

“Grabbing Hand” or “Helping Hand”? Corruption and the Economic Role of the State

JONATHAN HOPKIN and ANDRÉS RODRÍGUEZ-POSE*

This article seeks to disentangle which features of government intervention are linked to corruption and which are not, by distinguishing between the government roles of regulator, entrepreneur, and consumer. It finds that the degree of regulation of private business activity is the strongest predictor of corruption, and that high levels of public spending are related to low levels of corruption. There is no evidence of direct government involvement in production having any bearing on corruption. It is concluded that advanced welfare capitalist systems, which leave business relatively free from interference while intervening strongly in the distribution of wealth and the provision of key services, combine the most “virtuous” features of “big” and “small” government. This suggests that anti-corruption campaigners should be relaxed about state intervention in the economy in general, but should specifically target corruption-inducing regulatory systems.

Introduction

One line of research into corruption identifies overbearing government intervention in the economy as the main culprit. In contrast to the prevailing view of the 1940s, 1950s, and 1960s, which saw the state as a “helping hand” in economic and social development, it is now common to see government portrayed as a “grabbing hand,” controlled by politicians who “do not maximize social welfare and instead pursue their own selfish objectives” (Shleifer and Vishny 1998, 4). The emergence of “big government” over the postwar period, with higher taxes and spending and more invasive regulation, is often identified as a major cause of corruption (Tanzi 2000, 108–109). Even more cautious analyses, while recognizing that deregulation and privatization will not inevitably defeat corruption, often share the view that “smaller government may indeed be cleaner government” (Rose-Ackerman 2000, 99). This view, which draws on the “return to the market” advocated by the public choice school (see Tanzi 2000, ch. 2), has fed directly into the policy choices of developing countries through the pressures of international institutions such as the World Bank and the IMF (see Abed and Gupta 2002; Johnston 1998).

*London School of Economics and Political Science

Governance: An International Journal of Policy, Administration, and Institutions, Vol. 20, No. 2, April 2007 (pp. 187–208).

© 2007 The Authors

Journal compilation © 2007 Blackwell Publishing, 350 Main St, Malden, MA 02148, USA, and 9600 Garsington Road, Oxford, OX4 2DQ, UK. ISSN 0952-1895

There is much that is valuable in this literature, and it is not our intention to suggest growing the public sector as a “solution” to corruption. However, there are good reasons to believe that the interventionism-corruption case has been overstated. Surveys of corruption regularly place the high-spending Scandinavian social democracies at the very top of their league tables of “clean government,” and the market-oriented United States does not perform better than the much-criticized welfare states of continental Europe. This rather simple observation forms the basis of the analysis presented here. In this article we depart from the pessimistic view of the public sector promoted by the public choice school and try to untangle some of the intricacies of the link between government intervention and corruption, drawn from observation of the varied experiences of advanced and developing nations. Quantitative work by economists has shown that the “quality of government” is positively correlated with public sector size (La Porta et al. 1999) and that particular kinds of regulatory burdens are associated with corruption (Djankov et al. 2002). These findings form the basis for a quantitative analysis of the relationship between various kinds of government intervention in the economy and corruption in a sample of 103 countries. The results suggest an explanation of the low levels of corruption found in some countries with very large public sectors: Governments in these countries have developed the capacity to regulate their private sector economies effectively but unobtrusively, while growing the state’s role in other areas.

Corruption as a Government Pathology

The decade of the 1990s saw corruption emerge as an important concern of economics research, and in particular that of the public choice school. Building on the pioneering work of Rose-Ackerman (1978) and Banfield (1975), scholars have developed an “economic” account of corruption which has become increasingly influential in policy circles. This focus on corruption is a logical corollary of economists’ growing interest in institutions (e.g., Drobak and Nye 1997) and draws inspiration from the critical analysis of government activity advanced by the public choice school. Public choice challenged the Pigovian view of government as a “benevolent dictator” capable of pursuing economic efficiency and instead applied the tools of economic analysis to the politicians and bureaucrats who manage the government machinery (Tanzi 2000, 18–19). Government personnel are assumed to be just as self-interested as any other economic actor and will therefore exploit their monopoly over certain decisions to generate rents. Public choice scholars have argued, for example, that governments tend to reward narrow rather than encompassing interests (Becker 1983), provide poor quality services at high cost (Tanzi and Schuknecht 2000), and manipulate macroeconomic policy for political ends (Alesina, Cohen, and Roubini 1992). In this view, corruption is a particularly stark manifestation of the rent-seeking behavior in which

government officials engage, and a very damaging one in view of its consequences for economic performance (Knack and Keefer 1995; Mauro 1995; Méon and Sekkat 2005; Svensson 2005).

A number of economists and political scientists have therefore related corruption to degrees of government intervention, advocating reductions in the scope of government activity as the most effective way of constraining corruption (e.g., Harriss-White 1996). LaPalombara (1994) reports a positive empirical relationship between government expenditure and corruption, subsequently contradicted by Elliot (1997). The bluntest version of this diagnosis is Gary Becker's recommendation that "if you want to cut corruption cut government" (Becker and Becker 1997, 203). Others present the same equation in more prudent terms. The IMF economist Vito Tanzi (2000), for example, claims that "the growth of corruption is probably closely linked with the growth of some of the activities of the government in the economy" and concludes that "corruption will be reduced mainly in those countries where governments are willing to substantially reduce some of their functions" (133). Susan Rose-Ackerman (1999, 42) argues that "the elimination of spending and regulatory programs can be a potent corruption-reducing strategy," although she is cautious enough to warn that such changes can worsen the problem under certain conditions (see in particular Rose-Ackerman 2000). Treisman (2000, 441) concludes one overview by reporting that "the extent of state intervention in the economy and the level of perceived corruption are highly correlated." Ades and di Tella (1997a, 497; also 1999) advocate an "economist's approach" to the problem of corruption, arguing that corruption is inversely related to the level of competition in the economy, and that government should privatize public companies and introduce market-like mechanisms in those areas where it needs to retain control. Goldsmith (1999) finds negative correlations between economic liberalization, administrative centralization, and corruption. One fairly typical summary of the corruption literature talks of "a general consensus . . . that the reduction of state bureaucracies and the encouragement of more transparent, free-market operations, along with improving the government's capacity to regulate these processes and to enforce the law, are the most effective methods of controlling corruption" (Tulchin and Espach 2000, 5).

This line of argument fits neatly with the policy prescriptions of the "Washington consensus," under which governments are urged to deregulate, privatize, and roll back redistributive spending in order to maximize economic efficiency. Indeed, international organizations such as the IMF have been quick to emphasize the link between corruption and the government's role in the economy. The IMF Guide *Promoting Good Governance and Combating Corruption* states baldly that "corruption thrives in the presence of excessive government regulation and intervention in the economy," and goes on to suggest that corruption can emerge "when the government provides goods, services and resources at below-market prices" or "when officials take decisions that are potentially costly to

private individuals or companies" (IMF 2002). Although the Fund is careful not to suggest a neat "intervention = corruption" equation, the clear implication is that extensive government intervention poses at the very least an enhanced risk of corruption. The World Bank, for its part, has argued that "deregulation of prices or other aspects of production or trade are important steps towards reducing opportunities for corruption" and advocated "enhancing competition" in order to create a "vibrant and corruption-free private sector" (World Bank 2004a; see also World Bank 1997). These international institutions have drawn heavily on academic research into corruption, particularly by economists, in developing their policies.

It would be unfair to attribute to this line of scholarship a naïve belief in the powers of markets to defeat corruption. Indeed, a characteristic of current research into corruption is its avoidance of monocausal explanations and its emphasis on the need for reformers to address corrupt mechanisms in a variety of arenas (see for instance the reviews in Kaufman 2003; Lambdorff 2005; Svensson 2005). As well as advocating the withdrawal of the state from some areas of activity, recent economic research has sought to look inside the state machinery in order to identify the institutional structures and practices that seem to encourage corruption. Economists have sought to model the incentive structures which underlie bureaucratic corruption, looking at the impact of bureaucratic pay, recruitment, and structure (di Tella and Schargrodski 2003; Rose-Ackerman 1999, ch. 5; Van Rijckeghem and Weder 2001), the administration of tax collection (Chand and Moene 1997; Tanzi and Davoodi 2000), the territorial structure of government (Fisman and Gatti 2002; Kunicová and Rose-Ackerman 2005; Treisman 2000), and patterns of public spending and investment (Goel and Nelson 1998; Mauro 1998; Tanzi and Davoodi 1997). Other work by economists, geographers, and political scientists have stressed the importance of democracy and democratic tradition (Montinola and Jackman 2002; Treisman 2000¹), of the interface between community and society (Rodríguez-Pose and Storper 2006), colonial history and legal origin (Acemoglu, Robinson, and Johnson 2001; LaPorta et al. 1998, 1999), and within democracies, the extent to which electoral institutions promote competition among politicians, reducing rent-seeking and limiting the growth of the state (Djankov et al. 2003; Myerson 1993; Persson and Tabellini 1999). Some of this work suggests a more nuanced understanding of the relationship between government intervention and corruption, and indeed international institutions increasingly focus on the ways in which the private sector intervenes in policy making, and the importance of better organized, rather than smaller, government (e.g., Kaufman 2005).

Nevertheless, the dominant view remains broadly skeptical about the possibilities for extensive government intervention in the economy. Economic liberalization and the slimming down of the public sector may not be presented as a panacea but remain a central feature of the strategies for

improving governance promoted by international organizations and Western governments. Yet several of the “best governed” countries in the world are advanced industrial nations with large public sectors (La Porta et al. 1999). Moreover, although most Western nations have embarked at least to some degree on the kinds of market-friendly liberalization programs advocated by organizations such as the IMF, there is little evidence that such reforms have reduced levels of corruption. In fact, advanced industrial nations, for the most part, have long intervened heavily in their economies while enjoying low levels of corruption. The experience of the world’s richest nations suggests therefore that the economic agenda being pressed on the developing world will not necessarily be helpful in reducing levels of corruption.²

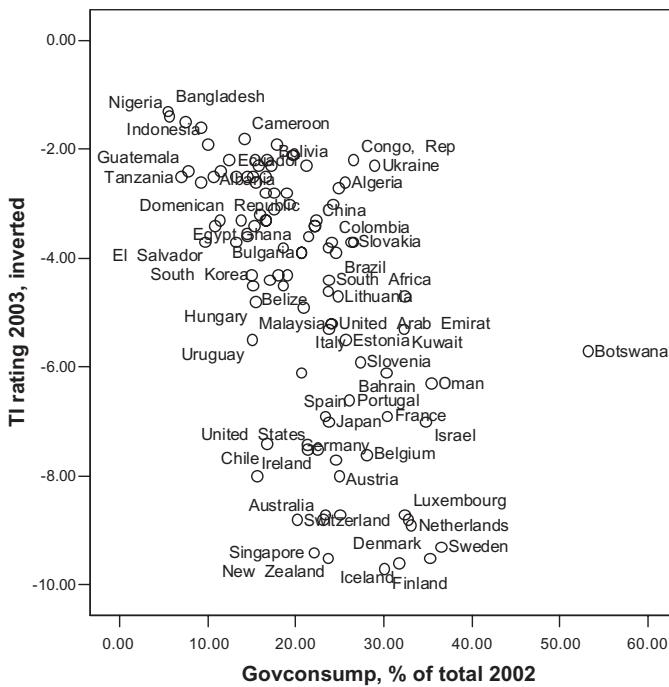
In the remainder of this article, we aim to contribute to the discussion by identifying the broad types of public intervention in the economy which are most damaging for corruption-free governance. The purpose of this analysis is to explain how some countries manage to combine large public sectors with low levels of corruption. We will present evidence that some kinds of government intervention in the economy may in fact be inimical to corruption, or at the very least unrelated to it.

Regulator, Entrepreneur, Consumer: Disentangling Government Intervention

There are a number of ways of distinguishing between different forms of government intervention. A useful starting point is Stiglitz’s (1989) simple division of government economic activity into production and consumption, subdivided in turn into different types of government intervention in production and consumption.³ On the production side, government indirectly intervenes in private production through regulation, subsidy, fiscal policy, and public services; it directly intervenes through producing some goods itself (Stiglitz 1989, 12–13). On the consumption side, government both redistributes income, and directly purchases goods and services (14). Here we distinguish between three broad government roles: regulation, entrepreneurship (i.e., state ownership of companies), and consumption. An analysis of some standard measures of these various kinds of intervention provides useful insights into the corruption problem.

The most straightforward way of measuring the extent of government intervention in the economy—calculating the level of tax raised by the state, or the money spent by the state, as a proportion of national income—gives us a measure of the extent to which the government intervenes as a “consumer.” Some studies have found a relationship between government size and corruption, concluding that higher government expenditures simply create more opportunities for rent-seeking (Goel and Nelson 1998; Nitzan 1994; Scully 1991). Other research has disaggregated public expenditure, finding that corruption is inversely related to educa-

FIGURE 1
Government Consumption and Corruption



Sources: TI rating = Transparency International (2003) survey (scores inverted so a higher figure denotes higher reported levels of corruption); government consumption as percent of national income (World Bank WDI 2003, see Appendix).

tion spending (Mauro 1998), but positively correlated with public investment (Tanzi and Davoodi 1997) and military spending (Gupta, de Mello, and Sharan 2001).

A simple bivariate analysis of government consumption (as a share of GDP) and corruption (Transparency International's ratings for 2001–2003, inverted; see Appendix) reveals a negative and statistically significant correlation ($r = -.607$, $p = .000$) (for a graphic representation see Figure 1). Countries whose governments are most active as "consumers" of national income have the lowest levels of corruption. Of course, this simple bivariate analysis fails to consider the widely recognized effect of levels of economic development on both variables. However, the strong negative and significant relationship between government consumption and corruption also holds for a much smaller group of advanced industrial democracies with high levels of economic development ($r = -.535$, $p = .009$). This finding is all the more significant in view of the rather wide

variation in corruption ratings among these advanced countries (ranging from .3/10 to 5.7/10, 64% of the range of ratings across the 133 countries surveyed by Transparency International). Moreover, a multivariate analysis of a far larger sample of both advanced and developing countries by La Porta et al. (1999) found that a broader measure of the quality of government also correlates positively with government size (see also Gerring and Thacker 2005; Tanzi 2000; Tanzi and Davoodi 1997).

A disaggregated analysis of government spending does little to enhance explanation of corruption, at least for advanced industrial nations. We carried out, again for advanced nations, a series of regression analyses of corruption ratings with a variety of spending categories, using data collected by Tanzi and Schuknecht (2000, ch. 2), and controlling for per capita GDP and overall levels of government consumption. For all but one of these categories, the analysis yielded no significant correlation,⁴ and it is worth noting that no relationship was found between corruption and either public investment or military spending, two areas highlighted in the literature. The most important exception is that the model for government spending on education found a negative and significant correlation with corruption (adjusted $r^2 = .372$, $p = .05$), replicating Mauro's (1998) findings for a larger sample of countries. Overall, however, the evidence suggests that government's role as consumer is, if anything, negatively correlated with corruption (Adserà, Boix, and Payne 2000; Gerring and Thacker 2005; La Porta 1999).

Our attention therefore turns to the ways in which governments intervene in the "production" side of economic life. We focus on government's role as an "entrepreneur": Direct government intervention in production through public enterprises has been identified by some economists as an important source of corruption (Ades and di Tella 1997b; Tanzi 2000, ch. 2), and is well documented as an arena for illicit political fundraising in some advanced industrialized nations (most notably Italy, McCarthy 1997, ch. 5). We also look at government's role as regulator, which has been signaled as an important source of unhealthily close relationships between business interests and public officials (Glaeser and Shleifer 2003; Peltzman 1998; Stigler 1971). There is now a broad consensus in the corruption literature that regulations which impose costs and allocate scarce benefits provide incentives for bribery (Rose-Ackerman 1999, ch. 4; Tanzi 2000, chs. 2, 3, 6, 7; Djankov et al. 2002). If a license or permit is required in order to carry out some economic activity, this potentially gives the public official discretionary power which has economic implications for citizens; put bluntly, if the authorization will make a citizen richer and refusal will make her poorer, then the citizen will probably be prepared to pay in order to ensure that the official provides it. Particularly damaging is "quasi-fiscal" regulation, through which governments with a weak revenue service pursue redistributive goals (Tanzi 2000, ch. 3). The more cumbersome the regulation of economic life, the more likely it is that citizens and

officials will engage in corrupt exchange. Moreover, pervasive corruption can be a cause of further cumbersome regulation, as corrupt officials seek to extend regulations in order to create and extract ever greater rents (Djankov et al. 2002, 2–3; for a case study, Golden 2003).

Regulation is more difficult to measure than taxation and spending and was absent from empirical analyses of corruption until relatively recently (for exceptions, Djankov et al. 2002; La Porta et al. 1999; Paldam 2001). However, useful indicators of the weight of regulation in an economy are available, allowing us to assess the extent to which governments interfere in economic life and, more generally, the amenability of social and political conditions for business activity. One of them is the Fraser Institute's comprehensive "Economic Freedom Index" (Gwartney and Lawson 2003, ch. 1), which covers a broad range of indicators, and has been employed in the analysis of corruption by Paldam (2001).

Preliminary analysis of these data suggests an answer to the big government–low corruption paradox. Independently of government size, countries with unobtrusive regulation of business activity perform well in the corruption rankings,⁵ confirming similar findings made by Djankov et al. (2002) using data on regulation of entry into product markets. Looking at individual data points, it becomes apparent that there are both "big" and "small" governments at both ends of the scale of economic regulation. Among lightly regulated economies with low levels of corruption, some countries (United States, United Kingdom, Australia) choose to keep public spending comparatively low, while others (Denmark, Sweden, Finland) intervene far more heavily in the redistribution of income and the provision of public services, maintaining high levels of public spending. In other words, provided private business activity is regulated effectively and unobtrusively, governments can choose to intervene more or less heavily in consumption and the provision of public services without running the risk of promoting corruption. The following section subjects this hypothesis to more rigorous statistical analysis in order to estimate the effects on corruption of governments in their roles as regulator, entrepreneur, and consumer.

Multiple Regression Analysis

In order to test our hypothesis, we conduct a simple OLS regression analysis of the link between corruption and different measures of government intervention in the economy across 103 countries. The main aim of this exercise is to test what kind of association can be found between the broad contours of "big government," following the West European model on the one hand, and levels of corruption on the other. Additional independent variables which control for the initial level of GDP per capita, the degree of democracy, the geographical location of countries, legal origin, socialist legacy, ethnic and religious polarization, or the presence of

federalism are also included in the model as control variables. The basic model adopts the following form:

$$\text{corruption}_i = \alpha + \beta_1 \text{governcons}_i + \beta_2 \ln \text{GDPcap}_i + \beta_3 \text{democr}_i + \beta_4 \text{biggov}_i + \beta_5 \text{controls}_i + \varepsilon$$

where

corruption is the degree of corruption in 2003;

governcons denotes the level of government consumption, as a percentage of GDP in 2002. This variable is included in the equations reported in Table 1, whereas Table 2 uses an alternative measure of government spending, the level of transfers and subsidies as a percentage of GDP in 2002;

lnGDPcap denotes the average GDP per capita between 2001 and 2003, measured in U.S. dollars;

democr is the inverse of a composite of the Freedom House index of democracy, representing the average for the period 1998–2002;

biggov comprises three variables that contribute to give a broader picture of the level of intervention of government in the economy. These variables include state ownership of industry, labor regulation, and business freedom;

controls depict a series of structural variables, which monitor the influence other national conditions may have on corruption. The control variables included in the equations include:

1. A series of geographical and development dummies (continent dummies for Africa, Asia, and Latin America, and a dummy for Organization for Economic Co-operation and Development [OECD] membership).
2. A dummy to control for the possible influence of different legal systems (dummy for the presence of common law or of systems of Anglo-Saxon origin).
3. A dummy representing a socialist legacy.
4. Indicators for levels of ethnic and religious polarization within countries.
5. An indicator for the level of federalism.

i represents the country;

t represents the period being analyzed;

and α and β are the regression coefficients, and ε is the error term.

TABLE 1
Corruption and Government Intervention: Government Consumption

| Indep. Var. | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|--------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------|
| Government consumption | -.1851*** .0239 | -.0607*** -.0225 | -.0618*** -.0258 | -.0553*** -.0222 | -.0719*** -.0226 | -.0681*** -.0339 | -.0707** -.0339 |
| In GDP per capita | .0180 -.10485*** | .1088 -.9478*** | .1333 -.1333 | .1759 -.1024 | .1303 -.1021 | .1344 -.1062 | -.9060*** -.1782 |
| Level of democracy | .1355 .0006 | .1355 .0006 | .0353 .1204 | .0483 .0211 | .0415 .1062 | .0415 .0303 | -.1553 -.1650 |
| State ownership industry | .0830 .0559 | .0830 .0559 | .0369 .0600 | .0672 .0477 | .0672 .0511 | .0628 .0628 | -.0949 -.0949 |
| Labor regulation | .0490 .9341** | .0490 .3542 | .8765*** .3879 | .8766* .4577 | .8900** .3672 | .8415* .4818 | -.1008*** -.1008*** |
| Business regulation | -.9576*** .1523 | -.9576*** .1523 | -.9106*** .1652 | -.9029*** .1484 | -.9029*** .1536 | -.10116*** .1511 | -.2151 -.2151 |
| Latin America dummy | | | .0932 .4314 | .0932 .4314 | | | |
| Africa dummy | | | -.3744 .5344 | -.3744 .5344 | | | |
| Asia dummy | | | -.0216 .4039 | -.0216 .4039 | | | |
| OECD dummy | | | .1188 .4126 | .1188 .4126 | .0596 .3154 | .2324 .4507 | |
| Anglo-Saxon legal system | | | | | .7632** .3002 | .2711 .4305 | |
| Socialist legacy | | | | | | | -.0788 -.0788 |
| Ethnic polarization | | | | | | | |
| Religious polarization | | | | | | | |
| Federalism | | | | | | | |
| Constant | -.7715 .5267 | 4.7810*** .9175 | 7.0746*** 1.1252 | 7.4895*** 1.3842 | 6.5996*** 1.1674 | 6.1557*** 1.3576 | 8.4731*** 1.8147 |
| F | 60.1598 .0000 | 110.6960 .0000 | 86.2804 .0000 | 49.0548 .0000 | 70.4190 .0000 | 71.7352 .0000 | 37.6640 .0000 |
| Prob > F | | | | | | | |
| df | | | | | | | |
| R ² | | | | | | | |
| Adj. R ² | | | | | | | |
| Multicollinearity | | | | | | | |
| Sp. autocorrelation | No No |

Note: Standard errors reported in italics under unstandardized coefficients.
***, **, and * denote significance at the 99%, 95%, and 90% levels, respectively.

A detailed explanation of what each variable represents and how it is calculated is included in the Appendix.

The types of government intervention whose effects we are exploring are precisely those traditionally associated with the various kinds of Western European welfare capitalism. We look at how Western European governments have intervened in economic and social life as regulator, entrepreneur, and consumer: They have regulated labor and product markets, sometimes extensively, they have sometimes directly managed industrial production through state ownership of companies, and they have raised taxes and borrowed money in order to provide public services and redistribute resources through transfers and subsidies. We expect to find that variations in the extent to which different governments intervene in their various roles will be related to perceived levels of corruption.

The results of the analysis of whether “big government” has an effect on corruption are presented in Table 1. Seven stepwise regressions are performed for the 103 countries included in the sample.⁶ The available data do not permit a tractable time series analysis, so data points from the early 2000s period are taken. Given that the variables are (or can be hypothesized to be) rather slow-moving, we do not envisage that this biases the results significantly.

The first three regressions in Table 1 concentrate on the simple relationship between government size and corruption and include the basic controls: Regression 1 comprises the level of public expenditure as a percentage of GDP, Regression 2 adds the basic controls of the natural logarithm of GDP per capita and the level of democracy, and Regression 3 adds the other variables that depict the degree of government intervention in the productive side of the economy (state ownership of firms, labor and business regulation). Regressions 4 to 7 introduce the additional controls for geography, legal system, socialist legacy, ethnic and religious polarization, and federalism. VIF and Moran’s I tests have been carried out in order to check for multicollinearity and spatial autocorrelation respectively. No violations of these assumptions were detected.

The results presented in Table 1 highlight the fact that “big government,” rather than having a positive impact on corruption as could be expected according to some theories, is robustly and negatively associated with it. Our main indicator of “big government,” the level of government consumption as a percentage of GDP, displays in all regressions a negative and significant coefficient. This means that the higher the level of government consumption, the lower the level of corruption. This relationship is extremely robust, as it is not affected by the inclusion of indicators such as the relative wealth of countries, the geographical location of the country considered, or the other control variables described above. The inclusion of the degree of democracy in the model also has little influence on the results, as its coefficients are insignificant and close to zero. Hence, countries with greater levels of government consumption tend to have more developed governments and public administrations, and, as a general

rule, a lower degree of corruption (as found by Gerring and Thacker 2005; La Porta et al. 1999).

The introduction from Regression 3 onward of the additional “big government” variables produces interesting insights about the link between the degree of government intervention in the economy and corruption. Contrary to the findings of Ades and di Tella (1997b), government ownership and management of enterprises have no relationship with corruption in any of the regressions in which it is included (Regressions 3, 4, 5, 6, and 7). The degree of labor regulation within a country, in contrast, is associated with higher levels of corruption. As the results of Table 1 indicate, countries with a greater level of intervention in the labor market also tend to be more corrupt. And the capacity of firms to conduct business without interference—the level of government regulation of business activity—is strongly associated with lower levels of corruption.

The above results are robust to the introduction of the control variables. Geographical factors, in general, and belonging to a specific continent, in particular, are not associated with greater or lower corruption, when factors such as the relative wealth of the country, the level of government consumption, and the capacity of business to act freely in the market place are controlled for. Neither is membership of a specific rich country club, such as the OECD, significant. The prevalence of any given legal system (proxied by the common law system), decentralization and federalism, or the presence of important ethnic and/or religious divisions within any given country also do not affect the strengths of the results. Only countries with a socialist past seem more prone to corruption than those that were not affected by it (Table 1).

In Table 2 we conduct the same regressions, substituting government consumption by the level of government transfers and subsidies as a percentage of GDP as the main independent variable. Although the level of transfers and subsidies, like government consumption, has a strong and robust negative correlation with corruption, this relationship is not robust to the inclusion of GDP per capita; the positive effect of such government spending on the level of corruption withers away when a country's economic development is taken into account. The level of transfers and subsidies only recover their positive and significant association with lower corruption levels when factors such as the socialist legacy of a country or its ethnic and religious polarization are accounted for (Table 2). As in Table 1, the results in Table 2 highlight, that, once GDP per capita is considered, countries that interfere less with business activities are generally less corrupt.

Overall, our results indicate the existence of a complex relationship between government intervention in the economy and corruption. Whereas corruption seems to be connected with greater government regulation, such as the regulation of business activities or of the labor market, the actual intervention of governments as economic actors is, in most cases, associated with lower corruption. High government expenditure is

TABLE 2
Corruption and Government Intervention: Transfers and Subsidies

| Indep. Var. | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|----------------------------|--------------------|--------------------|---------------------|---------------------|--------------------|---------------------|---------------------|
| Transfers and subsidies | -.1673*** .0252 | -.0119 .0207 | -.0254 .0257 | -.0095 .034 | -.0804** .0338 | -.0690** .0338 | .0113 .0374 |
| In GDP per capita | | -.1352*** .8239 | -.9683*** .2121 | -.9434*** .2934 | -.8706*** .2075 | -.7229*** .2168 | -.8978*** .2219 |
| Level of democracy | | -.0414 .0988 | -.0771 .1422 | -.1033 .1533 | -.0994 .136 | -.1503 .1551 | -.1121 .1935 |
| State ownership industry | | -.0199 .0142 | -.0159 .0164 | -.0159 .0148 | -.0335** .0158 | -.0217 .0148 | -.0152 .0153 |
| Labor regulation | | .392 .4914 | .3632 .5821 | .3632 .6084 | .2555 .4928 | .6336 .5617 | .301 .8354 |
| Business freedom | | -.1095*** .2044 | -.10495*** .2249 | -.10495*** .0272 | -.9300** .2072 | -.10391*** .2021 | -.11662*** .2554 |
| Latin America dummy | | | | .4487 .4487 | | | |
| Africa dummy | | | | .6101 .0107 | | | |
| Asia dummy | | | | .807 .4347 | | | |
| OECD dummy | | | | .7314 .017 | | | |
| Anglo-Saxon legal system | | | | .6491 .6491 | | | |
| Socialist legacy | | | | | -.6065 .4498 | | |
| Ethnic polarization | | | | | 1.4091** .6362 | | |
| Religious polarization | | | | | | 1.184 .5911 | |
| Federalism | | | | | | .5632 .6556 | |
| Constant | | | | | | | -.2869 .1974 |
| | | | | | | | 9.0776*** 2.4765 |
| <i>F</i> | | | | | | | |
| <i>Prob > F</i> | | | | | | | |
| df | | | | | | | |
| <i>R</i> ² | | | | | | | |
| Adj. <i>R</i> ² | | | | | | | |
| Multicollinearity | | | | | | | |
| Sp. Autocorrelation | | | | | | | |

Note: Standard errors reported in italics under unstandardized coefficients.
***, **, and * denote significance at the 99%, 95%, and 90% levels, respectively.

a robust sign of lower corruption, while the level of transfers and subsidies by government—whenever significant—are associated with lower levels of corruption, and government ownership of firms is neutral. Hence the profile of the less corrupt countries that emerges from our analysis is that of a relatively rich country, which does not shy away from “big government” measures and does not hesitate to take the role of a powerful economic actor, but that, at the same time, refrains from excessively regulating the market place.

Conclusions

Overall, the results of our analysis show that the magnitude of government intervention in the economy in its broadest sense has little to do with corruption. High levels of public expenditure or government consumption are strongly associated with low levels of corruption. Instead, restrictions on business activity through heavy regulation and cumbersome bureaucracy are a powerful predictor of corruption, as is the average wealth of the country in the larger sample. There is no apparent association between corruption and government-owned enterprises. In short, the more the government intervenes as a regulator, the more corruption we observe, but government activity as consumer and as entrepreneur has either no relationship, or a negative one, with the incidence of corruption. This confirms that the relationship between government intervention and corruption is far from straightforward, and that many of the features of “big government” associated with Western European welfare capitalism—even those now discredited on economic efficiency grounds, such as state-owned enterprises—cannot be regarded as a source of greater corruption.

It is generally in government regulation, rather than in government intervention in the economy *per se*, where the opportunities for greater corruption lie. Corruption is robustly positively correlated with the degree of regulation of business activity and of the labor market (see also Djankov et al. 2002; World Bank 2004b). This suggests that governments should remove the kinds of cumbersome regulations that create opportunities for public officials to offer “fast-track” treatment in return for cash. To this extent, the efforts of international organizations such as the IMF, the World Bank, and the OECD to improve the effectiveness and integrity of public administrations do indeed go to the heart of the problem. However, our analysis also implies that governments that follow this advice can also intervene extensively in the redistribution of income and the provision of social services, without such intervention necessarily undermining the quality of governance. Even regulation of the labor market and state-controlled enterprises, two examples of the kinds of interventionist policies which the current orthodoxy condemns (on both efficiency and governance grounds), have no statistically significant relationship with corruption in our analysis.

Moreover, the negative correlation between corruption and public spending is particularly striking, suggesting that government intervention through welfare programs is associated with lower corruption (although the analysis presented here does not allow us to assess the direction of causality). Recent research shows that universalistic welfare states (such as those in the high-spending social democracies) strengthen citizens' trust in public institutions, thereby enhancing compliance with state rules and decisions (Edlund 1999; Kumlin and Rothstein 2003). This intriguing finding runs counter to assumptions that more state intervention means more opportunities for corruption. Indeed, there is a remarkable lack of qualitative or quantitative evidence that corruption has increased in those countries which have had a large public sector over a long period of time. Instead, at least on the basis of the Western European experience, it can be suggested that large public sectors, when they make effective use of public resources, stimulate further demand for government intervention in consumption, which in turn can enhance citizen commitment to the democratic state (Rothstein and Steinmo 2002).

In sum, "big government" has many guises, and many of them are either unassociated, or indeed even negatively associated, with corruption. The findings presented here suggest an answer to the paradox we signaled at the beginning of this article. The Scandinavian social democracies, and to a lesser extent the continental European welfare states, manage to combine extensive state intervention with low levels of corruption because they have effective and unobtrusive institutions for regulating business activity. Recent research into regulatory frameworks finds that ease of entry into product markets is greater in the high-spending welfare states Norway and Denmark than in supposedly free-market Britain (Djankov et al. 2002). All three countries perform well in the Transparency International corruption league table, but the attitude toward government intervention, particularly in the areas of welfare provision and public services, varies considerably: Britain has opted to "roll back" the state, while the Scandinavian social democracies have continued to intervene significantly in economic life through high levels of public spending and, to an extent, by regulating the labor market. The social consequences of these two strategies are of course very different.

In the light of developments in high-profile cases such as Russia and some Latin American countries, advocates of anti-corruption strategies based on liberalization and privatization have recently become increasingly cautious in their assessments of the ways in which government intervention in the economy relates to corruption. It has recently been stressed that "the optimal level of government intervention is not zero" (Kaufman 2003) because government capacity to define and enforce property rights is crucial in establishing a functioning and transparent market economy. The analysis presented here goes further: We have presented evidence that key features of government intervention associated with West European welfare capitalism—social transfers, high public spend-

ing, and even state-owned enterprises—cannot be seriously argued to be causes of corruption and, if anything, are associated with lower levels of corruption. This suggests a lesson for developing countries faced with problems of both endemic corruption and entrenched poverty: Corruption can be defeated without abandoning the state's role in protecting society from the rough edges of the market economy. Policy advice should therefore reflect the fact that much of the time “the problem is not so much that the government is too big, but that it is not doing the right thing” (Stiglitz 2002, 54). By showing that countries with strong democratic institutions can reconcile extensive political intervention in economic life with low levels of corruption, the results presented here confirm this insight. This suggests a shift in emphasis in addressing the problem of corruption: Researchers and policymakers need to develop a clearer understanding of the reasons why some governments have tended to privilege the role of regulator over other possible types of economic and social intervention.

Notes

1. Treisman also looks at the impact of religious tradition, while La Porta et al. (1999) and Paldam (2001, 2002) examine both religious and legal traditions.
2. Moreover, there is an increasing recognition that this approach has not been as successful as hoped in developing countries either; see Tulchin and Espach (2000).
3. A third role, that of economic stabilization, is left outside the scope of this analysis.
4. No statistically significant correlations were found between corruption and the following spending items: government employment, defense, subsidies and transfers, health, pensions, unemployment benefits, income transfer programs other than unemployment benefit, and public investment. These analyses were run for the 17 industrialized nations included in Tanzi and Schuknecht (2000). Results are available on request.
5. To measure the obtrusiveness of business regulation, we use the Fraser Institute's Area 5C business regulation, which captures most of the features of the kind of “quasi-fiscal” regulation which creates corrupt incentives (see the Appendix for more details). A bivariate analysis yields a strong positive and significant relationship ($R^2 = .788$, $p = .000$) between high levels of invasive regulation of business (2002), and corruption (2001–2003). Full results available on request.
6. The inclusion of additional independent variables in successive regressions and the problems in gathering complete data sets for all countries included in the analysis (especially when different sources of information are used) lead to a de facto reduction of the sample with the addition of new independent variables in successive equations.

References

Abed, George, and Sanjeev Gupta, eds. 2002. *Governance, Corruption, and Economic Performance*. Washington, DC: IMF.

Acemoglu, Daren, James Robinson, and Simon Johnson. 2001. “The Colonial Origins of Comparative Development: An Empirical Investigation.” *American Economic Review* 91: 1369–1401.

Ades, Alberto, and Rafael di Tella. 1997a. "The New Economics of Corruption. A Survey and Some New Results." *Political Studies* 45: 496–515.

—. 1997b. "National Champions and Corruption. Some Unpleasant Interventionist Arithmetic." *Economic Journal* 107: 1023–1042.

—. 1999. "Rents, Competition and Corruption." *American Economic Review* 89: 982–993.

Adserà, Alícia, Carles Boix, and Mark Payne. 2000. *Are You Being Served? Political Accountability and the Quality of Government*. Inter-American Development Bank Research Department Working Paper 438, Washington, DC.

Alesina, Alberto, Gerald Cohen, and Nouriel Roubini. 1992. "Macroeconomic Policy and Elections in OECD Democracies." *Economics and Politics* 4: 1–31.

Arzaghi, Mohammed, and Vernon Henderson. 2005. "Why Countries Are Fiscally Decentralizing." *Journal of Public Economics* 89: 1157–1199.

Banfield, Edward. 1975. "Corruption as a Feature of Governmental Organization." *Journal of Law and Economics* 18: 587–605.

Becker, Gary. 1983. "A Theory of Competition among Pressure Groups for Political Influence." *Quarterly Journal of Economics* 98: 371–400.

Becker, Gary, and Guity Nashat Becker. 1997. *The Economics of Life*. New York: McGraw-Hill.

Botero, Juan, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2003. "The Regulation of Labour." Manuscript, Department of Economics, Harvard University.

Chand, Sheetal, and Karl Moene. 1997. "Controlling Fiscal Corruption." *IMF Working Papers* WP/97/100.

Di Tella, Rafael, and Ernesto Schargrodski. 2003. "The Role of Wages and Auditing During a Crackdown on Corruption in the City of Buenos Aires." *Journal of Law and Economics* 46 (1): 269–292.

Djankov, Simeon, Edward Glaeser, Rafael La Porta, Florencio López-de-Silanes, and Andrei Shleifer. 2003. "The New Comparative Economics." *Journal of Comparative Economics* 31 (4): 595–619.

Djankov, Simeon, Rafael La Porta, Florencio López-de-Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *Quarterly Journal of Economics* 117: 1–38.

Drobak, John, and John Nye, eds. 1997. *The Frontiers of the New Institutional Economics*. San Diego, CA: Academic Press.

Edlund, Jonas. 1999. "Trust in Government and Welfare Regimes: Attitudes to Redistribution and Financial Cheating in the USA and Norway." *European Journal of Political Research* 35 (3): 341–370.

Elliot, Kimberly Ann. 1997. "Corruption as an International Policy Problem: Overview and Recommendations." In *Corruption and the Global Economy*, ed. Kimberly Ann Elliot. Washington, DC: Institute for International Economics.

Fisman, Raymond, and Roberta Gatti. 2002. "Decentralization and Corruption: Evidence Across Countries." *Journal of Public Economics* 83: 325–345.

Gerring, John, and Strom Thacker. 2005. "Do Neo-Liberal Policies Deter Political Corruption." *International Organization* 59: 233–254.

Glaeser, Edward, and Andrei Shleifer. 2003. "The Rise of the Regulatory State." *Journal of Economic Literature* 41: 401–425.

Goel, Rajeev, and Michael Nelson. 1998. "Corruption and Government Size: A Disaggregated Analysis." *Public Choice* 97: 107–120.

Golden, Miriam. 2003. "Electoral Connections: The Effects of the Personal Vote on Political Patronage, Bureaucracy and Legislation in Postwar Italy." *British Journal of Political Science* 33 (2): 189–212.

Goldsmith, Arthur. 1999. "Slapping the Grasping Hand: Correlates of Political Corruption in Emerging Markets." *American Journal of Economics and Sociology* 58: 865–883.

Gupta, Sanjeev, Luiz de Mello, and Raju Sharan. 2001. "Corruption and Military Spending." *European Journal of Political Economy* 17: 749–777.

Gwartney, James, and Robert Lawson. 2003. *Economic Freedom of the World: 2003 Annual Report*. Vancouver, Canada: Fraser Institute.

Harriss-White, Barbara. 1996. "Corruption, Liberalization and Democracy: Introduction." *IDS Bulletin* 27 (2): 1–5.

Heckelman, Jac, and Michael Stroup. 2000. "Which Economic Freedoms Contribute to Growth?" *Kyklos* 53: 527–544.

———. 2002. "Which Economic Freedoms Contribute to Growth? A Reply." *Kyklos* 55: 417–420.

International Monetary Fund (IMF). 2002. *The IMF's Approach to Promoting Good Governance and Combating Corruption—A Guide*. Washington, DC: IMF.

Johnston, Michael. 1998. "What Can Be Done About Entrenched Corruption?" In *Annual World Bank Conference on Development Economics 1997*, ed. Boris Pleskovic. Washington DC: World Bank.

Kaufman, Daniel. 2003. "Governance Crossroads." In *The Global Competitiveness Report 2002–2003*, ed. Peter Cornelius, Klaus Schwab, and Michael Porter. Oxford: Oxford University Press.

———. 2005. "Myths and Realities of Governance and Corruption." In *World Economic Forum, Global Competitiveness Report*, ed. Michael Porter, Klaus Schwab, and Augusto Lopez-Claros. London: Palgrave.

Knack, Stephen, and Philip Keefer. 1995. "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures." *Economics and Politics* 7 (3): 207–227.

Kumlin, Staffan, and Bo Rothstein. 2003. "Investing in Social Capital: The Impact of Welfare State Institutions." Paper presented to American Political Science Association annual meeting, Philadelphia, August 28–31.

Kunicová, Jana, and Susan Rose-Ackerman. 2005. "Electoral Rules and Constitutional Structures as Constraints on Corruption." *British Journal of Political Science* 35: 573–606.

Lambsdorff, Johan Graf. 2005. "Consequences and Causes of Corruption—What Do We Know From a Cross-Section of Countries?" *Diskussionbeitrag Nr V-3405*. <http://typo3.wiwi.uni-passau.de/fileadmin/dokumente/lehrstuehle/lambsdorff/downloads/Corr_Review.pdf> (November 20, 2005).

LaPalombara, Joseph. 1994. "Structural and Institutional Aspects of Corruption." *Social Research* 61: 325–350.

La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer, and Robert Vishny. 1998. "Law and Finance." *Journal of Political Economy* 106: 1113–1155.

———. 1999. "The Quality of Government." *Journal of Law, Economics and Organization* 15: 222–279.

Mauro, Paolo. 1995. "Corruption and Growth." *Quarterly Journal of Economics* 110: (3): 681–712.

———. 1998. "Corruption and the Composition of Government Expenditure." *Journal of Public Economics* 69: 263–280.

McCarthy, Patrick. 1997. *The Crisis of the Italian State*. Basingstoke, UK: Macmillan.

Méon, Pierre-Guillaume, and Khalid Sekkat. 2005. "Does Corruption Grease or Sand the Wheels of Growth." *Public Choice* 122: 69–97.

Montalvo, Jose G., and Marta Reynal-Querol. 2005. "Ethnic Polarization, Potential Conflict and Civil Wars." *American Economic Review* 95 (3): 796–816.

Montinola, Gabriella, and Robert Jackman. 2002. "Sources of Corruption: A Cross-Country Study." *British Journal of Political Science* 32: 147–170.

Myerson, Roger. 1993. "Effectiveness of Electoral Systems for Reducing Government Corruption: A Game Theoretic Analysis." *Games and Economic Behaviour* 5: 118–132.

Nitzan, Shmuel. 1994. "Transfers or Public Good Provision? A Political Allocation Perspective." *Economics Letters* 45: 451–457.

Paldam, Martin. 2001. "Corruption and Religion. Adding to the Economic Model." *Kyklos* 54: 383–414.

—. 2002. "The Cross-Country Pattern of Corruption: Economics, Culture and the Seesaw Dynamics." *European Journal of Political Economy* 18: 215–240.

Peltzman, Sam. 1998. *Political Participation and Government Regulation*. Chicago: University of Chicago Press.

Persson, Torsten, and Guido Tabellini. 1999. "The Size and Scope of Government: Comparative Politics with Rational Politicians." *European Economic Review* 43: 699–735.

Rodríguez-Pose, Andrés, and Michael Storper. 2006. "Better Rules or Stronger Communities? On the Social Foundations of Institutional Change and Its Economic Effects." *Economic Geography* 82: 1–25.

Rose-Ackerman, Susan. 1978. *Corruption: A Study in Political Economy*. New York: Academic Press.

—. 1999. *Corruption and Government. Causes, Consequences and Reform*. Cambridge: Cambridge University Press.

—. 2000. "Is Leaner Government Necessarily Cleaner Government?" In *Combating Corruption in Latin America*, ed. Joseph Tulchin and Ralph Ebschach. Washington, DC: Woodrow Wilson Center Press.

Rothstein, Bo, and Sven Steinmo, eds. 2002. *Restructuring the Welfare State: Political Institutions and Policy Change*. Basingstoke, UK: Palgrave.

Scully, Gerald. 1991. "Rent-Seeking in US Government Budgets, 1900–88." *Public Choice* 70: 99–106.

Shleifer, Andrei, and Robert Vishny. 1998. *The Grabbing Hand. Government Pathologies and their Cures*. Cambridge, MA: Harvard University Press.

Stigler, George. 1971. "The Theory of Regulation." *Bell Journal of Economics and Management Science* 2: 3–21.

Stiglitz, Joseph. 1989. "On the Economic Role of the State." In *The Economic Role of the State*, ed. Arnold Heertje. Oxford: Blackwell.

—. 2002. *Globalization and Its Discontents*. London: Allen Lane.

Sturm, Jan-Egbert, Erik Leertouwer, and Jakob de Haan. 2002. "Which Economic Freedoms Contribute to Growth? A Comment." *Kyklos* 55: 403–416.

Svensson, Jakob. 2005. "Eight Questions About Corruption." *Journal of Economic Perspectives* 19 (3): 19–42.

Tanzi, Vito. 2000. *Policies, Institutions and the Dark Side of Economics*. Cheltenham, UK: Edward Elgar.

Tanzi, Vito, and Hamid Davoodi. 1997. "Corruption, Public Investment and Growth." *IMF Working Papers* WP/97/139.

—. 2000. "Corruption, Growth and Public Finances." *IMF Working Papers* WP/00/182.

Tanzi, Vito, and Ludger Schuknecht. 2000. *Public Spending in the 20th Century*. Cambridge: Cambridge University Press.

Transparency International. 2003. *2003 Corruption Perceptions Index*. Berlin: Transparency International.

Treisman, Daniel. 2000. "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76: 399–457.

Tulchin, Joseph, and Ralph Espach. 2000. "Introduction." In *Combating Corruption in Latin America*, ed. Joseph Tulchin and Ralph Espach. Washington, DC: Woodrow Wilson Center Press.

Van Rijckeghem, Caroline, and Beatrice Weder. 2001. "Bureaucratic Corruption and the Rate of Temptation: Do Wages in the Civil Service Affect Corruption, and By How Much?" *Journal of Development Economics* 65: 307–331.

World Bank. 1997. *World Development Report 1997: The State in a Changing World*. New York: Oxford University Press.

———. 2003. *World Development Indicators 2003*. Washington, DC: World Bank.

———. 2004a. "World Bank Anti-Corruption Strategy." <<http://www.worldbank.org>> (March 20, 2006).

———. 2004b. *Doing Business in 2004*. Oxford: Oxford University Press.

Appendix: Description of Dependent Variable

Corruption

The inverse of country scores on the Transparency International (TI) corruption perceptions ranking for 2003. The TI corruption perceptions index is based on surveys of business people and reflects respondents' perception of the likelihood of bribes being demanded by public officials in the course of business dealings in the country concerned. We use the 2003 index, which is based on data compiled between 2001 and 2003. We chose the TI rating because it is freely available and because it offers more up-to-date measures than alternatives such as the International Country Risk Guide (in any case the various measures correlate closely; see Fisman and Gatti 2002, Lambdorff 2005). The index uses a 0–10 scale in which 0 = very high corruption (low transparency) and 10 = very low corruption (high transparency). We invert the index for ease of exposition, so that higher scores imply higher levels of corruption.

Description of Independent Variables

Government Consumption

The World Bank's *World Development Indicator* measure of the general government final consumption expenditure for 2002, as a percentage of GDP (<http://www.WorldBank.org/data>).

Subsidies and Transfers

The Fraser Institute's measure of the percentage of GDP spent by government as subsidies or income transfers for 2002 (Gwartney and Lawson 2003).

State Ownership Industry

The inverse of the Fraser Institute's index of government enterprises and investment as a percentage of GDP in 2002 (Area 1C) (Gwartney and Lawson 2003). The Fraser Institute regards awards higher scores to countries with lower level of public ownership of enterprises and lower public investment.

Labor Regulation

The average score over the three areas of labor regulation examined by the World Bank *Doing Business* study (see Botero et al. 2003). The scores esti-

mate the degree of state regulation in the following areas: employment laws, industrial relations laws, and social security laws. Higher scores indicate a greater degree of state intervention, lower scores indicate that labor market relations are more likely to be regulated by private contract. We also ran the regressions with the Fraser Institute's data on labor regulation (Area 5B) (Gwartney and Lawson 2003), which produces very similar findings. Results are available on request.

Business Regulation

A Fraser Institute measure of the capacity of economic actors to conduct business without interference for the year 2002. Here we take the Area 5C scores which specifically measure freedom to operate and compete in business. Area 5C includes administrative conditions and new businesses, time spent in dealing with government bureaucracy, the requirements involved in starting a new business, the extent of local competition, the magnitude of irregular payments to public officials (which we remove for evident reasons of endogeneity), and bank credit for business (for more detail on how these measures were gathered, see Gwartney and Lawson 2003, ch. 2). Countries where economic actors are deemed to be able to pursue business without interference have higher scores.

The other components of the more comprehensive index were excluded from our analysis either because they included the dependent variable (Area 2, Legal Structure and Property Rights), because they included variables that we entered into the model separately (Area 1 Government Size), or because they dealt with issues outside the theoretical and empirical scope of this article (Area 3 Access to Sound Money, Area 4 Freedom to Trade Internationally, Area 5A Credit Regulation) (<http://www.fraserinstitute.ca/>). This has the added benefit of avoiding the biases which may result from Gwartney and Lawson's (2003) weighting of the various measures in the comprehensive index (Heckelman and Stroup 2000; see also Heckelman and Stroup 2002; Sturm, Leertouwer, and de Haan 2002).

Recent research supported by the World Bank has provided new data sets on regulation which have improved our knowledge in this area. We also ran the same regression analysis using the World Bank research's measure of "regulation of entry" (Djankov et al. 2002) as a surrogate for the unobtrusiveness of the regulatory environment. The results were very similar, with only a very slight reduction in the coefficient (results available on request). The World Bank and Fraser Institute measures in fact correlate very strongly (Pearson's $r = .898^{**}$). We adopt the latter, since the regulation of entry is an important variable for determining levels of competition and efficiency in product markets but is rather too specific for the purposes of assessing the types of business conditions which favor widespread and durable corruption. It might be added that the Fraser Institute's declared support for limited government and free markets

makes it an unlikely source of evidence for the benefits of Western European welfare capitalism. Although we take the data to be reliable, any potential bias would add to the robustness of our findings.

ln GDP per Capita

The log of the World Bank's *World Development Indicators* constant measure of GDP per capita in 1995 U.S. dollars, as an average for the period between 2001 and 2003 (<http://www.WorldBank.org/data>).

Level of Democracy

The composite variable resulting from averaging the political rights and civil liberties indices of the Freedom House annual Freedom in the World survey for the period 1998–2002 (<http://www.freedomhouse.org/>). Each country is rated on a scale from 1 to 7 with 1 representing the highest, and 7 the lowest level of political and civil liberties.

Legal Origin and Socialist Legacy

All scores taken from LaPorta et al. (1998).

Ethnic and Religious Polarization

All scores taken from Montalvo and Reynal-Querol (2005).

Federalism

Henderson's Index of Federalism using six components (<http://www.econ.brown.edu/faculty/henderson/papers.html>). See also Arzaghi and Henderson (2005).