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Introduction: Fiscal Aspects of Evolving Federations

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Abstract

There has been a resurgence of interest, in many parts of the world, in problems of multilevel government finance. Recent and ongoing political and economic developments raise questions about the role of the nation, subnational governments, and supranational public authorities in the provision and financing of public-sector programs. This paper presents an overview of these developments that may assist in understanding some of the motivation behind the articles presented in this special issue and in appreciating some of their potential applications. The articles are briefly summarized, and some issues that remain on the agenda for future research are identified.

Key words: fiscal federalism, fiscal decentralization

This special issue of *International Tax and Public Finance* contains a selection of papers presented at a conference on "Fiscal Aspects of Evolving Federations" held at Vanderbilt University in August 1994. The conference was held under the auspices of the International Seminar on Public Economics (ISPE). The conference provided a forum for the presentation of new research on the principles of fiscal federalism, fiscal decentralization, and intergovernmental fiscal relations and on recent experience and current policy issues relating to fiscal federalism in several countries.

There has been a resurgence of interest, in many parts of the world, in problems of multilevel government finance. Recent and ongoing political and economic developments raise questions about the role of the nation, subnational governments, and supranational public authorities in the provision and financing of public-sector programs. Section 1 presents an overview of these developments, which may assist in understanding some of the motivation behind the papers presented in this special issue and in appreciating some of their potential areas of application. The papers are briefly introduced in Section 2, and Section 3 discusses some issues that remain on the agenda for future research.

1. Fiscal federalism: A selective overview of recent developments

Problems of fiscal centralization and decentralization by their nature tend to have important political and institutional dimensions that vary from one country or region to another.[1] Shifting the locus of fiscal responsibility among levels of government may occur relatively incrementally, as in stable federations like the United States, or they may occur with dramatic speed, as in the disintegration of the Soviet Union or the unification of Germany. In all cases, however, there are specific historical and institutional factors that channel the process of fiscal adjustment within the broader context of overall economic and political change. Widely varying political and economic systems, levels of economic development, and legal, constitutional, and fiscal traditions form the milieu within which the responsibilities of different levels of government are determined. The following paragraphs briefly and selectively survey recent trends and issues involving intergovernmental fiscal relations in different parts of the world. The developed countries of Western Europe and North America are considered first. The discussion then turns to developing countries.

In Western Europe, the process of economic integration among the countries of the European Union raises numerous questions of fiscal coordination among member states. The taxation of multinational enterprises and the administration of national value-added taxes in a European Union free of fiscal frontiers present immediate practical problems. Furthermore, as labor and capital markets within the European Union (and between EU and non-EU countries) become increasingly integrated, fiscal externalities associated with national-level redistributive policies are likely to become more important (Wildasin, 1991, 1992; Wellisch and Wildasin, forthcoming). Oates (1968) and others have argued that the redistributive functions of the public sector are not within the proper sphere of responsibilities of lower-level governments—that is, governments that are open with respect to the markets for labor and capital. Traditionally, the "central" government to which redistributive functions would be assigned was conceived to be a national government. When factors of production become increasingly mobile across international boundaries, however, the government of a single country is no longer a central government in the relevant sense. One must therefore ask whether the extensive national-level redistributive programs that have developed over the course of the present century in the EU (and elsewhere) will remain viable over time (Cremer et al., 1995). If it is possible to perpetuate them, will it be desirable to do so? Does multinational policy coordination, perhaps through the further development of EU-level institutions, provide an appropriate mechanism through which redistributive and other fiscal policies can be organized?

Although the financing of agricultural subsidies has presented major and at times almost crippling challenges to the EU, EU regional development and social fund expenditures have increased over time. At least until recently, it was not difficult to imagine that still more policies of this type might be shifted to the supranational level in the longer term. The Single Market, the Maastricht Treaty, the expansion of EU membership to include Austria, Finland, and Sweden (and the prospective accession of some of the rapidly reforming countries of eastern Europe) seemed to exemplify a powerful momentum in favor of European policy integration. However, attainment of the Maastricht timetable for harmonization of monetary and fiscal policies now seems to be very unlikely for most EU member states.[2] It is noteworthy that the most stubborn obstacles to *monetary* union, at least as envisaged in the Maastricht treaty, arise from the difficulties that countries will face in meeting the *fiscal* convergence criteria, particularly those restricting the size of government deficits and debt-to-GDP ratios. This need not present any fundamental obstacle to monetary union since the convergence criteria are largely arbitrary.[3] The important lesson to draw from this experience is probably not that monetary union is hard to achieve but rather that individual EU countries find it extremely difficult to impose restraints on social and redistributive policies for the sake of meeting obligations to other EU member states. The problems of monetary union à la Maastricht, in other words, cast doubt on the feasibility (and perhaps the desirability) of harmonization of fiscal policies and the social and distributional objectives that they embody.

Even while the proper role of EU-level fiscal institutions is debated, the organization of fiscal affairs within EU member states is undergoing substantial change. Efforts have been underway in France and Italy to decentralize political and fiscal authority (Gérard-Varet, 1994; Owens and Panella, 1991). The internal economic integration accompanying German unification, including particularly freedom of labor and capital mobility within the national market, has required a strong central government response due to the uneven levels of development between East and West coupled with a commitment to uniform fiscal treatment under generous programs of social benefits (see Sinn and Sinn, 1992, for further discussion). The structure of local government finance in the United Kingom—and in particular the attempt to reduce local reliance on property taxes by shifting to poll taxes—has been the subject of vigorous controversy (Besley, Preston, and Ridge, 1993).

While issues of fiscal centralization and decentralization are attracting new attention in the EU, they have been of enduring concern in established federations such as the United States and Canada. Equalization of fiscal status has been a longstanding goal of Canada's very substantial programs of grants from the national to the provincial governments, and the need to understand better the equity and efficiency implications of these programs has stimulated a steady stream of research on the economics of intergovernmental transfers.[4] Of course, the separatist movement in Quebec heightens sensitivity to intergovernmental fiscal relations in Canada and may yet result in a fundamental political restructuring or even disintegration of the Canadian federation, changes that would likely necessitate profound fiscal restructuring as well. The disposition of national liabilities and assets (such as the national debt, the public pension system, public lands and corporations) and the coordination of health and social welfare policies among the provinces would present serious challenges to policymakers in a politically and fiscally fragmented Canada.[5]

In the United States, shifts in the balance of fiscal authority between the federal, state, and local governments tend to mirror basic changes in domestic policy. The period since the 1930s has witnessed substantial growth in federal government involvement in redistributive policies including public pensions and transfers to the poor. While the federal government plays a major role, independently of states and localities, in the provision of retirement income and health care for the elderly, much of its participation in other redistributive programs, especially those aimed at providing cash and health benefits for the poor (AFDC and Medicaid) has taken the form of matching grants to state governments. These transfers have been accompanied by significant restrictions on the form and administration of the programs they support, contributing to calls for fundamental reforms that would convert federal support to lump-sum assistance to the states with minimal restrictions on their use. Since federal matching rates lower the cost to state governments of assisting the poor by 50 percent or more, such reforms could result in significant reductions in total redistributive spending. On the other hand, it is possible that decentralization of redistributive programs would result in greater program effectiveness— for example, through better targeting of benefits, gains in administrative efficiency, or basic program redesign.

The division of fiscal responsibilities between state and local governments has also been the subject of continuing reassessment in the United States. The provision of primary and secondary education has been a principal function of local governments in the United States throughout the present century, and the persistence of significant variations in levels of provision among localities testifies to substantial differences in demand for education within the population. A large fraction of the U.S. population lives in metropolitan areas that contain dozens of individual localities within commuting distance of core cities, so that households can obtain quite diverse levels of public education provision through their residential choices.[6] Since education is an important determinant of lifetime well-being, however, equity considerations can conflict with the unequal provision of education that allocative efficiency would require.[7] Indeed, courts in many states have held that inequalities in the level of fiscal resources available to different localities for the finance of education violate state (though not federal) constitutional requirements for equal protection or treatment (see, e.g., Inman and Rubinfeld, 1979).

Whether in response to court mandates or simply as a matter of policy, state government transfers to local school authorities have grown substantially throughout the postwar period. In the eyes of critics, however, state government in local education has contributed to an increase in bureaucratization, the possible capture of education bureaucracies by teacher's unions, and perverse performance and fiscal incentives for local school authorities. In a number of states, parents are being given greater freedom to choose which public schools their children attend. Providing vouchers that could be applied to the cost of either private or public schooling would carry this type of reform a step further. Note that partial or complete privatization of schools, which would constitute a step in the direction of greater decentralization in education *provision*, could be accompanied by generous state support for vouchers, which would constitute a step in the direction of greater centralization of education *finance*. Perhaps the current mix of local and state government involvement in the education sector reflects the differing abilities of each level of government to contribute to the mix of objectives—allocative and distributive—that educational systems are expected to promote. Separation of allocative and distribution functions in the education sector—for instance, through vouchers—might then result in further decentralization of some functions along with greater centralization of others. This illustrates the fact that education, like many public sector programs, bundles together different public-sector functions, such as the provision of certain goods and services and the attainment of an equitable distribution of income. Some of these functions, such as redistribution, may be best suited to higher-level governments, while others, such as school administration or curriculum design, may be best left to local authorities or to the private sector. The bundling of functions in a single program may thus give rise to tensions between fiscal centralization and decentralization and to complex interactions between levels of government in the form of intergovernmental transfers.

While much of the controversy in the United States over the proper roles of different levels of government has revolved around issues of equity and allocative efficiency, recent trends toward fiscal decentralization in many third world and transition economies have focused new attention on macroeconomic stability. When Musgrave (1959) identified macroeconomic stabilization as one of the three principal branches of the public household (in addition to the allocative and distributive branches), many economists were convinced that fiscal policy could play an important and perhaps decisive role in managing short-run aggregate-demand fluctuations so as to achieve both price stability and full employment.

From the traditional Keynesian perspective, the conventional wisdom has been that the manipulation of fiscal policy for short-run demand-management purposes should be left to the central government rather than to local governments (see, e.g., Oates, 1968). This conventional wisdom remains relatively intact, at least insofar as Keynesian views on short-run macroeconomic policy survive at all. Nevertheless, new concern has arisen about the macroeconomic effects of fiscal decentralization, not because of new views about the effects of local or provincial government fiscal policy on the business cycle but rather because of worries that fiscal decentralization may contribute to structural deficits and fiscal imbalance. Even in the absence of moves toward fiscal decentralization, it has proven difficult in many countries to control aggregate public-sector borrowing; in turn, heavy public borrowing has increased the pressure on central banks to engage in inflationary finance. The question is whether fiscal decentralization tends to accentuate or to mitigate these sorts of problems. Where traditions of state/provincial and local government fiscal responsibility are weak, where the institutions of political control and accountability are immature, and where administrative professionalism and control are poorly developed, there may be a risk that lower-level governments may abuse or mismanage their borrowing authority, leading to aggregate fiscal imbalance with accompanying adverse macroeconomic consequences (Bird, Ebel, and Wallich, 1995a; Tanzi, forthcoming).

Beginning in the late 1980s, for example, India began serious efforts to limit the growth of government debt. The central government has made substantial progress in this regard, but there are increasing difficulties at the state government level (The World Bank, 1995a). India has an established federal system and highly elaborated programs of intergovernmental revenue sharing and fiscal transfers. Both the Planning Commission and the Finance Commission provide extensive grants to state governments in order to promote development and fiscal equalizations. This system has come under criticism, however, for creating perverse and conflicting incentives for state governments and for failing to promote equity objectives (Rao and Agarwal, 1994; Murty and Nayak, 1994). Of late, state government borrowing from the central government has begun to create serious fiscal stress: for a number of states, the cost of debt service now amounts to 15 percent or more of state goverment expenditures (World Bank, 1995a). States are struggling with pressing demands for development expenditure and poverty reduction. How can intergovernmental transfers and borrowing arrangements be structured so as to provide adequate fiscal resources without weakening the incentives for fiscal discipline at the state level? Of course, a sufficiently high level of transfers from the center to the states would obviate the need for state borrowing, but this might just shift fiscal imbalances back to the center. Resolving these issues will take time, and one can anticipate that intergovernmental fiscal relations will thus occupy a prominent place in discussions of overall macroeconomic management in India.

China presents a fascinating case where overall economic reform, macroeconomic and monetary policy, and problems of interregional imbalance interact with intergovernmental fiscal relations. One fundamental aspect of Chinese economic reform has, of course, been the reduction of the role of state planning and control in the operation of the economy. The fiscal arrangements that evolved during the Mao period proved to be poorly adapted to a more market-oriented economic system, however. A series of reforms involving changes in tax bases, tax administration, and the division of revenues between lower- and higher-level governments has occurred in the past decade (see, e.g., Bahl and Wallich, 1992; Agarwala, 1992). Uneven economic development among regions—the consequence, in part, of deliberate policies of selective economic liberalization, such as the establishment of special economic zones along the southeast coast—have given rise to increases in economic inequality that are problematic in themselves and that are making it increasingly difficult for China to control internal population movements among regions and between rural and urban areas. Indeed, the enforcement of the *hukou* system of household registration has depended on state bureaucratic control of grain rations, employment, housing, and health care, controls that are eroding and must, it seems, continue to erode as market reforms continue (Cheng and Selden, 1994; Harrold and Lall, 1993).

Regional inequalities, uneven regional development, and internal population movements all create demands for regionally differentiated public-service provision and redistributive transfers. Since the revenue system at each level of government as well as the structure of intergovernmental fiscal relations has been changing rapidly, it is easy to see how regions might press demands for fiscal assistance from the central government that the center would be both poorly positioned to meet and poorly positioned to resist. Indeed, the central government has relied in substantial part on lower-level governments to collect taxes and to transfer resources to it, while at the same time it attempts to distribute funds to lower-level governments to promote central goverment investment and other programs. Under these conditions, it has been difficult for the center to limit transfers to lower-level governments while simultaneously meeting its policy objectives. The weak revenue base of the center has created pressures on the People's Bank of China (PBC) to offer credit to lower-level governments that can be used to finance expenditures in areas deemed important to the central government. Such "policy lending," however, can prevent the PBC from controlling monetary aggregates in a way that achieves overall macroeconomic price stability (World Bank, 1995b; Ma, 1995). Establishing a structure of tax sharing and intergovernmental fiscal transfers between different levels of government is thus a complex problem (Laffont, 1995) but one that appears to be quite important for macroeconomic stability.

China is certainly not the only country that is undergoing a transition away from a socialist system and simultaneously reforming its fiscal structure, including the assignment of expenditure responsibilities and revenue instruments to different levels of government. The former Warsaw Pact countries of eastern Europe and the states of the former Soviet Union are currently grappling with these problems (see, in particular, the contributions in Bird, Ebel, and Wallich, 1995b). The breakup of the Soviet Union itself of course resulted in substantial fiscal decentralization since the public finances of Ukraine, Russia, the Baltic Republics, and other newly independent states are no longer part of the overall Soviet system. The breakup of Czechoslovakia and of Yugoslavia offer other examples where fiscal decentralization in an extreme form has occurred through the demise of the central government. Whether these countries will disintegrate further or whether they may form more integrated federal units at some future date is impossible to tell at this stage, but fiscal considerations will undoubtedly be an important part of whatever changes do occur. On the Korean peninsula, a division of the country at the close of the Korean conflict has been followed by nearly a half-century of divergent political and economic development. Growing economic disparities between the north and south and uncertainty about the continuity of political institutions in the north raise questions about the durability of the status quo. The possibility exists that unification, perhaps sudden, will present Koreans with fiscal challenges like those that arose so unexpectedly in Germany. These sorts of structural changes in the organization of the public sector, in which new jurisdictions form and old ones dissolve, raise fundamental questions about the economic foundations of nation-states.

These diverse developments, and many others that cannot be discussed here,[8] present an enormous challenge and opportunity for public economists. The contributions to the present special issue represent several current directions of research on these problems.

2. Current research in fiscal federalism

Stimulated at least in part by rapid political and economic change and pressing policy issues of the type described above, research on the economics of fiscal federalism has attracted much new attention in recent years. The papers in this special issue provide a sample of some of the recent work in this field. To differing degrees, each reflects real policy problems that are important in some countries or regions as well as some of the intellectual and analytical challenges that confront serious researchers in the area. The first three papers are theoretical essays that examine vertical and horizontal fiscal interactions in a multijurisdictional setting. The last two have a more applied orientation, one of them dealing with issues of local public finance and intergovernmental fiscal relations in South Africa and the other presenting a model for policy analysis with applications relevant to local public finance in the United States.

The first paper in this collection, by Robin Boadway and Michael Keen, analyzes a problem that arises very frequently in discussions of intergovernmental fiscal relations. Given that both higher- and lower-level governments have their own tax systems and expenditure needs, what determines the optimal magnitude of transfers between levels of government? As observed above, it is common for central governments to transfer substantial fiscal resources to lower-level governments in order to close a perceived fiscal gap—that is, a gap between the desired level of expenditures by lower-level governments and the level of revenues that they collect. Boadway and Keen formulate the problem of optimal transfers in a framework where each level of government sets the instruments at its disposal in such a way as to promote its own objectives. They study this question in a deliberately stylized model that abstracts from some of the customary reasons for intergovernmental grants, such as the existence of spillover benefits from local public goods or interregional disparities in wealth. This allows them to focus on the normative implications of the fiscal interactions that arise between higher- and lower-level governments when they share a common tax base. In the Boadway-Keen model, the only sources of primary revenue are taxes on the wage income of workers and on rents accruing to other, inelastically supplied factors of production. Since labor is variable in supply, the earnings tax is distortionary, and the distortions from the taxes separately imposed by each level of government are cumulative in nature.

Boadway and Keen show that the fiscal interactions between the state and central governments deriving from the sharing of a common tax base can lead these governments to choose policies that are inferior, from a welfare viewpoint, to those that a unified central government would choose. This may not surprise practitioners in the field of fiscal federalism, who have often argued that central government use of a productive revenue source like an earnings tax can preempt states and leave them with insufficient "room" to raise the revenue that they need to finance their expenditures. Programs of intergovernmental transfers from the center to the states or (what is virtually the same thing) of sharing central revenues with states are called for from this viewpoint in order to assist states in dealing with what would otherwise be revenue shortfalls. Boadway and Keen find that there may be cases where this practical prescription might indeed be correct, but, rather surprisingly perhaps, they also find that the argument might just as well go the other way: the *central* government may end up with insufficient revenue, and a program of transfers from states to the center may actually be needed to improve the overall efficiency of the public sector (the Chinese model?). They show that the distribution of rents between the central and state governments via the taxation of nonwage income as well as other factors can play an important part in determining whether optimal transfers should flow from the states to the central government. In any event, such a "negative fiscal gap" seems by no means to be an unusual occurrence in this sort of model, casting doubt on the presumption that transfers should generally flow from the center to the states.

Helmuth Cremer, Maurice Marchand, and Pierre Pestieau address informational aspects of fiscal federalism. In the informal literature of the subject, it is often asserted that local governments have "better information" than central governments and that fiscal decentralization therefore facilitates efficiency in public-sector activities. Until relatively recently, however, economists had few analytical tools with which to investigate such assertions formally. Cremer et al. present one of the first attempts to model informational asymmetries between central and lower-level governments in a rigorous way. In their model, localities differ both in terms of their endowments of resources and in terms of their preferences for public goods. They assume that localities can act independently in choosing the amount of local public goods to provide. A central government can use intergovernmental transfers to provide extra resources to poor localities or to try to influence the levels of local public expenditures. The central government is assumed to use its grant policy in order to maximize a utilitarian social welfare function, but it has only imperfect information on the basis of which to conduct its transfer policy. In particular, Cremer et al. assume that the central government is unable to distinguish the precise level of resources available to each locality from its own endowments or its preferences for local public goods, so that its intergovernmental transfers and the tax system that finances them must be incentive compatible.

The main goal of the Cremer et al. analysis is to characterize the optimal policy of the central government in its fiscal interactions with the lower-level governments. As in the analysis of optimal income taxation, incentive compatibility imposes constraints on the form of the optimal grant schedule. However, in contrast to optimal income tax models in which the principal (the government) is ignorant of only one agent attribute (a household's ability), here the agents (lower-level governments) have two attributes about which the principal (the central government) is uninformed. Cremer et al. show that it may be optimal to distort the pattern of local public expenditure through matching grants. An example illustrates how the optimal grant/tax policy can vary in quite complex ways, with positive or negative matching rates depending on the parameters of the model, as the center attempts to balance efficiency and equity while operating under the burden of imperfect information. Of course, when information is limited and useful, there is usually an incentive to acquire more of it. The Cremer et al. analysis thus goes on to study what happens when the central government is able to verify the attributes of lower-level governments through a system of costly auditing.

Whereas vertical fiscal interactions between governments play a crucial role in the analyses by Boadway and Keen and Cremer et al., the paper by Uwe Walz and Dietmar Wellisch focuses exclusively on horizontal interactions. One major thrust of recent research in local and international public economics has been the analysis of tax competition for mobile capital. The allocation of both portfolio capital and direct investment among jurisdictions depends, in general, on net-of-tax rates of return, and individual jurisdictions may be able to stimulate local investment through tax concessions or other fiscal incentives. A number of studies have examined the efficiency and distributional implications of interjurisdictional competition for mobile capital, with different branches of literature exploring different assumptions about the nature of this competition. The simplest cases to analyze are those in which both firms and governments are numerous and small. When there are many firms, producers do not interact strategically in output or factor markets, responding atomistically to fiscal incentives and to market conditions. When there are many small governments, individual jurisdictions can set their fiscal instruments without taking strategic interactions with other governments into account. The analysis of fiscal competition when both firms and governments operate under idealized conditions of perfect competition has yielded a body of standard benchmark results.

Our understanding of fiscal competition is incomplete, however, if it ignores the departures from perfect competition that arise when firms, governments, or both are small in number, and it is here that Walz and Wellisch make an important contribution. They study an economy where there are only two jurisdictions and only two firms. These two firms compete as Cournot duopolists in an external output market; in general, the absence of competition implies that these firms will earn positive profits in equilibrium. As in the strategic trade literature, individual jurisdictions have incentives to use their policy instruments to improve the competitive position of "their" producers in the output market in order to generate additional domestic profits. In the Walz-Wellisch model, localities provide productive public infrastructure—infrastructure that influences the production costs of private producers—financing their expenditures with taxes on firms. In the strategic trade tradition, it is of interest to examine how localities use these fiscal incentives to affect the strategic interactions between firms, and this is one important dimension of the Walz-Wellisch analysis. However, following the literature on fiscal competition for mobile capital, Walz and Wellisch recognize that fiscal incentives affect not only the output decisions of firms but also their locational choices. A jurisdiction that offers a particularly attractive bundle of local public services and taxes may become an agglomeration point for the industry, inducing both firms to locate together; whether or not this occurs depends in part on whether local infrastructure exhibits sufficiently strong public goods characteristics. The policy interactions between localities thus become very complex: not only do fiscal policies affect *how much* firms will produce but *where* the firms will produce. Walz and Wellisch analyze these interactions in a stage-game setup where infrastructure provision and locational choices are determined first and then output levels are fixed. As they show, both output and locational choices may be distorted away from optimal joint-profit maximizing) outcomes, depending on the configuration of production costs, infrastructure technology, and other parameters of the model.

This special issue contains two papers in the Policy Watch section. The first of these, by Junaid Ahmad, discusses urban governance and finance in South Africa. Under the enforced racial separation and settlement patterns of the apartheid system, both the private and the public sectors of the urban economies of South Africa had highly distorted spatial structures. The local public sector in white areas was characterized by high levels of public-service provision, effective taxation, and professional administration; the local public sector in black areas by none of these. Amelioration of race-based economic inequality is a pressing task facing South Africa today and the reorganization of the local public sector must inevitably play a major part in that process. As Ahmad explains, there are several ways that this might be done. The "twinning" of formerly white localities with neighboring formerly black localities so as to share local tax bases and administrative resources is one possibility. Another is the establishment of geographically comprehensive local governments encompassing entire metropolitan areas. These alternatives, or variations on them, present complex tradeoffs between redistributive objectives and allocative efficiency, especially in the face of rapid economic restructuring as the heavy and arbitrary regulatory controls of the apartheid era are relaxed. A governmental structure adapted to the spatial economic organization of the (apartheid) urban area is likely to become outmoded as employment centers, housing markets, and transportation systems are transformed. Yet the legacy of the past, embodied in existing location patterns, is a fact that cannot be erased instantly. South Africa must thus attempt to reorganize local governance and local finance in the midst of a spatial transition.

Changes in the jurisdictional structure of local government will certainly influence the ability of localities to meet demands for infrastructure and urban service provision. Grants from higher-level governments will also play a role in financing these activities. As an alternative or supplement to grants, however, localities might attempt to use debt finance as a source of funds. Under apartheid, markets for residential and commercial property in black areas were poorly developed, in significant part due to government policy. Under such circumstances, it is difficult to establish local finance using property or land taxation, which have been traditional revenue sources for white localities in South Africa. However, the dismantling of apartheid and the prospect of improved economic development in poor areas should strengthen local revenues over time. Under these conditions, the use of borrowing to finance a backlog of urban infrastructure has considerable appeal. However, as Ahmad discusses, there are potential pitfalls in the use of borrowing as an instrument of local finance, and an important task for policymakers in South Africa is to structure local government institutions so that they can reap the benefits of capital market access without undermining local fiscal responsibility. Exposure to capital markets can discipline local policymakers and create incentives for efficient financial and investment strategies, but this requires that the rules of the game governing the fiscal interactions among different units of government and the definition of their responsibilities with respect to capital market obligations be clearly and appropriately defined.

The second paper in Policy Watch is by Thomas Nechyba, who reports on a program of research aimed at analyzing the simultaneous interaction of market and political decisionmaking in local public finance through a computable general equilibrium (CGE) model. In Nechyba's model, decisions about local public good provision are made through simple majority voting by residents, with property taxes (or, in some experiments, other fiscal instruments) used to finance local spending. A crucial feature of the model is that the local electorate is endogenously determined: households are free to move among localities, finding the location that is best for them taking local public good provision, local taxes, and local housing costs into account. Calibrating his model using data from local school districts in New Jersey, Nechyba is able to compute allocations of resources and prices such that all markets clear and all public policies are majority-voting equilibria.

This framework allows a much more comprehensive analysis of structural changes in local government finance and intergovernmental fiscal relations than is usually possible. For example, Nechyba uses it to show how individual localities—meaning by that the current, voting residents of individual localities—have incentives to use property taxes rather than income taxes to finance local expenditures. He also describes how the model can be used to study the effects of both explicit and implicit intergovernmental transfers on the overall levels of, and interjurisdictional variation in, local public good provision. Previous theoretical research leads one to anticipate that matching grants ought to stimulate local public spending more than equal amounts transferred in the form of lump-sum grants, such as equalizing grants. Theoretical analysis cannot, however, determine the magnitudes of the effects of different types of grants. Nor can theory alone predict the quantitative impact of Federal income tax deductibility of local taxes, a form of implicit intergovernmental transfer that Nechyba also analyzes. For policy analysis, estimates of empirical magnitudes are of great value, and the CGE approach has much to offer in this respect. At the same time, because general equilibrium modeling requires that behavioral and accounting relations satisfy overall consistency conditions, it imposes useful discipline on quantitative policy analysis. For instance, Nechyba's model demands that government budgets be balanced, which means that while a program of grants to local governments may tend to increase local public spending by providing more resources to the local public sector, the effects of the taxes that are used to finance these transfers must also be explicitly taken into account. The CGE model described here is amenable to many additional types of policy analysis, and the model itself could in principle be extended or modified in a variety of ways to reflect institutional or economic factors that might be of special relevance in particular policy contexts.

3. Conclusion

The papers presented in this special issue are valuable contributions to the literature of fiscal federalism. The diversity of the topics they cover and of the methods that they use reflect some of the breadth of this field. In view of the enormous range of practical policy problems described in Section 1, however, it will come as no surprise to find that the last words on these subjects have yet to be written. Each of the papers presented here points the way to open questions that deserve further investigation. It may be useful, in conclusion, to mention some additional broad areas among the many remaining items on the research agenda.

One topic that warrants further attention, especially in the context of developing and transition economies, is the interplay between intergovernmental grants and government borrowing. Debt policy creates a wedge between a government's (primary) expenditures and its (primary) revenues. Intergovernmental grants do the same: recipient governments, like governments that borrow, can spend more than they collect in revenue, while the primary expenditures of donor governments are reduced relative to their revenue. In many countries, lower-level governments receive transfers from those at higher levels, and the higher-level governments engage in borrowing. How is this different from allowing lower-level governments to borrow directly, bypassing the intermediary of the central government? Do fiscal interdependencies between central and lower-level governments, reflected in intergovernmental transfer programs, imply that lower-level government borrowing creates implicit liabilities on the part of central governments? If so, must central governments impose controls on lower-level borrowing, or is it possible to structure intergovernmental fiscal relations in such a way as to allow local borrowing without inducing adverse local incentives? In the absence of independent local access to capital markets, should one view the central government as a financial intermediary or delegated borrower acting on behalf of local governments, obtaining funds through the issuance of debt that can then be transferred to lower-level governments through intergovernmental grants? What are the advantages or disadvantages of this sort of intermediation?

The formation or dissolution of countries is a topic about which modern economics has not had much to say (but see Berkowitz, forthcoming; Burbidge et al., 1994; Shapiro and Petchey, 1994; Casella, 1994). Perhaps because of the rigid polarization of the Cold War and the high potential costs of superpower confrontation, national boundaries in much of the world, especially the developed world, have been relatively stable during the past half century. In historical terms, however, such stability may be anomalous. Perhaps changes in jurisdictional structure are part of the normal course of economic events to which we ought to become accustomed. In any case, the existence of national units within established boundaries is now called into question with increased and sometimes unsettling frequency, and one must similarly question whether the country remains the appropriate unit of analysis for at least some important issues in economics. What are the fundamental economic forces that shape natural economic areas? Are there significant economic benefits or costs that result from the inclusion of several regions within one jurisdictional structure? From a normative viewpoint, what are the economic considerations that determine the optimal size of a country, and what are the crucial economic functions of national governments? From a positive viewpoint, to what extent do economic forces drive the political restructuring that we observe, and where may these forces take us in the future?

Gains from economic association through trade in goods and services and from free movement of factors of production are certainly crucial elements of this story. Demographic change, changes in the technology of communication and transportation, and the development of market institutions may alter the optimal or equilibrium boundaries of political units over time. Such change invariably raises questions about the organization of the public sector and the assignment of expenditures and revenues to different levels of government. The integration of labor and capital markets, for example, can be promoted by political union among governments or through policies such as deregulation of capital markets or relaxation of immigation controls. Such integration must certainly provide greater opportunities for the efficient deployment of factors of production over space and among industries, but, by affecting factor markets, it also affects the distribution of income. Perhaps the distributional effects of factor market integration would create a greater role for government redistributive policies, for example by cushioning some factors from negative quasi-rents. Yet, as mentioned already in Section 1, the opening of factor markets may limit the ability of governments to undertake redistributive policies. Conversely, the erection of barriers to factor movements through political separation may entail efficiency losses while facilitating government policy interventions. The patterns of gains and losses resulting from the reorganization of jurisdictional structures can thus be quite complex.[9] To understand them fully requires an appreciation both of the economic consequences of changes in market organization and of the economic consequences of changes in policy outcomes resulting from the reorganization of the public sector. This raises a series of questions that cuts across many areas of economics, including labor economics, finance, urban and regional economics, and international economics in addition to public economics and political economy.

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Notes

1. See Bird (1994) for insightful discussion of the benefits and limitations of comparative analyses of federal finance; also see McLure, Wallich, and Litvack (1995) for a concise comparative survey of intergovernmental fiscal relations. The following discussion is intended to illustrate some of the diversity of issues relating to fiscal federalism and fiscal decentralization that arise in many parts of the world today and to provide references to some (though only a portion) of the relevant literature for interested readers. I hope to develop some of the discussion here at greater length in an essay in a projected Cambridge University Press volume that will include the articles in the present special issue as well as additional papers presented at the Vanderbilt conference.
2. For instance, the requirement that the national debt should not exceed 60 percent of GDP is certainly out of reach for countries like Belgium (the seat of many EU institutions) and Italy (along with Germany, France, and the United Kingdom, one of the large EU countries) whose current debt-to-ratio GDP ratios exceed 100 percent.
3. It is intrinsically problematic to tie a quantitative event—a country's accession to a monetary union—to a quantitative economic indicator. If the debt-to-GDP ratio matters at all for monetary stability, it matters in a quantitative way, and there is no economically meaningful critical value around which a country's accession to a monetary union will have qualitatively divergent impacts.
4. See, e.g., Courcheme (1984), Boadway and Hobson (1993), and references therein.
5. See the contributions to Boadway, Courchene, and Purvis (1991) and Banting, Brown, and Courchene (1994) for further discussion.
6. Revelation of preferences through locational choices offers the prospect that more efficient levels of public good provision can be achieved than otherwise would be the case, a possibility identified by Tiebout (1956) in an influential article.
7. It has proven very difficult to determine exactly what variables under the control of policymakers are able to influence educational outcomes; in particular, per-student educational expenditures do not seem to have the decisive impact on educational output that one might anticipate (see, e.g., Hanushek, 1986). This greatly complicates the school finance debate since the true nature of any efficiency-equity tradeoffs remains obscure.
8. See, however, Petchey and Shapiro (1995) on the Australian federation, Shah (1991) for discussion of intergovernmental fiscal relations in Brazil, Shah and Qureshi (1994) on Indonesia, and Shah (1994) for general discussion of intergovernmental fiscal relations in LDCs and transition economies.
9. Some of the efficiency and distributional effects of factor market integration and the implications of factor market integration for public redistributive policies are discussed in Wildasin (forthcoming a, forthcoming b).

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