

Indian Federalism, Economic Reform and Globalization*

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Abstract

In this paper we examine several dimensions of economic reform in India, in the context of the country's federal system and of globalization, i.e., we explicitly recognize that the national government has subnational governments below it, and that all these layers of government simultaneously interact with foreign governments and corporations in a global economy. We examine two groups of reforms, the first involving redrawing of state-market boundaries, and the second concerned with reconfiguring federal institutions themselves. The first group includes financial sector reforms, assignment of regulatory powers, infrastructure reform and development, and privatization. We note the progress made in financial sector reform but also the problems caused for the financial sector as a whole by state and central fiscal deficits. We discuss the extreme problems of the power sector, and the important federal dimensions that make reform more difficult there. We also highlight the regional concentration of FDI in India's more liberalized economy. The second group of reforms includes tax reforms, reform of center-state fiscal transfer mechanisms, and local government reforms. To some degree, these reforms in federal governance hold the key to opening the door to further reform elsewhere, by reducing the fiscal burden placed on the private sector by government deficits. We acknowledge the political economy aspects of reform of governance, and discuss possibilities for politically acceptable packages of fiscal reforms, such as combinations of changes in tax assignment that would be acceptable to the center as well as the state governments. We also discuss the possibility that growing regional inequalities might require the intergovernmental transfer system to be more efficient and effective in its objectives.

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1. Introduction

India's economic reforms began slowly in the 1980s, and then accelerated under the pressure of an external crisis at the beginning of the 1990s. The most visible and important component of the reforms so far has been the relaxation of various internal and external controls on private economic activity, the "license-permit-quota *raj*". A significant objective of this liberalization has been achieving greater efficiency in resource allocation, and re-integration of India's economy with that of the rest of the world.¹ In addition to further removal of restrictions, there is an ongoing attempt to replace case-by-case, discretionary controls with more efficient forms of regulation, where market and informational structures make such regulation a positive input in the smooth functioning of markets. The financial, power and telecom industries are three somewhat different examples of where some kind of regulation is required because of potential monopolies, information problems, or both. The first two kinds of reforms can be viewed as redrawing the nature of the boundary between state and market in India.

Reform of governmental structures themselves can be another, significant component of reform. Some activities will continue to be handled by the government, whether from objectives of efficiency or of equity. There is at least some scope for improving the effectiveness of direct government activity within the economy, whether in terms of the efficiency with which it expends funds for public goods or to achieve redistribution, or of the efficiency with which it raises revenue through taxation or through borrowing (which ultimately will itself require some kind of taxation). Reform of government can also be clubbed with the development of new regulatory structures under the category of 'institutional reform'. However, reforms such as decentralization of government have additional, noninstrumental objectives, and have been motivated at least as much by the intrinsic value of local democracy as by the desire to improve the efficiency and equity of economic decisions.

In the case of reform of governance, improved efficiency and effectiveness can be achieved by designing instruments better, or by changing the internal organization of government to provide more efficient incentives. Examples of the former are changing the nature of tax bases and rates to reduce allocative distortions, or redesigning intergovernmental transfer schemes to avoid distortions to incentives for transfer recipients. Examples of the latter are changing the structures of and relationships between the bureaucracy, judiciary, legislature or functional branches of government in general (taking account of government actors' self interested natures), and changing the structure of and relationships between different geographically defined governmental jurisdictions.

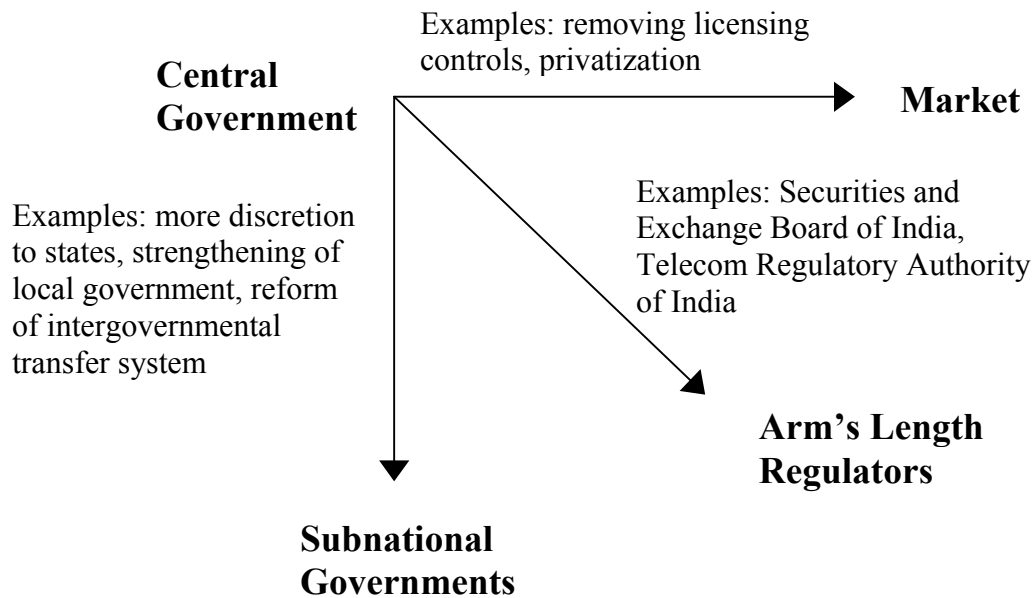
The existence of well-defined governmental jurisdictions at subnational levels is the essence of what we call federalism. Changing the nature of intergovernmental relations can involve many different dimensions, but much of what is possible in India, and what might be viewed as efficiency enhancing, can be gathered under the umbrella of decentralization. Of course some kinds decentralization may conflict with efficiency (e.g., tax competition), and may make achieving equity goals more difficult. Perhaps one

¹ See, for example, Srinivasan and Tendulkar (2002).

of the biggest concerns with decentralization is the impact on fiscal discipline. Nevertheless, given India's centralized nature, the presumption is in favor of decentralization on at least some dimensions.

The above discussion is partly represented schematically in Figure 1 below. Note that the three dimensions shown in the figure are not independent in practice, though they may often have different motivations, and different constituencies supporting or opposing them. For example, we have noted that withdrawing the government from certain kinds of control of private economic activity may require the introduction of effective arm's length regulation, rather than a completely hands off approach. In the case of regulation, the question of assignment of regulatory powers becomes a component of the design of the federal system, since regulatory authority must be assigned to the appropriate level of government. Another example is the liberalization of capital markets, which frees private actors from government controls, but also affects how governments at all levels may set about raising funds for their own activities. Yet another example is the possible privatization of delivery of some components of goods and services that have a mixed public-private good character, such as in the areas of education and health. Many more examples of interaction between the different components or dimensions of reform can be given.

Figure 1: Dimensions of Economic Reform



Of course India's economic reforms are not taking place in a vacuum. Other countries are also pursuing similar reforms, particularly with respect to integration with the world economy. In many cases, these countries are ahead in the game. Since part of economic reform includes trying to capture the benefits of participating more fully in the global

economy, the proper perspective on reform must be one of reform in the context of globalization. Globalization can be thought of abstractly in terms of freer movements of goods and of factors. This may bring down prices of some goods, lead to more efficient allocations of factors, and allow relatively capital-scarce countries such as India to gain greater access to foreign capital and technology for enhancing economic growth. This is the standard way in which openness supports private (and potentially also public²) economic activity. From the perspective of the government, however, there may be new challenges in a world of factor and goods mobility. The ability of the government to tax is affected, since mobile factors can escape the incidence of taxes that initially are placed on them. Furthermore, regulatory policies can be subject to similar problems in the face of factor mobility, as in fears of races to the bottom in standard setting.

An important aspect of openness in a federal system is the extent to which subnational governments can make policies independently. While only the national government can determine import duties, subnational governments will typically have some freedom in policies that affect the incentives of foreign capital to enter their jurisdictions. Note that, from the perspective of a subnational government, say an Indian state, capital from another country or from another state can be viewed through the same lens, and must be treated equally in typical policy environments. The final impacts of the entry of capital on a subnational government will therefore depend also on the internal mobility of capital and labor. Hence, an important point that emerges from considering subnational jurisdictions in a federal system is that attention must be paid to internal mobility of goods and factors, in addition to external liberalization. Thus subnational tax and regulatory policies can assume great importance in a scenario of economic reform under globalization. A further consideration, which we shall also explore, is that the fiscal health of the states that results from their policies is likely to impinge on the entire nation's credit rating in world capital markets.³

The above discussion should provide sufficient motivation for examining a particular set of issues that are all currently receiving the attention of economic reformers in India, and bringing out their interrelatedness. In this paper, we examine the following dimensions of reform and its consequences for India, where we explicitly recognize that the national government has subnational governments below it, and that all these layers of government simultaneously interact with foreign governments and corporations in a global economy.

1. Financial sector reforms
2. Assignment of regulatory powers
3. Infrastructure reform and development
4. Privatization

² This is particularly the case when the government produces private goods.

³ The mechanism by which this occurs can be indirect, through explicit central counter guarantees for state guarantees to foreign corporations, or direct, through the observation of larger deficits for the center and states combined.

5. Tax reforms
6. Reform of center-state fiscal transfer mechanisms
7. Local government reforms
8. Patterns of change in regional inequality

The first seven topics can be organized into two groups. The first four topics are concerned directly with state-market boundaries, while the next three deal purely with internal government decisions (though of course these have implications for the private sector). The eighth topic focuses on the possible impacts of various dimensions of reform, or their absence. Clearly, there are feedback effects from patterns of change in regional inequality, and of who wins and loses in general, to the manner and extent to which policies in any of the first seven categories can be implemented.

One can organize the first seven topics in other ways as well. For example, topics 1 and 3-7 all have implications for the government's overall finances. Topics 3 and 7, and to some extent 4 and 6, deal directly with the issue of effectiveness of government expenditures on classical public goods. Topics 1, 5 and 6 deal with the revenue side of government at different levels. Topics 2, 4 and 7 deal directly with institutional reforms. And so on. These alternative groupings merely highlight the interconnectedness of the topics. We organize the paper as follows. Section 2 provides an overview of India's economy and recent economic reforms. Section 3 gives a summary analysis of India's federal structures, touching on its fiscal situation. Section 4 examines the first four topics in our list, while section 5 tackles the next three. Section 6 deals with regional impacts, the last topic on our list. Section 7 provides a summary conclusion.

2. Overview of India's Economy and Recent Reform

India is a large and relatively poor developing country. After independence in 1947, it pursued economic policies that gave the government a primary role in promoting economic development. While the country's size dictated some kind of federal structure, the arrangements that were adopted in the Constitution (ratified in 1950), and their subsequent evolution gave the central government a dominant position vis-à-vis the constituent units of the nation (states and territories). India's leaders aspired toward an indigenous version of Fabian socialism, with government as benevolent guardian, leavened with a smattering of Gandhian influences in favor of smallness, self-sufficiency and rural traditions.

Through the 1970s, India's economic growth was reasonable, averaging between 3 and 4 per cent per year, but this was not rapid enough to significantly diminish the number of poor people, nor to deal comfortably with the strains associated with governing a country with substantial ethnic, linguistic and religious diversity along with economic inequalities. Nevertheless, India was able to preserve its unity, as well as the political system of parliamentary democracy adopted in its early years. However, this political stability was accompanied by the evolution of an economic system riddled with increasing rigidities and inefficiencies, the so-called 'license-quota-permit raj'.

In the 1980s, partly through fresh ideological influences, and partly through the observation of faster growth in many East Asian economies, India's economic policymakers began to seriously attempt some changes in the overall approach to the role of government in the country's economic development, introducing some liberalization in the trade regime, loosening of domestic industrial controls, and promotion of investment in modern technologies for areas such as telecommunications. Growth accelerated past 5 per cent, but this came at the cost of macroeconomic imbalances (fiscal and current account deficits), which worsened at the beginning of the 1990s as a result of the collapse of the Soviet Union, which had become a major trading partner and ally, and of turmoil in the Middle East.

In 1991 India faced a severe balance of payments crisis, and this circumstance became the occasion for a substantial advance in the pace and nature of economic reforms that were being attempted. In particular, the major steps taken were further trade liberalization, in the form of reductions in tariffs and conversion of quantitative restrictions to tariffs, and a sweeping away of a large segment of restrictions on domestic industrial investment. These two changes in the early 1990s have come to symbolize or encapsulate the term 'economic reform' in India. Note that the collapse of the Soviet Union in 1991 and the stellar growth performance of China after its opening to the world economy and initiation of market oriented reforms in the 1980s were two very significant developments that supported India's reform in the 1990s, and distinguished it from the temporary response to an earlier balance of payments crisis in 1966.

The move to reduce the role of government in directly controlling the working of markets had additional implications. It was recognized that sectors such as finance and telecommunications required a new set of regulatory structures suitable for an environment in which bureaucrats were no longer making discretionary judgments on a case-by-case basis. This need was strengthened by the direct and indirect impacts of technological change in such sectors. Furthermore, it was recognized that removing industrial investment controls could not by itself solve India's problem of slow growth, but needed to be complemented by restructuring the working of the labor market, and by improving the economy's physical and institutional infrastructure. Achieving the first of these objectives has been hampered by understandable interest group pressures, while the second goal has been constrained by the continued high level of the government's fiscal deficit. The high fiscal deficit, in turn, is traceable to interest group subsidies, as well as the nature of the interaction between the central and state governments.

Despite the roadblocks to accomplishing comprehensive economic reforms, India was able to achieve a slight acceleration of growth in the 1990s as compared to the previous decade. However, growth statistics suggest that there was a deceleration in the latter half of the 1990s, even before the current global recession took hold. Tables 1 and 2 provide a summary of the size and structure of India's economy and changes over time (Table 1), and economic performance along a wide range of dimensions over the last two decades (Table 2). One of the striking features of growth in the last decade has been the anemic performance of Indian industry, and lack of a shift from agriculture to industry in the

share of GDP. On the other hand, services have done well, partly as a result of the boom in software exports and IT-enabled services such as call centers. These aspects of services have also contributed to India's reasonably good export performance, and its avoidance of further balance of payments difficulties.

Underlying the aggregate performance statistics, we therefore have a story of incomplete economic reforms, with sectors such as agriculture still shackled by an inefficient public procurement and distribution system and severe input market distortions, industry hampered by small scale reservations and inefficient financing, a financial sector still dominated by direct and indirect public control of investible resources, and labor market rigidities that hamper the entire organized (as opposed to informal) segment of the economy. Liberalization of trade and foreign investment – the 'globalization' aspect of India's reforms – has helped in some areas, but has not been sufficient to promote widespread competitiveness, nor to overcome or rectify the poor state of India's infrastructure. Thus the economic reform agenda in India remains lengthy as well as complicated.

A further complication, one that is a major theme of our paper, is that the decade of the 1990s has seen a substantial increase in regional inequality. We shall document this in subsequent sections. Here we note that, while inequalities may have widened within states as well (for example, the coast and urban areas of Maharashtra and Gujarat versus their interior rural regions), the main focus has been and will be on widening disparities across the states themselves. This is natural, given the size and political importance of the states, and the fact that the states are the direct and indirect channels for numerous kinds of transfers from the central government. The goal of the rest of the paper, therefore, is to examine the interaction of key pieces of the reform agenda and the mechanisms within India's federal structures for managing and reducing inter-state inequalities, in the context of a situation where some aspects of economic reform, as well as larger global economic forces, are increasing regional inequalities within the country.

3. Overview of India's Federal Structures and Fiscal Situation

In this section, we focus on the institutions and mechanisms that govern fiscal federal arrangements in India, particularly center-state transfers. We preface this discussion with an overview of India's broader federal structure. India is comprised of 28 states, and seven "Union Territories" (see Figure 2). Of the seven, two Union Territories (Delhi and Pondicherry) have their own elected legislatures whereas the remaining ones are governed directly by appointees of the center. All the states have elected legislatures and Chief Ministers in the executive role. The constitutional assignment of certain statutory powers to the states is what makes India a federal system. The exact nature of the assignment of powers, and how that has played out in practice, determine the extent of centralization within this federal system. In addition, the size of the states also has implications for this characterization. For example, since many of the Indian states are quite large in terms of population (with the largest dozen being comparable in population to larger European countries), devolution of powers to the states without any further decentralization below that level may still represent a relatively centralized federation. In

practice, devolution to both the states and to substate (local) government bodies has arguably been quite weak.

Figure 2: India – States and Union Territories



Political and Administrative Structures

The primary expression of statutory constitutional authority in India comes through directly elected parliamentary-style governments at the national and state level, as well as nascent directly elected government bodies at various local levels. To the extent that the essence of federalism is based on representative democratic politics, the role of political parties in the interactions between central and state level politics is a crucial aspect of federal structures. To illustrate, consider the extreme case where government powers are notionally decentralized, with all residuary powers assigned to the state level, but the national and all state governments are controlled by a single, rigidly hierarchical political party. Here the outcome will effectively be the same as in a centralized, unitary system, since decisions are made at the top of the political hierarchy. For example, during the Nehru era, the Prime Minister's personal authority and prestige were combined with almost complete legislative control of the center and the states by the Congress Party led by Nehru. In such circumstances, issues of center-state relations were often played out within the ranks of the Congress party.

Over time, Indian political parties have embodied varying degrees of centralization, including the regional political bosses of the earlier Congress party,⁴ the tightly controlled personalized approach characteristic of the later Congress under Indira Gandhi, the more institutionalized hierarchy of the BJP, and the emergence of explicit regional parties. Overall, however, we may argue that the institutional expression of federal or centralized structures in political parties has not been a major independent factor in shaping India's federal system, because other forms of central control, administrative, legal and fiscal, have mattered more.⁵

The next level of governance that embodies aspects of federal structures is the bureaucracy. If elected politicians act as agents of constituents or voters, bureaucrats in turn act as the agents of elected officials. Bureaucrats, as career employees, are partly insulated from political whims and pressures, but ultimately in a democracy must be subordinate to the people's elected representatives. This means that a unitary, hierarchical bureaucracy cannot by itself negate a federal political structure in the same way that a powerful, centralized, national political party might. However, a centralized bureaucracy can act as the agent of such a political party, in acting against the requirements of a federal system. There are elements of such action in the workings of Indian bureaucracy.

The Indian bureaucracy is provided constitutional recognition. The central and state level tiers of the "public services" are given shape through the provisions of part XIV of the Constitution. Of course any bureaucracy in a federation will have a federal character in the sense that each layer of government requires its own administrative apparatus to accompany the political structures. In particular, state governments must be able to appoint and dismiss⁶ bureaucrats to implement state-level policies. This is certainly the case in India, where there is a central bureaucracy as well as an independent bureaucracy in each state.

A key component of the central bureaucracy, the Indian Administrative Service (IAS) has a dual allegiance. The IAS is an all-India bureaucratic hierarchy: its members are chosen by a central process, and trained together. However, they are then assigned to particular states, and become, technically as well as in most practical matters, members of a state-level bureaucratic hierarchy as well. While an IAS member's entire early career is spent within the home state, and senior level appointments at the state level carry considerable

⁴ Following Manor (1995), we may characterize the Congress party structure itself as federal in nature at this time. In some respects, however, Nehru's personal authority after independence allowed him to dominate decision-making, as we have noted above. The pre-independence Congress was actually more decentralized, with provincial units playing a significant role, and provincial leaders being powerful in their own right, with prominent positions in the formal party hierarchy.

⁵ There are many nuances that this conclusion glosses over. See Rao and Singh (2001) for a more detailed discussion.

⁶ In practice, dismissal is almost impossible, something that is true for the entire organized sector in India. However, state governments use (and misuse) the power to transfer bureaucrats to assert political control over the bureaucracy.

power and prestige, the most prestige, power, and resulting attraction tend to lie with appointments within the central government.

While the structure of the IAS was designed as a compromise between, on the one hand, the desire to have an effective administrative apparatus at the state level, to which most of the tasks of day-to-day administration, development, and law and order were assigned by the Constitution, and on the other hand, the fear of promoting regional loyalties over national ones (with the further fear of national disintegration), this compromise has been somewhat problematic. A bureaucracy in a democracy is the administrative tool of elected politicians, and a lack of clear lines of authority creates difficulties for incentives.

The efficiency consequences of the scope of bureaucratic governance are, to some extent, independent of the structures of federalism. They point to guidelines for constraining bureaucratic interventions at any level, whether national or subnational. However, the consequences of mistakes in assignment with respect to bureaucratic authority will be felt more widely in a centralized structure, since the geographic scope is wider and the pressure of competition is less. Competitive federalism is more likely to lead to corrections than is a unitary state, to the extent that electoral monitoring and incentives are better targeted, and therefore more effective, in a federal system. While competition among subnational jurisdictions may lead to a race to the bottom in tax rates or environmental regulations, it also puts more pressure on politicians to correct mistakes in bureaucratic decision-making than may exist in a centralized system.

The judiciary is, in some respects, a specialized bureaucracy, but is conceptually more separate, constituting a distinct branch of government at its higher levels. Much judicial activity involves judging whether the law was broken and who broke the law in particular cases, in which capacity the judiciary acts as a specialized agent of elected officials who frame laws. The higher levels of the judiciary also act as judges of the laws themselves, within the context of the overarching legal and constitutional framework. Furthermore, the judiciary in theory can check the actions of politicians in ways that may be difficult for bureaucrats: “no one is above the law”.

The Supreme Court stands at the top of the Indian judicial hierarchy. Its powers include broad original and appellate jurisdiction and the right to pass on the constitutionality of laws passed by Parliament. In practice, there has been conflict between the Supreme Court and the legislature/executive over the scope of these powers, and their boundaries remain subject to bargaining. The President, in consultation with the Prime Minister, appoints Justices of the Court. At the state level, below the Supreme Court, are the High Courts. Each High Court’s justices are appointed by the President, in consultation with the Chief Justice of the Supreme Court and the state’s Governor. Paralleling the situation at the Center, the state’s Chief Minister is in a position to influence the Governor’s advice. High courts also have both original and appellate jurisdiction. In addition, they superintend the work of all courts within the state, including district courts, as well as various courts subordinate to the district courts. These subordinate courts are specialized, with smaller civil matters being separated out from criminal cases, for example. Criminal cases are dealt with in magistrates’ courts.

The formal judiciary, therefore, is a well-defined hierarchy, with a relatively clear assignment of tasks. This assignment and hierarchy are overly centralized, in the sense that not enough matters are disposed of at lower level courts. This partly reflects a lack of resources devoted to lower level courts (though the resource problem exists at all levels), but also a centralized assignment of scope of jurisdictions. The problem is compounded by the nature of the appeals process, and by the failure of higher-level courts to control appeals.⁷ Note also that judges below the state level are typically not appointed by local government officials, representing a significant departure from a federal system below the state level.

The microeconomic inefficiencies of the judicial system in India partly reflect inadequate decentralization within the judiciary itself, but are also a consequence of inadequate delegation of powers by the legislative/executive branch. For example, the expansion of state intervention in the economy that occurred in the first three decades after independence was effectively outside judicial review. Inadequate judicial power is a constitutional problem, because this delegation is absent in some of the particulars of the Constitution. While a weaker central legislature may allow the national judiciary, particularly the Supreme Court, to play a more effective checking role, it does not solve the resource allocation problems that must ultimately be corrected for smoother working of day-to-day judicial functions. The pressure for correction might come from competition among subnational jurisdictions pursuing commercial motives. As states and localities try to attract investment and commercial activity, they may well come under pressure to provide judicial systems that support such commercial activity. It should be noted that this argument applies to areas such as contract enforcement, or property rights enforcement more broadly, rather than to the criminal justice system. In this respect, the lack of training of India's lawyers and judges in even rudimentary economics has sometimes led to judicial decisions with substantial negative impacts on the economy.

Finally, the police have a special role, involving both the bureaucracy and the judicial system. Ideally, the police are impartial investigators and monitors, preventing violations of law where possible. Their role complements that of the judiciary in enforcement. However, the police are also organized as a bureaucracy that is under the control of politicians, like other branches of administration, but unlike the judiciary, with its notional independence. The actual functioning of the police therefore becomes subject to politicization and the encroachment of the central government into law and order, constitutionally a state subject.

The Indian Police Service (IPS), which is the superior officer cadre for the police in India, is organized on similar dual lines to the IAS, that is, centralized recruitment and bureaucracy, but without the same key role in the Central government that belongs to the IAS. This latter difference reflects the fundamental difference between the generalist IAS and the functional specialization of the IPS. The IPS follows only the Indian Foreign

⁷ 'Public interest petitions' to the higher courts, while democracy enhancing in spirit, have also sometimes been used for obstructionist purposes to benefit particular interest groups.

Service and the IAS in prestige.⁸ Furthermore, the fact that the IPS is a central bureaucracy, as in the case of the IAS, puts its members on a different footing than members of state police forces, which are recruited directly by state governments, even though IPS officers are assigned to particular states.⁹ While each state has its own police force, the central government possesses several police forces also, giving it considerable power over policing, well beyond what might be suggested by the constitutional assignment of powers. In practice, therefore, the Center has taken a substantial role in the maintenance of law and order.

To conclude this description, we note that the existence of different dimensions of governance implies that a federal political system cannot exist simply through a constitutional assignment of responsibilities to different layers of government. Each level of government in a federal system must not only have authority to raise revenues, but it also must have the authority to carry out decisions made at that level. In India, the IAS, the IPS and the judiciary are all perhaps more centralized than they need to be, given the current federal political system. While independent India began with a relatively circumscribed federal model, independent political competition at the state government level has thrived in recent years. This decentralization has not necessarily been matched in the other dimensions of government, but may need to be for a more effective federal system to operate.

Assignments and Transfers

Assignments of authority include important non-fiscal dimensions, as we have briefly discussed in the context of politics, administration and law. However, control over how public resources are raised and spent represents a crucial aspect of any federal system. We describe the tax and expenditure assignments that form the basis of India's fiscal federal institutions, and consider the system of Center-State transfers that results from, and complements the assignment of fiscal authorities in India.

The essence of economic theories of government is the idea that some goods or services are not well provided by the market mechanism. If a good is non-rival (can be consumed by someone without reducing its availability to others) and non-exclusive (others cannot be prevented from consuming it), it is a pure public good, and a candidate for provision by government. This economic rationale for the existence of government does not justify a hierarchical structure. However, geographic distance can matter, by limiting the number who benefit from provision of a public good. If the information available to governments is not perfect and they are not intrinsically benevolent, subnational or local governments will be better able to judge the desired levels of some public goods, and can be given more powerful or refined electoral incentives to do so. Given the motivation for decentralization of government down to lower levels, based on better information and better incentives, the assignment of expenditure responsibilities follows. Wherever

⁸ The high status of the IPS appears to be a vestige of colonialism, especially when other specialized or technical services such as the Indian Economic Service and Indian Statistical Service are considered to be inferior.

⁹ For example, recently the Chief Minister of Tamil Nadu, J. Jayalalitha, came into conflict with the center over the posting of IPS officers in her state.

economies of scale, access to resources and externalities or spillovers do not indicate otherwise, the expenditure assignment should match the locus of beneficiaries. In other words, if the benefits of a public good are local, then local government should have the responsibility for provision.

With respect to revenue authority, tax assignments are what matter as a first approximation (neglecting intergenerational issues), since the interest on borrowing must also come out of taxes. Putting aside issues of collection efficiency, the allocational efficiency of different tax assignments is most significant. For example, mobility across jurisdictions within a federation is greater than mobility across nations. A tax base that is mobile may shrink dramatically in response to a tax. Therefore, it is harder for subnational jurisdictions to raise revenue from taxes than it is for the central government.¹⁰ If this factor implies that more taxes should be collected by the center, there will be a tendency for there to be a mismatch between revenues and expenditures for subnational jurisdictions, to the extent that subnational governments are relatively better able to respond to diversity of preferences, as noted above. A further push toward more centralized assignment of taxes may come from redistribution motives. The result of the differing determinants of optimal assignments of expenditure and tax authorities can be a “vertical fiscal imbalance”, where subnational governments rely on the center for revenue transfers. However, the divergence of revenue and expenditure decisions at the margin can have adverse incentive effects.

The Indian Constitution, in its Seventh Schedule, assigns the powers and functions of the center and the states. The schedule specifies the exclusive powers of the center in the Union list; exclusive powers of the states in the State list; and those falling under the joint jurisdiction are placed in the Concurrent list. All residuary powers are assigned to the center. The nature of the assignments is fairly typical of federal nations. The functions of the central government are those required to maintain macroeconomic stability, international trade and relations and those having implications for more than one state. The major subjects assigned to the states comprise public order, public health, agriculture, irrigation, land rights, fisheries and industries and minor minerals. The States also assume a significant role for subjects in the concurrent list such as education and transportation, social security and social insurance.

The assignment of tax powers in India is based on a principle of separation, i.e., tax categories are exclusively assigned either to the center or to the states. Most broad-based taxes have been assigned to the center, including taxes on income and wealth from non-agricultural sources, corporation tax, taxes on production (excluding those on alcoholic liquors) and customs duty. A long list of taxes is assigned to the states. However, only the tax on the sale and purchase of goods has been significant for state revenues.¹¹ This

¹⁰ Of course for internationally mobile factors, even national jurisdictions face problems in collecting taxes. A further qualification is that mobility also depends on the relative benefits provided through public expenditures, so that jurisdictions are able to counter mobility in response to marginal taxes by also providing appropriate benefits at the margin to those who are taxed.

¹¹ This tax assignment implies that the introduction of value added taxes in India (see section 5) has been subject to institutional difficulties with respect to the proper roles of center and the states.

narrow effective tax base is largely a result of political economy factors that have eroded or prevented the use of taxes on agricultural land or incomes by state governments. The center has also been assigned all residual powers, which implies that taxes not mentioned in any of the lists automatically fall into its domain.

The tax assignment system has some notable anomalies. The separation of income tax powers between the center and states based on whether the source of income is agriculture or non-agriculture has opened up avenues for both avoidance and evasion of the personal income tax. Second, even though in a legal sense taxes on production (central manufacturing excises) and sale (state sales taxes) are separate, they tax the same base, causing overlapping and leaving less tax room to the latter. Finally, the states are allowed to levy taxes on the sale and purchase of goods (entry 54 in the State list) but not services. This, besides providing avenues for tax evasion and avoidance, has also posed problems in designing and implementing a comprehensive value added tax.

The result of the Indian assignments of tax and expenditure authority, and of their implementation has been a substantial vertical fiscal imbalance. In 1997-98, the states on average raised about 31 per cent of total revenues, but incurred about 57 per cent of total expenditures. The balance was made up by transfers from the center. In fact, the ability of the states to finance their current expenditures from their own sources of revenues has tended to decline over time, from 69 per cent in 1955-56 to around 55 per cent in the 1990s.

The Constitution recognized that its assignment of tax powers and expenditure functions would create imbalances between expenditure 'needs' and abilities to raise revenue. The imbalances could be both vertical, among different levels of government, and horizontal, among different units within a sub-central level. Therefore, the Constitution provided for the assignment of revenues (as contrasted to assignment of tax powers), sharing of the proceeds of certain centrally levied taxes with the states, and making grants to the states from the Consolidated Fund of India. The Constitution also provided for the compulsory sharing of the net revenue from non-corporate income tax (Article 270), and optional sharing of the proceeds of Union excise duty (Article 272). Recent constitutional changes in this scheme are discussed in section 5. The shares of the center and the states and their allocation among different states of both the taxes are determined by the Finance Commission appointed by the President of India every five years (or earlier if needed). In addition to tax devolution, the Finance Commission is also required to recommend grants to the states in need of assistance under Article 275.

A notable feature of India's federal fiscal arrangements is the existence of multiple channels of center-state transfers. First, as noted, the Finance Commission decides on tax shares and makes grants. Second, the Planning Commission makes grants and loans for implementing development plans. Finally, various ministries give grants to their counterparts in the states for specified projects either wholly funded by the center (central sector projects) or requiring the states to share a proportion of the cost (centrally sponsored schemes).

Historically, as development planning gained emphasis, the Planning Commission became a major dispenser of funds to the states. As there is no specific provision in the Constitution for such plan transfers¹², the central government channeled them under the miscellaneous and ostensibly limited provisions of Article 282. Before 1969, plan transfers were project-based. Since then, the distribution has been done on the basis of a consensus formula decided by the National Development Council (NDC)¹³. However, various central ministries still felt the need to influence states' outlays on selected items of expenditure through specific purpose transfers, with or without varying matching requirements: these are monitored by the Planning Commission. There are over 100 such central sector and centrally sponsored schemes, and several attempts in the past to consolidate them into broad sectoral programs have not been successful.

Overall, as noted, transfers from the central government contribute significantly to state finances. Until 1993-94, the growth of transfers was faster than both the center's and the states' own revenues. Thus, the share of transfers in central revenues increased from 32 per cent in 1970-71 to 44 percent in 1993-94, and then declined to 39 per cent in 1995-96. Similarly, the share of transfers in state revenues increased from 39 per cent to 44 per cent and declined to 38 per cent in 1995-96. State expenditures increased even faster during this period, so that the share of transfers in state expenditures declined steadily. However, they still finance almost a third of state expenditures. The relative shares of the three channels of central transfers to states since the Fourth Plan (1969-74) bring out two important features. First, there has been an increase in the *discretionary element* of transfers. Second, within statutory transfers, the proportion of tax devolution, which had already been high, has shown a steady increase while that of grants has declined.

So far, eleven Finance Commissions have made recommendations and, barring a few exceptions, these have been accepted by the central government. However, the working of these Commissions, their design of the transfer system, and the approach and methodology adopted by them have come in for criticism. The main criticisms are (i) the scope of the Finance Commissions through the Presidential terms of reference has been too restricted; and (ii) the methodology for the transfer scheme employed by the Commissions has not led to optimal equity and incentive consequences. We shall return to these concerns in section 5. However, we may note here that two developments are closely related to the functioning of India's system of intergovernmental transfers, and heighten the need for reform in this dimension. First, India's growing overall fiscal deficit reflects larger government deficits at the subnational level. Second, there is a documented increase in inter-state inequalities in the last decade.

As noted earlier, plan transfers from the center to the states consist of grants and loans. The Planning Commission works out five-year-plan investments for each sector of the economy and each state. With this as background, the states work out their respective

¹² The Planning Commission was established by a Cabinet resolution, and the constitutionality of its transfers has, in fact, been seriously questioned.

¹³ The NDC is chaired by the Prime Minister and its members include all cabinet ministers at the center, Chief Ministers of the states, and members of the Planning Commission. The formula is known as the 'Gadgil formula', after the Deputy Chairman of Commission in 1969.

annual plans for each year, based on estimated resource availability, which includes the balance from current revenue, contributions of public enterprises, additional resource mobilization, plan grants and loans, market borrowings and other miscellaneous capital receipts. The Planning Commission then approves the state plans. Thus, given the amount of central transfers to the states as determined by the Gadgil formula, at the margin it is mainly the states' own resource position that determines their plan sizes.

Finally, assistance given to states through central sector and centrally sponsored schemes, constituting about 15-20 per cent of total transfers, is in some respects the most controversial form of transfers, being wholly discretionary. Central government ministries initiate a number of "National Programs", either by themselves, or at the request of the relevant ministries at the state level. Central sector schemes are assisted entirely through central grants, and the states merely have the agency function of executing these programs. Centrally sponsored schemes are cost sharing programs, and the share of central assistance is through grants or loans decided for each individual program. The ostensible rationale for these programs is financing activities with a high degree of inter-state spillovers, or which are merit goods (e.g., poverty alleviation and family planning).

These programs have provided the central government with an instrument to actively influence states' spending. Until 1969, the volume and pattern of assistance to state plan schemes were decided for each project, and the central government did not need such transfers. Once plan assistance was given according to a formula, the center introduced these specific purpose transfers and expanded them significantly. At present, there are hundreds of centrally sponsored schemes with detailed conditionalities, such as requirements on staffing patterns, which tend to distort the states' own spending. Also, the proliferation of schemes seemingly has increased the size and control of the bureaucracy. Therefore, the NDC appointed an investigative committee, which recommended scaling down and consolidating centrally sponsored schemes. This recommendation, however, has only been partially implemented.

4. Finance, Privatization, Infrastructure, and Regulation

After the liberalization of international trade arrangements and industrial controls that constituted the bulk of the initial economic reforms of 1991-92, much attention was focused on replacing rigid or discretionary controls with effective regulation suitable for market-based economic activity, and with encouraging private investment in areas where the government's role was recognized to have been misdirected, or to have been insufficient. Financial sector reform, privatization, initiatives for private investment in infrastructure, and the creation of new regulatory bodies were all interconnected parts of this effort. While progress has been dishearteningly slow in some areas, and there have been significant missteps, all these aspects of reform have stayed on the policy agenda. The issues involved are much broader than the scope of our analysis, which focuses on the intersection of these reform areas with India's federal system.

Finance

Much of financial sector reform has focused on making India's capital markets more efficient. Simple institutional improvements such as electronic trading and settlement, guidelines for corporate governance, and so on, have begun to take hold. The nature of financial markets requires some regulation, both by market participants and the government, and the development of regulatory institutions for financial markets in India is still taking place, as we discuss later in this section. Many of the issues with respect to financial sector reform are at the national level, and so India's federal system is not directly of concern. However, the nature of the financial system overall involves 'financial repression', which in turn has had implications for central and state fiscal deficits. We will explore this connection between financial sector reform and federalism.

One innovation in the Eleventh Finance Commission's recommendations was its consideration of the overall fiscal position of India's federal system, in particular the Central and state governments. This was, in fact, a significant part of the Commission's terms of reference, and represented a welcome broadening of its scope. It was clearly motivated by the ongoing issue of fiscal deficits that India has struggled with for the past decade. Furthermore, the problem of fiscal deficits has, to a large extent, been pushed down to the level of the state governments, making it very much an issue of federalism.

Fiscal deficits at the state level have increased despite the central government's apparent formal authority to strictly control state borrowing. There are two causes of this phenomenon. First, the central government has increasingly used discretionary loans, often with interest subsidies or even *ex post* conversion of loans to grants, as a component of political influence. This statement is based on casual empiricism, but is consistent with the political effects found in analyses of explicit transfers (Rao and Singh, 2001). Second, the states have used public sector enterprises and other off-budget devices to run larger deficits in practice.¹⁴ For both the center and the states, the ultimate enabler of both these trends has been the nature of India's financial system. Severe financial repression, along with direct ownership and control of much of the financial system, has permitted governments to 'park' deficits in the financial system without having to print money and cause politically dangerous inflation. One indicator of government financial control is the large percentage of credit allocation by commercial banks that goes to 'priority sectors'. As Table 3 shows, this ratio has not fallen appreciably since reform began, and is much higher than in 1969, when the banks were nationalized.

The cost of financial repression and deficit parking has been continued inefficient capital allocation and lower growth than might otherwise be attainable. If growth is to be promoted by improvements in the efficiency of capital allocation, and not just increases in savings and investment, a broad reform of the financial sector is required. While such reform has, as noted, been taking place in areas such as the functioning of Indian stock markets, corporate governance, regulation of banking, and methods of central government borrowing, the constraints imposed by the web of government-controlled financial institutions and their 'bad' loans to the public sector are a severe hurdle to more

¹⁴ See, for example, Lahiri (1999), Rao (2000b), and Mohan (2001).

thorough financial sector reform. Hence, while tax reform and decentralization (section 5) are directly issues of reform of India's federal structures, tackling the ways in which public sector capital finances are handled is a case of interaction of the private and public sectors. Financial sector reform threatens the public sector house of cards, and is therefore held back. Furthermore, both the public sector and private financial sector in India are vulnerable to downgrading by international ratings agencies such as Moody's and Standard & Poor's¹⁵, making India susceptible to the kind of severe financial crisis that ultimately hit Argentina at the end of 2001.

The problem as stated is well recognized. The solution may not be so clear, or easy to implement. The Eleventh Finance Commission recommended a slew of measures to promote fiscal discipline: an overall ceiling of 37.5% of gross receipts of the Center for all transfers to the states; hard budget constraints for all levels of government with respect to wages and salaries; 'greater autonomy' along with hard budget constraints for public sector enterprises; more explicit controls on debt levels for state governments; and improvements in budgeting, auditing and control. We would like to suggest that "greater autonomy along with hard budget constraints for public sector enterprises" will not work. Furthermore, by not working, it will continue to undermine any limits on states' debt levels. The only clear-cut solution is privatization of public sector assets. We discuss this below.

Note that the center-state issue with respect to the working of the financial sector has not been just one of levels of credit, but also of credit allocation across states. Hence, our discussion of fiscal deficits also relates to concerns about political economy influences and growing interstate disparities. In fact, the problem grew after the nationalization of commercial banks in 1969, which concentrated economic power in the hands of the center. With insurance and many other financial institutions already under central control, the central government became a virtual monopolist in the financial sector. It might even be argued that, in such circumstances, the role of the formal intergovernmental transfer system has been overshadowed by invisible transfers.

Privatization

Privatization is obviously not restricted to the financial sector. With the government owning enterprises in a broad cross-section of industries, the scope of potential privatization is quite sweeping. The political difficulty of this task is highlighted by the absence of any meaningful privatization in a decade of economic reform. It differs fundamentally from other aspects of reform, involving more than just reform within government or changing the nature and methods of regulating the private sector, instead explicitly shifting the boundary between private and public ownership. The large implicit subsidies for those employed in public sector enterprises have clearly been an important aspect of the resistance to privatization, and one can guess that patronage and rent-

¹⁵ For example Standard & Poor's lowered its long-term local currency rating to 'BBB-' from 'BBB' and revised its outlook on local and foreign currency to negative in August 2001, citing 'the continued deterioration of the government's financial profile, with persistently high fiscal deficits resulting in a rising burden of public debt.' This followed other recent downgrades of other debt categories and outlooks for India. (<http://www.standardandpoors.com/forums/ratingsanalysis/sovereigns/articles/121201/india.htm>)

seeking opportunities have contributed to the lack of political enthusiasm from government ministries. Finally, in the case of state-level public enterprises such as the State Electricity Boards (SEBs), there are additional twin problems of huge deficits and the need for coordinated reform of the power sector (see below).

Focusing on the financial sector, privatization can affect the nature of the demand for credit by reducing politically motivated subsidies, and by reducing overall interest rates through a reduction in government crowding out of private borrowing. The other side of the equation concerns the supply of credit. Deficit parking has been abetted by the existence and operation of public sector financial institutions. The need for privatization applies to these as well. Where does this leave the different levels of government with respect to financing the urgent needs for public infrastructure? One might be tempted to condemn privatization of the financial sector if the past approach of public subsidies and directed lending had been successful in efficiently and effectively building such infrastructure: in fact, it has failed badly, as we discuss below.

In the context of federalism, privatization in the financial sector not only can have direct impacts on efficiency and growth, but it can also support the objective of allowing explicit center-state transfers to meet their own objectives more effectively. With respect to transfers for capital purposes, we suggest that, while central and state governments will always have the option of making conditional grants and project loans to lower level governments, the practical limitations on monitoring and incentives of such transfers (including the ultimate fungibility of transferred funds) support the greater use of unconditional block grants, with marginal capital funds coming through market borrowing.¹⁶ Ultimately, since repayment of such borrowing comes from taxes and user charges, this means that each level of government is more responsible at the margin, and responsive to its constituents' preferences. This recommendation is perhaps as drastic a reform of 'development finance' in India as that of curtailing the Planning Commission's role (discussed in section 5), but it seems to be a necessary complement to other aspects of financial sector reform.

Another aspect of privatization that has impacted center-state relations is the response of state governments when public sector enterprises in their jurisdictions have been privatized or proposed for privatization. Since privatization has been so limited, there are few examples, but the initial cases have served as a test. Recently, the central government created the post of a Minister of State for Disinvestment, and in this position Arun Shourie has drawn up a list of 27 public sector units to be 'disinvested' as soon as practical. These include Air India, VSNL, Hindustan Copper Ltd, India Tourism Development Corporation, State Trading Corporation, and Indian Petrochemicals Corporation Ltd. The first significant privatization that occurred was of the Bharat

¹⁶ Obviously, the smaller the government, the less will be the feasibility of significant reliance on the market. However, as we have emphasized earlier, many of the Indian states are comparable to countries in terms of population size and fiscal domain. The possibility of market borrowing raises issues of institutional reform to allow indebted state governments to seek funds in the capital market without permission from higher level governments, as well as the need for a credit rating agency to rate state governments. Credit rating in India is in its infancy, but is developing rapidly (for example, see www.icraindia.com).

Aluminium Company (BALCO). As might have been expected, the company's labor unions opposed the privatization and went on strike. Less predictably, the government of the new state of Chhattisgarh (carved out of Madhya Pradesh) took an aggressive stance against the disinvestment. While some substantive issues of the fairness of the bidding and the sale of tribal land were involved, the case raised the potential of states obstructing privatization when the center had finally got it rolling. The Supreme Court, however, finally upheld the sale of the company, and dismissed actions by the state government against the new private sector owners.

Infrastructure

The term 'infrastructure' can include various physical, social and economic indicators, but attention is usually focused on public and quasi-public goods such as electric power, irrigation, roads and railways, telecommunications and ports. Various aggregate measures of infrastructure are possible. Table 4 reproduces data on an infrastructure development index produced by the Centre for Monitoring the Indian Economy (CMIE) from Ahluwalia (2001, Table 8). The states are ordered according to their per capita Gross State Domestic Product (GSDP) in the initial year, from poorest to richest. If these data are not weighted by population, then they show a remarkable amount of stability over the period, with simple correlations between any two years all being over 0.96, and the coefficient of variation showing a slight decline, from 0.35 in 1980-81 to 0.29 in 1996-97. According to this measure, up to 1996-97 there was no appreciable divergence in the major Indian states' infrastructure development.

Part of the Indian economic reform agenda has been to attract foreign direct investment (FDI), especially that which will bring in new technology and improve infrastructure. Statewise data for total FDI approvals for the 'reform decade' 1991-2001 is presented in Table 5. Using the 1991 population figures from the census of India, we also calculate per capita approvals. The simple correlation of the per capita FDI approvals with the infrastructure index for any of the three years in Table 4 is quite low, ranging from 0.03 to 0.07. To some extent, this reflects the unreliability of FDI approvals as an indicator of actual investment, but more importantly, this is a consequence of the particular infrastructure index used, in which, for example, a state such as Karnataka is measured as having very low infrastructure development, despite its concentration of workers with high levels of technical skills. Most significantly, the coefficient of variation for the per capita FDI approvals (using population weighted measures of mean and standard deviation) is 0.93, which is much higher than the corresponding measure for the infrastructure index. Thus it appears that FDI is seeking a few favored locations, with a concentration even more than would be dictated by broad infrastructure measures.

To the extent that variations in FDI across states are influenced by specific policy initiatives and narrowly focused government investments in infrastructure, such as might be the case in Karnataka, there is scope for state governments to compete more effectively for FDI that might have a longer-term impact on infrastructure. For example, Punjab, with the highest index of infrastructure, lags substantially in FDI, but might conceivably correct this with policy adjustments. In general, the result of economic reform has been to remove central efforts to direct the location of FDI, as well as to relax

restrictions on its nature and amount. The regional concentration of FDI is less of a concern if labor mobility is sufficient to ensure that workers can go where new jobs are created, and if public resources are channeled in ways that allow basic social infrastructure such as urban sanitation to complement private sector investments in aspects of infrastructure such as telecommunications, where the private returns to be captured are potentially higher. The importance of the system of taxation and of intergovernmental transfers in this arena will be highlighted in the next section.

Regulation¹⁷

In areas such as finance and telecommunications, the creation of new regulatory institutions such as the Securities and Exchange Board of India (SEBI), and the Telecoms Regulatory Authority of India (TRAI) has been essentially at the national level, with the central government shaping the evolution of these bodies. Each of these regulatory bodies has had problems in creating and implementing a new regulatory framework that does not involve ex ante case-by-case discretion. However, given their national focus, we shall not treat them further in this paper. In the case of electric power, however, the federal issues with respect to regulation are more salient. Electric power is a concurrent responsibility of the center and the states. Each state has had a State Electricity Board (SEB) that is vertically integrated with respect to generation, transmission and distribution, and is part of the state government. Various political compulsions and inefficiencies have led to large losses by the SEBs, and they have been the single largest contributor to India's fiscal deficits. Furthermore, power generation has lagged seriously behind targets, and availability of reliable electric power has become a serious bottleneck for growth.

Given the situation described above, and the power sector received early attention in the economic reform process, with attempts to attract private participation in the power sector, set forth in a 1991 policy document. Over the next decade, Rs. 373 billion in FDI in the power sector was approved, making up 14 per cent of total approvals, but actual investment has lagged, with several well-publicized disputes and withdrawals by foreign companies, the Enron case being only the most prominent of these. The need to dismantle the vertical integration of the power sector, the simultaneous involvement of the central and state governments, the lack of understanding of the technical details of power contracting by some of those on the Indian side, and the role of various interest groups all had an effect in delaying or even derailing power sector reform.

In 1997, the central and state governments tried again, with a Common Minimum National Action Plan for Power (CMNAP). The CMNAP recommended corporatization of the SEBs, though within a public ownership framework, and the creation of independent regulatory commissions at the central and state levels. The CMNAP also recommended some specific regulatory approaches, and private entry in the distribution component of the sector. While Andhra Pradesh, Haryana and Orissa had already set up their own State Electricity Regulatory Commissions (SERCs), other states moved after the center passed legislation in 1998 to set up its Central ERC, and to enable the states to create their own SERCs. State governments proceeded to do this the following year, and

¹⁷ This section draws on Dossani and Crow (2001).

some also moved forward with corporatization and some unbundling of generation, transmission and distribution. The delay in creating effective independent regulatory bodies, however, has meant that reform has proceeded in a somewhat chaotic manner. The regulatory commissions have not been able to establish the rules of the game, both because they have been pre-empted by earlier ad hoc decisions, and because they have not had much time to establish their own rules of operation. However, independent regulation and private sector participation appear to be the only route out of the political quicksand into which the power sector has fallen.

5. Transfers, Taxes and Decentralization

We described India's fiscal and other federal institutions in section 3. In this section, we examine some of the ongoing and potential reforms in the system of center-state transfers and in the tax system. We also examine the issue of decentralization to the local government level, where issues of expenditure assignment have been partially dealt with, but where the new system of state-local transfers has a long way to go to be effective, and where tax assignments may need to be rethought to enable effective decentralization (defined as more efficient delivery of public goods and services) to occur.

Center-State Transfers

What are possible reforms that can be made in the transfer system? One example of the process of reform comes from the case of tax sharing arrangements. The Constitution specified certain categories of centrally collected taxes that were to be shared with the states, according to criteria to be determined by the Finance Commission. In particular, personal income taxes were a major component of tax transfers from the center to the states, which received 87.5% of such tax revenues. On the other hand, income tax surcharges were kept entirely by the center. Academic commentators suggested that there were obvious incentive problems with such arrangements, and the Tenth Finance Commission recommended alternative arrangements whereby a proportion of overall central tax revenues would be devolved to the states. This required bargaining and agreement among the center and the states, as well as a constitutional amendment, but this has all been accomplished.¹⁸

Tax sharing between the center and the states reflects one dimension of the bargaining that must take place among a federation's constituents. Presumably, the initial effect of the change will be to leave the overall shares of the center and the states in aggregate near their previous values, avoiding the problem of creating clear initial losers from the reform. Principles of this sort might be used to tackle a harder problem, that of revising the formulae used to divide the states' share of tax revenue among them. These formulae are quite complex, without embodying any clearly defined objective, either of interstate (horizontal) equity, or of provision of incentives for fiscal prudence. Given that there are other transfer mechanisms as well, and that those will be used with discretion, there is a case for the Finance Commission overhauling its formulae completely, to achieve greater

¹⁸ See Rao and Singh (2001) for further detail on the new arrangements, as well as initial implementation by the Eleventh Finance Commission.

simplicity. Such an overhaul can in theory be designed to respect the present status quo to a great extent, but to deal more aggressively with future increases in interstate inequality.

We would argue that an approach that builds equity concerns into a formula is preferable to one in which *ad hoc* grants are made at the margin. In this respect, one welcome change related to tax sharing is recommended in the Eleventh Finance Commission report. This is the reversal of a practice – introduced by the Eighth Finance Commission – of keeping a portion of shareable tax revenues from Union excise duties exclusively for allocation among states according to the amount of their estimated post-tax-devolution deficits. This amounted to a conversion of a part of the share of taxes into “gap-filling” grants, lacking both in transparency and efficient incentive provision.

The case for reform of transfer formulae applies equally strongly to the portion of Planning Commission transfers that are calculated on the basis of the 1969 “Gadgil formula”. One of the problems in the past has been the overly narrow scope of Finance Commissions, much narrower than what the Constitution of India implies for their role. Moving away from this restriction, one welcome innovation in the latest Finance Commission’s terms of reference was the consideration of the overall fiscal position of India’s federal system. The Commission forthrightly recommends a reassessment of plan transfer formulae, with this task to be brought within the scope of the Finance Commission.¹⁹ The latest report also notes the severe muddle with respect to Planning Commission transfers, with economically meaningless distinctions between plan and non-plan categories of expenditure. It recommends reform of the financing of the plans so that plan revenue expenditure is financed from available revenue receipts after meeting non-plan expenditure, with borrowing used only for investments. Finally, a recommendation for multi-year budgeting could presumably be a step away from the artificial cycle of five-year plans, which, as the evidence in Rao, Singh and Vashishta (2002) suggests, may introduce temporal distortions in transfers.

We are not suggesting that any of these proposed reforms would solve the problem of divergence that seems to be creeping up quite quickly in India. Instead, they would make the formal transfer system clearer and simpler, which should make it easier to understand its objectives and its impacts. This is a first step in actually tackling problems of divergence, or of convergence to greatly different steady states. We are also not suggesting that this is the only channel for impacts on interstate inequality. Rao, Shand and Kalirajan (1999) have noted the important regressive impacts of implicit transfers and of private sector investment flows. They also point out the unknown regional effects of direct central government expenditures, which will also incorporate individual MPs’ pork barrel efforts. Finally, there will always be some component of explicit transfers that is subject to central government discretion. However, in our view, removing a significant portion of center-state transfers outside the political economy arena, clearly targeting them toward horizontal equity objectives, and doing so in a manner that does not create perverse incentives for recipients, is both feasible and desirable.

¹⁹ The broader issue of what the role of the Planning Commission should be is addressed below.

We have argued for integrating and simplifying the formulaic components of center-state transfers, focusing them more clearly, and expanding their importance relative to discretionary components. We suggested that the success of the recent overhaul of tax sharing arrangements provides evidence that reform in this area is feasible and workable. The recommendation of the Eleventh Finance Commission to bring formulaic plan transfers under the scope of the Finance Commission raises some interesting broader issues. The resources that have been devoted to the operation of the Planning Commission stand in stark contrast to the minimal assistance provided to the Finance Commission. It has also been argued (e.g., Rao and Singh, 2001) that the Finance Commission could be more effective if provided with ongoing resources for conducting its analysis and recommendations.

One might extend the argument to question whether the resources used by the Planning Commission provide any benefit in an economy where liberalization has taken hold. Where there is a justification for national level coordination because of externalities that cross state borders (as in the case of roads or power, for example), different ministries or even state governments can negotiate and cooperate. Where there is no such justification, unconditional grants, determined by the Finance Commission, that do not distort states' fiscal incentives seem to be the appropriate channel. The Planning Commission may be largely redundant in such an institutional framework. Tackling this issue head on is likely to be politically infeasible, but gradually shifting responsibility and resources to the Finance Commission may well be a possible approach.

This last recommendation flows directly from the discussion of how to improve the center-state transfer system. Three other areas of ongoing reform also bear on the transfer system, either by changing the environment within which it works, or through direct interactions. The assignment of tax authority is obviously important in influencing the starting point from which intergovernmental transfers are made. Second, the explicit strengthening of local governments, with formal transfer systems being introduced for state-local transfers, must impact center-state fiscal relations. Finally, financial sector reform interacts with the conditions under which subnational governments or other public entities can obtain funds for capital projects. Since funds are fungible, the institutions for current and capital transfers affect each other. We have discussed financial sector reform in section 4, and consider the other two issues next.

Tax Reform

Some elements of tax reform in the last decade (some beginning earlier) are well known: a reduction in tariff rates, reductions in direct tax rates coupled with attempts to broaden the tax base,²⁰ and a gradual movement from excise duties and sales taxes to VAT at both the central and state levels. If we compare 1990-91 with 1999-2000, the impact of some of these changes has been as follows: an increase in the direct-tax-to-GDP ratio from 2.16% to 3.24 %, accompanied by an increase in the number of filers from 6.1 to 17.8

²⁰ For example, the income tax base was redefined based on identifying asset ownership and consumption patterns (e.g., having a car or house). However, weaknesses in information systems and enforcement mechanisms mean that continued collection from the broader base may be difficult (Das-Gupta and Mookherjee, 1998).

million; more than offset by a decrease in the central indirect-tax-to-GDP ratio from 8.84 % to 6.23 %, driven by reductions in the percentages of central excise duties as well as customs duties.²¹ State sales taxes and excise duties have also shown some proportionate decline, so that the overall tax-GDP ratio has declined by almost two percentage points in the 1990s (Rao, 2000a). While the overall decline merely reverses an increase that took place in the 1980s, the fact that it has occurred at higher income levels, and during a period of economic reform, raises questions about long-term implications. Some of the issues are connected to dimensions of tax reform that have yet to be effectively tackled.

The Tax Reform Committee of 1991 had also recommended minimizing exemptions and concessions, simplification of laws and procedures, development of modern, computerized information systems, and improvements in administration and enforcement (Rao, 2000a). Work in the mid-1990s by Das-Gupta and Mookherjee (1998, Chapter 6) detailed the problems with Indian tax administration, both in terms of the incentives of those paying taxes and those enforcing them. However, in May 2001, Singh and Modi (focusing on central tax collection) were still led to write, “The tax enforcement effort has left much to be desired ... from the view point of a decline in total tax collected as a percentage of collectible tax, the pendency of assessment work and the dilatory process of the Appeal redressal mechanism.” Thus it is clear that much remains to be done in this respect. We would like to suggest here that the benefits of improvements in this area are likely to be large, not only because of the direct benefits of improvements in central information systems and institutions of enforcement, but also because these can provide a model for states to improve their tax administration as well.

A reform that more directly affects India’s federal system lies in indirect taxes, which, as we have noted, have not increased proportionately with GDP in the last decade. As Rao (2000a) puts it, “The most important challenge in restructuring the tax system in the country is to evolve a coordinated consumption tax system.” In Section II, we noted some of the problems with the current assignments of indirect taxes. Rao provides some detailed recommendations in this regard, with respect to issues such as rates, interstate sales taxes, and tax administration for a dual VAT coordinated between the center and the states. Rao also notes the problem created by the failure of the Constitution to explicitly include “services” within the scope of states’ sales tax authority. This problem has been recognized for some time, and is clearly in need of correction, as also recommended by the Eleventh Finance Commission in its report.

Moving taxation of services from the Union list, where it implicitly lies through the center’s residual powers over taxes not explicitly specified in the Constitution, to the Concurrent list will require a constitutional amendment. Such an amendment must be proposed by the central government, but will benefit the states. Rao incorporates political economy considerations of the kind that we have discussed in earlier sections, by suggesting that an amendment be tied persuading the states to reduce and eventually eliminate taxation of interstate sales, thus removing some of the internal barriers that have plagued the development of a true national market within India.²² This will also

²¹ These figures are from Singh and Modi (2001), Tables I, III and IV.

²² While the fundamental problem in India is the absence of an interstate commerce clause such as that in

smooth the implementation of a destination based VAT for the states. Note that such reforms can also reduce tax exporting by the richer states, (Rao and Singh, 1998), complementing the role of transfers in keeping interstate divergence from becoming politically unacceptable.

The case of taxation of services illustrates a broader issue that was addressed by the eleventh Finance Commission. Its report recommended in general terms a reduction in the vertical fiscal imbalance by reassignment of tax authorities, giving the states more power to tax. This approach takes some pressure off the fiscal transfer system, allowing states that can obtain political support to more flexibly tax their own constituents to deliver benefits to them. Another possible example of such a tax reassignment would be to allow states to piggyback on central income taxes. This, too, would require a constitutional amendment. It might seem redundant where tax sharing exists, but with tax sharing no longer applied to specific tax “handles”, but to tax revenues in total, this change would give states more flexibility at the margin, where they properly should have it. Note that states are already assigned the right to tax agricultural income, though their use of this tax is minimal. This separation has no economic justification, and merely promotes tax evasion. Piggybacking, along with a removal of the distinction between nonagricultural and agricultural income, would represent a major improvement in tax assignments. The latter would also be an important step forward in broadening the direct tax base. Whether the political economy logic can work for this case of tied reforms, as suggested for the case of services above, is worth considering.

To summarize our discussion, much remains to be done in terms of tax reform. While some measures can be initiated by the center acting alone, many others require agreement or coordination between the center and the states. These include possible reassignments of tax authority, as well as changes in tax administration. Recognizing the play of differing interests may help in devising reform packages that balance potential losses against gains, and thereby increase the probability of acceptance.

Decentralization

The political motivations and history of local government reform in India have been quite different from those that led to the economic reforms of the 1990s. Nevertheless, there is a complementarity between the two sets of reforms that benefits from their fortuitous temporal coincidence. After a long history of debate on decentralization, a central government committee recommended that local bodies should be given constitutional status. Two separate amendment bills were introduced, covering *panchayats* and municipalities²³ respectively, passed by parliament in 1992, ratified by more than half the state assemblies, and brought into force as the 73rd and 74th amendments to the Constitution of India in 1993. These amendments required individual states to pass appropriate legislation, since local government remained a state subject under the

the US constitution, there is still room for bargained solutions that will reduce internal trade barriers. For example, the recent replacement of local transit taxes (*octroi*) with state entry taxes in some states has shifted the problem up one level, reducing the number of entities that have to be involved in the negotiation.

²³ See also Mathur (1999) for an assessment of urban governments and reform.

constitution, and individual states have done so. These legislative changes are the beginning of a process of local government reform in India.

There are three tiers of rural local governments, roughly described as village, block and district. The population per village government is extremely small, raising questions of economic efficiency. Populations per block are considerably larger, and blocks approximate the constituencies of Legislative Assemblies, the lower houses of the state legislatures. The highest tier, the district, is approximately the size of the constituency of the member of the Lok Sabha, the lower house of the national parliament. The block and district levels – particularly the latter – have been important components of the central administrative and plan implementation apparatus.

Until the recent legislative changes, the ability to exercise local suffrage was very limited: at any given time since independence, 40-50 per cent of local government bodies in India had been under state supersession (Dillinger, 1994). Also, there was previously a structural limitation on local suffrage, since in most states only the lowest level of rural local government had directly elected local government officials. Some states did not have even indirect elections at the higher two levels of rural local government, those bodies instead being nominated by state governments. The 73rd and 74th amendments reduced state government discretion concerning elections to rural local government bodies. Direct elections to local bodies must be held every five years. Elections to constitute new bodies must be completed before the term expires. If a local government is dissolved prematurely, elections must be compulsorily held within six months, the new body to serve out the remainder of the five-year term.

Rao and Singh (2000, 2001) have characterized the above aspect of local government reform as replacing ‘hierarchy’ with ‘voice’²⁴ as the primary accountability mechanism, and have explained this as a positive step based on the ability to provide more refined incentives, subject to the caveat of effective monitoring and transparency being achievable. Local government reform has also changed the nature of tax and expenditure assignments to local governments, and instituted a system of formal state-local transfers modeled on the component of the existing center-state system that is governed by the Finance Commission. While there are some serious issues with the new assignments, including problems of local capacity and efficiency, both with respect to revenues and expenditures, we refer readers to Rao and Singh, and focus here on the new transfer system.

While one view has been that formal transfers from the center and states to local governments have the potential to accentuate fiscal deficit problems, our perspective suggests that a formal, rule-governed system will make such problems more transparent. In fact, the evidence suggests that this is the case. Local government finances, particularly for urban bodies, have steadily worsened over the period before local government reform, under a system of hierarchical control and supposedly strict monitoring by state governments. This is not to imply that the new institutions, particularly the State Finance Commissions (SFCs), represent an immediate

²⁴ See Hirschman (1970) for the introduction and discussion of this terminology.

improvement. Almost all SFCs have given their initial reports, and the Eleventh Finance Commission sums up its appraisal of them as follows:

Many SFC reports have not addressed the specific terms listed in articles 243I and 243Y, nor have they provided a clear idea of the powers, authority and responsibilities actually entrusted to the local bodies. Many of these reports also do not clearly indicate the principles formulated for sharing or assignment of State taxes, duties, tolls, fees and the grants-in-aid. (Paragraph 8.11b)

However, this situation is no worse than the previous one of ad hoc and discretionary transfers and control of local bodies by state governments.

The Eleventh Finance Commission has been reluctant, and rightly so, to provide the states with grants requested by them to supplement the states' own transfers to their local governments, noting that the amendments do not justify this softening of the states' budget constraints. The Commission's main recommendations with respect to local government relate to assignment and incentive issues for various sources of tax revenue. Land and profession taxes are identified as two possible sources of revenue. Perhaps the most promising is the recommendation of surcharges on state taxes earmarked for local government, similar to the piggybacking we proposed for the states on central taxes. These recommendations are straightforward at this general level – the real problems arise in defining details and assuring implementation. This point also applies to the Commission's discussion of property tax, replacements for *octroi*, and local user charges.

The analysis of Rao and Singh suggests that incentive efficiency with respect to government expenditure must be the starting point for revenue enhancement efforts. Here the Commission is right to suggest a quicker transfer of expenditure responsibilities to local governments: they are unlikely to do worse than state governments have so far done, in the provision of basic civic amenities. Grants to the lowest tier of local government recommended by the Commission may help to jumpstart the process of making local governments effective providers, if they can break out of their historical low-level equilibrium of revenue collection and service provision.

The Commission also recommends grants for improved accounting, auditing, and database building for local governments. These measures, if implemented effectively, can have a substantial positive impact on capacity, transparency and accountability in the delivery of street-level government services. The report also discusses some of the potential conflicts between the existing institutional apparatus of central and centrally sponsored schemes and the role envisaged for local governments, and problems that are arising from states' reluctance to devolve authority to their subordinate governments. One example of the latter problem is the failure of state governments to implement their own SFCs' reports. In the case of the central Finance Commission, the bargaining power of the states, and the role of precedent have worked to ensure the implementation of most recommendations. In the case of the states, local governments may need outside help, for example from the courts, to pressure reluctant state governments.

To conclude this discussion, we note that there is a clear conceptual and empirical connection between the nature of past regulation of local governments in India and the general top-down approach to economic policy, relying on the case-by-case discretion of government decision-makers in areas such as industrial location and expansion, which characterized pre-reform policy-making. The key point here is that the ideas that are guiding changes in how the national government interacts with the private sector are also important for how state governments interact with local governments. The expanded assignments legislated for local governments, and the increased role for local 'voice', together require the state governments to fundamentally change their regulation of local governments underneath them.

Furthermore, expanding and strengthening the scope of the central Finance Commission in determining center-state transfers, while simplifying the formulae that govern them (something we have advocated earlier in this paper), can have the added benefit of giving states a clearer road in achieving their own devolution to local governments. Currently, central discretionary transfers, which are meant to be implemented at the district or block level, swamp local government capacity for action and for their own revenue raising (Rajaraman, 2001). Replacing these with conditional or unconditional grants from the states (with the ultimate source possibly being unconditional grants from the center), will allow more effective functioning of local governments. Thus, our perspective on local government reform ties in with our earlier discussion of reform of the center-state transfer system.

We can summarize the main message of this section as follows. Overall, we suggest that a further devolution of expenditure assignments, as is being implemented in the ongoing local government reform, makes sense from an efficiency perspective, because it allows incentives to be more refined and effective. This must be accompanied by devolution of tax assignments, to keep vertical fiscal imbalances from overwhelming such incentives. Since vertical fiscal imbalances will still arise, we argue for a simpler transfer system that does not distort marginal incentives. While there is still room for transfers and loans that are earmarked for capital expenditure, we argue that here, too, marginal incentives are crucial, and that providing these through the market may be the only efficient avenue in practice. This argument is based on the recognition that political influences will distort choices in the absence of such discipline, no matter how legal restraints are structured. Thus our recommendations here are in keeping with our discussion of the political economy of center-state transfers earlier in this section. While decentralization and privatization may seem to exacerbate problems of interstate inequality and divergence, a counterargument is that, instead, they enable higher-level governments to focus more clearly and directly on redistribution as an objective where it is deemed necessary.

6. Regional Inequalities

Many studies have now examined the issue of regional inequalities in India, and in particular whether the evidence suggests that they are increasing, and how changes are affected by initial conditions such as the level of infrastructure development. These issues are particularly important as India integrates into the global economy, with the fear that

has been expressed by some that enclaves that successfully pursue this integration will grow rapidly, leaving the rest of the economy behind. We review a subset of the studies, and draw some tentative conclusions for policy reform.

Rao and Singh (2000) focus on political influence effects, but also look at equalizing effects of different categories of transfers. Their regressions tell a somewhat different story than simple correlation coefficients, which support the view that Finance Commission transfers have favored states with lower per capita State Domestic Product (SDP)²⁵, more so than Planning Commission transfers (Table 6 in Rao and Singh, 2000). Instead, the fixed-effect regressions provide a more ambiguous picture. For example, when state fixed effects are included, per capita Finance Commission transfers do not vary inversely with per capita SDP. While more empirical work needs to be done, the general point is that *conditional* on political and economic factors that may affect bargaining power, the equalizing impact of center-state transfers is unclear. Whether this should be of concern when the unconditional impacts – as reflected in the simple correlation coefficients – are in the right direction is a separate matter. We would argue that it is of concern, because economic reform has changed the nature of central government control of the economy in a way that increases the potential for greater disparities across states, putting more of the burden on an effective system of center-state transfers. Of course, extending the argument in the previous section, transfers must be designed in a way that does not dilute incentives of the states to exploit opportunities opened up by reform, as well as to be fiscally prudent. We pursue these issues after examining the evidence on convergence and divergence across the states of India.

The mushrooming of papers on convergence or divergence among the Indian states has been driven by the general resurgence of growth theory as much as by the experience of India. Studies of convergence across countries have focused on catching up by poorer nations through faster growth. Where faster growth is also affected by other variables besides initial income levels, the convergence is conditional: in other words, a poorer country (or region) may converge to a steady state that is different from that of the richer country (or region).²⁶ Variables such as literacy, health and physical infrastructure may be the conditioning variables, as well as the economic policies followed. Clearly, the conditioning variables themselves may be endogenous. While the evidence for any type of convergence across disparate countries is quite weak, one might expect greater possibilities for convergence across similar regions or constituent units of a federation such as India.

In one of the first studies of convergence within India, Cashin and Sahay (1996), examined data for the period 1961-91, thus excluding the reform period of the last

²⁵ All studies use SDP as a proxy for State National Product, which would be the appropriate measure of state income, because no data is available for the SNP. While SDP is far from ideal as a proxy, it is the only feasible measure for empirical work.

²⁶ Thus, one can identify three possible scenarios: absolute convergence, where different entities are moving toward the same steady state, conditional convergence, where they are converging to (possibly very) different steady states, and divergence, where there is no evidence of convergence. The last case is inconsistent with neoclassical growth models, but conceivably fits some endogenous growth models. Note that conditional convergence is quite consistent with increasing disparities across entities.

decade, but including the Rajiv Gandhi reform period of the 1980s. The analysis is performed on 20 states, thus including some of the special category states, which receive central transfers according to different, and typically much more generous formulae than the major states. This is important to note because the authors measure state disposable income per capita by adding in all central transfers, except for shared taxes, to GDP.²⁷ They find some evidence for unconditional convergence in the period of analysis, with the strongest effect being identified in the 1961-71 decade. These results are not changed in essence by controlling for other variables. Furthermore, the results indicate much slower convergence than that found across regions of developed countries such as the US and Japan. This meant that cross-sectional dispersion of per capita incomes across states actually increased over the three decades studied, despite the inclusion of center-state transfers (though dispersion was greater when these were excluded). Cashin and Sahay also examine the role of internal migration in convergence, and find it to be weak.

Several analyses followed Cashin and Sahay. Rao and Sen (1997) argue that the inclusion of four special category states in the Cashin-Sahay sample muddies their analysis. Furthermore, they argue that adding of transfers to GDP involves some double counting. Finally, they also take issue with the analysis of the equalizing effect of transfers, arguing that excluding shared taxes gives misleading results. Cashin and Sahay's response, however, disputes these criticisms on empirical and conceptual grounds. Marjit and Mitra (1996) independently analyze a data set similar to Cashin and Sahay's, but with different empirical methods: they argue that the evidence for convergence is weak.

Nagaraj, Varoudakis and Végonzonès (NVV, 1998) examine data on 17 states for 1970-94 (including three special category states). They find no evidence for absolute convergence. Using panel data (rather than a cross-section as in Cashin-Sahay) and per capita GDP (excluding transfers), NVV find that there is evidence for conditional convergence, with the conditioning being done on the share of agriculture and the relative price of agricultural and manufactured goods. Adding infrastructure indicators substantially strengthens the estimated rate of conditional convergence. While NVV do not explicitly consider transfers, they emphasize the importance of infrastructure and nonmeasured political and institutional factors (captured in state fixed effects) in explaining differences in steady state growth rates across states. To the extent that center-state transfers have a potential role in affecting these determinants of growth, they are important in this analysis.

Rao, Shand and Kalirajan (RSK, 1999) examine data for the 14 major states, for the period 1965-95, using GDP as the output measure. RSK find evidence for absolute as well as conditional divergence, a result that is quite robust across sub periods as well. They suggest that the speed of divergence increased in the last half-decade of their sample. However, this does not seem to be the decisive factor in explaining the difference from Cashin-Sahay: instead, the exclusion of special category states and of center-state transfers is of greater importance. The differences in conditioning variables and

²⁷ This appears to be a partial attempt to deal with some of the problems with using GDP, but it suffers from its own inconsistencies, including some 'external' receipts of the states but not others. Subsequent studies have always used GDP.

estimation methodology from NVV (who use a fixed-effects panel model) may explain the difference in conditional convergence results between RSK and NVV. RSK emphasize the role of private investment in explaining growth differences across states. They find that private investment goes disproportionately to higher-income states, as well as to states that have higher per capita public expenditures.²⁸ RSK also argue that explicit center-state transfers have had moderate impacts on interstate inequalities, and that these effects have been outweighed by implicit transfers through subsidized (public and private) lending and through interstate tax exportation.

Ahluwalia (2000, 2001) examines the most recent data on the performance of India's states. He does not consider convergence, but directly examines inequality by using the Gini coefficient for the 14 major states. He finds that interstate inequality, after being stable for most of the 1980s, increased starting from the late 1980s, and even more in the 1990s. Many of the factors that he identifies as affecting growth performance are those emphasized earlier by NVV and RSK, suggesting that the fundamental situation that India faced earlier in the reform period has persisted through the decade of the 1990s.²⁹ Ahluwalia (2000) does argue for reform of the center-state transfer system, but in the direction of imposing more effective conditionalities on transfers, to improve the use of transferred funds by the states. In fact, this would work against reduction in interstate inequalities. Furthermore, this recommendation seems to implicitly assume that the center (the Planning Commission in particular) is able to impose and monitor such conditionalities in an effective manner. Our consideration of the political economy evidence and effectiveness of monitoring leads us to be more cautious about such an approach. Ahluwalia (2001) adds some simple regressions to his earlier analysis, but these do not change the overall analysis or conclusions.

Two final studies of possible convergence among India's states are those of Bajpai and Sachs (1999) and Aiyar (2001). The former study examines data for a sample of 19 states for 1961-93. For the subperiod 1961-71, they find some evidence of convergence, but not for later subperiods or for the period as a whole. Allowing for conditional convergence does not qualitatively alter these results. Aiyar also uses the 19-state sample, for 1971-96. He finds weak evidence of absolute convergence for the 1970s, but divergence for later subperiods (especially the 1990s), as well as for the overall period. He estimates a panel with fixed effects, as do NVV, in which he does find evidence of conditional convergence. His conclusions are similar to those of NVV and RSK, emphasizing the importance of infrastructure, private investment, and nonmeasured institutional factors.

A different approach to examining changes in regional inequalities is to see if one can identify any changes in regional flows of capital and labor. While not much data is available on such flows, one can try to make inferences from what we have. We have

²⁸ Marjit and Ghosh (2000) obtain results quite consistent to those of RSK, for the period 1970-96, using a slightly different sample of states and somewhat different data. Interestingly, they exclude most of the special category states 'endogenously', based on an outlier analysis.

²⁹ See also Shand and Bhide (2000) for further empirical analysis, including sectoral decompositions. Chaudhuri (2000) also profiles Indian states' growth experience, amplifying the work of Ahluwalia, and highlighting some of the differences between the 1990s and earlier decades.

already noted the regional concentration of FDI flows. In order to see if we can identify interstate movements of domestic capital, we examine data for the one source where we have state-level data, namely bank deposits and credit. We calculate the credit-deposit ratios for the 14 major states, and examine trends over the last two decades. This is done in Table 6. The average credit-deposit ratio shows a slight decline from 1980 to 1995, and is thereafter about the same in 2001. While we do not have a good explanation for interstate variations in the ratio, the standard deviation creeps up from the initial year to 1995, and increases further in 2001. While the increase is not spectacular, the sharp decline in the credit-deposit ratio for the states of Bihar and UP is quite striking. Most striking is the fact that the correlation between the ratio and per capita GDP jumps dramatically from 1995 to 2001, after a smaller increase in the earlier period (1980 to 1995). This is in a period when the coefficient of variation of per capita SDP for these state actually declines slightly. It is possible that this data is picking up a change in some dimension of the domestic allocation of capital, though a more definite conclusion will require further investigation.

In Table 7, we extend our analysis of financial variables and growth, by estimating some simple convergence regressions, focusing on three different financial variables: FDI approvals per capita over the decade 1991-2001, 1990 per capita bank credit (which is Aiyar's measure of private investment) and 1990 credit-deposit ratios. We focus on the 14 major states, and our study uses 1998-99 as the latest year, updating all the studies discussed above. The results are quite striking. First, note that the evidence for conditional or absolute divergence is not strong, since even when the point estimate is above one, the 95% confidence interval extends considerably below one. More interestingly, any one of the financial variables taken individually is estimated to have a significant impact on growth of SDP. When two or more financial variables are included, there is evidence of multicollinearity, but otherwise the results seem quite robust. They are quite consistent with a story where domestic and foreign capital are complements, and taken together with our earlier discussion of credit-deposit ratios and of FDI approvals, the evidence is suggestive of mobile domestic and foreign capital driving growth. From an efficiency point of view, this is probably a good thing, but the equity consequences bear some consideration.

What can we conclude? The evidence weakly supports the idea of absolute divergence among the Indian states in the past two decades, with the rate increasing in the 1990s. The evidence on conditional convergence is less decisive, but even if one accepts conditional convergence as descriptive of India's states, the conclusion remains that they may be converging to very different steady states.³⁰ The differences in infrastructure and institutions that seem to explain interstate differences have been persistent, as we have partly indicated in section 4, and neither Finance Commission transfers, Planning Commission transfers, nor centrally sponsored schemes have made a substantial dent in regional inequalities in India.

³⁰ Here it is useful to repeat the caveat that the empirical work relies on SDP rather than SNP. Thus remittances by internal migrants (e.g., Biharis working as agricultural laborers in Punjab) and external ones (Keralites working in health care in the Middle East) are being missed by the analysis

One might argue that the center-state transfer system is being asked to do too much, both in terms of short term amelioration of interstate inequalities or in promoting development and poverty alleviation in the long run. If that is the case, however, the present tangle of multiple channels of transfers, with its combination of two extremes of complex formulae on one hand and ad hoc discretion on the other, ought to be simplified dramatically. Alternatively, one can argue that the transfer system has an important role to play in overall national development, and that this role has become more important if centrifugal forces of economic reform put pressures on the other institutions of India's federal system, and perhaps even on India's political fabric.³¹ This is not to say that the transfer system's role is to remove regional inequalities – that is clearly neither desirable nor feasible. Nevertheless, some degree of equalization can be important in ensuring the wider political acceptability of continued economic reform, and a simpler, better targeted transfer system can be useful in achieving this.

7. Conclusion

Our paper has sought to examine several dimensions of economic reform in India, in the context of the country's federal system and of globalization. In our analysis, we have explicitly recognized that the national government has subnational governments below it, and that all these layers of government simultaneously interact with foreign governments and corporations in a global economy. We have examined two groups of reforms, the first involving redrawing of state-market boundaries, including changes in ownership and regulation, and the second concerned with reconfiguring federal institutions themselves. The first group includes financial sector reforms, assignment of regulatory powers, infrastructure reform and development, and privatization. Despite the incomplete nature of financial reform, we have presented some evidence in the last section that liberalization is making a difference, with foreign and domestic capital together driving growth, and leading to some of the differential growth across states that has been observed in the last decade.

The second group of reforms includes tax reforms, reform of center-state fiscal transfer mechanisms, and local government reforms. To some degree, these reforms in federal governance hold the key to opening the door to further reform elsewhere, by reducing the fiscal burden placed on the private sector by government deficits. We have acknowledged the political economy aspects of reform of governance, and discussed possibilities for politically acceptable packages of fiscal reforms, such as combinations of changes in tax assignment that would be acceptable to the center as well as the state governments.

The benefit of an approach that explicitly takes account of India's federal institutions is that we have been able to identify some areas in which the states may be able to achieve positive reforms acting independently, and other areas where coordination between the

³¹ This point also applies if one considers migration, a factor that has received relatively little attention after Cashin and Sahay's effort to quantify its impacts. While migration may help to support convergence, in a heterogeneous country such as India, it may bring its own set of problems with it. If effective equalizing fiscal transfers can reduce interregional migration pressures or slow down the process, they may have a positive role in preserving interethnic, or other intergroup, peace.

central and the state governments in designing and implementing reform policies may be more appropriate. Furthermore, we have highlighted the challenges of greater openness to the world economy, and of growing regional disparities. The former requires urgent attention to the financial position of the government in particular, as well as of the financial sector as a whole. The latter requires more efficient mechanisms for managing internal inequities. Together, they suggest some avenues of further reform that we have outlined in the paper.

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Table 1: Gross Domestic Product and its Sectoral Share

	Gross domestic product (GDP)		Sectoral share in GDP* (per cent)		
	(At factor cost)	(At market prices)	Agriculture & allied	Industry	Services
At 1993-94 prices	Rs. Crores				
1950-51	141557	149594	55.4	16.1	28.5
1960-61	207704	222161	50.9	20.0	29.1
1970-71	298580	329227	44.5	23.6	31.9
1980-81	404246	442319	38.1	25.9	36.0
1990-91	694925	773349	30.9	30.0	39.1
1991-92	705149	781575	30.0	29.4	40.6
1992-93	737018	818544	30.2	29.1	40.7
1993-94	781345	859220	33.6	23.7	42.7
1994-95	835864	922289	33.0	24.2	42.8
1995-96	896990	992877	30.7	25.3	44.0
1996-97	964390	1061902	31.0	25.2	43.8
1997-98	1012816	1110384	29.2	25.3	45.5
1998-99	1081834	1185399	29.2	24.7	46.1

Note: * At factor cost and figures up to 1992-93 relate to prior to revision of GDP.
<http://meadev.nic.in/economy/gdp.htm>

Table 2: Major Economic Indicators – Annual Growth Rates (per cent)

Year	Gross national product*	Gross domestic product*	Agricultural production Index	Food grains production	Industrial production Index	Electricity generation	Wholesale price index	Consumer price index	Money supply (M3)	Imports*	Exports*
1981-82	5.8	6.1	5.6	2.9	9.3	9.9	–	12.3	12	–4.4	2.6
1982-83	2.6	3.1	–3.8	–2.9	3.2	7	4.9	8.8	16.6	–2.6	4.6
1983-84	7.9	8.2	13.7	17.7	6.7	7.6	7.5	12.1	18.2	3.5	3.8
1984-85	3.8	3.8	–1.2	–4.5	8.6	12.1	6.5	6.3	19	–5.9	4.5
1985-86	4.1	4.1	2.5	3.4	8.7	8.4	4.4	6.8	16	11.5	–9.9
1986-87	4.0	4.3	–3.7	–4.7	9.1	9.8	5.8	8.7	18.6	–2.1	9.4
1987-88	4.1	4.3	–0.8	–2.1	7.3	8.8	8.2	8.8	16	9.1	24.1
1988-89	10.2	10.6	21.4	21	8.7	10.2	7.5	9.4	17.8	13.6	15.6
1989-90	6.9	6.9	2.1	0.6	8.6	11.2	7.4	6.1	19.4	8.8	18.9
1990-91	5.2	5.4	3.8	3.2	8.2	7.8	10.3	11.6	15.1	13.5	9.2
1991-92	0.5	0.8	–2.0	–4.5	0.6	9.1	13.7	13.5	19.3	–19.4	–1.5
1992-93	5.2	5.3	4.1	6.6	2.3	5	10.1	9.6	15.7	12.7	3.8
1993-94	6.2	6.2	3.8	2.7	6	7.3	8.4	7.3	18.4	6.5	20.0
1994-95	7.7	7.8	4.9	3.8	8.4	8.1	10.9	10.3	22.3	22.9	18.4
1995-96	7.8	7.6	–2.7	–5.8	12.8	8.6	7.6	10.2	13.7	28.0	20.9
1996-97	8.1	7.8	9.1	10.5	5.6	4.3	6.4	9.3	15.9	6.5	5.3
1997-98	5.0	5.0	–5.4	–3.5	6.6	6.6	4.8	7.0	17.3	6.1	4.5
1998-99	6.8	6.8	7.5	5.6	4.0	6.5	7.0	13.1	19.4	15.7	7.4
1999-2000	6.4	6.4	–0.7	1.4	8.2	6.9	3.3	3.4	13.9	14.7	16.6
2000-2001**	6.0	6.0	1.5	-	6.0	4.5	6.5	7.0	15.0	21.0	18.4

Note: * revised (at 1993-94 prices). **Projected @ Figure relates to Base 1993-94

<http://meadev.nic.in/economy/mei.htm>

Table 3: Commercial Bank Deposits and Priority Credit

	1969	1990	1993	1996	1997	1998	1999	2000	2001
Deposits of Scheduled Commercial Banks as percentage of National Income (at current prices)	15.5	48.6	50.4	46.3	46.4	49.6	50.3	53.5	55.7
Share of Priority Sector Advances in total	14.0	40.7	34.4	32.8	34.8	34.6	35.3	35.4	..

Source: RBI various statistical tables, www.rbi.org.in.

Note: 1969 data are for June, other years for March

Table 4: Relative Infrastructure Development Indices, 14 Major States

	1980-81	1991-92	1996-97
Bihar	83.5	81.7	77.8
Rajasthan	74.4	82.6	83.9
Uttar Pradesh	97.7	102.3	103.8
Orissa	81.5	95.0	98.9
Madhya Pradesh	62.1	71.5	74.1
Andhra Pradesh	98.1	96.8	93.1
Tamil Nadu	158.6	145.9	138.9
Kerala	158.1	158.0	155.4
Karnataka	94.8	96.5	94.3
West Bengal	110.6	92.1	90.8
Gujarat	123.0	122.9	121.8
Haryana	145.0	143.0	137.2
Maharashtra	120.1	109.6	111.3
Punjab	207.3	193.4	185.6
All India	100	100	100

Source: CMIE and Ahluwalia (2001)

Table 5: FDI approvals August 1991- July 2001, 14 Major States

	FDI Approvals (Rs. Million)	1991 Population (Million)	FDI per capita (Rs.)
Bihar	8833.43	86.374	102.27
Rajasthan	25916.69	44.006	588.94
Uttar Pradesh	43304.25	139.112	311.29
Orissa	82289.14	31.660	2599.15
Madhya Pradesh	97709.14	66.181	1476.39
Andhra Pradesh	124701.31	66.508	1874.98
Tamil Nadu	222804.00	55.859	3988.69
Kerala	14360.83	29.098	493.53
Karnataka	208156.32	44.977	4628.06
West Bengal	84234.59	68.078	1237.32
Gujarat	168555.48	41.310	4080.26
Haryana	31947.46	16.464	1940.44
Maharashtra	456286.23	78.937	5780.38
Punjab	19519.22	20.282	962.39
14 States	1588618.09	788.846	2013.85

Sources: FDI – Secretariat for Industrial Assistance Newsletter, August 2001; population – <http://www.censusindia.net/data.html>

Note: Figures for Bihar, Madhya Pradesh and Uttar Pradesh include FDI approvals for Jharkand, Chhattisgarh and Uttaranchal respectively

Table 6: Credit-Deposit Ratios by State

	1980	1995	2001
Bihar	0.41	0.33	0.24
Rajasthan	0.68	0.46	0.48
Uttar Pradesh	0.42	0.35	0.28
Orissa	0.59	0.54	0.41
Madhya Pradesh	0.56	0.53	0.47
Andhra Pradesh	0.74	0.76	0.63
Tamil Nadu	0.94	0.91	0.91
Kerala	0.68	0.45	0.43
Karnataka	0.75	0.68	0.59
West Bengal	0.60	0.54	0.44
Gujarat	0.58	0.47	0.49
Haryana	0.72	0.47	0.42
Maharashtra	0.79	0.70	0.85
Punjab	0.43	0.41	0.41
Average	0.65	0.58	0.57
Std. Deviation.	0.15	0.16	0.18
Coeff. of Var.	0.22	0.27	0.32
Coeff. of Var. (SDP)	0.32	0.40	0.36
Corr ⁿ . with per capita SDP	0.11	0.18	0.59

Sources: RBI Bulletins, National Accounts Statistics, and Indian Census. Figures for Bihar, Madhya Pradesh and Uttar Pradesh in 2001 include Jharkand, Chhattisgarh and Uttaranchal respectively. SDP and population figures used to calculate correlations were for closest available years.

Table 7: Growth Regressions

**Dependent variable is log of 1998-99 per capita GDP
t-statistics in parentheses**

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	-0.86 (-0.94)	-0.02 (-0.02)	-0.70 (-0.76)	-1.16 (-1.65)	0.13 (0.11)	0.84 (0.79)	1.18 (1.12)
1990-91 ln GDP per capita	1.14 (9.75)	1.02 (9.79)	1.08 (9.71)	1.14 (12.71)	0.96 (6.41)	0.90 (6.21)	0.85 (5.95)
FDI approvals p. c. 1991-2001		5.4E-05 (2.76)	2.4E-05 (0.81)		6.3E-06 (0.19)	3.3E-05 (1.25)	
Credit-deposit ratio 1990			0.35 (1.34)	0.52 (3.10)	0.33 (1.26)		
Credit per capita 1990					8.9E-05 (1.12)	9.7E-05 (1.19)	16.6E-05 (2.71)