ROLE AND INFLUENCE OF INTERGOVERNMENTAL GRANTS ON LOCAL FINANCE

BY

WERNER Z. HIRSCH

Working Paper No. 622
Department of Economics
University of California, Los Angeles
May 1991
ROLE AND INFLUENCE OF INTERGOVERNMENTAL GRANTS ON LOCAL FINANCE

Werner Z. Hirsch*

1. Introduction

Government structures of many countries have undergone changes in recent years. The noble experiment with federalism of the United States has been a guiding light and so have its intricate fiscal intergovernmental relations. This paper is based on the premise that many countries, including Turkey, might want to reexamine their intergovernmental grant system. Thus after this short introduction, this paper will briefly review the role of Turkey's various governments and their interrelations. Next, reasons for and purposes of intergovernmental grants will be examined, to be followed by a systematic analysis of major grant types and their likely effects. Finally, a short summary will be offered.

2. Turkey's System of Public Finance

In describing the role of local government in Turkey, Metin Hepen states, "To the extent that local government implies self-government, the Ottoman-Turkish polity did not have such a tradition. The Ottoman polity was neither "centralized" nor "decentralized feudalism." Instead, it evinced strong characteristics of patrimonialism. Whereas in both centralized and decentralized feudalism, central authority is effectively checked by countervailing powers ... in patrimonialism, the periphery is

*The author is Professor of Economics at the University of California at Los Angeles. The paper was prepared for the conference on Fiscal Relations Between Local and Central Governments with Special Reference to Turkey, organized by the Departments of Finance of Turkey's universities, May 23-25, 1991, Marmaris, Turkey.
almost totally subdued by the center.\textsuperscript{1} This tradition of patrimonialism goes back to the classical age (1300 to 1600 AD of the Ottoman Empire). Ottoman local notables saw their role as intermediaries between the state and the peasants. Quite a few local notables used their delegated powers to enrich themselves at the expense of both the state and the peasants. In 1826, a new ministry of revenues was created, and one of its duties was to supervise local markets in Istanbul and act as a municipal police.\textsuperscript{2}

When the republic was established in 1923, formal centralization took place. Each province was run by a centrally appointed governor, and each province was subdivided into districts as well as subdistricts and villages. The Ministry of Interior financed certain select government activities and provided oversight of expenditures.

The Municipal Law of 1930 made possible the delegation by central government to local government, giving expression to sensitivity by the central government to local autonomy. In the process, however, the financial burden of municipalities was significantly increased.\textsuperscript{3}

After the Second World War, rapid urbanization took place in Turkey, leaving municipalities with ever-increasing responsibilities. More and more local functions were mandated by the central government without financial support. The main sources of municipal revenues were local shares of certain national taxes and direct municipal revenues, mainly in the form of user charges and select taxes.\textsuperscript{4} Local shares of national taxes were only

\textsuperscript{2}Ibid., p. 11.
\textsuperscript{3}Ibid., p. 17.
\textsuperscript{4}Ibid., p. 21.
five percent of the income tax and corporation tax, two percent of tax on
state monopolies, eight percent of fuel consumption tax, and fifteen percent
of customs and duties. While the property tax provided the bulk of
municipal revenues, still only forty five percent were available to munici-
palities. 5 Although Turkey became increasingly urbanized, e.g., between
1927 and 1975 Turkey's population in municipalities grew from twenty three
to fifty seven percent, yet the percentage of Turkey's public revenues going
to municipalities remained almost unchanged. 6

In the 1970s, mayors of major cities began to seek greater decentrali-
zation and local autonomy, a policy adopted when the Republican People's
Party-dominated coalition government came to power in January 1978.
According to observers, however, this movement, which was supported strongly
by intellectuals on the left, failed.

In summary, intergovernmental relations in Turkey are poorly defined,
quite loose, and perhaps also in a state of flux. Funds available to local
governments are extremely limited, and the fiscal problems of these govern-
ments are continuously exacerbated by rapid urbanization. With these
circumstances in mind, I will seek next to review some major purposes of
intergovernmental grants.

3. Purposes of Intergovernmental Grants

There are essentially six reasons why a higher level of government
funds a lower level. The first is to account for redistributional goals.
If a local government tries to redistribute, it creates incentives for the
losers to leave its jurisdiction and for gainers to enter. This is not

5 Ibid., p. 22.
6 Ibid., p. 22.
efficient and does not seem to promote equity, either.

Why should the residents of one community have to pay more toward the services provided to low-income families than the residents of another community? There may be some reasons why a central government would not take sufficient account of the differences among areas in the desired amount of redistribution or of the differences in cost of living or support of redistribution. Also, some services must be provided equally to all residents of a community regardless of their ability to pay, and this amounts to redistribution within the community. Intergovernmental grants can offset some of the incentives created by redistribution if the funds are targeted at communities with a high percentage of low-income residents; however, the use of grants allows for local variation in levels of service or amount of redistribution. For example, the grants for direct redistribution often leave some leeway for subnational governments to allow for differences from the national average.

A second reason is for the higher level of government to set a uniform tax standard for the lower levels of government so as to prevent some of the distortions associated with competition for the tax base. Thus, if the state sets a sales tax, which is then distributed back to the local governments, there is no incentive for people to move around among the local governments to avoid the local sales tax. They must pay it in all the jurisdictions within the state. However, if only one local government did not have such a tax, it might be able to attract large amounts of retail sales business. This might seem very desirable to the one local government, but its gains are at the expense of other local governments. If they then responded by removing their own local sales taxes, there would be little net effect on the total amount of retail sales activity or on its
distribution; but the local governments would not have the tax revenue. For this reason, the state collection with a formula redistribution to the local governments may be an efficient way to raise local taxes.

A third reason for the grants could be to internalize the externalities associated with small communities providing a good or service whose benefits are shared by many people outside the community. For example, the residents of an inner suburb may find that their roads are used extensively by people traveling from more distant suburbs to the central city. These people receive benefits from the roads but do not help finance them directly and do not have any direct voice in determining the level of service the roads should provide. Thus, the road decisions made by the residents of the inner suburb would not take into account the benefits to others, and roads would tend to be underprovided.

A matching grant from a higher level of government is one way to internalize this externality. Residents are likely to want more road services if the direct cost to them of providing the services is reduced. If the matching grant is designed to represent the amount of services received by nonresidents, it would lead to the appropriate level of road service.

The fourth major reason for the use of intergovernmental grants relates to the fund raising ability of different levels of government. In many countries, central governments have access to the most income-elastic source of revenue, the progressive income tax. Because each additional dollar of income is taxed at a higher rate than the average dollar of income, the revenue from the tax goes up more than proportionately with rises in income. This is further augmented by the effect of inflation pushing income into higher tax brackets.
A fifth argument for intergovernmental grants is that they are required to get local governments to do certain desirable things that they have no incentive to do on their own. These may relate to externalities or to merit goods. We have already seen how the use of a matching grant can get a local government to internalize the benefits that its activities generate for others. However, there are some activities that may be desired at the national level but that local governments have no incentive to provide. For example, a national policy to provide additional education for disadvantaged children would be difficult to implement directly; however, a grant from a higher level of government may induce the local communities to take the desired action. Even if the higher government has the authority to order the local government to implement the program, substantial hardships may be imposed on the local community because of the expenditure, so a grant may be an equitable way to achieve the goal even if it is not required.

The final major reason for a higher level of government is to provide funds to a lower level of government is to fund an activity that is the appropriate responsibility of the higher level government but that can be better administered at the local level. This is the case for many of the program grants to local governments. For example, the central government may want to increase the amount of energy conservation in the country, yet its program may not be sensitive to regional differences in energy usage. Instead the central government may decide to provide grants for local governments to offer such programs. Then the local governments essentially become agents of the central government in conducting the programs.
4. **Types of Grants and Their Effects**

In the preceding pages, we reviewed major reasons that have been invoked to justify intergovernmental grants. Now we would like to review some grant options and their likely implications.

Intergovernmental grants can be viewed as either increasing the income of the recipient government or as reducing the price to the recipient government of some particular service. We start by treating the government as having a set of preferences and a budget constraint, or as an individual in terms of decision making. In Figure 1, the horizontal axis represents the quantity of all programs other than the one we are examining. The vertical axis represents the amount of the target program (TP). Each indifference curve shows a higher level of satisfaction, moving northeast. These can be thought of as some form of social indifference curves or the indifference curves of the local decision maker. In addition, there is a budget constraint. Given the prices of the various services that the government can provide, the budget constraint shows the trade-off between services available to the local government. Even tax cuts can be included in the analysis by thinking of the budget constraint as showing the maximum amount of revenue that could be raised and thinking of a tax cut as one of the services included in the "all other" category.

Each type of intergovernmental grant has a particular effect on the government's budget constraint. An unconstrained transfer, such as revenue sharing, shifts the budget line out by the amount of the transfer. Thus, if the government has $10,000,000 to spend before the intergovernmental grant and we adjust the units so that one unit of each output costs exactly one dollar, the budget line would intercept each axis at the 10,000,000 point. This represents the maximum amount of each output that the govern-
ment could purchase if it spent all its budget on that good. Each unit of
one good that is not purchased allows for one additional unit of the other
good to be purchased. This is illustrated in Figure 2. The consumption
point in the figure is for 3,000,000 units of the units of the target
program and 7,000,000 units of other programs, i.e., $3,000,000 will be
allocated to the target program and $7,000,000 will be allocated to the
other programs.

Now suppose that the federal government provides $1 million in revenue
sharing funds. The intercept on each axis moves up by this amount. Thus,
the budget constraint runs from 11 million units of the target program to 11
million units of the other programs. This shift is also illustrated in
Figure 2. In the figure, expenditure on each program is increased by
500,000. However, this is a purely arbitrary increase. It is possible to
get much more or less than this increase in the target program. If it is a
program which the government feels has to be provided at some minimum level
but which does not have a high priority for expansion, it may get none of
the new funds. Alternatively, it may get all of the new funds if it is a
high-priority area for the government. In practice, we would not expect
either of these extremes. Rather, the increase in income would lead to a
small increase in each of the programs the government undertakes. 7 Since we

7 It is probably worthwhile to point out that the increase can be more
than $1 million or the program could actually see a decrease in its funding.
These actions depend on the relation of the program to the income of the
government. For example, a school district may provide a variety of special
programs. Some of these programs may be viewed as providing experience that
is desirable for all students but that is restricted because of limited
resources. The increase in income may allow for the material to be
incorporated into the regular curriculum, thus causing a reduction in
funding for the target program. Alternatively, more of the student's time
may be shifted into the target program because of the higher level of
funding. This may reduce expenditures in other areas and allow for an
increase of more than $1 million in the funding for the target program.
are treating local tax cuts as one of the "other" programs, it is likely that the increase in intergovernmental aid would reduce the amount of local taxes raised, so the increase in recipient government spending would be less than the full amount of the grant.

A program-specific grant has the effect of increasing the amount of money available for that specific program, but it does not guarantee that the level of spending on the targeted program will increase by the full amount of the grant. Figure 3 shows the effect of a grant for $1 million that can only be spent on the targeted program. The maximum amount that can be spent on other programs remains $10 million. However, this amount is available until spending on the targeted program hits $1 million. Beyond that amount, the local government must decrease its own spending by one dollar for each additional dollar spent on the target program. Hence, the budget line starts at $10 million on the horizontal axis and goes up for the first million dollars. Then it goes back to its original slope and intersects the vertical axis at $11 million.

In the figure we see that the effect is exactly the same as an unconditional grant in terms of the spending decisions of the local government. This is because this particular local government would have spent more than the $1 million on the program in the absence of the federal grant. Hence, the grant simply substitutes for the first million dollars of local expenditure and frees that amount for the general budget. The targeted grant would have the same effect as a general grant if the recipient government chose at least the minimum desired by the higher level of government, even if the grant were unconstrained. For example, if the

However, in most cases we expect that each program will receive some part of the additional money.
local government would have chosen to spend nothing on the targeted program in the absence of the grant, the grant effectively guarantees at least $1 million of expenditure on the targeted program. Few governments would turn down the "free" part of the program even if they would not spend any of their own money on it. This is illustrated in Figure 4. The local government chooses to spend nothing on this program given its preferences. A grant of another million dollars would still cause no spending on this program; but a categorical grant for $1 million is accepted. Note that the government has not reached as high an indifference curve as it would have with the cash transfer. However, there is some presumption that preferences of others should be taken into account or there would be no reason to use anything other than a cash grant. For example, the expenditure may generate spillover benefits in other communities.

This analysis shows that the nonmatching categorical grant can guarantee some minimum level of expenditure, but that it otherwise may not affect the expenditure on the targeted program any more than would a general revenue-sharing grant of the same amount. To offset this ability to shift the money out of the targeted activity by reducing its own expenditures, some categorical grants have a "maintenance-of-effort" provision. According to this provision, the local government can only receive the central government grant if it is used in addition to the amount the local government would have spent in the absence of the grant. This type of grant is illustrated in Figure 5. The local government with some expenditure on this good is now facing a different opportunity set. If this is a categorical grant for a fixed amount, the new level of expenditure is likely to be higher by the amount of the grant. A community like the one in Figure 4 has no effort to maintain, so the analysis is not changed by a
maintenance-of-effort provision.

The maintenance-of-effort restriction sounds effective, but it has a number of problems. The most important problem is figuring out what the level of expenditure would have been in the absence of the grant. In practice, some historical level is usually treated as the minimum amount, which must be maintained to be eligible for the grant. Governments can change their spending patterns from year to year. Thus, a maintenance-of-effort provision may be ineffective if the program would have increased anyway. Alternatively, it may be particularly troublesome for a local government that was planning to reduce its expenditures on the targeted. This may lead to loss of assistance from the central government for a declining community while a rapidly growing one receives the assistance. In addition, inflation tends to water down the effectiveness of maintenance-of-effort provisions over time since they would usually be specified in dollar amounts rather than level-of-service amounts.

Another way to discourage the diversion of local funds from targeted programs is to use a matching grant. With such grants the local government receives grant money in some specified proportion to local spending. For central government may match local expenditures on a dollar-for-dollar basis. This is illustrated in Figure 6. The local government faces a budget that allows expenditure of up to $10 million on other expenditures or up to $20 million on the target program. For each additional dollar spent on the targeted program, the local government must only reduce spending on other programs by $0.50 since the central government pays half the cost. In the figure, this leads to expenditure of $12 million on the targeted program and $4 million on the other expenditures. As can be seen, a lump-sum grant of $6 million would not have led to as large an increase in the expenditure
on the targeted program. The lump-sum grant would lead to expenditures of $8 million on each category.

The figure shows an open-ended matching grant. In practice, most such grants have a limit on the amount of the match. These close-ended matching grants function more like lump-sum grants with some minimum local expenditure because the match often ends at a low level compared to the desires of the local government in response to the match. To the extent that the local government spends more than the match amount, the grant acts like an unrestricted lump-sum grant since the local government must pay the full cost of the expenditure beyond the match amount.

5. Summary

Should Turkey decide to rethink the relations between central and local governments, it no doubt will consider a number of options. They are likely to require a change in what to the outside appear to be rather loose and poorly defined roles of and relations between governments. Particularly some difficult choices will have to be made among alternative systems of intergovernmental fiscal relations. My review of the various purposes which intergovernmental grants can serve together with an examination of grant types and their likely effects may, I hope, contribute to a more informed debate.
Figure 1. Budget Equilibrium
Figure 2. Lump-Sum Grant
Figure 3. Targeted Grant
Figure 4. Targeted Grant with Minimum Expenditure
Figure 5. Maintenance-of-Effort Provision
Figure 6. Matching Grant Versus Lump-Sum Grant