
THE DANGERS OF DECENTRALIZATION

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Demand for decentralization is strong throughout the world. But the benefits of decentralization are not as obvious as the standard theory of fiscal federalism suggests, and there are serious drawbacks that should be considered in designing any decentralization program. An analysis of these dangers makes it easier to understand some of the real choices. These choices are not so much whether to decentralize in general, but rather what functions to decentralize, in which sectors, and in which regions. In many cases the problem is not so much whether a certain service should be provided by a central, regional, or local government, but rather how to organize the joint production of the service by the various levels.

In many—if not most—cases, such measures have an enormous potential and could, if properly designed and implemented, significantly improve the efficiency of the public sector. Decentralization measures are like some potent drugs, however: when prescribed for the relevant illness, at the appropriate moment and in the correct dose, they can have the desired salutary effect; but in the wrong circumstances, they can harm rather than heal. This article looks at some of the negative effects of decentralization in the hope that a better understanding of its dangers will contribute to a wiser application of potentially desirable decentralization programs.

This article highlights some of the dangers associated with decentralization. In this analysis, “decentralization” is taken to be the “pure” decentralization of fiscal federalism theory, that is, a system in which pure local governments raise pure local taxes and undertake pure local expenditures without the benefit of central government transfers. This is not a very realistic model, but it is the one used in the pro-decentralization theory, and it is useful for analytical purposes. In classical fashion, the discussion first examines the dangers of decentralization from the viewpoints of redistribution, stabilization, and allocation. It then explores some of the questionable assumptions of the decentralization model to go beyond the centralization-decentralization dichotomy.

Decentralization Can Increase Disparities

Because decentralization measures can adversely affect the distribution of equity, a substantial body of public finance literature holds that the redistribution of income should remain a responsibility of the central government for two reasons. First, attempts by local governments to redress income disparities are likely to be unfair. The poor in well-off regions will fare better than the poor in more deprived regions. Households in regions that enjoyed the same income before redistribution will have different incomes after redistribution, either because of income differentials among regions (even if they have similar redistribution policies) or because the regions have different redistribution policies (even if initial income distributions are similar), or because both incomes and redistribution policies differ from region to region—which is likely. Second, decentralized redistribution is self-defeating. If a jurisdiction adopts policies to redistribute income, imposing high taxes on the rich and giving high benefits to the poor, the rich will tend to leave for more lightly taxed areas and the poor will tend to move in from areas that offer lower benefits. The generous jurisdiction will soon be unable to sustain its policy.

It follows that the central government must have the responsibility for redistributive programs and thus must control a large share of taxes and public expenditures. Although centralization is not a sufficient condition for redistribution, and many centralized countries have little or no redistribution, it is a necessary condition, and it is hard to think of a country that carries out redistributive policies at subnational levels. Decentralization will therefore make it more difficult to pursue redistributive policies.

Income can—and probably should—be redistributed among jurisdictions as well as among individuals. This point is often ignored in the literature on fiscal federalism, which sees regional disparities as abnormal phenomena resulting from accidental shocks that will be reduced and eliminated automatically by the movement of goods, capital, and labor. To the extent that interjurisdictional disparities exist, however, it is often argued that what counts—and should be corrected—are interpersonal disparities. Poor people are poor anywhere and should be aided irrespective of their place of residence. There is no guarantee, however, that transfers to low-income areas will effectively benefit poorer residents. And although it is often maintained that reducing income disparities will automatically reduce disparities among regions, this argument is not compelling for several reasons.

The first reason is that regional disparities exist in most countries (and are particularly large in developing countries), and, contrary to standard economic theory, they do not disappear with economic development. At one time it was assumed that these disparities were temporary and would be smoothed out in a later phase of economic development (Williamson 1965). This view has been challenged by economists (see Krugman 1987 and Myrdal 1957) and contradicted by recent trends in several industrial countries in which regional disparities increased in the late 1980s.

The second is that a reduction in income disparities does not necessarily correlate with a reduction in regional income differentials. If income levels in a poor region are more equally distributed than in a higher-income region, transfers to poorer citizens will primarily benefit the richer region and actually increase regional disparities.

A third point is that poor people in low-income regions are poor for good reason: they live in a place that offers fewer economic opportunities and less infrastructure and lacks economies of agglomeration and other location-specific externalities. Raising individual incomes is not the same thing as increasing the development potential of the area. It cures the symptoms rather than the illness.

Furthermore, each region is a social and political entity that exists beyond the individuals who reside there. In assessing their well-being, the citizens in a region consider not only their own income but also the income of their fellow citizens much more than the income of inhabitants of other regions. Interregional disparities are not merely statistical artifacts; their perception is a sociological reality. There is a political demand for action to reduce interjurisdictional disparities.

Is a decentralized system likely to be more effective at reducing interjurisdictional disparities than a centralized system? The answer is no. In a decentralized system, the local jurisdiction would collect all taxes from and undertake all expenditures on behalf of its residents. By contrast, a centralized system would redistribute income from richer areas to poorer ones, even under regressive tax and expenditure systems in which per capita expenditures or benefits increase as per capita income rises. (See Davezies 1989 for data on France; Oliveira 1991 on Brazil; and Davezies, Nicot, and Prud'homme 1984, 1987; and Nicot and Letrung 1989 on Côte d'Ivoire, Thailand, and Morocco.) Despite the conceptual and statistical difficulties of interpreting these studies, the results are unambiguous; richer jurisdictions do subsidize, through national budgets at least, poorer regions. Table 1 summarizes the magnitude of the transfers between large cities and the rest of the country for the five cases studied.

The conclusion that emerges from both the analytical and empirical research is that national budgets tend to reduce regional disparities. Any reduction in the importance of national budgets relative to those at the subnational level (a definition of decentralization) therefore increases interjurisdictional disparities by reducing the impact of national policies designed to correct regional inequities.

This mechanism is both static and dynamic. It is likely to induce a vicious circle; richer jurisdictions will have large tax bases (whatever tax bases are chosen), with tax rates that are either the same or lower than other, less rich jurisdictions. In the first instance, they will collect more taxes and therefore will be able to provide more local public services. In the second, they will offer the same services at lower tax rates. In both cases, these localities will be preferred by businesses and households, which will choose to settle there, enlarging the tax base and increasing the gap in income between regions. Decentralization can therefore be the mother of segregation. Local government in the United States offers a model of this disparity-increasing mechanism.

Table 1. Budget Transfers from Large Cities to Poorer Jurisdictions

<i>Category</i>	<i>Abidjan 1984</i>	<i>Bangkok 1987</i>	<i>Casa- blanca 1982</i>	<i>São Paulo 1985</i>	<i>Paris 1984</i>
Share of country population	18	14	12	12	18
<i>Share of national budget (percentage)</i>					
Contribution to budget	54	41	34	20	26
Gains (benefits) from budget	25	28	18	14	19
Gains (flow) from budget	34	35	21	9	21
Transfers (benefits)	25	13	16	6	7
Transfers (flow)	18	7	13	12	5
<i>Transfers (U.S. dollars)</i>					
Transfers (benefit) per capita	200	160	400	90	870
Transfers (flow) per capita	160	80	330	160	630
<i>Transfers (percentage of GDP)</i>					
Transfers (benefit)	5.3	2.5	6.5	7.4	1.7
Transfers (flow)	4.2	1.3	5.5	13.9	1.3

Source: Davezies 1989; Oliveira 1991; Davezies, Nicot, and Prud'homme 1984, 1987; Nicot and Letrung 1989.

A corollary to this thesis is that, all else being equal, the decentralization of taxes and expenditures works against the decentralization of activities and is likely to lead to a concentration of growth in a few urban locations. Cynics might consider this concentration one of the main virtues of highly decentralized government. If it is argued that a concentration of activity helps contribute to growth, fiscal decentralization is likely to be growth-inducing. The cynics would find support for such a thesis in the experiences of the former socialist countries. In these highly centralized states, planners located industries where they pleased, including regions in which the particular activity had no comparative advantage whatsoever. The net result was a fairly balanced spatial development coupled with very low growth.

A final issue is that of destructive competition among jurisdictions eager to attract investment. Subnational governments might compete with each other to attract enterprises by lowering tax rates or raising subsidies. Although some competition may be desirable, particularly if it encourages efficiency, too much competition may be destructive. If all local governments offer enterprises identical advantages (at a cost to their taxpayers), spatial patterns will not be modified, but the balance between the public and private sectors will swing away from an initial equilibrium that was supposed to be optimal. The greater the

degree of decentralization, the greater the potential for misallocation. Of course, there are solutions to this problem: subnational governments can cooperate with each other, either spontaneously or as a result of national government incentives. And the central government can intervene to limit or regulate regional competition.

Decentralization Can Jeopardize Stability

It is easy to show that a decentralized system makes macroeconomic policies more difficult to implement.

Theory

The two main instruments of macroeconomic policy are monetary policy and fiscal policy. Fiscal policy—that is, control over the amount and structure of taxes and expenditures and the management of the budget deficit (or surplus)—is a very powerful instrument for stabilizing the economy. It is an instrument that only the central government can manipulate, because local authorities have few or no incentives to undertake economic stabilization policies. The impact a particular regional government could have on national—or global—demand and on prices is negligible. Even if any regional government had that much influence, most of the impact would be outside its jurisdiction because subnational economies are much more “open” than national ones and sustain greater leakages to other regions as a result of overspending or underspending. Moreover, a regional government would have to pay the full political cost of an economic stabilization policy that would bring it only partial benefits. As a result, regional and local governments will never provide enough economic stabilization; which must be conducted by central governments.

If the national government is to use fiscal policies to affect overall demand, however, its share of national taxes and expenditures must be sufficiently large in relation to total taxes and expenditures as well as to gross domestic product (GDP). In all cases, a large share of total expenditures and taxes is already committed and cannot easily be changed. Stabilization policies can only be undertaken at the margin, but the margin is a function of the whole; if the whole is small, the margin will be very small.

Consider, for example, a country in which total government spending accounts for 30 percent of GDP and assume that the central government can, for the purpose of stabilization, increase or decrease expenditures by 10 percent (a generous assumption). In a decentralized country in which local government accounts for 60 percent of total government spending, the central authority would be able to increase or decrease total demand by about 1.2 percent of GDP. In a centralized economy, where local government accounts for 10 percent of total government spending, the central government’s mar-

gin would be 2.7 percent of GDP. The difference between 1.2 percent and 2.7 percent may well mean the difference between an ineffective and an effective macroeconomic policy.

Furthermore, it is still possible that the fiscal policies of subnational governments will run counter to those of the central government. In many countries the political cycle affects local policies: expenditures increase immediately before local elections, and taxes increase immediately after elections. But there is no reason why this political cycle would coincide with the business cycle. In practice, local governments may end up increasing expenditures or raising taxes while the central government is trying to reduce spending or cut taxes.

This is very much what happened in the United Kingdom in the early 1980s, frustrating the central government's efforts to reduce public outlays (for structural as much as for countercyclical reasons) and leading to the introduction of the ill-fated poll tax—a device intended to constrain the ability of local governments to increase expenditures. According to Perloff (1985), the opposite occurred in the United States during the Great Depression, when local jurisdictions ran high budget surpluses that offset the central government budget deficit.

Examples of “Fiscal Perversity”

Argentina provides a good illustration of what Perloff (1985) calls the “fiscal perversity” of subnational governments (World Bank 1990a). Argentina has always been a decentralized state. Provincial expenditures rose rapidly to more than 11.2 percent of GDP in 1986, but provincial government revenues as a share of GDP actually dropped from 5.6 percent in 1980 to 5 percent in 1986. The 6.2 percent provincial deficit was either financed by transfers from the central government or by borrowing; in both cases it was inflationary. Transfers (at least until 1988) consisted largely of a posteriori discretionary grants from the Ministry of Finance, a practice that rewarded—and therefore encouraged—provincial mismanagement. More important, because the grants were not financed by central government revenues, the practice led to government deficits of a large magnitude. Borrowing by the provincial governments from the Central Bank, or from provincial banks (entirely controlled by the provincial governments) was no better. According to World Bank (1990a: ii): “These provincial/national financial practices have contributed to unsustainable public sector fiscal and quasi-fiscal deficits, and their continuation would undermine national efforts to attain price stability and to promote sustainable economic development.”

The 1988 constitutional reform in Brazil significantly reduced the central government's ability to conduct macroeconomic policies. Prud'homme (1989: 32) gives a comparison of the central government's share of taxes and net-of-transfers expenditures before and after the reform:

<i>Source</i>	<i>Under previous constitution</i>	<i>Under new constitution</i>
Total tax revenues	100	100
Percentage of taxes raised by central government	57	52
Transfers from central to provincial government	-27	-30
Share of national taxes left to central government	30	22

Even before 1988 the central government raised a relatively small share of total taxes and had a relatively small share of total expenditures. This statement, however, must be qualified by the fact that the central authorities set the tax rates of most states and therefore had a fair degree of control over the overall fiscal burden (although tax collection in Brazil is a function of the local tax authorities as much as of tax rates). The new constitution reduces the government's ability to conduct macroeconomic policy in three ways: it lowers the share of taxes raised by the central government; it gives the states more freedom to set tax rates; and it increases automatic transfers from the center to the regions. These changes have certainly contributed to Brazil's poor macroeconomic performance in recent years.

Bogoev (1991) cites the example of the former Yugoslavia, which was one of the most decentralized economies in the world. In 1986 central government (the Federation) expenditures accounted for only 22 percent of total public revenues. Moreover, these revenues were derived in large part from sales taxes and customs duties, that is, taxes that are not appropriate for stabilization policies. Because total revenues were insufficient for the central government to discharge its responsibilities, it had to rely upon "contributions" from lower levels of government that were negotiated each year. Thus the federal government was unable to implement stabilization policies, and high inflation and poor macroeconomic management resulted.

Decentralization Can Undermine Efficiency

The case for centralization is usually based on efficiency. The argument provided by the theory of fiscal federalism is that the inhabitants of the different jurisdictions have different tastes: in local government A, people prefer recreation, but in local government B, they prefer education. The same provision of education and recreation in A and B will satisfy neither. Decentralized provision, on the contrary, will make it possible to give the residents of A and B what they want, will better match demand, and therefore will increase welfare. This model, however, can be criticized on two grounds. First, it assumes several hypotheses that are very unlikely to be met in a developing country. Second, it focuses entirely on demand efficiency and ignores supply efficiency.

Decentralization and Allocative Efficiency

The problem is that developing countries do not meet most of the explicit or implicit assumptions of the model of fiscal federalism. First, the model assumes that the main difference between the various local or regional jurisdictions is in their respective tastes or preferences. In reality, the main differences are in income, whether household income (which certainly explains differences in tastes) or potential tax income. In most developing countries, the problem is not to reveal the fine differences in preferences between jurisdictions but to satisfy basic needs, which are—at least in principle—quite well known. The potential welfare gains associated with a better match of supply and demand are not large.

Second, the model assumes that the taxpayers/voters of each jurisdiction will express their preferences in their votes. This hypothesis bears little relationship to local electoral behavior in developing countries. Local elections, when they exist, are usually decided on the basis of personal, tribal, or political party loyalties. People vote for a mayor they know, a member of their group, or a party they like. This is true in all countries; local elections are often a mere rehearsal of national elections and say little about local preferences. In addition, the platforms on which local elections are fought (when they exist) are often vague and unrealistic. The menus offered for choice are unlikely to express the electorate's preferences.

A third hypothesis is that locally elected mayors will satisfy the preferences thus revealed. But often the electoral mandate is vague or inconsistent—or both. Even if elected officials wanted to fulfill it, they could not, usually because of a gross mismatch between available resources and promised expenditures. Then, too, officials often lack incentives to keep their promises. Some do not expect to run for reelection. And most know that their reelection will not depend much on their local performance. A mayor who has a feel for the preferences of the electorate and tries to respond to it may well be ousted because he or she represents a party whose national policies have become unpopular.

Finally, even if mayors wanted to satisfy the preferences of the electorate and had enough resources to do so (two heroic assumptions!), it is not clear that they would be able to persuade the local bureaucracy to go along. An elected official is merely a principal who gives orders to a local bureaucrat, his agent. The difficulties associated with this principal-agent relationship cannot be dismissed, particularly in developing countries. Local bureaucracies are often unresponsive, they may be poorly motivated and occasionally poorly qualified, and they might have good reasons to pursue their own agenda rather than the agenda of their principal.

The hypothesis on which the decentralization model rests appears therefore rather fragile, particularly (but not exclusively) in developing countries. Of course, it can be argued that the mechanisms that have been shown to work imperfectly in a decentralized regime do not work at all in a centralized one. This view,

however, is only partly true. Central provision of local public services can also be modulated to better suit local demand. There is no compelling reason for the model's assumption that services provided by the central government would be provided uniformly. Higher-level governments might be quite able to differentiate the services they provide, just as private enterprises operating on a national or international scale do. No formal electoral mechanism exists to ensure adaptation to local needs, but other mechanisms, such as the will to serve, deconcentration (or, the redistribution of decisionmaking authority), pricing mechanisms, and survey devices might be as efficient (or as inefficient) as the electoral mechanism. On the whole, the potential gains in allocative efficiency resulting from decentralization are likely to be rather small. This finding is particularly important in view of the impact that decentralization has on production efficiency.

Decentralization and Production Efficiency

The standard decentralization model says nothing or next to nothing about production efficiency. The welfare gains to be obtained (according to the model) will accrue only because supply will better match demand. A hidden assumption here is that supply itself is always efficient. This assumption, derived from the consideration of the private sector (where it does not always hold), is not acceptable for the public sector (see critiques of marginal cost pricing practices by Kranton 1990 and Heggie 1991). The real issue is whether local provision is more cost-effective than national provision. We cannot take for granted that either one is totally effective. Unfortunately, few studies are available on this difficult subject, but there are several a priori reasons to fear the effect of decentralization on productive efficiency.

One is, of course, that providing a given local public service may entail economies of scale. This point is widely recognized in the literature. Actual studies of economies of scale in the various local public services are scarce, but the prevailing view is that there are few local public services for which economies of scale imply nationwide supply. For most local public services, the provision in a given city is independent of the provision in other cities. The welfare losses attributable to economies of scale that would result from decentralization are probably minimal.

Another, more compelling, reason is that economies of scope might exist and that central bureaucracies may be more efficient providers than local bureaucracies. Decentralization transfers power not only from central to local governments, but also from central to local bureaucracies. There are reasons to believe that central bureaucracies are likely to operate closer (than local bureaucracies) to the technical production frontier, even though both central and local bureaucracies probably operate quite far from this frontier. Why? For one thing, central government bureaucracies are likely to attract more-qualified people—not so much because they offer higher salaries, but because they offer better careers,

with a greater diversity of tasks, more possibilities of promotion, less political intervention, and a longer view of issues. Then, too, central government bureaucracies invest more in technology, research, development, promotion, and innovation. Only large institutions can make such investments—in the public sector just as in the private sector. In many developing countries central governments tend to make few such investments, but local bureaucracies make almost none.

The problem is compounded by the current enthusiasm for privatization. In most countries, and for good reasons, the line between private and public provision is shifting, and the sphere of public provision is shrinking. Decentralization similarly shifts the border between central and local provision, reducing the center's share. The result is a contraction in the role of central government activities. This retrenchment probably comes at a cost, which may well be high. The best people leave, morale is lowered, the sense of public service is shaken, networks are broken, and investments in research and development are sacrificed. Two examples—France and Brazil—would probably support this pessimistic assessment. In France the strength of the prestigious and efficient corps of civil engineers (Ingénieurs des Ponts et Chaussées), the driving force behind most infrastructure provision in the country, is waning, largely as a result of decentralization. In Brazil, for very much the same reason, the highly qualified national corps of road and sanitary engineers is also being partly dismantled. The obvious costs associated with this loss of technology and expertise are probably not compensated by potential progress in the private sector or in local government bureaucracies.

Whether these retrenchment costs are related to the size of the nation's public sector (because it goes below an unknown threshold) or to the speed at which the process occurs is a matter for speculation. It is, however, important for policy prescription. If retrenchment costs are a function of the speed at which decentralization proceeds, they could be minimized or even perhaps eliminated by a slower process.

The authors of several case studies of actual decentralization measures have expressed fears that decentralization might undermine efficiency. Thus, for instance, a recent World Bank (1990b: xi–xii) document on Peru's water supply and sanitation sector notes:

The regionalization process under way and the corresponding changes in sector organization assign all the operational responsibilities to regional and local governments. In general, this is a desirable trend as it brings the level of responsibility closer to the users. A great challenge, however, is being placed on these levels of government to create the necessary institutions to respond effectively to local needs. The management of services in more than 400 urban centers of less than 100,000 inhabitants is of particular concern. These towns do not benefit from economies of scale in operations, and are unable to offer attractive working conditions and salaries to qualified personnel and to plan and

run water and sanitation operations at a satisfactory level. . . . In the next two or three years, it is likely that response capacity of the new sector will be even worse than it is today as new institutions need time and assistance to develop this capacity.

Decentralization and Corruption

Another concern that involves both allocative and production efficiency is the possibility that decentralization might be accompanied by more corruption. If, as is likely, corruption is more widespread at the local than at the national level, then decentralization automatically increases the overall level of corruption. This outcome, by the way, might not be bad in terms of redistribution, because the “benefits” of decentralized corruption are probably better distributed than the benefits of centralized corruption. But it would certainly increase the costs in terms of allocative efficiency, because it leads to the supply of services for which the levels of kickbacks are higher (rather than those for which there is a demand). It is also costly in terms of production efficiency, because it leads to corruption-avoiding strategies that increase costs, favor ineffective technologies, and waste time.

Corruption is hard to assess and measure, but there are several reasons why it is likely to be more prevalent at the local than at the national level. For one, there are probably more opportunities for corruption at the local level. Local politicians and bureaucrats are likely to be more subject to pressing demands from local interest groups (whose money and votes count) in matters such as taxation or authorizations. In addition, local officials usually have more discretion than national decisionmakers; indeed, it is precisely this discretion that is the major theoretical advantage of decentralization. The fact that national bureaucrats, at least in some countries, are moved from place to place and never stay very long in the same location makes it more difficult for them to establish unethical relationships with local interest groups, unlike local bureaucrats whose careers are spent in the same location.

At the same time, there are fewer obstacles to corruption at the local level. Corruption in many cases requires the cooperation of both politicians and bureaucrats, and the distinction between them is generally less rigorous at the local level. Local bureaucrats have less independence from local politicians than national bureaucrats do from national politicians. In some countries, at least, national bureaucracies have a tradition of honesty that is often absent at the local level. Monitoring and auditing are usually better developed at the national than at the local level. The pressure of the media, inasmuch as it exists, would also be a greater disincentive at the national than at the local level.

Few—if any—empirical studies have been done on the subject of corruption. Prud'homme (1992), looking at informal taxation (defined as the “nonformal means utilized to finance the provision of public goods and services”) at the

local level in Zaire, estimates that it is at least eight times more important than formal taxes. Informal taxes include payoffs to authorities as well as contributions, gifts, and donations. The study did not attempt to estimate informal tax revenues at the national level, but it is difficult to believe that it is of the same relative magnitude. The issue of corruption only reinforces the point that decentralization is not always beneficial from an efficiency viewpoint and it can be dangerous. These a priori considerations should be supported by empirical studies. One such study, on water collection and treatment in Tunisia, can be found in Khellaf (1992).

A Case Study of Centralization in Tunisia

Until 1974 local governments in Tunisia were responsible for collecting and treating used water. The level of technical expertise was very low. A survey of people employed in the sector revealed that only about 4 percent had any skills related to sewerage, and practically all of these people were attached to the municipality of Tunis. The service was provided directly, with no information on costs and no form of cost recovery. Both quantity and quality were either bad or very bad. In 1970 only 20 out of 150 municipalities had some form of sewage treatment, and those systems that existed were inefficient. Only eight municipalities had some form of treatment plants, but all were overloaded and malfunctioning. Many of the sewer systems were poorly designed and poorly maintained. More than half of the sewer accessories, such as manholes and grit-traps, were out of service. Of the twenty-seven lift-stations that were visited by a World Bank team in 1974, only five were functioning. The implications were serious. The Lake of Tunis, into which used water was discharged with little or no treatment, was eutrophying rapidly. Infectious and parasitic diseases were prevalent; some cases of cholera were reported. Something had to be done.

The government decided to turn over the provision of water and sewerage services to a specialized parastatal agency, ONAS (the Office National de l'Assainissement), created for that purpose. ONAS was made responsible for the service, first in metropolitan Tunis, then gradually in all other major urban centers of the country. In other parts of Tunisia, municipalities continue to operate their own systems (if any), some of which will eventually be integrated into ONAS's operations. From the outset, the emphasis was put on autonomous management, appropriate personnel policy, and sound financial procedures.

By most accounts this approach has been successful. The training programs that started in 1978 have been particularly important. By 1987, 23 percent of the personnel were technical professionals (in addition to the 6 percent who were managers). Even though the central government continues to provide subsidies, a surcharge on water consumption covers most of the operating costs, investments costs for infrastructure are partly recovered by a form of property tax, and individual connection costs are entirely recovered from the users. ONAS benefited from important loans by the World Bank and other donors, which

enabled Tunisia to increase services significantly. By 1988 ONAS was providing full sewerage services to the thirty largest cities, where about 50 percent of the urban population lived.

It might be unfair to compare the success of this approach to sewerage services with the failure that preceded it and to claim that centralization made the difference. The important resources that were mobilized domestically and internationally naturally played a key role. But there are strong reasons to believe that these resources could not have been mobilized under a decentralized system, and that, had they been mobilized, they would not have been used as efficiently. Training, for example, would have been more difficult to conduct in thirty different municipalities, and the need for trained personnel would have been greater. Accounting and financial reforms, which did not prove easy at the level of ONAS, would have been impossible in thirty different municipalities. It is precisely for these reasons that resources would not have been forthcoming under such a regime. In terms of production (or supply) efficiency, the centralization of sewerage services in Tunisia was successful.

Was there a cost in terms of allocative (demand) efficiency? ONAS has not (yet) provided sewerage services in all parts of the country, and some smaller cities rightly complain that they have not benefited from the system. The agency's answer is that it focused on the larger cities where the needs were greatest or more urgent. It is difficult not to agree. Had the same resources been spread more evenly all over the country (even assuming equal supply efficiency), the benefits of sanitation, measured in terms of sanitary hazards avoided, would probably have been reduced. Had the previous system prevailed, it is even more likely that these smaller cities would not have been better off.

The real cost, if any, of this experiment is elsewhere. The creation of ONAS weakened already-weak local governments and made it more difficult for them to change, to learn, and to improve. As a result, they are perhaps less efficient in providing other services, such as garbage collection or physical planning.

Beyond the Centralization-Decentralization Dichotomy

Decentralization has many dimensions and can apply to many forms of government intervention. Some are more appropriate or desirable—or less dangerous—than others. This section, therefore, drops the simplicity of the centralization-decentralization dichotomy and attempts to explore some of these dimensions.

The Case for a Different Treatment of Taxes and Expenditures

In the literature on tax and expenditure assignment, the reasons for decentralizing expenditures are completely independent from those in favor of decentralizing taxes. There is no reason why the two processes should lead to similar

results. Many public expenditures (according to this theory) lend themselves to decentralization, and the optimal expenditure-decentralization ratio is quite high. In contrast, very few taxes lend themselves to decentralization, and the optimal tax decentralization ratio is quite low. Subnational governments are therefore unlikely to have enough tax money to finance their expenditures, and transfers from the central government will be necessary. Transfers should not be considered as unavoidable evil. They can be used to control some of the dangers of decentralization, particularly for distribution and stabilization, and should be seen as an important component of any decentralization program.

Designing a “good” transfer system, however, is a delicate task, because the features that are desirable to reach certain objectives are not desirable to reach other equally worthy objectives. Tradeoffs must be identified and compromises reached. The area of transfers is very promising for policy improvements, because in many developing countries, transfer systems are often crude. They have often evolved as products of administrative convenience or of political pressures, and can in many cases be easily amended at low technical and even political costs.

The Case for a Different Treatment of Geographical Areas

Most discussions of decentralization (including that in the preceding sections) ignore geography. Decentralization in India is discussed with the same concepts and words as decentralization in Tunisia; and decentralization to cities is treated just like decentralization to villages. This is, of course, absurd.

Population size obviously matters. Decentralization is more likely to be warranted in a heavily populated country, where secondary subnational units are bigger than many small countries. The same is true of geographical size. In a large country such as Brazil or Zaire, particularly if communications are difficult, decentralization is (all other things equal) more desirable than in a small country like Jamaica. The same is probably true also of levels of development. Statistical analysis suggests that decentralization, as conventionally measured, tends to increase with income levels. Although such correlations do not reflect underlying causalities, they can suggest that decentralization is more likely to be successful (or at least less dangerous) in middle- and high-income countries. This is a point made by Bahl and Linn (1992: 393), who add: “For the lowest income countries, decentralization may be limited to rhetoric.” Similarly, the authors say, large cities should be treated differently from smaller jurisdictions even if they have the same legal status because they are more able to benefit from decentralization.

Special quasi-political government agencies, to which some functions could be decentralized, might be created covering appropriate areas. For example, France has divided water resources management into six areas, corresponding to six major river basin regions, under the direction of regional agencies. These agencies are quasi-political bodies, with board representatives made up of lo-

cally elected officials. They are responsible for both water quality and water quantity management and have the power to determine the rates charged to users and the fees and taxes charged to polluters. They collect the fees and spend the income generated on water production schemes or on pollution treatment subsidies. They have the appropriate geographic coverage to internalize the externalities associated with water resources management.

In geographically differentiated decentralization, the key concept is the critical mass. For decentralized units to be efficient and achieve the potential benefits of decentralization, they must be sufficiently large in terms of population, activities, and income. This efficiency can be increased by personal training and institution building, but decentralizing taxes and even expenditures to small and weak local governments is unlikely to be successful.

The concept of critical mass also applies to central governments. Decentralization should not shrink them below a certain quantitative and qualitative level. This level is, of course, different from the level required for efficient subnational governments, because the functions to be performed by central governments are different. This sets two constraints: the powers transferred from central to local governments should not jeopardize the efficiency of the central government, and these powers should be transferred to local governments that have the critical mass required to use them effectively.

The Case for a Different Treatment of Sectors

Public services exhibit different characteristics. Kessides (1993) explored this issue with a view to finding out which services lend themselves better to privatization, on the basis of the characteristics of the service, the characteristics of the market, and the characteristics of the demand. A similar exercise can be conducted to find out which services or sectors would lend themselves more easily to decentralization. From this aspect, three characteristics are particularly relevant: the “externability” of the service, its “chargeability,” and its “technicity.”

The externability of a service refers to the quantity and types of external effects and geographical spillovers associated with the service. Some infrastructure services, such as highways or power production and transportation, matter very much outside the area in which the infrastructure is located or the service provided. This is the case with most “network” infrastructure investments, as opposed to “point” infrastructure sites, although a small network (such as a water distribution system) resembles point infrastructure. The smaller the externability of a service, the easier it is to decentralize; services with important network effects or spillovers are not easy targets for decentralization.

The chargeability of a service refers to the ease with which the service can be financed by charges, as opposed to taxes. Some services can and should be sold (that is, financed by fees), rather than provided free of charge (that is, financed by taxes). Water or power can easily be charged to consumers; urban public

transport is a little more difficult to finance solely by fees; and it is extremely difficult to make people pay for garbage collection or for the use of certain streets. Technological progress, however, constantly extends the domain of chargeability. Forty years ago it was difficult to charge for parking; today, various types of parking meters have made it easy. Charging for the use of roads appears to be difficult now, but electronic pricing devices are about to make that possible. The ability to charge users also has a social dimension. Some services, such as education, which could technically be funded by user charges, are often financed by taxes, at least in part, either because they are considered public goods or because there are social as well as private benefits associated with the service. The greater the ability to charge for a service, the easier it is to decentralize it.

The technicity of a service refers to the degree of technical and managerial expertise required to provide the service. Garbage collection is much easier to provide than bulk clean water. The lower the technicity of a service, the easier it is to decentralize because the economies of scale and scope associated with its provision, which are difficult to reap in the case of multiple providers, will be less important, and therefore the potential production efficiency losses will be minimal.

Table 2 attempts to give some flesh to these concepts. The externability, chargeability, and technicity of a number of local public services have been estimated on a scale of 1 to 5, with 5 the value most favorable to decentralization;

Table 2. *The Potential for Decentralizing Selected Local Public Services*

<i>Service</i>	<i>Externability^a</i>	<i>Chargeability^a</i>	<i>Technicity^a</i>	<i>Decentralizability^b</i>
Highways	1	1	2	4
Sanitation	2	2	2	6
Railroads	1	4	2	7
Power production and transmission	1	5	1	7
Primary education	3	2	2	7
Rural roads	2	1	5	8
Telephone	1	5	2	8
Airports	3	4	2	9
Water production and storage	2	5	2	9
Ports	4	4	3	11
Garbage collection	5	1	5	11
Power distribution	4	5	3	12
Urban transport	4	4	4	12
Water distribution	4	5	4	13
Street cleaning	5	4	5	14

a. The range is from a high of 1 to a low of 5.

b. The range is from a high of 15 to a low of 5.

Source: Author's calculations.

and the values of the three characteristics have been added to yield a gross indicator of the decentralizability of the service.

Clearly the concepts, the ratings, and the weighting formula can be improved, but this simple exercise indicates that some services are more easily devolved to local authorities than others and why. Street cleaning, water distribution, urban transportation (provision, regulation) and power distribution appear to be the most interesting candidates. At the other end of the spectrum are such services as highways, sanitation, railroads, power production, and primary education, which should be considered for devolution only with great caution and prudence—if at all.

The Case for a Different Treatment of Different Functions

Providing local public services is a complex task that encompasses many different activities—from selecting the appropriate investment and supervising its construction to operating, regulating, and maintaining the system, and finally to monitoring and auditing its performance. Not all these functions are required for every type of service, and many of these tasks are interdependent. For a given public service in a given geographical context, the desirable degree of decentralization is likely to differ from one function to another.

The choice of investments has a technical dimension (what design should be selected?), a geographic dimension (where should the investment be located?), an institutional dimension (what agency should be in charge of it?), and a social dimension (who should benefit from it?). If local decisionmaking can improve allocative efficiency, it is through the exercise of this last function. This is where the detailed, first-hand knowledge of local realities can best be applied. This is also where the election control mechanism can be expected to play a role.

The design of infrastructure investments is usually highly technical and will become ever more so in a world of rapid technological progress. Local governments cannot easily perform this function, which is often marked by important economies of scale. It must either be contracted out to private firms or remain a central government responsibility.

The construction of infrastructure is probably not a task that governments, local or central, should undertake directly. In most cases, this function should be contracted out to the private sector. Government will nevertheless always have a role in this area, either in building the facility—if no one can be found to undertake the project—or in contracting out and supervising the construction. In either case, this aspect is better conducted by the central government. In practice, unfortunately, divorcing the construction of the facility from the choice of investment is not always easy, but in theory, the decentralization of the former is more dangerous than the decentralization of the latter.

The operation and regulation of the facility is often the most important function in the provision of the service. The setting of prices and fees is an activity that lends itself easily to decentralization. It cannot easily be performed by

the central government, which does not have the appropriate information or incentive.

Maintenance can and should be decentralized. In many cases it should be privatized. The supervisory agency can be the central government, particularly when those authorities are providing financing, but it can also be the local government, which will again have a comparative advantage in terms of information and incentive.

Finally, monitoring and auditing are functions best suited for the central government, which has the expertise, the independence, and the performance objectives that make monitoring useful.

The Case for the Joint Provision of Services

What is the most desirable way to allocate different functions to different levels of government? The problem is not one of deciding which level of government will be in charge of which local public service; the solution is not to draw up a matrix of level of government by type of service. For many—if not most—types of infrastructure, two or three levels of government will have to be involved as each level of government will have different—but equally legitimate—interests.

Consider primary education, for example. One can argue that it should be decentralized to local governments because the needs and the specifics of local pupils are likely to differ from community to community. But one can also argue that primary education should be a regional responsibility because of economies of scale (in the design of curricula or the recruitment of teachers, for instance) and because purely local financing will lead to inequalities in the operation of schools. Finally, one can also argue that the central government has an interest in the education of all of its citizens and that rural-to-urban migration creates externalities and spillovers that must be addressed by a higher level of government intervention. All three arguments are strong and convincing; they suggest that central, regional, and local levels of government must simultaneously be involved in providing the service.

The problem therefore is to determine how the different levels of government could and should cooperate. Many instruments are available: subsidies (of various types), mandates, constraints, guidelines, floors and ceilings, coordination mechanisms, contracts between various levels of governments, and so on. These instruments should be studied and compared. Some mechanisms work, others do not. In the United States, for instance, bridge maintenance is a state responsibility, but when a bridge deteriorates below a certain threshold, the bridge becomes eligible for federal money; this form of central-regional relationship is especially perverse and is sure to lead to poor maintenance.

Thus decentralization may not always be a panacea. Its costs are more certain than its benefits. Decentralization refers to both a state and a process. The virtues and the dangers of decentralization are often discussed simultaneously for both concepts. This confusion is dangerous because what is desirable in a

given country at a certain point is a function of the present state of decentralization and the speed at which it has been reached.

Notes

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