

Political Decentralization

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Abstract

I provide a critical overview of the literature on political decentralization. After reviewing first- and second-generation theories of federalism, I describe recent empirical studies focusing mainly on determinants of capture and local government accountability emphasized by second-generation theories. The article concludes by describing emerging new issues that deserve more attention in future research: a wider range of political distortions beyond capture and corruption; effects of decentralization on intercommunity allocations, learning, and experimentation, and on democracy itself; a comparison of decentralization with other organizational alternatives; and issues pertaining to design and implementation raised by first-generation federalism theories, such as interjurisdictional spillovers, vertical fiscal relations, the range of devolution, and the political economy of implementation.

1. INTRODUCTION

Government decentralization is a perennially important topic in the discourse on democracy, constitution design, and public finance. In the past two decades, there has been renewed interest in decentralization, particularly in the context of developing countries seeking ways to promote government accountability in the delivery of public services (see, e.g., World Bank 2004). In this article, which overlaps partially with Bardhan (2002) and Bardhan & Mookherjee (2015), I provide an overview of some of this recent literature, both broader issues generally raised in this area and specific policy issues faced in developing countries. I attempt to summarize what we have and have not yet learned from this literature.

Section 2 starts with a brief overview of the conceptual frameworks associated with first-generation and more recent second-generation theories of fiscal federalism, which are distinguished by the focus of the latter on political economy and government accountability. Section 3 summarizes empirical findings from the recent literature on developing countries. The article concludes with Section 4, which describes a range of questions and policy issues that represent promising directions of emerging and future research.

2. CONCEPTUAL FRAMEWORKS AND THEORETICAL PREDICTIONS

2.1. First-Generation Federalism

The classic papers in the economics literature on fiscal federalism are by Tiebout (1956) and Oates (1972), who discuss the benefits and costs of decentralization, respectively, from the standpoint of efficient resource allocation, while ignoring agency problems within government. Tiebout's analysis stresses the heterogeneity of citizen preferences for local public goods, which causes it to be desirable for citizens with disparate preferences to sort into different communities. Voting with one's feet becomes a way of revealing local public good preferences by citizens, which rationalizes the decentralization of spending decisions to local governments. The underlying implicit assumption is that central governments cannot efficiently differentiate the provision of local public goods across communities. The reasoning underlying this assumption is, however, not spelled out explicitly. Oates's analysis describes some of the inefficiencies associated with decentralization: interjurisdictional externalities and the loss of economies of scale. Accordingly, the optimal choice trades off the benefits of greater capacity of decentralized governments to cater to heterogeneous tastes against the loss of scale economies and interjurisdictional coordination. The importance of taste heterogeneity relative to the latter costs can vary across contexts and functions and is ultimately an empirical matter. For instance, countries with greater geographic or ethnic diversity *ceteris paribus* ought to have more decentralized governments. Central governments should retain responsibility for nationwide highways or irrigation systems, while local governments can be devolved responsibility for local roads and canals, and so on.

With regard to taxes, it is widely agreed that decentralizing these to local governments would be associated with high interjurisdictional externalities—such as a race for the bottom—thereby rationalizing centralization of taxes on potentially mobile factors of production. With the exception of real estate taxes, which can be imposed by local governments owing to the immobility of property, most other taxes would have to be imposed by upper layers. Consequently, the need arises for downward flows of central government revenues to local government. Mechanisms for such vertical fiscal transfers need to be designed, with efficiency and equity objectives in mind, besides incorporating problems of communicating preferences and needs by the local government to the central government. The underlying assumption is that local governments act on behalf of

the interests of citizens in their respective jurisdictions, and the latter do not adequately internalize the costs imposed on other jurisdictions by increased resource transfers to their own jurisdiction. This gives rise to classic principal-agent problems in the design of intergovernmental fiscal transfer mechanisms, even in the absence of any political economy or corruption problems within government. In particular, the central government is viewed as a unitary welfare-maximizing entity. As a consequence, the role of local governments is limited to reporting local needs to the central government, and administering grants received in the interests of local residents. In this sense, there is no genuine devolution of authority to local governments in these scenarios.

2.2. Second-Generation Federalism

Second-generation theories of fiscal federalism focus instead on political economy and corruption problems. One strand of this literature focuses on political economy problems within the central government: Public good decisions are made by elected legislators, while abstracting from political agency or corruption problems (i.e., by assuming that elected representatives act in the interest of their constituents). Prominent examples include work by Besley & Coate (2003) and Lockwood (2002), who criticize the assumption of the uniformity of centralized public good provision made by the first-generation models on conceptual as well as empirical grounds. In their models, centralized provision involves decisions made by minimum winning coalitions among legislators representing specific districts, who do not internalize impacts on other districts. This results in misallocations and uncertainty, undermining the efficiency of centralized allocations, which have to be traded off against interjurisdictional spillovers that are not internalized under decentralization. These models generate similar normative conclusions as those of the first-generation literature: The argument for centralization is enhanced when there is less interjurisdictional heterogeneity and more spillovers.

The remainder (which forms the bulk) of the second-generation literature focuses squarely on problems of agency within government. These problems have become particularly prominent in developing countries in the closing decades of the twentieth century, as a consequence of centralized development strategies pursued in the Third World during the 1950s and 1960s. Policies were traditionally formulated by planners and politicians in state capitals and were implemented by bureaucrats appointed by and answerable only to them. Very little thought was devoted to ensuring that policies were well targeted or appropriate to local conditions, or whether the incentives of bureaucrats or politicians were aligned with public interest. Reports of mounting corruption, chronic absenteeism among government service providers, wasteful and poorly designed policies, and lobbying and rent seeking by powerful interest groups provided a growing sense of development efforts going astray, resulting in outcomes that were neither efficient nor equitable. There was a growing sense that these adverse outcomes could be alleviated by devolving many responsibilities to local governments (see, e.g., World Bank 2004).

In the past three decades, mainstream academic literature has witnessed the emergence of formal models of political economy, contracts, corruption, and, more generally, the role of institutions in long-term development. The second-generation literature on fiscal federalism rapidly grew as a result of this confluence of policy concerns and availability of analytical tools. Cremer et al. (1995) and Seabright (1996) argue that decentralization combined with local democracy could play a useful disciplinary role in remedying problems of the low accountability of government service providers. Their key assumption is that information concerning the performance of these providers is available only to local citizens in a form that could not be documented or verified by third parties. This creates contractual incompleteness between central bureaucrats and their bosses, which limits the monitoring capacity of the latter. A decentralized system in which

services are provided by locally elected governments allows disgruntled citizens to punish errant officials by voting them out in subsequent elections. A centralized system cannot achieve the same discipline even if the politicians are motivated to serve the public interest, owing to the difficulty of communicating performance information by local citizens to higher authorities in a form that higher authorities could use to discipline bureaucrats. Moreover, Besley & Case (1995) argue that a comparative advantage of decentralization is that it permits yardstick competition, in which citizens can use the performance of governments in other jurisdictions as benchmarks to evaluate their own governments.

In a similar vein, Tommasi & Weinschelbaum (2007) use a common agency model predicting that 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. Myerson (2014) stresses the advantages of decentralized government in providing a screening device for governance talent and a setting for officials to develop reputations they can subsequently exploit in transiting to offices in higher levels of government. Case studies comparing the performance of irrigation bureaucracies in India and Korea by Wade (1997) confirmed the superior performance of the decentralized Korean system owing partly to these disciplinary factors. In stark contrast to the recommendations of the first-generation literature, these arguments provide a rationale for decentralization on the grounds of superior accountability, which applies even in the absence of any significant heterogeneity across jurisdictions.

A related argument in favor of decentralization is made on the basis of competition among different local governments, which limits the scope for corruption and rent seeking among government officials. The typical argument of this form due to Brennan & Buchanan (1980) was formalized by Edwards & Keen (1996) and Arikian (2004). The benefits of competition in these models resemble those of Bertrand price competition among rival producers of a homogeneous undifferentiated good. It underlies the view expressed by economic historians (Menes 1999, 2003) that an important contributing factor to declining municipal corruption in the United States at the turn of the nineteenth 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, thereby reducing the capacity of government officials to extract rents. Qian & Weingast (1997) and Qian & Roland (1998) provide alternative arguments, based on the problem of the soft budget constraint, in which governments are unable to commit to not bail out financially troubled state-owned enterprises. Competition between local governments to attract private investors raises the opportunity costs of bailouts. Decentralization can then serve as a useful precommitment device that hardens budget constraints for governments. Outcomes of centralization are inferior as central governments are less subject to competition for mobile investors: They compete only vis-à-vis foreign locations.

Several qualifications and counterarguments to these favorable views of decentralization subsequently began to emerge. Local governments could be more prone to capture by local elites, owing either to relative lack of media attention or to the greater capacity of elites to organize at the local level as a result of greater cohesion or homogeneity. These arguments echoed those of the designers of the US constitution, which provided powers to central governments as a safeguard against the perils of local elite capture (Hamilton et al. 1937 [1787]). Bardhan & Mookherjee (2000) use a model of political competition with lobbying by special interest groups to argue that it is difficult to assess a priori whether central or local governments would be more vulnerable to elite capture, as there are a number of factors pulling in different directions. In particular, elite capture would likely depend on the extent of political competition; patterns of political awareness, participation, and literacy; and local poverty and inequality. These factors are likely to differ across

regions; hence the effects of decentralization would be expected to be highly heterogeneous and raise inequality across regions.

In a related critique of decentralization in the specific context of post-transition Russia, Blanchard & Shleifer (2000) argue that provincial governors had been highly susceptible to capture by old industrial firms, resulting in large transfers to these firms and protection from competition from new firms. The central government was less likely to be captured by initial rent holders, being larger in size than local governments, and less directly affected by unemployment implications of closing any particular firm. This view of decentralization causing provincial protectionism was subsequently formalized in a theoretical model by Sonin (2003). The model emphasizes the need for economic decentralization to be accompanied by political centralization (i.e., in which regional governors cooperate with the federal government, owing to sanctions that the latter could potentially impose on the former). However, Sonin's model does not address the potential for capture of the federal government itself within a centralized regime.

Treisman (2007) and Cai & Treisman (2004, 2005) provide counterarguments to the view that competition between local governments invariably reduces agency problems. Cai & Treisman (2005) 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. Arguments based on a heightened race to the bottom owing to a different set of causes are offered by Cai & Treisman (2004): 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. The broader point is that there are many different ways of attracting investors, some of which are in the public interest (e.g., reducing rent extraction and providing better infrastructure) and some of which are not (e.g., shielding them from central taxes and regulations). The effects of decentralization will depend on which of these are more effective instruments of attracting private investors. These depend on existing institutions and can only be settled (if at all) by empirical studies. In this respect, various strands of the theoretical literature on elite capture eventually agree that the effects of decentralization are difficult to predict *a priori*, thereby highlighting the need for empirical analysis.

3. EMPIRICAL STUDIES

3.1. Cross-Country Comparisons

This section begins by reviewing evidence from cross-country regressions concerning the relation between decentralization and measures of corruption and government performance. Estache & Sinha (1995) report one of the earliest studies of this nature, based on a panel data set of 20 countries (composed equally of developed and developing countries) covering 1970–1992, concerning 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 find a significant positive association in general, an effect that was stronger when there was greater revenue decentralization (measured by the dependence of subnational governments on self-generated revenues rather than fiscal transfers). Similar benign (i.e., negative) effects of expenditure decentralization on measures of corruption (drawn from subjective perceptions of businesspersons and investors) are reported by Fisman & Gatti (2002a), using a data set covering 59 countries over the period 1980–1995. In another paper, Fisman & Gatti (2002b) argue—analogueous to the finding of Estache & Sinha mentioned above—that the effects of

expenditure decentralization depend on accompanying revenue decentralization. Using data from 50 US states covering the period 1976–1987, 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.

However, Treisman (2002) argues that Fisman & Gatti's (2002a) results are not robust to the choice of measures of corruption and the inclusion of additional controls, such as the proportion of Protestants in the population (which is positively correlated with decentralization and negatively correlated with corruption). He shows that expenditure decentralization tends to be positively correlated with youth illiteracy and access to paved roads but negatively correlated with access to sanitation. Appointment decentralization, measured by the proportion of key officials in sub-national tiers who were directly elected (or by directly elected local legislatures) rather than appointed by a central government, exhibited no significant relation with corruption. It had a significant positive correlation with measures of delivered health services 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. Fan et al. (2009) find a robust increase in corruption when there are more vertical tiers in government and when local governments are larger (with size measured by the number of employees).

The cross-country studies thus do not provide robust results on effects of decentralization on governance quality. Given the well-known methodological problems with this research methodology—unobserved cross-sectional heterogeneity, endogeneity bias, data quality, and comparability problems—much of the empirical literature has sought evidence at a more disaggregated level.

3.2. Micro Evidence on Intracommunity Capture and Corruption

The past decade has seen a vast outpouring of studies on corruption, elite capture, or other measures of governance at the level of individual communities, villages, or municipalities. Although much of the earlier literature has been summarized in a recent book by Mansuri & Rao (2013), important papers have continued to appear more recently. Hence, it is worthwhile to update their summary to incorporate recent notable contributions.

The main question continues to be the one posed by Mansuri & Rao (2013) at the outset of their book: the importance of capture or civil society failure, defined as the lack of involvement of poor and marginalized groups in decision making, project outcomes that are less aligned with their needs, the capacity of elites to hijack programs to suit their ends, and the capacity of officials to pocket rents or divert resources. The key issues are determinants of capture: The studies generally show that capture tends to be higher in communities with greater inequality, those that are “remote from centers of power; have low literacy; are poor; or have significant caste, race or gender disparities” (Mansuri & Rao 2013, p. 5).

For instance, Galasso & Ravallion (2005) demonstrate that intravillage targeting of a Food for Education program in Bangladesh was less pro-poor in villages that were more remote and had higher land inequality. Most of the targeting variations were intravillage rather than intervillage in their context, reflecting the effect of actions of local authorities rather than budgetary allocations by higher-level governments. In contrast, Bardhan & Mookherjee (2006c) find negligible variation in intravillage targeting of services delivered by local governments in the Indian state of West Bengal. However, they find lower employment generated by local governments out of allocated public work funds, and significantly lower allocation of funds by higher-level governments to jurisdictions with higher poverty, land inequality, and higher proportions of low-caste households

among the poor. Using a large household data set from India, Kochar (2008) finds evidence consistent with the hypothesis that landed elites blocked investments in local public education to prevent upward pressure on the wages of workers hired by the elites. In Ecuador, Araujo et al. (2008) demonstrate that local communities were significantly less likely to select a pro-poor project in villages with greater inequality. In the Philippines, Labonne & Chase (2009) present evidence of capture by local leaders in highly unequal villages at the project proposal stage; these leaders exercised greater influence over resource allocation at the supravillage-level meetings at which proposed projects are approved.

In a similar vein, Acemoglu et al. (2014) find in Sierra Leone that communities with fewer ruling chiefs (originally recognized by British colonial authorities) achieve significantly worse development outcomes today (e.g., nonagricultural employment, education, and child health). They interpret this as a result of reduced political competition among elites who play an important role in allocating land rights within the community. In the Indian state of Maharashtra, Anderson et al. (2015) show that areas with greater domination of land ownership by the Maratha caste were associated with significantly lower wages, lower take-up of pro-poor government programs, and stronger clientelistic relationships involving insurance and employment between Maratha landlords and the poor. In both the Sierra Leone and Maharashtra contexts, greater elite capture was positively correlated with measures of social capital (e.g., collective action, stated trust in community leaders, and participation in social activities).

Contrasting results concerning the role of elite capture emerge from recent experimental evidence from Indonesia in Alatas et al. (2012, 2013). These studies experimentally varied methods for selecting beneficiaries of cash transfers to those below the poverty line. In one variant, selections were made only by local elites; in another, they were made by members of the local community including elites; and in a third variant, they were based on data concerning community assets. In a low-stakes experiment, they find no evidence of elite capture (measured by benefits cornered by elites or their relatives, or differences in selection patterns between treatments with varying control by elites). In a higher-stakes experiment, they find some evidence in which formal elites holding local government positions were more likely to receive benefits, but the extent of such capture turned out to be quantitatively small.

These studies therefore suggest considerable heterogeneity across and within countries with regard to the extent of local capture. One would then expect the benefits of decentralization to exhibit corresponding heterogeneous patterns. Such heterogeneity has been observed in many contexts. For instance, in their study of the distributional effects of decentralization across municipalities on educational quality in Argentine secondary schools, Galiani et al. (2008) find that schools in poorer municipalities fell further behind, whereas those in better-off areas improved. In the context of a field experiment (Björkman & Svensson 2009) that randomly varied community involvement in health clinics in Uganda and found higher average levels of service delivery and corresponding improvements in child health indicators, Björkman & Svensson (2010) demonstrate that these improvements varied significantly with income inequality and ethnic fractionalization.

Given the risk of elite capture, benefits of decentralization are also likely to vary with institutional safeguards against such capture, whether they are accompanied by accountability mechanisms such as contested elections, transparency of budgeting procedures, public provision of information, and oversight by citizen councils, judicial authorities, auditors, or media. In Uganda, Reinikka & Svensson (2005) demonstrate that a newspaper campaign providing school parents with information to monitor local officials' handling of education grants substantially reduced the diversion of these funds, resulting in positive effects on enrollment and student learning. In Brazil, Ferraz & Finan (2008) show that the release of audit reports on the local government expenditure of federal transfers had a significant impact on the electoral performance

of incumbent mayors. This impact was more pronounced in municipalities in which local radio was present to divulge audit information. In Madagascar, Francken et al. (2009) find that the media significantly reduced the local capture of public education funds; this effect was stronger in more educated communities, which were presumably better able to use the information to monitor local providers. Banerjee et al. (2010) experiment with the provision of citizen report cards (evaluating legislator performance and characteristics) to slum residents in Delhi in India and find that the report cards raised the vote shares of the better-performing incumbents. Björkman et al. (2014) describe an experiment with Ugandan health clinics that compared a treatment involving community participation combined with information provision (on local staff performance based on household surveys and clinic records) with one consisting of community participation alone. Whereas the former achieved striking improvements in child health outcomes, the latter treatment failed to do so.

An alternative way of repairing civic failures is to mandate the inclusion of disadvantaged groups in the participatory process. A growing body of literature from India, starting with Chattopadhyay & Duflo (2004), has been studying the effects of gender- and caste-based reservations of mayoral positions in local governments (e.g., Bardhan et al. 2010; Besley et al. 2004, 2005, 2012). These papers generally find that caste-based reservations result in increased targeting of benefits to the corresponding caste groups.

3.3. Empirical Studies of Provincial Protectionism in Russia and China

The studies described in the previous section focus on capture and corruption within specific communities. The theoretical literature has also addressed possible adverse spillover impacts of decentralization on other parts of the country, such as raising provincial protectionism. As explained above, the viewpoints of Blanchard & Shleifer (2000) and Sonin (2003) in this regard contrast sharply with the market-preserving-federalism hypothesis of Qian & Weingast (1997) and Qian & Roland (1998). What does the empirical evidence show?

In the Russian context, evidence in favor of the hypothesis of the local state corroding federalism is provided by Ponomareva & Zhuravskaya (2004) and Slinko et al. (2005). Using a sample of Russian firms from the second half of the 1990s, Ponomareva & Zhuravskaya (2004) show that 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 stronger bargaining position. In a sample of over 8,000 Russian firms, Lambert-Mogiliansky et al. (2003) demonstrate that firms located in regions with governors who were politically more powerful, independent from the central government, and with 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. Slinko et al. (2005) 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 in which political power was less concentrated. Regions with more concentrated power exhibited lower rates of development of small businesses and retail turnover. Although overall rates of growth of economic activity in the regions were not significantly different, greater concentration of power was associated with lower payment of federal taxes.

China exhibited substantially different results. Jin et al. (2005) use data from 1982 to 1992 for approximately 30 provinces to show that fiscal decentralization was positively related to growth of per capita regional GDP, nonagricultural employment, and nonstate industrial output, after controlling for provincial tax rates, regional labor force growth, province, and time fixed effects.

Administrative decentralization had a significant positive correlation with local fixed investment, the ratio of local to central government investment, and the growth of nonagricultural employment and nonstate industrial output. They explain these results as stemming from the effects of altered fiscal contracts between local and central governments, in which local governments were allowed to retain a higher fraction of tax revenues collected during 1982–1992, compared to the previous decade. Despite this, inequality in provincial per capita budgetary revenues and expenditures declined during 1982–1992, whereas inequality in central transfers increased. They infer that high incentives on the margin coexisted with inframarginal redistribution in the fiscal contracting mechanism.

A contrasting view of the effects of increased fiscal decentralization in China is presented by Young (2000) and Poncet (2003, 2005), who argue that the increased autonomy and incentives offered to local governments induced them to engage in provincial protectionism, in the form of high barriers to interregional trade. Moreover, just as in the Russian case, local governments offered local enterprises exemptions on central taxes, accompanying them with informal levies accruing to their own coffers. These papers show that the composition of output converged across regions between 1978 and 1997, whereas prices, labor productivity, and labor allocations diverged, and reliance on international trade increased.

Despite the evidence for growing trends of regional protectionism in China, Young (2000, p. 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 were positive in China, and negative in Russia, and that this resulted from a strong central government in China. Although this is plausible, there is little hard evidence in favor of this hypothesis. Most 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 et al. (2005), 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 & 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.

4. EMERGING ISSUES

The focus on intracommunity allocations and the extent to which they reveal mistargeting, diversion, or lack of responsiveness to local need is a natural first step in evaluating the accountability performance of local governments. Much of the existing literature has grappled with the econometric challenge of identifying causal effects of decentralization and of underlying determinants of accountability, using experimental or quasi-experimental methods. A natural concomitant is that effects on a narrow range of outcomes in the short run are evaluated. For instance, patterns of political participation and competition in any context are taken as given and viewed as an underlying determinant of the effects of decentralization. The possibility that these may be affected by decentralization in the long term has been largely ignored. Moreover, empirical identification of effects of decentralization policies often reveal very little about the underlying processes at play. Less effort has been devoted to understanding the political economy of local governments in any given context. Consequently, when disparate results are found in different

contexts, it is difficult to draw any general lessons that could be useful in countries where decentralization policies have yet to be determined.

Of course, these concerns apply more to recent empirical literature on policy evaluation more generally: the identification of short-term effects on a narrow range of dimensions, concerns about external validity, lack of understanding of underlying processes, and lack of a systemic (e.g., general equilibrium) perspective. In the specific context of decentralization, the following issues are emerging as important new areas of investigation: (a) the widening of the conceptual apparatus of political economy distortions beyond capture and corruption; (b) effects on a wider range of relevant dimensions, such as intercommunity allocations, and the functioning of local democracy itself (civic participation, political competition, legitimacy, leadership, and learning); (c) evaluations of decentralization vis-à-vis other organizational alternatives; (d) design issues highlighted by first-generation theories of fiscal federalism, such as interjurisdictional spillovers, intercommunity allocations, and hardness of budget constraints; (e) the appropriate domain and extent of devolution; and (f) the political economy of implementation.

4.1. Widening the Conceptual Apparatus

Although elite capture and corruption are important political distortions associated with local governments, they are not necessarily the only ones. Consider communities in which literacy is high, local elections are free and fair by and large, there are high levels of political turnout and awareness across all sections of the population, and elections are highly contested. Should one then assess the likely welfare benefits of decentralization to be high, on the grounds that such a community is not susceptible to much capture or corruption? Strong political competition could conceivably induce candidates to pander to voters in a variety of ways, by offering short-term benefits (such as loan waivers or low taxes) at the expense of long-term programs.

In developing countries, there is considerable evidence of clientelistic politics or vote buying, in which parties offer private transfers or benefits to specific groups of swing voters conditional on receiving these individuals' votes (e.g., Bardhan et al. 2009, Bardhan & Mookherjee 2012, Keefer & Khemani 2014, Khemani 2014, Kitschelt & Wilkinson 2007, Robinson & Verdier 2013, Stokes 2005, Wantchekon 2003). Such clientelistic relations tend to be more common with poorer voters (as their votes are cheaper to purchase). In contexts in which clientelism is common, one would therefore observe highly pro-poor targeting. Viewing the outcomes through the singular lens of elite capture, one might infer the outcome to be benign. Yet it could conceal the underlying distortion of clientelism, associated with excess spending on narrowly targeted discretionary private transfers of a recurring nature, at the expense of more broadly targeted programmatic transfer programs or public goods.

In a similar vein, mandated reservations of local government positions for disadvantaged minorities defined by ethnicity or tribe are often associated with increased transfers to members of such groups (as much research in the Indian context shows). How such outcomes should be evaluated depends on the relative importance of distortions related to capture and clientelism, respectively. Are these increased transfers symptoms of a reduction of elite capture or of heightened clientelism? More attention needs to be devoted to the study of clientelistic distortions and whether they are intensified by decentralization. Khemani (2013) provides a theoretical model in which central governments use decentralization as an instrument of dispensing targeted private transfers, at the expense of broad-based public goods. Khemani (2014) subsequently provides evidence from the Philippines of a robust negative correlation between voter reports of having received targeted private transfers and the delivery of community health services (which in turn was positively correlated with child health outcomes).

In a related vein, politicians and voters often cash in on short-term benefits at the expense of long-term objectives, resulting in problems of credible commitment by politicians to policies that are likely to achieve long-term goals. For instance, there is short-term pressure to avoid levying or collecting taxes and user fees, which undermine the fiscal capacity of governments to make long-term investments in infrastructure. To gain popularity, governments and voters could be prone to spend less on education, health, and sanitation, the benefits of which are often diffuse and pushed into the distant future. Is decentralization more or less likely to be vulnerable to such populist distortions? This issue is discussed in a preliminary way by Bardhan & Mookherjee (2015), but it deserves more attention, both theoretically and empirically.

4.2. Wider Effects of Decentralization

Much attention has been devoted to intracommunity allocations of government services: how they are allocated between different programs or different categories of beneficiaries and how efficiently such services have been delivered. In evaluating the relation between underlying determinants of elite capture such as land or socioeconomic equality, researchers often focus attention on a narrow subset of programs administered by local governments, such as latrines in Ecuador (Araujo et al. 2008), schools in Argentina (Galiani et al. 2008), or allocation across specific public goods in India (Chattopadhyay & Duflo 2004, Foster & Rosenzweig 2001). Rarely is a more comprehensive evaluation undertaken that incorporates the larger range of programs administered by local governments. Moreover, effects of decentralization on intercommunity allocations are no less important than those on intracommunity allocations. For instance, the 1994 decentralization in Bolivia resulted in a remarkable redistribution of central resources in favor of poorer regions (Faguet 2004). The Indian state of West Bengal exhibited a bias in the opposite direction, in which elite capture manifested itself in distorted intercommunity rather than intracommunity allocations (Bardhan & Mookherjee 2006c).

The nature of civil society and democracy, which has been found to be a key determinant of decentralization effects in a large number of studies, is also typically taken as given in most studies. Yet, as Faguet (2014) argues in his introduction to a recent symposium on decentralization, there could be important effects on the nature of democracy itself. Citizens may participate more in civic affairs when they perceive more of a stake from doing so. In Indonesia, the 2001 fiscal decentralization was followed by the emergence of new leaders who were elected rather than appointed by local elites in approximately 20% of all villages: These villages manifested superior gains from decentralization (Pal & Roy 2014). Decentralization could provide room for a new set of political leaders to emerge and prove their mettle, conceivably lowering entry barriers into national politics (Myerson 2014). Even if resource allocations are unaffected, the fact of wider popular participation in decision making could generate greater satisfaction among citizens, as Olken (2010) finds in a controlled experiment in Indonesia. This may help enhance the legitimacy of the government in the eyes of citizens and limit threats of political secession. Beaman et al. (2009) show that Indian voters' gender stereotypes regarding political leaders became moderated as they became exposed to local women leaders. Women leaders may accumulate political and administrative experience over time, reducing and even reversing gender gaps in governance performance (Afridi et al. 2013). Decentralization provides the scope for learning from policy experimentation by select jurisdictions, an avenue for the spatial diffusion of successful policy innovations, as exemplified by schooling reforms in São Paulo, Brazil (Gemignani & Madeira 2014).

4.3. Comparisons with Other Organizational Alternatives

Most studies of political decentralization examine the performance of local government across different jurisdictions, and/or over time, and relate these to differences in political competition, inequality, or social capital. Relatively few studies compare it with centralization, owing to a lack of suitable data. Yet that is one of the questions of primary concern. Comparisons with other alternatives frequently arise in policy discussions, such as privatization. For instance, if the provision of an infrastructure, education, or health services by a centralized government is considered unsatisfactory, would services improve if the responsibility for the provision were devolved to local governments? Or would it be better to privatize service delivery, while the government limits its role to financing via budgetary subsidies to private service providers or cash vouchers to households? The trade-offs between decentralization and privatization have not received much attention in the literature, either theoretically or empirically. An exception is provided by Granados & Sanchez (2014), who evaluate the comparative performance of decentralization and privatization in the delivery of water services in Colombia in lowering infant mortality rates.

4.4. Design Issues Highlighted by First-Generation Theories

Several issues that formed the focus of the first-generation theories have not received much attention in recent years. As I argue below, these need to be revisited, both empirically and theoretically.

4.4.1. Spillovers. Interjurisdictional spillovers and loss of scale economies are identified as the principal costs of decentralization in the first-generation literature. These have to be traded off against benefits from catering to greater heterogeneity and improved accountability under decentralization. Compared to the latter, there is a paucity of empirical studies that evaluate the former.

Nevertheless, there has been some interesting work on effects of decentralization on environmental quality across political jurisdictions. Sigman (2001) finds evidence of free riding across countries by comparing water quality in national and international rivers in 49 countries in 1979–1990. Water quality was significantly poorer in monitoring stations located upstream of international rivers outside the European Union. Using data from 500 river-monitoring stations within the United States, Sigman (2005) finds similar evidence of a 4% deterioration of water quality in monitoring stations located downstream from states authorized to implement the Clean Water Act. These results obtain after controlling for state, river characteristics, and monitoring-station fixed effects, with the identification coming from time-varying state authority.

Lipscomb & Mobarak (2007) examine the effects of splitting county boundaries in Brazil using data from 372 monitoring stations located in all eight major river basins. They find a significant increase in pollution close to a river's downstream exit point out of a newly created county, thereby revealing increased free-riding incentives. Yet they find no evidence of any effects on overall water quality, averaging across all locations. They explain these contrasting results by the fact that splitting counties increased aggregate budgets of county governments, resulting in offsetting increases in spending on sanitation. Burgess et al. (2012) provide evidence of increased deforestation in Indonesia resulting from splitting local governments between 2000 and 2008. These results inform the need to correctly evaluate costs of decentralization, besides designing decentralization programs to control transboundary spillovers via monitoring and corrective taxes or subsidies.

4.4.2. Vertical fiscal relations and interjurisdictional allocations. Another design issue stressed by the first-generation literature involves arrangements for fiscal transfers from national to local governments. In many Latin American countries, decentralization has been associated with macroeconomic instability associated with the inability of central governments to control the spending of local governments owing to soft budget constraint problems (Rodden & Eskeland 2003). In most other developing countries, conversely, decentralization has transferred significant spending responsibilities to local governments without concomitant increases in funds devolved, resulting in complaints of unfunded mandates.

Although the softness of local government budget constraints is partly affected by underlying political economy factors, it could also be affected by the design of vertical fiscal transfer mechanisms. To the extent that there is scope for such choices, what are the associated trade-offs? Soft budget constraints can create problems of controlling fiscal spending and inefficiencies associated with bailouts of improvident localities. Alternatively, hardening budget constraints limits flexibility in interjurisdictional allocations in response to changing needs and circumstances and reduces the ability of local governments to provide essential services.

Fiscal strain can also induce increases in corruption, as shown in an interesting study of Indonesian local governments by Henderson & Kuncoro (2004). They report the results of a survey of 1,808 firms in 2001–2002, following a comprehensive nationwide decentralization. After controlling for various firm- and locality-specific characteristics, the authors find that increasing the ratio of property tax revenues retained by local governments to local GDP, or 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 either of these variables was associated with a 73% or 56% increase in the number of licenses, respectively, which in turn was positively correlated with bribes (a doubling of the number of licenses raised the ratio of bribes to firm costs by approximately 0.8–0.9). Henderson & Kuncoro interpret this finding as the effects of the fiscal strain of local governments relative to expenditure responsibilities mandated by the decentralization, which led the local governments to underpay government officials, thereby inducing the officials to rely on bribes to supplement incomes.

A related issue is the extent of discretion retained by upper-level governments in reallocating transfers across jurisdictions. The use of formula-based transfers in Bolivia was instrumental in redistributing funds in favor of poorer regions (Faguet 2004). In contrast, many Indian states allow upper-level governments to retain discretion over these transfers, allowing scope for political manipulation. Gupta & Mukhopadhyay (2014) show that the Rajasthan state government dominated by the Indian National Congress (INC) allocated larger funds for the national employment guarantee program to blocks (a layer of government between the district and village levels) in which the INC lost the previous election by a narrow margin and that this helped the INC recover its vote shares. Retaining discretion over interjurisdictional transfers enables parties dominating higher-level governments to manipulate these to secure political advantages, in a manner rarely visible to citizens. More attention therefore needs to be devoted to the design of interjurisdictional transfers and their implications.

4.5. Domain and Extent of Devolution

What responsibilities ought to be devolved to local governments? Although authority over allocations across different local projects and their implementation is devolved in most decentralization contexts, these are typically subject to various mandates and regulations imposed by upper-level governments. Projects may have to be approved in advance, a time-consuming procedure that restricts the time available to local governments to execute projects. There can be

restrictions on the use of contractors or on the ratio of costs incurred on material procurement. The intent of these regulations is often to limit the scope for local corruption, but in practice these regulations can become instruments of discretionary control exercised by upper-level governments to secure their own political advantage (e.g., restricting spending by local governments dominated by rival parties).

Many service areas are often partially decentralized, in the sense that responsibility is shared between central and local governments. Joanis (2014) provides a theoretical analysis of the benefits (vertical supply complementarities between different tiers) and costs (reduced accountability, as voters cannot pinpoint responsibility for delivery failures). Despite the pervasiveness of shared responsibilities, very few empirical studies have attempted to examine their consequences.

Another important question is the desirability of financial devolution: Should local governments be empowered or authorized to levy taxes on local businesses or residents? Countries vary considerably with respect to the extent of fiscal autonomy granted to local governments. As reported in Section 3, cross-country and country panel studies find that expansionary effects of expenditure decentralization on local services are higher the greater the extent of revenue-raising devolution that accompanies the decentralization. Bardhan & Mookherjee (2006a) develop a theoretical model that is consistent with this finding, but in which the devolution of revenue-raising authority could nevertheless reduce welfare. The reason is that with full revenue-raising autonomy, local governments subject to substantial elite capture are motivated to impose regressive local taxes in which the poor end up paying for services delivered to elites. This problem is avoided by restricting financial devolution. Conversely, if the local government is not subject to elite capture, financial devolution allows local governments the flexibility to adjust spending in response to variations in local need. Moreover, it is often argued that citizens would be motivated to evade taxes less if the taxes were visibly spent on the jurisdictions in which they reside. Hence, there are various pros and cons of altering the extent of financial devolution, which do not seem to have been studied empirically.

The converse question of effects of political devolution in a setting with fiscal decentralization has been studied in the context of China, where a reform requiring some local government leaders to be elected has been introduced in the past two decades. Using a village panel and staggered introduction of local government elections, Martinez-Bravo et al. (2014) find that the provision of local public goods financed via local taxes doubled, and less land was leased to enterprises, resulting in reduced incomes of prosperous residents and lower inequality. In a similar vein, Zhang et al. (2004) demonstrate that local elections increased the share of public investments in local government spending and shifted taxes from households to enterprises.

4.6. Political Economy and Implementation Issues

Case studies of recent decentralization experiences of a number of poor and middle-income countries show striking differences in design and implementation (Bardhan & Mookherjee 2006b). In some countries, local governments have independent constitutional authority, whereas in others they exist at the mercy of upper-level governments. Local government leaders can be elected in some countries or appointed by upper-level governments. Even when there is some degree of local democracy, as in China over the past two decades, there can be restrictions imposed on the freedom of political parties to form and contest these elections. Most countries, however, impose no such constraints. Elected officials of local governments may be constrained to operate with bureaucrats or service workers appointed by and accountable only to upper-level governments in some countries, as in the case of India, where most schoolteachers and health workers cannot be hired or fired by local governments. In others, local governments have far greater control.

Moreover, the extent of decentralization *de facto* often deviates from what is prescribed *de jure*. Frequently, responsibilities are divided between local and higher-level governments, with boundaries that are not clearly demarcated. Officials in local governments often lack requisite administrative skills and training. The extent of upward and downward accountability mechanisms on local governments can also differ greatly, as can the extent of financial authority or range of functions devolved. As is clear from the evidence described by the existing literature, these features have a strong impact on the ultimate outcomes of decentralization.

Are there normative rationales in terms of underlying fundamentals for these cross-country or cross-regional differences, or are they instead the result of the political economy of the process by which decentralization was implemented? This is a question that requires more attention. To do this, one has to ultimately confront why central governments willingly devolve power to lower-level governments, and the circumstances under which they do so. As country case studies (e.g., in Bardhan & Mookherjee 2006b) show, historical contexts play a critical role in defining the motive for decentralization and the shape that it eventually takes. Central authorities could devolve power because they are compelled by threats to their own authority (rising competition from competing parties or regional pressures), because they seek to preempt such threats. Alternatively, devolution may be a response to crises, external shocks and pressures, changes in political ideology, or some combination of these. In some cases (e.g., Bolivia, Brazil, Indonesia, and South Africa), a prior authoritarian political regime has been swept away by a new government wedded to an ideology more aligned with decentralization, resulting in a big bang decentralization reform. Such decentralizations have been more comprehensive, devolving a larger range of responsibilities to local governments with independent constitutional authority and in a more transparent manner. By contrast, strong central governments in Uganda or China, which faced no challenges, resorted to administrative rather than political devolution as a way of improving the management of government functions. In India and Pakistan, weak central governments tended to counter rising opposition from regional parties by cultivating local governments. Yet in India, the central government was constitutionally required to seek approval from the regional parties and so was forced to let each state implement the devolution in its own manner. This resulted in enormous heterogeneity in the pattern of devolution across different states in India, in which many state governments implemented central statutes and mandates in ways to hold on to as much power as possible. It is a challenging task to develop a theory of the institutional dynamics of actual decentralizations that can provide a unified account of these disparate experiences.

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LITERATURE CITED

Acemoglu D, Reed T, Robinson J. 2014. Chiefs: economic development and elite control of civil society in Sierra Leone. *J. Polit. Econ.* 122:319–68

- Afridi F, Iversen V, Sharan M. 2013. *Women political leaders, corruption and learning: evidence from a large public program in India*. Work. Pap., Int. Growth Cent., London Sch. Econ.
- Alatas V, Banerjee A, Hanna R, Olken B, Purnamasari R, Wai-Poi M. 2013. *Does elite capture matter? Local elites and targeted welfare programs in Indonesia*. Work. Pap., Dep. Econ., Mass. Inst. Technol., Cambridge, MA
- Alatas V, Banerjee A, Hanna R, Olken B, Tobias J. 2012. Targeting the poor: evidence from a field experiment in Indonesia. *Am. Econ. Rev.* 102:1206–40
- Anderson S, Francois P, Kotwal A. 2015. Clientelism in Indian villages. *Am. Econ. Rev.* In press
- Araujo MC, Ferreira F, Lanjouw P, Özler B. 2008. Local inequality and project choice: theory and evidence from Ecuador. *J. Public Econ.* 92:1022–46
- Arikan GG. 2004. Fiscal decentralization: a remedy for corruption? *Int. Tax Public Finance* 11:175–95
- Banerjee A, Kumar S, Pande R, Su F. 2010. *Do informed voters make better choices? Experimental evidence from urban India*. Work. Pap., Kennedy Sch. Gov., Harvard Univ., Cambridge, MA
- Bardhan P. 2002. Decentralization of governance and development. *J. Econ. Perspect.* 16(4):185–205
- Bardhan P, Mitra S, Mookherjee D, Sarkar A. 2009. Local democracy and clientelism: implications for political stability in rural West Bengal. *Econ. Polit. Wkly.* 44:46–58
- Bardhan P, Mookherjee D. 2000. Capture and governance at local and national levels. *Am. Econ. Rev.* 90:135–39
- Bardhan P, Mookherjee D. 2006a. Accountability and decentralization of infrastructure delivery in developing countries. *Econ. J.* 116:107–33
- Bardhan P, Mookherjee D, eds. 2006b. *Decentralization and Local Governments in Developing Countries: A Comparative Perspective*. Cambridge, MA: MIT Press
- Bardhan P, Mookherjee D. 2006c. Pro-poor targeting and accountability of local governments in West Bengal. *J. Dev. Econ.* 79:303–27
- Bardhan P, Mookherjee D. 2012. *Political clientelism and capture: theory and evidence from West Bengal*. Work. Pap., Inst. Econ. Dev., Boston Univ.
- Bardhan P, Mookherjee D. 2015. Decentralization and development: dilemmas, trade-offs and safeguards. In *Handbook of Fiscal Federalism*, ed. E Ahmed, G Brosio, pp. 461–70. Northampton, MA: Edward Elgar
- Bardhan P, Mookherjee D, Parra Torrado M. 2010. Impact of political reservations in West Bengal local governments on anti-poverty targeting. *J. Glob. Dev.* 1(1). doi: 10.2202/1948-1837.1025
- Beaman L, Chattopadhyay R, Duflo E, Pande R, Topalova P. 2009. Powerful women: Does exposure reduce bias? *Q. J. Econ.* 124:1497–540
- Besley T, Case A. 1995. Incumbent behavior: vote-seeking, tax-setting and yardstick competition. *Am. Econ. Rev.* 85:25–45
- Besley T, Coate S. 2003. Centralized versus decentralized provision of local public goods: a political economy approach. *J. Public Econ.* 87:2611–37
- Besley T, Pande R, Rahman L, Rao V. 2004. The politics of public good provision: evidence from Indian local governments. *J. Eur. Econ. Assoc.* 2:416–26
- Besley T, Pande R, Rao V. 2005. *Political selection and the quality of governments: evidence from South India*. Work. Pap. 921, Econ. Growth Cent., Yale Univ., New Haven, CT
- Besley T, Pande R, Rao V. 2012. Just rewards? Local politics and public action in South India. *World Bank Econ. Rev.* 26:191–216
- Björkman M, de Walque D, Svensson J. 2014. *Information is power: experimental evidence on the long-run impact of community monitoring*. Work. Pap., Stockholm Sch. Econ.
- Björkman M, Svensson J. 2009. Power to the people: evidence from a randomized field experiment on community-based monitoring in Uganda. *Q. J. Econ.* 124:735–69
- Björkman M, Svensson J. 2010. When is community-based monitoring effective? Evidence from a randomized experiment in primary health in Uganda. *J. Eur. Econ. Assoc.* 8:571–81
- Blanchard O, Shleifer A. 2000. *Federalism with and without political centralization: China versus Russia*. Work. Pap. 00-15, Dep. Econ., Mass. Inst. Technol., Cambridge, MA

- Brennan G, Buchanan J. 1980. *The Power to Tax: Analytical Foundations of a Fiscal Constitution*. Cambridge, UK: Cambridge Univ. Press
- Burgess R, Hansen M, Olken B, Potapov P, Sieber S. 2012. The political economy of deforestation in the tropics. *Q. J. Econ.* 127:1707–54
- Cai H, Treisman D. 2004. State corroding federalism. *J. Public Econ.* 88:819–43
- Cai H, Treisman D. 2005. Does competition for capital discipline governments? Decentralization, globalization and public policy. *Am. Econ. Rev.* 95:817–30
- Chattopadhyay R, Duflo E. 2004. Women as policy makers: evidence from a randomized policy experiment in India. *Econometrica* 72:1409–33
- Cremer J, Estache A, Seabright P. 1995. The decentralization of public services: lessons from the theory of the firm. In *Decentralizing Infrastructure: Advantages and Limitations*, ed. A Estache, pp. 98–119. Washington, DC: World Bank
- Edwards J, Keen M. 1996. Tax competition and Leviathan. *Eur. Econ. Rev.* 40:113–34
- Estache A, Sinha S. 1995. Does decentralization increase public infrastructure expenditure? In *Decentralizing Infrastructure: Advantages and Limitations*, ed. A Estache, pp. 63–80. Washington, DC: World Bank
- Faguet JP. 2004. Does decentralization increase government responsiveness to local need? Evidence from Bolivia. *J. Public Econ.* 88:867–93
- Faguet JP. 2014. Decentralization and governance. *World Dev.* 53:2–13
- Fan CS, Lin C, Treisman D. 2009. Political decentralization and corruption: evidence from around the world. *J. Public Econ.* 93:14–34
- Ferraz C, Finan F. 2008. Exposing corrupt politicians: the effects of Brazil's publicly released audits on electoral outcomes. *Q. J. Econ.* 123:703–45
- Fisman R, Gatti R. 2002a. Decentralization and corruption: evidence across countries. *J. Public Econ.* 83:325–45
- Fisman R, Gatti R. 2002b. Decentralization and corruption: evidence from US federal transfer programs. *Public Choice* 113:25–35
- Foster A, Rosenzweig M. 2001. *Democratization, decentralization and distribution of local public goods in a poor rural economy*. Work. Pap., Brown Univ., Providence, RI
- Francken N, Minten B, Swinnen J. 2009. Media, monitoring, and capture of public funds: evidence from Madagascar. *World Dev.* 37:242–55
- Galasso E, Ravallion M. 2005. Decentralized targeting of an anti-poverty program. *J. Public Econ.* 89:705–27
- Galiani S, Gertler P, Schargrodsky E. 2008. School decentralization: helping the good get better, but leaving the poor behind. *J. Public Econ.* 92:2106–20
- Gemignani T, Madeira R. 2014. *Political learning and officials' motivations: an empirical analysis of the education reform in the state of São Paulo*. Work. Pap., Dep. Econ., Univ. São Paulo
- Granados C, Sanchez F. 2014. Water reforms, decentralization and child mortality in Colombia. *World Dev.* 53:68–78
- Gupta B, Mukhopadhyay A. 2014. *Local funds and political competition: evidence from the National Rural Employment Guarantee Scheme in India*. Work. Pap., Indian Stat. Inst., New Delhi
- Hamilton A, Madison J, Jay J. 1937 (1787). *The Federalist*. New York: Tudor
- Henderson JV, Kuncoro A. 2004. *Corruption in Indonesia*. Work. Pap., Dep. Econ., Brown Univ., Providence, RI
- Jin H, Qian Y, Weingast B. 2005. Regional decentralization and fiscal incentives: federalism, Chinese style. *J. Public Econ.* 89:1719–42
- Joanis M. 2014. Shared accountability and partial decentralization in local public good provision. *J. Dev. Econ.* 107:28–37
- Keefer P, Khemani S. 2014. *Radio's impact on the support for clientelism*. Work. Pap., Dev. Res. Group, World Bank, Washington, DC
- Khemani S. 2013. *Political capture of decentralization: vote buying through grant-financed local jurisdictions*. Work. Pap., Dev. Res. Group, World Bank, Washington, DC
- Khemani S. 2014. *Buying votes versus supplying public services: political incentives to under-invest in pro-poor policies*. Work. Pap., Dev. Res. Group, World Bank, Washington, DC

- Kitschelt H, Wilkinson S. 2007. *Patrons, Clients and Policies: Patterns of Democratic Accountability and Political Competition*. Cambridge, UK: Cambridge Univ. Press
- Kochar A. 2008. Schooling, wages, and profit: negative pecuniary externalities from schooling and their consequences for schooling investments. *J. Dev. Econ.* 86:76–95
- Labonne J, Chase RS. 2009. Who is at the wheel when communities drive development? Evidence from the Philippines. *World Dev.* 37:219–31
- Lambert-Mogiliansky A, Sonin K, Zhuravskaya E. 2003. *Capture of bankruptcy: theory and Russian evidence*. Work. Pap., Cent. Econ. Policy Res., London
- Lipscomb M, Mobarak M. 2007. *Decentralization and water quality: evidence from the re-drawing of county boundaries in Brazil*. BREAD Work. Pap. 159
- Lockwood B. 2002. Distributive politics and the costs of centralization. *Rev. Econ. Stud.* 69:313–37
- Mansuri G, Rao V. 2013. *Localizing Development: Does Participation Work?* Washington, DC: World Bank
- Martinez-Bravo M, Padro i Miguel G, Qian N, Yao Y. 2014. *Political reform in China: elections, public goods and income distribution*. Work. Pap., Yale Univ., New Haven, CT
- Menes R. 1999. *The effect of patronage politics on city government in American cities 1900–10*. NBER Work. Pap. 6975
- Menes R. 2003. *Corruption in cities: graft and politics in American cities at the turn of the twentieth century*. NBER Work. Pap. 9990
- Myerson R. 2014. Constitutional structures for a strong democracy: considerations on the government of Pakistan. *World Dev.* 53:46–64
- Oates W. 1972. *Fiscal Federalism*. New York: Harcourt
- Olken B. 2010. Direct democracy and local public goods: evidence from a field experiment in Indonesia. *Am. Polit. Sci. Rev.* 104:243–67
- Pal S, Roy J. 2014. *Fiscal decentralization, grass-root democracy and local development in Indonesia*. Work. Pap., Univ. Surrey, Guildford, UK
- Poncet S. 2003. Measuring Chinese domestic and international integration. *China Econ. Rev.* 14:1–23
- Poncet S. 2005. A fragmented China: measure and determinants of Chinese domestic market disintegration. *Rev. Int. Econ.* 13:409–30
- Ponomareva M, Zhuravskaya E. 2004. Federal tax arrears in Russia: liquidity problems, federal redistribution or regional resistance? *Econ. Transit.* 12:373–98
- Qian Y, Roland G. 1998. Federalism and the soft budget constraint. *Am. Econ. Rev.* 88:1593–615
- Qian Y, Weingast B. 1997. Federalism as a commitment to preserving market incentives. *J. Econ. Perspect.* 11:83–92
- Reinikka R, Svensson J. 2005. Fighting corruption to improve schooling: evidence from a newspaper campaign in Uganda. *J. Eur. Econ. Assoc.* 3:259–67
- Robinson J, Verdier T. 2013. The political economy of clientelism. *Scand. J. Econ.* 115:260–91
- Rodden J, Eskeland G, eds. 2003. *Fiscal Decentralization and the Challenge of Hard Budget Constraints*. Cambridge, MA: MIT Press
- Seabright P. 1996. Accountability and decentralisation in government: an incomplete contracts model. *Eur. Econ. Rev.* 40:61–89
- Sigman H. 2001. International spillovers and water quality in rivers: Do countries free-ride? *Am. Econ. Rev.* 92:1152–59
- Sigman H. 2005. Transboundary spillovers and decentralization of environmental policies. *J. Environ. Econ. Manag.* 50:82–101
- Slinko I, Yakovlev E, Zhuravskaya E. 2005. Laws for sale: evidence from Russia. *Am. Law Econ. Rev.* 7:284–318
- Sonin K. 2003. *Provincial protectionism*. Work. Pap. 557, William Davidson Inst., Univ. Mich. Bus. Sch., Ann Arbor
- Stokes S. 2005. Perverse accountability: a formal model of machine politics with evidence from Argentina. *Am. Polit. Sci. Rev.* 99:315–25
- Tiebout C. 1956. A pure theory of local expenditures. *J. Polit. Econ.* 64:416–24

- Tommasi M, Weinschelbaum F. 2007. Centralization vs. decentralization: a principal-agent analysis. *J. Public Econ. Theory* 9:369–89
- Treisman D. 2002. *Decentralization and the quality of government*. Work. Pap., Dep. Polit. Sci., Univ. Calif., Los Angeles
- Treisman D. 2007. *The Architecture of Government*. Cambridge, UK: Cambridge Univ. Press
- Wade R. 1997. How infrastructure agencies motivate staff: canal irrigation in India and the Republic of Korea. In *Infrastructure Strategies in East Asia: The Untold Story*, ed. A Mody, pp. 109–30. Washington, DC: World Bank
- Wantchekon L. 2003. Clientelism and voting behavior: evidence from a field experiment in Benin. *World Polit.* 55:399–422
- World Bank. 2004. *World Development Report 2004: Making Services Work for Poor People*. Washington, DC: World Bank
- Young A. 2000. The razor's edge: distortions and incremental reform in the People's Republic of China. *Q. J. Econ.* 115:1091–136
- Zhang X, Fan S, Zhang L, Huang J. 2004. Local governance and public good provision in rural China. *J. Public Econ.* 88:2857–71



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