The Effects of Intergovernmental Grants in Ethiopia: International Lessons

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Abstract
Intergovernmental grants are an important feature of federal systems of governments in many countries. Grants from one level of government to another have been primarily used as a way of addressing the vertical fiscal imbalance that is often created in a federation. In the presence of disparate taxing capacity of regions, designing a good intergovernmental grant system that is acceptable by all regions is usually challenging. Yet the success of fiscal federalism greatly depends on how the federal government addresses the fiscal needs of regional governments through intergovernmental transfers. What lessons can relatively young federal countries like Ethiopia draw from the experiences of other countries? We examine various kinds of grants and their potential effects on the recipient regional government spending and economic growth. We also explore how federal transfers might affect the fiscal behaviour of regional governments and the welfare of the residents of recipient regions. We look at these important issues from both theoretical and practical perspectives focusing on the applicability of the international lessons to Ethiopia.

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1. INTRODUCTION
The ultimate tenet of fiscal federalism is decentralizing government expenditure and revenue decisions. Local and regional governments assume a greater role in raising revenue and provision of public services. Subnational governments are relatively in a better position to match the public services priorities needed by local residents and raise the participation of local stakeholders at the various levels of the fiscal decision process. As a result, fiscal decentralization may enhance an efficient provision of public services.

In practice, however, fiscal decentralization can be challenging for a number of reasons. Firstly, states or provinces in a federation may have a significant variation in fiscal capacity. Richer states with strong revenue base can have a stronger ability to provide services to residents than poor ones. Secondly, state government’s expenditure on various local public services may have spill over effects to other states or provinces in the federation. That is, for such kind of public services the benefits of providing the public service may not be enjoyed by the residents of the state alone who bear the cost of financing the services. Furthermore, there is usually a disparity between what the federal government collects in the form of tax revenue from the state and what it spends on various activities in the state. In this regard intergovernmental grants from a higher to a lower level of government play an important role in the effective implementation of fiscal decentralization in a federation. In fact, the success of fiscal federalism greatly depends on how the federal government addresses the fiscal needs of regional governments through intergovernmental transfers. We examine various kinds of grants and their potential effects on the recipient regional government spending and economic growth. We look at these important issues from both theoretical and practical perspectives focusing on the applicability of the international lessons to Ethiopia. The remaining part of the paper is organized as follows. Section 2 describes the types and the objectives of intergovernmental grants. The likely effects of grants on the recipient subnational government spending behavior and the state’s economic growth are discussed in Section three. Section four focuses on the relevance of other countries’ experience to Ethiopia. Section five concludes.

2. Intergovernmental Grants: Types And Objectives
2.1. Conditional grants
In most federations the provision of local public services such as healthcare, education, local roads, policing, water, etc are the responsibilities of local or subnational governments. One justification for such delegation of power to local governments is due to the fact that local governments are more accessible to know the preferences and needs of local residents regarding these services. It also significantly cuts the red tape involved in the provision of such services if the federal government were to provide the services. Of course efficient provision of these important public services partly depends on institutional capacities of subnational governments. As it is well known most of these public services have spillover (external benefits) to other jurisdictions. For example a person who gets his or her degree from Addis Ababa University may end up working in regional states and vice versa. So the benefits of education (or education expenditure by the regional government) are not fully captured by that region alone. Regional expenditures on public services such as healthcare, highways, and others have similar spillover effects.
to other regions. Economic theory shows, that in the presence of such external benefits, regional governments may not provide efficient levels of public services unless the federal government somehow helps them internalize the benefits. One way of accommodating the spillover effects of public services provided by subnational governments is through federal grants to the state or provincial government. The grants are like the payment for the external benefits that the subnational government spending generates. This is one of the common objectives of intergovernmental grants.

The next question is: what kind of grants should federal governments use to encourage efficient provision of public services by the state or provincial government? There are basically two kinds of intergovernmental grants: “Conditional” and “unconditional grants”. When the federal government provides conditional grants to the subnational government, it imposes various restrictions on the funds use by the recipient government. The kind of restrictions imposed on the recipient government varies depending on the objectives of the grantor. The conditional grants can be in the form of matching grant where the federal government finances a certain fraction of the subnational government’s expenditure or non-matching. Matching grants are generally used to encourage the subnational government to spend on various activities that are deemed to have spillover effects to other jurisdictions. In this case the matching rate should be set proportional to the external benefits generated by the subnational government’s spending. For example the federal government may provide 20 cents as grants to the state or province for every dollar the subnational government spends on a particular public service (which is a matching rate of 20 percent).

In designing matching (conditional) grants the federal government can make such grants open-ended or close-ended. If matching grants are open-ended, the federal government is committed to match (at a pre-specified matching rate) any level of eligible regional government’s expenditure on a particular public service. On the other hand, close-ended matching grants put a cap on the maximum amount of grants (which is pre-specified) that the subnational government can receive from the grantor.

As one may expect, matching grants may exacerbate the disparity in fiscal capacity among regions as those who can afford to spend more are likely to benefit more from such grant systems. One solution for this kind of problem is to design nonmatching conditional grants. Nonmatching conditional grants allow the grantor provide a certain amount of grants to the subnational government on condition that the recipient regional government spends it on certain pre-specified areas. These kinds of grants are usually designed to encourage government spending in areas which are deemed to be of greater importance from the federal government’s perspective but may not be viewed as such by the regional government. As explained before, regional government expenditures that are likely to generate a significant spillover effects to other jurisdictions may be eligible for funding through such grants. The rational for this is that, without the financial help from the federal government, the regional state may not provide such public services. Or even if the regional state decides to spend on such services, it may not provide the socially optimal level.

2.2. Unconditional (lump-sum) grants
Unconditional grants are lump-sum transfers from the federal government to the subnational government no strings attached. These kinds of grants are designed as a budget support to the lower level of government. Thus the major purpose of this kind of grant is to enhance the fiscal capacity of the recipient state or province. The recipient subnational government can usually spend these kinds of transfers in any way it wishes. Equalization payments, which are commonly used in federal countries such as Australia, Canada, and Germany, among others, take this form.

Equalization payments essentially involve the transfer of income from relatively richer states or provinces to poorer ones.¹ Such grants take into account the fiscal capacity and fiscal needs of subnational governments. They are often employed using some kind of formula that takes into account both the fiscal capacity and needs of the state or province relative to other jurisdictions. See Bodaway and Flatters (1982). States or provinces with relatively weaker fiscal capacity often receive higher per capita grants from the federal government. Since poorer jurisdictions disproportionately benefit from equalization payments such grants help reduce the feeling of “marginalization” often heard in unitary governments with disparate regions or even in federation that do not use similar grants.

Equalization payments can have also a strong political importance. By serving as a vehicle for income redistribution among states or provinces equalization payments give the incentive needed to keep states or provinces in the federation. Canada is a good example here. In Canada there is a great income disparity between western provinces, Atlantic Provinces, and Quebec (the province that has long sought to secede from the country).² While western Provinces and Ontario are generally considered as the Haves, Atlantic Provinces and

¹The idea is similar to using progressive income taxes as a way of income redistribution among citizens (except now that the units of income redistribution are regions not persons).
²Such regional income differences are also quite common in other federal countries. For example Germany, Italy, USA and others have similar problems.
Quebec have been historically categorized as the Have-nots. Despite a huge income differences among provinces, the federal government makes sure that citizens (wherever they may live) have access to a comparable public service (and standard of living) through the equalization payment system. The equalization payment funds usually come from the province of Alberta and British Columbia. Quebec is the largest recipient of the federal equalization payment. Of course, the strength of equalization payments can be also its weakness. Some wealthier states or provinces may not like their income transferred to other jurisdictions and jeopardize the very existence of the federation (e.g. Southern regions in Italy and the province of Alberta in Canada). Many commentators argue that equalization payments are important to maintain the cohesiveness of states or provinces in a federation. For example a number of studies indicated that the decline in the number of sovereignty advocates in Quebec to the presence of strong equalization payment system that is favourable to Quebecers.

Although equalization payments play an important role in strengthening the stability of a federation, such grants are criticized on efficiency grounds. One argument against equalization payments is that, since in equalization formulas states with weak fiscal capacities receive disproportionately higher transfer payments, it creates incentive for the subnational government not to raise enough tax revenue on its own. See Smart (2007) and Dahlby and Ferede (2011a, 2011b).

One justification for unconditional ( lump-sum) transfer payments in a federation is that it can serve as a means of revenue sharing. The federal government may collect tax revenue in excess of its spending responsibilities. Or in some developing countries subnational governments may lack the capacity to effectively administer its own taxes. In this case, the federal government can collect taxes (sometimes on behalf of the state or provincial governments) and share the tax revenue with the subnational government in the form of transfers. Of course, even in developed countries (where the tax bases of the federal and subnational governments are the same), it may be cost effective for the federal government to collect tax revenue on behalf of the state or provincial government. For example in Canada, the federal government collects personal income taxes (for all provinces except Quebec) and corporate income tax (for all provinces with the exception of Quebec and Alberta). This tremendously cut the cost of collecting taxes for the provinces.

3. EFFECTS OF INTERGOVERNMENTAL GRANTS

3.1. Expenditure Effects

The literature on intergovernmental grants has been mainly concerned with the response of local government spending to changes in grants. Oates (1999) and Gamkhar and Shah (2007) provide a detailed survey of the literature. A number of studies empirically examine the stimulative effects of intergovernmental grants. The studies mainly focused on the nonequivalence between the effects of intergovernmental grants and private income in the community on subnational government spending the “flypaper effect”. The literature has reached a general consensus that matching grants have a higher government spending stimulative effect per dollar than nonmatching grants (See Dahlby (forthcoming) and the references contained therein). The reason for this is that while nonmatching grants have price effects matching grants have both price and income effects. See for example Hamilton (1986), Hines and Thaler (1995), Gamkhar and Shah (2007), and Shaw (2005).

Lump-sum grants to a subnational government augment the income of the recipient community without affecting the relative price of public goods provided by the subnational government. Thus an increase in lump-sum grants should have the same effect on local government spending as an equivalent increase in private income. However, the empirical literature overwhelmingly rejects this hypothesis (See Gamkhar and Shah (2007)). In fact, most studies show that nonmatching grants have a higher stimulative effect on subnational government spending than an equal change in private income. This nonequivalent effects of nonmatching and private income is called the “flypaper effect” that is “money sticks where it hits”.

A number of studies attempt to provide justifications for the common empirical finding that grants have a higher stimulative effect on local government spending than income. While Hines and Thaler (1995) views the flypaper effect simply as an empirical anomaly, others argue that it may be caused by fiscal illusion by the local government (see for example Courant, et al (1979), Logan (1986), and Dollery and Worthington (1999)).

Most of the theoretical studies rely on the assumption that the subnational government uses lump-sum taxes even though in practice such taxes are rarely used. Hamilton (1984) and Dahlby (forthcoming) have shown that in fact the flypaper effect can be a result of the subnational government’s reliance on distortionary taxes, as opposed to lump sum taxes that most previous studies assume.

Another strand of the literature attempts to explain the flypaper effect by alluding to the possible endogeneity of intergovernmental grants. See for example Knight (2002). Most empirical studies on flypaper effects assume that grants are exogenous. But in practice the amount of money that the federal government provides to the regional government may be determined by negotiation between the federal and subnational government where usually political motives play a greater role. In such cases treating federal grants as exogenous may bias the empirical results. Knight (2002) and others argue that if one corrects for this problem by treating grants as endogenous, the so called the “Flypaper” effect disappears or weakens.
3.2. Growth Effects

Intergovernmental grants are an important feature of many federal governments. They are generally employed to address the problem of vertical fiscal imbalance and encourage subnational governments to act in accordance with some national objectives. Regardless of the nature of the initial justification for their introduction, they are likely to affect various aspects of the recipient subnational government. Do federal grants raise economic growth in the recipient state? How do grants affect the welfare of residents in the recipient state? Does the source of finance for the grants matter? We explore these important issues in this section. The section heavily draws from Ferede (2011).

Ferede (2001) examines the long-run effects of federal grants on local public consumption, public capital, private capital, and consumption. The dynamic effects of grants are also explored in Zou (1994). Zou finds that income tax-financed matching grant to local public consumption, has no long-run effect on private capital stock. This is surprising because the grants are financed through distortionary income tax that reduces the after tax return to private capital. One would expect an increase in income tax-financed matching grant to local public consumption to reduce the after tax return to private capital and discourage private capital accumulation. We believe that this counter-intuitive result is due to the omission of accounting for the response of federal taxes to changes in federal grants.

Ferede (2011) examines the long-run growth and welfare effects of intergovernmental grants using an endogenous growth model similar to Turnovsky (2000). The study differs from Zou (1996) in two fundamental ways. First, while Zou does not analyze the effects of grants on economic growth, Ferede (2001) explores the effects of grants on the long-run growth and welfare of the recipient state. Second, and more importantly, Ferede (2001) allows the federal government to use various alternative financing sources and explicitly take into account the response of the revenue sources to changes in federal grants. The study considers three types of federal grants: lump-sum, matching grants to state public consumption services, and public investment. The federal government finances the grants through funds coming outside of the recipient state and taxes imposed on the residents of the state.

Ferede (2001) finds that lump-sum tax-financed increase in lump-sum grants and matching grants to state public consumption services have no effect on the recipient state’s long-run growth rate. However, a lump-sum tax-financed increase in matching grants to state public investment raises the long-run growth rate.

In many developing countries such as Ethiopia the federal government also often relies on external sources of funds such as foreign aid. Results from Ferede (2011) indicate that an increase in lump-sum and matching grants to state public consumption financed from external sources have no effect on the long-run growth rate of the recipient state. However when the external revenue sources are used to finance matching grants to state public investment, the recipient state’s long-run growth rate rises. This highlights the importance of channeling external revenue sources to growth-enhancing infrastructure spending. Chatterjee, et al (2003) also show that foreign aid is effective in enhancing growth when they are tied to public investment.

When the federal government uses distortionary taxes, on the other hand, the growth rate effects of lump-sum and matching grants to state public consumption become negative. This is because while such grants do not contribute to growth, the federal distortionary tax used to finance the grants reduces the return from private investment. This in turn results in a lower private capital thereby reducing the long-run growth rate. The long-run growth effect of distortionary tax-financed matching grants to state public investment however is unclear. The reason for this is that while the matching grant itself (in isolation from the financing decision) has a positive impact, the income tax that is used to finance the matching grant has a deleterious effect on the state’s growth rate.

Our analysis indicates that the long-run welfare effects of grants are generally more complicated than their effects on growth. This is because grants and the sources of funding them affect welfare in various (sometimes opposite) ways. We find that external source-financed grants are welfare-enhancing. However, when the federal government relies on taxes imposed on the residents of the recipient state to finance the grants, the effects of grants on welfare become less clear. Thus our study shows that the growth and welfare impacts of federal grants greatly depend not only on the type of grants but also on the nature of taxes used to finance the grants.

4. LESSONS FOR ETHIOPIA

In most federal countries, the division of power between the federal government and states or provinces is dictated by their respective constitutions. The constitutions usually indicate the types of taxes to be levied by and the types of spending by the federal and subnational governments. The kind of fiscal relationship between federal and lower level of governments is usually enshrined in their respective constitutions.¹

The effectiveness of intergovernmental grants generally depends on how the grants are designed in the first place. In fact, according to Boadway and Shah (2007) governments should note the following when designing intergovernmental grants. First, the objectives of the grant system should be clearly defined. This is important

¹ For example, the Ethiopian Constitution Articles 95-100 (Chapter 10) show the taxation powers and rights of the federal and subnational governments. Furthermore, while Article 94 of the Constitution shows the financial expenditure responsibilities of the federal and state governments, Article 89 shows the responsibility of the federal government in providing transfers to the states.
because, as noted before, we can achieve various goals with grants. Thus the grants and their desired objectives must be simple and clear so that it would be easier later to assess whether the objectives are met.

Second, the grant system should not adversely impact the revenue raising capability and willingness of the recipient government. For instance, if the grants are allowed to finance the budget deficit of the recipient subnational government, this gives an incentive for the subnational government to run budget deficits (for example by not trying enough to raise sufficient revenue on its own).

Not surprisingly, the design of intergovernmental grants is often influenced by political motives. While this may not be too big a problem on the part of the federal government, the recipient subnational government should not have a strong say on the design of the grant system. If for example the federal grants are designed through negotiation with the recipient subnational government this can, in some cases, be a catalyst for disunity in the federation. This is because a negotiated grant system is most likely to be favorable to the politically (sometimes economically) strong states or provinces. Rather, the grant system should be based on certain transparent criteria such as population, area of the region, and the nature of the recipient government (for example municipal or state governments). The federal government should have a strong say on these issues so that the grant system is not influenced by just few influential states or provinces. This is the general practice in developing countries such as China and India.

Another alternative form of arrangement involves federal-provincial (state) committees which work on the modalities of the transfer system. Countries such as Canada and Germany follow this approach. Pakistan also uses a somewhat similar method. For example in designing equalization payment systems grant systems meant to achieve equal fiscal capacity per capita across jurisdictions it is important to have a consensus on the criteria. Of course consultation with all important stakeholders at all levels of government is also equally important. This is particularly true at the first stage of the process to come up with acceptable guidelines or criteria for grant provision.

Finally, international experience indicates that grant programs should be reviewed periodically in light of the performance of the recipient government. This is important to minimize the classical “principal and agent” problem. The grant system also needs to be predictable to avoid any uncertainty in the recipient government’s budget planning and service provision to the local residents. One way to do this is by providing a minimum level of grants that is not conditional on the recipient government’s fiscal effort. This will help guarantee a certain level of comparable (to other jurisdictions) public service provision in the jurisdiction. See Bird and Smart (2001) and the references contained therein.

5. CONCLUSION

Intergovernmental grants play a key role in fiscal federalism. This paper explores the various types of intergovernmental grants, their objectives and effects on the recipient regional economies. We highlight some of the experiences of other countries with regard to intergovernmental grants, without attempting to discuss the countries’ experience in details.

The literature and the experiences of other countries indicate that intergovernmental grants can be effective in order to strengthen the cohesiveness of a federation provided that it is done based on transparent criteria. If, for instance, the objective of the federal grant is to provide budgetary support, as is commonly done in many federal countries, then it should be based on population size. Another important lesson is that the federal grant should not adversely affect the incentive of regional government from making their own fiscal efforts (to raise more revenue or rein on their budget deficits).

With regard to encouraging public investment in regional states, the experiences of other countries also show that matching grants seem to be effective. However such grants may sustain the already existing disparity in fiscal capacity among the regions. Thus there is a need to complement such grants with some sort of lump-sum or non-matching grants perhaps based on population size or geographical area. Of course, the very idea of disbursing federal grants to the regions is based on the premise that the regional governments have the capacity to effectively implement the various projects deemed to have some national importance. Perhaps, in an unrelated note, there may be the need to enhance the capacity of regional governments. The grant system should be simple and with a clear statement of accountability on the part of the recipient region.

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