* 46 (3): 642-655.
- Swank, Duane. 2002. *Global Capital, Political Institutions, and Policy Change in Developed Welfare States*. New York: Cambridge University Press.
- . 2013. "Taxing Choices: International Competition, Domestic Institutions, and the Transformation of Corporate Tax Policy." Presented at the Annual Meeting of the International Studies Association, San Francisco, CA.
- Tanzi, Vita, and Howell H. Zee. 2000. "Tax Policy for Emerging Markets: Developing Countries." In IMF Working Paper.
- Verweij, Marco, and Riccardo Pelizzo. 2009. Singapore: Does Authoritarianism Pay? *Journal of Democracy* 20 (2): 18-32.
- Weingast, Barry R. 1995. The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development. *Journal of Law, Economics and Organization* 11 (1): 1-31.
- . 1997. The political foundations of democracy and the rule of law. *American Political Science Review* 91 (2): 245-263.
- Wilson, J. D. 1999. Theories of tax competition. *National Tax Journal* 52 (2): 269-304.
- Winer, Stanley L., and Lawrence W. Kenny. 2006. Tax systems in the World: An empirical Investigation into the Importance of Tax Bases, Administration Costs, Scale and Political Regime. *International Tax and Public Finance* 13: 181-215.

REFERENCES

WorldBank. 2013.

———. 2013. “Doing Business: Protecting Investors.” In: World Bank.

———. 2013. “World Development Indicators.” In: The World Bank.

Zakaria, Fareed. 2003. *The Future of Freedom: Illiberal Democracy at Home and Abroad*. New York: Norton.

Zodrow, G. R. , and P. Mieszkowski. 1986. Pigou, Tiebout, Property Taxation, and the Underprovision of Local Public Goods. *Journal of Urban Economics* 19: 356-370.

FIGURES AND TABLES

Table 1: The Effect of Country Size and Regime Type on Corporate Tax Rates

	(1)	(2)	(3)	(4)
	No Interaction	Main Model	Fixed Effects	AR1
Country size	2.21*** (0.44)	-0.26 (0.66)	0.14 (1.87)	0.56 (0.70)
Regime Type	0.067 (0.071)	-2.98*** (0.62)	-3.35*** (0.84)	-1.77*** (0.68)
Interaction		0.18*** (0.037)	0.21*** (0.049)	0.100** (0.040)
Observations	1,166	1,166	1,166	1,166
Countries	99	99	99	99
R2	0.24	0.25	0.24	0.17

Standard errors in parentheses. Constant and splines not reported.

*** p<0.01, ** p<0.05, * p<0.1

Figure 1: Country size and corporate tax rate of 113 countries, 2011. Sources: KPMG (2007-2011) and World Bank (2013).

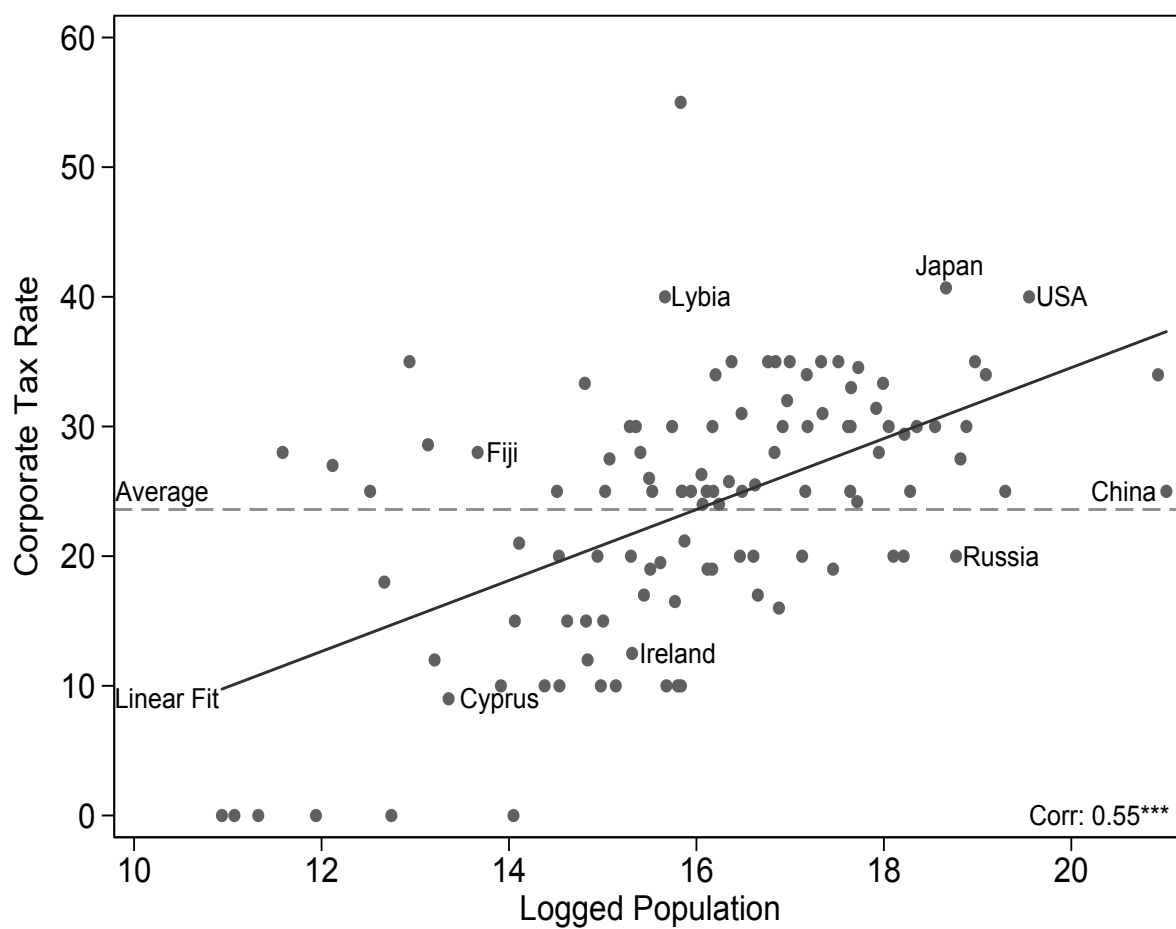


Figure 2: Conditional Effect of Regime Type on the Corporate Tax Rate depending on Country Size

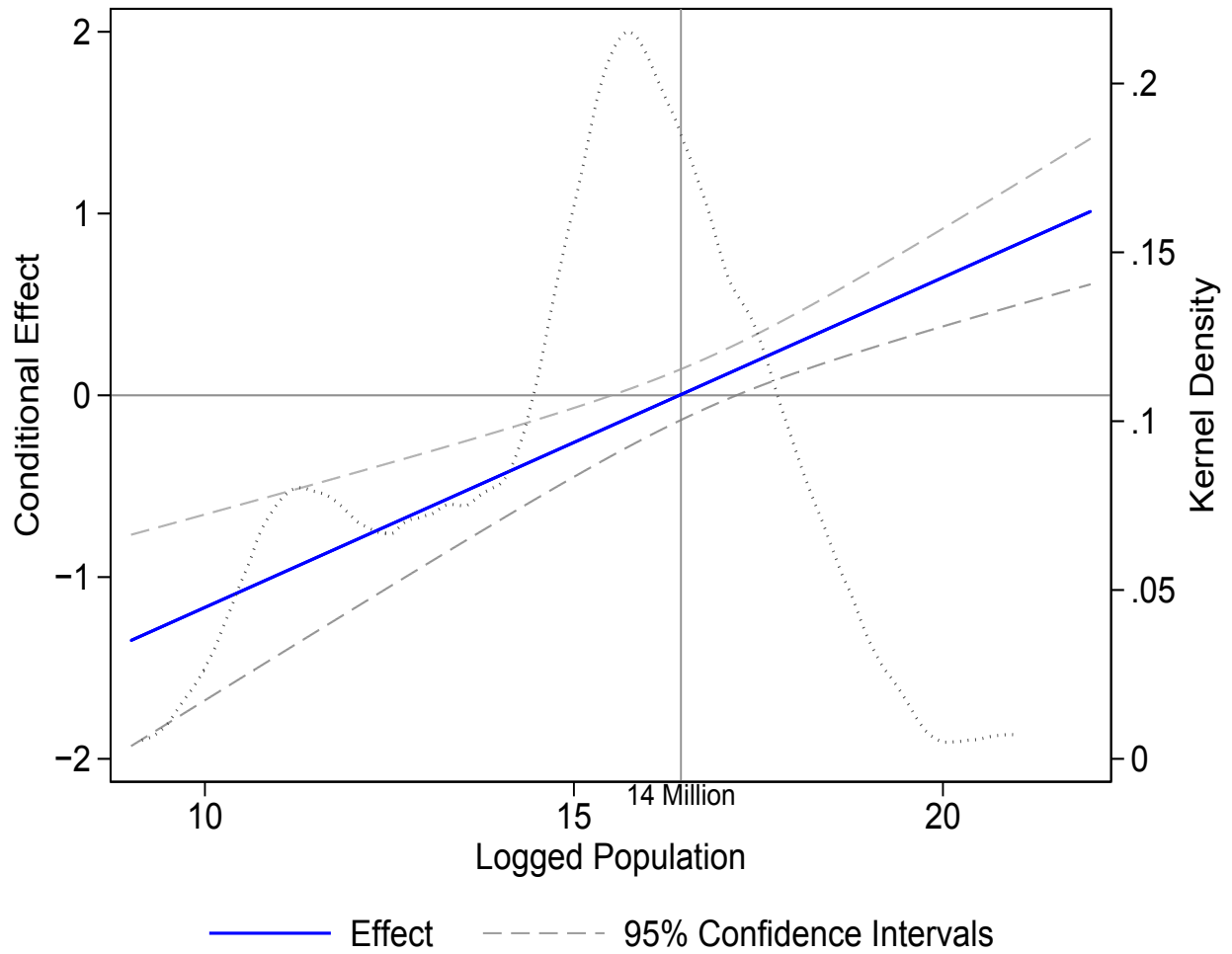
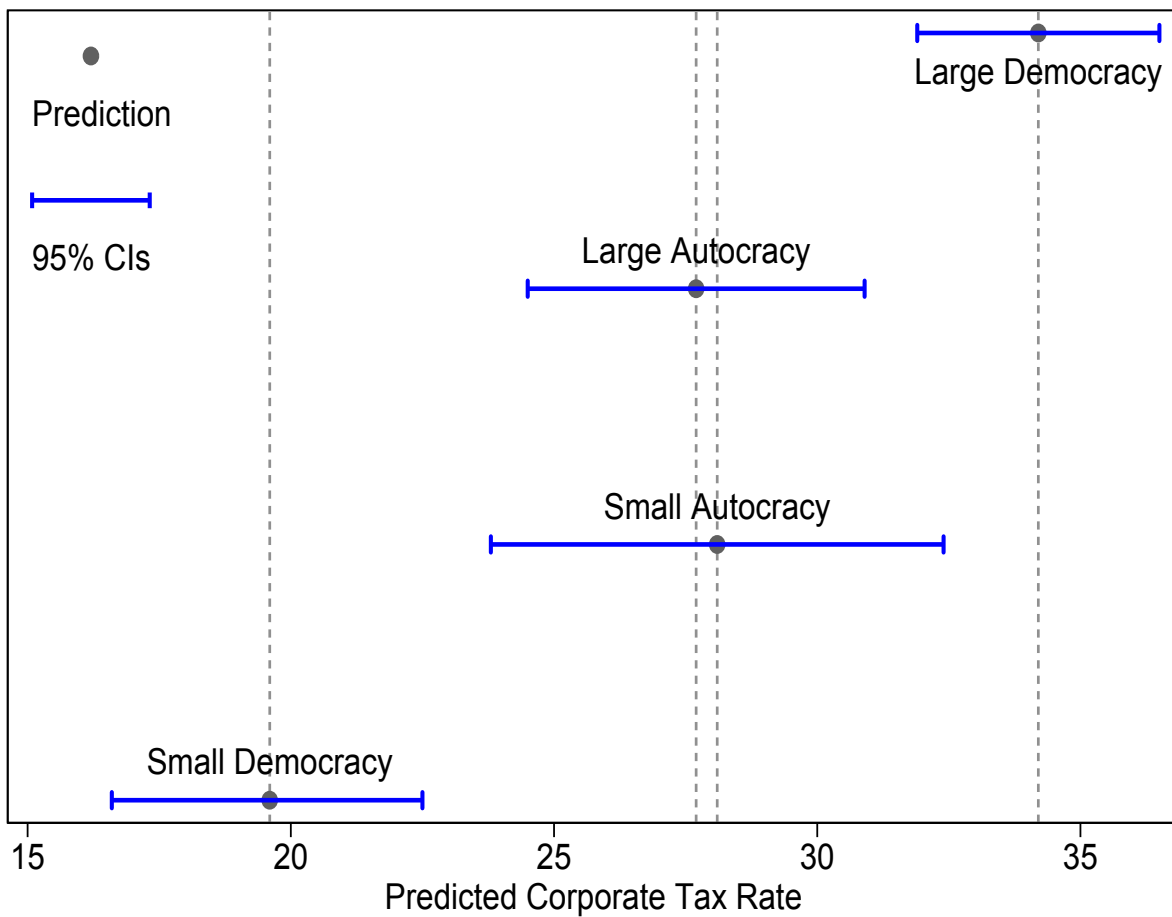


Figure 3: Predicted Corporate Tax Rates for Small and Large Autocracies and Democracies, holding all other Variables at their Mean



Values Used: Regime Type: Autocratic (1), Democratic(19), Population: Small (1 Mio), Large (100 Mio)

Figure 4: Conditional Effect of Country Size on the Corporate Tax Rate depending on Regime Type

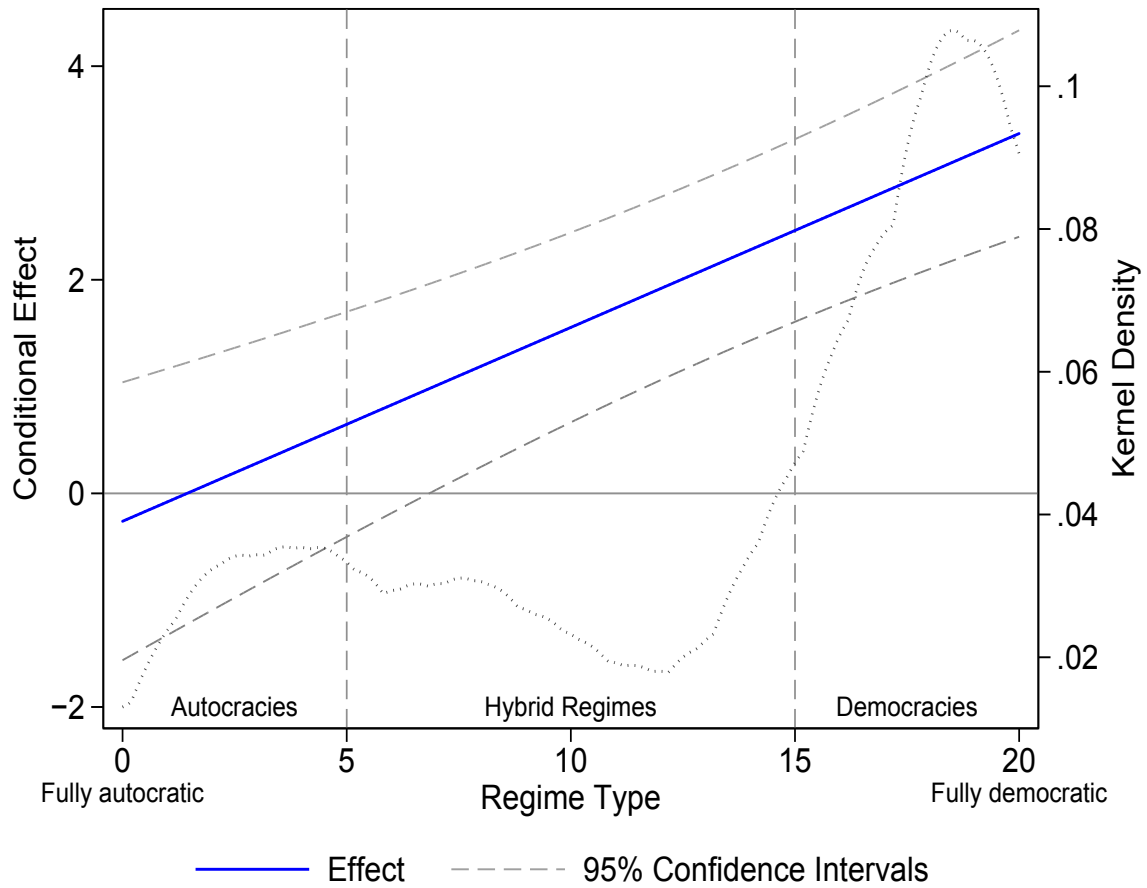
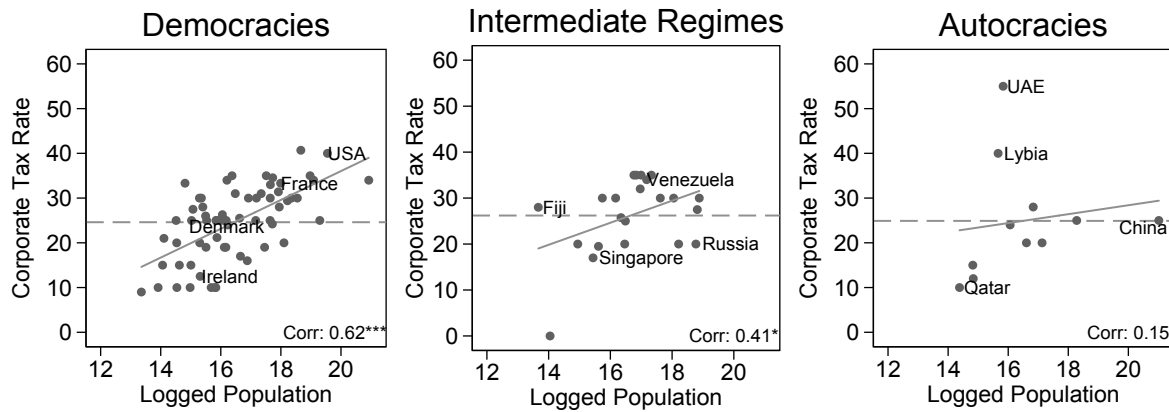


Figure 5: Country size and corporate tax rates in 99 countries by regime type, 2010. Sources: KPMG (2007-2011), World Bank (2013), and Marshall et al. (2011).



APPENDIX

Figure A1: Country Size and Corporate Tax Rate of 113 Countries, 2011. Sources: KPMG (2007-2011) and World Bank (2013).

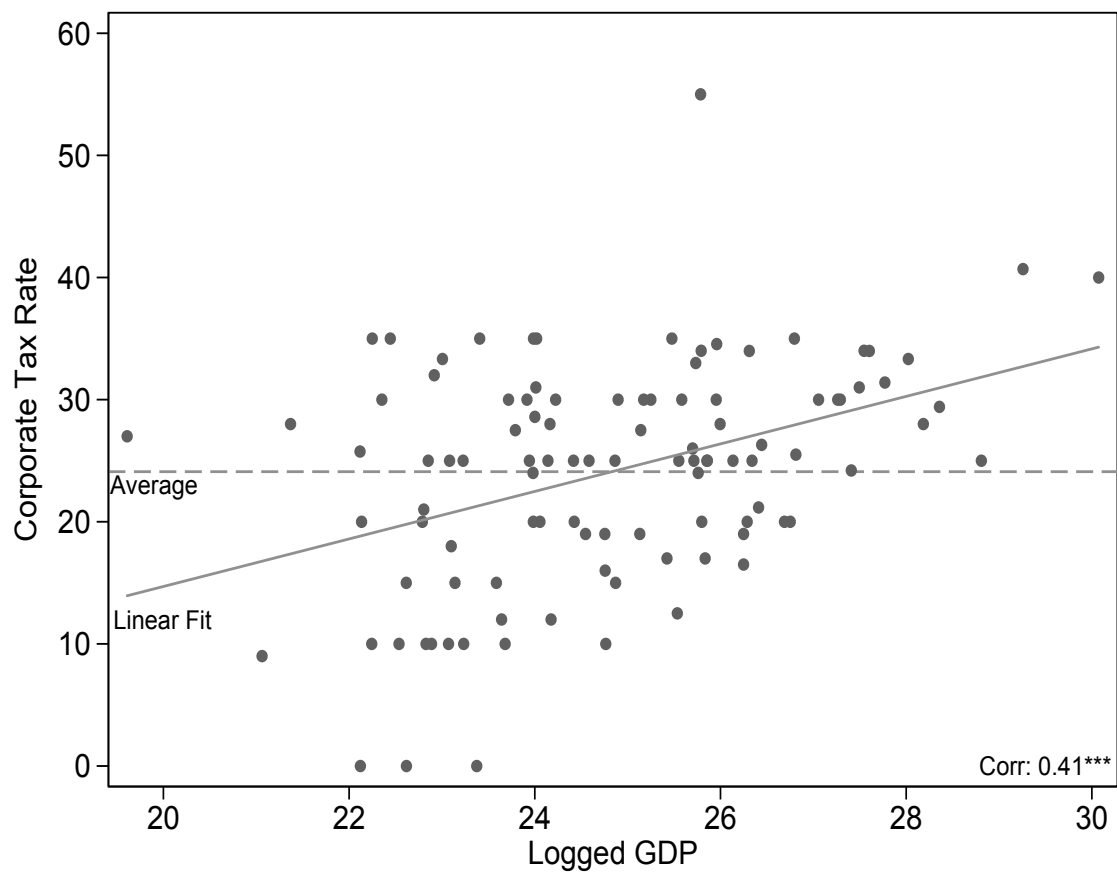


Figure A2: Number of Special Tax Incentives available in 60 Democracies and Autocracies, 2000. Sources: Li (2006), World Bank (2013), and Marshall et al. (2011).

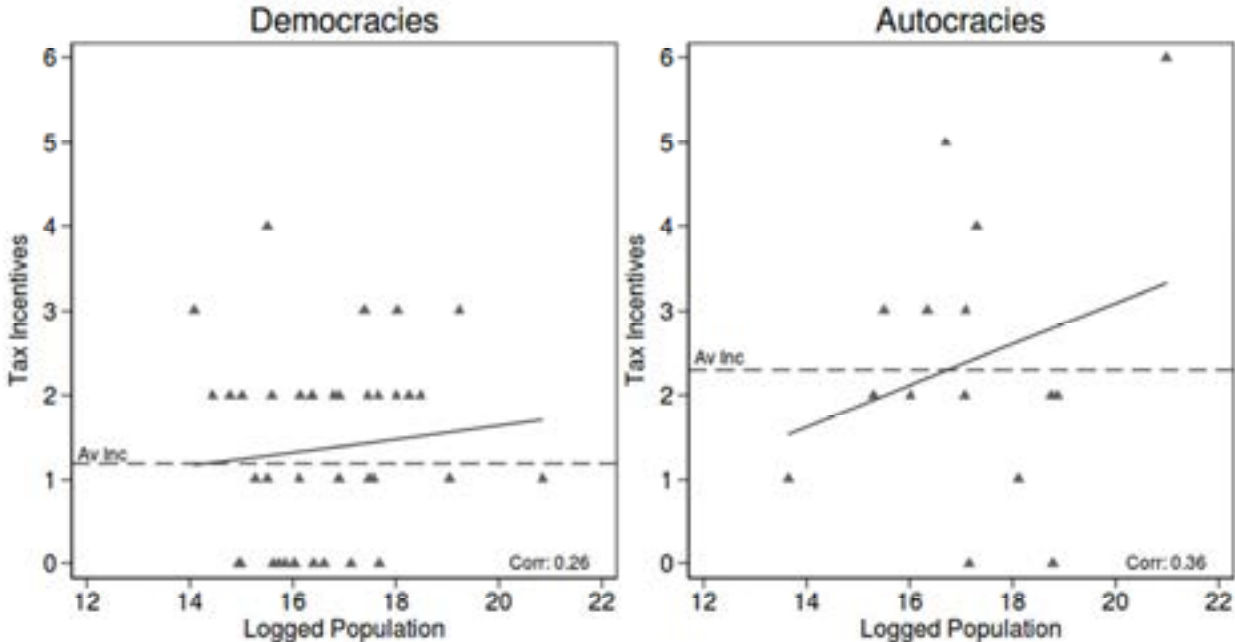


Table A1: Descriptive Statistics

Variable	Source	Obs	Mean	Std. Dev.	Min	Max
Corporate Tax Rate	KPMG	1322	27.1	9.9	0.0	55.0
Logged Population	World Bank	2782	15.1	2.4	9.1	21.0
Regime Type	Polity IV Project	2089	13.5	6.5	0.0	20.0
Voice	Good Governance Indicators	2289	0.0	1.0	-2.3	1.8
Political Rights	Freedom House	2499	4.6	2.2	1.0	7.0
Capital Account Openness	Chinn-Ito	2336	0.4	1.6	-1.9	2.4
GDPpc	World Bank	2499	8.2	13	0.1	108
Health Spending	World Bank	1390	2.7	1.5	0.0	9.6
Growth	World Bank	2517	4.2	5.2	-41.3	61.9
Agriculture % GDP	World Bank	2156	14.6	13.9	0.0	96.6
Tax Revenue	IMF	1988	0.6	0.2	0.0	1.3
Investor Protection	World Bank	1081	0.0	1.0	-2.7	2.0
Durability	Polity IV Project	2128	24.9	30.6	0.0	202.0

Table A2: The Effect of Country Size on the Corporate Tax Rate for three different Regime Types, 1999-2011

	Autocracies	Intermediate Regimes	Democracies
Population	1.22 (1.47)	1.23 (0.82)	2.88*** (0.42)
Observations	151	201	814
Countries	17	29	72
R2	0.09	0.14	0.39

Standard errors in parentheses. Constant and splines not reported.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A3: The Effect of Regime Type and Country Size on Corporate Tax Rates – Regional Models

	Non-OECD	Latin America	MENA	South Asia	SSA
Population	-0.41 (0.75)	-19.9** (8.70)	1.51 (2.58)	-7.19** (3.54)	-4.65 (3.16)
Regime Type	-3.15*** (0.72)	-19.6** (7.94)	-8.93* (4.85)	-8.04** (3.96)	-6.75** (3.03)
Interaction	0.19***	1.13**	0.58**	0.43**	0.41**
Observations	769	220	148	52	114
Countries	68	17	14	4	10
R2	0.19	0.16	0.14	0.25	0.53

Standard errors in parentheses. Constant and splines not reported.

*** p<0.01, ** p<0.05, * p<0.1

Table A4: The Effect of Regime Type and Country Size on Corporate Tax Rates – Different Measurement

	Political Rights	Voice	lnGDP as size
Size	0.68	2.30***	-0.89
	(0.75)	(0.40)	(0.74)
Regime Type	-4.64**	-7.90*	-3.72***
	(2.04)	(4.70)	(0.99)
Interaction	0.26**	0.51*	0.15***
	(0.12)	(0.29)	(0.040)
Observations	1,236	1,115	1,159
Countries	107	114	99
R2	0.23	0.27	0.20

Standard errors in parentheses. Constant and splines not reported.

*** p<0.01, ** p<0.05, * p<0.1

Table A5: The Effect of Regime Type and Country Size on Corporate Tax Rates – Controls

	Controls I	Controls II	Controls III	Controls IV
Size	-0.63 (0.67)	-0.85 (1.02)	0.24 (0.89)	-0.79 (1.01)
Regime Type	-2.79*** (0.63)	-2.53** (1.05)	-2.44*** (0.90)	-2.54** (1.10)
Interaction	0.17*** (0.037)	0.15** (0.060)	0.14*** (0.052)	0.14** (0.060)
Openness	-0.55** (0.22)	-0.69** (0.33)		-0.58 (0.47)
Spatial Lag	0.50*** (0.11)	0.93*** (0.24)		1.34*** (0.40)
GDPpc		0.58***		0.96***
Health Spending		-0.43 (0.42) (0.20)		-0.47 (0.44) (0.21)
Growth		-0.0049 (0.066)		-0.18*** (0.063)
Agriculture		0.071 (0.094)		0.20* (0.11)
Tax Revenue		1.06 (2.89)		7.40** (3.75)
Investor Protection			-0.16 (0.29)	-0.061 (0.41)
Durability			0.031* (0.019)	0.015 (0.030)
Observations	1,140	471	566	155
Countries	96	57	98	53
R2	0.21	0.33	0.26	0.56

Standard errors in parentheses. Constant and splines not reported.

*** p<0.01, ** p<0.05, * p<0.1