

Forum of Federations

700-325 Dalhousie Street
Ottawa, Ontario K1N 7G2 Canada
Tel.: (613) 244-3360 Fax: (613) 244-3372
www.forumfed.org
Email: forum@forumfed.org

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700-325, rue Dalhousie
Ottawa (Ontario) K1N 7G2 Canada
Tél.: (613) 244-3360 Téléc.: (613) 244-3372
www.forumfed.org
Courrier électronique : forum@forumfed.org

COMPETITION BETWEEN DECENTRALIZED GOVERNMENTS: DOES IT MATTER, DOES IT HELP?

By

William F. Fox and Paula Dowell¹

Introduction

Sub-national governments compete for people (labor), capital, and technology. They do not necessarily choose to compete, but as long as people and capital are mobile, states will compete with one another. The whole range of public policy decisions can affect the economic environment and can influence the relative position of a state's economic climate, regardless of the intent of its policy and regardless of whether the competition is active or passive. The competition is active when state and local governments explicitly seek to attract or stimulate activity by setting tax rates, choosing service levels, and structuring regulations in a manner that is intended to influence the economy.² In some cases, the competition is very active as states

¹University of Tennessee, USA.

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Of course, competition for resources is only one of the factors that goes into setting service levels, taxes and other policies. For example, preferences of the existing residents and businesses are a factor that is probably of greater importance.

seek to recruit individual businesses attract specific industries or stimulate growth. The competition is passive when state and local governments set policies without a specific intent to effect the economic climate. Kenyon (1990) defined implicit competition as the way in which free mobility of goods, services, people, and capital places bounds on the actions of independent governments in a federal system. Decisions on regulations, education, and sanitary services are often set in a passive manner. It should be noted that policies set with an explicit intent to compete need not have a greater influence on the economy than ones set in a passive manner.

States make their public policy decisions based on a range of goals, most of which can only be discerned by observing the actions. The goals that drive decision-making are presumably those of the decisive group in the state rather than ones held by the population at large, though different players in the decision group could have different goals. Economic development goals can be related to income, employment, unemployment, tax revenues, lower tax cost for the decisive group, larger population and so on. These goals may be articulated in terms of particular levels of economic performance or rates of growth. The goals can be focused on business activity, such as the location or startup of business, though the actual goals are likely to be derivatives of new business such as employment, income, or tax revenues. Alternatively, goals may directly involve people, such as population growth or attraction of specific demographic groups. Political goals, on the other hand, anticipate more votes because of ribbon cutting ceremonies and visible signs of prosperity and greater power as they control more resources.

Competition occurs both between and within urban areas and states. This paper is focused primarily at the state level but varying service demands across people and businesses and presence of many local governments in each state are likely to lead local governments to offer differing mixes of tax and service packages. Thus, each state should not be viewed as a

homogeneous unit, but instead as composed of many alternatives depending on the consistency of state government policies and the offerings of local governments. People, capital, and technology will regard themselves as having located or started-up at specific places within a state, and likely enjoy different sets of services, taxes and regulations from those available at other locations in the state.

This paper summarizes the economics literature on whether competition enhances wellbeing. This is accomplished by first examining the conceptual models on the effects of competition on public sector service delivery and revenue generation. Then a summary is given of the empirical literature on the extent to which competitive behavior influences the location of resources. The following section is a review of the relationship between decentralization and overall economic performance, which is essentially a review of whether the combination of public service delivery and locational effects is efficiency enhancing. The final section is a brief conclusion and listing of policy recommendations.

Conceptual Models of Competition

This section summarizes theoretical literature on whether the competition between sub-national governments enhances public service delivery. Possible criteria for measuring improvements include efficiency (measured either by welfare or improved service quality at low tax cost), equity, individual liberty, and policy innovations in government. Further, the criteria can be viewed from either the individual state or the national perspective. This section, like most of the economic literature, focuses on efficiency and offers only limited consideration of equity. Other criteria are generally ignored in the economic's literature.

Efficiency Enhancing Competition

Two views have been espoused on the equilibrium outcome of competition:³ one leads to the conclusion that competition is efficiency enhancing and the other finds that competition comes at an economic cost.⁴ The former is based on models that were drawn from Tiebout (1956), which conclude that both allocative efficiency (people obtain the desired set of services) and productive efficiency (the services are delivered at the lowest tax cost) are attained through competition. Governments are forced to eliminate waste and deliver the services that people demand. Ability to vote with their feet both allows mobile people to select the community offering the desired public services and forces jurisdictions to offer services that people demand. Further, the mobility ensures that services are financed with taxes that are equal to benefit charges. The lack of competition means that no corresponding pressures for efficiency arise with national service delivery.

Through the competitive process people arrange themselves in communities that provide homogeneous services within but heterogeneous services across communities. Widely different tax revenue and service levels could result based on differing demands and resource endowments. Thus, the outcomes need not be equitable. Also, the results are inefficient from a global perspective to the extent that interjurisdictional spillovers exist. The conclusions rely on a stylized economy with strong assumptions, including highly mobile populations, many

³See McGuire (1991).

⁴The models discussed here are most useful for thinking about the equilibrium level of services and taxes in countries with established intergovernmental structures. The models were not intended to explain service and tax levels during the transition phase in countries such as the former Soviet Union and Eastern Europe where institutions, election processes, tax structures, and service delivery mechanisms are all in early stages of development.

jurisdictions from which to choose, the potential for fiscal zoning and other regulatory constraints by governments, and incomes that are independent of location.

Similar models have been applied to business locations.⁵ Assumptions of perfectly mobile capital and profit maximizing businesses result in firms locating in the local governments offering them the services they demand at the lowest cost. In these models, business taxes become benefit charges for the public services received and environmental effects imposed by the businesses. Again, efficiency in business location models is dependent on severe assumptions regarding mobility, fiscal zoning, and so forth.

Destructive Competition

The second view has been described as destructive competition. This framework, which focuses on spillovers and other effects that arise between jurisdictions, results in a finding that decentralized service delivery offers the potential for allocative efficiency, but inefficiencies arise in funding services. Financing the different service levels that arise from varied demands requires the ability to set differential tax rates, but a state's tax bases can be affected by the rates it chooses. Inman and Rubinfeld (1996) demonstrate how decentralized competition for resources results in taxes that are inefficient relative to those that would be chosen with centralized planning, when the conditions for a Tiebout style equilibrium are not present or when people value distribution.⁶ The presumption is that governments either cannot effectively impose benefit taxes (or must tax in a way so that the structure is not reduced to benefit charges through

⁵For example, see Fischel (1992) and Fox (1978).

⁶Fischel (1992) has argued that the fiscal zoning necessary to achieve Tiebout outcomes is likely to be present in the U.S.. Mieszkowski and Zodrow (1989) assert that zoning is not nearly this effective.

the competitive process) or care about the distribution of services and taxes and want to levy ability to pay taxes to finance service delivery.

Decentralized governments seeking the best interests of their own citizens (or those of the decisive group) are likely to tax export (either to non-residents or the disenfranchised), tax immobile groups heavily (such as low income populations), tax noxious activities intensely, and ignore effects of their tax policies on other states. In these cases, the likelihood is that competition leads to an inefficiently small public sector, low taxes on factors that are mobile within the country (relative to those that would be imposed by a central planner), and taxes that are vertically inequitable relative to those that would be levied nationally. The probable outcome is service levels that are even lower than those demanded by the mobile populations.⁷ Within this framework, competition alone is insufficient to ensure that public services are financed with benefit charges. None of the decentralized governments acting on their own accord has the incentive to correct the inefficient tax structure or service levels. Only a national government would be in a position to correct the inefficiencies.

It is important to remember that the benchmark for measuring efficiency is a fully enlightened central planner. The efficiency losses need not be greater than those arising from national governments which also operate with a series of perverse incentives. Even with the efficiency losses, the positive aspects of competition from taxpayers voting with their feet can achieve a more efficient outcome than a central government that faces no competitive pressures and does not operate to maximize the well-being of constituents.

⁷The individual inefficiencies inherent in setting tax structures can lead to a public sector that is either too large or too small. For example, tax exporting lowers tax prices and encourages excessive consumption of public services, but incentives to set low taxes on mobile factors lower consumption of public services.

Neither model perfectly describes the competitive behavior that operates within a country, since many factors go into household and business location decisions. Conditions for a Tiebout equilibrium are more likely to be approximated *within* an urban area that is composed of many local jurisdictions than across states. Within the urban area people can often select the jurisdiction offering the tax and service package that most closely parallels their demands, with little influence on their income and job opportunities (they can commute across the urban area). Similarly, firms can choose any location in the urban area and have access to the same labor force and much of the same infrastructure and other factors of production.

The competition for business and people between states and urban areas is more likely to be characterized by destructive competition.⁸ Destructive competition must be interpreted carefully, because in this context it probably only means that more efficient policies could be designed if the states would work together. The overall effect of competition is still likely to be enhanced service delivery and lower taxes.

The high degree of mobility and large number of jurisdictions necessary to achieve Tiebout outcomes are particularly unlikely to characterize the competition that exists within countries such as India, with its relatively small number of mostly large states, meaning the competition is likely to be destructive. Even here, competition has often been sufficient to lower taxes on business (often through the granting of concessions). Competition is also likely to improve service delivery over time as businesses make it clear that they require certain services if they are to operate efficiently. Effects of competition on people are less likely to be positive. Mobility in developing countries is probably highest for better educated, higher income and

⁸In their brief review of tax structures, Inman and Rubinfeld illustrate how many tax structures parallel those expected with destructive competition. Taxes are often high on exported resources, such as oil and coal and low on capital. City taxes tend to be regressive in the U.S. because higher income people are more mobile.

younger population groups, suggesting older less educated and poorer groups probably bear the highest tax burdens. Fewer modes of travel and limited mobility may leave low income residents of developing countries particularly disadvantaged.

Empirical Research on Resource Allocation

Different tax/expenditure packages and other sub-national policies can reallocate resources between regions, either as the result of active or passive competition. Voluminous research has been conducted on how fiscal factors affect location, though most of the empirical work has been conducted in developed countries. The overriding conclusion is that states cannot help themselves very much by designing policies to attract business. Taxes, for example, are too small as a share of business costs to become a major factor in business location decisions. Taxes would matter if all else was equal, but this is seldom the case, except within narrow geographic areas, such as along state borders. Nonetheless, states can hurt themselves by such actions as imposing taxes that are well above other states or by introducing regulations that are particularly harmful to business development. This section summarizes the empirical research on how competition affects the location of productive resources.

Effects of Taxes on Business Location

In effect, policymakers are setting a component of a state's industrial policy when the tax structure is established. The competitive position of any state is potentially a function of its entire tax structure. Tax rates, definitions of tax base, and choice of tax instruments all can matter. Everything from corporate income tax rates to a state's choice of a depreciation schedule could impact its resulting industrial mix. For example, a corporate income tax with rapid depreciation of capital favors long-term investments, and encourages the location of heavy

industry (Heller and Kauffman, 1963). Gross receipts taxes often place higher burdens on wholesaling and other industries with high revenues relative to value added and property taxes impose greater burdens on capital intensive firms.

Officials fear that businesses will flee if their tax structure is out of line with competing jurisdictions. The extent to which fiscal policy influences business location and economic growth, an issue for many years, is more controversial than ever, as vast technological and political changes have enhanced the geographic mobility of capital and labor and potentially intensified interstate competition. The effect of a specific state's tax structure depends on both the magnitude of the tax elasticity and the characteristics of the specific state's overall tax levels. Recent reviews of research on the locational effects of tax policy revealed that tax elasticities were statistically significant in 70 percent of the studies reviewed (24 out of a total of 34 studies).⁹ Nonetheless, Wasylenko concluded that the elasticities are sufficiently small so that taxes do not have a substantial effect on economic activity across states. The bottom line is that taxes (and public services) probably have a modest, statistically significant effect on locations, but the magnitude is not important for setting public policy. Only states with tax structures that are significantly above those imposed in other areas have reason for concern that development will be discouraged, and in these cases the effect may result more from perceptions that the state has a bad business climate than from actual costs. Similarly, states offering very poor quality services are likely to be harmed because businesses will feel they cannot be productive in such a setting.

⁹ See Bartik (1991) and Wasylenko (1997).

A possible interpretation of the empirical research is that competition is so intense that it has caused states to keep their tax structures similar to their neighbors.¹⁰ For example, Case (1993) finds that states are more likely to increase tax rates after a neighboring state has done so. Thus, the resulting tax differentials are not large enough to cause measurable effects on business location across states. However, the most significant effect of competition may have been to narrow the range of tax structures, and studies of business location may fail to discern these effects of competition. Changing technology and ability to deliver services electronically will place even greater pressure on states to have homogeneous tax structures.

The limited tax structure differences can be large enough to influence the location of economic activity within small geographic regions, and in particular along state borders. Much of the research examining cross border effects in the U.S. has focused on the effects of differentials in consumption taxes on the level of cross border shopping, but the conclusions should extrapolate to location decisions of the related businesses. Taxes have generally been found to influence locations in border areas. For example, Mikesell (1970) examined effects of tax differentials between 173 central cities in the U.S. and their suburbs and found that sales tax differentials led to cross border shopping. Fox (1986) determined that the situs of cross border shopping and employment is influenced by tax differentials, but only when differentials are sufficient to cover transportation costs.

Public Services

¹⁰Tanzi (1995) demonstrates that there is a high tolerance between U.S. states for differences in both individual and corporate income taxes. For example, in 1992, the differences in individual income taxes were as large as 12 percentage points, and the differences in corporate income taxes were as large as 10 percentage points. However, tax structures within regions are much more homogeneous than across the entire country. Further, Tanzi observes that the differences he reports may be exaggerated because they are for marginal and not average tax rates.

As with taxes, the overall effect of sub-national public services on the location of business appears to be small. Fisher's (1997) literature review on effects of public services on business location decisions in the U.S. found disparate results, but overall the evidence indicates that services have a very limited effect. Again, much of the influence from competitiveness may be to narrow the range of services offered by governments, and this effect is not measured by the research. Not surprisingly, the importance varies by type of service. Helms (1985) concluded that spending on productive public services, like education, stimulates the economy but spending on redistributionary functions, like welfare, is detrimental to the economy.

The services that have a bearing on location also differ between businesses and people. Education expenditures appear to be important in location decisions for both individuals and businesses. On the other hand, public infrastructure is a more important factor in firm locations (Eberts, 1991), and spending on police and fire protection is more influential in labor migration decisions (Fox, Herzog, and Schlottmann, 1989). Thus, competition based on services is complicated by the different public services that are perceived to be important for attracting and retaining individuals versus businesses.¹¹ These differences pressure states to offer a wide array of public services that appeal to both businesses and people, increasing the chance that cross subsidies will arise between groups and watering down effects of services on location.

Effects of infrastructure on economic growth have been widely studied. It seems likely that infrastructure has a greater influence in developing than in developed countries because of a higher marginal productivity of new investments. Even so, in terms of its overall role in a state's competitiveness, Fox (1994) concluded that infrastructure is most effective as an

¹¹There may also be wide differences between categories of people and between types of businesses. For example, younger households may have higher demands for education services and older households may want more parks or retirement facilities.

accommodation to economic growth and not as a stimulant to more rapid growth. It is a prerequisite to growth, but not the causal factor. Within a small region, such as a city, infrastructure can influence the pattern of development, because there is a tendency to locate where electric, water and other services are available at the needed quality. Public infrastructure's greatest effects are on small firms and households, which are unable to deliver services for themselves. Additionally, infrastructure is most productive when delivered in regions where other growth determinants, such as an appropriately trained labor force and market accessibility, are in place.

Infrastructure investments that meet the needs of industries that intensively use low-skilled workers can increase employment and wages for these workers. States in developing countries can foster these industries and the resulting jobs by delivering the needed infrastructure. However, competition on the basis of infrastructure can lead to duplication of services across states, resulting in underutilization of infrastructure and net efficiency losses for the country.

Competition for public services is more likely to have an effect on the type of services provided than on the economy. Shannon (1991) has described a pacesetter phenomenon and the catch-up imperative. The pacesetter phenomenon occurs as more affluent and/or innovative jurisdictions undertake the provision of new, inventive public services, such as previously unavailable forms of public mass transportation, or improvements in existing services, such as more computers in classrooms. As details of innovations spread into neighboring states, the new service becomes a standard budgetary item for an increasing number of localities. As the more capable jurisdictions set the pace in the types and quality of public services, the poorer jurisdictions find themselves striving to "catch-up" to the new standard. Lagging jurisdictions

feel they cannot afford to fall too far behind the pacesetters, especially in those services they believe are essential for the attraction of individuals and businesses.

Tax Policy and Labor Migration

While the effect of tax policies on business location decisions has been explored extensively, there has been considerably less examination of the impact of tax policy on population migration. Nonetheless, there are potentially important competitive implications that arise from such tax structure-migration linkages. For example, can states design tax policy that will attract high-income individuals, thereby expanding the tax base and providing a pool of skilled workers who, in turn, will startup or attract businesses?

Studies by Reschovsky and Chernick (1989) and ACIR (1991) point to evidence that the taxation of workers, and especially those with highly specialized skills, may influence their locational decisions. Fox, Herzog, and Schlottmann (1989) found that high local own-source revenues and greater tax progressivity cause people to leave urban areas. Migration rates are generally much higher for better educated, younger, higher income individuals, the very groups governments are most likely to seek. The authors conclude higher-income residents are generally attracted to areas which rely heavily on the property tax (perhaps with the notion that these are benefit charges) and/or where overall state government revenues are small. The effect of taxes depends on how the revenues are used. Expenditures on education or police and fire protection are more likely to attract people but expenditures on parks and recreation encourage out-migration.

Given these findings, one outcome of states competing for higher income residents via design of tax policy is likely to be increasingly regressive tax structures. A trend to less progressiveness appears to be underway in the U.S. In the mid-1980's, the highest marginal tax

rate on personal income was above 10 percent in 15 states. Today, only three states have marginal rates above 10 percent.

Firm Specific Incentives

The search for effective economic development incentives has caused states to develop several forms of aid that are specific to individual companies locating within their geographic region. Incentives include gifts of land, industrial revenue bonds, subsidies for specialized employee training programs, infrastructure subsidies, and tax concessions. Incentive packages are most often tailored to a specific firm, though distinguishing between specific concessions and broad tax policies can be difficult because statutes may be structured to benefit a small number of firms. Considerable insight into the process and intent of particular pieces of legislation is necessary to discern the difference.

Incentive packages are particularly likely to be excessive, resulting in taxation that is too low on large firm locations that are perceived as being a very mobile form of capital. Information asymmetries are an important reason since the locating company has much more information than the prospective government about its anticipated economic impact. Governments are prone to be overly optimistic about the expected benefits of a new locator and as a result will overpay. Political leaders, who are in a position to influence the incentive package, often have more information than the general population. However, they make judgements based on the political and not the economic gains from the locations and may be willing to give away more than is economically justifiable. Citizens, each with limited information and relatively little to lose, may fail to investigate the benefits and costs of locations. Also, an arms race mentality can be created with states, caught up in the heat of negotiations, prone to bid more than a project is worth. Finally, a winner's curse can develop. All else equal the highest bidding state wins, but does it?

Other states looking at the same project have perceived the payoff to be lower and therefore bid less. Which is more likely, that all other states underestimated the payoff or that the winning state bid too much?

The generosity of concessions is often positively correlated with the magnitude of the capital investment and job creation. For example, automobile assembly plants received from \$11,000 to over \$50,000 per job in incentives from U.S. states during the 1980s (Milward and Newman, 1990). Estimates of incentives granted recently to the Mercedes-Benz Corporation by the U.S. State of Alabama are as high as \$300,000 per job.

A number of criticisms have been levied at tax concessions, the primary being that they are not significant in business location decisions. However, the statistical analyses described above cannot be directly applied to concessions because the studies normally examine effects of average tax rates and broad indicators of taxes, not the larger more targeted provisions of concession packages. Survey data may be more appropriate for understanding implications of concessions. In a survey of firms conducting interstate site searches in the U.S., Barker (1981) found that of all the firms that received tax incentives, only 3.3 percent of the new firms, none of the expansions, and 6.3 percent of the new branch plants indicated that they would have located in another state in the absence of tax incentives.¹² Survey results are probably an upper bound on the actual importance of taxes because it is in the best interest of company executives to argue that tax concessions influence their decisions.

The limited role of incentives can be best understood in the context of how location decisions are made, a process often portrayed as multi-staged. Incentives are held to play no role

¹² The survey did indicate that firms may have changed the amount of their investment in the absence of tax incentives. Specifically, 7.7 percent of new firms, 12.0 percent of expansions, and 21.9 percent of branch plants indicated they would have reduced their investment.

in the initial stage, when the selection is narrowed down to a specific region. However, incentives become important when the final site is selected. Thus, incentives can have an effect within a narrow geographic range, but are too small a component of business costs to influence locations across wide areas.

Even if concessions are important in the location decision, the issue arises as to whether the location of large firms stimulates the economy. Fox and Murray (1998), studying more than 100 major sitings in the U.S., find little evidence that the location of large firms has an appreciable influence on the growth path of regions. One possible explanation is that the concessions extract all of the gains that a community reaps from the locator. Also, the dynamics of regional growth may result in the new firm crowding out activity that otherwise would locate in the region.

Regulatory Policy

An important purpose of regulatory policy at all levels of government is to enhance economic welfare by correcting for market failures such as externalities and monopolistic power. These regulations can both positively and negatively impact a state's competitive position. For example, environmental regulations can increase the cost of doing business for industrial firms, thereby discouraging investment. However, service and clean manufacturing firms as well as individuals might view increased environmental awareness favorably. In poorer states, the desire to raise incomes may outweigh the demand for cleaner air and water, thus encouraging policymakers to impose little or no regulation on pollution in an effort to attract investment. At the margin, residents in lower income states may choose to "purchase" less environmental quality to the extent it is a consumption good, just as they purchase less of other goods. Unfortunately, the price of such policies can be a less productive labor force because of poorer

health, thereby mitigating cost reductions realized by lower environmental standards. The environmental degradation can also spillover to other regions.

Other regulatory issues governed by states, such as right-to-work laws, worker's compensation rules, and criteria for occupational licenses, target the labor market. Right-to-work laws have received the most attention in empirical studies. A positive relationship is expected between right-to-work laws and employment growth and firm location decisions. The effect depends on the degree to which such regulations change wages and other labor costs.

Tannenwald (1997) identified 11 studies estimating the impact of right-to-work laws on various measures of economic development. Eight of the studies find that the existence of such laws exerts a significant positive influence on economic activity. It is important to remember that states are competing for both businesses and individuals, and, as mentioned above, regulations may encourage business investment and discourage labor force location or vice versa.

Does Competition Enhance Economic Growth?

A key issue is whether the combined effect of competition on efficiency in public fiscal behavior and on the location of resources translates into improved economic performance and welfare. This is ultimately an empirical question since competition has both positive and negative effects.

Competition's effects must be evaluated based on evidence from both empirical and survey literature that government is not as important at the margin to growth as are many other ingredients. Access to markets and inputs and characteristics of the labor force, such as quality and availability of workers, wage rates, and union influences, are normally the predominant determinants of economic performance in developed countries. These factors are also essential in developing countries, but the public sector's role of ensuring that an adequate infrastructure is in

place, government is stable, and other requirements of an efficiently operating economy are available is probably more important at the margin in developing countries.¹³

The net outcome of competition could be either positive or negative, depending on such key factors as the degree to which resources are mobile and to which sub-national governments respond to broad concerns of people and businesses rather than to local elites. Competitive actions could expand the overall economy as lower capital taxes encourages greater and more efficient investment. More favorable labor taxes could attract workers from other countries, encourage additional people to participate in the labor force or cause workers to invest in greater skill development. On the expenditure side, competition may encourage governments to develop more appropriate infrastructure, better education systems and so forth. On the other hand, decentralization could harm the economy if local governments provide lower quality public services than would result from national delivery or fail to deliver the services sought by people and businesses. Further, an inefficient tax structure, such as taxes that are too low on capital or less progressive than desired, could reduce overall wellbeing.

Much of the effect of government influence on the location of resources may be simply beggar-thy-neighbor. A state that has been particularly good at competing can grow more rapidly by attracting economic activity, but the gains may come at the expense of states that are competing less effectively. In this case there is no gain from a national perspective, only redistributions. Such competition has been characterized as zero sum or even negative sum. The notion is that competition merely redistributes employment, but the combined effect on all areas is a loss because of the resources expended in the competitive process. Firms could be induced to locate in less efficient places from a global perspective, further harming the economy. Also, a

¹³Of course, much of this will be provided by the national government, even in a decentralized environment.

state may need to expand its infrastructure to accommodate businesses that moved from another state, where excess infrastructure is now available. Development of the new infrastructure represents wasted resources, and the losing area is left with a smaller base to finance and operate its infrastructure.¹⁴ Competition carried out through firm specific concessions is often an example of beggar-thy-neighbor policies.

It is possible that merely shifting economic activity could enhance wellbeing. For example, welfare is enhanced if jobs are moved from a low unemployment to a high unemployment area, assuming society places a higher weight on creating jobs in the high unemployment area (Bartik, 1991). Unfortunately, the low unemployment rate areas are often in the position to offer better services and incentives, so any shift may be in the opposite direction.

Little research has been conducted on whether decentralization enhances economic performance, so at this point there is no answer to the question of whether decentralization and the resulting competition improve wellbeing and economic growth. In one recent study, Davoodi and Zou (1998) find that decentralization has no impact on economic growth in either developed or developing countries.¹⁵ Their study must be viewed with some caution. First, the sub-national percentage of total government expenditures is their measure of decentralization and they readily note that this may be a poor indicator of the true degree of decentralization or competition. Second, many countries are currently expanding their decentralized structure and there may not have been sufficient time for effective institutions to develop and influence efficiency.

¹⁴This is the broader context of stranded costs, a concept often applied to electricity production.

¹⁵The authors rely on a one-tail test and conclude that decentralization hurts economic growth in developing countries. However, the finding is not statistically significant at the 10 percent level for a two-tail test, which seems to be the appropriate test.

Freinkman and Yossifov (1999), using panel data for Russian regions between 1994 and 1996, find that the percent of regional revenues raised at the local level is positively related to growth in real industrial output. They also concluded that education spending as a share of consolidated regional budgets rises with decentralization and expenditures for enterprise and housing subsidies fall with local budget deficits. These results are consistent with decentralization expanding economic growth and more productive use of expenditures. However, evidence that decentralization and competition stimulate regional industrial production does not necessarily imply that national output is expanded.

Conclusion and Policy Implications

The likely outcome is that decentralization of appropriate governments results in higher levels of wellbeing, greater satisfaction with public services (which are better targeted to consumers' demands) and lower taxes than results when the national government is responsible for all service delivery and tax collection. The literature is characterized by conflicting findings and viewpoints on whether interstate competition results in a zero-, negative-, or positive-sum game. Some of the ambiguity stems from differences in the criteria used in making the conclusion. Efficiency and equity are the most common basis of evaluation. If efficiency is the primary consideration, the models of Tiebout and Oates and Schwab (1991) clearly demonstrate the beneficial aspects of interstate competition. However, the outcome of these models may be less desirable if equity is considered the main criterion.

Assessment of interstate competition also depends on assumptions about structural issues such as degree of mobility, existence of spillovers, and availability of information. Mobility of capital and labor is crucial in the models demonstrating efficiency gains from competition. Given that labor mobility is often constrained by level of wealth, educational attainment, and

age, the assumption of perfect mobility at the heart of Tiebout's model is called into question. Without mobility, the benefits of increased efficiency arising from competition may not fully materialize. Also, implicit in Tiebout's model is the absence of public service spillovers. In the face of such spillovers, competition would not be efficient. Models like the one described by Inman and Rubinfeld (1996), which allow for consideration of equity, spillovers, and other factors, fail to yield the degree of efficiency gains that are seen in Tiebout models. Still, efficiency is likely to be greater than from national service delivery. None of these economic models considers other values that may be important considerations in evaluating competition, including adoption rates for public policies or innovations and individual liberty. Decentralized governments are almost certainly more conducive to achieving these other goals.

The tools of interstate competition also influence assessment of its overall effect. As discussed earlier, the tools of competition include provision of public services, tax policy, economic development initiatives, and regulations. Some of the strongest criticisms are aimed at economic development initiatives, specifically tax incentive packages tailored to lure specific firms into a region. Both theoretical and empirical literature suggest that such practices result in a negative-sum game (ACIR, 1991), and can also distort neutrality for firms in the same industries. Much has been said about competition causing a race to the bottom. This review leads to the conclusion that there is a tendency for competition to reduce public services below the efficient levels. But the major outcome may be better characterized as a shifting in the type of taxes used rather than a decrease in the size of government. The pattern will be greater taxation of less mobile business, such as firms that serve local clientele, and less mobile people, such as lower income people. Thus, consumption and wage taxes are more likely than broader income taxes and taxes on capital. Concessions can be expected to reduce taxes on the most

mobile businesses below those on the average firm. These influences result in lower taxes on large businesses, foreign investment, and higher income residents and higher taxes on small firms, local businesses, and lower income residents. Nationwide this discourages entrepreneurship and small businesses, where many of the jobs may be created, and results in taxes that are less progressive than would be chosen by society.

Overall, states can be expected to shift from imposing taxes on businesses to individuals,¹⁶ based on the presumption that capital is more mobile than labor. Nonetheless, shifting of the tax burden from businesses to individuals can encourage out-migration of more skilled, higher income individuals. The end result could be erosion of human capital in states with the most progressive taxes. Alternatively, tax evasion and avoidance can circumvent the ability to levy higher taxes on individuals. For example, high income earners could set up legal residence in a tax haven state. The challenge for policymakers is to strike a balance between tax policies impacting businesses and those aimed at individuals, while maintaining the capacity to effectively provide competitive public services.

Policy Recommendations

Decentralization is new or expanding in many parts of the world, and the full benefits of decentralization policy cannot be seen until the structures have had time to evolve. A series of alternatives exist for reducing the efficiency losses (when viewed from the national perspective) associated with decentralized revenue generation, while allowing decentralized service choices. Each requires initiatives by higher level governments and results in some reduction in flexibility

¹⁶In the U.S., businesses have historically subsidized residents by paying taxes that were higher than the benefits they received. This trend is changing as efforts to compete for new businesses and to retain established firms encourages lower taxes on mobile capital. As a result, personal income taxes have been increased as a share of revenues (mostly because of high income elasticities of revenue) so that corporate income taxes can be lowered (mostly through narrowing of the base) and sales taxes on business equipment and property taxes on inventories can be reduced (Hy and Waugh, 1995)

on the part of decentralized governments. The reduced flexibility could limit the ability to achieve gains in wellbeing on the spending side, since local governments may not have the revenue raising authority to purchase the differentiated service demands of their citizens. Also, these policies are predicated on the national government acting to maximize wellbeing. The policies will be ineffective if the national government makes decisions to benefit the national elite, the bureaucracy, or some other more limited group.

First, Kanbur and Keen (1993), who focused on strategies for maximizing revenues when governments are of different sizes, demonstrate that minimum tax rates are preferred over harmonized tax rates as a means to limit the revenue losses that non-tax haven states experience because of tax havenstates. Both tax havens and other places can have increased revenues with imposition of minimum rates.

Second, a number of authors suggest that intergovernmental aid can be structured to compensate for the externalities that arise from local governments setting tax policy focused only on their own interests.¹⁷ The intergovernmental system involves the central government collecting source based taxes and redistributing grants to offset inefficiencies in decentralized revenue raising. For example, the central government could impose a source tax on bases where tax exporting is likely and redistribute the revenues through grants. Equalizing grants can be used to offset advantages available to jurisdictions with the greatest potential to tax export. Other types of grants can be designed to offset inefficiencies arising for other reasons. This alternative, though good in concept, is particularly worrisome in practice because national governments in both developing and developed countries have failed to maintain intergovernmental transfers as a consistent revenue source. Thus, the origin tax may be implemented and the revenues transferred

¹⁷See Inman and Rubinfeld (1996) and McGuire (1991).

to the local governments for a period of time, but the grants could be eliminated and the revenues remain with the national government when national revenue sources tighten.

Third, local governments could be required to impose residence/destination based taxes to limit the potential for tax competition.¹⁸ Taxes would be imposed on consumption and capital located in the jurisdiction and on income earned by residents. Tax competition can only be used to attract residents, not businesses if destination based taxes can be enforced.¹⁹ The presumption is that residents are less mobile than capital, so destination taxes are less distorting than source-based taxes. Destination taxes would also limit the extent of tax exporting to non-residents, though exporting to members of a non-decisive group within a jurisdiction could still occur.²⁰ However, the potential for imposing heavy taxes on noxious activities would be eliminated if taxes are restricted to a destination basis. This could result in communities using zoning to constrain the location of noxious activities (including many types of business) because of the inability to impose taxes to account for the negative externalities. The national government could design grants to compensate communities for accepting noxious activities.

Inman and Rubinfeld conclude that in developing countries grants are probably a better mechanism than destination taxes because of differences in the information requirements. The grant's strategy requires central collection of source-based taxes from firms with the revenues

¹⁸In this context it is interesting that the U.S. Congress has failed to enact legislation enabling states to impose sales taxes on mail order sales made to residents of states in which a firm has no physical presence or on products sold by firms through the world wide web. Potentially without the constitutional authority to impose these taxes, the states are either required to levy origin based taxes or to leave these transactions untaxed. Tax competition will probably result in the transactions going untaxed. Overall, this significantly harms the states' ability to levy destination based consumption taxes and increases the propensity for tax competition.

¹⁹Taxes on business must effectively become benefit taxes or taxes on residents' ownership of business for this result.

²⁰As already noted, high income decision-makers in the community can impose taxes on low income households and provide little or no services in return.

distributed to state and local governments through grants. The necessary information for designing the grants can be obtained from subnational governments and firms. Destination taxes, on the other hand, require the ability to account for border effects and to track individual incomes and capital to specific states. This requires information on the characteristics of all consumers, which is presumably more difficult to obtain. However, the Inman and Rubinfeld argument fails to consider the incentives facing the national government. The likelihood that grants will be designed based on political rather than economic criteria, and that revenues will ultimately be used for central purposes mean that properly structured destination taxes and minimum tax rates are the best options.

The major recommendation for states is that they focus on “doing government well” by providing the essential services (e.g., education and infrastructure) for which they were created, and establishing an overall tax structure that both provides adequate revenue and promotes a favorable business climate in the state. Tax structures should be designed so that the effect on business is neutral across industries, which means that tax (and other types) incentives should generally be avoided. An important reason is that governments historically do a very poor job of identifying the industries which will be most productive at a particular location. Further, incentives raise the tax cost for others, potentially raising costs for industries and residents that could have better long term potential for the state. While there remains contrasting opinions on the effects of states actively competing for businesses and labor force participants, it is generally agreed upon that more passive interstate competition that focuses on broad tax and fiscal policies is beneficial and can increase efficiency in both public and private markets.

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