CSH Occasional Paper

Fiscal Federalism, State Lobbying and Discretionary Finance in India

Rongili BISWAS
Sugata MARJIT
Velayoudom MARIMOUTOU

Publication of the
French Research Institutes in India

No. 23
2008

Fiscal Federalism, State Lobbying and Discretionary Finance in India

by
Rongili BISWAS
Sugata MARJIT
Velayoudom MARIMOUTOU

December 2008

CSH OCCASIONAL PAPER N° 23 / 2008

Centre de Sciences Humaines (Centre for Social Sciences and Humanities): Created in 1990, the CSH is part of the network of research centres of the French Ministry of Foreign Affairs. The Centre's research work is primarily oriented towards the study of issues concerning the contemporary dynamics of development in India and South Asia. The activities of the Centre are focused on four main areas, namely: Economic transition and sustainable development; Political dynamics and social transformations; Regional dynamics in South Asia and international relations; and Urban dynamics.

Centre de Sciences Humaines, 2 Aurangzeb Road, New Delhi 110011, India
Tel: (91 11) 3041 0070
Fax. (91 11) 3041 00 79
Email : infos@csh-delhi.com
Website://www.csh-delhi.com

Institut Français de Pondichéry (French Institute of Pondicherry): Created in 1955 the IFP is a multi-disciplinary research and advanced educational institute. Major research works are focusing on Sanskrit and Tamil languages and literatures (in close collaboration with the *Ecole Française d'Extrême-Orient*); Ecosystems, biodiversity and sustainability; Dynamics of population and socio-economic development.

Institut Français de Pondichéry
11 Saint Louis Street, PB 33, Pondicherry 605 001
Tel: (91) 413 2334168
Fax: (91) 413 2339534
http://www.ifpindia.org

Published by Raman Naahar, Rajdhani Art Press, Tel. : 98102 45301

ISSN- 0972 - 3579

ABOUT THE AUTHORS

Rongili Biswas (rongili@yahoo.co.in)is currently Post-Doctoral Fellow, Department of Public Policy and Collective Choice (POLIS), University of Eastern Piedmont, Italy. She was previously Research Fellow in the Economics division of the *Centre de Sciences Humaines*, New Delhi. She earlier worked as Senior Lecturer in Economics at Bethune College, Kolkata, and Lecturer in Economics at Bidhannagar College, Kolkata. Awarded the HERMES post-doctoral fellowship, she was affiliated to the *Université de Caen*, France, in 2005-2006. She was also awarded the Indian Council of Social Science Research (ICSSR) teaching fellowship and was affiliated to the Centre for Studies in Social Sciences, Kolkata, in 2001-2002. In 2003, she obtained her PhD from Jadavpur University, Kolkata. Specializing in both theoretical and applied public, political and development economics, she has published in several national and international journals including the *International Review of Economics and Finance* and the *Economic and Political Weekly*.

Sugata Marjit (sugata@cssscal.org) is currently Director and Reserve Bank of India Professor of Industrial Economics, Centre for Studies in Social Sciences, Kolkata. He obtained his PhD in Economics from the University of Rochester, USA, in 1985. His interest areas include international economics, economic development, economics of corruption and governance, banking and finance, political economy, West Bengal and Indian economy. He has held many prestigious positions including the Sukhamoy Chakravorty Professorship of Economics, Jawaharlal Nehru University, New Delhi; Professorship of Economics, Indian Statistical Institute, Kolkata; and many visiting positions in Cornell University, State University of New York, Chinese University, City University in Hong Kong, Rochester University, University of Bonn, etc. He has published around 100 articles in prestigious edited volumes and national and international journals and has been editor of several contributory volumes.

Velayoudom Marimoutou (Velayoudom.Marimoutou@cnrs-dir.fr) is currently Professor of Economics at the University of Mediterranean, Marseille, France, and Deputy Director (Social Sciences and Humanities) at the *Centre National de Recherche Scientifique* (CNRS), Paris. He obtained a PhD from the University of Mediterranean in 1986. His interest areas include theoretical econometrics, time series data, financial econometrics, regional dynamics, international macroeconomics and finance. He has held many posts, including those of Associate Professor and later Professor at the University of Bordeaux 1; joint in-charge of DESS Stochastic Modelling and Operational Research, University of Bordeaux 1; founder and head of the Bachelors and Masters programme in Econometrics as well as Dean of the Faculty of Economic Sciences and Management, University of Montesquieu Bordeaux 4; Director, GREQAM UMR 6579 CNRS; and visiting Professor at the Universities of Geneva, Lausanne, Casablanca and Morocco. He has authored several publications, including *Econometric Modeling and Inference* (in collaboration with J.P. Florens and Anne Peguin-Feissolle).

CONTENTS

INTRODUCTION*

India can be described as a quasi-federation, the nature of its polity compelling the Union to be formed as a federation of states. As in any federation, intergovernmental transfer in this country has a variety of objectives. As put quite succinctly by Rao and Singh (2005), a number of factors should be taken into account in designing and implementing the transfer system to fulfil the overall objectives of fiscal and political federalism. Some of the obvious objectives are, for instance, making a transfer system work in an equitable manner, making it mostly formula-based and non-discretionary, making it a good combination of general purpose and specific purpose transfers etc. Also, the mechanism for designing and implementing the transfer system should be clear, transparent and capable of adjusting to changing economic situations.

There has been a long-standing debate in India about Centre-state transfer of funds and many economists working in the field of Indian public finance have criticized the unitary tendencies that prevail despite the country's federal economic structure. We present some of this literature in the next section. Concerning political science literature in India, other than major debates over critical theoretical stances and political critique, there has been significant work on voting behaviour and electoral outcomes. Quantitative political-econometric analysis has seldom been tried out as a methodological possibility. But political scientists have also long critiqued, or at least brought to notice, the role politics has played in deciding central fund disbursements in India. Our paper is one of the first attempts to construct political influence variables and explain discrepancies in fund disbursement through proper econometric specification in the Indian context. Considerable econometric modifications have been made on a first version of this paper written in 2000. We think the value of these kinds of exercises lies in staying within the genre

* The authors are particularly thankful to the two anonymous referees for their constructive comments and suggestions. We are, of course, responsible for any errors that remain.

of new political economics, where the classical assumption of a social planner's maximizing a welfare function is replaced by the more realistic assumption that policy is determined by a political mechanism and reflects the interests of powerful groups in society. This helps build a case for changing policies or making them more equitable.

The paper proceeds as follows: Section 2 focuses on the fiscal-federal relationship between the Centre and the constituent states in India. Offering a brief historical overview, it provides an account of the literature, if scanty, available in the field, from the perspective of both economists and political scientists. Section 3 discusses the making of several political indices by elaborating the methodology and data source. Section 4 relates the index to the observed pattern of discretionary fiscal disbursements by forming regression equations and citing the results thereafter. Section 5 interprets the results and section 6 concludes the paper.

Rongili BISWAS, Sugata MARJIT, Velayoudom MARIMOUTOU

FISCAL FEDERAL RELATIONS IN INDIA

Background

Despite India's essential feature of being a non-unitary state, the Constitution grants considerable powers to the Centre. It is commonly held that constitutional provisions tilt the balance of power in favour of the Union Government while also trying to strike a balance by means of establishing a more or less federal financial structure. However, some critics in public finance are of the opinion that, in the attempt to ensure control over the states in the political as well as financial arena, the Union Government has on several occasions gone beyond the constitutional framework in trying to legitimize a centralization process by means of certain policies and/or institutions. The setting up of the Planning Commission itself has been under attack from several quarters because of its 'extra-constitutional' nature and objectives and functions of a unitary kind[1]. Some critics (e.g., Thimmaiah, 1997) have gone further to show that the Union Government has not been content even with the instrumentality of a Planning Commission – set over and above the constitutional body of the Finance Commission – as an alternative mechanism to monitor the financial relationship between the Centre and the states.

Building on these categories, we dwell extensively on the resource transfer mechanism from the Centre to the states. Statutory flow is pre-determined and largely formulaic in relation to distribution between states, accepted as mandated by Finance Commissions and implemented with no modifications. It has two components: shares of central tax revenues, and grants, both as prescribed by Finance Commissions. Shared taxes are the most formulaic, although their configuration has changed over time from shares of individual taxes to a share of overall collections. Grants prescribed

[1] See Dandekar (1987), Thimmaiah (1997), Paranjape (1988) etc.

in absolutes by Finance Commissions are as statutorily legitimate as shared taxes, but have carried an adverse incentive for fiscal discipline. There is also a clear discretionary element in their distribution between states but, because they are prescribed by a group of technical experts, they could in principle be seen as determined outside a bargaining context. Once prescribed and accepted in Parliament, grants are as unalterable as tax shares, and because prescribed in absolutes, actually even more predictable. Shared taxes have accounted for most of the statutory flow, which rose substantially in 1970 to half the total flow and remained there until 2005.

Right from the start, the statutory flow was supplemented by an assortment of non-statutory flows for developmental assistance called Plan flows. Though non-statutory, these were permissible under Article 282 of the Constitution. There were two components of Plan flows: central assistance for state Plans and central Plan expenditure. The statutory flow is accordingly termed a non-Plan flow, although to further complicate matters, there are some non-statutory non-Plan (loan) flows as well. The Union Government allocates a portion of its total revenue, including tax, non-tax and loan receipts for transfer to state governments under Article 282 in the form of central assistance for state Plans. The Planning Commission distributes this on the basis of what is known as the Modified Gadgil Formula. Under this scheme, 30 per cent of total central assistance available for state Plans is set apart for distribution among 'special category states' – namely, Jammu and Kashmir, Himachal Pradesh, Sikkim and the seven Northeastern states. The remaining is distributed on the basis of population, per capita income, special needs and good fiscal performance. For general category states, 70 per cent is passed on in the form of central loans and 30 per cent as grants. In the case of special category states, 90 per cent is given as grants and another 10 per cent in loans.[2] The sequence of Plan periods has continued with some disruptions into the post-reform period; the Eleventh Plan currently covers the period 2007-2012. In practice, the non-statutory flow for the period 1951-1971 exceeded the statutory flow which was essentially half the total for 1971-2001, never amounting to more than 60 per cent (except after 2005) (Rajaraman, 2007).

Thimmaiah's contention here is that, in spite of such arrangements, the Union Government went beyond both the Finance and Planning Commissions by providing direct financial assistance through individual union ministries. He argues that such direct discretionary transfer is to be used sparingly and only under exceptional circumstances under Article 282. Nevertheless, this form of political and bureaucratic transfer at the discretion of the union ministries accounted for more than 44 per cent of total financial transfers in the First Plan. Despite the figure coming down to 23.54 per cent in

[2] "The Gadgil formula itself applied to the inter-state distribution of total Plan assistance. The loan and grant components are commonly ascribed to the formula because they were introduced simultaneously with it, but were really arrived at by the National Development Council (Vithal and Sastry, 2002: 44), a body which meets episodically with full state representation. The formula is actually applied to the residual after deducting a component awarded to what are called special category (mostly northeastern) states. This subset of eleven states characterized broadly by hilly terrain, has a special status for fiscal purposes. It intersects with the set carrying special constitutional provisions under Article 371 of the Constitution making for an asymmetric federal structure (Arora, 1995), but curiously does not itself carry a constitutional underpinning. Although the loan share (ten per cent) is different for the special category, it is formulaic again within the special category. The Gadgil formula has undergone some modifications over the years, reported in detail in Vithal and Sastry, 2002: 152. The weights used after 1991 are 60 per cent for population, 25 per cent inversely related to per capita State Domestic Product, 7.5 per cent for special problems, and 7.5 per cent for performance in 'tax effort, fiscal management, population control, female literacy, on-time completion of externally aided projects and land reforms'. The population weight is by the 1971 population so as not to de-incentivize population control; and the SDP related weight is further split into 20 per cent, which goes only to states below the average SDP and is calculated by the deviation from the mean, and 5 per cent which goes to all states and is calculated by distance from the highest per capita level (with a provision for the state at the top). The remaining 15 per cent is based on assessments which introduce a discretionary margin into the formula." See Rajaraman (2007).

the Eighth Plan, in terms of number and amount, the growth of such transfers has been substantial.[3]

Thimmaiah defines discretionary transfer as grants and loans made under Article 282 and Article 293 for centrally sponsored and central sector schemes[4] (which are basically under the purview of the Planning Commission but beyond the scope of the application of the Gadgil formula) plus all forms of ad-hoc assistance provided by the Centre to the states in the form of grants and loans. The ad-hoc allocation includes 'relief for natural calamities' and 'others' in the grants part and 'share of small savings', 'relief for natural calamities', 'ways and means advance', 'loans for special schemes' and 'others' in the loan part. "Most of the discretionary loans and grants are specifically related to various programmes of non-Plan expenditure. In several cases extensive conditions are also attached to the manner of utilization of these transfers. This provides an explanation why these transfers are not covered by the recommendations of the Finance Commission, which deals with general non-Plan transfers. The broad purpose of all these transfers is the same, namely, to assist the states in specific directions outside the Plans. This distinguishes them from all other categories of transfers as the latter are either not specific or…not meant for non-Plan purposes. Of course, the reasons why some of these transfers are kept outside the Plan vary"[5]. Thimmaiah's prime

---

[3] The Finance Commission has laid down certain rules (whose recommendation mostly comes from the Commission itself) of fund disbursement under Article 275. Its tax shares and grants-in-aid transfers follow these rules and no flexibility is allowed in that respect. The rules themselves are subject to change according to the deliberations of successive Finance Commissions. Although critics have over the years highlighted the shortcomings of such policy formulations and many recommendations as well as various aspects of their implementation have been criticized, they have never been questioned in terms of discrimination against a group of states in a systematic manner. As far as Planning Commission transfers are concerned, there is a systematic part, calculated on the basis of the Gadgil formula (or its modified version, as has been elaborated earlier, in the form of loans and grants).

[4] There are sometimes other categories or categories with changed names like central Plan schemes and special Plan schemes. All these are not subject to the Gadgil Formula. We consider them as discretionary transfer.

[5] See Grewal (1975).

contention here is that discretion has become an expression of the Central Government's sense of superiority, which is to a large extent symptomatic of the centralization process going on in the financial as well as the political arena.

Since the central sector and centrally sponsored schemes constitute the bulk of discretionary transfer, they require examining in some detail.

Rao and Singh (2005) assert that "assistance given to states via central sector and centrally sponsored schemes, constituting about 20% of total transfers, is the most controversial component of total transfers…(These) are discretionary. The central government ministries initiate a number of national programmes either by themselves or at the request of the relevant ministries at the state level. The central sector schemes are assisted entirely by the central government; the states merely execute these programmes. The centrally sponsored schemes, on the other hand, are shared cost programmes and central assistance is given by the way of grants or loans decided for each programme. The rationale for introducing these programmes is ostensibly to finance activities which have a high degree of interstate spill-overs or are in the nature of merit goods (poverty alleviation and family planning).

"The central sector and centrally sponsored schemes have attracted the sharpest criticism because of (the) arbitrariness and discretion implicit in them. Although major programmes on family planning and rural development are well designed, and the transfers are given according to the formula devised by the administering ministries, bureaucratic and political discretion plays an important role in introducing and designing most of the programmes. Most schemes are designed at the central level, applied uniformly to all the states without taking account of their institutional realities. Most schemes require that new employees be created for implementing the schemes and this leaves the states with a new burden. There are also instances where the prime minister announces the programmes in public meetings, leaving the Planning Commission and the relevant ministries to work out details. When even a few such programmes are determined in an arbitrary and non-transparent manner, some of the well-formulated programmes under central sector and centrally sponsored schemes also become subject to serious doubts about their objectivity and transparency.

“These programmes have provided the central government an instrument to interfere with the states’ allocations. Until 1969, when the volume and pattern of assistance to state schemes were decided for each project, the central government did not find the need for these transfers. But once plan assistance was given according to the Gadgil formula, the central government took recourse to these specific purpose transfers and expanded them significantly.

“Thus these schemes have grown in both volume and number over the years. In spite of the states’ objection to the proliferation of such schemes and the decision of the NDC (National Development Council) in 1970 to roll the assistance to one-sixth of the central assistance for state plans, the volume of transfers amounts to about 40%. Politicization of the schemes is illustrated by the fact that there are over 225 such schemes and despite several attempts by the Planning Commission to consolidate them, it has achieved little success. Besides the discretion and arbitrariness implicit in these transfers, conditionalities imposed by the Centre including those on the staffing pattern tend to distort the states’ own priorities and programmes. While in any federal system and more so in India, there is certainly a case for specific-purpose transfers, it is important to ensure that these are well designed to ensure minimum standards of public services. Choosing the programmes on political considerations and spreading the resources thinly across multiple schemes without a proper monitoring mechanism may serve the political objective of dispensing political patronage to groups and parties, but does not help to fulfil the economic objectives of such transfers. Furthermore, political and administrative discretion may be necessary…in any system, but it is important that these are transparent and based on consensus.”

A Brief Historical Overview

In 1970, central assistance for state Plans was subordinated to a formula. The remainder was that portion of the central Plan expenditure that is routed through state exchequers and thus explicitly at the discretion of the Centre. In effect, there developed after 1970 two parallel formulaic components to central flows to states, one statutory, one not, yielding a sharp rise in the aggregate formulaic share to 95 per cent, and a corresponding reduction in the bargaining margin to 5 per cent. In itself, this was a major improvement. Loans added to a steady increase in state indebtedness to the Centre. Interest rates on these loans were set by the Centre and, in this manner, states lost control of a substantial portion of their current expenditure (Rajaraman, 2007). Perhaps in response to the debt build-up, central assistance to state Plans began to include components not subordinated to the basic formula. The advantage of grant receipts was traded off against the loss of formulaic distribution between states.

Thus, although the total of Finance Commission and state Plan assistance apparently stayed within the 85-90 per cent range after 1970, the formulaic share began to decline. The non-formulaic share began widening again to reach 30 per cent by 2006-2007. The drivers of the year-to-year variations in the non-formulaic share are investigated further in this section. Although the formulaic component in central assistance for state Plans as a phenomenon is well-known, there was complete absence of any formal accounting provision for segregating it from the non-formulaic component (Rajaraman, 2007). Our exercise below is one attempt to account for non-formulaic transfer in the form of the so-called discretionary transfer.

Existing Literature

Before embarking on our task, we focus on the views of some other eminent economists working in the field of Indian public finance. As Dandekar (1987) notes, in its Seventh Schedule, the Constitution lays down in great detail in three lists – namely, the

Union List, the State List and the Concurrent List – norms for the distribution of legislative powers between the Union and the states. Moreover, it recognizes that the division of legislative powers between the state and the Union must be supported by a division of financial powers. It thus demarcates the spheres of taxation into two lists, a Union List and a State List, to be exploited independently and exclusively by the Union and the states. The scope of legislative power in the State List is impressive: agriculture, irrigation, labour, trade and commerce, production, distribution and supply of goods, regulation of mines and mineral development, education and public health. But in almost each case, there are provisos and exceptions. For instance, industries declared by Parliament by law to be necessary for the purpose of defence or for conduct of war or industries, the control of which is declared to be expedient in the public interest, are in the Union List. This also applies to the regulation of mines and mineral development. Besides, Article 249 empowers Parliament to make laws with respect to any matter in the State List, if the council of states declares by a resolution supported by at least two-thirds of the members present and voting that this is necessary or expedient in the national interest. Thus, in spite of its written character, the Constitution allows for a great deal of flexibility with regard to the division of powers between the Union and the states, with a bias generally in favour of the former, enabling it to expand and extend its authority as and when necessary. However, anticipating that the revenues of the states from taxes in the State List could fall short of the states' expenditure on the functions assigned to them, the Constitution provides a comprehensive arrangement for revenue-sharing between the Union and the states from some taxes in the Union List. For this purpose, it requires that an independent Finance Commission be appointed at the end of every fifth year or earlier if the President considers it necessary. The recommendations of the Commission are generally honoured. The Finance Commission has, therefore, been a constitutionally deployed device for periodically deciding how finances raised by the Union Government are to be distributed among the states. Since revenues collected by the Union Government are normally expected to exceed the amount required for it to carry out its own functions, state governments are to be assured their share in such revenues on the basis of the Finance Commission's recommendations. These arrangements have so far worked well and the federal intentions of the Constitution have been fulfilled reasonably satisfactorily.[6]

Nonetheless, as we have already mentioned, critics are particularly vociferous about the formation of the Planning Commission. The Constitution did not anticipate that the country would adopt the strategy of planned development and hence did not provide for the appointment of a Planning Commission with well-defined powers and functions. The Planning Commissions that were appointed subsequently are neither statutory bodies nor subject to any constitutional limits to their powers. No information is available on why it was decided that the Planning Commission should be constituted merely through an executive order of the Government of India (GoI) instead of being given a statutory basis. What is remarkable is that, even though it has played a very important role in the economy of the country as a whole and its activities have encompassed both the Union and the states, the Planning Commission is fully subordinate to the Union Government and therefore subject to its wishes in both composition and working. With the ruling Congress securing a majority not only in Parliament but also in a number of states in 1970-1971, a centralizing tendency began to assert itself through the working of the Planning Commission. In the interregnum of Janata rule between 1977 and 1980, the Planning Commission again made efforts to promote decentralization. But the centralizing tendency reasserted itself in 1980 and has prevailed for a considerable length of time. There has also been a more pronounced tendency to appoint party political personalities as the effective heads of the Planning Commission, thus diluting the impact of keeping non-political experts in the same positions. Though the Gadgil formula (modified) – based on which central Plan assistance to states was to be allocated – continues to

[6] See Paranjape (1988). Many scholars still advance some criticism against Finance Commission transfers. See Rajaraman (2007).

hold sway, there has been a marked shift towards ‘centrally sponsored schemes’. At the same time, ‘discretionary assistance’ is increasingly becoming important because policies related to its distribution may be influenced by political favouritism.[7] In this context, Dandekar (2000) suggests that, for the states to agree to specific grants for specific items and the concomitant central control, what is needed is a body entrusted with the task of transfer of resources from the Centre to the states, which is under the control of the Inter-State Council envisaged in Article 273 of the Constitution. It has to be ensured that this body remains under the control of the states rather than of the Union Government. Appointment of its members should be approved by the Council and, in all matters relating to Centre-state financial and economic relations, the President should be guided by the Council and not by the central cabinet. On the other hand, it has also been argued that the creation of a new body should be avoided. The existence of several agencies, as at present, prevents the adoption of an integrated approach to the totality of resources and needs of the states and the Centre.

Rao and Singh (1998) show that the proportion of transfers recommended by the Finance Commission in total current transfers declined from 65 per cent during the Fourth Plan to less than 60 per cent during the Eighth Plan. On the whole, they note that formula-based transfers from the Finance and Planning Commissions have not only fluctuated from one Plan period to another but have also tended to increase discretion on the part of the Central Government. These transfers claimed about 85 per cent of total transfers in the Fifth Plan period and, during the Seventh Plan period, the share was at 78 per cent. Of the discretionary transfers, specific purpose transfers for central-sector and centrally sponsored schemes constitute the bulk. The share of these transfers increased steadily, from less than 12 per cent in the Fourth and Fifth Plan periods, to about 20 per cent in 1994-1995. Central sector schemes are assisted by way of central grants and the states merely function

[7] Dandekar (1987) and Paranjape (1988)

as agents executing these programmes. Centrally sponsored schemes are essentially “cost sharing programmes”, with the share of central assistance given as grants or loans determined case by case. Most of these schemes require matching contributions from the states. A number of times, bureaucratic and political discretion have played an important role in determining the amount of transfers and the pattern of their distribution. As cited earlier, there have been instances of prime ministerial announcements of programmes whose details of implementation have been left to the Planning Commission and relevant ministries. The number of such schemes has grown over the years, despite the unhappiness of the states and the decision of the NDC[8] “to roll the assistance to one-sixth of the central assistance for state plans”. Thus, the authors conclude, there is clear evidence of an increase in the discretionary element in transfers to the states, which is one of the most significant political economy features of the inter-governmental transfer system in India. They also express serious concern regarding the increased dominance of the Planning Commission in allocative decisions, and its empowerment to dispense assistance to the states to finance their developmental activities, substantially curtailing the role of the Finance Commission in making inter-governmental transfers.

In another study by Kletzer and Singh (1996), the authors argue that studies of the economics of fiscal federalism in India have, by and large, tended to concentrate on problems of allocative efficiency and inter-jurisdictional transfers without modelling how politics and economics interact in the institutional setting of Indian federalism. Hence, the goal of their study is to initiate such an investigation by developing a political economy model of decentralized fiscal policy-making inspired by the Indian case. The model in their paper proposes a framework for analyzing how political forces influence

[8] Formed in 1952, the NDC is composed of the Prime Minister, chief ministers of states and members of the Planning Commission. It was formed to give national backing and authority to the planning process. “...Unfortunately, for the past several years it has ceased to be the embodiment of national consensus of development planning. The NDC sessions are called fitfully and after prolonged intervals to suit personal-political convenience of central leaders, are treated as rituals for purposes of pontification and one-sided publicity”. See Misquitta (1991).

the provision of public goods by different levels of government and the allocation of tax revenues across jurisdictions under different institutional structures. Inter-governmental fiscal relations are discussed using a simple model in which public goods allocation at the federal and the state level is determined by majority voting. In the paper, they show that the need for national policy-makers to achieve a parliamentary majority leads to the result that a subset of states is favoured in the federal allocation of public resources. In this system, discretionary policy-making by national fiscal authorities chosen indirectly by a simple majority can thwart the social goals of fairness or equity in the distribution of public expenditures and tax burdens across regions and communities. In this context, the empirical counterpart provided by the writers in the context of India is particularly noteworthy. They say that when the federal government has some discretion over inter-governmental transfers between itself and the states or across states, state fiscal authorities have incentives to try to influence the allocation of grants to favour their constituents. For example, the federal government might use matching grants to provide incentives to sub-national levels to provide specific public goods or transfers. If the objectives or the amounts of matching grants can be chosen by the national government, then the state or local authorities will seek to have the formulae changed to the benefit of their jurisdiction. While the motives can be purely redistributive, these activities distort the allocation of resources so that efficiency and other social welfare objectives are sacrificed. As concerns the Indian experience, the evidence suggests that the equity objective has not been achieved, even partially, through central government transfers to the states. In fact, some analysis suggests that the overall effect of central transfers has been regressive. The writers also allege that discretionary transfers appear to have grown as a proportion of revenue-sharing with the states in recent years. These discretionary transfers tend to favour states with higher per capita incomes. This is particularly true for transfers from the federal government allocated according to matching formulae. The use of matching favours richer states to the extent that they can more easily come up with their share, and is one contributing factor in the growth of fiscal disparities among states in India. A final aspect of this issue is that state deficits have grown and loans to states by the Centre have grown correspondingly: this is potentially a conversion of rule-based finance of the states' expenditure to discretion-based finance, since loans are based on central government discretion, which is swayed by political considerations.

Political scientists have also long reflected on this issue. According to Chatterjee (1997), for instance, the whole process of continuous bargaining between the Centre and the states over distribution of revenues takes the form of an orderly and rational transaction via such statutory bodies as the Finance Commissions, but immediately spills over into the disorderly immediacy of contingent political considerations. These political considerations, he thinks, may not always be the consequence of a well-planned process of deliberate centralization but may generate out of the compulsions of party politics, electoral advantage or the pressures of influential interest lobbies. Hence, central fund disbursement in India has, over the decades, taken the form of an ever-growing series of ad-hoc allocations.

CONSTRUCTION OF POLITICAL VARIABLES AND DATA ELABORATION

Our Purpose

Two things need to be looked into. First, what the words *compulsion/ pressure* exactly mean in a democratic set-up like India and, second, whether ad-hoc allocations are genuinely ad-hoc in terms of any rational and consistent criterion being claimed. In dealing with the first question, one has to look into the meaning of electoral representation in a parliamentary democracy. A representative in such a structure is bound to take certain actions, more often than not, towards a tangible financial end in favour of his or her constituency. To put it differently, an individual representative's utility function must internalize preferences of the constituents to find the most efficient solution. This requires clearer knowledge about the preference patterns of the members of the electorate. However, the most common proxy for this may be in terms of the financial commitment of the elected representative towards his or her constituency. In other words, if we assume a general standard of efficiency, each representative member in a democratically elected government will invest a considerable amount of effort to attract funds to the specific state-constituency's end. The success of this action will definitely depend on various factors which we may, for the time being, take as parameters. But it is well nigh impossible to deny the pressure component of this action of attracting funds. Acceptance of this leads us to the second question. If this behaviour pattern is common to any elected representative in a parliamentary democracy, can one think of an aggregate behavioral pattern, which is structured by the conflicting interests of different states? In other words, can we say that homogeneity of behaviour would enable the elected members of a state (region) to behave as a *pressure group* in alluring funds towards their own state's end, treating other such groups as rival entities? Perhaps we can. *State lobbying* does exist in a country like ours but, due to the lack of a process of legitimization, operates as a covert dimension. In a federal structure like the USA's, lobbying is institutionalized, overt and organized through cohesive, systematic and professional methods. In contrast, lobbying continues to be regarded with suspicion in India and the quality of legislative lobbying can be called primitive by American standards. Primitive, because in any form of lobbying in India, masquerading is a necessity. Therefore, it becomes very difficult to get a quantitative account of how much lobbying is done towards a particular end by various lobbyists/pressure groups.

The purpose of this paper is to analytically explore the possibility of quantifying the extent of lobbying by the Indian states to influence centralized allocations. The necessity of constructing such an index is further strengthened by the fact that, over the entire post-Independence period, inter-state disparities have widened. There is substantial empirical evidence[9] which indicates growing imbalances among different regions of the country. We believe that such an index will help us assess the contributions of the constitutional structure towards the evolution of the Indian economy and its disparate segments. The aim is to generate a workable index, which can be related to the observed pattern of disbursement. A study by Ghosh, Marjit and Neogy (1998) has established a negative relationship between per capita plan outlay and per capita net state domestic product (PCNSDP). The authors have also found that the growth rate of per capita plan outlay is negatively related to the growth rate of PCNSDP. Therefore, they suggest that "the planners have done their duty in fostering balanced regional development as far as distribution of funds (is) concerned"[9]. The plan outlay considered here is distributed 'primarily on the basis of (the) Gadgil formula'. So our index does not seem to be applicable in this kind of transfer. But as mentioned earlier, the Planning Commission also makes certain transfers beyond that formula. These mainly consist of centrally sponsored and central sector schemes. It is probable that this non-Gadgil part of the Planning Commission transfer along with the union ministry transfers mentioned earlier are strongly biased in favour of states that are

[9] See Ghosh, Marjit and Neogy (1998).

more politically influential than others. With this hypothesis in mind, we work through the next few sections to see whether the relationship between the non-formulaic part of central fund disbursement and the political variables that we construct below can be called as significant as has been the claim of critics in the field of political science and public finance.

The making of the indices

In the two bodies of India's legislature – Parliament and government – elected representatives fight for their state constituencies. The amount of pressure they exert as a group is proportionate to their strength of representation. So the number of representatives from a state can be taken as a surrogate for the amount of lobbying done. But a problem appears in this line of argument. Seats in the Parliament from a state are directly proportional to the population of the state in question. So if the Parliament is taken into account, the *lobbying index* for a larger state will always be greater compared to that of a smaller one. For this reason, we, for the time being, look at representation in terms of participation in government alone. In other words, all representatives that we consider are representatives in the council of ministers.

The second problem relates to a hierarchy within the council of ministers. The most important members, including the Prime Minister, fall under the category of cabinet ministers followed by ministers of state (independent), ministers of state and deputy ministers. The second and fourth categories are not always present. They are sometimes abolished and reinstated later. For our first benchmark analysis, we assume no significant difference in bargaining power for different categories. In other words, same weight is attached to each of them. The major purpose of using our index is to see how it fares as a possible explanatory variable before we go on to the complexities of index formation. In fact, as we will show later, the benchmark index works reasonably well in explaining discretionary disbursement. Given this framework, lobbying power for a state can be calculated as the proportional representation of a state in various categories of ministers in the council of ministers, normalized in terms of the population of the state in question.

Lobbying Power $(LP)_{jt}$ =

$$\frac{h_{jt} / \sum_{i} h_{it}}{pop_{jt}}$$

where h_{jt} is the total representation of the jth state in the council of ministers at time period t and pop_{jt} is the population of the jth state in the same period in time.

Next, we introduce two political *time* dummies[10] - the *coalition* dummy and the *reform* dummy. For a state j,

The coalition dummy
$coa_{jt} = 1$ if the year is 1977 or falls in the group 1990-1994, both boundaries included.
$= 0$ otherwise.

The reform dummy
$ref_{jt} = 1$ if the year falls in the group of years 1985-1994, both boundaries included
$= 0$ otherwise

Let us elaborate on the dummies. The coalition dummy takes a value of 1 in 1977 and 1990 when Morarji Desai and VP Singh, respectively, headed coalition governments at the Centre and also in the post-1990 period when the Congress won (and went on to form the Narasimha Rao Government) but the seats it had as a percentage of total seats was 44.5 per cent. For the other earlier governments that the Congress formed at the Centre, the percentage of total seats won by it was always more than 50 per cent. We take 50 per cent as the cut-off, below which we assume that the government in power has only that much bargaining capacity vis-

[10] Our chosen time period is 1974-1994. The reasons for this choice are discussed later in this section.

à-vis the opposition, making it closer to a coalition rather than a non-coalition government. The reform dummy tries to measure the impact of economic reforms introduced primarily by Rajiv Gandhi and later carried ahead by the Narasimha Rao Government. In setting up this dummy, we put the value of the dummy = 1 in the years 1985-1994 for all states. The rest of the years get 0. Rajiv Gandhi came to power in the 1984 election. We consider the year that follows as the beginning of the reform period.

We now look at another index of lobbying where lobbying is measured by a dummy which takes a value of 1 if the state's ruling party has an *alignment* with the party/coalition in power at the Centre and 0 otherwise. We call this the alignment index. Construction of this index seems necessary because of a long-standing claim that the party at the Centre favours those states that are ruled by parties in alliance with the central government. We quote one of India's leading political scientists: "The alliance in power in New Delhi tends to favour those state governments run by their own people. A World Bank study for the period 1972-95 found that states ruled by parties which were also in office in Delhi received 4%-18% more central funds than did states that did not enjoy this status. Another study, by two Indian economists and for a more recent period, estimated that grants were 30% higher when the same party was in power in the state as well as the centre" (Guha, 2007). Generally speaking, we have constructed the index in a way that reflects the relationship, at the national level, between the ruling party at the Centre and the regional party. For instance, if a regional party confronts the national party at the state level but forms an alliance with it at the Centre, we give the alignment dummy a value of 1.The best example would be the position of the Left Front following the 2004 election vis-à-vis the Congress Government at the Centre. Although this time period is beyond the scope of our present analysis, we thought it necessary to mention this as a thumb rule. Secondly, any state in any year facing President's Rule is given a value of 1. Thirdly, in case of a change in government within a calendar year, we consider the government that stays at the end of the year. So, in case of transitions during a particular year, the closing situation is taken into account (same as Rajaraman, 2007)

$align_{jt}$= 1 if the state's ruling party has an alignment with the party at the Centre

= 0 otherwise.

Other explanatory variables

Before we go further, we need to think about certain variables other than the political variables that may influence disbursement. Thus the *income index* is defined as, $incin_{jt}$ = per capita net state domestic product of the state j at time period t / total income of all the states at time t.

Elaboration of the data

1) **Choice of the time period:** Our initial idea was to take the entire period since Independence as our relevant timeframe but we later decided to restrict ourselves to a 22-year perspective. Our period stretches from 1974 to 1994. The reasons for this choice are:
   a) This period covers many major upheavals in India's post-Independence political history – six major elections, the 1975 Emergency, two coalition governments of 1977 and 1990 – and the very important phase of economic reforms attempted by the Rajiv Gandhi and Narasimha Rao Governments.
   b) The period of economic reform being of specific importance to us as economic analysts, we tried to divide the whole period into pre- and post-reform years. If the 1984 election and Rajiv Gandhi's victory in it are taken as the breakthrough year, then we have almost exactly the same number of years before and after, considering our entire stretch of time.
   c) Problems with regard to data acted as a constraint. For the early post-Independence years, the boundaries of states were ill-defined or at least very different from what they are now. Reconciling with that would have been a problem. Second, and more important, classification with regard to discretionary finance changed in the pre-1971 years so

much so that this part of the data could not be accommodated in our analysis. For the years 1978 and 1989, we did not have separate information regarding ministerial representation. Our data source clubbed them with 1977 and 1988 respectively. For 1979, we have data on the Charan Singh ministry which lasted only for three weeks. For this reason, it would be unwise to take that year into consideration. So we, in actuality, have 18 years in hand. That we have annual data on ministerial representation might seem odd at the first instance because elections, under normal circumstances, take place every 5 years. This is, of course, true for MPs. For ministers in the council of ministers, by contrast, cabinet reshuffles are such a frequent event that annual data show sufficient year-to-year variation.

2) **Data source:** Our raw data for ministerial representation has been taken from *India Reference Annual,* a Government of India Publication. Data on discretionary finance has been taken from *Reserve Bank of India Bulletins*. We have used Thimmaiah's method of classifying the data under the discretionary transfer head.[11] For data on the dynamics of electoral alliances for the period under consideration, several books on elections and state politics in India were consulted since no such ready 'political' data is available as opposed to psephological data which is always accessible. Details of the texts and authors are given in the Bibliography.

---

[11]A problem appeared while doing this. Only for certain years do we get disaggregated data on every head considered to be under the discretionary head. For instance, in the financial year 1994-1995, we do not have disaggregated data on central *grants* for Uttar Pradesh. When this happens for any state in its grants or loan part, we interpolate the money disbursed under the discretionary head for that year from the data on the previous and the succeeding years. This was necessitated by the fact that grants include disbursement of a substantial amount of money on the state plan and statutory account and loans include loans for state plans over and above the discretionary heads. Hence the approximation of discretionary by total would largely overstate the grants and the loan amount.

ECONOMETRIC MODEL, REGRESSION AND RESULTS

Regressions and results

We try to see how per capita share of fiscal disbursement under the discretionary head (MD) can be related to the political variables (including dummies) that we have in hand.

$$MD_{jt} = \frac{m_{jt} / \sum_{j} m_{jt}}{pop_{jt}}$$

Where MD_{jt} is the *discretionary fiscal flow index* (proportional disbursement to a state normalized in terms of that state's population) under the discretionary head, m_{jt} is the money disbursed under the discretionary head to the jth state at time period t and pop_{jt} is the population of the jth state at time period t. The states we examine are: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.[12]

Exclusion of *small savings* from the discretionary disbursement is necessitated by the fact that central allocative loans for small savings maintain a particular ratio (3:4) with the concerned state's total small saving collection. Evidently, for such a head, political variables do not serve as an explanation.

So in total we have 252 observations pooled over time and states together.

Concerning discretionary disbursement, there are many categories (centrally sponsored schemes and central sector schemes, for instance)

[12] Assam, Jammu & Kashmir and Himachal Pradesh are left out by virtue of being *special category states*. The six Northeastern states are left out for the same reason.

where the Central Government matches grants with the state governments and, obviously, richer states can come up with higher matching grants than poorer states. This is one big reason why high income states get more funds. But more funds mean more investment in infrastructural and other schemes which also make a high income state richer compared to its poorer counterpart over time. This problem of endogeneity needs to be taken care of. For this, we run regressions with income as a lagged explanatory variable.[13]

Second, lobbying power as a political variable should have a persistent effect on disbursement. Lobbying done in one period is expected to affect disbursement later. To address this issue, we take lobbying as a lagged explanatory variable as well.

Third, disbursement in one period is also likely to have an impact on disbursement in the next period, for the same kind of reasons that endogeneity is created by the income index. So one of the explanatory variables would be lagged disbursement itself.

[13] Rao and Singh (2005) talk about our mimeographed paper Biswas and Marjit (2000) and criticize certain aspects. They say that a) we are including plan loans, ways and means advance and special relief for natural disasters in discretionary transfer and there are some problems with this approach. b) Despite the fact that our results are promising, they are subject to econometric problems because our procedure introduces biases into the estimation by way of a two-step procedure. The first criticism is a little confusing. We have not, in any version of our paper, included plan loans unless plan loan means centrally sponsored and central sector schemes (henceforth, CSPS and CSS), sometimes the latter is referred to as central plan schemes. As we explained earlier, only ad-hoc transfers through the union ministries have a loan part, CSPS require matching grants from the states. So we are not sure what Rao and Singh are referring to in comment a). Comment b) is more important. In the mimeographed version of our paper we first regressed the dependent variable on NSDP per capita; the residuals were then regressed on the political variables. This brings in bias in the estimation process. We fully agree with this and therefore this version of the paper takes care of the problem of 'income endogeneity' by running regressions with the lagged explanatory variable. Also, while their footnote 2 in chapter 11 finds that in a regression run by Singh and Vasishtha (2002, but the reference is not given in the bibliography) our lobbying power variable is insignificant, it is quite significant in our model even after carrying out all sorts of possible econometric refinements. Additionally, Singh and Vasishtha in a later version (2004) find our lobbying power variable significant vis-à-vis per capita grants for central plan schemes. Since the later version finds significance, even if partly, in an independent model constructed by them, we think this should have been noted in Rao and Singh's chapter.

To take care of heteroscadasticity and autocorrelation, we run the regression with the *Generalized Least Square Method with Ordinary Least Square residuals* instead of running simple fixed effect panel regression. This method yields an estimated parameter that is a matrix weighted average of the between and the within estimated parameters. Therefore, we have the state fixed effects internalized in the regressions to account for heterogeneity arising between the states.[14]

The equation to be estimated is:

$$MD_{jt} = \alpha + \beta_1 \, MD_{j,t-1} + \beta_2 \, LP_{j,t-1} + \beta_3 \, incin_{j,t-1} \qquad (1)$$

MD_{jt} is the discretionary disbursement to the jth state at t th period of time. $MD_{j,t-1}$ is the discretionary disbursement to the jth state at (t-1) th period of time. $LP_{j,t-1}$ is lobbying power of the jth state at (t-1) th period of time. $incin_{j,t-1}$ is the income index of the jth state at (t-1) th period of time.

The Kolmogorov-Smirnov (KS) Test has shown that the residuals of this regression specification approximately follow an asymptotically normal distribution. The result of the regression GLS with OLS residuals is shown in result 1 in the Appendix.

Result 2 in the Appendix gives the Maximum Likelihood Method Estimation of the same equation.

As can be seen from both results, all the variables yield significance.

Next is the question of accommodating other forms of lobbying such as the alignment dummy. Alignment yields significance as a slope dummy (dummy multiplied by LP_{jt}) and not as an intercept dummy. Moreover, because the LP_{jt} and the slope dummy expectedly

---

[14] Note that the lagged dependent variables may imply that our model does not have Strict Exogeneity. We would like to clarify this point. The notion of Strict Exogeneity is not necessary to the asymptotic behaviour of the estimates. Analysis of the residuals tells us that there are no correlations. By taking into account the lagged dependent variable, we implicitly make the hypothesis of a Markovian process.

hold a very high correlation, putting them in the same regression suppresses the effect of both lobbying and the slope dummy. We show the estimated equation, where the lobbying variable interacts with the slope dummy variable. The other variables are: lagged income and lagged discretionary disbursement. We again run GLS with OLS residuals.

The equations to be estimated are:

$$MD_{jt} = \alpha + \beta_1 MD_{j,t-1} + \beta_2 LP_{j,t-1} * align + \beta_3 incin_{j,t-1} \qquad (2)$$

The results of the estimation are shown in result 3.

The inclusion of the reform and the coalition dummies in the regression does not yield significance but that is probably because our dataset does not cover the post-1995 reform years. Moreover, the coalition era in India, properly speaking, begins after 1995. The variables show right signs. We think that reform as a slope dummy and coalition as an intercept dummy would yield significance if we extended our dataset for a few more years. This is an exercise that we attempt in our next paper.[15]

The results of the following estimated equations are shown in the Appendix (results 4 and 5):

$$MD_{jt} = \alpha + \beta_1 MD_{j,t-1} + \beta_2 reform + \beta_3 LP_{j,t-1} + \beta_4 incin_{j,t-1} \qquad (3)$$

$$MD_{jt} = \alpha + \beta_1 MD_{j,t-1} + \beta_2 LP_{j,t-1} * coa + \beta_3 incin_{j,t-1} \qquad (4)$$ [16]

[15] It is interesting to note that, extending the dataset till 2002, we found even the reform and coalition dummies significant along with other political variables that are showing significance now ('Discretionary Finance and State Lobbying in India: An Empirical Extension', draft in preparation).

[16] It would have been econometrically more elegant to build up one fully nested model and dispense with this sequential build-up. But here our precise purpose is to show the direct and probable impact of all the political variables constructed on discretionary disbursement. Econometricians can take equation (3) as the central equation and ignore the rest.

INTERPRETATION

Our result clearly shows that lobbying power acts as a significant variable in explaining the per capita share of discretionary fund disbursement. When lobbying is measured by ministerial strength in the cabinet, along with discretionary disbursement and income index, it shows significance.

If a state has an alignment with the Centre, for each amount of lobbying done, that state gets more fund disbursement compared to states with no alliance, with the characteristic that the higher the lobbying capacity, higher the gain in discretionary disbursement. This result corresponds to the claim of systematic deprivation on the part of some opposition-ruled states in India.

The negative intercept dummy indicates that, in the reform years, there has actually been a reduction in discretionary disbursement in the discretionary head for each amount of lobbying done in the cabinet. Once economic reform measures came into being, external vigilance became stronger as a result of which the Reserve Bank of India (the central bank) stopped acting as an organization fully under the control of the Union Government and withdrawal of funds on deficit as and when necessary became less easy. So, on the whole, discretionary finance got reduced in the face of reduced flexibility on the part of the government. The negative slope of the coalition dummy is reflective of the presence of inside vigilance within the government in power. The coalition characteristic of the government now prevents a higher amount of lobbying to be associated with a higher amount of disbursement. This is so because we are measuring state lobbying and, in almost all coalitions, the partners are mostly state or region-based parties. So, internal coalition threats make it difficult for a high-lobbying state to bag a larger amount of funds, something that was possible under a single-party government. Similarly, under the coalition regime, it is not easy to rob the low-lobbying state of funds to the extent possible under a single-party government. However, the coalition and reform dummy variables need to show significance before these interpretations can be emphasized.

In short, discretionary financing among states in the Indian context is, to a considerable extent, explained by a measure of state lobbying in the government.[17] [18]

Lastly, it would be interesting to rank the states in terms of average disbursements and lobbying power (LP) during the entire period. This exercise becomes important in the context of the allegation made by some states (particularly, the opposition-ruled ones, West Bengal being the most vociferous among them) that the Central Government deprives them in various economic fields due to extra-economic or, more specifically, political reasons.[19] Discretionary disbursement is one such arena where the chances of manœuvring are high and, therefore, it demands special attention when we talk

---

[17] By comparing these results with Rao and Singh (2005), we find a striking contrast between their conclusion and ours. They find that, in their linear specification, income and the power variables do not explain per capita discretionary transfers (and *not proportionate per capita* as in our case) significantly. This is expectedly true for statutory transfers as well. But they find that, for the plan transfers, one of the political variables shows significance. When they take log-linear or trans-log specifications, one of the political variables shows significance vis-à-vis the statutory transfer. Also, in both cases, another political variable shows significance vis-à-vis transfers under per capita state plan schemes. These results stand in stark contrast to intuitive reasoning. As we have specified earlier, both Finance Commission transfers and transfers under state plan schemes follow certain formulae whereas discretionary transfers are channeled through union ministries. It would be difficult to argue that political influence plays a role in certain transfers that follow rigorous rules and does not have any impact on transfers that entail much greater scope for manipulation. In fact, the authors do not offer any answer to this anomaly other than leaving the issue of political influence in transfer of funds in India an open question. In contrast, our results are congruent with the findings of other authors (see section 6).

[18] One can compare this with Rajaraman (2007) who finds that “over time the non-formulaic bargaining margin in Plan support grew again on the promise of grant rather than loan support, at the expense of formulaic allocation across states”.

[19] One should not forget that these arguments are largely subjective. When we conduct this exercise, we try to give it an objective basis. However, as we try to find out the ranking of states in terms of disbursements, we presume that there is a ‘popular notion’ (largely created by the media and political parties themselves) of how states should rank in this regard. Whenever any state ranks otherwise, we have a ‘surprise’ (in the sense of: contrary to popular belief) observation.

about political favouritism. As the Appendix shows, West Bengal can indeed claim that it has been deprived because, in terms of average disbursement, it ranks 12th only. So can Bihar (14) and Maharashtra (13). The overall rank of the eastern region is quite low barring Orissa. The South's overall ranking is not bad except for Tamil Nadu (11). Uttar Pradesh is in the middle (8). Punjab and Haryana occupy the top positions both in terms of disbursement and lobbying.[20] West Bengal is expectedly the lowest in lobbying. So are Kerala and Tamil Nadu. Uttar Pradesh and Bihar occupy 4th and 6th positions respectively. Karnataka and Rajasthan rank high. Andhra Pradesh and Gujarat occupy middling positions. The ranks between the two indices show fairly high correlation, supporting our basic hypothesis, although through a different route.

[20] It must be mentioned, though, that these exercises are grossly approximate because we are reducing a large volume of data (14*18 =252) to only 14.

COMPARISON WITH RECENT WORKS AND CONCLUSIONS

Recent works in estimation

Rao and Singh (2000) begin with five categories of transfer from the Centre to the states. What they call discretionary transfer has less scope than in our framework. They only include grants for central plan schemes and grants for centrally sponsored schemes in this category. Their explanatory variables are state domestic product (like our income variable, per capita net state domestic product), population, ruling party's Members of Parliament (power) and alignment (like our alignment dummy). The authors estimate linear, log-linear and translog functions to test the robustness of the results. We have already provided a brief exposition of their result in footnote 13. We also leave aside our own study, Biswas and Marjit (2000) since this *Occasional Paper* is a far more econometrically refined version. Singh and Vasishtha (2004) re-estimate the Rao and Singh equations with some modifications. (a) They include dummy variables for different Planning Commissions. (b) They estimate separately for two components of discretionary transfers. (c) They fix the political variables at levels that prevail in the year in which decisions are made. They find that different Planning Commissions have very different fixed effects on transfers. Finance Commission transfers show some stability over time, though. The political variables are sometimes statistically significant. Dasgupta, Dhillon and Dutta (2001) use three political explanatory variables: two are somewhat similar to the Rao and Singh ones, namely, the power and alignment variable, and the third variable determines whether a legislative assembly election was close or not, reflecting whether a state might swing in a favourable direction or not as a result of transfers. They find strong support in favour of the importance of political effects on discretionary transfers.

What justifies the need for such exercises? Rao and Singh (2005) summarize the 'need' succinctly. "These papers are an excellent start in sorting out the political-economic interactions that determine the actual levels of various kinds of centre-state transfers in India, and their insights can be combined in future empirical work. Second, the papers taken together do suggest that political factors, whether captured through straight political variables, or through measures of demographic and economic importance, do matter…We would like to argue…that there is a case for institutional reform of the centre-state transfer system that is supported by the empirical work summarized in this section…"

Conclusion

To put it briefly, lobbying in the context of a quasi-federal state like India is structured in such a manner that it operates in a covert fashion. A representative democracy exerts a certain amount of pressure on elected members, and this indirectly acts as the primary incentive for lobbying. This paper has, on the basis of preliminary indices, made an attempt to verify the significant link between discretionary disbursement and lobbying. The argument put forth in both cases seems to structurally establish the role of 'contingent political interests' in the bargaining for funds between the Centre and the states – a long-standing claim of this country's historians and political scientists.[21]

[21] Chatterjee (1997).

BIBLIOGRAPHY

Arrow, K. 1963. *Social Choice and Individual Values*. (1951 first edition).New York: John Wiley and Sons. Rev.

Bagchi, A. 1995. Tenets of the Tenth Finance Commission. *Economic and Political Weekly*, 5-12 August, 30 (31 & 32): 1985-95.

Bailey, C.S. 1991. Lessons in Lobbying for Free Trade in 19th Century Britain. *American Political Science Review* 85(1): 37-58.

Becker, G.S. 1983. A Theory of Competition among Pressure Groups for Political Influence. *The Quarterly Journal of Economics* 98 (3): 371-400.

Berry, J.M. 1977. *Lobbying for the People*. Princeton N J: Princeton University Press.

Bollen, K. 1980. Issues in the Comparative Measurement of Political Democracy. *American Sociological Review* 45: 370-90.

Biswas, R., and S. Marjit. 2000. *Political Lobbying and Discretionary Finance in India: An Aspect of Regional Political Influence in a Representative Democracy*. Mimeo.

Biswas, R. and S. Marjit. 2005. Political Lobbying and Discretionary Finance in India: An Aspect of Regional Political Influence in a Representative Democracy. In *Development, Displacement and Disparity: India in the Last Quarter of the Century*, edited by Sugata Marjit and Nirmala Banerjee. New Delhi: Orient Longman Limited.

Brass, P.R. 1990. *The Politics of India since Independence*. New Cambridge History of India. Cambridge: Cambridge University Press.

Brunetti, A. 1997. Political Variables in Cross-Country Growth Analysis. *Journal of Economic Surveys* 11(2): 160-90.

Butler, D., A. Lahiri, and P. Roy. 1996. *India Decides: Elections 1952-1996*. New Delhi: Living Media India Limited.

Chakravarty, S. 1987. *Development Planning: The Indian Experience*. New Delhi: Oxford India Paperbacks.

Chakravarty, S. 1994. Problems of Plan Implementation. In *The State and Development Planning in India*, edited by T. J. Byres. Delhi: Oxford University Press.

Chatterjee, P. 1994. *Nation and its Fragments: Colonial and Post-colonial Histories*. Delhi: Oxford University Press.

Chatterjee, P. 1997. Development Planning and the Indian State. In *State and Politics in India*, edited by P. Chatterjee. New Delhi: Oxford University Press.

Chelliah, R, M.G. Rao, and T. Sen. 1992. Issues before the Tenth Finance Commission. *Economic and Political Weekly*, 21 November, 27(47): 2539-50.

Dandekar, V. M. 1987. Unitary Elements in a Federal Constitution. *Economic and Political Weekly*, 31 October, 22(44): 1865-70.

Dandekar, V.M. 2000. Gross Domestic Product & Regional Disparities in Development in India. *Journal of Indian School of Political Economy* 12(1): 35-69.

Dasgupta, S., A. Dhillon, and B. Dutta. 2001. Electoral Goals and Centre-State Transfers in India. *Indian Statistical Institute, New Delhi*. Processed.

Dixit, A., and J. Londregan. 1998. Fiscal Federation and Redistributive Politics. *Journal of Public Economics* 68: 153-80.

Dreze, J., and A. Sen, eds. 1997. *Indian Development—Selected Regional Perspective*. Oxford and Delhi: Oxford University Press.

Echeveri-Gent., J. 1993. *The State and the Poor—Public Policy and Political Development in India and the United States.* California: University of California Press.

Frankel, F.R., and M.S.A.Rao, eds. 1990. *Dominance and State Power in Modern India—Decline of a Social Order*. 2 vols. Delhi: Oxford University Press.

Frankel, F.R. 2000. Decline of a Social Order. In *Politics and the State in India*, edited by Z. Hasan. Readings in Indian Government and Poitics, no. 3. New Delhi: Sage Publications.

Ghani, J. 1987. *Election in India.* South Asian Studies. Islamabad: IRS.

Ghosh, B., and P. De. 1998. Role of Infrastructure in Regional Development: A Study over the Plan Period. *Economic and Political Weekly*, 21 November, 33 (47&48): 3039-48.

Ghosh, B., S. Marjit, and C. Neogy. 1998. Economic Growth and Regional Divergence in India, 1960 to 1995. *Economic and Political Weekly*, 27 June, 33(26): 1623-30.

Gopa Kumar, G. 1984. *The Congress Party and State Politics.* New Delhi: Deep and Deep Publication.

Grewal, B. S. 1975. *Centre-State Financial Relations in India*. Patiala: Punjabi University.

Guha, R. 2007. *India After Gandhi: The History of World's Largest Democracy*. Picador.

Guhan, S. 1995. Report of the Tenth Finance Commission. *Economic and Political Weekly*, 22 April, 30(16): 877-86.

Guhan, S. 1997. Centre-State Fiscal Transfers: Beyond the Tenth Finance Commission. *Economic and Political Weekly*, 15 February, 32(7): 353-56.

Hanson, A.H. 1966. *The Process of Planning: A Study of India's Five Year Plans, 1950-1964*. London: Oxford University Press.

Hardgrave, R.L. 1992. *India: Government and Politics in a Developing Nation*. New York: Harcourt, Brace and Javanovich.

Hibbs, D. 1977. Political Parties and Macroeconomic Policy. *American Political Science Review* 71: 1467-87.

Johnston, J., and J. Dinerdo. 1997. *Econometric Methods.* Fourth Edition, McGraw-Hill International Editions (Economic Series).

Kletzer, K., and N. Singh. 1996. *The Political Economy of Indian Fiscal Federalism*. The meeting of the American Political Science Association, August 29-September 1. Mimeo.

Kochanek, S.A. 1974. *Business and Politics in India.* California: University of California Press.

Kohli, A. 1991. *Democracy and Discontent: India's Growing Crisis of Governability.* Cambridge: Cambridge University Press.

Krueger, A.O. 1974. The Political Economy of the Rent-seeking Society. *American Economic Review* 64: 291-303.

Lal, S. 1990. *Non-Congressism is reborn: 1989-90 Polls and Parties*. 2 vols. New Delhi: Election Archives.

Maddala, G.S. 1971. The Use of Variance Components Models in Pooling Cross Section and Time Series Data. *Econometrica* 39(2): 341-58.

Maddala, G.S. 1989. *Introduction to Econometrics*. New York: Macmillan Publishing Company.

Milbrath, L. W. 1963. *The Washington Lobbyists*. Chicago:Rand Mcnally.

Misquitta, L.P. 1991. *Pressure Groups and Democracy in India.* New Delhi: Sterling Publishers.

Nuna, S.C. 1989. *Spatial fragmentation of Political Behaviour in India: A Geographical Perspective on Parliamentary Elections*. New Delhi: Concept Publication.

Pandey, G. 1992. In Defence of the Fragment. *Representations* (winter): 27-55.

Paranjape, H.K. 1988. Task of the Ninth Finance Commission: The Planning Commission Tangle. *Economic and Political Weekly*, 17 September, 23(38): 1953-58.

Pincus, J. J. 1975. Pressure Groups and the Pattern of Tariffs. *Journal of Political Economy* 83: 757-78.

Raj, H. 1998. *Encyclopedia of Indian Parliament: Lok Sabha General Elections*. Vol. 1 and Vol. 2. New Delhi: Anmol Publications.

Rajaraman, I. 2007. *The Political Economy of the Indian Fiscal Federation*. Mimeo (June).

Rao, M.G., and N. Singh. 1998. *An analysis of Explicit and Implicit Intergovernmental Transfers in India.* Australian National University, University of California at Santa Cruz and Stanford University. Mimeo.

Rao, M.G., and N. Singh. 2000. The Political Economy of Centre-State Fiscal transfers in India. Paper presented at the World Bank conference on Institutional Elements of Tax Design and Reform, 18-19 February, at Columbia University.

Rao, M.G., and N. Singh. 2001. Federalism in India: Political Economy and Reform. *Centre for Research on Economic Development and Policy Reform, Stanford University, Stanford*. Working Paper No.108.

Rao, M.G., and N. Singh. 2005. *Political Economy and Federalism in India*. New Delhi: Oxford India Paperbacks.

Rao, M.G., N. Singh, and G. Vashistha. 2001. The Political Economy of Centre-State Fiscal Transfers in India: Further Analysis. In progress.

Singh, N., and G.Vashistha. 2004. Patterns of Centre-State Fiscal Transfers: An Illustrative Analysis. *Economic and Political Weekly*, 6 November, 39(45): 4897-4903

Schoolmen, K.L., and J.T. Tierney. 1986. *Organised Interests and American Democracy.* New York: Harper and Row.

Thimmaiah, G. 1997. Federal India-Burning Issues in Union-State relations. *Journal of Indian School of Political Economy* 9(4): 609-25.

Wood, J. R. ed. 1984. *State Politics in Contemporary India: Crisis or Continuity?* Boulder and London: Westview Press.

Wright, J.R. 1990. Contributions, Lobbying and Committee Voting in the US House of Representatives. *American Political Science Review* 84(2): 417-38.

Official Publications and Government Documents

Government of India. *Five Year Plan Reports*. New Delhi: Planning Commission.

Reserve Bank of India. *Bulletins*. 1974-1994.

APPENDIX

Table-1

States	Rank of Average Money Disbursement Index	Rank of Average Lobbying Index
Andhra Pradesh	9	8
Bihar	14	6
Gujarat	5	9
Haryana	2	1
Karnataka	7	2
Kerala	6	12
Maharashtra	13	10
Madhya Pradesh	10	11
Orissa	3	7
Punjab	1	3
Rajasthan	4	5
Tamil Nadu	11	13
Uttar Pradesh	8	4
West Bengal	12	14
	Spearman's Rank Correlation Coefficient =.5648* Kendall's Rank Correlation Coefficient = .4286*	

*Both the rank correlation coefficients are significant enough to reject the null hypothesis of the non-existence of correlation between the two ranks.

Table-2

states	lobprop	mon	coa	reform	1/pop	incindex	align ment	year
Andhra	1.66E-09	1.78E-09	0	0	2.16E-08	2.17E-09	1	74
Bihar	1.92E-09	1.04E-09	0	0	1.66E-08	1.12E-09	1	74
Gujarat	6.69E-10	2.73E-09	0	0	3.48E-08	2.27E-09	1	74
Haryana	3.55E-09	3.72E-09	0	0	9.24E-08	2.58E-09	1	74
Karnataka	3.06E-09	2E-09	0	0	3.18E-08	1.99E-09	1	74
Kerala	8.54E-10	2.42E-09	0	0	4.44E-08	1.69E-09	1	74
Maharastra	1.79E-09	1.51E-09	0	0	1.86E-08	2.64E-09	1	74
MP	1.29E-09	1.47E-09	0	0	2.24E-08	1.39E-09	1	74
Orissa	8.29E-10	1.56E-09	0	0	4.31E-08	1.27E-09	1	74
Punjab	2.66E-09	2.93E-09	0	0	6.92E-08	3.25E-09	1	74
Raja	2.06E-09	1.98E-09	0	0	3.56E-08	1.64E-09	1	74
TN	4.45E-10	1.11E-09	0	0	2.31E-08	2.03E-09	1	74
UP	2.85E-09	2.15E-09	0	0	1.06E-08	1.32E-09	1	74
WB	1.63E-09	1.84E-09	0	0	2.12E-08	2.15E-09	1	74
Andhra	1.63E-09	1.72E-09	0	0	2.12E-08	1.81E-09	1	75
Bihar	1.88E-09	1.91E-09	0	0	1.63E-08	1.28E-09	1	75
Gujarat	1.31E-09	3.55E-09	0	0	3.4E-08	2.51E-09	1	75
Haryana	1.73E-09	5.33E-09	0	0	9.01E-08	2.87E-09	1	75
Karnataka	2.39E-09	1.79E-09	0	0	3.1E-08	1.78E-09	1	75
Kerala	8.33E-10	1.68E-09	0	0	4.37E-08	1.56E-09	1	75
Maharastra	1.4E-09	1.41E-09	0	0	1.82E-08	2.39E-09	1	75
MP	1.27E-09	1.38E-09	0	0	2.19E-08	1.33E-09	1	75
Orissa	1.63E-09	1.49E-09	0	0	4.23E-08	1.13E-09	1	75
Punjab	3.91E-09	3.71E-09	0	0	6.77E-08	3.5E-09	1	75
Raja	2E-09	2.38E-09	0	0	3.46E-08	1.77E-09	1	75
TN	4.37E-10	1.27E-09	0	0	2.28E-08	1.42E-09	1	75
UP	2.98E-09	1.39E-09	0	0	1.03E-08	1.47E-09	1	75
WB	1.2E-09	1.08E-09	0	0	2.08E-08	2.25E-09	1	75
Andhra	1.56E-09	1.7E-09	0	0	2.07E-08	1.6E-09	1	76
Bihar	1.8E-09	2.35E-09	0	0	1.59E-08	1.2E-09	1	76
Gujarat	1.25E-09	1.23E-09	0	0	3.32E-08	2.7E-09	1	76
Haryana	3.31E-09	3.15E-09	0	0	8.78E-08	2.74E-09	1	76

states	lobprop	mon	coa	reform	1/pop	incindex	alignment	year
Karnataka	1.72E-09	1.3E-09	0	0	3.03E-08	1.64E-09	1	76
Kerala	1.62E-09	2.17E-09	0	0	4.29E-08	1.52E-09	1	76
Maharastra	1.34E-09	1.57E-09	0	0	1.78E-08	2.44E-09	1	76
MP	1.62E-09	1.46E-09	0	0	2.14E-08	1.25E-09	1	76
Orissa	1.57E-09	1.23E-09	0	0	4.16E-08	1.01E-09	1	76
Punjab	3.75E-09	6.25E-09	0	0	6.63E-08	3.37E-09	1	76
Raja	1.9E-09	2.55E-09	0	0	3.37E-08	1.9E-09	1	76
TN	4.22E-10	9.81E-10	0	0	2.24E-08	1.62E-09	1	76
UP	2.86E-09	1.22E-09	0	0	1.01E-08	1.52E-09	1	76
WB	1.15E-09	1.7E-09	0	0	2.03E-08	1.92E-09	1	76
Andhra	0	1.52E-09	1	0	2.03E-08	1.65E-09	0	77
Bihar	3.04E-09	1.52E-09	1	0	1.56E-08	1.06E-09	1	77
Gujarat	2.37E-09	2.13E-09	1	0	3.24E-08	2.66E-09	1	77
Haryana	4.18E-09	2.39E-09	1	0	8.56E-08	2.63E-09	1	77
Karnataka	7.22E-10	2.22E-09	1	0	2.96E-08	1.75E-09	0	77
Kerala	0	1.3E-09	1	0	4.21E-08	1.62E-09	0	77
Maharastra	8.48E-10	1.3E-09	1	0	1.74E-08	2.55E-09	0	77
MP	2.56E-09	1.16E-09	1	0	2.1E-08	1.33E-09	1	77
Orissa	1.99E-09	1.66E-09	1	0	4.08E-08	1.18E-09	1	77
Punjab	3.17E-09	6.28E-09	1	0	6.49E-08	3.33E-09	0	77
Raja	1.6E-09	1.76E-09	1	0	3.27E-08	1.68E-09	1	77
TN	5.37E-10	1.14E-09	1	0	2.2E-08	1.35E-09	0	77
UP	2.65E-09	8.86E-10	1	0	9.88E-09	1.39E-09	1	77
WB	9.71E-10	2.01E-09	1	0	1.99E-08	1.92E-09	1	77
Andhra	4.12E-09	1.45E-09	0	0	1.9E-08	1.72E-09	1	80
Bihar	2.37E-09	1.15E-09	0	0	1.46E-08	9.69E-10	1	80
Gujarat	1.62E-09	2.23E-09	0	0	3E-08	2.46E-09	1	80
Haryana	4.29E-09	1.73E-09	0	0	7.94E-08	2.38E-09	0	80
Karnataka	2.98E-09	1.74E-09	0	0	2.75E-08	1.67E-09	1	80
Kerala	0	9.37E-10	0	0	4E-08	1.61E-09	0	80
Maharastra	8.8E-10	9.33E-10	0	0	1.63E-08	2.5E-09	1	80
MP	1.06E-09	1.84E-09	0	0	1.96E-08	1.2E-09	1	80
Orissa	0	2.93E-09	0	0	3.86E-08	1.16E-09	1	80
Punjab	3.3E-09	2.13E-09	0	0	6.1E-08	2.65E-09	0	80
Raja	8.11E-10	3.11E-09	0	0	3E-08	1.27E-09	1	80

states	lobprop	mon	coa	reform	1/pop	incindex	align ment	year
TN	1.13E-09	1.11E-09	0	0	2.1E-08	1.52E-09	1	80
UP	1E-09	1.67E-09	0	0	9.26E-09	1.22E-09	1	80
WB	1.01E-09	1.21E-09	0	0	1.87E-08	1.78E-09	0	80
Andhra	2.55E-09	1.39E-09	0	0	1.87E-08	1.74E-09	1	81
Bihar	2.93E-09	1.04E-09	0	0	1.43E-08	9.52E-10	1	81
Gujarat	2E-09	2.26E-09	0	0	2.93E-08	2.52E-09	1	81
Haryana	3.52E-09	2.05E-09	0	0	7.74E-08	2.36E-09	0	81
Karnataka	2.45E-09	1.2E-09	0	0	2.69E-08	1.52E-09	1	81
Kerala	0	1.07E-09	0	0	3.93E-08	1.48E-09	0	81
Maharastra	1.45E-09	1.2E-09	0	0	1.59E-08	2.25E-09	1	81
MP	1.31E-09	1.11E-09	0	0	1.92E-08	1.18E-09	1	81
Orissa	8.62E-10	2.07E-09	0	0	3.79E-08	1.16E-09	1	81
Punjab	2.71E-09	3.08E-09	0	0	5.96E-08	2.8E-09	0	81
Raja	6.64E-10	3.42E-09	0	0	2.92E-08	1.31E-09	1	81
TN	9.39E-10	9.81E-10	0	0	2.07E-08	1.59E-09	1	81
UP	1.02E-09	1.45E-09	0	0	9.02E-09	1.22E-09	1	81
WB	8.33E-10	2.06E-09	0	0	1.83E-08	1.69E-09	0	81
Andhra	2.37E-09	1.14E-09	0	0	1.83E-08	1.66E-09	1	82
Bihar	2.08E-09	1.05E-09	0	0	1.4E-08	9.12E-10	1	82
Gujarat	1.6E-09	1.84E-09	0	0	2.88E-08	2.48E-09	1	82
Haryana	2.81E-09	2.81E-09	0	0	7.58E-08	2.4E-09	1	82
Karnataka	2.44E-09	1.31E-09	0	0	2.64E-08	1.49E-09	1	82
Kerala	7.18E-10	1.03E-09	0	0	3.88E-08	1.41E-09	1	82
Maharastra	1.73E-09	1.26E-09	0	0	1.56E-08	2.31E-09	1	82
MP	6.94E-10	1.1E-09	0	0	1.87E-08	1.19E-09	1	82
Orissa	2.75E-09	4.33E-09	0	0	3.72E-08	8.98E-10	1	82
Punjab	1.08E-09	5.74E-09	0	0	5.85E-08	2.8E-09	0	82
Raja	1.06E-09	1.6E-09	0	0	2.85E-08	1.43E-09	1	82
TN	7.55E-10	1.41E-09	0	0	2.04E-08	1.48E-09	1	82
UP	1.47E-09	1.19E-09	0	0	8.85E-09	1.26E-09	1	82
WB	6.64E-10	1.29E-09	0	0	1.79E-08	1.51E-09	0	82
Andhra	2.61E-09	1.12E-09	0	0	1.79E-08	1.72E-09	0	83
Bihar	8.58E-10	1.41E-09	0	0	1.37E-08	8.63E-10	1	83
Gujarat	1.18E-09	4.13E-10	0	0	2.82E-08	2.38E-09	1	83
Haryana	3.06E-09	3.12E-09	0	0	7.35E-08	2.23E-09	1	83

states	lobprop	mon	coa	reform	1/pop	incindex	alignment	year
Karnataka	2.7E-09	1.28E-09	0	0	2.59E-08	1.43E-09	0	83
Kerala	7.98E-10	1.76E-09	0	0	3.83E-08	1.24E-09	1	83
Maharastra	2.22E-09	1.28E-09	0	0	1.52E-08	2.19E-09	1	83
MP	7.62E-10	8.97E-10	0	0	1.83E-08	1.25E-09	1	83
Orissa	1.52E-09	2.32E-09	0	0	3.65E-08	1.05E-09	1	83
Punjab	1.01E-09	8.42E-09	0	0	5.75E-08	2.7E-09	1	83
Raja	1.16E-09	1.7E-09	0	0	2.78E-08	1.64E-09	1	83
TN	4.18E-10	1.26E-09	0	0	2.01E-08	1.31E-09	1	83
UP	1.8E-09	1.27E-09	0	0	8.62E-09	1.18E-09	1	83
WB	7.31E-10	1.18E-09	0	0	1.75E-08	1.57E-09	0	83
Andhra	4.86E-10	1.09E-09	0	0	1.75E-08	1.56E-09	0	84
Bihar	7.46E-10	1.18E-09	0	0	1.34E-08	9.88E-10	1	84
Gujarat	7.69E-10	1.68E-09	0	0	2.77E-08	2.21E-09	1	84
Haryana	4E-09	1.67E-09	0	0	7.19E-08	2.03E-09	1	84
Karnataka	2.83E-09	1.89E-09	0	0	2.54E-08	1.41E-09	0	84
Kerala	1.05E-09	1.86E-09	0	0	3.77E-08	1.21E-09	1	84
Maharastra	1.49E-09	9.03E-10	0	0	1.49E-08	2.13E-09	1	84
MP	9.96E-10	7.91E-10	0	0	1.79E-08	1.1E-09	1	84
Orissa	0	1.19E-09	0	0	3.58E-08	1.01E-09	1	84
Punjab	3.76E-09	7.09E-09	0	0	5.62E-08	2.56E-09	1	84
Raja	5.5E-10	1.71E-09	0	0	2.71E-08	1.39E-09	1	84
TN	2.1E-09	1.27E-09	0	0	1.98E-08	1.46E-09	1	84
UP	4.76E-10	1.17E-09	0	0	8.4E-09	1.16E-09	1	84
WB	2.06E-09	1.89E-09	0	0	1.72E-08	1.72E-09	0	84
Andhra	3.98E-10	1.27E-09	0	1	1.71E-08	1.63E-09	0	85
Bihar	1.22E-09	7.66E-10	0	1	1.31E-08	9.85E-10	1	85
Gujarat	6.32E-10	1.57E-09	0	1	2.72E-08	1.8E-09	1	85
Haryana	3.28E-09	1.94E-09	0	1	7.04E-08	2.05E-09	1	85
Karnataka	1.74E-09	1.97E-09	0	1	2.49E-08	1.35E-09	0	85
Kerala	8.65E-10	3.52E-09	0	1	3.72E-08	1.2E-09	1	85
Maharastra	2.03E-09	1.17E-09	0	1	1.45E-08	2.18E-09	1	85
MP	1.22E-09	1.24E-09	0	1	1.74E-08	1.1E-09	1	85
Orissa	1.64E-09	1.12E-09	0	1	3.52E-08	1.07E-09	1	85
Punjab	0	6.99E-09	0	1	5.52E-08	2.46E-09	1	85
Raja	3.07E-09	2.02E-10	0	1	2.64E-08	1.17E-09	1	85

states	lobprop	mon	coa	reform	1/pop	incindex	align ment	year
TN	9.07E-10	1.23E-09	0	1	1.95E-08	1.56E-09	1	85
UP	1.92E-09	1.4E-09	0	1	8.26E-09	1.13E-09	1	85
WB	1.17E-09	9.75E-10	0	1	1.68E-08	1.66E-09	0	85
Andhra	3.58E-10	1.2E-09	0	1	1.68E-08	1.52E-09	0	86
Bihar	1.09E-09	1E-09	0	1	1.29E-08	9.56E-10	1	86
Gujarat	1.66E-09	1.19E-09	0	1	2.67E-08	1.91E-09	1	86
Haryana	2.9E-09	3.32E-09	0	1	6.85E-08	2.04E-09	1	86
Karnataka	2.04E-09	1.4E-09	0	1	2.44E-08	1.44E-09	0	86
Kerala	2.3E-09	1.46E-09	0	1	3.68E-08	1.14E-09	1	86
Maharastra	1.52E-09	1.68E-09	0	1	1.42E-08	2.08E-09	1	86
MP	7.29E-10	1.42E-09	0	1	1.7E-08	1.08E-09	1	86
Orissa	1.07E-09	1.76E-09	0	1	3.46E-08	1E-09	1	86
Punjab	1.14E-09	1.29E-09	0	1	5.41E-08	2.45E-09	1	86
Raja	2.16E-09	3.22E-09	0	1	2.58E-08	1.16E-09	1	86
TN	9.71E-10	1.11E-09	0	1	1.92E-08	1.51E-09	1	86
UP	1.54E-09	9.94E-10	0	1	8.06E-09	1.14E-09	1	86
WB	1.4E-09	1.28E-09	0	1	1.64E-08	1.56E-09	0	86
Andhra	6.56E-10	1.2E-09	0	1	1.64E-08	1.57E-09	0	87
Bihar	1.51E-09	8.04E-10	0	1	1.26E-08	8.19E-10	1	87
Gujarat	1.57E-09	2.17E-09	0	1	2.61E-08	1.75E-09	1	87
Haryana	2.68E-09	2.3E-09	0	1	6.71E-08	1.92E-09	0	87
Karnataka	1.44E-09	1.23E-09	0	1	2.4E-08	1.51E-09	0	87
Kerala	2.17E-09	1.2E-09	0	1	3.62E-08	1.19E-09	0	87
Maharastra	8.34E-10	1.27E-09	0	1	1.39E-08	2.12E-09	1	87
MP	9.97E-10	1.09E-09	0	1	1.66E-08	1.19E-09	1	87
Orissa	1.36E-09	2.43E-09	0	1	3.4E-08	9.57E-10	1	87
Punjab	0	1.81E-09	0	1	5.32E-08	2.47E-09	1	87
Raja	2.01E-09	2.42E-09	0	1	2.51E-08	1.04E-09	1	87
TN	1.52E-09	1.2E-09	0	1	1.9E-08	1.54E-09	1	87
UP	2.05E-09	1.19E-09	0	1	7.87E-09	9.95E-10	1	87
WB	6.42E-10	1.4E-09	0	1	1.61E-08	1.61E-09	0	87
Andhra	3.09E-10	1.29E-09	0	1	1.61E-08	1.56E-09	0	88
Bihar	1.42E-09	1.6E-09	0	1	1.23E-08	8.08E-10	1	88
Gujarat	1.48E-09	1.11E-09	0	1	2.56E-08	2.12E-09	1	88
Haryana	2.51E-09	2.25E-09	0	1	6.54E-08	1.96E-09	1	88

states	lobprop	mon	coa	reform	1/pop	incindex	align ment	year
Karnataka	1.36E-09	1.2E-09	0	1	2.35E-08	1.34E-09	0	88
Kerala	2.06E-09	9.51E-10	0	1	3.57E-08	1.12E-09	0	88
Maharastra	1.04E-09	1.22E-09	0	1	1.36E-08	2.11E-09	1	88
MP	1.56E-09	1.4E-09	0	1	1.62E-08	1.1E-09	1	88
Orissa	1.28E-09	2.43E-09	0	1	3.33E-08	1E-09	1	88
Punjab	0	1.86E-09	0	1	5.21E-08	2.23E-09	1	88
Raja	1.89E-09	1.8E-09	0	1	2.45E-08	1.12E-09	1	88
TN	1.08E-09	1.34E-09	0	1	1.87E-08	1.48E-09	1	88
UP	2.07E-09	1.14E-09	0	1	7.69E-09	9.31E-10	1	88
WB	6.04E-10	8.88E-10	0	1	1.57E-08	1.49E-09	0	88
Andhra	3.94E-10	1.24E-09	1	1	1.54E-08	1.67E-09	0	90
Bihar	2.12E-09	7.01E-10	1	1	1.18E-08	7.21E-10	1	90
Gujarat	1.27E-09	1.19E-09	1	1	2.47E-08	1.85E-09	1	90
Haryana	1.6E-09	1.21E-09	1	1	6.21E-08	1.87E-09	1	90
Karnataka	0	2.18E-10	1	1	2.27E-08	1.32E-09	0	90
Kerala	1.79E-09	1.6E-09	1	1	3.48E-08	1.04E-09	1	90
Maharastra	3.32E-10	1.3E-09	1	1	1.3E-08	2.13E-09	0	90
MP	0	1.42E-09	1	1	1.55E-08	1.09E-09	1	90
Orissa	4.12E-09	3.85E-09	1	1	3.22E-08	8.6E-10	1	90
Punjab	1.29E-09	1.27E-09	1	1	5.03E-08	2.08E-09	1	90
Raja	1.79E-09	2.21E-09	1	1	2.33E-08	1.1E-09	1	90
TN	0	1.45E-09	1	1	1.81E-08	1.5E-09	1	90
UP	2.83E-09	1.3E-09	1	1	7.35E-09	8.68E-10	1	90
WB	0	7.09E-10	1	1	1.5E-08	1.3E-09	1	90
Andhra	2.45E-09	1.25E-09	1	1	1.5E-08	1.59E-09	1	91
Bihar	4.72E-10	9.08E-10	1	1	1.16E-08	6.83E-10	0	91
Gujarat	9.88E-10	1.41E-09	1	1	2.42E-08	1.67E-09	0	91
Haryana	0	1.2E-09	1	1	6.07E-08	2.05E-09	1	91
Karnataka	2.27E-09	1.11E-09	1	1	2.22E-08	1.42E-09	1	91
Kerala	2.11E-09	1.86E-09	1	1	3.44E-08	1.22E-09	1	91
Maharastra	1.03E-09	1.1E-09	1	1	1.27E-08	1.85E-09	1	91
MP	1.54E-09	1.15E-09	1	1	1.51E-08	9.82E-10	0	91
Orissa	1.29E-09	1.93E-09	1	1	3.16E-08	9.2E-10	0	91
Punjab	1.01E-09	8.39E-10	1	1	4.93E-08	2.31E-09	1	91
Raja	1.86E-09	1.78E-09	1	1	2.27E-08	1.07E-09	0	91

states	lobprop	mon	coa	reform	1/pop	incindex	alignment	year
TN	1.83E-09	2.11E-09	1	1	1.79E-08	1.52E-09	1	91
UP	8.8E-10	1.09E-09	1	1	7.19E-09	8.85E-10	0	91
WB	6E-10	9.79E-10	1	1	1.47E-08	1.32E-09	0	91
Andhra	1.53E-09	1.04E-09	1	1	1.47E-08	1.34E-09	1	92
Bihar	7.07E-10	1.09E-09	1	1	1.13E-08	6.23E-10	0	92
Gujarat	4.95E-10	1.06E-09	1	1	2.38E-08	1.84E-09	0	92
Haryana	2.47E-09	1.21E-09	1	1	5.92E-08	1.85E-09	1	92
Karnataka	1.82E-09	1.12E-09	1	1	2.18E-08	1.26E-09	1	92
Kerala	1.41E-09	1.57E-09	1	1	3.39E-08	1.13E-09	1	92
Maharastra	1.29E-09	9.81E-10	1	1	1.24E-08	2.02E-09	1	92
MP	1.23E-09	1.35E-09	1	1	1.47E-08	9.52E-10	0	92
Orissa	1.93E-09	2.06E-09	1	1	3.1E-08	8.82E-10	0	92
Punjab	2.01E-09	2.55E-09	1	1	4.83E-08	2.3E-09	1	92
Raja	1.84E-09	1.64E-09	1	1	2.22E-08	1.1E-09	0	92
TN	1.47E-09	1.2E-09	1	1	1.76E-08	1.51E-09	1	92
UP	1.03E-09	1.35E-09	1	1	7.04E-09	8.88E-10	0	92
WB	5.99E-10	6.59E-10	1	1	1.44E-08	1.29E-09	0	92
Andhra	1.41E-09	1.3E-09	1	1	1.44E-08	1.52E-09	1	93
Bihar	6.53E-10	1.1E-09	1	1	1.11E-08	5.74E-10	0	93
Gujarat	4.57E-10	1.35E-09	1	1	2.33E-08	1.73E-09	0	93
Haryana	3.4E-09	1.35E-09	1	1	5.78E-08	1.68E-09	1	93
Karnataka	2.1E-09	1.39E-09	1	1	2.14E-08	1.34E-09	1	93
Kerala	1.31E-09	1.29E-09	1	1	3.34E-08	9.84E-10	1	93
Maharastra	1.19E-09	1.16E-09	1	1	1.21E-08	2.21E-09	1	93
MP	1.41E-09	1.35E-09	1	1	1.44E-08	9.74E-10	1	
Orissa	1.79E-09	1.87E-09	1	1	3.04E-08	8.38E-10	0	93
Punjab	1.86E-09	8.97E-10	1	1	4.74E-08	2.02E-09	1	93
Raja	1.7E-09	1.81E-09	1	1	2.16E-08	8.77E-10	0	93
TN	1.02E-09	1.33E-09	1	1	1.74E-08	1.56E-09	1	93
UP	9.4E-10	1.04E-09	1	1	6.85E-09	7.58E-10	1	93
WB	8.27E-10	6.22E-10	1	1	1.41E-08	1.21E-09	0	93
Andhra	1.25E-09	1.3E-09	1	1	1.41E-08	1.48E-09	1	94
Bihar	7.24E-10	7.77E-10	1	1	1.09E-08	6.05E-10	0	94
Gujarat	1.01E-09	1.27E-09	1	1	2.28E-08	1.85E-09	0	94
Haryana	3.77E-09	8.96E-11	1	1	5.65E-08	1.74E-09	1	94

states	lobprop	mon	coa	reform	1/pop	incindex	alignment	year
Karnataka	1.87E-09	1.61E-09	1	1	2.1E-08	1.3E-09	1	94
Kerala	7.33E-10	1.7E-09	1	1	3.3E-08	1.05E-09	1	94
Maharastra	1.05E-09	9.09E-10	1	1	1.18E-08	1.97E-09	1	94
MP	1.56E-09	1.54E-09	1	1	1.41E-08	8.87E-10	1	94
Orissa	1.33E-09	1.58E-09	1	1	2.99E-08	8.32E-10	0	94
Punjab	2.07E-09	1.13E-09	1	1	4.65E-08	2.05E-09	1	94
Raja	1.88E-09	2.49E-09	1	1	2.11E-08	9.21E-10	0	94
TN	1.14E-09	1.17E-09	1	1	1.72E-08	1.5E-09	1	94
UP	7.46E-10	2.3E-09	1	1	6.71E-09	7.5E-10	0	94
WB	6.11E-10	5.41E-10	1	1	1.38E-08	1.21E-09	0	94

Symbols Used

lobprop: lobbying power
mon: discretionary fiscal flow index
coa: the coalition dummy
reform: the reform dummy
1/pop: inverse of state population
incindex: income index
alignment: the alignment dummy

Result 1

	Coefficient	Std. Error	t-value	t-prob
$MD_{j,t-1}$	0.554236	0.05498	10.1	0.000
$LP_{j,t-1}$	0.131996	0.05834	2.26	0.025
$incin_{j,t-1}$	0.274486	0.1120	2.45	0.015
Constant	7.79456e-011	1.798e-010	0.433	0.665

sigma 7.751039e-010
$sigma^2$ 6.007861e-019
R^2 0.438123
RSS 1.4058394654e-016
TSS 2.5020412005e-016

Result 2

	Coefficient	Std. Error	t-value	t-prob
$MD_{j,t-1}$	0.534529	0.05587	9.57	0.000
$LP_{j,t-1}$	0.133183	0.05904	2.26	0.025
$incin_{j,t-1}$	0.301883	0.1196	2.52	0.012
Constant	6.58631e-011	1.919e-010	0.343	0.732

sigma	7.701305e-010
$sigma^2$	5.93101e-019
R^2	0.4145832
RSS	1.3878563921e-016
TSS	2.3707148722e-016

Result 3

	Coefficient	Std. Error	t-value	t-prob
$MD_{j,t-1}$	0.569370	0.05424	10.5	0.000
$LP_{j,t-1*}align$	.116180	0.05123	2.27	0.024
$incin_{j,t-1}$	0.276281	0.1124	2.46	0.015
Constant	1.22033e-010	1.761e-010	0.693	0.489

sigma	7.748171e-010
$sigma^2$	6.003415e-019
R^2	0.436999
RSS	1.404799e-016
TSS	2.4951986e-019

Result 4

	Coefficient	Std. Error	t-value	t-prob
$MD_{j,t-1}$	0.550724	0.05512	9.99	0.000
$LP_{j,t-1}$	0.127352	0.05862	2 .17	0.031
$incin_{j,t-1}$	0.245001	0.1173	2.09	0 .038
reform	-9.77062e-011	1.084e-010	-0.901	0.368
constant	1.90245e-010	2.194e-010	0.867	0.387

sigma 7.752282e-010
$sigma^2$ 6.009788e-019
R^2 0.4391881
RSS 1.4002805777e-016
TSS 2.4968807798e-016

Result 5

	Coefficient	Std. Error	t-value	t-prob
$MD_{j,t-1}$	0.577765	0.05475	10.6	0.000
$LP_{j,t-1*}coa$	-0.0657039	0.06097	-1.08	0.282
$incin_{j,t-1}$	0.293821	0.1173	2.58	0.010
Constant	2.43460e-010	1.834e-010	1.33	0.186

sigma 7.812216e-010
$sigma^2$ 6.103072e-019
R^2 0 .42686
RSS 1.4281189e-016
TSS 2.4917452467e-016

Other CSH Occasional Papers

HUCHON AGNES, TRICOT GUILLAUME, *Between Citizens and Institutions: The dynamics of the integration of Water Supply and Sanitation Services in Hyderabad*, CSH Occasional Paper 22, New Delhi, 2008, 135p.

MENON-CHOUDHURY D., SHUKLA P.R., HOURCADE J-CHARLES, MATHY S., *Aligning Development, Air Quality and Climate Policies for Multiple Dividends*, CSH Occasional Paper 21, New Delhi, 2007, 95p.

GRAVEL N., MUKHOPADHYAY A., *Is India better off today than 15 years ago? A robust multidimensional answer*, CSH Occasional Paper 20, New Delhi, 66p.

HENRY L., *Trade and Economic Arrangements Between India and South East Asia In the Context of Regional Construction and Globalisation*, CSH Occasional Paper 19, New Delhi, 138p.

CHAKRABORTY D., SENGUPTA D., *IBSAC (India, Brazil, South Africa, China): A Potential Developing Country Coalition in WTO Negotiations***,** CSH Occasional Paper 18, New Delhi, 2006, 162p.

DUPONT V., SRIDHARAN N. (eds.), *Peri-Urban Dynamics: Case studies in Chennai, Hyderabad and Mumbai,* CSH Occasional Paper 17, New Delhi, 2006, 109p.

EGRETEAU R., *Instability at the Gate: India's Troubled North-East and its External Connections*, CSH Occasional Paper 16, CSH/IFP, New Delhi, 2006, 165p.

OLIVEAU S., *Periurbanisation in Tamil Nadu: a quantitative approach*, CSH Occasional Paper 15, CSH/IFP, New Delhi, 2005, 90p.

DUPONT V.(ed.)**,** *Peri-urban dynamics: Population, Habitat and Environment on the Peripheries of Large Indian Metropolises. A review of concepts and general issues*, CSH Occasional Paper 14, New Delhi, 2005, 144p.

CHAISSE J., *Ensuring the Conformity of Domestic Law With World Trade Organisation Law. India as a Case* Study, CSH Occasional Paper 13, New Delhi, 2005, 188p.

GARG A., MENON-CHOUDHARY D., SHUKLA P.R., *Assessing Policy Choices for Managing SO2 Emissions from Indian Power* Sector, CSH Occasional Paper 12, New Delhi, 2005, 87p.

CHAPELET P., LEFEBVRE B., *Contextualising The Urban Healthcare System: Methodology for Building up a Geodatabase of Delhi's healthcare System*, CSH Occasional Paper 11, 2005, 135p.

SINGH S., *China-India Economic Engagement: Building Mutual Confidence*, CSH Occasional Paper 10, 2005, 205p.

Fiscal Federalism, State Lobbying and Discretionary Finance in India

Summary

In a quasi-federal democratic polity such as India's, lobbying for central funds by the states is often done in a covert fashion. Unlike as in the USA's fully federal structure, lobbying is not institutionalized in India and hence lacks legitimacy. It thus becomes difficult to gauge how much lobbying has been done towards a particular end. The present paper is one of the first attempts at constructing certain proxy political variables to quantify the extent of such lobbying in India. Here an effort has been made to quantify lobbying in terms of ministerial representation in the council of ministers. Several time and state dummies have been used to account for the constituent states' political alignment with the Centre as well as the 'breaks' in the Indian system represented by economic reforms and the advent of coalition politics. Taking panel data covering 20 years and 14 major states, the study shows that its constructed variables do explain disparity in central fund disbursements under the discretionary head in a robust way. Discretionary disbursement mainly refers to that part of the central fiscal disbursement to states distributed through union ministries or the Planning Commission but which is, at every instance, non-formulaic. These findings remain valid even after we take into account the impact of income on the transfers, dealing with it as an endogenous variable. Finally, the present exercise leaves open the question that coalition governments and economic reform measures tend to impact on state lobbying at the Centre in a significant manner.

Keywords: state lobbying, discretionary disbursement, political variables

JEL classification: H0, H79

CENTRE DE SCIENCES HUMAINES

2 Aurangzeb Road, New Delhi - 110 011, India

Tel. : (91 11) 30 41 00 70

Fax : (91 11) 30 41 00 79

E-mail : infos@csh-delhi.com

Website : http://www.csh-delhi.com
