“Decentralization, Corruption And Government Accountability: An Overview”

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Introduction

The impact of government decentralization on economic performance and growth is a hotly contested issue. Waves of decentralization occurred in many developing countries over the past few decades, following the demise of a development paradigm in which centralized states played a leading role (see for instance, case studies of decentralization covering over half the world’s population in Bardhan and Mookherjee 2005b). The trends toward greater decentralization has been motivated by disenchantment with previous centralized modes of governance, owing partly to a perception that monolithic government bred high levels of rent-seeking, corruption and lack of accountability of government officials. An important research question, therefore, concerns the effects of decentralization on corruption. Can decentralization be a useful institutional reform to reduce corruption, or might corruption increase as political power shifts downward?

Opinions on this vary widely. Although some authors in some contexts provide an optimistic assessment of the effect of decentralization on corruption, others claim that the effects are insignificant, ambiguous and context-dependent, with some at the opposite extreme arguing that decentralization seriously worsens problems of corruption. The arguments on both sides are grounded in theory and in econometric analyses, including cross-country regressions and other types of statistical exercises. The definitions of decentralization and corruption used in these analyses differ widely, as do underlying assumptions and the specific country experiences studied. The purpose of this essay is to provide an overview of the literature on this subject, make an effort to provide a common framework to identify key sources of disagreement, and appraise what has been learnt so far.

It is useful at the outset to identify potential disagreements in the use of the terms `corruption' and `decentralization'. The theoretical literature alerts us to many different ways of measuring corruption; the definitions used may affect the conclusions drawn from empirical studies or normative policy exercises. Should corruption be measured by total bribes, or some per capita measure (e.g., relative to the number of potential bribe-givers, or bribe-takers, or the level of economic activity in the sector or economy in question)? Waller, Verdier and Gardner (2002, p.700), for instance, show in a theoretical model that alternative measures of bribery produce different results when one studies the link between the number of vertical bureaucratic layers and corruption. A single bribe-setting monopolist (compared with a chain of successive monopolists) sets a lower bribe rate per investment project, but total volume of bribes is higher, owing to higher volume of investment. Use of total volume of bribes as a measure of corruption rather than the per-project rate will result in entirely different correlations with private investment.

Moreover, should corruption be measured by bribes alone, or should it also include costly efforts made by citizens to influence the design or application of laws in their own self-interest? This might include contributions by interest groups to politicians, or costs incurred by citizens to evade laws. Shouldn't corruption also include forms of political corruption, where some special groups use unusual forms of influence over policy makers to receive preferential treatments? Bardhan and Mookherjee (2006) argue that measures of corruption which focus only on bribes and exclude such forms of special interest capture provide a misleading impression of the true welfare effects of decentralization. In their theoretical model, decentralization results in the replacement of bribes charged by central government bureaucrats with elite capture of local governments. Bribe-based corruption measures decline while at the same time economic efficiency and equity also decline.

Even where a focus on bribe-based measures of corruption is reasonable, a single-minded focus on corruption may be too narrow minded, since there may be other conflicting goals of policy. Numerous theoretical analyses of corruption (e.g., Besley and McLaren 1993, Mookherjee and Png 1995, Mookherjee 1997, Acemoglu and Verdier 1998, Chand and Moene 1999, Waller, Verdier and Gardner 2002) have shown that optimal policy design may not involve minimizing corruption, since that may imply too large a sacrifice of other welfare goals (e.g., raising fiscal revenues, or environmental regulation). Minimization of corruption in many instances would require closing down the government altogether, which almost nobody would be prepared to argue is the right `solution'.

Accordingly, broader notions of welfare seem more appropriate yardsticks than corruption measures even if one emphasizes governance and accountability, as against other channels more conventionally studied by economists. As Qian and Weingast, (1997), Bardhan (2002) and Bardhan and Mookherjee (2005, 2006) argue, the new `second generation' literature on federalism focuses on the accountability and incentives of government officials, in contrast to the traditional literature on fiscal federalism which stressed the role of preference heterogeneity for public goods, and interjurisdictional externalities. This latter approach, principally designed with developed country contexts in mind, abstracted entirely from issues of government accountability by assuming that politicians and government officials act benevolently on behalf of citizens. In developing countries problems of governance are pervasive and so the effects of decentralization on governance are likely to be first-order. In any case, the focus on accountability is natural for those interested in corruption, broadly interpreted. The key question is whether decentralization acts as a disciplining device for government officials.

Another source of ambiguity concerns the notion of decentralization. The literature on federalism traditionally focuses on regional or provincial governments one step below the national government. But much of the recent wave of decentralization in developing countries concerned the empowerment of lower level governments at the municipal or village level. And at any given level of government, many different notions of decentralization can be relevant: e.g., (i) of <u>authority</u> over legislation or implementation of local regulations, composition of government spending, and delivery of public services; (ii) of finances, i.e., setting and collecting taxes, borrowing from higher level government or markets, and allocating expenditures on local services; (iii) of democracy, i.e., whether local government officials are elected by local residents or appointed by higher level governments. In some countries (such as China) there is devolution of economic responsibilities (items (i) and (ii)) but not much political decentralization (item (iii)); in others (such as most parts of India) it is the opposite. Treisman (2002) argues other dimensions of decentralization may also be relevant, such as creation of checks and balances between different governments: either at the same level via horizontal (interjurisdictional) competition, or across different vertical levels (e.g., power of local governments over central government and vice versa).

Decentralization seems to have different effects in different countries. For instance, Qian and Weingast (1997), and Jin, Qian and Weingast (1999) argue that decentralization was an important contributing factor to rapid economic growth in China since the early 1980s. In contrast, Blanchard and Shleifer (2000) argue that local governments retarded growth in Russia in the 1990s. Both sets of authors seem to agree that the effects of government decentralization have differed substantially between China and Russia. In the context of Brazil and India, the effects of decentralization are likely to vary substantially across different regions (Baiochhi 2005, Chaudhuri 2005). Robert Wade (1996) argues that decentralization of delivery of irrigation services is associated with superior performance of Korea compared with India. In contrast, Tendler (1997) argues that decentralization of municipal health services in Ceara, Brazil was the source of poor performance. Taken together, this research suggests that outcomes may be highly context-specific.

In the next section we describe relevant theoretical literature concerning the different channels via which decentralization can have an impact on corruption and accountability. We then go on to review the results of cross-country regression analyses. The following section discusses empirical evidence on the effects of interjurisdictional competition where one of the distinctive accountability mechanisms for local governments is the possibility that mobile factors, such as firms and investors, may relocate ('exit'). We then turn our attention to the evidence on the other key accountability mechanism (`voice'): local democracy, an especially relevant factor for the treatment of consumers and workers, and the delivery of public services. Finally, the chapter concludes with a summary of the main lessons that we draw from this literature.

Conceptual Issues

Numerous arguments have been advanced by political philosophers, political scientists, and theoretical economists for the various effects of decentralization on government accountability. Abstract principal-agent models of contracting hierarchies in firms (see, e.g., Melumad, Mookherjee and Reichelstein 1992, 1995, 1997 and Mookherjee, 2003, for a general survey) elucidate some of the basic trade-offs involved in delegation of decision-making: decisions are made on the basis of better (local) information, but they are made by an agent whose incentives differ from those of the principal thus leading to a `loss of control' or an `abuse of power'. Hence, the overall effect depends on the relative importance of these two problems, which boils down to the extent of interest conflict between the principal and agent and on the means available to the principal to control the agent (e.g., via monitoring and contracting). This literature explains why the effects of decentralization are likely to be ambiguous and context-dependent. A related approach discussed by Cremer, Estache and Seabright (1995) and Seabright (1996) is based on incompleteness of contracts, where it is argued that the allocation of control rights acquires meaning in a world where comprehensive contracts cannot be written in advance. Information available at the local level cannot be communicated for use in decision-making at the central level, so decentralization can lead to better-informed decisions concerning taxation or expenditure allocations. In addition, much information possessed by citizens helpful in evaluating government officials is not verifiable, thus cannot be used to control the behavior of official via contractual means. Local democracy then becomes a means for citizens best placed to evaluate the performance of officials, to decide who should be appointed or fired.

The effects of fiscal decentralization on government accountability depend additionally on discipline arising from `external' competitive pressures besides `internal' democratic pressure, corresponding roughly to Hirschman's notions of `exit' and `voice'. Below we discuss in some detail these two sources of accountability pressures.

Interjurisdictional Competition

If factors of production are mobile between jurisdictions then different local governments can compete with one another to attract them. This reduces the monopoly power enjoyed by government officials with regard to local laws, regulations, and bribes: poor governance manifested by high level of corruption and low provision of necessary infrastructure can cause mobile factors to exit to alternative jurisdictions with better services and less predatory local governments. The archetypical argument of this form of intergovernmental competition is made by Brennan and Buchanan (1980), who characterize all governments as Leviathans, with no mechanism for accountability apart from such competition and constitutional restrictions on the powers of governments to tax and regulate. Edwards and Keen (1996) and Arikan (2000) provide more recent formalizations of this argument, based on less draconian assumptions about the objectives of government officials (i.e., they are assumed to maximize a weighted average of their own corrupt earnings and the utility of local citizens). The benefits of competition in these models resemble those of Bertrand price competition among rival producers of a homogenous undifferentiated good. It underlies the view expressed by economic historians that an important contributing factor to declining municipal corruption in the United States during the turn of the previous century was the expansion of the American frontier and development of railroads, which raised the `elasticity' of the local revenue base to bribe (or tax) rates, thus reducing the capacity of government officials to extract rents (Menes 1999, 2003).

A similar argument for the beneficial effect of competition for mobile factors on the incentives of non-corrupt governments is provided by Qian and Weingast (1997) and Qian and Roland (1998). In their theory the crucial incentive problem stems from the inability of governments to commit not to bail out financially troubled state-owned enterprises, commonly referred to as soft budget constraints. This causes great fiscal strain, reducing the ability of governments to provide required infrastructure for private investors. The cost of bailouts is then underprovision of infrastructure, resulting in reduced private investment. However, if local governments have to compete with one another to attract private investors, this raises the opportunity costs of bailouts. Hence, decentralization serves as a useful precommitment device which hardens budget constraints for governments. Central governments are less subject to competition for mobile investors --- they compete only vis-à-vis foreign locations --- hence the outcomes of centralization are inferior.

However, other theoretical perspectives generate opposing results concerning the way competition for mobile factors affects corruption. Cai and Treisman (2004b) point out that the argument for benign effects of competition depends on the implicit assumption of the homogeneity of jurisdictions with regard to the productivity of the factors concerned. With sufficient heterogeneity across jurisdictions the race for mobile factors can be highly uneven, and the worse endowed regions can end up with less business-friendly policies and higher corruption. Under capital immobility governments will have some incentives to provide business services, owing to their ability to tax business profits. With free capital mobility, all capital can flow out of backward regions; knowing that they cannot compete, the governments of these regions will give up on pro-business policies and focus instead on predation as the only source of rents. The result will be weaker discipline and growing polarization of government services across regions.

A different argument is offered by Cai and Treisman (2004a): increasing competition for capital can exacerbate interjurisdictional externalities: local governments have incentives to attract investors away from other regions by offering them opportunities to evade central government taxes and regulations, the cost of which is largely borne by other regions. They construct a model in which local governments engage in fiscal or regulatory protection in an environment where the ability of the central government to collect taxes or enforce regulations is weak. Increasing decentralization and competition for capital can reduce tax revenues, increase regulatory violations, reduce central government enforcement effort and reduce welfare. Federalism is then `state-corroding' rather than `market-preserving'. The point is that there are many different ways of attracting investors, some of which are in the wider public interest --- such as reducing rent extraction and providing better infrastructure --- and some that are not, such as shielding them from central taxes and regulations. The effects of decentralization will depend on which of these avenues are more effective instruments of attracting private investors, which depends on existing institutions, and can only be settled (if at all) by empirical studies.

Rodden and Rose-Ackerman (1997) provide additional arguments why the ideal conditions required for `market preserving federalism' may fail to be realized in the context of many developing countries. The demands of immobile interests such as workers, farmers and domestic consumers may conflict with those of mobile factors of production such as foreign investors: local politicians typically have to respond to both sets of demands. The survival of regional political leaders may often require the cultivation of support of immobile interests who are frequently more numerous and better politically organized than private investors. Moreover, regional leaders could be motivated to engage in protectionist, rent-seeking behavior at the expense of the wider national interest. Decentralization may result in growing inter-regional inequality and low provision of national public goods. To avoid these problems, market-preserving federalism requires a strong central government to rein in the uncoordinated self-seeking tendencies of local governments. But this is unlikely to be politically compatible with the relinquishment of most powers by the central government. How can the role of the central government both be strong and limited at the same time? Hence Rodden and Rose-Ackerman argue that the political foundations of the `intergovernmental market' are shaky.

Another literature compares the effects of centralized and decentralized corruption on bribes and investment efficiency. Shleifer and Vishny (1993) consider an economy in which any investor needs to obtain permits from different government officials in succession. They compare the outcome where the officials select bribes independently with one where a single centralized agency coordinates bribe setting. The latter system results in lower bribes and higher investment, owing to internalization of bribe-setting externalities across officials. However, this corresponds to a different notion of decentralization, since investors are assumed to need clearances from <u>all</u> the governments, rather than be able to choose <u>between</u> them. This view of decentralization corresponds to adding layers of subnational government on top of a national government, rather than the former replacing the latter. Differing definitions of decentralization thus give rise to contrasting effects: one (where a tier of competing local governments replaces a single centralized government) substitutes monopoly with competition. The other (where local governments represent an additional vertical tier of government) replaces a single monopolist by a chain of successive monopolists.

Waller, Verdier and Gardner (2002) extend the Shleifer-Vishny model and obtain more nuanced results. In a system of <u>bottom-up corruption</u>, investors need simultaneous clearances from a number of different government officials who set bribes independently, just as in the Shleifer-Vishny framework. This is contrasted to a system of top-down corruption, in which there is an additional layer in the government, consisting of a higher level autocrat who attempts to coordinate and enforce a common bribe level, of which a fixed fraction accrues to the autocrat. To enforce the common bribe, the autocrat randomly monitors lower level officials, and punishes those found over-charging. They compare outcomes of the two systems, and show that the results are ambiguous, and depend on specific parametric circumstances. Top-down corruption adds another bribe-taker, which may increase overall corruption; on the other hand it may allow some coordination of bribe setting which can reduce corruption. If the autocrat is able to control and enforce a coordinated bribe rate --- which depends on the bureaucratic control systems available to the autocrat ---- then the top down system involves lower bribes; otherwise it may turn out to involve greater corruption. Alternative arguments for the same general point --- that the effect of powerful autocrats at the top level of the government on corruption and investment incentives is ambiguous --- is discussed more extensively in Rose-Ackerman (1999, pp. 115—121) and Robinson (2001), with various examples from many developing countries.

Local Democracy

The other mechanism for ensuring accountability of governments is through democratic pressure for re-election. This is particularly relevant in the supply of public consumption goods, social services and antipoverty programs in developing countries because mobility costs are high for households and workers, and residents of one region are not usually entitled to public services in other regions.

Local governments are in closer proximity to citizens than central governments, and that fact may make them more accountable to ordinary people. Thus, Seabright (1996) argues that local citizens are often able to make accurate inferences concerning the accountability of local government officials, owing to their knowledge and observation of local conditions and behavior of these officials. But most of this knowledge is not hard evidence that can be used in a court of law or submitted to other watchdog agencies. As a result, central politicians monitor lower-level bureaucrats more poorly than do local citizens. Local elections form an `incomplete contract' which permits citizens to express their displeasure with corrupt and incompetent officials by refusing to re-elect them. Tommasi and Weinschelbaum (1999) use a model of common agency with citizens as multiple principals appointing government officials as their common agents. The larger the jurisdiction of governments, the higher is the ratio of principals to officials, resulting in a weakening of the connection between pay and performance. These models formalize the arguments of Rousseau and Jefferson criticizing centralized government in a large state:

> ``The rulers, overburdened with business, see nothing for themselves; clerks govern the state." (Rousseau 1762, pp. 49—50)

> ``(distance between rulers and ruled:) by rendering detection impossible to their constituents, will invite the public agents to corruption, plunder and waste." (Jefferson, in Appleby and Ball 1999, pp 169-70).

Opposite arguments concerning the relative accountability of local and national governments have also been made. Arguments for retention of the intervention rights of federal governments were made by the designers of the US constitution, on the grounds that local governments were more likely to be captured by elites. James Madison in the <u>Federalist Papers no. 10</u> argued that

> ``the smaller the society, the fewer probably will be the distinct parties and interests composing it; the fewer the distinct parties and interests, the more frequently will a majority be found of the same party; and the smaller the number of individuals composing a majority, and the smaller the compass within which they are placed, the more easily will they concert and execute their plans of oppression". (Madison, in Hamilton, Madison and Jay 1937)

In a similar vein, Blanchard and Shleifer (2000) argue in the context of post-transition Russia that provincial governors have been highly susceptible to capture by old industrial firms, resulting in large transfers to these firms and who also obtained protection from competition. At the same time, they argue that central governments are less likely to be captured by initial rent holders, being larger in size than local governments and less directly affected by the unemployment implications of closing any particular firm.

Sonin (2003) provides a model that formalizes the Blanchard-Shleifer view. Regional governors are assumed to receive campaign contributions from local firms and use these to purchase the votes of `unattached voters'. In exchange, they provide protection from responsibility to pay federal taxes, from entry of new firms, from bankruptcy proceedings and subsidies of various sorts. Equilibrium `capture' is increasing in the concentration and inefficiency of local industry, the lack of local political competition, in the proportion of `unattached' voters (therefore, the extent of local unemployment), and p, a parameter that represents the cost to the regional governor of providing protection against the federal government. Subsequently the federal government selects p at a certain cost to itself, in order to `punish' recalcitrant regional governors. If the federal government is weak, the costs of imposing sanctions on regional governors are high, and there can exist an overall equilibrium of the system in which provincial protectionism is rampant. There can also exist a cooperative equilibrium between the federal and local governments where the latter do not provide any protection. If the federal government is strong, the noncooperative equilibrium can be eliminated. Hence the model echoes the opinion expressed by Blanchard and Shleifer that economic decentralization must be accompanied by political centralization in order to succeed (i.e., where regional governors cooperate with the federal government, owing to sanctions that the latter could potentially impose on the former). Nevertheless, the model does not address the potential for capture of the federal government itself within a centralized regime.

In some of our earlier work (Bardhan and Mookherjee 1999, 2000) we used a model of electoral competition with special interest capture (extending Grossman-Helpman 1996) to argue that the extent of relative capture of national and local governments by special interest groups is theoretically ambiguous, the result of numerous factors that run in opposite directions, whose relative importance is likely to be highly context-specific. The model is a more general version of that used in Sonin (2003): wealthy interest groups can contribute to the campaign finances of competing electoral candidates, which are used to mobilize the votes of `unaware' voters. Aware voters, in contrast, vote based on more accurate perceptions of how chosen policies would affect their interests. Both types of voters also vote partly on the basis of loyalties determined exogenously, partly by historical circumstances and other non-economic dimensions that differentiate competing parties.

In this model, the equilibrium level of capture of government at any level depends ultimately on patterns of political participation, on the political awareness of different groups in the population, and on the evenness of political competition among contesting parties (which depends in turn on the distribution of voter loyalties). Patterns of political participation and awareness depend on the distribution of literacy and socio-economic status within concerned communities, apart from exposure to independent media sources.

Capture may be higher at local levels compared with the national government for Madisonian reasons, such as greater media coverage of national issues, greater difficulty for special interest groups to overcome free-riding problems at the national level, or greater formal separation of powers at that level. Alternatively capture may be higher at the national level owing to the greater importance of campaign finance, more uneven political competition, or poorer information available to citizens to evaluate candidates on nation-wide issues. If different regions are heterogeneous with regard to literacy, economic backwardness or socio-economic inequality, capture of local governments will vary correspondingly across regions. The extent of capture of national governments will be located somewhere between the extremes of standards of governance across different local governments. Decentralization will then tend to be associated with greater dispersion of quality of governance across regions; more backward and unequal regions will be worse off compared with centralization, while more progressive and equal regions will benefit. These tendencies are accentuated in the case of national governments selected on the basis of proportional representation rather than first-past-the-post elections.

In summary, the two classes of models view the effects of decentralization on accountability quite differently. The Blanchard-Shleifer-Sonin approach emphasizes the debilitating effect of lack of political centralization, arising from the use of power by regional interests to engage in protectionism and free-riding on national interests. Our approach views the effects of political centralization in more ambiguous and nuanced tones, owing to the difficulty of assessing the relative proneness of local and national governments to capture by special interests without knowledge of detailed circumstances of the nature of political competition.

Empirical Evidence From Country-Wide And Cross-Country Comparisons

This section reviews evidence from cross-country regressions concerning the relation between decentralization and measures of corruption and government performance. Estache and Sinha (1995) reported one of the earliest studies of this nature, based on a panel dataset of 20 countries (comprised equally of developed and developing countries) covering 1970—92. They evaluated the relation between a measure of expenditure decentralization (the share of subnational governments in total government spending) and per capita delivery of different forms of infrastructure. They found a significant positive association in general, an effect which was stronger when there was greater revenue decentralization (measured by dependence of subnational governments on self-generated revenues rather than fiscal transfers). In fact, there was little significant association when subnational governments relied almost exclusively on central grants. Hence they found a significant positive interaction between expenditure and revenue decentralization in their effects on infrastructure delivery.

Similar evidence suggesting positive effects of decentralization on governance is reported by Fisman and Gatti (2002a) who examine the relation between the same measure of expenditure decentralization and measures of corruption (on the basis of subjective perceptions of businesspeople and investors). Their dataset covers 59 countries for the period 1980—95. The regression controls for an index of civil liberties, GDP, country size (population, government expenditure as a proportion of GDP), openness (import to GDP ratio), besides indices of ethnic fractionalization, contract enforceability, the existence of a federal constitution, regional and colonial dummies. They find a significant negative correlation between expenditure decentralization and corruption measures, which is robust with respect to the precise set of controls or corruption measures or subperiods. However, as with any cross-sectional regression there are potential problems with respect to the endogeneity of regressors, which Fisman and Gatti attempt to overcome using legal origin as an instrument for decentralization. The validity of this instrument is doubtful because legal origin could well have a direct, independent effect on corruption, even after allowing for its effect via decentralization or other included controls.

In another paper Fisman and Gatti (2002b) argue -- analogous to the finding of Estache and Sinha -- that the effects of expenditure decentralization may depend on accompanying revenue decentralization. Using data from 50 states in the US covering the period 1976--87, they show a significant positive association between conviction rates for abuse of public office and dependence on central transfers, after controlling for state size, GDP, enforcement expenditures, and civil service wages.

A contrasting picture emerges from a comprehensive set of cross-country regression results by Treisman (2002) who examines correlations between eight different measures of decentralization with various measures of corruption and of social service delivery, while controlling for a larger range of variables. The same measure of expenditure decentralization turns out to not have a significant association with corruption measures, despite using a similar set of countries and time period in the sample. Treisman explains the discrepancy from the Fisman-Gatti results by their use of a religion control variable: the proportion of Protestants in the population. This religion variable which was excluded by Fisman and Gatti turns out to account for the correlation they observed between corruption and expenditure decentralization: countries with more Protestants tend to be both less corrupt and more decentralized. Expenditure decentralization tends also to be positively correlated with youth illiteracy and negatively with access to sanitation, though positively correlated with paved roads. Hence the use of a wider range of controls and of measures of governance quality tends to cast doubt on the earlier findings of Estache-Sinha and Fisman-Gatti.

Other findings of Treisman (2002) concerning different measures of decentralization also fail to confirm the benign effects claimed by its advocates. Appointment decentralization, measured by the proportion of key officials in subnational tiers that were directly elected (or by directly elected local legislatures), rather than appointed by a central government, exhibited no significant relation with corruption. Corruption had a significant positive correlation with measures of health services delivered and paved roads, but also with youth illiteracy rates. The scope for interjurisdictional competition -- measured (negatively) by average land area covered by first-tier governments because this serves as a proxy for distance between jurisdictions -- was positively correlated with corruption. As for measures of decentralization represented by number of (vertical) subnational tiers, or existence of checks imposed by a regionally chosen upper house on the lower house of elected representatives at the national level, these had a significant positive correlation with corruption, and a negative correlation with virtually all measures of service delivery. This last result is consistent with the Shleifer-Vishny prediction that more vertical tiers of government will worsen governance.

In summary, cross-country empirical studies fail to provide robust evidence of benign effects of decentralization on governance. Given the methodological problems with this research methodology -- involving the difficulty of controlling for unobserved cross-sectional heterogeneity, for other sources of endogeneity bias, for measurement errors and limited and biased selection of samples owing to the questionable quality and comparability of data -- it is hard in any case to make any firm inferences based on such studies. It is more instructive to seek empirical evidence on a more disaggregated and localized set of contexts. To this we turn in the next two sections.

Within-Country Empirical Studies

We first discuss evidence from Russia and China respectively. This is followed by evidence from case studies in a variety of developing and middle income countries, such as Argentina, Bangladesh, Bolivia, El Salvador, India, Indonesia and Uganda.

Provincial Protectionism In Russia

A number of papers provide empirical evidence in favor of the Blanchard-Shleifer (2000) hypothesis (as formalized by Sonin 2003) of high levels of capture of regional governments in Russia that also conforms to the Cai-Treisman (2004a) theory of `state-corroding federalism'. Ponomareva and Zhuravskaya (2004) provide evidence from a sample of Russian firms in the second half of the 1990s. Federal tax arrears accumulated at a faster rate in provinces whose governors had a larger popular base, were in political opposition to the central government, and had a better bargaining position *vis-à-vis* the latter. Lambert-Mogiliansky, Sonin and Zhuravskaya (2003) show in a sample of over 8,000 firms that firms located in regions with governors who were politically more powerful, that were more independent from the central government, and that had more opaque tax collection systems were significantly less likely to be liquidated under the new bankruptcy law of 1998 which enlarged the discretion of regional governors over bankruptcy procedures. This result obtains after controlling for industry cash flows, pre-1998 firm characteristics (such as productivity, size, leverage ratio, liquidity), industry dummies, and regional GDP levels.

Slinko, Yakolev and Zhuravskaya (2004) examine the effects of regional capture on performance and profitability of enterprises. They examine large firms (measured by sales) that received preferential treatment in the form of tax breaks, subsidized loans, subsidies of other forms, delays in tax payments or any other kind of special privilege from the regional government during 1992-2000. They then use as a measure of `regional capture' the concentration (Herfindahl index) of preferential treatments for the five firms in each region with the largest number of such treatments. This measure of concentration of `political power' turns out to be positively correlated with Transparency International state capture ratings, and other indices of lack of press freedom, and of administrative corruption. They show that firms with more preferential treatments grew faster in profits, sales, employment and federal tax arrears after controlling for firm characteristics. Firms without any such treatments invested more and performed better when they were located in regions where political power was less concentrated. Regions with more concentrated power exhibited lower rates of development of small businesses and retail turnover.

However, overall rates of growth of economic activity in the region were not significantly different, suggesting that the effect of the protections were primarily redistributive within the region. However, greater concentrations of power were associated with lower payment of federal taxes, so this may have lowered economic activity for the country as a whole. Interestingly, concentration was uncorrelated with local tax arrears, at the same time that it was positively correlated with federal tax arrears. This provides support to the view that federal tax arrears were the result of collusion between firms and local governments.

Federalism In China: Market Preserving Or Market Corroding?

Jian, Qian and Weingast (1999) provide evidence in favor of the market preserving federalism view for China by relating measures of regional growth to measures of decentralization. They use three different measures of decentralization: fiscal (the ratio of spending by local governments to central government spending), industrial (share of industrial output from state owned enterprises supervised by local governments in total industrial output in the province), and administrative (`distance' between top provincial officials and the central government or the Chinese Communist Party, in terms of whether they were appointed by the latter and transferred from outside, or promoted from within the region). Using data from 1982-92 for 30-odd provinces, and after controlling for province and time fixed effects besides provincial tax rates and regional labor force growth, they show that fiscal decentralization was positively related (statistically significant at 10% level) to growth of per capita regional GDP, of non-agricultural employment and non-state industrial output. Administrative decentralization had a significant positive correlation with local fixed investment, ratio of local to central government investment, and growth of non-agricultural employment and non-state industrial output.

They explain these results as resulting from the effects of altered fiscal contracts between local and central governments. During the period local governments were allowed to retain over 75% of all revenues collected, in contrast to only 18% during 1970-79. The extent of ratcheting (effect of unit increase in tax revenues collected one year to the amount transferred to the central government the following year) was 25% during the period 1982—92, compared with 55% during 1970—79. The marginal retention rate was significantly correlated with percent contract workers in state owned enterprises, percent wages paid in the form of bonuses, and new loans as a percent of GDP.

The high retention rate for local revenues has the potential of increasing inequality of revenues across regions exhibiting uneven rates of growth. However, Jin, Qian and Weingast point out that inequality in provincial per capita budgetary revenues and expenditures at the provincial level declined over 1982—92, with inequality in central transfers moved in the opposite direction. They infer that high incentives on the margin co-existed with infra-marginal redistribution in the fiscal contracting mechanism.

A contrasting view of the effects of increased fiscal decentralization in China is presented by Young (2000) who argues that the increased autonomy and incentives offered to local governments induced them to engage in provincial protectionism, in the form of high barriers to inter-regional trade. These took the form of tariffs, road levies, prohibitions on inter-regional trade, and many other restrictions. The aim of these restrictions was to capture a large share of rents resulting from existence of significant price distortions (such as large gaps between prices of finished industrial goods and of raw materials). Moreover, just as in the Russian case, local governments could offer local enterprises exemptions on central taxes, accompanying them with informal levies accruing to their own coffers. He cites estimates that as much as 44% of after-tax profits in 1984 were collected in the form of these informal levies. The local governments thus found their `financial and political interests embedded in a particular industrial structure'. The empirical evidence he presents for this point of view is that China exhibited shrinking inter-regional specialization according to comparative advantage following 1978, at the same time it was becoming more open to the outside world. He shows that the composition of output converged across regions between 1978 and 1997, while prices, labor productivity and labor allocations diverged. In addition, there was no relation between labor intensity and agricultural yields (instrumented by weather variables) following 1978, whereas a significant positive relation existed prior to 1978.

Poncet (2003) provides additional evidence supporting Young's hypothesis, using data aggregated at the regional level. She shows that while reliance on international trade increased between 1992 and 1997, reliance on inter-regional trade decreased. More detailed support is provided in Poncet (2004) using data at the industry level. She computes indicators of province level and industry level trade barriers using the border price method (which compares actual trade flows with those that would be predicted by a gravity equation that assumed no trade barriers). She finds that these barriers were high and increased between 1992 and 1997. The determinants of these barriers are consistent with a political economy model where local governments are assumed to maximize an objective function which weights tax revenues and socio-economic stability (i.e., reductions in local unemployment). Controlling for the provincial unemployment rate, size of the public sector and industry level fiscal contributions, the level of the inter-regional trade barriers was positively correlated with the extent of local fiscal autonomy and the provincial share of government consumption. Based on these findings, she concludes by quoting Zhao and Zhang (1999):

> ``Fiscal decentralization has created conditions that encourage regionalism: disappearance of the traditional umbrella, unfairness to the poor regions, territorial segmentation and confrontation, central-local confrontation, and failure of spatial programs of specialization and cooperation."

In similar vein, Lin, Tao and Liu (2006) describe how fiscal decentralization in China in the 1980s led to growing inequality across provinces, regional protectionism, a fiscal crisis for both the central and (most) local governments, and a decline in redistributive power of the central governments, eventually inducing a fiscal recentralization in 1994. Despite this, the 1990s has witnessed continued problems of unfunded mandates for local governments, inducing them to impose illegal taxes on farmers and expropriate lands, causing considerable social unrest in the countryside. Since 2000 the central government has initiated reforms in local taxes, and imposed limits on illicit expropriations of arable land by local governments.

Despite the evidence for regional protectionism, Young (2000:1129) concedes that fiscal decentralization probably contributed to economic growth overall, owing to its success in dealing with control and incentive problems. Most writers on China and Russia seem to concur that the overall effects of fiscal decentralization was positive in China, and negative in Russia. However, there is little hard evidence in favor of this. Most of the empirical results for China pertain to data on differences in regional growth rates and their relation to the nature of fiscal contracting: there are no estimates available of the effects of regional protectionism on growth in China as a whole which trade off the superior incentive properties of decentralization against the corroding effects on regional protectionism. The only supporting arguments are provided by Jin, Qian and Weingast (1999) who point out that fiscal contracts with the provinces in the two countries were quite different: budgetary constraints for provinces were much `harder' in China. Blanchard and Shleifer (2000) argue that the problem of capture of local governments by local firms was much less severe in China, because China did not start its reforms with the large industrial enterprises that characterized the Russian economy of the early 1990s. This may have lessened problems of capture of local governments by local firms in China. But the `state corroding' effects of federalism argued by Cai and Treisman (2004a) appeared to exist in China as well as Russia, based on the evidence reported above. There is no evidence on the comparative significance of these effects between the two countries.

Evidence In Other Countries Concerning Determinants Of Accountability And Capture Of Local Governments

A large body of empirical work on the accountability of local governments in many different countries is beginning to emerge. This literature attempts to provide quantitative estimates of accountability, and to estimate its important determinants. These include patterns of political participation and awareness in local communities, as well as the formal design of decentralization.

Relatively little evidence is available concerning the relative accountability of local and national governments. However, this is a key factor which partly determines the welfare effects of decentralization compared with a centralized state. Galasso and Ravallion (2005) study levels of pro-poor targeting achieved by a decentralized food-for-education (FFE) program in Bangladesh. The program sought to encourage school enrollment of poor rural families by providing food rations to selected households conditional on a class attendance rate of at least 85% of all school days. The actual selection of beneficiaries within each community was made by the local School Management Committee composed of parents, teachers, education specialists and school donors. Galasso and Ravallion use a sample of over 3,000 households from 200 villages and use a 1995-96 Household Expenditure Survey to assess the targeting achieved by the program. The program was mildly pro-poor: a larger fraction of the poor (12%) received benefits from the program than the nonpoor (8%). This was accounted for almost entirely by targeting within participating communities, rather than across communities. This suggests that capture within the community was a less severe problem than distorted inter-community allocations decided by higher level governments for political reasons.

Our research on targeting of service delivery programs by local governments in the Indian state of West Bengal (Bardhan and Mookherjee 2004) generated a similar finding. Inter-village allocations of credit, resources for local infrastructure and employment for the poor, and development grants from upper level governments exhibited considerably poorer targeting than the allocation of these resources within villages. Intra-village targeting of subsidized credit, agricultural seeds and fertilizers was consistently in favor of the poor (defined as landless and/or marginal landowners), relative to middle and big landowning households. In contrast, the inter-village allocations exhibited a perverse anti-poor bias: increases in the proportion of poor, low caste households within the village resulted in a significant reduction in the total quantum of resources allocated to the village as a whole by upper-level governments.

Foster and Rosenzweig (2001) provide evidence from an all-India panel dataset of 250 villages that increased local democracy between the early 1980s and late 1990s (measured by whether local governments were selected via local elections) increased responsiveness of local government spending to the needs of the poor. Specifically, they argue that the principal difference of interest between the landless poor and the landowning households concerns the allocation of local infrastructure spending between roads and irrigation: roads generate more employment, while irrigation raises farm productivity and profits to a greater degree. They show that when local governments were democratically elected, roads were more likely to be favored vis-à-vis local irrigation facilities when the demographic weight of the landless in the local population rose.

Using the 1995 `big-bang' decentralization in Bolivia as a case, Faguet (2001) presents evidence on the superior effect of decentralization on the interjurisdictional allocation of social services. . Before the decentralization, the nine state or departmental capitals received 93% of all funds devolved from the center, leaving 7% for the other 302 municipalities. After decentralization these shares stood at 38% and 62% respectively. This resulted in a massive shift of resources in favor of the smaller and poorer municipalities. Local governments were empowered to select the composition of the funds received, and responded by dramatically altering the composition of spending from the production to the social sector. Between 1991-3, 73% of all public investment in Bolivia was accounted for by transport, hydrocarbons, energy and other production enterprises. After the decentralization education, urban development, water and sanitation constituted 79% of all municipal investment. Faguet finds these shifts were mostly explained by investment patterns in the poorest municipalities that had previously received negligible resources. He argues that these investments responded to measures of local need. However, he does not present any evidence concerning changes in intra-community targeting before and after the decentralization.

A final piece of evidence is a study of the effect of a nation-wide decentralization of public schools in Argentina between 1992 and 1994 (Galiani, Gertler and Schargrodsky 2005). Using as a control group schools that remained under provincial administration throughout, they find that scores on standardized mathematics and language tests in schools that were transferred from central to provincial control improved in better-off provinces and became worse in less well-off provinces. This is consistent with theoretical expectations that the impact of decentralization will vary with the characteristics of local communities, resulting in increased inequality across communities.

Most of the remaining literature is concerned with measuring the extent and nature of capture within provincial or local governments, and relates capture to the following community attributes and institutions of local democracy:

Community Socio-Economic (Literacy-Wealth) Status*:* Reinikka and Svensson (2004a) found that the average income of Ugandan local communities was negatively correlated with the diversion of school funds (earmarked for the community by the central government) by provincial authorities acting as intermediaries in the flow of funds. They interpret this as reflecting the capacity of more well-off local communities to bargain with the provincial authorities and to be better informed about their entitlements. Besley, Pande and Rao (2004a) found that South Indian villages with higher literacy rates were more likely to hold village meetings that discussed resource allocation issues within the village and the actions of local governments. Villages that held meetings targeted public benefits more closely in favor of landless and illiterate individuals by an order of 8—10 percentage points.

Socio-Economic Inequality*:* Galasso and Ravallion (2005) found that intra-village targeting of the FFE program in Bangladesh deteriorated in communities with higher land inequality and a larger fraction of households headed by widows. In the West Bengal local governments studied in Bardhan and Mookherjee (2004), increased inequality in local land distribution between 1978 and 1998 was associated with significant increases in the fraction of local government expenditures allocated to government consumption (salaries and administrative expenses of government officials). At the same time, local revenues collected by the local government decreased, despite the nominal progressivity of local taxes with respect to landholdings. These results suggest that rising land inequality allowed greater collusion between big landowners who were allowed to evade taxes, and local government officials who consumed a larger share of the (shrinking) revenues collected. On the other hand, increased land inequality had no significant effect on the targeting of subsidized credit or agricultural inputs within the village, and increased landlessness was associated with higher generation of employment for the poor (controlling for the resources available to the local government for those programs).

In a related setting of sugar cooperative factories in Maharashtra, India, Banerjee, Mookherjee, Munshi and Ray (2001) provide evidence for increased diversion of cooperative funds and underpricing of cane supplied by members if large local landowners were responsible for managing the cooperative. The extent of such diversion and underpricing was highest when the proportion of land in the local area held in small holdings was neither too large nor too small. Beyond a threshold level, further increases in the proportion of land in small holdings allowed small landowning members to acquire effective control of the cooperative (through the increased size of their voting bloc among cooperative shareholders). This led to significantly improved performance of the cooperative (in terms of levels and growth of sugar output over time, as well as equity amongst members). They argue that differences in local land distribution explain to a significant degree the discrepancy between the sugar cooperatives in two major regions within the state, Western and Eastern Maharashtra.

Political Competition: The importance of local political competition is documented by Bardhan and Mookherjee (2003) in their study of land reforms implemented by local governments in West Bengal since the late 1970s. The land reform effort was highest when local elections were more contested between the two rival parties, a Left alliance and the more right-leaning Congress party. This applied even when the local dominance of the Left party increased beyond a two-thirds majority, and despite the prominence given to land reform in the political rhetoric of the Left parties. The result is robust with respect to using village or district fixed effects, and the use of a measure of loyalty shifts between the two parties at the district, state and national levels as instruments for the extent of local competition. However, the political composition of these local governments had no significant effects on intra-village targeting of credit, subsidized agricultural inputs, composition of infrastructure investments, or local government finances.

Civic Participation: Jimenez and Sawada (1999) study the involvement of schoolchildren's parents in the management of schools in the EDUCO program in El Salvador since 1991. After controlling for school and student characteristics, they find a positive significant effect on language tests, a positive insignificant effect on math tests at the third grade level, and a significant negative effect on student absenteeism. Santos (1998) and Baiochhi (2005) describe processes of participatory budgeting in a number of Brazilian municipalities, where each neighborhood holds popular assemblies involving local residents to discuss investment priorities, review accounts, evaluate past investments and elect representatives to a city council. Cities such as Porto Alegre witnessed at the same time a significant rise in of local revenues, local spending on local sanitation and road paving, and improved school enrollment. Faguet (2005) discusses the role of citizen watchdog groups in Bolivia with the power to veto local government budget proposals. However, no rigorous statistical evaluation of the effects of these forms of civic participation in Brazil and Bolivia are yet available.

<u>Access to Information and Media</u>*:* Reinikka and Svensson (2004b) provide evidence for the dramatic effects of a media campaign via radio and newspapers informing local communities of their entitlement to school funds from the central government in Uganda. This campaign, along with an increase in central government monitoring, reduced diversion of these funds by intermediating provincial governments from 80% to 20%. Although the impact of the components of the reform cannot easily be disentangled, the information strategy does seem to have had an independent effect. The authors show that the proximity to newspaper outlets to local communities was a powerful predictor of the extent of reduced diversions. Besley and Burgess (2002) provide evidence for the role of local newspapers in increasing the responsiveness of Indian state governments to natural disasters, using a panel study of major Indian states. The role of village meetings that discuss the resource allocation decisions of local governments in improving targeting in South Indian villages has already been discussed.

<u>Monitoring by Higher Level Governments</u>*:* Olken (2004) carried out a randomized field experiment using over 600 village road projects in Indonesia to test the impact of central

government audits. A randomly selected subgroup was told they would definitely be subjected to these audits, the remaining being audited at the usual frequency (of 4%). Those in the treatment group experienced an 8% reduction in reported expenditures for the project relative to those in the control group. In contrast, increasing grass-roots participation by local residents reduced thefts of villagers' wages, but this was almost entirely offset by corresponding theft of material costs. `Theft' was measured by comparing reported expenditures with independent estimates of prices and quantities assessed as necessary by an independent team of engineers. These results suggest that grass-roots monitoring may be more effective in reducing theft when community members have substantial private stakes in the outcome, but less so (compared with top-down monitoring) when public good supply is involved.

Reservation of Local Government Positions for Minorities: Chattopadhyay and Duflo (2004) studied randomized reservations of local government pradhan (chief) positions for women in the Birbhum district in West Bengal, India in 1998. Governments with women as heads were associated with a significant shift in the composition of local government spending across different public services in line with priorities expressed by women in village meetings. Similar reservations for low caste candidates altered the allocation of local government resources between different villages under their jurisdiction: more resources went to the village where the low caste pradhan resided. Besley, Pande, Rahman and Rao (2004) find that the same low-caste reservations of pradhan positions in South Indian village governments enhanced targeting in favor of low caste households. Relative to living in a non-reserved area, living in a reserved area raised the likelihood that a low caste household received private benefits from the local government (either has a home or toilet built under a government scheme, or received a private water or electricity connection via a government scheme) since the previous election. Village public goods (the improvement or construction of roads, sanitation, streetlights or water sources) since the last election were more likely to be provided (by between 4 and 5 percentage points) in a village in which the pradhan resides, but there was no difference between reserved and unreserved constituencies. However, they were more likely to be provided in a village where more low caste households reside: a 50% increase in the latter would raise the probability by about four percentage points. These results hold using as controls the proportion of landless households, village area and population, literacy rate, distance from nearest town, wage rate and block dummies.

Unfunded Mandates of Local Governments*:* Henderson and Kuncoro (2004) show that a significant determinant of (self-reported) bribes paid by Indonesian firms to local government officials was the extent of fiscal strain on local governments relative to their expenditure responsibilities. They report the results of a survey of 1808 firms in Indonesia concerning economic activity in 2001-2002, following a comprehensive nationwide decentralization. After controlling for various firm and locality specific characteristics, they find that either increasing the ratio of property tax revenues retained by local governments to local GDP or increasing the ratio of central government transfers to local GDP, had a strong negative effect on the number of licenses that local firms had to obtain. One standard deviation increase in each of these variables was associated with a 73% and a 56% increase in the number of licenses, respectively, which in turn has a significant correlation with bribes (a doubling of number of licenses raised the ratio of bribes to firm costs by about .8-.9). They interpret this as measuring the effects of fiscal strain on local governments (relative to expenditure responsibilities mandated by the decentralization), which induces them to underpay government officials and let them rely on bribes to supplement their incomes.

Conclusion

In summary, the effects of decentralization on corruption and government accountability are complex and cannot be summarized by simple, unconditional statements. This applies equally to theoretical analyses, cross-country regression results and more detailed empirical studies of specific countries. In this essay we reviewed the literature dealing with two principal accountability mechanisms: external competition with other governments, and internal democratic pressures.

In theory, decentralization can reduce corruption and reduce the undersupply of infrastructure support for private investors owing to interjurisdictional competition. It can harden budget constraints so that governments do not bailout inefficient enterprises. The extent of these incentive effects depends on the degree of fiscal autonomy of local governments, which affects the extent to which they internalize the benefits of economic development within their respective jurisdictions. China is an example of a country where fiscal decentralization was combined with a high degree of fiscal autonomy, yielding these incentive benefits, inducing fast economic growth since the early 1980s.

Alternatively high-powered fiscal incentives can compound interjurisdictional externalities: local governments attract investors by colluding with them to protect them from federal taxes and regulations and impose barriers on inter-regional trade. These actions promote regional growth at the expense of other regions, and lower growth in the country as a whole. Collusion between local governments and local industry is widely viewed as an important cause of lack of growth in the Russian economy. The general consensus seems to be that the externality-causing actions dominated any local-growth-promoting effects of decentralization in Russia, while the opposite was the case in China. Yet this consensus judgment is untested and not well explained.

Blanchard and Shleifer argue that the difference between the Russian and Chinese experience is explained by the fact that these two countries China started their respective transitions from different initial conditions. There was no scope for high levels of capture of regional governments by oligarchs in China in the same way as Russia because such oligarchs did not exist in China in the late 1970s as they did in Russia in the early 1990s. In addition they point to differences in the extent of political centralization between the two countries. Political centralization in China meant that leaders of local governments were appointed by the central government, and evaluated on the basis of their success in promoting the goals of the centre. Whereas in Russia provincial governors often had an independent power base and were opposed to the central government.

The Blanchard-Shleifer argument concerning the benign role of political centralization is not supported by the facts for China, where administrative decentralization (wherein leaders of provincial government were promoted from within their respective provincial cadres rather than appointed and transferred from the central cadre) was positively rather than negatively correlated with local growth and investment. Moreover there is now growing evidence of patterns of provincial protectionism in China in the work of Young and Poncet, quite similar (at least qualitatively) to such patterns in Russia.

The thesis that decentralization was growth-retarding in Russia is also based on an implicit assumption that the potential for capture of the federal government is less compared with that of provincial governments. This remains untested. So does the hypothesis of less capture of regional governments in China compared with Russia, as well as problems of abuse of power by local government officials, and other problems associated with soft budget constraints (such as an unwillingness to close down inefficient enterprises owing to their repercussions for local unemployment). Perhaps the lower levels of inequality in China at the onset of the transition (owing in turn to the significant land reform in the late 1970s, and egalitarian after-effects of various Mao-regime policies) contrasted with the higher levels of inequality in Russia (exacerbated by the privatization patterns in the early 1990s that effectively gave away most state assets to a handful of oligarchs) played an important role, as argued in Bardhan (2002). Much more needs to be learnt about this issue.

In general, problems of capture and lack of accountability of local governments appear common in many transition and developing countries. There is also a rapidly growing body of evidence of some of the determinants of local government accountability. Empirical findings generally match predictions of political economy models of capture. Capture is related to malfunctions in local democracy, associated with asymmetries in local literacy, wealth, social status, and patterns of political participation, and with lop-sided political competition. The extent of corruption within local governments is also related to availability of information to citizens concerning their entitlements, to the way they are monitored by higher level governments and monitored by external media. There is growing evidence that a number of institutional safeguards are effective in limiting capture of local governments by elites and non-minority groups: reservations of positions in local governments for minorities, information-media campaigns, mandated village meetings, civic participation mechanisms, and monitoring by upper level governments.

Financial strain on local governments may also promote corruption, as in Indonesia. However, the effects of providing greater revenue autonomy are ambiguous, given evidence of the regressivity of local tax burdens. Hence ensuring that the expenditure mandates of local governments are matched by central government grants may be important in limiting pressures on local governments to tolerate or encourage corruption among its employees. However, this may limit the extent of fiscal autonomy of local governments, with adverse incentive effects on other dimensions.

Empirical evidence concerning the effects of decentralization vis-à-vis centralization on delivery of public services is beginning to emerge. These tend to indicate that the problems of local capture within communities have not been excessive and have been dominated by beneficial effects on targeting across communities. However, decentralization is likely to be accompanied by increasing inequality in quality of governance between better-off and less-well-off regions. This suggests the importance of accompanying decentralization with a watchdog role for the central government with regard to monitoring the performance of local governments and guaranteeing minimal service provisions through targeted interventions in lagging areas.

Generally, then, the literature contributes substantially to our understanding of the sources of capture and the reasons for the lack of accountability of local governments -- information that should be useful in comparing the performance of different decentralization arrangements. For policy-makers there are some important lessons: decentralization by itself is unlikely to be a panacea for problems of accountability. Institutional safeguards to prevent excessive capture of local governments include literacy and information campaigns, minority reservations, land reform, monitoring by civic associations, media and higher level governments, and avoidance of excessive unfunded mandates that force local governments to capitulate to corruption.

What is relatively less known is the relative proneness of local and national governments to problems of accountability. Thus it is difficult to evaluate decentralization versus centralization as constitutional options for state design. But recent studies do provide some idea of the factors that influence accountability. Thus, there is great potential for future research to provide a better understanding both of the overall effects of decentralization relative to centralization as a government disciplinary device and of why these effects vary so much from one context to another.

Notes:

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References

Acemoglu, Daron and Thierry Verdier (1998), 'Property Rights, Corruption and the Allocation of Talent: A General Equilibrium Approach', Economic Journal, 108, 1381-1403.

Appleby, J. and T. Hal (eds) (1999), Jefferson: Political Writings, New York: Cambridge University Press.

Arikan, G. G. (2003), `Fiscal Decentralization: A Remedy For Corruption?', Working Paper, Department of Economics, University of Illinois at Urbana Champaign.

Baiochhi, G. (2005), `Inequality and Innovation: Decentralization as an Opportunity Structure in Brazil', in Bardhan and Mookherjee (eds), Decentralization and Local Governments in Developing Countries: A Comparative Perspective, Cambridge, US: MIT Press.

Banerjee, A., D. Mookherjee, K. Munshi and D. Ray (2001), `Inequality, Control Rights and Rent-Seeking: Sugar Cooperatives in Maharashtra', Journal of Political Economy, 109(1), 138-190.

Bardhan, P. (2002), `Decentralization of Governance and Development', Journal of Economic Perspectives, 16(4), 185-206.

Bardhan, P. and D. Mookherjee (1999), `Relative Capture of Local and National Governments: An Essay in the Political Economy of Decentralization', Working Paper, Institute for Economic Development, Boston University.

Bardhan, P. and D. Mookherjee (2000), `Capture and Governance at Local and National Levels`, American Economic Review, 90 (2), 135—39.

Bardhan, P. and D. Mookherjee (2003), `Political Economy of Land Reforms in West Bengal 1978—98', Working Paper, Institute for Economic Development, Boston University.

Bardhan, P. and D. Mookherjee (2004), `Pro-Poor Targeting and Accountability of Local Governments in West Bengal', Working Paper, Institute for Economic Development, Boston University.

Bardhan, P. and D. Mookherjee (2005a), `Decentralizing Delivery of Anti-Poverty Programs in Developing Countries', Journal of Public Economics, forthcoming.

Bardhan, P. and D. Mookherjee (2005b), Decentralization and Local Governments in Developing Countries: A Comparative Perspective, Cambridge, US: MIT Press, forthcoming.

Bardhan, P. and D. Mookherjee (2006), `Accountability and Decentralization of Infrastructure Delivery in Developing Countries', Economic Journal, forthcoming.

Besley, Timothy and John McLaren (1993), 'Taxes and Bribery: The Role of Wage Incentives', Economic Journal, 103, 119–41.

Besley, T. and R. Burgess (2002), `The Political Economy of Government Responsiveness: Theory and Evidence from India', Quarterly Journal of Economics, 117(4), 1415-1451.

Besley, T., R. Pande and V. Rao (2004), `Participatory Democracy in Action: Survey Evidence From South India', Working Paper, World Bank.

Besley T., R. Pande, L. Rahman and V. Rao (2004), `The Politics of Public Good Provision: Evidence From Indian Local Governments', Working Paper, World Bank. Forthcoming, Journal of European Economic Association.

Blanchard, O. and A. Shleifer (2000), `Federalism With and Without Political Centralization, China Versus Russia', Working Paper 00-15, Department of Economics, MIT.

Brennan, G. and J. Buchanan (1980), The Power to Tax: Analytical Foundations of a Fiscal Constitution, New York: Cambridge University Press.

Cai, H. and D. Treisman (2004a), `State Corroding Federalism', *Journal of Public Economics*, **88**, 819—843.

Cai, H. and D. Treisman (2004b), `Does Competition for Capital Discipline Governments? Decentralization, Globalization and Public Policy', *American Economic Review,* forthcoming.

Chand, S. and K.O. Moene (1999), `Controlling Fiscal Corruption',World Development 27(7), 1129-1140.

Chattopadhyay, R. and E. Duflo (2004), `Women as Policy-Makers: Evidence From an India-Wide Randomized Policy Experiment', Econometrica, 72(5), 1409-1444.

Chaudhuri, S. (2005), `What Difference Does a Constitutional Amendment Make? The 1994 Panchayati Raj Act and The Attempt to Revitalize Rural Local Government in India' in Bardhan and Mookherjee (eds), Decentralization and Local Governments in

Developing Countries: A Comparative Perspective, Cambridge, US: MIT Press.

Cremer, J., A. Estache and P. Seabright (1995). `The Decentralisation of Public Services: Lessons from the Theory of the Firm', in A. Estache (ed), Decentralizing Infrastructure: Advantages and Limitations, World Bank Discussion Papers 290, Washington D.C.

Edwards, J. and M. Keen (1996), `Tax Competition and Leviathan', European Economic Review, 40, 113—134.

Estache, A. and S. Sinha (1995). `Does Decentralization Increase Public Infrastructure Expenditure?', in A. Estache (ed) Decentralizing Infrastructure: Advantages and Limitations, World Bank Discussion Papers 290, Washington D.C.

Faguet, J-P (2001), `Does Decentralization Increase Government Responsiveness to Local Needs? Decentralization and Public Investment in Bolivia', Working Paper no 999, Centre for Economic Performance, London School of Economics.

Fisman, R. and R. Gatti (2002a), `Decentralization and Corruption: Evidence Across Countries', Journal of Public Economics, 83, 325—345.

Fisman, R. and R. Gatti (2002b), `Decentralization and Corruption: Evidence From US Federal Transfer Programs', Public Choice, 113, 25—35.

Foster, A. and M. Rosenzweig (2001), `Democratization, Decentralization and the Distribution of Local Public Goods in a Poor Rural Economy', Mimeo, Brown University.

Galasso, E and M. Ravallion (2005), `Decentralized Targeting of an Anti-Poverty Program', Journal of Public Economics, 89, 705-722.

Galiani, S., P. Gertler and E. Schargrodsky (2005), `School Decentralization: Helping the Good Get Better, but Leaving the Poor Behind', Working Paper, Buenos Aires: Universidad de San Andres.

Grossman, G. and E. Helpman (1996), 'Electoral Competition and Special Interest Politics', Review of Economic Studies, 63, 265-286.

Hamilton A., J. Madison and J. Jay (1937), The Federalist (originally published, 1787). New York: Tudor.

Henderson, J.V. and A. Kuncoro (2004), 'Corruption in Indonesia', Working Paper, Department of Economics, Brown University.

Jimenez, E. and Y. Sawada (1999), `Do Community-Managed Schools Work? An Evaluation of El Salvador's EDUCO Program', World Bank Economic Review, 13(3), 415-442.

Jin, H., Y. Qian and B. Weingast (1999), `Regional Decentralization and Fiscal Incentives: Federalism, Chinese Style', Working Paper, Department of Economics, Stanford University.

Lambert-Mogiliansky, A., K. Sonin and E. Zhuravskaya (2003), `Capture of Bankruptcy: Theory and Russian Evidence', Working Paper, CEPR.

Lin, J., R. Tao and M. Liu (2005), `Decentralization and Local Governments in China's Economic Transition', in Bardhan and Mookherjee (eds), Decentralization and Local Governments in Developing Countries: A Comparative Perspective, Cambridge, US: MIT Press.

Mauro, P. (1995), 'Corruption and Growth', Quarterly Journal of Economics, 110(3), 681—712.

Melumad, N., D. Mookherjee and S. Reichelstein (1992), 'A Theory of Responsibility Centers', Journal of Accounting and Economics, 15, 445–84.

Melumad, N., D. Mookherjee and S. Reichelstein (1995), 'Hierarchical Decentralization of Incentive Contracts', Rand Journal of Economics, 26(4), 654–72.

Melumad, N., D. Mookherjee and S. Reichelstein (1997), 'Contract Complexity, Incentives and the Value of Delegation', Journal of Economics and Management Strategy, 6(2), 257-289.

Menes, R (1999), 'The Effect of Patronage Politics On City Government in American Cities 1900-10,' NBER Working Paper No. 6975, Cambridge, US: NBER.

Menes, R. (2003), 'Corruption in Cities: Graft and Politics in American Cities At the Turn Of The Twentieth Century', NBER Working Paper No. 9990, Cambridge, US: NBER.

Mookherjee, D. and I. Png (1995), 'Corruptible Law Enforcers: How Should They Be Compensated?', Economic Journal, **105**, 145–59.

Mookherjee, D. (1997), 'Incentive Reforms in Developing Country Bureaucracies: Lessons From Tax Administration', in Boris Pleskovic and Joseph Stiglitz (eds) Annual Bank Conference in Development Economics 1997, Washington, D.C: the World Bank.

Mookherjee, D. (2003), 'Delegation and Contractual Hierarchies: An Overview', Working Paper, Department of Economics, Boston University.

Olken, B. (2004), 'Monitoring Corruption: Evidence From a Field Experiment in Indonesia', NBER Working Paper, Cambridge, US: NBER.

Poncet, S. (2003), 'Measuring Chinese Domestic and International Integration," China Economic Review, 14(1), 1—23.

Poncet, S. (2004), 'A Fragmented China', Tinbergen Institute Working Paper TI 2004-103/2, Rotterdam: Erasmus University.

Ponomareva, M. and E. Zhuravskaya (2004), 'Federal Tax Arrears in Russia: Liquidity Problems, Federal Redistribution or Regional Resistance?', Economics of Transition, 12(3), 373—398.

Qian, Y. and B. Weingast (1997), ``Federalism as a Commitment to Preserving Market Incentives," Journal of Economic Perspectives, 11(4), 83—92.

Qian, Y. and G. Roland (1998), 'Federalism and the Soft Budget Constraint', American Economic Review, 88(5), 1593—1615.

Reinikka R. and J. Svensson (2004a), 'Local Capture: Evidence From a Central Government Transfer Program in Uganda', Quarterly Journal of Economics, 119(2), 679—705.

Reinikka, R. and J. Svensson (2004b), 'Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda', Working Paper, World Bank.

Robinson, J. (2001), 'When is a State Predatory?', Mimeo, Department of Government, Harvard University.

Rodden, J. and S. Rose-Ackerman (1997), 'Does Federalism Preserve Markets?', Virginia Law Review, 83, 1521-1572.

Rose-Ackerman, S. (1999), Corruption and Government. Cambridge: Cambridge University Press.

Rose-Ackerman, S. (1999), Corruption and Government: Causes, Consequences, and Reform. Cambridge, UK, New York, US and Melbourne, AU: Cambridge University Press.

Rousseau, J-J. (1762), in Frederick Watkins (ed) The Social Contract in Political Writings, Madison: University of Wisconsin Press.

Santos, B. (1998), 'Participatory Budgeting in Porto Alegre: Towards a Redistributive Democracy', Politics and Society, 26(4), 461-510.

Seabright, P. (1996), 'Accountability and Decentralization in Government: An Incomplete Contracts Model', European Economic Review, 40 (1), 61-89.

Shleifer, A and R. Vishny (1993), 'Corruption', *Quarterly Journal of Economics*, *108*(3), 599—617.

Slinko I., E. Yakovlev and E. Zhuravskaya (2004), 'Laws For Sale: Evidence from Russia', *Working Paper*, CEPR and Center for Economic and Financial Research in Moscow.

Sonin, K. (2003), 'Provincial Protectionism', *William Davidson Institute Working Paper No. 557*, University of Michigan Business School.

Tendler, J. (1997), *Good Government in the Tropics*, Johns Hopkins Studies in Development, Baltimore,US and London, UK: Johns Hopkins University Press.

Tommasi, M. and F. Weinschelbaum (1999), 'A Principal-Agent Building Block for the Study of Decentralisation and Integration', *Working Paper*, Buenos Aires: Universidad de San Andres.

Treisman, D. (2002), 'Decentralization and the Quality of Government', *Working Paper*, Department of Political Science, UCLA.

Wade, R. (1997), 'How Infrastructure Agencies Motivate Staff: Canal Irrigation in India and the Republic of Korea', in Ashoka Mody (ed) *Infrastructure Strategies in East Asia*, Washington, D.C.: World Bank.

Waller C., T. Verdier and R. Gardner (2002), ‘Corruption: Top Down or Bottom Up?’, Economic Inquiry, 40(4), 688—703.

Young, A. (2000), ‘The Razor’s Edge: Distortions and Incremental Reform in the People’s Republic of China’, Quarterly Journal of Economics, 115, 1091—1136.

Zhao, X.B. and L. Zhang (1999), ‘Decentralization Reforms and Regionalism in China: A Review’, International Regional Science Review, 22(3), 251—281.