Why doesn't Capitalism flow to Poor Countries?

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Abstract

We show that governments that are elected in poor countries are more on the left of the political spectrum than those elected in OECD countries. This is perhaps surprising as one could think that, at least sometimes, a reasonable development strategy is to mimic what rich countries do. We focus on the role of corruption. A possible explanation is that corruption, which is more widespread in poor countries, reduces the appeal of capitalism. Alternatively, the negative effect of a given amount of corruption on the appeal of capitalism is larger in poor countries. Two channels for these effects are discussed. If corruption reduces the legitimacy of capitalism by offending people's sense of fairness, they are more likely to vote for higher taxes to restore the "social contract". Interestingly, even with standard preferences, corruption may move the electorate to the left as voters are less worried about "killing the geese with golden eggs". The existence of corrupt entrepreneurs hurts good entrepreneurs by reducing the appeal of capitalism. We provide evidence on the corruption/left-wing connection by reinterpreting the evidence on the regulation of entry across countries, as well as by providing new evidence showing that corruption is positively correlated with left wing governments within countries. The final piece of evidence concerns beliefs within countries: people who perceive corruption to be high are also more likely to lean ideologically to the left and to declare to support more intrusive government in economic matters.

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I. Introduction

Few people in poor countries want to have a US-style capitalist system. There is quite a lot of admiration around the world for the levels of wealth achieved in the US. And people are certainly willing to emigrate to America. But relatively few people in poor countries would vote for the political parties that want to implement the system that, at least on the surface, has made the US rich. In other words, few people favor right wing parties even though these parties' proposals are the closest voters have if they want to implement a US-style capitalist system with low taxes. Although some voters would claim that wealth is not the main objective, or that the US did not grow thanks to capitalism but rather by exploiting poorer countries, this does not seem to be the predominant view. So the puzzle is, why isn't capitalism, as a way to get a country out of poverty, a more attractive idea in poor countries?

The starting point for the paper, then, is the empirical observation that poor countries are less capitalist than rich countries. Some anecdotal evidence on this is available. For example, electoral competition in Latin American countries often involves only center or left leaning parties.[1] The case of Argentina, where the Radical and Peronist parties have alternated in government during the last century, is a case in point.[2] Even *within* the group of right wing parties, those in rich countries tend to have more explicit right wing rhetoric than those in poor countries. A more systematic approach would be to use data on the platforms of political parties around the world. The closest we have available is a recent database on political institutions created by Beck *et al* (2001) at the World Bank. Of particular interest are data on the declared intentions of political parties (platforms) and data on their relative electoral performance. Although the data are rough and approximate given our purposes, the basic patterns suggest that right wing, pro-capitalist political parties are in government less frequently in developing countries than in the industrial democracies. Controlling for democratic differences, differences in levels of inequality, differences in the level of prevailing violence and

[1] In fact, a standard informal justification for military coups in the region is that they are the only way that right wing ideas can get to be implemented, given their small electoral appeal. The involvement of the "Chicago boys" with the military dictatorships of Chile and Argentina in the 1970's is sometimes discussed in similar terms (e.g., Green (1995)). Of course, an alternative explanation is that some degree of authoritarianism is consistent with economic liberalism when interest groups break the law (see the contributions in Skidelsky (1988) for a more general discussion).

[2] The Peronists are sometimes labeled as right wing given the role of fascism in shaping Peron's early ideology. Yet, over the last century, the labor share has been highest with Peronist administrations and the Peronist march intones that *"the Peronist lads will fight capital"*. Likewise it is sometimes claimed that the Menem administration in the 1990's turned right wing, which is plausible, but does not deny the fact that Menem was elected on a populist platform that included a massive wage hike or *"salariazo"*.

differences in country size does not seem to affect the conclusion that governments in poor countries are, by and large, ideologically more to the left than rich countries.

One potential explanation for these patterns in the data is cultural differences across poor and rich countries. For example, it has been argued that capitalism spread in the countries that are rich today because the reigning religious culture approved of success and the accumulation of individual wealth, whereas in today's poor countries other cultures (such as Catholicism) stood in the way of capitalism.[3] An alternative explanation, economic in nature, is that voters in poor countries are choosing left wing governments to redistribute the little income there is. More inequality, in this view, moves average income up relative to the median, and may introduce a desire for redistribution. A number of authors, however, have emphasized that, at least amongst advanced industrial nations more unequal countries seem to distribute less, not more.[4] Furthermore, since countries can move to the center, and redistribute within a market economy, it does not explain why so many countries loose faith in the private sector altogether.[5] More importantly, these explanations for differences in redistribution do not give a role to corruption, which is widespread in poor countries and figures prominently in the rhetoric of politicians that support redistribution.[6]

In this paper, we explore an alternative explanation based on the role of corruption in undermining the support of capitalism. We introduce a simple model in which two possible explanations are identified. First, corruption, which is more widespread in poor countries, may reduce the appeal of capitalism. A second possibility is that the negative effect of a given amount of corruption on the appeal of capitalism is bigger in poorer countries. In our model, workers can vote to supplement their income by taxing firms. This desire is tempered by the knowledge that fully taxing business people would leave no incentives to invest for the future, the knowledge that high stakes in the

[3] In some extreme cases, wealth was indicative of a person's moral standing (and likely after-life performance). A classic reference for the role of cultural affinities in the spread of capitalism is Weber (1958). Iannaccone (1998) describes the empirical performance of Weber's hypothesis. For empirical evidence on the role of cultural factors, see Grier (1997), La Porta *et al* (1997, 1999) and Guiso *et al* (2003).

[4] This is, for example, the starting point of Benabou (2000). We are unaware of systematic empirical evidence. In section II we present empirical evidence showing that more inequality is *positively* correlated with the election of right wing parties. This is also related to the literature on inequality and growth (Alesina and Rodrik (1994), Persson and Tabellini (1994), Perotti (1996)). See Benabou (1996) for a discussion of the main issues.

[5] A standard *definition* for a Center party (used in Beck et al (2001)) is one that advocates both strengthening the private sector and a redistributive role for government. Korea, for example, has reduced income inequality, increased public funding for education and health care, but kept a basic pro-capitalist system with respect to the organization of production through private firms. Interestingly, Korea's government for 1975-97 is classified as *Right* by Beck *et al* .

[6] See, for example, the case of Lula in Brazil (http://www.pt.org.br). See also footnote 7.

taxation game would lead to the corruption of tax inspectors and tax evasion, and (in the "fairness" extension) the knowledge that this would hurt the voters sense of fairness.[7] When voters have a preference for "fairness", corruption can be seen as an attempt by businesspeople to obtain more than their fair share. Thus, a move towards the left is just an attempt by the median voter to return to the payoffs proposed by the social contract. We also show that the assumption that the median voter cares about fairness is not necessary, as the two possible explanations can also be generated in a model with standard preferences (i.e., without fairness in the utility function). The main forces at work are the same as those that advise against eating the goose that lays golden eggs in the children's fable. In this context, a perception of corruption means that businesspeople obtain some of the fruits of their investment in ways that are not visible to the government. This means both that entrepreneurs are less worried by the high taxes (so they imply *less* of a disincentive to invest) and that it is less costly for voters to be more aggressive with taxes (now they are only killing a chicken with copper eggs). If we assume that part of the entrepreneur's business cannot be hidden, and that voters cannot make taxes contingent on the entrepreneur's level of honesty, voters will then desire more taxes when corruption is higher. More generally, corruption makes capitalism less appealing to voters, since they see it as less conducive to their welfare than a system based on higher taxes and less "risk taking". Corrupt entrepreneurs introduce a negative externality on the business community by making capitalism less appealing.

In the last part of the paper, we provide empirical evidence on the hypothesis that support for left wing parties originates in perceptions of corruption. We provide three types of evidence. The first is simply a reinterpretation of the recent work of Djankov *et al* (2002) on the regulation of entry. They find that countries with more regulation on the entry of firms, in terms of delays and money spent in the process, also have more corruption. This, we argue, is also consistent with the models we present as entrepreneurs in regulated environments can be expected to be less well off than in deregulated environments. The second type of evidence concerns corruption levels aggregated at the country level. We show that there is a positive correlation within countries between the amount of corruption and how left the government is. Furthermore, there is some evidence that the correlation between corruption and left-wing is larger at lower levels of income. Finally, analysis of subjective

[7] An emphasis on tax evasion as a response to tax increases (versus, for example, labor supply responses) is fully justified given the empirical evidence available (see, for example, Auerbach and Slemrod (1997)), although it implies a departure from much of the recent work in political economy (e.g. Persson and Tabellini (2000)).

data within countries reveals that individuals who believe that there is more corruption are also more likely to be in favor of more government intervention in the economy. There is no evidence, however, that this propensity changes at lower levels of income.

Our paper builds on the literature studying the role of the social contract and how economic organization is built on beliefs (see Denzau and North (1993)). Two important papers are Piketty (1995) and Benabou (2000). The former shows that an initial distribution of beliefs concerning the importance of effort in determining performance can lead to two different types of equilibria, one (the other) with low (high) taxes and a belief, which holds in reality, that individual effort is (is not) important in determining income.[8] Benabou (2000), on the other hand, shows that for a class of interventions that increase output, such as public education when capital markets are imperfect, multiple steady states can arise. Finally, Alesina and Angeletos (2002) show how fairness can influence the choice of taxes: if a society believes that luck or corruption (rather than effort) determine wealth, it will choose high (rather than low) taxes, thus distorting allocations and making these beliefs self-sustaining. Alesina, Glaeser and Sacerdote (2002) review the contributions to this growing literature. In our model, different beliefs on the importance of corruption determine how much taxation they will support. Since taxation (and beliefs of how widespread corruption is) determines corruption levels, our model also has the potential for multiple equilibria.

We also draw on the corruption literature. Of particular interest is work suggesting that corruption levels are tied to regime legitimacy. A large literature in political science has focused on the determinants of legitimacy in political representation, including the role of corruption. In contrast, we focus on the legitimacy of a country's economic institutions and commercial organization. These are often affected by changes in the ideology of the government (partisanship), although, to our knowledge, work in this area has not yet made the connection to corruption.[9] Some authors have

[8] A recent paper by Benabou and Tirole (2002), shows how multiple equilibria out of a distribution of beliefs can arise when individuals have self-control problems. The advantage of this model over Piketty's is that beliefs have more "texture" in the sense that some individuals will believe that effort does not determine performance and will still want to persuade themselves that effort is important. In the same spirit, we try to incorporate how perceptions of corruption shape economic equilibria. For an enlightening discussion of American beliefs on distributive justice, see Hochschild (1981). See also the discussion on attitudes towards inequality in Klugel and Smith (1986) Ladd and Bowman (1998).

[9] On political legitimacy see, for example, Dahl (1956), Huntington (1968), and Weatherford (1992). della Porta (2000) and Seligson (2002) provide empirical evidence based on exposure to corruption. Work on partisanship, which goes back at least to Downs (1957), has studied how aggregate party identification moves over time in the US (see, for example, Jennings and Markus (1984), MacKuen *et al* (1989) and Green *et al* (1998)). On revolutions see MacCulloch (1999) and MacCulloch and Pezzini (2001).

emphasized how corruption has undermined support for economic reforms, something that is connected with partisanship, at least over the short run.[10] Our work can be seen as formalizing these ideas in the context of general economic ideology (and not to views solely about reforms). A number of economists have emphasized how corruption may reduce growth (see Rose-Ackerman (1978), Shelifer and Vishny (1993), *inter alia*. See also the empirical evidence presented in Mauro (1995) and Knack and Keefer (1995)). An important early paper is Andvig and Moene (1990) who describe how multiple equilibria in corruption can arise (see also Angeletos and Kollintzas (2000)). Work in this literature has also studied how government interventions may improve social welfare even when corruption originates in these very same interventions (see Banerjee (1997), Ades and Di Tella (1997), Acemoglu and Verdier (2000) and Djankov *et al* (2003)). An implication of this approach is that it may be hard to justify interventions in very poor countries that cannot afford to pay the high salaries necessary to control corruption, a point made explicitly in Acemoglu and Verdier (2000). Our paper is also related to Glaeser and Shleifer (2002), who explain the rise of regulation in America as the efficient response to the subversion of justice by robber barons during the Gilded Age, when the scale of business can be assumed to have grown.[11] Finally, a large literature has studied how countries may get to have bad institutions that retard growth (e.g., North and Thomas (1973), De Long and Shleifer (1993), Acemoglu, Johnson and Robinson (2001), *inter alia*), or get to choose bad policies (e.g., Alesina and Drazen (1990), Fenandez and Rodrik (1990), *inter alia*), or even get to be governed by low quality politicians (e.g., Caselli and Morelli (2002), *inter alia*). But in all these models voters want to have good policies (and capitalism), and there is some impediment to their adoption. In our case, voters do not want capitalism.

Section II presents evidence consistent with the idea that poor countries are more left wing than rich countries. Section III presents a simple model where citizens form an expectation of how much corruption there is in the economy, and then vote on taxes knowing that these will induce some bureaucrats and firms to collude to evade taxes and avoid sharing their profits with workers. Section IV explores the empirical connection between corruption and ideological position, both across and within countries, and across individuals within countries. Section V concludes.

[10] See Stiglitz (2000). Rajan and Zingales (2003) emphasize how economic downturns can allow capitalists to exploit public anger to restrict competition and access to capital.
[11] See Djankov *et al* (2003) for a general discussion.

II. The Color of Government Across Countries and Over Time

II.a. Data Source

For data on policy preferences or ideological leanings of a country's decision makers we rely on Beck *et al* (2001). Although there are limitations with a quantitative approach, given our purposes, this is the best data available for such a large sample (177 countries over the period 1975 to 1997). The traditional approach uses voting records of legislators (particularly in the US context). Beck *et al* (2001) mention work on European politics reviewing the platforms of political parties by Laver and Shepsle (1996). Since data with this level of detail were not available for many countries in the world, Beck *et al* use a similar approach using simply the party identification plus basic classification of the political leaders of the country. These include the prime minister and/or president, the three largest parties in the government coalition, and the largest party in the opposition. Our focus concerns preferences regarding greater or less state control of the economy – the standard left-right scale. Sometimes the name was enough information (e.g., communist party is classified as Left).[12] Beck et al classify parties as centrist if they are called centrist by their sources or if their position can best be described as centrist (e.g., because the party advocates the strengthening of private enterprise but also supports a redistributive role for government, for example in the form of a tightly knit safety net). Parties that cannot be classified in the three categories are recorded as "other" and not included in our study (these are frequently parties in non-competitive electoral systems).[13] Coverage is far from exhaustive, unfortunately, but constitutes the most comprehensive characterization of parties and decision makers that is available.

II.b. Results

Perhaps the simplest measure to study initially is the color of the party to which the chief executive is affiliated. We start by proxying very roughly the level of development of nations by whether they

[12] If the orientation of the party was not immediately obvious from its name or its description in the Political Handbook of the World and the Europa Year Book, Beck *et al* consulted the website mantained by Agora Telematica edited by Wilfried Derksen http://www.agora.stmit/elections/parties.htm which provides short definitions of parties. Party orientation was also cross-checked against information in Political Parties of Africa and the Middle East and Political Parties of Eastern Europe, Russia, and the Successor States, both published by Longman Current Affairs series. In the rare cases where conflict emerged among these sources, Beck *et al* noted it in the data set.

are OECD members or not. The simple table of frequencies of the color of government using the simplest possible definition (Chief Executive) is as follows:

Table A1: Frequency of Political Color of Government, OECD vs Non OECD

	OECD	**Non-OECD**
Left	198 (39.4%)	1,083 (60.7%)
Center	49 (10.4%)	115 (6.2%)
Right	241 (50.2%)	625 (33.1%)
Total	488 (100%)	1,823 (100%)

Note: Frequencies of government color (definition used is Chief Executive). Percentage of group in parentheses. Based on 177 countries over the period 1975 to 1997

Overall the evidence suggests that simply counting governments of each color, 50% of governments in OECD countries are right wing, while only 39.4% are left wing. In contrast the parties that govern Non-OECD countries are mostly left wing (almost 61% versus 33% right wing).

Table A2 partitions the sample symmetrically by thirds on the basis of income (real purchasing power parity). It also adopts a definition of government that follows more closely electoral appeal (as opposed to political maneuvering) based on the color of the largest government party. Again the data suggests that successful right wing parties are more frequent in rich countries. The frequency of right wing governments relative to left wing is monotonically increasing in income.

Table A3 presents the data at two moments in time. Although during the early part of the sample (namely 1975-80) left wing governments were more common than later on in the sample (namely 1992-7), in both periods right wing governments are relatively more common in rich countries.

Table A4 explores other metrics that can be used to define the color of government available from Beck *et al*. They are (a) the left/center/right designation of the chief executive and (b) that of the 3 main parties in government.[14] We also assign a cardinal scale to the parties (assigning 1 to right wing parties, 0 to center parties and -1 to left wing parties) so as to represent the groups with simple

[13] Beck *et al* also code governments as nationalistic, regional, rural and religious. They state *"These dimensions were chosen because they do not necessarily correlate with each other: religious or nationalistic parties adopt both left and right wing economic policies;…"*

[14] We obtained similar results when we experimented with the color of a fourth, more broad measure of government, namely the largest government and opposition parties.

averages. For all definitions of government a simple t-test strongly suggests that right wing parties are more common in richer countries (now defined as top half). In other words, the data present a similar picture to that presented in Table A1. There do not seem to exist significant trends over time, both using the OECD versus Non-OECD partition or top versus bottom of the world income distribution. For example, using the *"Chief Executive"* definition the biggest difference between OECD and non-OECD occurred in the 1980's (difference equals 0.57), while the smallest was in the 1990's (difference equals 0.21). In all three periods the OECD had significantly more right-wing governments, on average. For the *"Largest Government Party"* and *"3 Main Government Parties"* definitions, the 1980's again saw the greatest differences between the two groups of countries.

Other variables may affect the relationship between government ideology and level of development. An obvious candidate is inequality. The frequencies of political color using data on the Gini from Deininger and Squire (1996)) to partition the sample is

Table A5: Frequency of Political Color, by Income and Inequality Levels

		Top income (1st)	**Bottom Income (3rd)**
Low Inequality	*Left*	111 (44 %)	43 (96 %)
	Center	24 (10 %)	0 (0 %)
	Right	116 (46 %)	2 (4 %)
	Total	251 (100 %)	45 (100 %)

		Top income (1st)	**Bottom Income (3rd)**
High Inequality	*Left*	19 (27 %)	68 (58 %)
	Center	24 (34 %)	8 (7 %)
	Right	27 (39 %)	42 (35 %)
	Total	70 (100 %)	118 (100 %)

Again it seems poor countries are more left wing and, if anything, more unequal countries seem to be more right wing. Other variables, such as the extent of a country's level of democracy, may play a role. We control for this type of influence by including *Freedom*, a country's level of political rights as measured by the Gastil index (the appendix provides a careful description). Table A6 present results that control for *Freedom*, as well as other variables that may be expected to be associated with

left/right color of government (vis-à-vis level of development). These include a control for whether the countries were experiencing civil war (from Doyle and Sambanis (2000)) and a control for inequality. Since our sample includes countries that were in the Eastern-European communist bloc, the variable *Communist* (equal to one in such cases) is included.

The rich developed world in the top half of the income distribution is again associated with more right wing governments across all definitions, even after controlling for other variables often associated with different color of government. It is worth noting that more unequal countries tend to have more right wing parties. This point, which has been made informally contrasting the US and European experiences, is the starting point of Piketty (1995) and Benabou (2000) and, to our knowledge, has not been documented before. The positive and significant coefficient on *War* in the last three columns shows there is a positive association between right-wing government and there being a civil conflict in the corresponding country. More generally in the world less democratic freedoms typically correspond to the left being in power.

The previous tables treat each country/year observation in our data set as independent. However since our data include repeated observations on the same country over time it is of interest to relax this assumption and give more weight to changes in government.[15] A simple approach is to look at random effects regressions that allow for serial correlation in the error term. Table A7 reports the random effects results in which similar patterns emerge in the data.

The above sizes and significance levels on the "Rich" dummy remain similar if we exclude the lowest 25% of countries based on population size. The coefficients (standard errors) on "Rich" dummy restricting the sample to countries with more than 1 million people are 0.24 (0.06), 0.23 (0.07) and 0.25 (0.03) for the three different definitions of government, respectively.

III. Corruption and Ideological Orientation: Theory

As noted in the introduction, a noteworthy aspect of the rhetoric of political parties in less developed countries is how often they focus on corruption. Inspection of the platforms of well

[15] It may seem obvious that one should eliminate the role of serial correlation. But if one assumes rational voters, then in a democratic country voters *intended* the government to stay for the full length of the term.

established parties, such as the Peronist party in Argentina and the PRI in Mexico, show that corruption of the capitalist class is seen as justifying a more paternalistic role of government. A natural explanation is that corruption reduces the legitimacy of capitalism by offending people's sense of fairness. If corruption is seen as an attempt by entrepreneurs to get more than their "fair share" of the pie, voters may vote for higher taxes to restore the allocation stipulated by the "social contract". Interestingly, even with standard preferences, more corruption may move the electorate to the left as voters are less worried about "killing the geese with the golden eggs". We present a simple model to illustrate this case and discuss a simple "fairness" model in the appendix.

One may legitimately wonder why is it that right wing parties cannot convince voters that they will be tough on capitalists. Indeed in some cases there *is* separation between the pro-capitalist party and bad capitalists.[16] We do not have a fully satisfactory answer for this difficult question. A possible answer is that the promises of a capitalist party to be tough on bad capitalists may not be credible if the latter are members of the same social group (friends and family) as the candidate, or if they are campaign contributors. Alternatively, people may vote by "emotional association". If capitalism in the past has been implemented by a ruthless dictator or by a colonial power, then voters in subsequent elections would find it hard to associate capitalism with freedom and respect for human rights. Likewise, voters may emotionally associate the capitalist party with bad entrepreneurs, regardless of the policies the party proposes.

III.a. Preferences and technology

There are three actors in our model: entrepreneurs, bureaucrats and workers. Entrepreneurial activity brings about an amount of profits, *L*, with certainty and an extra amount of profits, *m*. For simplicity *m* can take only two values, $m \in \{0, M\}$, and *p* is the probability that the good state occurs. The entrepreneur can invest the amount, *e*, in order to increase the odds of this favorable event occurs, so we have *p(Ae)*. The properties of *p(.)* include $p(0)=0$, $p_e>0$, $p_{ee}<0$ and $p \in [0,1]$, where subscripts denote derivatives. The parameter $A \in \{\alpha, \beta\}$, measures the effectiveness of investment

[16] An example is Theodore Roosevelt's presidency in the US. It is difficult to know how exactly he achieved this, although it has been pointed out that regulation was connected to morality in some of his writings where he was explicit that trust owners had became disproportionately prosperous relative to the employees. See Morris (2001). An example of a failed political candidacy that had everything one would expect is needed to achieve this separation is the case of the novelist and liberal candidate Mario Vargas Llosa in Peru in the early 1990's.

when the entrepreneur is engaged in honest "schumpeterian" activities and when it is engaged in corrupt activities, respectively. Workers are needed for the project. In good times workers and entrepreneurs strike a bargain that a share s of the profits will be kept by entrepreneurs.[17] Firms are subject to a proportional tax t. In other words, in good times entrepreneurs keep $L(1-t)+Ms-Mst$ of reported profits.

Bureaucrats collect taxes and earn a wage of w. They are paired with firms to evaluate if the good state has occurred, in which case the firm must pay $Lt+Mst$ of reported profits, or if the bad state has occurred, in which case they must pay only Lt. Bureaucrats can misreport the state of the world in exchange for a bribe b, at personal cost of b/c which is private information.[18] The parameter b varies across bureaucrats according to the distribution function $K(b)$, with associated density $k(b)$. Where needed, subscripts h and c will denote activity related to honest and corrupt bureaucrats, respectively.

Workers vote on taxes and do not have access to other ways of claiming money from entrepreneurs (i.e. provided they do not revolt). They simply take their income from the government based on what the firm reports, y^R, which equals Lt in bad times and $Lt+M(1-s)+Mst$ in good times. The median voter is assumed to be a worker, so we assume that taxes are chosen by workers. Their preferences are given by the weighted sum of their expected utility and a term that introduces a taste for outcomes to reflect the social contract that demands firm to honestly report their earnings. Thus, their utility is given by EU which is defined as

$$EU = (1-K(h))\left[(1-p(\alpha e_h))Lt + p(\alpha e_h)\left(Lt + M(1-s+st)\right)\right] + K(h)Lt$$

With honest bureaucrats firms report income to workers of $y^B=0$ in bad times and $y^G=M(1-s)$ in good times. However with dishonest bureaucrats firms report income to workers of $y^B=0$ in bad and good times so in both cases taxes are equal to Lt.

[17] This reflects the fact that the labor share does not collapse with development, and is obtained from first principles in a variety of models, an example being when wages are determined by some form of bargaining.

[18] Opportunities for corruption could originate in the collection of taxes to fund a public good (and in the expenditures associated). Or in the use of redistributive taxes, as in this case. Our model is designed so that when no intervention is desired, no corruption is possible and capitalism is legitimate. On the assumption that firms engaged in corruption hide output, see the evidence presented in Johnson, Kaufman, McMillan and Woodruff (2000). The large literature on tax

Lastly, the model presumes a social contract exists. Economics does not offer a good guide on what are the elements of this social contract, and we can expect that there is not a simple way of capturing a large number of these elements (e.g. moral aspects, etc). Yet, a reasonable assumption is that, given the contributions of workers and entrepreneurs, they agree that part *s* of *M*, when it does take place, goes to entrepreneurs, and that proportion *1-s* goes to workers.[19] For the purposes of the paper some of these details are less important than the assumption that the social contract is made in advance.

The timing of the problem is as follows: First, entrepreneurs and workers organize the economy around a "social contract" which determines what entrepreneurs and workers get from the economy.[20] Second, workers vote on taxes. Then, firms decide how much to invest. Last, firms and bureaucrats observe the state of nature and agree on what to report and payments are made.

III.b. Equilibrium

We solve the problem backwards. If $m=0$ then, firms and bureaucrats have no option but to report the truth. When $m=M$, all bureaucrats with $w \le w + b - \frac{h^*}{c}$ will be corrupted in the sense that they will allow the firm to report $m=0$ in exchange for b. Since types are private information, b does not vary with h. We assume that bribes are determined through a bargaining process that leaves x of the surplus with the bureaucrat, so $b = xM(1-s+st)$.

The level of investment in the economy is determined by entrepreneurs. It is more realistic to assume that they know if they will engage in corruption at the time of investment, although results that are similar in spirit obtain if we assume that the type of bureaucrats faced by the firm are unknown at the time of investment.[21] The entrepreneur's problem (facing an honest bureaucrat) is

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evasion, which includes Reinganum and Wilde (1985), Besley and McLaren (1993) and Mookherjee and Png (1995), often emphasize the role of corrupt inspectors.

[19] A bargaining model would certainly pin down the shares precisely, and then our results would simply have to be re-scaled by the difference between the fair outcome and the bargained shares.

[20] This is important only when fairness matters.

[21] See Ramalho (2002), who finds that the effect of Collor's impeachment in Brazil in the early 1990's reduced the stock market price of firms that were directly linked with the family of the ex president, without a significant effect on other

$$Max_e \quad \pi_h = -e_h + (1-t)\left[L + p(\alpha e_h)Ms\right]$$

The first order condition characterizing the level of investment of honest entrepreneurs is

$$-1 + (1-t)\; p_{e_h}\; \alpha\, Ms = 0$$

The problem of a corrupt entrepreneur (facing a corrupt bureaucrat) is

$$Max_e \quad \pi_c = -e_c + L(1-t) + p(\beta e_c)\left(M - b\right)$$

The first order condition characterizing the level of investment of corrupt entrepreneurs is

$$-1 + p_{e_c}\; \beta\,(M - b) = 0$$

In both cases, the second order condition for a maximum follows from the assumption of concavity of *p(.)*. Thus total investment in the economy is given by

$$I = K(h^*)\, e_c^* + \left[1 - K(h^*)\right] e_h^*$$

As the model is set up, corrupt entrepreneurs are taxed less than honest entrepreneurs, particularly if their bargaining power relative to bureaucrats increases (i.e., when x falls). The reason here is that by under-reporting profits, entrepreneurs can pay less tax and share less of the real profits with workers. This could introduces a tendency for higher investment by corrupt entrepreneurs, leaving the differences in the quality of the investment (α and β) the only way in which corrupt entrepreneurs would not be the drivers of the economy. One can certainly imagine two ways in which one could obtain a different result. The first is that there could be uncertainty in the amount of bribe exactions that bureaucrats will be subjecting firms to, so that more corruption means more uncertain returns and with some type of entrepreneurs, particularly those that are risk averse, there

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firms that were then later found out to be politically connected. This suggests that firms have a stable set of political links that do not depend on the political coalition in power.

would be less investment.[22] A second possibility is that corrupt entrepreneurs are failing to report profits to shareholders. This type of intra private sector corruption could lead to a situation where more corruption means less investor confidence and lower funds available to entrepreneurs for investment.

The median worker votes on taxes to

$$Max_t \quad EU(e_h^*, e_c^*, t)$$

such that $e_h^* = \arg\max \pi_h$

$e_c^* = \arg\max \pi_c$

If we denote with $EU\big|_h$ the expected utility of the individual when entrepreneurs are all honest, and $EU\big|_c$ that when all are corrupt, we can write the first order condition as

$$0 = (1-K)\left[L + p(\alpha e_h)Ms + p_{e_h^*}\alpha\frac{de_h^*}{dt}M(1-s+st)\right] + KL - k\left[EU\big|_h - EU\big|_c\right]cxMs$$

and the second order condition is denoted by S_t. Voters balance the benefits and costs of taxing honest entrepreneurs (in terms of tax collections and negative incentive effects) with the benefits of taxing corrupt entrepreneurs (in terms of tax collections) and the costs in terms of higher corruption. The latter occurs because when taxes increase, more bureaucrats are tempted to allow entrepreneurs to misrepresent profits and avoid paying taxes and sharing with workers. If the voters anticipate this last effect they may want to adjust bureaucratic wages to reduce corruption.[23] In other words, voters would fully tax entrepreneurs but if they do this they will not invest and there will be fewer tax collections.

[22] Decentralized corruption may be particularly harmful, as studied in Shleifer and Vishny (1993). See also Wei (1997).
[23] If there is full compensation (voters find it optimal to give officials a raise equal to the higher temptation), then this term drops out. In general however, there will be less than full compensation, particularly when there are extreme types.

III.c. Comparative Statics

The main results of the paper can now be established.

Standard Model (No Fairness)

The effect of corruption on voting is summarized in the following proposition,

Proposition 1:

1. The effect of corruption on equilibrium taxes is ambiguous.
2. In poorer countries, the effect of corruption on taxes is positive.

Proof:

Assume that fairness is not a consideration, so $f=0$. To see part 1 simply compute

$$\frac{dt}{dc}=\frac{xM^2}{S_v}\left\{p(\alpha e_h)s(1-s+st)[2k+\frac{dk}{dh}cxM(1-s+st)]+k\alpha(1-s+st)^2\,p_{e_h}\,\frac{de_h^*}{dt}\right\}$$

To see part 2, compute

$$\lim\frac{dt}{dc}_{e\to 0}=\frac{xM^2}{S_v}k\alpha(1-s+st)^2\,p_{e_h}\,\frac{de_h^*}{dt}>0$$

#

Part 1 shows that under some distributions of types, the effect cannot be signed. Part 2 shows that in poor countries, where investment can be expected to be low (and consequently also $p(\alpha e_h)$) the negative effect of taxes on investment will dominate. In a poor country, investment is low and the size of the adverse effect of taxes on investment (de_h/dt) can be expected to be large. In the voting equilibrium, taxes are kept low so as to protect investment. When corruption increases voters become convinced that it is not worth giving entrepreneurs the incentive to invest: the few times that investment results in higher profits the entrepreneurs will under-report profits and avoid

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Since our results do not depend on the way wages adjust, we assume they are fixed. In general, it will be too expensive to

sharing them with workers and taxpayers. In other words there is a form of dynamic discipline on the desire of voters similar to the reason why chickens that lay golden eggs do not get eaten. When there is corruption, the value of dynamic discipline is lower as with a chicken that lays copper eggs. The profits of entrepreneurs are inter-dependent as corrupt acts give a bad name to capitalism (see Velasco and Tornell (1992) for different type of externality). Note the important role played by the assumption that the entrepreneur cannot hide all of the proceeds of its investment from the public (i.e., the part, *L*, is always visible to the public).[24] And that of the assumption concerning how the public cannot target the taxes exclusively to one group of entrepreneurs (those that are corrupt). Note also that we have assumed that individual utility is linear. With concave preferences, workers have even more reasons to vote for higher taxes in the presence of increased corruption because it is worst when workers are in bad times, where the marginal utility of income is greater.

IV. Corruption and Ideological Orientation: Evidence

In this section we discuss evidence that is relevant to evaluating the hypothesis that the resistance to adopting capitalism in the third world originates in perceptions of corruption. We propose three pieces of evidence. The first comes from re-examining the evidence on the regulation of entry presented in Djankov *et al* (2002). The second comes from examining the relationship between aggregate levels of corruption and political orientation of government within countries (using the Beck *et al* (2001) data set). And the thirds comes from examining the pattern of subjective opinions on corruption and the role of government across individuals using World Values Survey data.

IV.a. A Reinterpretation of "The Regulation of Entry" by Djankov et al (2002)

In a provocative paper, Djankov *et al* report that they find it hard to reconcile the evidence available on the regulation of firm entry with public interest theories of regulation. Instead they find the evidence consistent with "tollbooth" theories claiming that regulations are put into place to allow rent extraction by bureaucrats. Djankov *et al* collect data on the procedures regulating firm entry,

avoid corruption of very infrequent types. See Besley and McLaren (1993).

[24] On corruption and firm investment, see Pil Choi and Thum (2001) and Svensson (2001). Fisman and Svensson (2000) present evidence on the relative role of taxes and bribe demands in reducing investment.

including the number of procedures, the time for putting the firm into operation, and total cost.[25]

A basic finding is that the number of procedures enter positively in bad-performance regressions (i.e., where the dependent variable is water pollution, deaths from accidental poisoning, deaths from intestinal infection, *inter alia*). They state, *"While the data are noisy, none of the results support the predictions of the public interest theory"* (page 25). They then present corruption regressions where the number of procedures, time and cost measures all enter positively. They interpret this as *"pointing further to the robustness of this evidence in favor of the tollbooth theory"* (page 28). Lastly they find that lack of political rights in the country enter positively in regulation regressions (dependent variable=number of procedures). Thus, regulation is heavy in autocratic countries, *"consistent with the public choice theory that sees regulation as a mechanism to create rents for the politicians and the firms they support"* (page 34).

The model we present can also account for these correlations. When business people are perceived to be failing to deliver on their social contract, either because they are polluting the environment or because they are corrupting bureaucrats, offended citizens vote for more controls in the forms of more regulations. In fact, evidence at the individual level presented in the next section suggests that people who perceive there to be corruption themselves want more government intervention, something difficult to explain if regulations where simply facilitating rent extraction by bureaucrats. As for the finding that autocrats regulate more, there seems to be an equally appealing interpretation to the one proposed by Djankov *et al*, namely that they are passing these laws and regulations to "buy" the legitimacy that they lack from a democratic electoral process. Remember that this paper, unlike the De Soto (1990) study, focuses on written regulations. By increasing the amount of written regulations, more autocratic leaders would be strengthening the bargaining position of bureaucrats vis a vis firms. But why would they do that? One possibility is that they are simply trying to buy the support of the bureaucracy. But this approach would risk alienating the - typically - more powerful business community. A more plausible story, then, is that autocrats are regulating as a way to

[25] The procedures include screening (to certify business competence, a clean criminal record, check name for uniqueness, etc), tax related requirements (register for state taxes, seal-validate-rubricate accounting books, etc), Labor/Social security requirements (file with the ministry of labor, register for health insurance, etc), safety and health requirements (obtain permit to operate from health ministry, pass inspections related to work safety, etc) and environment related requirements (obtain environment certificate, obtain zoning approval, register with water management authority, etc). See Table I, in Djankov *et al* (2002). They focus on a "standardized" firm, which has capital higher than either (i) 10 times the country's GDP per capita or (ii) the minimum capital requirement, 5 to 50 employees one month after commencement of operations, turnover equal to 10 times its start-up capital and does not qualify for investment

discipline business and get the support of the general population, because as Djankov *et al* emphasize, few dictators have a secure position.[26]

IV.b. Corruption and Ideology at the Aggregate level

Table B1 looks at the correlation between the Beck *et al* (2001) measure of government ideology and the *International Country Risk Guide* (ICRG) corruption index introduced into economics by Knack and Keefer (1995). The corruption variable indicates the opinion of analysts on each country regarding the extent to which *"high government officials are likely to demand special payments"* and *"illegal payments are generally expected throughout lower levels of government"* in the form of *"bribes connected with import and export licenses, exchange controls, tax assessment, policy protection or loans."* (see Knack and Keefer (1995), p.225). Countries are scored from 0 to 6, where higher numbers mean high corruption (we transformed the data to make our results easier to follow). We also use data on the level of development (GDP per capita and the education level) from the World Bank. The sample is somewhat shorter than the analysis in part II as the ICRG data starts in 1984. The analysis is not designed to deal convincingly with problems of endogeneity, so it has to remain illustrative. (As a small step towards addressing these issues, we have lagged the right-hand variables two periods).

We focus on within country variations using fixed effect panel regressions. The dependent variables are transformed into continuous variables by multiplying the left-center-right variable by the proportion of the total number of seats in parliament.[27] For column one we focus on the seats obtained by the largest government party and for column two on those obtained by the 3 main government parties. The basic results show that high levels of corruption are correlated with less right wing governments (with a lag), for both definitions of government. The relationship is significant at conventional levels. Columns (3) and (4) show that the correlations survive controlling for two very basic indicators of development, the level of income and the level of education.

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incentives. Other features of the "standardized" firm include that it performs industrial or commercial activities, is in the largest city, is exempt from industry requirements (including environmental), is domestically owned and limited liability.

[26] Djankov *et al* argue, *"dictators need the political support of various interest groups, and use the distortionary policies to favor their friends"*. They then assert *"the choice of distortionary policy is not mitigated by public pressure since he faces no elections."* (page 28). We argue that one group of dictators gain legitimacy by pleasing the general public, and that this affects the decision to control business people (as well as the choice of policy).

[27] This is done so as to avoid having to run ordered probits with fixed effects. It also means we cannot use the color of the chief executive definition as we cannot use information on the number of seats.

In the last two columns of Table B1 we interact the level of corruption with the level of income. The interaction is positive and significant. It indicates that the correlation between corruption and how left the government is gets larger in size at low levels of income. This is consistent with the predictions of the model (part 2 of Proposition 1).

IV.c. Evidence on Individual Beliefs from the World Values Survey

The source of the data for this section is World Values Survey Series. A large random sample of individuals are interviewed and asked a series of questions to *"contribute to a better understanding of what people all over the world believe and want out of life"*.[28] The last wave includes a question to 67,416 people in 51 nations on corruption. It asks, *"How widespread do you think bribe taking and corruption is in this country?"* The four relevant response categories are: 1. *Almost no public officials are engaged in it.* 2. *A few public officials are engaged in it.* 3. *Most public officials are engaged in it.* 4. *Almost all public officials are engaged in it.* Accordingly, four dummy variables capturing each of these responses are created: *Perception of Corruption – almost none*, - *few officials*, - *most officials*, - *almost all officials*.

Ideology and Perceptions of Corruption

Table C1 uses this variable to study ideological inclination. This is possible because individuals also answer a question on ideological self-placement: *"In political matters, people talk of "the left" and "the right". How would you place your views on this scale, generally speaking?"* The interviewer then shows a scale with numbers 1 to 10 written down with the word *"Left"* written below the number 1 and the word *"Right"* below the number 10. Accordingly, the variable *Right Wing* is created taking the values 1-10. A total of 51,810 people across 48 countries answer both questions of interest.

Regression (1-2) in Table 1 present ordered probit regressions, of the form:

$$Right_{ijt} = a\ Perception\ of\ Corruption_{ijt} + b\ Personal\ Controls_{ijt} + Country_j + \varepsilon_{ijt}$$

where $Right_{ijt}$ is the ideological position of individual *i* living in country *j*, $Perception\ of\ Corruption_{ijt}$ is the perception of corruption of individual *i* living in country *j* in year *t* while ε_{ijt} is a standard error term

(i.i.d.) and $Country_j$ is a country dummy. We also include large set of personal controls, $Personal\ Controls_{ijt}$, such the age, sex and income of the respondent. When we use all this information the sample reduces further to 40,028 people across 43 nations.

Regression (1) in Table C1 shows that individuals who perceive corruption to be widespread are less likely to identify themselves as right-wingers. Regression (2) shows that the result survives the inclusion of personal controls, including gender, age, marital status, income, education, place of residence and employment status. They enter with the expected signs: people on higher income, men, the self-employed, those that are not divorced or separated, all tend to lean ideologically towards the right. In both regressions the effect of *Perception of Corruption* is monotonic and large. A person who perceives corruption to be widespread (almost all officials engaged in it) is predicted to move toward the left-end of the left/right scale by 0.14 units of the underlying continuous variable relative to the base category (*Almost no public officials are engaged in it*). The size of this effect is bigger than a fall from the top to the bottom income quintile.

We also compared the coefficients on perception of corruption across rich and poor countries (as suggested in part 2 of Proposition 1). In this case the evidence did not reveal significant differences across the two sub-samples concerning the effect of corruption on left wing ideology.

Perceptions of Corruption and Economic Attitudes

Table C2 investigates this correlation further by considering several economic dimensions of ideology. A similar regression to the one above is used but with different dependent variables that capture different dimensions of ideology. One can assume that a person decides on his/her ideology based on how much coincidence there is between his/her views and those of a typical right winger and a typical left winger on a basic set of issues, some economic in nature (like how business should be run) and some moral or political (like how acceptable is homosexuality). Table C2 has five regressions corresponding to five different economic views. For ease of exposition we treat the variable *Perception of Corruption* as cardinal (assigning the value 1 to "almost no officials" and 4 to "almost all officials"). We also attach the letter R (L) if, in the natural interpretation, higher values are associated with a right wing (left wing) ideological placement. The dependent variables in the

[28] From the introduction by the interviewer. The countries surveyed include almost 80 percent of the world's population. Appendix B provides a summary of the World Values Survey Series.

first 3 columns deal with attitudes to poverty. Column (1) in Table C2 uses the answer to the question *Why, in your opinion, are there people in this country who live in need? Here are two opinions: which comes closest to your view? The two relevant options are 1. They are poor because of laziness and lack of willpower, OR 2. They are poor because society treats them unfairly.* The variable, which is called *Not Lazy-L* is positively associated with *Perception of Corruption*, suggesting that people who perceive corruption to be widespread are more likely to reject the idea that poverty is due to laziness in favor of the idea that the poor are unfairly treated by society, compared to those that do not think that corruption is widespread. Column (2) explores a different framing. Again those who perceive high levels of corruption also express a left wing view. Column (3) shows that people who perceive corruption to be widespread are also more likely to say that the government is doing too little to alleviate poverty. This is interesting for theories that see corruption arising from government intervention. One possibility is that individuals understand that the optimal intervention is larger when the bureaucrats implementing them are corrupt, as there may be leaks.[29] Thus, the result in column (3) is consistent only with a sophisticated version of what Djankov *et al* (2002) call the "public interest" view and is inconsistent with what they call the "tollbooth theory" where regulation is put into place to extract fees. A more natural interpretation, we argue, is laid out in the model in section III. When corruption is widespread, voters feel cheated and vote for a system where firms are doing less well, even if it means that there is more corruption.

Column (4) in Table C2 turns attention to individual views on business. The dependent variable is the answer to the question, *"There is a lot of discussion about how business and industry should be managed. Which of these four statements comes closest to your opinion? 1. The owners should run their business or appoint the managers; 2. The owners and the employees should participate in the selection of managers. 3. The government should be the owner and appoint the managers; 4. The employees should own the business and should elect the managers."* Individuals who perceive corruption to be widespread are also less likely to say that business and industry should be managed in ways that are typical of capitalism.

Column (5) asks about the fairness of paying somebody in proportion to his or her output. The dependent variable is the answer to *"Imagine two secretaries, of the same age, doing practically the same job. One finds out that the other earns considerably more than she does. The better-paid secretary, however, is quicker, more*

[29] Ades and Di Tella (1997) call these "super-pigouvian" interventions (see also Banerjee (1997), Acemoglu and Verdier (2000) and Djankov *et al* (2003)).

efficient and more reliable at her job. In your opinion, is it fair or not fair that one secretary is paid more than the other?" Individuals who perceive corruption to be widespread are more likely to say that it is not fair to pay more to the more efficient secretary. Columns (1b-5b) run the same set of regressions, but also including the same set of personal characteristics used in Table C1. The results remain similar.

Perceptions of Corruption and Non Economic Attitudes

Interestingly, if corruption is seen as very costly and government intervention breeds corruption, people who perceive corruption to be high should want less intervention. Yet the opposite pattern is present in the data. A possible explanation is that individuals that lean to the left are also more likely to observe the high levels of corruption. In other words, it could well be that these characteristics go together (i.e., left-wingers happen to see corruption everywhere) and it is not the case that the observation of corruption moves otherwise similar individuals to the left. This means that there would not be a causal mechanism at play, but rather an omitted variable (left-wing-ness) driving the correlation. For the purposes of this paper, there would not be much difference. One would still have that the observation of corruption in society could give more prominence to those individuals who are worried about this problem (left-wingers), and make it more likely that other policies that they favor (e.g., favoring public over private ownership of industry) are implemented.

Table C3 investigates this further. The strategy consists simply of isolating non-economic attitudes that also have left/right divide, such as views on homosexuals, tradition, etc. If these are also correlated with perceptions of corruption one would be more inclined to think our correlations reveal that worrying about corruption is simply a left-wing activity, in the same sense that worrying about the moral effect of homosexuals in the community or emphasizing tradition are something that right-wingers do. Column (1) presents results using *Homosexual-L* as the dependent variable, where this is the answer to *"Please tell me if homosexuality can always be justified, never be justified or something in between"*. The scale reveals that 1 equals *"Never justifiable"* while 10 equals *"Always justifiable"*. The correlation with *Corruption* is negative and, once personal controls are included significant at the 1% level. Since accepting homosexuality is associated with liberal (or at least non conservative) ideology, we have a non-economic proxy for left-wing ideology. People who perceive corruption to be widespread are more likely to report the standard right-wing answer, not the left-wing. This is contrary to what was found in Table C2 where economic attitudes were used.

Using other attitudinal non-economic aspects of ideology yields more mixed results. This is due to the fact that sometimes the association with left-right positions is less clear-cut, or because the results sometimes have the opposite sign. For example, columns (2-3) yield similar results to column (1) using *Technology vs Tradition-L* and *Tolerance-R*. Again people who have high values of *Perception of Corruption* are less likely to be left-wing. Columns (4) and (5), considering the variables *Nature-L* and *Marriage Outdated-R* exhibit the opposite correlation with corruption as the first three variables.

In summary, there are two ways of interpreting the evidence. The first is consistent with the mechanisms outlined in the model, which points out that observing corruption causes people to become left-wing. This explains why people who perceive there to be widespread corruption are more likely to be on the left of the political spectrum (Table C1) and to have left-wing views on economic matters (Table C2). It also explains why the picture is so much more mixed when it comes to non-economic aspects of ideology (Table C3). The second interpretation is that belief in widespread corruption is *a part* of left-wing ideology. In other words, left-wingers have some core identity that leads them to believe simultaneously that firms should be managed by workers or the state (rather than owners and managers), for example, and that corruption is widespread. The fact that the evidence coming from looking at the correlation between corruption and non-economic attributes is so mixed is harder to explain, but since the evidence is not overwhelming and the questions are often imprecise, one could attribute this to noise. In this case the evidence is consistent only with the spirit of the model, and not the actual mechanism we outlined. A model where left wingers and right wingers compete for votes and where the observation of corruption leads the public to think that the left winger is more likely to be correct on other aspects (of managing the economy) would certainly lead to the correlation between corruption and lack of capitalism, which is the core message of the paper.

V. Conclusion

The starting point of this paper is the observation that capitalist political parties are less likely to be observed governing poor countries than left-wing parties. The best evidence for this is probably anecdotal in nature, and consists of a simple comparison of the political rhetoric of right-wing parties in rich and poor countries. Casual observation suggest that the kind of capitalism defended by right-wing parties in poor countries would count, at best, as center in rich countries. More

systematic evidence is provided by comparing the data on the ideological identification of political parties in government around the world presented in Beck *et al* (2001). Empirically, OECD countries tend to be more right-wing than non-OECD countries. Controlling for countries that have less democratic governments, countries that have high levels of inequality or countries where there are civil wars, does not change this conclusion. A similar pattern is observed if one looks at countries following income differences (and not just OECD membership).

We then suggest an explanation based on the fact that poor countries are also more corrupt (see Mauro (1995)). We build a simple model where corruption erodes the legitimacy of the economic system in the eyes of voters. We model the demand for legitimacy as a form of fairness: If corruption offends people's sense of fairness, they are more likely to vote for higher taxes to restore the "social contract". This occurs even if voters know that higher taxes deter investment and make it more likely that bureaucrats can be corrupted. Interestingly, even with standard preferences (i.e. no fairness), a perception of more corruption may move the electorate to the left. The reason is that voters will not want to tax firms if they think that by doing so they can induce them to invest more and get a bigger share later on. But more corruption makes it less likely that voters will not get to see the product of this investment, so they opt for higher taxes. In both versions of the model, higher corruption can bring about higher taxes and a given level of corruption induces a larger move to the left in the electorate of poor countries. Perhaps the most important aspect of the model is that it points out that corrupt entrepreneurs have a negative effect on *all* entrepreneurs by undermining the electorate's faith in markets. A limitation of our model is that good entrepreneurs have no way of disciplining corrupt entrepreneurs. In reality there may be ways of making these entrepreneurs internalize the costs of their actions (e.g. through social checks such as membership of social clubs, or more vague social norms).

We then provide evidence on the role of corruption in moving the electorate to the left. First, we argue that some of the cross-country evidence showing that more regulation is correlated with more corruption presented in Djankov *et al* (2002) is consistent with our model (as well as with the model presented by these authors). Second, we present evidence on the link between corruption and ideology within countries. First, we show that there is a negative correlation between a country's aggregate level of corruption and how much to the right ideologically is the government. Interestingly, this correlation is larger in absolute value in poor countries. Second, we look at data

across individuals. We show that people who think that corruption is widespread in the country tend to be on the left of the political spectrum. The effect is monotonically increasing in corruption and well defined statistically, and comparable in size with other determinants of left-wing preferences, such as being on low income. We also document the correlation between the perceptions of corruption and economic attributes of ideology. People who perceive there to be widespread corruption also tend to think that the government is doing too little to fight poverty or to think that the government should run firms (rather than owners and managers). Attributes of ideology that are not economic in nature, such as views on homosexuals or the role of tradition versus new ideas, present a more mixed picture. More often than not, the attitude that is associated with right-wing ideology (e.g., homosexuality not being justifiable) is correlated with the perception that corruption is widespread. This is suggestive of the view that an exogenous increase in corruption leads to more left-wing views in the electorate. However, we do not observe differences in the association between perceived corruption and being left wing across rich versus poor countries.

Overall, the paper suggests that corruption is an important determinant of economic performance through its influence on the electoral performance of pro-capitalist parties. After the 1961 military coup, Korea's new leader Major General Park Chung Hee passed the Illicit Wealth Accumulation Act. He then arrested the country's more prominent businessmen and paraded them through the streets of Seoul carrying placards with legends such as "I am a corrupt swine". During the next 40 years Korea grew rich operating under what is, by world standards, a pro-capitalist system. In 1995, almost ten years since democracy returned to the country, two thirds of Koreans still ranked Park as the country's greatest president. The main argument in this paper is that Park's policies may have led to the belief that capitalism is not run for the benefit of a few powerful businesspeople. And that this may have made right-wing policies more attractive to citizens and his regime more stable, in turn making economic growth more likely.

Appendix A: Fairness Model

A.a. Preferences and technology

The only difference with the model presented in the main body of the paper is that worker preferences are assumed to reveal a taste for outcomes that reflect the social contract demanding firms to honestly report their earnings. Thus, their utility is given by EF where E denotes expectations and $F=F(y^f-y^R, T)$ where $F_{y^f-y^R}\geq 0$, $F_T\leq 0$ and $F(0,T)=0$) so that tax revenues, T, can correct any departures of y^R, the income reported to the workers, from y^f, the income going to workers determined by the social contract in that state of the world. It is assumed that taxes must be strictly positive (a justification is derived in the non-fairness model in Section III). EF is defined as

$$EF = (1-K(h))\left\{(1-p(\alpha e_h))F(y^f\big|_B - y^B, T) + p(\alpha e_h)F(y^f\big|_G - y^G, T)\right\}$$
$$+ K(h)\left\{(1-p(\beta e_c))F(y^f\big|_B - y^B, T) + p(\beta e_c)F(y^f\big|_G - y^B, T)\right\}$$

where $y^f\big|_B$ denotes the level of income that the workers would deem fair in the bad state (i.e. when we have $m=0$), and $y^f\big|_G$ is that deemed fair in the good state (i.e. when we have $m=M$). Thus, taxes will tend to restore the fair outcome when voter's sense of fairness is hurt in those states when the entrepreneurs are corrupt and profits are high. This expression can be reduced to

$$EF = K(h)\,p(\beta e_c)F(M(1-s), Lt)$$

where $y^f\big|_B = 0$, $y^f\big|_G = M(1-s)$. With honest bureaucrats firms report income to workers of $y^B=0$ in bad times and $y^G=M(1-s)$ in good times. However with dishonest bureaucrats firms report income to workers of $y^B=0$ in bad and good times so in both cases taxes are equal to Lt. [30]

A.b. Equilibrium

The level of investment in the economy (given taxes) is similar to that in the main body. The median worker votes on taxes to

$$Max_t \quad EF(e_h^*, e_c^*, t)$$

such that
$$e_h^* = \arg\max \pi_h$$
$$e_c^* = \arg\max \pi_c$$

We can write the first order condition as

[30] The model can be extended so that any positive level of taxes set when $y^f=y^R$ is considered unfair and F_T cannot be signed without knowledge of the report. Usually in fairness models (e.g., Rabin (1993)) there are two ad hoc assumptions that need to be made: the way fairness enters the utility function, and the target fair income. In our model the problem of what is the fair level of income is less important as what matters to our argument is the deviation from it thanks to corruption. In this case, the departure from the fair level is whatever amount of income the capitalists are able to hide from workers, so as not to share it with them.

$$0=\left\{K(h)\beta p_{e_c}\frac{de_c^*}{dt}F(M(1-s),Lt)+K(h)F_t(M(1-s),Lt)p(\beta e_c)+k(h)p(\beta e_c)F(M(1-s),Lt)xMsc\right\}$$

and the second order condition is denoted by S_v. Workers only want to tax capitalists when they are being cheated by non-disclosure of income. They certainly take into account that higher taxes generate even more corruption in the economy (the last expression inside the brackets), but that is a price worth paying when they get less than the level they perceive as fair. Higher taxes allow them to redress the balance by clawing back income on the part of profits that are visible, L, and also make corrupt activities less profitable (the first two terms in brackets).

A.c. Comparative Statics

In a model in which preferences reflect a desire for fair outcomes, the effect of corruption on voting is summarized in the following proposition,

Proposition 2:

1. The effect of corruption on equilibrium taxes is ambiguous.
2. In poorer countries, the effect of corruption on taxes is positive.

Proof:

To see part 1 simply compute

$$\frac{dt}{dc}=\frac{xM}{S_v}\left\{p(\beta e_c)\left(sF(M(1-s),Lt)(k(h)+cxM(1-s+st)\frac{dk}{dh})+k(h)(1-s+st)F_t(M(1-s),Lt)\right)\right.$$
$$\left.+(1-s+st)k(h)\beta p_{e_c}\frac{de_c^*}{dt}F(M(1-s),Lt)\right\}$$

To see part 2, note that

$$\lim\frac{dt}{dc}_{e\to 0}=\frac{xM}{S_v}\left\{(1-s+st)k(h)\beta p_{e_c}\frac{de_c^*}{dt}F(M(1-s),Lt)\right\}>0$$

#

Part 1 shows that under some distributions of types, the effect cannot again be signed. More corruption makes it more important on fairness grounds to try to get back undeclared income from dishonest entrepreneurs by taxing visible income more, as well as try to discourage such investment (by reducing effort, e_c^*, due to a higher cost of bribes). However there is an opposing force whereby higher taxes drive a greater fraction of profitable investment underground, aggravating workers' fairness problem. Part 2 says that in poorer countries a higher proportion of corrupt entrepreneurs unambiguously make voters want to increase taxes since this latter effect can assumed to be relatively small (e.g., due to a low probability of investment succeeding).

Appendix B

Survey Descriptions

World Values Survey and European Values Survey (Third wave: 1995-7)

The Combined World Values Survey is produced by the Institute for Social Research, Ann Arbor, MI, USA. The series is designed to enable a cross-national comparison of values and norms on a wide variety of norms and to monitor changes in values and attitudes across the globe. Both national random and quota sampling were used. All of the surveys were carried out through face-to-face interviews, with a sampling universe consisting of all adult citizens, aged 18 and older. The countries which have been surveyed in the 1995-7 wave which have data on both corruption and ideology include: Argentina, Armenia, Australia, Azerbaijan, Bangladesh, Belarus, Bulgaria, Bosnia-Herzegovina, Brazil, Chile, Colombia, Croatia, Dominican Republic, Estonia, Finland, Georgia, Germany, India, South Korea, Latvia, Lithuania, Macedonia, Mexico, Moldova, Nigeria, Norway, Peru, Philippines, Poland, Puerto Rico, Russia, Moscow, Slovenia, South Africa, Spain, Andalusia, Basque, Galicia, Valencia, Sweden, Switzerland, Taiwan, Turkey, Ukraine, United States of America, Uruguay, Venezuela, Serbia-Montenegro.

Freedom House Survey

Freedom in the World is an institutional effort by the Freedom House organization to monitor the progress and decline of political rights and civil liberties in 192 nations and 60 related and disputed territories. The annual survey is a year-long effort produced by regional experts, consultants, and human rights specialists. A country is assigned to a particular numerical category based on responses to the checklist and the judgments of the Survey team at Freedom House. To answer the political rights questions, Freedom House considers the extent to which the system offers the voter the chance to make a free choice among candidates, and to what extent the candidates are chosen independently of the state. In particular, it follows a "checklist" of political rights, although it recognizes that formal electoral procedures are not the only factors that determine the real distribution of power.

Data Definitions

Country Level Variables

Chief Executive: A discrete variable that refers to the political orientation of the party of the chief political decision-maker in the country. It is assigned three numerical codes: -1 if the chief executive is left wing, 0 if center and 1 if right wing. These labels refer to policy preferences regarding more or less state control of the economy. For this variable, as well as the five following ones below, the two main sources of data were *The Europa Handbook* and Banks' *Political Handbook of the World*. Information on party orientation comes from *Political Parties of Africa and the Middle East: A Reference Guide* (1993), *Political Parties of Eastern Europe, Russia and the Successor States: A Reference Guide* (1994) and the Web site maintained by Agora Telematica (*www.agora.stm.it/elections/parties.htm*).

Largest Government Party: A discrete variable that refers to the political orientation of the Governing party with most seats in the legislature. It is assigned three numerical codes: -1 if the largest government party is left wing, 0 if center and 1 if right wing.

Largest Government Party (by seats): A continuous variable capturing the political orientation of the largest Governing party as above, but now weighted by the proportion of seats it occupies in the legislature.

Three Main Government Parties: The political orientation of the government parties with the first, second and third largest number of seats in the legislature, obtained by taking a simple average across the political orientation of each of these parties. The government parties are assigned three numerical codes: -1, 0 and 1 depending on whether they are left, center or right-wing.

Three Main Government Parties (by seats): A continuous variable capturing the political orientation of the three

largest government parties as above, but where each one is weighted by the number of seats it occupies in the legislature.

Largest Government and Opposition Parties: The political orientation of the largest Government and Opposition parties, by seats in the legislature, obtained by taking a simple average across the political orientation of each of the two parties. They are assigned three numerical codes: -1, 0 and 1 depending on whether their orientation is left, center or right-wing.

Freedom: A scale from 1 to 7 measuring the extent of political rights. Nations with a rating of 1 come closest to the ideals of free and fair elections. Those who are elected rule, there are competitive parties or other political groupings, and the opposition plays an important role and has actual power. Citizens enjoy self-determination and minority groups have reasonable self-government or can participate in the government through informal consensus. Nations rated 2 are less free than those rated 1. Such factors as gross political corruption, violence, political discrimination against minorities, and foreign or military influence on politics may be present and weaken democracy. The same conditions that undermine freedom in countries with a rating of 2 may also weaken political rights in those with a rating of 3, 4, or 5. Other damaging elements can include civil war, heavy military involvement in politics, lingering royal power, unfair elections, and one-party dominance. However, states in these categories may still enjoy some elements of political rights. Nations rated 6 have systems ruled by military juntas, one-party dictatorships, religious hierarchies, or autocrats. These regimes may allow only minimal manifestation of political rights For nations with a rating of 7, political rights are absent or virtually nonexistent due to the extremely oppressive nature of the regime.

Communist: A dummy variable equal to one if the country is at that time part of the (former) Eastern-bloc of Communist nations.

War: A dummy variable equal to one when there is a civil war in the corresponding country and year. A civil war is defined as a domestic conflict involving of over 1,000 battle deaths per year. From Doyle and Sambanis (2000).

Inequality: The Gini Ratio, obtained from the Deininger and Squire (1996) World Bank "high quality" data set.

Corruption: The International Country Risk Guide (ICRG) corruption index has been produced annually since 1982 by Political Risk Services, a private international investment risk service. It is measured on a 0 to 6 scale. The index is based on the opinion of experts, and intends to capture the extent to which "high government officials are likely to demand special payments" and "illegal payments are generally expected throughout lower levels of government" in the form of "bribes connected with import and export licences, exchange controls, tax assessments, police protection, or loans".

GDP per head: GDP per capita, in 1992 US$, from the World Development Indicators of the World Bank.

Education: The percentage of the population over the age of 15 years who are illiterate, from the World Development Indicators of the World Bank.

Individual Level Variables:

Personal Income Quintile: This heading refers to a set of 4 dummy variables which take the value 1 depending on which income quintile the respondent's family income belongs to. The base category is the lowest income quintile (from World Values Survey).

Right Wing Voter: Dependent variable is the answer to the question *"In political matters, people talk of "the left" and "the right". How would you place your views on this scale, generally speaking?"* Interviewer shows scale

with numbers 1 to 10 written down with the word "Left" written below the number 1 and the word "Right" below the number 10. (from World Values Survey).

Perception of Corruption: A categorical variable that is the answer to the question "How widespread do you think bribe taking and corruption is in this country?. The answers are (*1) Almost no public officials are engaged in it (2) A few public officials are engaged in it. (3) Most public officials are engaged in it*. (4) *Almost all public officials are engaged in it*. (from World Values Survey).

Work Status: A set of dummy variables taking the value 1 depending on the respondent's employment status: "Unemployed", "Self-employed", "Retired", "Student", "Housewife" or "Other". The base category is "Employed" (from World Values Survey).

Marital Status: A set of dummy variables taking the value 1 depending on the respondent's marital status: "Married", "Divorced", "Separated" or "Widowed". The base category is "Never Married".

Age: A set of dummy variables corresponding to the respondent's age: "Middle" which corresponds to 26-50 years old, "Old" which corresponds to greater than 50 years old. The base category is "Young" which corresponds to less than 26 years old (from World Values Survey).

Male: A dummy variable equal to 1 if the respondent is male and 0 otherwise (from World Values Survey).

Age Finished School: This heading refers to a set of dummy variables which take the value 1 depending on the age at which the respondent finished full-time education: up to "12-14 years old", "15-18 years old", "19-21 years old" or up to "more than 21 years old". The base category is education up to, but not including, 12 years old (from World Values Survey).

Appendix C: Results (follows from pages 8 and 9, main body)

Table A2: Frequency of Political Color of Government by Income Group

	Top income (1st)	Middle Income (2nd)	Bottom Income (3rd)
Left	244 (37.7 %)	290 (45.0 %)	436 (67.6 %)
Center	78 (12.1 %)	59 (9.2 %)	62 (9.6 %)
Right	325 (50.2 %)	295 (45.8 %)	147 (22.8 %)
Total	647 (100 %)	644 (100 %)	645 (100 %)

Note: Frequencies of government (definition used is "largest government party") for 177 countries over the period 1975 to 1997. Percentiles within income group in parentheses.

Table A3: Frequency of Political Color, Beginning and End of the Sample Period.

1975-80	**Top income (1st)**	**Middle Income (2nd)**	**Bottom Income (3rd)**
Left	65 (44.2 %)	69 (50.4 %)	73 (67.6 %)
Center	21 (14.3 %)	10 (7.3 %)	7 (6.5 %)
Right	61 (41.5 %)	58 (42.3 %)	28 (25.9 %)
Total 1975-80	147 (100 %)	137 (100 %)	108 (100 %)
1992-97	**Top income (1st)**	**Middle Income (2nd)**	**Bottom Income (3rd)**
Left	68 (36.1 %)	92 (40.2 %)	143 (64.7 %)
Center	14 (7.5 %)	23 (10.0 %)	34 (15.4 %)
Right	106 (56.4 %)	114 (49.8 %)	44 (19.9 %)
Total 1992-97	188 (100 %)	229 (100 %)	221 (100 %)

Table A4: Political Color of Government (3 Definitions): Top vs Bottom Income Half

	Chief Executive	Largest Government Party	3 Main Government Parties
Top Half	0.13	0.07	0.06
Bottom Half	-0.39	-0.38	-0.37
t-statistic	12.1	10.6	10.9

Note: Averages are obtained assigning value 1 to right wing party, 0 to center party and -1 to left wing party. t-statistic refers to the difference in means test between *Top Half* and *Bottom Half*. Significance levels <0.1% for all columns.

Table A6: Partial Correlation Coefficients using 3 definitions of Political Color.

	Chief Executive	Largest Government Party	3 Main Government Parties
Rich (top half)	0.22 (0.000)	0.16 (0.000)	0.18 (0.000)
Communist	-0.13 (0.001)	-0.10 (0.005)	-0.12 (0.001)
Freedom	0.06 (0.14)	0.13 (0.000)	0.11 (0.003)
War	0.008 (0.83)	0.09 (0.02)	0.11 (0.002)
Inequality	0.17 (0.000)	0.11 (0.003)	0.12 (0.001)

Note: Significance levels of the partial correlation coefficients are in brackets. Chief executive is a variable that takes value -1 if chief executive is left wing, 0 if center and 1 if right wing. Similarly with the orientation of the largest government party (in column 2) and that of the 3 main government parties (column 3). *Rich (top Half)* is a dummy denoting if the country is in the richest half of the sample, Communist is a dummy if country is part of the Eastern-bloc Communist, *Freedom* is the rating of political rights from the Freedom House Organization but rescaled to range from 1 (least rights) to 7 (most rights). *War* is defined as a civil war of over 1,000 battle deaths per year from Doyle and Sambanis (2000). *Inequality* is measured by the Gini coefficient from the Deininger and Squire (1996) data set. See the Appendix for more information.

Table A7: Political Color, Random Effects Regressions, 80 Countries, 1975-1997.

	Chief Executive	Largest Government Party	3 Main Government Parties
Rich (top half)	**0.26** **(0.12)**	**0.26** **(0.12)**	**0.27** **(0.11)**
Freedom	-0.005 (0.03)	0.02 (0.03)	0.04 (0.03)
War	0.22 (0.20)	0.17 (0.19)	**0.30** **(0.16)**
Inequality	**0.02***** **(0.01)**	**0.02***** **(0.01)**	**0.02***** **(0.01)**
R^2 overall	*0.10*	*0.10*	*0.11*
Number of observations	*714*	*748*	*759*

Note: Standard errors are in brackets. All regressions include a dummy denoting if the country is part of the Communist Eastern-bloc. Dependent Variable: Column (1) Chief executive is a variable that takes value -1 if chief executive is left wing, 0 if center and 1 if right wing. Column (2) same but orientation of the largest government party and Column (3) that of the 3 main government parties. *Rich (top Half)* is a dummy denoting if the country is in the richest half of the sample, Freedom is the rating of political rights from the *Freedom House Organization* but rescaled to range from 1 (least rights) to 7 (most rights), *War* is defined as a civil war of over 1,000 battle deaths per year from Doyle and Sambanis (2000). *Inequality* is measured by the Gini coefficient from the Deininger and Squire (1996) data set. See the Appendix.

Table B1: Political Color and lagged Corruption within Countries.

	(1) Largest Gov't Party - Seats	(2) Three Main Gov't Parties - Seats	(3) Largest Gov't Party - Seats	(4) Three Main Gov't Parties - Seats	(5) Largest Gov't Party - Seats	(6) Three Main Gov't Parties - Seats
Corruption (t-2)	**-0.07****	**-0.07****	**-0.06***	**-0.06***	**-0.12****	**-0.11****
	(0.02)	**(0.02)**	**(0.03)**	**(0.03)**	**(0.04)**	**(0.03)**
GDP per head (t-2)			0.09	0.10	-0.26	-0.21
			(0.12)	(0.11)	(0.18)	(0.17)
Education (t-2)			-0.40	-0.74	-0.31	-0.65
			(0.62)	(0.57)	(0.62)	(0.57)
*Corruption (t-2) * GDP per head(t-2)*					**0.18****	**0.16***
					(0.07)	**(0.07)**
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	*0.71*	*0.70*	*0.71*	*0.70*	*0.71*	*0.70*
Number of observations	*640*	*659*	*640*	*659*	*640*	*659*

Note: Standard errors in parentheses. Regressions include country fixed effects. Dependent Variable: Columns (1), (3) and (5) are a variable that takes the proportion of seats of the largest party in government and multiplies it by the value -1 if the party is left wing, 0 if center and 1 if right wing. Columns (2), (4) and (6) do the same but is an average across the orientation of each of the 3 main government parties. *Corruption* is the ICRG corruption measure. *(t-2)* indicates the variable has been lagged by one year. See the Appendix for more information. Real GDP per capita is scaled down by a factor of 10,000.

Table C1: Corruption Perceptions and Ideology

Dependent Variable: Right Wing Voter	**(1)**	**(2)** Coefficients	**(2 continued)** Std. error
Perception of Corruption			
- Few officials	-0.029 (0.026)	-0.040	(0.030)
- Most officials	**-0.068** (0.026)**	**-0.091****	**(0.030)**
- Almost all officials	**-0.127** (0.027)**	**-0.141****	**(0.031)**
Personal Income Quintile - Second		**-0.032***	**(0.015)**
- Third		-0.007	(0.017)
- Fourth		**0.042***	**(0.019)**
- Fifth (top)		**0.116****	**(0.022)**
Work Status - Unemployed		-0.003	(0.020)
- Self employed		**0.097****	**(0.019)**
- Retired		**-0.057****	**(0.023)**
- Student		**0.054***	**(0.024)**
- Housewife		**0.109****	**(0.020)**
- Other		0.045	(0.039)
Marital status - Married		**0.031***	**(0.016)**
- Divorced		0.014	(0.031)
- Separated		-0.017	(0.040)
- Widowed		**0.070****	**(0.028)**
Age		**-0.006****	**(0.002)**
Squared Age		**9.5e-5****	**(2.5e-5)**
Male		**0.040****	**(0.011)**
Age Finished School: 12-14 years old		0.012	(0.031)
15-18 years old		-0.039	(0.030)
19-21 years old		-0.040	(0.032)
> 21 years old		-0.082	(0.031)
Country Dummies	Yes	Yes	
No of Observations	51,810	40,028	
Pseudo R^2	0.02	0.02	

Note: [1] All regressions are Ordered Probits. [2] Standard errors in parentheses. [3] Bold-face denotes significant at the 10 percent level; Single-starred bold-face at the 5 per cent level; Double-starred bold face at the 1 percent level. [4] The cut points (standard errors) for column (1) are: _cut1=-1.58 (0.08), _cut2=-1.18 (0.08), _cut3=-0.77 (0.08), _cut4=-0.46 (0.08), _cut5=0.38 (0.08), _cut6=0.74 (0.08), _cut7=1.03 (0.08), _cut8=1.39 (0.08) and _cut9=1.62 (0.08). The cut points for column (2) are: _cut1=-1.58 (0.11), _cut2=-1.32 (0. 11), _cut3=-0.90 (0. 11), _cut4=-0.59 (0.11), _cut5=0.24 (0.11), _cut6=0.61 (0.11), _cut7=0.90 (0.11), _cut8=1.28 (0.11), _cut9=1.52 (0.11). [5] Dependent variable is the answer to the question *"In political matters, people talk of "the left" and "the right". How would you place your views on this scale, generally speaking?"* Interviewer shows scale with numbers 1 to 10 written down with the word Left written below the number 1 and the word Right below the number 10. [6] "Perception of Corruption" is the answer to the question *"How widespread do you think bribe taking and corruption is in this country?*

1. *Almost no public officials are engaged in it*
2. *A few public officials are engaged in it*
3. *Most public officials are engaged in it*
4. *Almost all public officials are engaged in it*

Table C2: Corruption Perceptions and Economic Attributes of Ideology

Dep. Variable has L (R) extension if higher numbers mean more Left (right)	(1) Not Lazy-L	(2) Escape-L	(3) Govern. Poor-L	(4) Business Own-L	(5) Fair Pay-L
Perception of Corruption *1= almost no official* *4= almost all officials*	**0.155**** **0.032**	**0.251**** **0.031**	**0.331**** **0.041**	**0.047**** **0.018**	**0.138**** **0.026**
Personal Controls	No	No	No	No	No
No of Observations	52,446	58,180	55,103	56,873	58,810
Pseudo Rsq	0.098	0.111	0.105	0.041	0.079

	(1b)	(2b)	(3b)	(4b)	(5b)
Perception of Corruption *1= almost no official* *4= almost all officials*	**0.168**** **0.040**	**0.264**** **0.036**	**0.372**** **0.041**	**0.047*** **0.020**	**0.134**** **0.021**
Personal Controls	Yes	Yes	Yes	Yes	Yes
No of Observations	37,864	43,673	39,995	41,184	44,392
Pseudo Rsq	0.087	0.110	0.114	0.049	0.092

Note: [1] Name of dependent variable has L (R) extension if higher numbers mean more Left (right) [2] All regressions are Ordered Probits [3] Standard errors in parentheses [4] Bold-face denotes significant at 10 percent level; Single-starred bold-face at 5 per cent level; Double-starred bold face at 1 percent level. [5] P. of Corruption= Perception of Corruption as defined in the note to Table 1. [6] Dependent variables in the first three columns are the answers to the question:
Now I'd like you some questions about the problem of poverty, in this country and in other countries:

Column (1) Why, in your opinion, are there people in this country who live in need? Here are two opinions: which comes closest to your view? 1. They are poor because of laziness and lack of willpower, or 2.They are poor because society treats them unfairly.

Column (2) In your opinion, do most poor people in this country have a chance of escaping from poverty, or there is very little chance of escaping? 1. They have a chance or 2. There is very little chance.

Column (3) Do you think that what the government is doing for people in poverty in this country is about the right amount, too much, or too little? 1. Too much or 2. About the right amount, or 3. Too little.

Column (4) There is a lot of discussion about how business and industry should be managed. Which of these four statements comes closest to your opinion?

1. The owners should run their business or appoint the managers
2. The owners and the employees should participate in the selection of managers.
3. The government should be the owner and appoint the managers
4. The employees should own the business and should elect the managers.

Column (5) Imagine two secretaries, of the same age, doing practically the same job. One finds out that the other earns considerably more than she does. The better paid secretary, however, is quicker, more efficient and more reliable at her job. In your opinion, is it fair or not fair that one secretary is paid more than the other? 1. Fair or 2. Not fair.

Columns (1b-5b) run the same set of regressions, but also controlling for the identical set of personal characteristics included in Table C1.

Table C3: Corruption Perceptions and Non-Economic Attributes of Ideology

Dep. Variable has L (R) extension if higher numbers mean more Left (right)	**(1)** Homosex-L	**(2)** Technology vs Tradition-L	**(3)** Tolerance-R	**(4)** Nature-L	**(5)** Marriage Outdated-R
Perception of Corruption	-0.037	**-0.054***	**0.093****	**0.077****	**-0.139****
1= almost no official	0.023	**0.023**	**0.018**	**0.024**	**0.032**
4= almost all officials					
Personal Controls	No	No	No	No	No
No. Observations	61,165	52,342	54,969	56,731	61,324
Pseudo R^2	0.087	0.063	0.065	0.114	0.075

	(1b)	**(2b)**	**(3b)**	**(4b)**	**(5b)**
Perception of Corruption	**-0.067****	**-0.054***	**0.075****	**0.092****	**-0.123****
1= almost no official	**0.025**	**0.025**	**0.021**	**0.027**	**0.035**
4= almost all officials					
Personal Controls	Yes	Yes	Yes	Yes	No
No. Observations	49,777	38,030	39,903	41,144	45,115
Pseudo R^2	0.127	0.092	0.070	0.104	0.108

Notes: [1] All the regressions are Ordered Probits. [2] Standard errors in parentheses. [3] Bold-face denotes significant at the 10 percent level; Single-starred bold-face at the 5 per cent level; Double-starred bold face at the 1 percent level.
Dependent Variables:

Column (1) Please tell me if homosexuality can always be justified, never be justified or something in between, using this card. Card shows a scale from 1 to 10 where 1= Never justifiable, 10= Always justifiable.

Column (2) For the following pair of statements, please tell me which one comes closest to your own views. 1. We should emphasize tradition more than high technology, OR 2. We should emphasize high technology more than tradition.

Column (3) For the following pair of statements, please tell me which one comes closest to your own views. 1. To build good human relationships, it is most important to try to understand other's preferences; OR 2. To build good relationships, it is most important to express one's own preferences clearly.

Column (4) For the following pair of statements, please tell me which one comes closest to your own views. 1. Human beings should master nature; OR 2. Humans should coexist with nature.

Column (5) Do you agree or disagree with the following statement? "Marriage is an out-dated institution"
1. Agree; 2. Disagree

Columns (1b-5b) run the same set of regressions, but also controlling for the identical set of personal characteristics included in Table C1.

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