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**Determining Gender Equity in Fiscal Federalism:  
Analytical Issues and Empirical Evidence from India**

by

**Lekha S. Chakraborty\***  
Levy Economics Institute of Bard College

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\* Comments may be sent to the author at [lekhachakraborty@gmail.com](mailto:lekhachakraborty@gmail.com).

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Levy Economics Institute  
P.O. Box 5000  
Annandale-on-Hudson, NY 12504-5000  
<http://www.levy.org>

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## **ABSTRACT**

Despite the policy realm's growing recognition of fiscal devolution in gender development, there have been relatively few attempts to translate gender commitments into fiscal commitments. This paper aims to engage in this significant debate, focusing on the plausibility of incorporating gender into financial devolution, with the Thirteenth Finance Commission of India as backdrop. Given the disturbing demographics—the monotonous decline in the juvenile sex ratio, especially in some of the prosperous states of India—there can be no valid objection to using Finance Commission transfers for this purpose. A simple method for accomplishing this could be to introduce some weight in favor of the female population of the states in the Commission's fiscal devolution formula. The message would be even stronger and more appropriate if the population of girl children only—that is, the number of girls in the 0–6 age cohort—is adopted as the basis for determining the states' relative shares of the amount to be disbursed by applying the allotted weight. A special dispensation for girls would also be justifiable in a scheme of need-based equalization transfers. While social mores cannot be changed by fiscal fiat, particularly when prejudices run deep, a proactive approach by a high constitutional body like the Finance Commission is called for, especially when the prejudices are blatantly oppressive. Indeed, such action is imperative. The intergovernmental transfer system can and should play a role in upholding the right to life for India's girl children. That being said, it needs to be mentioned that it is not plausible to incorporate more gender variables in the Finance Commission's already complex transfer formula. In other words, inclusion of a “gender inequality index” in the formula may not result in the intended results, as the variables included in the index may cancel one another out. Accepting the fact that incorporating gender criteria in fiscal devolution could only be the second-best principle for engendering fiscal policy, the paper argues that newfound policy space for the feminization of local governance, coupled with an engendered fiscal devolution to the third tier, can lead to public expenditure decisions that correspond more closely to the revealed preferences (“voice”) of women. With the 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments, this policy space is favorable at the local level for conducting gender responsive budgeting.

**Keywords:** Fiscal Decentralization; Federalism; Fiscal Transfers; Gender

**JEL Classifications:** H77, J16

## I. INTRODUCTION

Despite the growing recognition of fiscal devolution in gender development in the policy realms, there have been relatively few attempts on the translation of gender commitments into fiscal devolution commitments.<sup>1</sup> This paper aims to take on this rare range of significant debate, focusing on the plausibility of incorporating gender into financial devolution against the backdrop of the Thirteenth Finance Commission of India. It is particularly relevant in this context that India is the first country to institutionalize gender budgeting *within* its Ministry of Finance, adhering to the budgetary accounting framework and analyzing the possibilities of changes in the budgetary classification to integrate gender budgeting in the mainstream budgets.

There can be hardly two opinions on the fact that the new-found policy space of feminization of local governance in India, coupled with fiscal devolution to the third tier, may provide an impetus to adopt the *gender lens* more effectively in formulating gender-sensitive fiscal policies. It could be based on dual conjectures. Firstly, greater fiscal autonomy at the local level, with effective feminization of governance, can make a transition in the budgetary decisions by incorporating gender concerns. Secondly, it helps to identify spatial gender needs, which is a step ahead from existing homogeneous *one-size-fits-all* gender budgeting policies.

The arguments set above are within the analytical framework of fiscal decentralization. Theoretically, fiscal decentralization is neither good nor bad for efficiency and equity in terms of gender. The effects of fiscal decentralization depend on institutional mechanism design, which relates to the degree of decentralization and how decentralization policy in terms of intergovernmental transfers, along with functional and financial assignment at the subnational levels and institutions, interact. The principle of subsidiarity states that fiscal decentralization is good for efficiency and equity in the economy based on the rationale that local governments, which are closer to citizens, are more efficient in the provisioning of public services than the higher levels of government. This rationale holds good in terms of gender development, as local governments have better information on gender differentials regarding needs and preferences.

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<sup>1</sup> The scarce literature in this realm that looks into the fiscal decentralization process through a gender lens for selected countries was contributed by the National Institute of Public Finance and Policy in its working paper series, particularly Rao and Chakraborty (2006), Chakraborty and Bagchi (2007), and Chakraborty (2005a, 2005b, 2006a, 2006b, 2006c, 2007a, and 2007b).

The rest of the paper is organized as follows. Section 2 provides theoretical issues related to gender and fiscal federalism, while section 3 provides a briefing on the existing policy initiatives on incorporating gender into fiscal policy in India. Section 4 critically reviews the process of fiscal devolution through a *gender lens* at the aggregate level. Section 5 concludes.

## II. THEORETICAL ISSUES

The theoretical underpinnings of the rationale of incorporating gender into intergovernmental fiscal transfers are accountability (“voice” and “exit”), information symmetry, transparency, and appropriate size of government at the local level for effective service delivery. The degree of accountability (“voice”) in integrating gender in an intergovernmental fiscal setup is based on dual conjecture—first, the accountability of the subnational government to the higher tier of government and second, to the electorate. The former limits the latter, especially in cases where financial decisions are centralized, but the provision of public goods is decentralized. The separation of finance from functional assignment can lead to inefficiencies, the most oft-cited problem being unfunded mandates. On the other hand, the real autonomy in the decision making of the Elected Women Representatives (EWR) plays a crucial role in integrating gender-specific needs in the fiscal policies and their accountability to the electorate gets constrained if the flow of funds is through deconcentrated intermediate levels with accountability to the central government. However, fiscal policy in a federal setting promotes government accountability, particularly in geographically or demographically large nations (Stern 2002). Participatory local governments are generally better informed about the needs and preferences of the local population than the central government is and is the entry point of integrating gender concerns. It helps to improve efficiency in resource allocation, minimize transaction costs in designing and implementing the development policies, and ensure better incentive mechanisms and accountability. In fiscal federal setup, monitoring and control of governance by local communities is easier in principle. At the subnational level, elected governments can be expected to be generally more accountable and responsive to the gender concerns, and more effective in involving the women in the sociopolitical development processes. Decisions at the subnational level give more responsibility, ownership, and, thus, incentives to local agents and local

information can often identify cheaper and more appropriate ways of providing public goods (Stern 2002; Bardhan and Mookherjee 1999).

Another risk of incorporating gender in the intergovernmental fiscal transfer mechanism is the dominance of elite groups within the jurisdiction and their influence in control over financial resources and in the public expenditure decisions related to the provisioning of public goods and governance. There is growing evidence that power at the local level is more concentrated, more elitist, and applied more ruthlessly against poor than at the center (Griffith 1981). This is referred to as *elite capture* in theoretical literature. In such a setting, the voice of women elected as representatives may get neutralized by political pressure groups. In addition, if the women in governance are comparatively less empowered, with minimum/no education and basic capabilities, their ad hoc decisions on the systems of public goods and services will not have any major impact on poor and needy women. The benefits of decentralized socioeconomic programs would be captured by the local elite and, in turn, result in underinvestment in public goods and services for poor women. This is particularly true in the context of heterogeneous communities and underdeveloped rural economies (Bardhan 1999; Galasso and Ravallion 2000).

The aberrations in voice may induce the possibility of greater corruption at local levels of government than at the national levels; in turn, corruption deepens capability deprivation. There is empirical evidence indicating that decentralization increases corruption and reduces accountability (Rose-Ackerman 1997; Tanzi and Davoodi 2000), however, empirical evidence favors the hypothesis that the participation of women in governance structure lessens the possibilities of corruption (Swamy et al. 2001). The gender differences in the incidence of corruption may range from personality traits (honesty, law-abiding), to the degree of access to networks of corruption, or to lack of proper knowledge of how to engage in corrupt practices. It may also be the case that voice may be a “proxy voice” if the elected women are not empowered and their male relatives operate the local bodies. However, effective participation of female representatives at the local level can change the priorities in budgeting, bring accountability, and ensure quality and efficiency of public goods and services.

The axiom of “exit,” which provides yet another mechanism for accountability, refers to the mobility of population. Theoretically, citizens who are dissatisfied with the public provisioning of services by one local government can “vote with their feet” by moving to another jurisdiction that better meets their preferences. In practice, there are many constraints on

interjurisdictional mobility, especially in case of women. In spite of these constraints, there are evidences of interjurisdictional labor mobility by women for wage employment. This reveals that factors beyond local service provision in physical and social infrastructure often influence citizen's decision about where to locate. Interjurisdictional labor mobility may be an instrument of local accountability when citizens reveal their preferences by strengthening exit.

A centrally determined *one-size-fits-all* gender policy cannot be a solution to redress gender inequities in a country with a vast population and heterogeneity across jurisdictions. Given the heterogeneity in the efficiency of public service provisioning across jurisdictions, it may be timely to consider the scope of *asymmetric federalism*<sup>2</sup> in the context of incorporating gender into fiscal policies. One way of looking at this is the process of accreditation where the subnational governments who pass minimum standards in service and product delivery, as well as specific attributes of governance, could be given greater autonomy in functions and finance. This requires benchmarking the governance of subnational governments, which may catalyse horizontal competition among the states. It can ensure gains in efficiency and increase productivity through the "Salmon mechanism," in which intergovernmental competition is activated by benchmarking the performances of other governments in terms of levels and qualities of services, levels of taxes, or more general economic and social indicators (Salmon 1987).<sup>3</sup> The voters and opposition parties compare the supply performance of their governments with the benchmark performance and influence supply decisions.<sup>4</sup> This gender-sensitive benchmarking of local governance can empower women to compare the relative performance of their governments in terms of the tightness of *Wicksellian connections*<sup>5</sup> and influence supply

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<sup>2</sup> "Asymmetric federalism" refers to federalism based on unequal powers and relationships in political, administrative, and fiscal arrangement spheres between the units constituting a federation. Asymmetry in the arrangements in a federation can be viewed both vertically (between central and states) and horizontally (among the states). If federations are seen as an "indestructible union of indestructible states," and the central government and states are seen to exist on the basis of equality, neither has the power to make inroads into the defined authority and functions of the other unilaterally (Rao and Singh 2004).

<sup>3</sup> As cited by Breton and Fraschini (2004) and Rao (2006).

<sup>4</sup> Breton (1996), Salmon (1987).

<sup>5</sup> A *Wicksellian connection* is a link between the quantity of a particular good or service supplied by centers of power and the tax price that citizens pay for that good or service. Knut Wicksell (1896) and Erik Lindahl (1919) showed that if decisions regarding public expenditures and their financing were taken simultaneously and under a rule of (quasi) unanimity, a perfectly tight nexus between the two variables would emerge. Breton (1996) argued that competition between centers of power, if it was perfect and not distorted by informational problems, would also generate completely tight Wicksellian connections. In the real world, competition is, of course, never perfect and informational problems abound; as a consequence, Wicksellian connections are less than perfectly tight. Still, as long as some competition exists, there will be Wicksellian connections (Breton and Fraschini 2004).

decisions of their jurisdictions to design and implement appropriate policies and programs to ensure gender equity.

Intergovernmental competition and the mechanism of exercising choice by the citizen-voters, either through exit or by voice, helps to reveal preferences of public services (Rao 2002). The theoretical literature elaborated that competition results in innovations in the provision of public services and, in respect of public goods, it helps to identify the beneficiaries and impose user charges on them. However, the efficiency in the service delivery and welfare gains accrued and the enhancement of accountability depends on the nature of intergovernmental competition and political *institutions* (Breton 1996).

Information symmetry is one of the important factors in holding subnational governments accountable. When policymakers are in close proximity to the people they serve, the information they receive tends to be more accurate regarding the needs and demands of citizens across gender as they participate effectively and exercise their voice in terms of revealing preferences. The higher the information symmetry, the higher the accountability and transparency of the local government. Information symmetry can reduce the transaction costs on both the provider's and the citizen's side.

The size of the lowest tier of the government varies significantly across countries. It is often argued that the smaller the size of the local government, the higher the inefficiency in public service delivery. It is often because of a lack of capacity to manage all the functions assigned to them. On the other hand, the smaller the size of local governments, the greater the participation and accountability become. The real challenge at this point is a judicious structure of local government that is not only politically acceptable, but also can provide efficient delivery of public services. The appropriate scale for key services should be an important element in the governance structure at the local level.

There is no direct attempt so far to incorporate gender concerns in the intergovernmental fiscal relations in India. Given the asymmetries in the assignment of functions and finance, a significant prerequisite of integrating gender into intergovernmental transfers is to lessen the *unfunded mandates*. However, it is also important to gender sensitize the transfer system, as a major share of local government revenue is fiscal transfers.

The point to be noted here is that it would be ideal to incorporate gender in specific-purpose transfers (conditional) rather than in general-purpose transfers (unconditional). The

objective of the general-purpose transfer system is to offset the fiscal disabilities and it is desirable to keep the transfer system formula-based, simple, equitable, and without perverse incentives. Any attempt to include a gender component in general-purpose transfers may make it complex and create incentives against undertaking measures to improve gender equity. On the other hand, the objective of specific-purpose transfers is ensuring minimum standards in access to specified services, such as basic education, healthcare, water supply, sanitation, and anti-poverty interventions.

Ideally the transfer system for gender equity should have a judicious mix of both general-purpose and specific-purpose transfers. The objective of the general-purpose transfers is to enable all subnational jurisdictions to provide normatively determined standards of public services. On the other hand, it is important to design specific transfers to implement direct programs that would enhance the capabilities and entitlements of women, which, in turn, would help them to release the time locked up in the unpaid activities of the care economy and enable them to participate in paid work in the market economy.

### **III. KEY INITIATIVES ON GENDER-SENSITIVE FISCAL POLICY IN INDIAN FEDERALISM**

India is a pioneering country in institutionalizing gender budgeting within its Ministry of Finance. The process of gender budgeting in India gathered momentum with the National Institute of Public Finance and Policy (NIPFP) study (Lahiri, Chakraborty, and Bhattacharyya 2003). To provide the analytical framework for gender budgeting, the NIPFP study constructed an econometric model to link spending on public education and health to the Gender Development Index (GDI), showing the positive effect of such spending on this indicator (GDI) of gender inequality (box 1). This approach does not refute the widely explored link between economic growth and (gender-sensitive) human development, rather it confirms this link through higher public expenditure, particularly through healthcare and education (Chakraborty 2003a).



## Box 1

### Gender Development Index

The Human Development Index [HDI] is a gender-neutral measure of the average achievements of a country in three basic dimensions of human development: longevity, knowledge, and a decent standard of living. Longevity is measured by life expectancy at birth; knowledge by adult literacy and the combined gross primary, secondary, and tertiary enrollment ratio; and standard of living by Gross Domestic Product (GDP) per capita in U.S. dollars in purchasing power parity (PPP) terms.

Let  $L$  denote life expectancy at birth in years;  $A$  adult literacy as percent;  $E$  combined gross primary, secondary, and tertiary enrollment ratio in percent; and  $Y$  per capita GDP in PPP U.S. dollar terms. The value of each variable for a country is transformed into its deviation from the minimum possible value of the variable expressed as a proportion of the maximum deviation possible, i.e., maximum less minimum. Thus, after transformation we have:

$$L^* = (L-25)/(85-25), A^* = A/100, E^* = E/100, \text{ and } Y^* = (Y - \min Y)/(\max Y - \min Y).$$

Given the minimum life expectancy for women and men of 27.5 years and 22.5 years, respectively, the average minimum life expectancy is taken as 25 [= (27.5 + 22.5)/2]. Similarly, maximum life expectancy is taken as 85. The maximum and minimum of both adult literacy and enrollment are taken as 100 and 0, respectively. The maximum and minimum for  $Y$  are exogenously fixed. HDI is computed as:

$$\{L^* + (2/3 \times A^* + 1/3 \times E^*) + Y^*\}/3.$$

The Gender Development Index (GDI) uses the same variables as HDI, but adjusts for the degree of disparity in achievement across genders. The average value of each of the component variables is substituted by “equally distributed equivalent achievements.” The equally distributed equivalent achievement for a variable is taken as that level of achievement that, if attained equally by women and men, would be judged to be exactly as valuable socially as the actually observed disparate achievements. Taking an additively separable, symmetric, and constant elasticity marginal valuation function with elasticity 2, the equally distributed equivalent achievement  $X_{ede}$  for any variable  $X$  turns out to be:

$$X_{ede} = [n_f (1/X_f) + n_m (1/X_m)]^{-1}$$

where  $X_f$  and  $X_m$  are the values of the variable for females and males, and  $n_f$  and  $n_m$  are the population shares of females and males, and  $X_{ede}$  is a “gender-equity-sensitive indicator” (GESI).

Thus, for this chosen value of 2 for the constant elasticity marginal valuation function, GDI is computed as:

$$\{L_{ede} + (2/3 \times A_{ede} + 1/3 \times E_{ede}) + Y_{ede}\}/3.$$

Given the limited scope of *trickle-down effects* of economic growth-promoting strategies, the role of fiscal policy stance in gender-sensitive human development proceeds from market failures of one kind or another. Fiscal policy stance is a key policy instrument to ensure human development (in particular, gender development) and rests on the fact that the functioning of the market cannot, by itself, activate the signaling, response, and mobility of economic agents to achieve efficiency in both static (allocative efficiency) and dynamic (shift in the production frontier) terms. This is all the more relevant at the subnational levels of fiscal policy stance, as the provisioning of *merit goods* like education and health are provided at the subnational level. The rubric of gender budgeting owes its roots to these analytics.

What manifests gender budgeting in India? It is important to recall in this context that gender budgeting is a step ahead from the *Women's Component Plan (WCP)*—the strategy adopted by the *National Development Council*, one of the highest policymaking bodies in the country—for achieving the specific objective of the Ninth Five Year Plan (1997–2002), the empowerment of women. The WCP is confined to only the plan expenditure of the government and is thus partial. However, the WCP is designed to ensure that not less than 30 percent of funds and benefits flow to women from the developmental sectors. Accepting that earmarking money for women through WCP is only a *second-best principle of gender budgeting*, the NIPFP study has attempted an analysis of the whole budgetary process through a gender lens. The WCP would have been more effective had there been a differential targeting of expenditure emanating from the identification of appropriate programs for women in various sectors. In other words, reprioritizing the expenditure based on a generic list of appropriate programs and policies for women might be more effective than *ad hoc targeting* of 30 percent across sectors.

The major debate in India on gender budgeting in the initial phase went much beyond the mechanics of adopting a homogenous 30 percent WCP to the very rationale of conducting gender budgeting itself. The *gender diagnosis* analysis carried out by NIPFP justified the need for conducting gender budgeting based on the empirical evidence that as women and men are at asymmetric levels of socioeconomic development in India, the existing gender neutrality of budgets can lead to many unintentional negative consequences, translating the gender neutrality of budgets into gender blindness. The study provides some selected indicators of the status of women in India, showing the degree of disadvantage, especially in health, education, and work participation. The study also evaluated the existing degree of gender inequality in India, presenting an interesting application of HDI, GDI, and GEM<sup>6</sup> (Stotsky 2006). The NIPFP study also expostulated that integrating gender perspective into budgetary policy has dual dimensions of *equality* and *efficiency*. From the *efficiency* consideration, what is important is the social rate of return of investment in women, in some cases, this can be greater than the corresponding rate for men. The study highlighted that *gender inequality is inefficient* and costly to development.

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<sup>6</sup> The Gender Empowerment Measure (GEM) attempts to capture gender inequality in key areas of economic and political participation and decision making. It differs from the GDI in that it focuses on women's opportunities rather than on gender inequality in basic capabilities. The GEM is constructed on the basis of the percentage share of men and women in: (i) Parliament; (ii) administrative and managerial positions and professional and technical jobs; and (iii) unadjusted GDP per capita.

Through these discussions, the NIPFP study was rooting its rationale for gender budgeting in *externalities*, a notion that encompasses equity as well as efficiency considerations. Gender budgeting intrinsically recognizes these dual dimensions and assumes that fiscal policy stance can be used to internalize the externalities through various policy instruments including taxation, subsidies, and public expenditure.

While discussing the externalities through a gender lens, an important point that needs to be highlighted is the *labor force exogeneity in the treatment of the care economy*<sup>7</sup> in the prevalent macroeconomic policymaking, which is dubious. The intrahousehold gender asymmetries in the intensity and allocation of time and the choices regarding labor force participation in the *care economy* have always been invisible in the macro policies. Recognizing that the dynamic interaction between dual sets of economic activity mark the microfoundations of engendering macroeconomic policies, the NIPFP study applies global substitution criteria of price variables to the time use budgets to value the care economy across selected states in India (within the framework of extended production boundary of *Systems of National Accounts* [SNA] 1993, [box 2]) and, in turn, integrates this into macro policies. Realizing that the allocation and efficiency of time spent in the *care economy* might be more important to economic welfare than market economy through its positive externalities, the study has recommended integrating the inferences from time use budgets in gender budgeting. The point to be noted here is that the gender budgeting policies related to the *care economy* would be more effective at the decentralized levels of government through *social multiplier* effects.

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<sup>7</sup> The care economy represents domestic (reproductive) work together with voluntary community work.

## Box 2

### Systems of National Accounts 1993

The 1993 System of National Accounts (SNA) limits economic production of households for their own consumption to the production of *goods* alone and excludes the own-account production of personal and domestic services (except for the services produced by employing paid domestic staff, the own-account production of housing services produced by employing paid domestic staff, and the own-account production of housing services by owner-occupants). This allows the SNA to avoid valuing activities such as eating, drinking, and sleeping, which are difficult for a person to obtain from another person. But, in the process, activities such as fetching water from the river or the well, collecting fuel wood, washing clothes, house cleaning, and preparation and serving of meals, as well as care, training, and instruction of children and care of sick, infirm, or old people also gets excluded from the definition of economic activity. These services are mostly performed by women, but can also be procured from other units. While these activities are excluded partly because of the inadequate price systems for valuing these services, this exclusion principle leads to the economic invisibility and a statistical underestimation of women's work. It is interesting to recall in this context the famous economist Pigou's comment that if a housemaid employed by a bachelor were to marry him, national income would fall, since her previously paid work would now be performed unpaid.

SNA 1993 suggests development of estimates for the value of household production of services for own use in satellite accounts of an alternative concept of gross domestic product (GDP). Estimation of the "unpaid" work of women in the care sector can suggest a quantification of the contribution of women to the economy. The quantification can also be useful for two more reasons. First, it would provide a fuller understanding of how resources and time are allocated in the economy. Second, it would indicate the extent to which economic development and the associated feminization of labor—through the substitution of own-account production of services by purchases from the market (for example, households using self-service laundry services instead of washing at home)—would give a fillip to the growth rate of GDP as it is measured. Monitoring such estimates over time can also help in understanding the effect of policies on these own-account production of services, which are critical for welfare.

**Source:** Systems of National Accounts, UNSD (1993); Lahiri, Chakraborty, and Bhattacharyya (2002)

The methodology adopted by NIPFP for gender budgeting received wide attention due to its simplicity and practicability in conducting gender budgeting *within* the country and *between* countries. Stotsky (2006) noted that it represents an interesting effort at focusing on the gender-differentiated effects of budgetary spending and, although the linkages of such spending to gender disparity measures and economic growth and welfare are only treated in brief, it provides a framework for such analyses to support sensible budget-making. Within the analytical framework of gender budgeting, a few matrices have been developed by NIPFP to categorize the financial inputs from gender perspective. These analytical matrices for categorizing public expenditure through a gender lens are: (i) specifically targeted expenditure to women and girls; (ii) pro-women allocations, which are the composite expenditure schemes with a significant women's component (that is, a scale of  $30 \leq E < 100$ ; at least 30 percent targeted for women);

and (iii) residual public expenditures that have gender-differential impacts (that is, a scale  $0 \leq E < 30$ ). These three analytical matrices neatly fit into the existing program budgeting framework in India. These matrices hold good even with the transition of the existing accounting system to International Monetary Fund's *Government Finance Statistics*, where government budgets are broken down into functional and economic categorizations. This is possible through: (i) organizing the budgetary data either by examining gender-disaggregated public expenditure, benefit incidence analysis (BIA) or (ii) by segregation of gender-specific allocations in the budget and accounts by introducing a new budget head of account. A gender-disaggregated public expenditure BIA involves the measurement of the *unit cost* of providing a particular service and the number of *units utilized* by gender. The paucity of gender-disaggregated data on services utilized constrains such a BIA for a variety of public services. Furthermore, theoretically, all public goods and services cannot be gender partitioned.

The policy series on ex-post gender budgeting analysis, published by NIPFP and based on their methodology, was revealing. Higher budgetary allocation for women *per se* does not translate into higher spending, as there has been significant deviation between *budget estimates* and *actuals*. It is important to note in this context that the gender-sensitive analysis of budgets *begins* with categorizing expenditure, but it does not *stop* there. The NIPFP study recognizes that the categorization has to be followed by a number of exercises that examine what *use* has been made of expenditures and what *impact* this has had (that is, from the financial inputs to the gendered outputs and impacts). Thus, linking gender budgets to outcome budgets and performance budgeting are equally important. *Expenditure tracking surveys* are also required to analyze the implementation aspects of these programs and also to analyze the leakages in the financial allocation, if any.

What budgetary reforms are therefore required for gender-sensitive public policy? The policy solutions suggested by the NIPFP study are mainly twofold. First, ensure transparency in the allocation for women through adequate changes in *budgetary classification* to protect these provisions from reappropriation, thereby enhancing accountability. Second, with the advent of fiscal decentralization, strengthen the gender-sensitive budgeting at the subnational government levels, as provisioning of *merit goods* (like education and health) are primarily the responsibility of subnational governments. The first policy solution was addressed by the Ministry of Finance (MoF), Government of India, through the establishment of an expert group on "Classification of

Government Transactions” in 2004, of which one of the terms of reference (TOR) was institutionalizing a gender-responsive budgeting process at the national level. Based on the recommendations of the Expert Group, gender budgeting has been institutionalized in India through the Ministry of Finance since 2005–06.<sup>8</sup> Against the backdrop of the recommendations by the Expert Group, the Finance Minister has introduced a statement on gender budgeting in the Union Budget of 2005–06. The 2005–06 Union Budget included a separate statement on the gender sensitivities of budgetary allocations under ten demands for grants. It also required all departments to present gender budget statements. In one year’s time, the Finance Minister has been able to enlarge the statement to include 24 demands for grants with an outlay of Rs. 28,737 crores. *Prima facie*, Rs. 28,737 crores appears as *unpleasant gender arithmetic*, as it constitutes only 5 percent of the total budget. However, in due course, the gender budgeting statement increased to include more than 33 demands for grants in 2008–09, contributed by 27 ministries/departments and 5 Union Territories. The number of ministries/departments with gender budgeting cells increased to 54. The gender statement also dichotomized the gender-sensitive allocations into specifically targeted programs for women and public expenditure with pro-women allocations. According to the latest gender budgeting statement in the Union Budget of 2009–10, Rs. 11,460 crore has been provided for schemes that are 100 percent women-specific and Rs. 36,605.86 crore for schemes where at least 30 percent is for women-specific programs. The 2008–09 Union Budget also reported that the gender allocations had increased from Rs. 49,623.35 crores in 2008–09 (RE) to Rs. 51,159.04 crores in 2009–10 (BE) (Expenditure Budget, Volume 1, Union Budget 2009–10, page 68).

The second policy solution of strengthening gender budgeting at the decentralized levels gave mixed results. The NIPFP methodology for gender budgeting has been accepted by the Government of India for carrying this exercise over to the state level. The Ministry of Women and Child Development (DWCD) has coordinated these studies and the analysis of these studies has been included as a separate chapter in the Annual Report of the DWCD since 2001. In addition to these exercises, several states announced the introduction of gender budgeting in their state budget, including Rajasthan and Madhya Pradesh. At the local level, only the government

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<sup>8</sup> The research that preceded the institutionalization of gender budgeting in India in preparing the ex post gender budget statements can be reviewed in Lahiri, Chakraborty, and Bhattacharya (2001), Chakraborty (2003c), and Chakraborty (2006c). The country-specific and cross-country experiences related to preparing gender budgets in the Asia Pacific region can be reviewed in Chakraborty (2003b, 2003d, 2004, 2005, 2008b, and forthcoming).

of Kerala has taken the initiative to integrate gender budgeting, with 10 percent of the plan outlay devoted to the third tier of the WCP.

Given that a major chunk of resources at the local level come from financial devolution, unless the devolution formula is gender sensitive, the gender budgeting experiments cannot go far. The next section takes up the overall discussion of the intergovernmental fiscal system in a three-tier set up in India through a gender lens.

#### **IV. FISCAL DEVOLUTION THROUGH A GENDER LENS**

India is the largest democratic federal polity in the world. Out of over a quarter-million local governments, only around 3,000 are in the urban areas. Structurally, decentralization in India would seem to have been carried to the smallest unit of habitation *viz* villages, but their resources and functions are limited. While substantial resources are raised or are devolved further to the second level *viz* the states, the third tier suffer acutely from inadequacy of resources.

Although constitutional amendments provide an illustrative list of functions that are considered appropriate for local governments, they remain largely unfunded mandates. The amendments also made it mandatory to appoint a state finance commission once in every five years to make recommendations regarding the fiscal transfers from the state to the local bodies; progress in terms of functions and finance to local bodies has been tardy. The degree of decentralization in any country is difficult to quantify. Fiscal decentralization can broadly be captured by the share of subnational expenditure in total expenditure and/or local government expenditure as percentage of GDP of the country. However, these indices do not capture enough of the governance structure to understand the degree of power in terms of decision making vested with the local government over expenditure functions. Lack of data on these components of governance structure limits the empirical analysis to a great extent. However, to capture a broad picture, a few proxies of fiscal decentralization are given in table 1.

**Table 1. Fiscal Decentralization in India**

|                           | Revenue Collection | Revenue Accrual | Total Expenditure |
|---------------------------|--------------------|-----------------|-------------------|
| <b>(Percent of GDP)</b>   |                    |                 |                   |
| Central Government        | 11.46              | 6.80            | 12.00             |
| States                    | 7.80               | 10.90           | 13.60             |
| Local Bodies              | 0.54               | 2.10            | 2.20              |
| Urban Local Bodies        | 0.50               | 0.80            | 0.80              |
| Rural Local Bodies        | 0.04               | 1.40            | 1.40              |
| District Panchayats       | Negligible         | 0.60            | 0.60              |
| Taluk Panchayats          | Negligible         | 0.30            | 0.40              |
| Village Panchayats        | 0.04               | 0.40            | 0.40              |
| Total                     | 19.80              | 19.80           | 27.80             |
| <b>(Percent of Total)</b> |                    |                 |                   |
| Central Government        | 57.88              | 34.43           | 43.20             |
| States                    | 39.39              | 55.03           | 48.90             |
| Local Bodies              | 2.73               | 10.53           | 7.90              |
| Urban Local Bodies        | 2.53               | 4.07            | 2.90              |
| Rural Local Bodies        | 0.20               | 6.46            | 5.00              |
| District Panchayats       | Negligible         | 3.21            | 2.20              |
| Taluk Panchayats          | Negligible         | 1.44            | 1.40              |
| Village Panchayats        | 0.20               | 1.82            | 1.40              |
| Total                     | 100.00             | 100.00          | 100.00            |

*Source:* Rao and Singh (2005)

The local government expenditure as a percentage of GDP constituted 2.20 percent, while in terms of revenue mobilization, local government revenue constituted 0.54 percent of GDP. Specifically, over a quarter-million rural local bodies in India mobilize only 0.04 percent of GDP. The expenditure of local government constituted 7.90 percent of the total, but their revenues accounted for only 2.73 percent of the total. The fiscal autonomy ratio of local governments (the ratio of own revenue to total expenditure) was as low as 27 percent in India. In the case of low income states, it was even lower at 13.03 percent (Rao, Nath, and Vani 2004). As can be seen from table 2, the share of own tax and own nontax revenue sources of *Panchayati Raj Institutions* (PRIs) in aggregate government resources is negligible.



**Table 2. Composition of Revenue of Panchayats in India (%)**

|                            | 1998–99      | 1999–2000    | 2000–01      | 2001–02      | 2002–03      |
|----------------------------|--------------|--------------|--------------|--------------|--------------|
| Own tax                    | 3.64         | 3.04         | 3.24         | 3.61         | 3.87         |
| Own nontax                 | 3.07         | 2.95         | 2.86         | 2.77         | 2.98         |
| <b>Own revenue</b>         | <b>6.71</b>  | <b>5.99</b>  | <b>6.10</b>  | <b>6.38</b>  | <b>6.84</b>  |
| Assignment + devolution    | 30.20        | 29.23        | 28.10        | 27.01        | 27.69        |
| Grants-in-aid              | 56.34        | 58.92        | 57.76        | 58.85        | 58.95        |
| Others                     | 6.75         | 5.85         | 8.04         | 7.32         | 6.52         |
| <b>Total other revenue</b> | <b>93.29</b> | <b>94.01</b> | <b>93.90</b> | <b>93.62</b> | <b>93.16</b> |
| Total revenue              | 100.00       | 100.00       | 100.00       | 100.00       | 100.00       |

*Source:* Government of India (2004)

Given that a major part of the subnational government revenue accrues from fiscal transfers, the attempt of gender budgeting at the local level in India does not go far enough unless the institutional mechanisms of fiscal decentralization and degree of fiscal autonomy are varied. There is a lack of transparency and accountability in the system because of the extensive use of inadequate revenue assignments, lack of sufficient decentralization to local bodies, and a poorly designed intergovernmental transfer system. However, as local governments depend heavily on transfers from the higher level of government, could engendering the criteria of fiscal devolution be a plausible policy step?

### **Criteria of Fiscal Devolution through a Gender Lens**

In the multi-tier structure of intergovernmental fiscal relations in India, the Central Finance Commission, which is appointed every five years by the President of India to mediate revenue transfer from the center to the states, also makes recommendations with regard to the financial devolution to the local bodies as a measure to “augment the Consolidated Fund of a State to supplement the resources of the *panchayats* and municipalities.” The shares of fiscal transfers for each state are determined on the basis of a set of criteria. This criteria of fiscal devolution includes population, geographical area, distance from highest per capita income, index of deprivation, and revenue effort (table 3). Apart from the transfers ordained by the Central Finance Commission for local bodies, each state is required to appoint State Finance Commission (SFC) every five years to make recommendations on the transfers to be made to local bodies from the state’s coffers. Table 3 also reports the criteria of fiscal devolution suggested by the first SFCs of Karnataka, Kerala, and West Bengal.

**Table 3. Criteria for Financial Devolution to the Local Bodies**

| Criteria  | India (TFC) | Kerala | Karnataka | West Bengal |
|---|-------------|--------|-----------|-------------|
| Population  | 40          | 75     | 33.33     | 50          |
| Geographical area                                       | 10          |        | 33.33     | 10          |
| Distance from highest per capita income                 | 20          |        |           |             |
| Index of deprivation                                    | 10          |        |           |             |
| Count of backward population or SC/ST                   |             | 5      |           | 10          |
| Rural population  |             |        |           | 10          |
| Illiteracy rate   |             |        | 11.11     | 10          |
| Persons per head in government hospitals                |             |        | 11.11     |             |
| Road length/sq. km                                      |             |        | 11.11     |             |
| Inverse ratio of per capita bank deposit                |             |        |           | 10          |
| Revenue effort, of which                                | 20          |        |           |             |
| (a) With respect to own revenue of states               | 10          |        |           |             |
| (b) With respect to gross state domestic product (GSDP) | 10          |        |           |             |
| Tax effort  |             | 5      |           |             |
| Financial need  |             | 15     |           |             |
| Total weight  | 100         | 100    | 100.00    | 100         |

**Source:** Twelfth Finance Commission Report (2004) and First SFC Reports of Kerala, Karnataka, and West Bengal.

Among the criteria of fiscal devolution to the third tier, population turns out to be the predominant one. It is true that population criteria has an advantage of providing a summary measure of the basic needs that is free from value judgment and arbitrariness, unlike other indicators. However, heavy reliance on too broad a measure of need (like population) could be inconsistent with promoting fiscal equalization or balanced development of regions within a state. Gulati (1987) pointed out that population as a basis of distribution altogether ignores the existence of income disparities among the states. As an alternative to that, he argued, would be the distribution of resources on the basis of per capita income; this would be much more even and fiscally equalizing.

Population criteria apart, all three SFCs have considered applying other indices of socioeconomic backwardness for the horizontal distribution of resources. While selecting the criterion of backwardness, one has to be very careful so that it does not suffer from arbitrariness and excessive value judgment. The question arises at this juncture whether objective indicators of economic and social infrastructure could also be used for assessing the backwardness of a

local body. The Twelfth Finance Commission (TFC) has incorporated indices of deprivation including percentage of households fetching water from a distance and percentage of households without sanitation. Public investment in infrastructure like water supply and sanitation can have positive social externalities in terms of educating the girl child and improving the health and nutritional aspects of the household. A World Bank study (Bredie and Beehary 1998) noted that easy accessibility to drinking water facilities might lead to an increase in school enrollment, particularly for girls; in Madagascar, 83 percent of the girls who did not go to school spent their time collecting water, while only 58 percent of the girls who attended school spent time collecting water. However, the major criticism against the use of social indicators as an index of backwardness is that it will be biased against the regions that, despite poor resource base, have achieved relatively high levels of attainment in these sectors.

Do fiscal equalization transfers enhance gender equity? Though these transfers are not specifically targeted to the poor, the poor will benefit from the general capacity increase in the region, especially women. When unconditional transfers are made, equalization transfers aim to neutralize deficiency in fiscal capacity, but not in revenue effort. Sometimes adjustments affecting cost and need factors may also be accommodated. In many ways, the finance commission's formula-based fiscal transfers are not part of an equalization grant system, but rather part of general or unconditional funding, which might have equalization grant features. P. Chakraborty (2003) seeks to empirically investigate if the fiscal transfers in India follow the principles of fiscal equalization. Econometric investigation using panel data for 15 major states for the years 1990–91 to 1999–2000 in a fixed effects model revealed a strikingly regressive element of transfers, with aggregate tax transfers per capita positively related to state per capita income. However, grant transfers showed clear progressivity, though the grant transfers are not sufficient to eliminate horizontal inequalities owing to a smaller proportion of grants in the overall transfer in comparison to tax transfers. His results echo those of previous studies, reinforcing the oft-made observation that richer states are receiving more per capita fiscal transfers than poorer states. Fiscal equalization grants can correct for spatial inequalities in the provisioning of merit goods or quasi-public goods, which have evident gender differential impacts. Considering the acute spatial disparities in service standards in the provision of health and education, the TFC has tried to bring in the equalization principle for certain specific grants for education and health on the expenditure side. Although equalization should be pursued

mostly, if not exclusively, by the equalization grant system in order to free up other grant instruments to pursue other objectives, this is a temporary positive move given the present need for more equalization in the system (Bahl et al. 2005). Fiscal equalization grants for health and education can redress the capability deprivation across gender.

The moot question at this juncture is whether gender criteria needs be incorporated in the unconditional fiscal transfers. One of the arguments against incorporating gender concerns in unconditional fiscal transfers is that these transfers are meant for offsetting the fiscal disabilities and it is desirable to keep the transfer system formula simple and without perverse incentives (Rao 2006). However, in India, given the disturbing demographic facts of the precipitous decline in the sex ratio for children in the 0–6 age group, especially in some of the prosperous states of India, there can be no valid objection to using central transfers for this purpose. A simple method for this could be to introduce some weight for the female population of the states in the tax devolution formula of the finance commission and the Gadgil formula for allocation of central assistance for state plans (Bagchi and Chakraborty 2004). The message would be even stronger and more appropriate if the population of girl children only, that is the number of females in the 0–6 age group, is adopted as the basis for determining the relative shares of the states in the amount carved out of the divisible pool by applying the allotted weight.<sup>9</sup> A special dispensation for girls would also be justifiable in a scheme of need-based equalization transfers.

While social mores cannot be changed by fiscal fiats, especially when prejudices run deep, state action is called for when they are blatantly oppressive to any section of the community. Indeed such action is an imperative. The transfer system can and should play a role in upholding the right to life for the females of the country (Bagchi and Chakraborty 2004). Having said that, it needs to be mentioned that it is not plausible to incorporate more gender variables in the formula and complicate the transfer formula of the Finance Commission. In other words, inclusion of a *gender inequality index* in the transfer formula may not result in the intended results, as the variables included in the index may neutralize each other. Accepting that incorporating gender criteria in fiscal devolution could only be the second-best principle of engendering fiscal policy, the paper argues that the newfound policy space of *feminization of*

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<sup>9</sup> However, if it is felt that the mandate of adhering to the 1971 population would stand in the way, then the population weights can be split into two halves, with one-half assigned to the number of females or, better still, female children (Bagchi and Chakraborty 2004).

*local governance* coupled with an *engendered* fiscal devolution to the third tier can also make variations in the public expenditure decisions correspond more to the revealed preferences (voice) of women. The policy space is favorable at the local level, with the 73rd and 74th constitutional amendments providing for the conducting of local-level gender-responsive budgeting (LLGRB). However, given that the major share of revenue for the local bodies in India is still financial devolution, the finance commission may assign transfers to the states that have already initiated LLGRB.

To be upfront and brief, amidst the plethora of criteria for fiscal devolution, the right thing to do—even from the gender perspective—appears to be to first make fiscal transfers on per capita basis, which would be much more even and fiscally equalizing, and then make suitable adjustments for backwardness. It goes without saying that weightage to genuine backwardness, in addition to population, is more redistributive than weightage to population alone. Given the magnitude of *missing women* in India and the disturbing practices of gender discrimination that exist *even before birth*, a criterion needs to be incorporated in the unconditional fiscal transfers to penalize the states with an adverse juvenile sex ratio.

In addition, the feminization of governance at the third tier could change the types of public expenditure at the local level to correspond more to the revealed preferences (“voice”) by women. A MIT study by Chattopadhyay and Duflo (2001) has measured the impact of the feminization of governance at the local level on the outcomes of decentralization with data collected from a survey of all investments in local public goods made by the village councils in one district in West Bengal. They found that women leaders of village councils invest more in infrastructure that is relevant to the needs of rural women (like drinking water, fuel, and roads) and that village women are more likely to participate in the policymaking process if the leader of their village council is a woman. Thus, placing women in a leadership position in governance at the local level can change the expenditure decisions of the local bodies and, in turn, change the types of public-good investments at the local level to correspond more to the revealed preferences (voice) by women (Stern 2002). The study, however, has confronted a few criticisms. Bardhan and Mookherjee (2000) noted that without direct evidence on the nature of women’s preferences relative to men’s, and since women’s reservation in the leadership positions in local government was not linked to the distribution of women in the village, this

study does not quite address how local democracy affects the underrepresented groups in the village to implement their desired outcomes.

There is a growing recognition that fiscal policy can redress intrahousehold inequalities in terms of household division of labor by supporting initiatives that reduce the time allocation of women in unpaid work. Examples of such government intervention are improved infrastructure in water sector, rural electrification, sanitation services, and better transport infrastructure. The public infrastructure deficit in rural areas may deepen rural poverty due to the time allocation across gender skewed towards more unpaid work, which is time otherwise available for income-earning market economy activities. Public investment in infrastructure, like water and fuel, can also have positive social externalities in terms of educating the girl child and improving the health and nutritional aspects of the household. There can be a link between deterioration in infrastructure and rural poverty. In terms of fiscal policies to redress poverty, the aspects of *time poverty* are often surpassed. Time poverty affects income poverty. Fiscal policies designed to redress income poverty can be partial if they do not take into account the aspects of time poverty. This policy discussion has gender dimension, as women are time poor and fiscal policies designed for propoor measures need to incorporate the time allocation aspects across gender. Using time use statistics of water revealed that the incidence is significantly higher for girls and women in both rural and urban areas, which, in turn, points to the deficiency in adequate infrastructure in water and sanitation (Chakraborty 2008a and 2009). It has significant fiscal policy implications, as easy accessibility to drinking water facilities might lead to an increase in school enrollment, particularly for girls, by reducing the time utilized for fetching water. In other words, time budget statistics enable the identification of the *complementary fiscal services* required for better gender-sensitive human development.

## **V. CONCLUSION**

The paper argues that amidst the plethora of criteria for fiscal devolution, the right thing to do—even from the gender perspective—is to first make fiscal transfers on per capita basis (which would be much more even and fiscally equalizing) and then make suitable adjustments for backwardness. Further, weightage to genuine indices of backwardness in fiscal transfers in addition to population is more redistributive than weightage to population alone. Given the

magnitude of *missing girls* in India, a *penalty criterion* needs to be incorporated in the unconditional fiscal transfers to penalize the states with adverse juvenile sex ratio. However, the design for gender component in fiscal transfers is only a second-best principle of gender budgeting. The first best is to integrate gender concerns in the overall budgetary process at the local level and ensure the transparency and accountability through better governance with effective participation of women in local bodies. Given that a major chunk of revenue resources of the third tier comes via fiscal devolution, it is significant to incorporate gender criteria in fiscal transfers. The policy level at the local level is conducive for gender budgeting against the feminization of governance ex post to the 73rd and 74th constitutional amendments. The women in governance at the third tier could change the types of public expenditure at local level to those corresponding more to the revealed preferences (“voice”) by women.

## REFERENCES

- Bagchi, Amaresh, and Lekha Chakraborty. 2004. "No Pride in this Prejudice." *Financial Express*, November 19.
- Bahl, Roy, and Larry Schroder. 1983. *Intergovernmental Relations in Local Government Finance in the Third World*. New York: Praeger Publications.
- Bahl, Roy, Eunice Heredia-Ortiz, Jorge Martinez-Vazquez, and Mark Rider. 2005 "India: Fiscal Condition of the States, International Experience, and Options for Reform: Volume 2." Working Paper No. 05142. Atlanta, GA: International Studies Program, Andrew Young School of Policy Studies, Georgia State University.
- Bardhan, Pranab, and Dilip Mookherjee. 1999. "Relative Capture of Local and Central Governments: An Essay in the Political Economy of Decentralization." Working Paper 97. Boston, MA; Boston University—Institute for Economic Development.
- . 2000. "Decentralizing Anti-Poverty Program Delivery in Developing Countries." Working Paper C98-104.1. Berkley, CA: Center for International and Development Economics Research (CIDER), University of California at Berkley.
- Bredie, J., and G. Beehary. 1998. "School Enrolment Decline in Sub-Saharan Africa." Discussion Paper No 395. Washington, DC: World Bank.
- Breton, Albert. 1996. *Competitive Governments. An Economic Theory of Politics and Public Finance*. New York: Cambridge University Press.
- Breton, Albert, and Angela Frascini. 2004. "Intergovernmental Equalization Grants: Some Fundamental Principles." Working Paper 42. Alexandria, Italy: Department of Public Policy and Public Choice (POLIS).
- Chakraborty, Lekha. 2003a. "Public Expenditure and Human Development: A Panel Investigation." Paper presented at WIDER (World Institute for Development Economics Research) Conference on "Inequality, Poverty and Human Wellbeing," Helsinki, Finland, May 30–31. Also appeared in B.B. Bhattacharyya and Arup Mitra (eds.) *Macroeconomics and Welfare*. New Delhi: Academic Publishers.
- . 2003b. "Gender Based Analysis (GBA) in Canada: Lessons for India." Paper prepared under Shastri Indo-Canadian Institute-Department of Foreign Affairs and International Trade (SICI-DFAIT), Government of Canada Faculty Research Fellowship at University of Carleton, Ottawa.
- . 2003c. "Macroscan of Union Budget through a Gender Lens." Mimeo. New Delhi: UNIFEM.



- . 2003d. “Gender Budgeting in Sri Lanka: Categorizing Financial Inputs.” Mimeo. Colombo, Sri Lanka: UNIFEM and Government of Sri Lanka, Colombo.
- . 2004. “Gender Budgeting in Asia: An Empirical Investigation of Selected Seven Countries.” Mimeo. London: The Commonwealth Secretariat.
- . 2005a. “Public Policy Stance and Human Development: A Panel Analysis.” in B.B. Bhattacharya and A. Mitra (eds.), *Macroeconomics and Welfare*. New Delhi: Academic Foundation.
- . 2005b. “Gender Budgeting in Selected Ministries: Conceptual and Methodological Issues.” Mimeo. New Delhi: NIPFP-DWCD, Ministry of HRD, Government of India.
- . 2006a. “Fiscal Decentralization and Local Level Gender Responsive Budgeting in the Philippines: An Empirical Analysis.” Working Paper 41. New Delhi: National Institute of Public Finance and Policy (NIPFP).
- . 2006b. “Fiscal Decentralization and Gender Responsive Budgeting in Mexico: Some Observations.” Working Paper 40. New Delhi: National Institute of Public Finance and Policy (NIPFP).
- . 2006c. “Ex-post Gender Sensitive Analysis of Union Budget 2006-07, Government of India.” Mimeo. New Delhi: NIPFP and UNIFEM.
- . 2007a. “Public Infrastructure Investment and Non-market Work in India: Selective Evidence from Time Use Data.” Working Paper No.47. New Delhi: National Institute of Public Finance and Policy (NIPFP).
- . 2007b. “Gender Responsive Budgeting and Fiscal Decentralization in India: A Preliminary Appraisal.” Working Paper 46. New Delhi: National Institute of Public Finance and Policy (NIPFP).
- . 2008a. “Deficient Public Infrastructure and Private Costs: Evidence for the Water Sector.” *Economic and Political Weekly* 43(31): 11–14.
- . 2008b. “Analysis of Kerala State Budget through a Gender Lens.” Centre for Development Studies Report submitted to Ministry of Finance, Government of Kerala, Thiruvananthapuram.
- . 2009. “Invisibility of Women’s Work in Budgetary Policies: Labour File.” *Journal of Labour and Economic Affairs* 6(3).
- . 2010. “Public Investment and Unpaid Work: Selective Evidence from Time Use Data.” in Rania Antonopoulos and Indira Hirway (eds.), *Unpaid Work and the Economy: Gender, Time-use and Poverty in Developing Countries*. Basingstoke, UK: Palgrave.

- . forthcoming. “Gender Sensitive Fiscal Policies: Experience of *ex-post* and *ex-ante* Gender Budgets in Asia Pacific.” Background paper for *Human Development Report*, New York: UNDP.
- Chakraborty, Lekha, and Amaresh Bagchi. 2007. “Fiscal Decentralization and Gender Responsive Budgeting in South Africa: An Appraisal.” Working Paper 45. New Delhi: National Institute of Public Finance and Policy (NIPFP).
- Chakraborty, Pinaki. 2003. “Unequal Fiscal Capacities across Indian States: How Corrective is the Fiscal Transfer Mechanism?” Paper prepared for the UNU/WIDER Project Conference on Spatial Inequality in Asia, UNU Centre, Tokyo, March 28–29.
- Chattopadhyay, Raghavendra, and Esther Duflo. 2001. “Women as Policy Makers: Evidence from an India-Wide Randomized Policy Experiment.” Unpublished paper. Cambridge, MA: Massachusetts Institute of Technology.
- Edralin, Josefa S., and Cristino M. Collado. 2005. *Decentralized Governance and Food Security: Perceptions from Rural Local Governments and Communities in Bulacan Province*. Tokyo: United Nations Centre for Regional Development (UNCRD).
- Eunice, Heredia-Ortíz, and Mark Rider. 2005. “India’s Intergovernmental Transfer System and the Fiscal Condition of the States.” Working Paper 06-47. Atlanta, GA: Andrew Young School of Policy Studies.
- Galasso, Emanuela, and Martin Ravallion. 2000. “Distributional Outcomes of a Decentralized Welfare Program.” Policy Research Working Paper Series 2316. Washington, DC: The World Bank.
- Government of India (GoI). 2000. *Economic Survey of India*. New Delhi: Ministry of Finance.
- . 2004. *Report of the Twelfth Finance Commission*. New Delhi: Ministry of Finance.
- . 2005. *Expenditure Budget*, Volume 1. New Delhi: Ministry of Finance.
- . 2008. *Expenditure Budget*, Volume 1. New Delhi: Ministry of Finance.
- Government of Kerala. 1996. *Report of the State Finance Commission*. Thiruvananthapuram, India: Government of Kerala.
- Government of West Bengal. 1996. *Report of the State Finance Commission*. Kolkata, India: Government of West Bengal.
- Griffith, K. 1981. “Economic Development in a Changed World.” *World Development* 9(3): 5.
- Gulati, Iqbal Singh (ed.). 1987. *Centre-State Budgetary Transfers*. Bombay: Oxford University Press.

- Lahiri, Ashok, Lekha Chakraborty, and P.N. Bhattacharaya. 2000. "India-Gender Budgeting." Report submitted to UNIFEM, South Asia and Ministry of Human Resource Development, Government of India, New Delhi.
- . 2001. "Gender Budgeting in India: Post Budget Assessment Report 2001." UNIFEM, South Asia and Ministry of Human Resource Development, Government of India, New Delhi.
- . 2002a. "Gender Budgeting in India." UNIFEM, South Asia and Ministry of Human Resource Development, Government of India, New Delhi.
- . 2002b. "Gender Diagnosis and Budgeting in India." UNIFEM, South Asia and Ministry of Human Resource Development, Government of India, New Delhi.
- . 2003. "Gender Budgeting in India." *Follow the Money Series*. New Delhi: NIPFP and UNIFEM—South Asia.
- Lindahl, Erik. 1919. "Just Taxation—A Positive Solution." in Richard A. Musgrave and Alan T. Peacock (eds.), *Classics in the Theory of Public Finance* [1964]. London: Macmillan.
- Meagher, Patrick. 2000. "Decentralization, Quality of Governance, and Corruption." Mimeo. Washington, DC: The World Bank Group.
- Prud'homme, Remy. 1995. "On the Dangers of Decentralization." *The World Bank Research Observer* 10(2): 201–20.
- Rao, M. Govinda. 2002. *Development, Poverty, and Fiscal Policy*. New Delhi: Oxford University Press.
- . 2006. "Gender Responsive Budgetary Policies and Fiscal Decentralization: Conceptual Issues." Paper presented at NIPFP-IFES-USAID Conference on Gender Budgeting, New Delhi, February 2.
- Rao, M. Govinda, and Lekha Chakraborty. 2006. "Fiscal Decentralization and Local-level Gender Responsive Budgeting in Morocco: Some Observations." Working Paper No. 42. New Delhi: National Institute of Public Finance and Policy (NIPFP).
- Rao, M. Govinda, H.K. Amar Nath, and B.P. Vani. 2004. "Fiscal Decentralization in Karnataka." in Geeta Sethi (ed.), *Fiscal Decentralization to Rural Governments in India*. New Delhi: The World Bank.
- Rao, M. Govinda, and Nirvikar Singh. 2004. "Asymmetric Federalism in India." Working Paper 06. New Delhi: National Institute of Public Finance and Policy (NIPFP).
- . 2005. *Political Economy of Federalism in India*. New Delhi: Oxford University Press.

- Rose-Ackerman, Susan. 1997. "Corruption, Inefficiency, and Economic Growth." *Nordic Journal of Political Economy* 24: 3–20.
- Salmon, Pierre. 1987. "Decentralisation as an Incentive Scheme." *Oxford Review of Economic Policy* 3(2): 24–43.
- Stern, Nicholas. 2002. "Public Finance and Policy for Development: Challenges for India." Silver Jubilee Lecture at the National Institute of Public Finance and Policy (NIPFP), New Delhi, January 10.
- Stotsky, Janet. 2006. "Gender Budgeting." Working Paper 06/232. Washington, DC: International Monetary Fund (IMF).
- Swamy, Anand, Stephen Knack, Young Lee, and Omar Azfar. 2001. "Gender and Corruption." *Journal of Development Economics* 64(1): 5–55.
- Tanzi, Vito, and Hamid R. Davoodi. 2000. "Corruption, Growth, and Public Finances." Working Paper 00/182. Washington, DC: International Monetary Fund.
- Tiebout, Charles M. 1956. "A Pure Theory of Local Expenditures." *The Journal of Political Economy* 64(5): 416–24.
- United Nations Development Programme (UNDP). 2005. *Human Development Report*. New York: Oxford University Press.
- United Nations Statistical Division (UNSD). 1993. *Systems of National Accounts 1993*. New York: United Nations.
- Wicksell, Knut. 1896. "A New Principle of Just Taxation." in Richard Musgrave and Alan T. Peacock (eds.), *Classics in the Theory of Public Finance* [1964]. London: Macmillan.
- World Bank. 2002. *World Development Indicators*. Washington, DC: The World Bank.