Can Delegation Promote Fiscal Discipline in a Federation?

Evidence from fiscal performance in the Indian states

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Abstract

Theoretical and empirical analysis suggests that federations are prone to fiscal indiscipline, because of a classic "common-pool" problem of distributive politics—when decision-making power over government spending is distributed across multiple agents but financed out of generalized taxation. An institutional solution typically adopted by many countries is the delegation of sub-national debt oversight to the national political executive, which is assumed to have stronger incentives for fiscal discipline. Can such delegation successfully address political distortions to fiscal discipline? This paper provides evidence on this question from India, arguing that such delegation has limited success because the political incentives of the national government are such that it is unwilling or unable to enforce hard budget constraints on sub-nationals. In light of this evidence, the paper explores the role of an alternate form of delegation, to an independent fiscal agency, of monitoring and oversight of consolidated government debt, as a solution to the common- pool problem, again providing evidence from India to support its arguments.

Keywords: Delegation; Political economy; Fiscal deficit; Intergovernmental transfers

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1. Introduction

One of the more prominent issues in recent development policy is the risk of fiscal indiscipline and macroeconomic instability in developing countries that are rapidly decentralizing fiscal powers to sub-national governments. The concern lies explicitly in the domain of political economy—that political incentives will change with fiscal decentralization in a manner detrimental to fiscal stability. Evidence from individual country experience is being garnered to understand what forms of institutions can address problems of fiscal indiscipline arising from political incentives. One institution has received particular attention and support in policy circles—delegating authority to the national political executive of oversight and regulation of sub-national borrowing and debt. Can such delegation successfully address political distortions to fiscal discipline? This paper provides evidence on this question from the long-term experience of one of the largest federations in the developing world, India. It argues that such delegation has limited success when the political incentives of the national government are such that it is unwilling or unable to enforce hard budget constraints on sub-nationals. In light of this evidence, the paper explores the role of an alternate form of delegation, to an independent fiscal agency, of monitoring and oversight of consolidated government debt, again providing evidence from India on the functioning of such an institution to support its arguments.

The risk of fiscal indiscipline in a federation (or in any system with extensive fiscal decentralization) was raised by Alesina and Perotti (1995) in a review article on the political economy of budget deficits. They suggested that fiscal decentralization or federal arrangements are prone to a classic "common pool" problem, when spending decisions taken at local levels are financed by transfers from the national government, which raises taxes. This insight for fiscal federalism was drawn from a model of legislative bargaining on how representatives from geographically based constituencies overestimate the benefits of public spending in their districts relative to its financing costs, leading to above optimal levels of spending (Weingast, Shepsle, and Johnsen, 1981). Although these models typically address the *size* of budgets, they can be made dynamic so that they also address the *balance* of government budgets. Persson and Tabellini (2000) provide a simple dynamic extension of the common-pool problem and show that both spending and borrowing are higher than optimal, when different groups in the government are given decision power over parts of the budget, but nobody is given authority for the aggregate outcome. Velasco (1999) presents a more detailed dynamic political economy model where government resources are a "common property" from which interest groups can finance expenditures on their preferred areas. Fiscal deficits and debt accumulation result in this model even when there are no reasons for inter-temporal tax and consumption smoothing.

The salience of interest groups in over-fishing the common property of public resources has been measured through the political party composition of a government. Alesina and Perotti (1995) emphasize the importance of coalition governments, consisting of several political parties, in delaying fiscal adjustments and more rapid accumulation of public debt. That is, bargaining between multiple political parties is likely to proxy for bargaining between multiple interest groups over public resources. Beginning with the seminal contribution of Roubini and Sachs (1989) a large empirical literature has found a positive correlation between deficits and “type of government”, an indicator variable that typically ranks governments in ascending order of political fragmentation, from single-party majority governments to coalitions and minority governments. Perotti and Kontopoulos (2002) have recently pointed out that this set of results is sensitive to the subjective coding of the “type of government” indicator, and they instead test the impact of a more objective measure—the number of political parties in a government. Using panel data for 19 OECD countries from 1970-1995, they find that although coalition size is a significant determinant of government spending and deficits, a stronger more robust association is revealed with the size of the cabinet, or the number of spending ministers in a cabinet.

Consistent with these theoretical ideas and empirical evidence, countries seem to have explored solutions to the common-pool problem by concentrating decision power over aggregate budgets to central agencies. An established literature on the role of fiscal institutions in promoting fiscal performance has argued that such hierarchical institutions that centralize decision-power over fiscal aggregates, such as deficit and debt, can make a difference for better outcomes (Poterba and von Hagen, 1999). In the context of fiscal decentralization, such an institution is the delegation of authority to the national political executive of oversight and regulation of sub-national borrowing and debt. At least in two regions of the world where sub-national fiscal profligacy has been credited with contributing to macroeconomic crises, Russia and Latin America, many scholars and policy-makers, amongst them Blanchard and Shleifer (2001), Dillinger and Webb (1999), Ordeshook (1996), Samuels (2000), Stepan (2000), have advocated a disciplining role for strong, centralized national political parties that will likely force sub-national governments to internalize the costs of their policies.

However, this line of thinking is at odds with that in an earlier literature where the institutions of decentralization were viewed as potentially solving the problem of political distortions in public resource allocation. Qian and Weingast (1997) review their idea of "market-preserving federalism", where inter-jurisdictional competition between governments to attract private economic activity would tie the hands of governments from interfering in market forces. Specifically, if decentralization to locally elected governments creates competition amongst them, then this competition, the argument goes, serves to commit governments to not bail-out agencies, projects, or enterprises that fail.

Qian and Roland (1998) use this story to interpret the success of China in transitioning to a market economy—that decentralization to local governments created conditions for hard budget constraints on economic activity and thereby promoted good resource allocation decisions that led to growth.[1]

In the market-preserving view of federalism, there is doubt about whether a central political authority that is strong enough to impose discipline on sub-national governments would be itself disciplined by market considerations of efficiency (Wibbels, 2003; Weingast, 1995). Specifically, limiting central government information about and power over sub-national finances, reinforces the credible commitment to "hard budget constraints" provided by competition between sub-national governments. Qian and Weingast (1997) support this argument through an example from China, where the central government allows local governments to maintain various "extra-budget" and "off-budget" accounts of which it has limited knowledge, precisely as a commitment device to not intervene to tax nor bail them out, which in turn encourages local governments to invest in profitable activity.

Blanchard and Shleifer (2001), however, offer a counter-argument by comparing the experiences of China and Russia, that the degree of political centralization in China allowed the central government to discipline local governments into favoring growth, whilst the waning power of central political authorities in Russia prevented them from doing the same. They invoke Riker

(1964), one of the earliest thinkers on federalism, for stating that if federalism is to function and endure, it must come with political centralization.

The review above thus shows that the importance of a single and strong national ruling party controlling the national government has been emphasized in both the literature on fiscal federalism and in a general literature on common-pool problems in public resource allocation. The idea appears to be that a strong national party at the center is likely to be held accountable by voters for overall macroeconomic outcomes and hence have the right incentives for fiscal discipline. However, the critique of the market-preserving view of governments suggests that more analysis is needed to understand the political incentives of national parties, before any conclusion on the potential fiscal benefits of political centralization can be reached.

India provides a valuable laboratory to study this issue because for much of its history as an independent, democratic country, it has seen one dominant national political party at the helm of fiscal policy, and federal institutions characterized both by dependence of states on national transfers, and national regulation of sub-national borrowing. Some of the literature reviewed above would therefore predict that with this combination of political and federal institutions India is not likely to suffer from sub-national fiscal profligacy. Indeed, in recent years, when the strength of the national political parties declined, and sub-national fiscal deficit simultaneously increased, contributing to an overall increase in the consolidated government deficit, many interpreted this correlation as confirming the importance of single party national governments in promoting fiscal discipline in a federation. This paper tests whether delegation of sub-national debt oversight to the national political executive, at a time when there was a strong national political party, indeed served to strengthen sub-national fiscal discipline, by exploring the correlation between center-state political relations and state fiscal deficits.

The paper defines political conditions whose variation across states are a good proxy for the variation in political costs of the national government of withholding a bailout when a state requires additional financing. It finds large effects of political partisanship on sub-national deficits and argues that this suggests significant political incentives problems for fiscal discipline, even when the center is dominated by a single national party. When such political distortions exist, the paper argues that delegation to the national political executive is likely to be insufficient or ineffective in promoting fiscal discipline in a federation. Instead, the paper explores a new institutional solution—delegation of debt oversight to an independent fiscal agency, much in the same spirit as delegation of monetary policy to an independent central bank—that has hitherto not been deliberated in the literature, and presents evidence from India to inform this idea.[2]

After trying several specifications to test the impact of politics, as suggested by a large literature, we find that party affiliation between the national and state governments in India emerges as the single-most significant political determinant of state deficits. Using a panel dataset for 15 major states of India over the period 1972-95 we find that when a state government is controlled by the same party that controls the national government, the state has higher than average fiscal deficit. This partisan effect is large, with deficits in politically affiliated states being 11 percent higher than deficits in non-affiliated states, calculated at the sample average. Amongst co-partisan states, those where the national ruling party controls a larger proportion of seats allotted to the state in the national legislature may be characterized as "core support" states, whereas those where the party controls a smaller proportion of seats may be characterized as "swing" states. We find that deficits are greater in the latter, that is, the "swing" states. Affiliated states where the ruling party controls close to zero of the state's seats in the national legislature have deficits that are more than 25 percent higher than the sample average. Non-affiliated states have lower deficits compared to affiliated states, irrespective of their representation in the national legislature.

The evidence for the Indian states shows that partisan affiliation between the national and state governments stands out as the only significant political determinant of variation in deficits across and within states over time, to the exclusion of other plausible political and institutional determinants at the state level that have been tested in the received literature, such as election cycles (Alesina et al. 1997; Khemani, 2004), fragmented or divided legislatures (Poterba, 1994; Alt and Lowry, 1994; Roubini and Sachs, 1989; Perotti and Kontopoulos, 2002), and dependence on intergovernmental transfers (Rodden, 2002; Jones, Sanguinetti, and Tommasi, 2000). We find no evidence of impact on state deficits of the timing of state elections, the existence of a coalition government at the state-level, nor the extent of dependence of a state on federal revenue transfers. We interpret this pattern of evidence as suggesting that while delegation to the national political executive of sub-national debt oversight might allow it to discipline states governed by rival political parties, it does not prevent the national ruling party from using deficit financing to further its own political objectives. That is, the mere existence of a single and strong national party at the helm of government does not guarantee that the underlying process of electoral competition that got the party there will necessarily provide strong incentives for fiscal discipline.

We review the literature on multi-party electoral competition in India, and use the evidence provided here on the effect of center-state political relations on fiscal discipline, to argue that the fundamental political problem with fiscal profligacy in developing countries like India might not be fiscal decentralization to multiple spending entities, but rather the platform of multi-party electoral competition at all tiers of government. This platform is characterized by emphasis on spending programs that target benefits to specific groups, out of generalized taxation, and therefore completely congruent with the common-pool problem of fiscal discipline analyzed early on in the literature on political economy of budget deficits.

This insight has a particular policy implication, which is topical for India and other rapidly decentralizing developing countries, given recent concern with burgeoning deficits. Instead of focusing on strengthening the hands of the national political executive to control sub-national governments, which is what current policy debates do, policy-makers could fruitfully explore delegation of consolidated government debt oversight to a non-partisan, independent fiscal agency, as a commitment device that reduces costly political bargaining between multiple interest groups over public resources. An independent fiscal agency already exists in India—the Finance Commission—and is delegated power over the distribution of national revenue transfers. Recent evidence shows that it indeed functions to curb the partisan influence of the national executive (Khemani, 2003), and is therefore an agency that might be credible to diverse political groups in the country, which they could use as a commitment device to shift to a more co-operative bargaining equilibrium, where the costs of non-cooperation are reduced.

Section 2 below describes the methodological approach used in the paper to test for political distortions to fiscal discipline in a federation. Section 3 provides a brief description of Indian fiscal and political institutions. Section 4 describes the data used for our empirical analysis, and reports the evidence on the impact of national-state political relations on state fiscal deficit. Section 5 reviews insights from the political science literature on electoral competition in the country to interpret the empirical evidence provided here, and discusses delegation to an independent fiscal agency as an innovative policy solution to the problem of fiscal deficits. Section 6 concludes with some open questions.

2. Methodological approach

Typically, to answer the question of whether the existence of a particular institution leads to particular outcomes, the empirical methodology employed is to measure differences in outcomes either across jurisdictions where some have the institutions and some don't, or differences over time, before and after the institution is operational, or both, which is termed the difference-in differences approach. However, such a methodology is difficult to apply to the question of interest here, because the institution of delegation of certain oversight powers to the national political executive is invariant across jurisdictions within a country; changes measured at the aggregate level of one country over time, before and after the strength of the national political executive declined, usually implies very few observations from which to draw generalizations, and the "event" of substantial political weakening at the national level around which changes are measured, is likely to be confounded by many other underlying changes that simultaneously impact other outcomes; variations across countries would be useful to explore and some have attempted it (Rodden and Wibbels, 2002, is a prominent and successful example to be reviewed below), but cross-country analysis is constrained by measurement and comparability problems.

The approach taken in this paper is to exploit variation across states and over time within a country, in states' political relations with the center that would proxy for political costs to the center of not bailing-out a state, estimate correlations between center-state political relations and state fiscal deficit, and use the pattern of results to deduce the incentives of the national political executive in its fiscal dealings with states. The null hypothesis is therefore that center-state political relations should have no impact on state fiscal deficits if delegation to the national political executive solves the problem of perverse sub-national incentives.

The literature on intergovernmental fiscal relations identifies several political factors, variation in which would determine whether the national government is able to discipline sub-national governments. Dependence of sub-nationals on national revenue transfers has been identified as perhaps the single-most important factor in determining whether the national government has inescapable obligations to respond to states in need. In states where the governments are more dependent on central transfers for their spending programs, voters might find it harder to distinguish whether fiscal problems and economic hardships are due to unsustainable actions taken by their state government or inaction by the central government during times of negative economic shocks, and therefore more likely to punish the center for withholding bailouts to the state (Rodden, 2002).

Indeed, in many developing countries the basic condition of the market-preserving view of federalism, that sub-national government actions be driven by competition with other jurisdictions, is unlikely to hold because local government accountability for its own actions is clouded by its dependence on federal revenue transfers (rather than relying on own-revenue bases). Various articles in Rodden, Eskeland, and Litvack (2002) argue that fiscal decentralization institutions "soften" sub-national budget constraints because the center cannot credibly commit to withhold a bailout from a sub-national government in financial trouble because it would share in the political costs of the failure, and that knowing this, sub-nationals have incentives to over-spend in expectation of future bail-outs. Rodden and Wibbels (2002) and Rodden (2002) find that greater regulation and oversight of sub-national borrowing by the national government is correlated with lower deficits, when sub-national taxing autonomy is limited, and spending is largely financed by federal transfers. Rodden and Wibbels (2002) further speculate upon one measure of political centralization, the existence of strong national parties with representation at both national and sub-national tiers of government. Thus, this literature on fiscal decentralization joins the literature on political conditions for fiscal discipline of national governments in emphasizing the importance of national political parties.

Second, party affiliation between the central and state governments is likely to matter. Jones, Sanguinetti, and Tommasi (2000), Dillinger and Webb (1999), Rodden and Wibbels (2002), amongst others, hypothesize that the center is likely to have leverage in affiliated states through internal party disciplinary mechanisms, and might be able to preempt state fiscal profligacy, leading to lower deficits for affiliated states. Sub-national governments that are politically affiliated with the center are more likely to internalize the effect of spending an additional unit of national resources due to internal party discipline to protect the party's national reputation, and should therefore have lower spending and deficits. Consistent with this hypothesis Jones et al (2000) find empirical evidence that provinces in Argentina whose governors belong to the same political party as that of the national President have lower spending than provinces that are not affiliated with the President's party.

However, co-partisanship could have the opposite effect depending on the nature of electoral competition, if the center bears political costs for not bailing out a state only in those states where it's own party controls the government. In politically affiliated states the center might bear relatively greater costs of no-bailout due to the damage done to the reputation of the political party from the poor performance of the state government. In unaffiliated states, the direct costs to the center might be mitigated by costs to the rival political party controlling the state, if voters punish the rival political party ruling the state for subsequent illeffects of fiscal mismanagement. That is, the central ruling party might actually stand to gain from its rival party's discomfiture due to fiscal retrenchment, while it loses by supporting additional spending on local public goods whose political benefits would accrue to the rival party.

Another measure of bargaining power of states is their representation in the national legislature. States that have greater representation in the national legislature, in terms of the absolute number of representatives elected from a state to the national legislature, might be harder for the national government to ignore (*a la* Weingast et al, 1981). In addition to, or instead of absolute representation, partisan affiliation of the legislators elected from the state's constituencies might matter—states whose constituencies return a larger proportion of legislators from the national ruling party might receive more resources. Or conversely, if the national ruling party can discipline its own legislators, then states sending a higher proportion of legislators from rival political parties might be the ones with the bargaining power for greater resources to their state (Riker, 1964).

A prolific and ongoing discussion in the literature centers around the conditions under which voters that are "core supporters" of a ruling political party receive more or less public resources than voters that are "swing", with empirical evidence on both sides of the issue (Schady, 2000; Case, 2001; Johansson, 2003; Miguel and Zaidi, 2003). Thus, the extent to which a state has "swing" voters or “core supporters” of the national political party might matter for whether it is likely to be bailed-out when in financial trouble.

We define all these variables in the empirical analysis below, and test their relative impact on states’ fiscal deficit. If any of these variables are significant determinants of sub-national deficits then we can conclude that central political discretion is being exercised in the allocation of sub-national debt, that is, there are political distortions in sub-national fiscal performance in the federation.

Moreover, the pattern of impact would have implications for how strong the incentives of the national ruling party are for fiscal discipline. The key variable in this regard is the party affiliation between the center and a state. If there is any impact of political partisanship, then co-partisan states should have lower deficits if the party’s political incentives are aligned with greater fiscal discipline. However, if the party’s own interests are served through greater deficits then co-partisan states should have higher deficits. If co-partisan states have higher deficits then this could be either because of the center opportunistically and deliberately distributing deficit financing across states to further the party’s political objectives; or, because state party leaders have bargaining power within the party and hold the central party leadership hostage through their actions. We will discuss both interpretations in the analysis below.

3. Political and Fiscal Institutions in India

Government in India has been a Westminster-style parliamentary democracy since the adoption of a constitution in 1950, with direct elections based on universal adult suffrage to the Lok Sabha, or the House of the People, the lower house at the national level, and to the Vidhan Sabhas, the individual legislative assemblies at the state level. The country is divided into 4061 single-member districts for state assembly elections, which are grouped together, separately within each state, to form 543 single-member districts for the national assembly. The party which wins a majority of districts distributed in any manner across the states,[3] is invited to form the government, headed by a Prime Minister and a cabinet of ministers.[4] Analogous to the national executive, the party or coalition of parties with a majority of seats in an individual state's legislative assembly forms the state-level executive government headed by a Chief Minister and a state cabinet of ministers.

The Indian states are constitutionally assigned broad fiscal powers, the nature of which is typical of federal nations, with the central government responsible for macroeconomic and any other policies involving extensive spillovers across state boundaries. Expenditure responsibilities for most local public goods are assigned to the states. Between 1960 and the present state governments have been undertaking around 50-60 percent of total government expenditures in India (Rao and Singh, 2000).

Relative to their expenditure responsibilities, the revenue generation powers of state governments are more limited, with high yielding taxes such as personal income tax, corporation taxes, and customs duty assigned to the center. State governments collect tax revenues from agricultural income, from property and capital transactions, and from the production and sale of commodities. Between 1960 and the present state governments collected around 30 percent of total revenues (Rao and Singh, 2000).

The constitutional assignment of expenditure responsibilities and revenue authority between the central and the state governments in India is intentionally imbalanced to give the central government a role in regional redistribution.[5] A large part of state expenditures is financed by general-purpose revenue transfers, including both untied grants and share in centrally collected taxes. Federal transfers to state governments constitute about 30-40 percent of state revenues, and 5 percent of the national GDP (Rao and Singh, 2000).

An independent fiscal agency was created for the explicit purpose of curbing partisan influence on the sharing of national revenues between national and state governments—the Finance Commission of India. It was established by the Indian Constitution of 1950, which mandates the appointment of new members to the Commission every five years, with the primary purpose of determining the sharing of centrally collected tax proceeds between the central and state governments, and the distribution of grants in aid of revenues across states.

The rules of membership are detailed in the Finance Commission Act of 1951—it is to consist of a Chairman and four other members who are either qualified to be Justices in High Courts, or have technical expertise in public financial matters. The appointments are formally made for a fixed term by the constitutional head of India, the President, upon the recommendation of the Prime Minister's office, in consultation with Parliament. Once appointed, the members of the Commission cannot be replaced at the discretion of the political executive. The Commission has general powers of summoning and requisitioning, and its recommendations with regard to tax devolution and grants-in-aid are legally binding, and cannot be overridden by the central cabinet of ministers or the legislature.

The Terms of Reference (TOR) of successive Commissions can be expanded by order of Parliament, but must include the determination of tax devolution and grants-in aid. The overarching objectives of Finance Commission transfers are described in every TOR in terms of promoting economic efficiency and regional equity. Thus, the powers of the agency over tax sharing and grants are based on constitutional authority and cannot easily be reversed by an act of parliament.

Interestingly, and perhaps revealingly, soon after the provision of this independent agency, the national government established another agency with access to very similar instruments of resource distribution across states, but with far fewer constraints on partisan manipulation. The Planning Commission was set up by a Resolution of the Government of India in 1950, as a government agency within the central executive, with the Prime Minister as chairman. Its purpose is to supplement the annual budget process with a medium and long-term planning process to determine the allocation of national resources across competing needs. Its technical members are appointed directly by the Prime Minister and serve as advisors to the government, working under the general guidance of the National Development Council, which is chaired by the Prime Minister and includes all central cabinet ministers and state Chief Ministers. In particular, the formula for distribution of Planning Commission transfers across states is determined by the National Development Council and its political representatives.[6]

In the sample of 15 major states studied here, from 1972-1995, tax devolution and grants by the independent agency makes up about 24 percent of state revenues, while grants from central government agencies constitute about 14 percent. The Planning Commission also makes regular loans to the states.

Hence, while transfers made by the Planning Commission are amenable to the discretion of explicitly political agents, transfers made by the Finance Commission are at least designed to be protected from political discretion through constitutional rules. Whether these constitutional rules indeed make a difference is, however, an empirical question, because the members of the Finance Commission are ultimately appointed upon the recommendation of the Prime Minister, and are therefore open to some degree of central political control.[7] However, since new commissions are appointed according to a constitutionally established cycle, the tenure of the Finance Commission is not congruent with the electoral cycle that changes the executive government.

Khemani (2003) tests whether delegation to an independent agency indeed makes a difference by contrasting the impact of partisan politics on the fiscal transfers determined by the two agencies. She finds that while the distribution of transfers by the Planning Commission is consistent with the political concerns of the national political executive, the distribution of transfers by the Finance Commission counteracts the partisan influence of the national government. This evidence shows that delegation to an independent agency can be effective in controlling central partisan influence.

Fiscal deficits of states are defined as the difference between total spending (on the current account, on capital project investments, on net loans to other agencies, especially state owned enterprises) and total revenues of a state (including own-generated and tax devolution and grants made by all central agencies). Fiscal deficits of state governments are largely financed by loans from the central government, constituting more than 65 percent of total borrowing by the 15 major states in the sample studied here.

Borrowing autonomy of state governments from other market sources is limited and subject to approval by the center. There is widespread belief that these regulations can be easily circumvented, largely by off-budget borrowing through state-owned public enterprises, although the burden ultimately falls on the state (Anand, Bagchi, and Sen 2001 and McCarten 2001). The center therefore has a dominant role to play in determining deficit financing for states, both directly through a large volume of loans, but also indirectly through bail-outs of state owned enterprises and approval of market loans. Hence, interpreting any evidence of political impact on deficits as stemming from political incentives to provide bail-outs makes specific sense in the Indian context because some of the largest pressures on the state budget come from financial losses of state owned enterprises.

4. Data, Empirical Specification, and Results

Data

The data set for this study is compiled from diverse sources for 15 major states of India over the period 1972-95. The political data is compiled from Butler, Lahiri, and Roy (1995). The public finance data on deficits, revenues, expenditures, and intergovernmental transfers, is available since 1972 from relevant volumes of the *Reserve Bank of India Bulletin*, a quarterly publication of the central bank of India with annual issues on details of finances of state governments. State demographic and economic characteristics, and a state-level price index to convert all variables into real terms are available from an Indian data set put together at the World Bank. A detailed description of these variables is available in Ozler, Datt, and Ravallion (1996). Table 1 provides summary statistics for each of the variables included in the analysis.[8] Of the 360 state-year observations in the sample studied here, only 2 have shown a small fiscal surplus, that is, state finances in India are always likely to be in deficit presumably because of the inherent vertical fiscal imbalance in India's federal structure, and the role of the center in providing loans to states for planned economic development.

Specification

We begin with a simple model to estimate the effect of absolute representation of the state in the national legislature, and the political affiliation of its government. The basic model is:

$$DEFICIT_{it} = \beta\, AFFILIATION_{it} + \alpha REPRESENTATION_{it} + \eta\, Z_{it} + \delta_t + \varepsilon_{it} \quad (1)$$

where $DEFICIT_{it}$ is real per capita fiscal deficit in state *i* in year *t*; $AFFILIATION_{it}$ is an indicator of political affiliation that equals 1 when the governing party in state *i* at time *t* belongs to the same party as that governing at the center at time *t*, and 0 otherwise; $REPRESENTATION_i$ is the number of districts allotted to a state in the national legislature. There is large variation across states in absolute representation in the national legislature, with the sample average number of seats allotted to a state being 34, and the sample standard deviation being 19. The largest state, Uttar Pradesh, contributed over 80 seats to the national legislature over the period under study, while the smallest state, Haryana, contributed only 9-10 seats. Since there is little or no variation over time within a state in the number of seats allotted to it in the national legislature, we estimate the impact of state representation in the national legislature without state fixed-effects. Time variant economic and demographic characteristics of states (real per capita state domestic product and total population) are included in the vector Z_{it}, and a time effect for each year, δ_t, is included to control for various shocks to the state economy in any given year.

In order to account for the partisan identity of individual legislators from a state in the national assembly we include the number of legislators in the national parliament belonging to the state ruling party, as a proportion of the total seats allotted to the state, distinguishing between their impact in affiliated and unaffiliated states. This yields the following specification where $StatePartySEATS_{it}$ is the proportion of seats (allotted to the state in the national legislature) controlled by the state ruling party—

$DEFICIT_{it}$ =

β $AFFILIATION_{it}$ + ϕ $AFFIL*State/NationalPartySEATS_{it}$ + γ $(1–AFFIL)*State$ $PartySEATS_{it}$

$$+ \eta Z_{it} + \alpha_i + \delta_t + \varepsilon_{it} \qquad (2)$$

Specification (2) includes state fixed effects, α_i, so that β, the coefficient on political affiliation, is identified from variation within a state from its own average deficit when it is affiliated and not affiliated with the center.

This specification also allows us to measure the impact of “swing” states. Measuring the extent to which a state is “swing”, defined in much of the theoretical literature (Dixit and Londregan, 1996; Cox and McCubbins, 1997) as the extent to which more voters in a state are more likely to be influenced by public spending policies, and less likely to be ideologically driven, when making their choices between rival political candidates, is difficult, because of the level of aggregation involved at the state level. Johansson (2003) has most closely followed the theoretical literature in her study of distribution of grants across Swedish municipalities, by using Swedish voter surveys to directly measure the density of voters in a municipality that exhibit characteristics of “swing” voters. But the rest of the literature has used tightness of political races (margin of victory in single-member-first-past-the-post constituencies, or distance from 50 percent mark for two-candidate constituencies) as the basis for characterizing a constituency as “swing” or not (Case, 2001; Schady 2000).

However, in the Indian system, national political parties do not have to win a certain threshold of votes from a state in order to "win" a state—they can win a majority of seats in the national legislature distributed in any manner across the states in order to form the government. It is therefore difficult to identify a particular criterion for measuring "tightness" of a political race at the level of aggregation of the state. We argue that the proportion of seats allotted to a state that a party wins can be used to control for "swing" characteristics, especially when interacted with the party affiliation of the state government. If a party sweeps a state, that is, wins all or almost all the seats allotted to the state in the national legislature, and is also in power at the state government it would imply the political race in that state is not tight, from the perspective of the party. If a party controls a very small proportion of seats from a state in the national legislature, but is in power at the state level, the state is likely to be "swing", in that there is room for political gains using the fiscal instruments of the state at the party's disposal. If a party controls a small proportion of seats from a state, and is not in power in the state, the state is least likely to be "swing" from the party's perspective, because the state might have an ideological preference for the rival political party. If a party sweeps a state in national elections, even when a rival party is in power at the state level, then the state is likely to be "swing" from the party's perspective, in that it is "up-for-grabs" in the next state election.[9] Thus, in both non-affiliated and affiliated states (but for different reasons), those where the state ruling party controls a smaller proportion of seats in the national legislature are likely to be swing.

If overall representation of a state matters for its bargaining power, we would have $\alpha > 0$ (from equation 4); if the central ruling party can only discipline its co-partisan states (as in the evidence from the Argentine provinces) we would have $\beta < 0$ (in both equations 1 and 2); conversely, if the center only bears political costs for not bailing out a state in co-partisan states, then we would have $\beta > 0$. Amongst affiliated states, if "swing" states are more important than "core support" states, we would have $\phi < 0$ (in equation 2).

Amongst non-affiliated states, the impact of "swing" status of a state (that is, whether the state ruling party controls a smaller proportion of seats in the national legislature) will be linked to what relation is observed on β. If $\beta > 0$, then the center does not bear direct costs of not bailing out a state when a rival political party is in power at the state level, because the losses are likely to be borne by the governing rival political party in the state. In this case, non-affiliated states that are swing (where the state's voters have not shown a clear preference for the rival political party by also voting for them in national elections) might have even lower deficits as the center tries to inflict greater damage on its rival political party in "swing" states, by withholding resources from the state governing party, that is $\gamma < 0$. If $\beta < 0$, then non-affiliated states have bargaining power for greater resources, which might increase with the proportion of seats the rival political party controls in the national legislature, in which case we would have $\gamma > 0$.

If partisan identity of the state government does not matter and only bargaining power of national legislators belonging to rival political parties matters, then β and ϕ would be indistinguishable from 0 and we would have $\gamma > 0$. If national legislators belonging to the national ruling party are the ones bargaining for greater spending in their states of origin, again irrespective of the partisan identity of the state government, then we would have β indistinguishable from 0, but $\phi > 0$ and $\gamma > 0$.

In Section 4 below we discuss how we augment specification (2) to include dependence of states on central transfers. If transfer dependence is what matters for state deficits (and the partisan effect is driven by correlation between transfer dependence and partisan identity) then this inclusion will serve to test this alternate hypothesis.

Endogeneity concerns

Estimating the potential effect of election outcomes on public expenditures (and hence deficits) is rather obviously subject to an endogeneity problem. If we believe that politicians use election outcomes to determine allocation of public resources, then we must also believe that public expenditure policies have an effect on elections, that is, election outcomes are influenced by expenditures in past periods. Schady (2000) explains that the coefficients on election outcomes, β, ϕ, and γ in equation (2) in this paper, are biased and inconsistent when two conditions are simultaneously met—there is serial correlation in the error term and expenditures affect election outcomes.

In the absence of any valid instruments for political affiliation and seat share of ruling parties, the paper addresses this problem by controlling for serial correlation in the regression specifications and including lagged values of the dependent variable. In particular, since political affiliation and seat share can only change in value in election years, we are likely to correctly identify the effect of political variables once we control for lagged deficit. That is, if an election occurs in year *t*, the electoral outcomes of year *t* can be treated as pre-determined with respect to the fiscal deficit in years $t + 1$, $t + 2$, etcetera, until the next elections, once deficit of year *t*, which is likely to influence election outcomes in year *t*, has been included in the specification. Since state elections in India have usually taken place exactly at the end of the fiscal year, in an election year *t*, equations (1) and (2) actually regress $DEFICIT_{it}$ during the course of year *t*, on outcomes of the previous election, that is, on values of $AFFILIATION_{it-1}$ and $SEATS_{it-1}$, that were obtained from the previous year.

Results

Table 2 reports the results of estimating specifications (1) and (2) using a variety of estimation strategies that have been commonly used in this literature—

the first column reports ordinary least squares (OLS) estimates of the simple specification (1) without state fixed effects, with panel corrected standard errors that account for heteroskedasticity, autocorrelation, and contemporaneous correlation across panels; the second column reports OLS estimates of specification (2), with state fixed effects; the third column reports OLS estimates including the lag of the dependent variable; and the fourth column reports results from a Generalized Method of Moments (GMM) estimator derived by Arellano and Bond (1991) for consistent parameter estimates in a fixed effects model with a lagged dependent variable.

All estimates show that state governments that belong to the same political party as the central government have significantly higher fiscal deficits. Amongst affiliated states, those that control a small proportion of seats to the national legislature tend to have significantly higher deficits than those that control a higher proportion of seats. In fact, if an affiliated state government controls all the state's seats to the national legislature (that is, the proportion=1), then its net benefit from affiliation can be negative, since the coefficient on the interaction term is greater than the coefficient on the affiliation indicator in many specifications. Hence, it is really those affiliated states where the center receives greater political gains at the margin that seem to be particularly favored in terms of being allowed to run higher deficits.

The effect of political affiliation is substantial—the smallest estimated effect shows that deficits in affiliated states (where the proportion of seats controlled by the ruling party is at the sample average, which is about half) is greater than in other states by 11 percent of the average per capita fiscal deficit in the sample. If an affiliated state controls close to zero of the seats in the national parliament, then its deficit is greater by more than 25 percent of the average per capita fiscal deficit in the sample. Non-affiliated states even when the rival party controls a larger proportion of state seats in the national legislature do not appear to bargain for higher deficits.[10] The result that amongst affiliated states those where the national ruling party controls a smaller number of seats have higher deficits is interesting in its own right, and suggestive of the importance of "swing" states as contrasted with "core-support" states.

Various types of alternate explanations, including those based on efficient fiscal responses to macroeconomic shocks, can be imagined for why changes in state governments might be correlated with state deficits, casting doubt on the interpretation that party affiliation represents political bargaining power in a federation and distorts allocation of government debt. In fact, the variation in affiliation in the data derives largely from whether voters in a state elect a particular party, the Congress party, or not. The Congress party has dominated national government in India until the 1990s, although it has been frequently unseated from state governments. The Congress was driven out of power from the center by a coalition of opposition parties in the general elections of 1977 and 1990, and the states from where the non-Congress parties won the majority of their seats to the national legislature were also the states where these opposition parties defeated the incumbent Congress state government and tool control of the state. Thus, a state is likely to be affiliated with the center if its voters elect Congress to the state, except in the years 1977-79 and 1990 when the opposite is true.

We address these potential sources of endogenous variation in overall state government affiliation in a variety of ways. First, we include the share of votes cast for the Congress party in specification (2) to control for voter taste for the dominant national political party. These results are shown in column (1) of Table 3, and do not change the impact of affiliation. Second, we test whether the impact of affiliation is different in the years 1977-1979 and in 1990 when non-Congress parties controlled the national parliament, in column (2) of Table 3. There is no difference in the overall pattern of impact of political affiliation, but the non-Congress national ruling parties in 1977-79 and 1990 appear to target more vigorously those affiliated states from where they control a lower proportion of seats in the national legislature.

Other political and institutional determinants of deficits at the state level that have been tested in the received literature might also be correlated with affiliation, and be driving the results, such as election cycles (Alesina et al. 1997;

Khemani, 2004), and fragmented or divided legislatures (Poterba, 1994; Alt and Lowry, 1994; Roubini and Sachs, 1989; Perotti and Kontopoulos, 2002). Column (3) of Table 3 includes an additional indicator variable $COALITION_{it}$, which equals 1 when there is no clear majority in the state legislature, and the executive is formed of a coalition of various political parties, and an indicator for the state election cycle.[11] Coalition politics at the state level and the state election cycle are not significantly correlated with state deficits, and including them in the regression does not affect the coefficients of interest. If anything, the estimated effects of partisanship become even larger once controls are included for these other political effects.

These results of the non-effect of other political variables are interesting in their own right because they seem to indicate that state-level political variables have no statistically discernable effect on deficits, although they might on the composition of spending and revenues (as reported by Khemani 2004). Instead, it is the state's political relation with the center that accounts for significant variation in its deficit.

Dependence on federal grants is another variable that is likely to contribute to perverse incentives for fiscal profligacy (according to the argument in Rodden, 2002). In fact, the results on partisanship might be driven by this alternate hypothesis of dependence on federal transfers, if affiliated states receive greater transfers, and transfers exacerbate the credibility problem. Table 4 reports results when we include vertical fiscal imbalance, that is, the proportion of intergovernmental grants in total state revenues (total intergovernmental grants/total revenues) as a measure of transfer dependence. Since vertical fiscal imbalance is largely stable within a state over time, most of the variation in transfer dependence measured this way comes from variation across states. Hence, results are reported both with and without state fixed effects, in columns (1) and (2) respectively. The GMM estimates in columns (3) and (4) respectively include vertical fiscal imbalance in first difference and in levels. The coefficient on vertical fiscal imbalance is not statistically significant; the sign, in fact, is negative, suggesting that contrary to conventional wisdom greater transfer dependence might be correlated with *lower* deficits. The effect of partisanship is unchanged even after controlling for transfer dependence.[12]

Table 5 simultaneously estimates the effect of the *level* of transfers (in per capita real terms) on state fiscal deficit and the determinants of transfer distribution across states, using three-stage least squares. There is an inherent simultaneity problem in identifying the effect of transfers on deficits, because both are presumably determined in equilibrium under general economic conditions. Unfortunately, the paper is not able to address this endogeneity in a satisfactory manner given lack of good instruments that only affect transfers and not state fiscal behavior directly. However, it attempts to do so by using lagged values of transfers as instruments. To the best of our knowledge, this is the first time a rigorous test has been undertaken of the conventional wisdom that the design of intergovernmental transfers in India creates perverse incentives for state governments to run higher deficits (Rao, 1998; Rao and Singh, 2000).

We distinguish between the specifications for the distribution of the two types of transfers—those determined by the independent agency and those determined under political discretion—based upon the results reported in Khemani (2005) of contrasting political effects across these two types. Lagged transfers are used in each specification for the determination of transfers, and omitted from the deficit equation, to identify the impact of transfers on deficits. Political effects on the distribution of transfers across states are identical to that reported in Khemani (2003)—while discretionary transfers are targeted to those affiliated states where the ruling party controls a smaller proportion of seats in the national legislature (to maximize the party's representation in the legislature), transfers determined by the independent agency is consistent with promoting equity across states by curbing political influence.

The level of transfers received by state governments has a negative effect on fiscal deficit—a one percent increase in either category of per capita transfers is associated with a fall in deficit of 0.4 percent, calculated at the sample average. Hence, although the effect is not elastic, it runs counter to the received wisdom that greater transfer dependence is associated with higher deficits. Greater transfer receipts in this case appears to be indicative of greater resources available to state governments, which lowers their need for deficit financing. There is no apparent evidence of perverse political incentives for fiscal profligacy as a result of greater transfer dependence.

4. Interpretation of results and implications for policy

The Indian evidence hence suggests that while delegation to the national political executive of oversight authority for sub-national debt can make a difference (which is why, perhaps, transfer dependence does not have a negative effect on deficits in India), national party political incentives can still lead to fiscal profligacy at the state level. Interpreting the evidence here in light of insights from the political science literature on electoral competition in India, suggests that these political incentives are likely to be arising from the pressure of multiple interest groups on public resources, as identified in the literature on the political economy of budget deficits.

There exists a large political science literature analyzing party competition in India from which we derive the following brief description.[13] A single political party dominated electoral competition in the early years of India's democracy, namely the Indian National Congress (hereafter referred to as the Congress), largely due to the historical legacy of being the leader of the independence movement against British colonial rule. However, in the late 1960s the Congress party began to face stiff challenges from rival political parties in state assembly elections, several of which were emerging regional parties with limited national standing. These regional parties began to replace the Congress as the governing party at the state level.

The Congress lost control of the national parliament for the first time in the national elections of 1977, when a new national-level opposition political party was forged through alliances between political leaders previously belonging to disparate political groups. However, it came back to power in an early election in 1980. It similarly lost control of the national parliament in the 1989 elections to a new political party created for the explicit purpose of organizing a unified opposition to the Congress, only to return quickly to power in 1991 with early elections. By the 1990s, seat control in the national parliament became increasingly fragmented across different political parties, including regional parties with their power bases at the state level. Since 1989, multi-party competition for the national parliament appears firmly established, with national parties like the Congress and BJP (Bharatiya Janata Party) leading coalition governments that depend upon the support of regional political parties.[14]

The emergence of regional parties in India can be attributed to the nature of electoral competition along the lines of caste, religion, and linguistic identities that vary systematically across states (Weiner and Field, 1974). Chhibber (1995) and Weiner and Field (1974) suggest that there are limited ideological differences between parties along the lines of economic policy, but rather, party identity is driven by social, ethnic, and regional differences.[15] Electoral competition between these parties has been characterized as revolving around access to the instruments of government and appropriation of public resources by different groups (Chhibber, 1995).

In addition to social identity based politics, specific electoral institutions in India emphasize the importance of geographically defined interest groups, which is a central feature of fiscal models with common-pool problems. India's first-past-the-post voting system is based on contests between individual candidates in single-member constituencies where the seat is won by the candidate that gets more votes than any other. This simple plurality electoral law in practice implies a tenuous link between the percentage of popular votes received by a party and the probability of winning the majority of seats in the legislature, because of fragmented electoral competition at the constituency level. In many electoral districts it is possible for a candidate to win with just about 20 percent of the popular vote (Butler, Lahiri, and Roy, 1995). Butler et al (1995) also indicate that once a party crosses a particular threshold in votes, around 30-35 percent, it can move to a landslide victory in seats by gaining just a few percentage points in popular support.

The spending instruments available to state governments have direct impact on people's lives, such as provision of education, health, water services, and construction of local roads. There are three large chunks that account for the bulk of central government spending—defense, debt-servicing, and various agricultural subsidies that are actually distributed through state governments (Varshney, 1995). Thus, the politically influential fiscal instruments available to the center, subsidies, depend upon the states' political machinery for distribution. If a party loses control of a state government it loses control over public instruments to buy political support through targeted provision of benefits. Hence, it is not surprising to note that if a party comes to power in a state (by winning a majority of seats in the state legislature), then in the next national elections that party also tends to win seats to the national legislature from that state.[16] Additional spending by state governments might then yield benefits in the form of additional seats for the political party in power in the state, in both state and national elections.

We have argued that the above evidence of impact of federal politics on state fiscal deficits should be interpreted as evidence of limited ability of the national political executive in enforcing sub-national fiscal discipline. However, as mentioned at the end of Section 2 the impact of co-partisanship on deficits could be because of the center opportunistically and deliberately distributing deficit financing across states to further the party's political objectives; or, because state party leaders have bargaining power within the party and hold the central party leadership hostage through their actions. We cannot distinguish empirically between these two interpretations.

Which of the two is appropriate is likely to depend upon the extent of control of national party leaders on state party leaders. There is quite a bit of political science literature on the bargaining power of state leaders of the Congress party, which is the party most likely to be driving the incidence of affiliation. In the late 1960s power within the Comgress party has been described as resting in the hands of powerful state leaders, commonly called the Syndicate (Frankel, 1978; Kochanek, 1968; Rudolph and Rudolph, 1987). From 1971-1977 and again from 1980-85, Prime Minister Indira Gandhi tried to bypass state leaders to forge direct ties with local elites that helped as power "brokers" during elections (Kochanek, 1976). After 1985, her son and then Prime Minister Rajiv Gandhi has been described as unable to control the various factions within the Congress party (Frankel, 1987; Manor, 1988; Weiner, 1987). This literature is therefore consistent with a story of bargaining by affiliated states for bail-outs from the center.

This received description of Indian politics thus suggests that interest group politics can be played out within political parties, making even single party dominant national governments unable to withstand electoral pressure for spending. The key, therefore, is to understand the nature of electoral competition, and whether the national party is primarily being held accountable for overall macroeconomic outcomes and national public goods, or for private benefits targeted to disperse interest groups. If the latter, then the issue for concern is not just fiscal decentralization to multiple sub-national spending authorities, but rather consolidated government resource allocation decisions.

In many developing countries political competition is typically described as “clientelistic”—the exchange of votes for targeted, private resource transfers—rather than on the basis of providing broad public goods. Such competition is likely to be appropriately represented in simple non-cooperative bargaining games between multiple players, and therefore likely to lead to Nash-style equilibria where the final outcome is sub-optimal from the perspective of each player. This suggests, therefore, a role for an independent agency, whose non-partisan identity is credible to all players, to impose constraints on the overall size of fiscal aggregates for consolidated government accounts. In fact, if an independent agency were only delegated authority over the determination of overall fiscal aggregates that are consistent with the national public good of fiscal sustainability, without any powers of interfering in decisions of resource distribution within the overall envelope, then theoretically it might play the role of enforcing a cooperative equilibrium where outcomes are more efficient, leaving bargaining over distribution in the political arena.

Delegation to an independent agency of consolidated government borrowing and debt regulation can therefore serve as a commitment device for all interest groups, within and across political parties, engaged in bargaining over national resources. Eichengreen, Hausmann, and Von Hagen (1999) have already initiated this idea by outlining a blueprint for delegation of decisions over consolidated government debt ceilings to an independent agency in the Latin American region. The Finance Commission in India has a track record of success in checking the impact of partisan influence on general-purpose revenue transfers to states, and is therefore a promising candidate for delegation of consolidated government debt oversight. Ironically, it might be important for the Finance Commission to relinquish its former authority over deciding inter-regional resource distribution to the national legislative assembly, so that the national assembly has more instruments at its disposal for political bargaining, while overall fiscal aggregates are credibly placed above the fray, and all parties have incentives to comply with its rulings.

Why delegation and not formal fiscal rules, targeting particular levels of debt and deficits? An increasing number of countries in both developed and developing regions, have adopted various forms of fiscal rules, mainly balanced budget requirements and debt limits, with the primary objective of conferring credibility on their fiscal policies. Hallerberg and von Hagen (1999) show that countries with majoritarian electoral systems (where national legislatures are more likely to be dominated by a single political party) have chosen to delegate power to the finance minister in the budget process, while countries with proportional electoral systems (where the national legislature is likely to be fragmented across political parties) have tried to adopt formal budget targets. The research literature evaluating the efficacy of these rules has by and large concluded that they can make a difference for fiscal performance (Poterba and von Hagen, 1999). Specifically, the evidence suggests that formal fiscal rules do impact short-run taxes and expenditures, and promote faster adjustment to fiscal shocks; however, they do not prevent extreme outcomes and the substitution of non-transparent debt for restricted debt instruments (von Hagen, 1991). It is generally agreed in this literature on fiscal institutions that rules, in order to be effective, have to be simple (Tanzi, 1993), leading to a trade-off between effectiveness and flexibility on one hand, and necessitating accompanying institutions of transparency, on the other hand, to prevent circumvention of the rules through creative accounting and counter-productive actions on the side. Thus, an independent fiscal agency is likely to serve a useful purpose even if to monitor and ensure transparent compliance with fiscal rules, or to determine contingency conditions under which rules should be made flexible.

If this seems rather obvious, then the question arises why delegation to an independent fiscal agency has not yet been seriously pursued in wider policy circles, or in the mainstream research literature, given that similar steps have been taken for monetary policy, through the creation of independent central banks, for the same objective of promoting macroeconomic stability? Wyplosz (2002) raises this question as well, and tentatively answers it as follows—since fiscal policy is a powerful tool for income redistribution, democratic rule implemented through political representatives has been viewed as the more appropriate or just form of decision-making. However, he argues, although democratic control might be viewed as essential for decision-making over the size of government, the distribution of spending, and the structure of taxation, it should not be considered crucial for fiscal aggregates such as debt and deficit, and once this distinction is understood by policy-makers they might be open to considering the role of independent fiscal agencies. In this spirit, Eichengreen et al (1999) describe the idea of an independent fiscal agency as the logical culmination of the approach of formal budgetary procedures and fiscal rules as institutional restraints on fiscal performance.

6. Conclusion

This paper has provided new empirical evidence on political incentives of national governments to impose fiscal discipline on sub-nationals. It has argued from this evidence that the national political party itself does not have strong incentives for fiscal discipline, and that hence, delegation to the national political executive of oversight authority of sub-national debt has had limited success. Instead, in light of the overall common-pool problem of consolidated government finances, the paper has suggested an innovative policy area that might be explored—delegation to an independent fiscal agency of oversight of consolidated government debt and borrowing.

Although such a policy recommendation is relevant for India, the country case considered here, because of the existence and demonstrated effectiveness of an independent fiscal agency, it is difficult to generalize to other countries because there is no systematic research on the political conditions under which such agencies can be created and sustained, and it is not clear that they can be created everywhere. Even within India it is difficult to address counterfactuals such as whether political authorities will agree to delegate powers over debt oversight to the independent agency, and whether the agency will continue to effectively curb national partisan influence even after this delegation. There is no specific experience from any country of independent agencies with oversight authority for consolidated government debt. Independent agencies do exist in other developing countries for determining inter-governmental resource transfers, the Commonwealth Grants Commission in Australia, the National Finance Council in Malaysia, are some other prominent examples, with other developing countries that are rapidly decentralizing beginning to experiment with the establishment of similar agencies, but there is no evidence on whether they are effective in curbing political influence.

The immediate purpose of this paper is to argue through new evidence on costly political bargaining and fiscal indiscipline, that the creation of independent fiscal agencies and delegation of debt oversight to them is a fruitful policy agenda to explore, much in the spirit of an earlier agenda pursuing independent central banks. This idea appears be springing independently in several minds—Eichengreen et al (1999) and Wyplosz (2000) have already been cited; Blinder (1997) has explored the role of independent agencies even more broadly, drawing from his experience of the functioning of the US Federal Reserve. Additional research on the political conditions under which effectively independent fiscal agencies can be created, and delegated sufficient authority would usefully serve this agenda.

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Table 1. Summary Statistics[a]

Variable	*No. of Obs.*	*Mean*	*Std. Dev.*
Real fiscal deficit[b]	360	193.41	118.62
Real state income	360	4803.73	1807.98
Total population (in thousands)	360	47396.79	28163.28
Political affiliation (=1 if center and state govt. belong to same political party)	360	0.62	0.49
Absolute number of seats allotted to a state in the national legislature	360	33.55	18.91
Proportion of seats in the national legislature (allotted to the state) controlled by state ruling party	360	0.62	0.31
Proportion of seats controlled by national ruling party	360	0.62	0.31
Affiliation * State ruling party seats	360	0.47	0.41
(1- Affiliation) * State ruling party seats	360	0.15	0.26
Vertical Fiscal Imbalance (Total grants/total revenues, in percentage)	360	37.22	13.93
Tax sharing and grants determined by the independent agency (Non-discretionary grants)	352	173.32	64.80
Grants determined by central political agencies (Discretionary grants)	352	105.98	64.45

a. Fiscal variables and state domestic product are in per capita 1992 Indian rupees
b. Fiscal Deficit = Total current expenditure + total capital expenditure – total revenue + (loans by state government – recovery of loans).

Table 2. Effect of partisanship on state fiscal deficit
(std. error in parenthesis)

Variable	(1) OLS (w/out fixed effects)	(2) OLS (w/fixed effects)	(3) OLS (w/ lagged fiscal deficit)	(4) GMM
Seats allotted to state in national legislature	-0.09 (2.23)			
Political affiliation (=1 if center and state govt. belong to same political party)	20.22** (10.09)	53.41** (27.50)	63.27*** (23.38)	62.93** (29.29)
Affiliation * State Ruling Party Seats		–69.67** (29.61)	–66.69*** (24.47)	–53.58** (22.48)
(1- Affiliation) * State Ruling Party Seats		–22.56 (24.80)	–3.23 (20.79)	8.85 (17.58)
Lagged fiscal deficit			0.43*** (0.08)	0.41*** (0.05)
Real state income per capita	0.02*** (0.004)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Total population	–0.001 (0.002)	–0.001 (0.001)	–0.001 (0.001)	–0.001 (0.001)
	N=360 R–sq=0.49	N=360 R–sq=0.65	N=360 R–sq=0.82	N=360

Notes: Dependent variable is real fiscal deficit per capita; *** Significant at 1%; ** Significant at 5%; * Significant at 10%; Columns (1), (2) and (3) report OLS regressions with panel corrected standard errors, for heteroskedasticity, autocorrelation, and contemporaneous correlation across panels; Year effects included, and state fixed effects in all but column (1); Column (4) reports the Arellano-Bond GMM estimates, one-step robust estimates

Table 3. Effect of partisanship on state fiscal deficit—controlling for other political determinants
(std. error in parenthesis)

Variable	(1)	(2)	(3)
Political affiliation (=1 if center and state govt. belong to same political party)	63.19** (30.87)	46.93** (23.70)	66.43** (31.52)
Affiliation * State ruling party seats	–57.67*** (21.52)	-37.95** (19.40)	–57.13** (24.01)
(1- Affiliation) * State ruling party seats	7.73 (18.24)	23.63 (16.99)	8.03 (17.03)
Affiliation* Yrs 1977-80 & 1990		90.35** (45.74)	
Affiliation* State ruling party seats* Yrs 1977-80 & 1990		-106.81*** (41.98)	
(1- Affiliation)*State ruling party seats* Yrs 1977-80 & 1990		-39.12 (37.91)	
Percentage of votes received by Congress party in state elections	–2.47* (1.49)		
Congress votes^2	0.04* (0.02)		
Coalition government (=1 if state executive consists of a coalition govt.)			–3.87 (7.52)
State election year (=1 in the year preceding a state election)			–11.62** (5.59)
Lagged fiscal deficit	0.40*** (0.05)	0.40*** (0.04)	0.40*** (0.05)
Real state income per capita	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Total population	–0.001 (0.001)	–0.001 (0.001)	–0.001 (0.001)
	N=360	N=360	N=360

Notes: Dependent variable is real fiscal deficit per capita; *** Significant at 1%; ** Significant at 5%; * Significant at 10%; Arellano-Bond GMM estimates, one-step robust estimates

Table 4. Effect of intergovernmental grants on state fiscal deficit
(std. error in parenthesis)

Variable	(1) OLS (w/ state fixed effects)	(2) OLS (w/out state fixed effects)	(2) GMM (grants/rev. differenced)	(4) GMM (grants/rev. in levels)
Vertical fiscal imbalance (grants/revenues)	-0.07 (1.11)	-0.21 (0.34)	-0.46 (1.41)	-0.11* (0.06)
Political affiliation (=1 if center and state govt. belong to same political party)	63.11*** (23.35)	56.22*** (21.90)	61.31** (27.21)	60.68** (28.99)
Affiliation * State ruling party seats	–66.42*** (24.57)	–55.39*** (22.59)	–52.50** (22.22)	–55.40** (23.01)
(1- Affiliation) * State ruling party seats	–3.18 (20.80)	–6.63 (19.65)	7.73 (17.02)	10.48 (17.58)
Lagged fiscal deficit	0.43*** (0.08)	0.58*** (0.08)	0.40*** (0.05)	0.38*** (0.05)
Real state income per capita	0.01 (0.01)	0.01 (0.004)	0.01 (0.01)	-0.01 (0.01)
Total population	–0.001 (0.001)	–0.0002** (0.0001)	–0.001 (0.001)	–0.001 (0.001)
	N=360 R–sq=0.82	N=360 R–sq=0.81	N=360	N=360

Notes: Dependent variable is real fiscal deficit per capita; *** Significant at 1%; ** Significant at 5%; * Significant at 10%; Columns (1) and (2) report OLS regressions with panel corrected standard errors, for heteroskedasticity, autocorrelation, and contemporaneous correlation across panels; year fixed effects included; Columns (3) and (4) report the Arellano-Bond GMM estimates, one-step robust estimates; Column (3) includes grants/revenues in first difference, while column (4) includes grants/revenues in levels

Table 5. Effect of intergovernmental grants on state fiscal deficit—3 stage least squares
(std. error in parenthesis)

Variable	(1) Fiscal Deficit	(2) Non-discretionary Grants	(3) Discretionary Grants
Non-discretionary grants	-0.44** (0.21)		
Discretionary grants	-0.76*** (0.23)		
Non-discretionary grants (lag 1)		0.65*** (0.04)	
Discretionary grants (lag 1)			0.49*** (0.05)
Political affiliation (=1 if center and state govt. belong to same political party)	84.22*** (29.51)	-28.89*** (7.37)	27.16** (11.35)
Affiliation * State ruling party seats	–93.23*** (23.06)	8.34 (7.66)	–15.75* (9.79)
(1- Affiliation) * State ruling party seats	–4.76 (26.36)	-8.99 (8.88)	12.11 (11.44)
Real state income per capita	-0.003 (0.01)	0.002 (0.002)	-0.01* (0.003)
Total population	–0.003*** (0.001)	-0.0001 (0.0003)	–0.0004 (0.0004)
	N=335 "R–sq"=0.75	N=335 "R–sq"=0.89	N=335 "R–sq"=0.83

Notes: *** Significant at 1%; ** Significant at 5%; * Significant at 10%; 3-stage least squares estimates; State fixed effects and year effects included

[1] An enterprise or any organization was described by Kornai (1980, 1986) as having a “soft budget constraint” when it expects to be bailed-out by external sources in case of financial trouble. The national

[2] Only two other papers, to the best of my knowledge, have floated the idea of delegation of fiscal aggregates such as deficits and debt to an independent fiscal agency—Eichengreen, Hausman, and von Hagen (1999) and Wyplosz (2002)—but neither has provided empirical evidence on how such delegation might be effected and whether it would make a difference.

[3] That is, a party does not have win a critical number of votes in each state in order to win the districts allotted to a state in the national legislature. Districts are won on an individual basis.

[4] In the event of a single party not winning more than 50 percent of Lok Sabha seats, a ruling coalition is formed amongst different parties on the basis of a vote of confidence in parliament.

[5] Detailed analysis of the history of fiscal federalism and inter-government transfers in India, with exhaustive references, can be found in Rao and Chelliah (1991) and Rao and Singh (2000). The main reason behind the imbalanced assignment of revenue authority and expenditure responsibility was to provide the central authorities with a fiscal instrument to promote unity amongst the disparate nationalities residing within one country. Overall fiscal control at the center was

expected to reign-in regional secessionist tendencies and promote regional equality.

[6] Many scholars of Indian fiscal federalism have described transfers made by the Planning Commission as unconstitutional, because the Finance Commission was envisioned in the Constitution as the only agency with decision-authority over regular, general-purpose transfers to the states.

[7] We scrutinized the membership of individual Finance Commissions from 1951 to the present and found that every one of them included one Justice (either sitting on a State High Court or the Supreme Court of India, or retired from one) and one technical expert with no political experience. However the remaining members tended to have had a political career either in the national or state legislatures, or to have held senior positions in central or state administrations. In addition, there have been a few instances in which an individual member has resigned in the middle of the tenure of the Commission to accept a post in a state or central government. These instances might lead us to suspect the actual independence of the Commission from the political process, but there does not appear to be a systematic bias towards either the central or individual state governments from the identity of the members.

[8] These 15 states of India account for 95 percent of the total population. India consists of 28 states at present of which 3 were newly created in 2000, 2 were

recently converted to statehood from Union Territories, and 8 are designated "special" states, largely because of separatist tensions, and provided extraordinary central transfers. Of the 15 states under study, 11 have existed since the organization of the federation in 1956. An additional two, were created for linguistic reasons out of a single large state—Maharashtra and Gujarat—in 1960; and two in 1966—Pubjab and Haryana—also for ethnic and linguistic reasons. Hence, in order to avoid issues of endogenous state boundaries, and of special transfers to some smaller states, we focus only on the 15 major states that have existed from the early days of the federation. These 15 states are: Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal.

[9] Affiliation with the state government is a non-linear way of measuring representation of the party in the *state* legislature. We did estimate the more general model of including a party's representation in both the state and national legislatures, and found that once the affiliation indicator was included, other measures of state legislature representation had no separate effect.

[10] None of the main results are affected by including or excluding the control variables, expressing deficit as a percentage of state domestic product, or

dropping individual states one at a time. The Arellano-Bond one-step model performs well. We are able to reject the presence of second order autocorrelation. The sign of the coefficient on the affiliation and seats interaction is identical when the absolute number of national legislators belonging to the state ruling party is used instead of as a proportion of the total seats allotted to a state.

[11] There is an emerging literature on political budget cycles which finds evidence of expansionary fiscal policies in election years in developing countries. However, Khemani (2004) finds no effect of such cycles in overall spending and deficits in the Indian states—only the composition of spending and revenues changes, possibly to target special interest groups for campaign support.

[12] There is no effect of transfer dependence on fiscal deficits even when we distinguish between dependence on those transfers that are determined at the discretion of the central political executive and on those determined by the independent agency.These results are not reported here in the interests of brevity.

[13] Some of the references providing good overviews and recent developments are Brass (1990), Manor (1994), and Yadav (1996).

[14] We tried several specifications to test whether results changed significantly after 1989, when multi-party competition at the national level became more vigorous, and find no evidence of this—that is, the effect of partisanship is the same before and after 1989.

[15] There are two communist parties in India that have dominated state elections in two states, Kerala and West Bengal, and have a distinguishable economic policy platform. But the platforms of these parties are different along specific dimensions such as labor regulations and land redistribution, rather than in broad terms such as size of government, and are therefore unlike the left-right distinctions in OECD countries.

[16] An example from the state of Andhra Pradesh is illustrative in this context. The Congress party lost control of the state government in Andhra Pradesh in the 1983 state elections to a new regional party, the Telegu Desam. In the next national elections in 1984, even though it won an overwhelming majority of seats in the national legislature, the Congress lost most seats from Andhra Pradesh to the Telegu Desam, despite the latter’s novice status in national politics.