# INTERSTATE TAX COMPETITION, INCENTIVES TO COLLUDE, AND FEDERAL INFLUENCES

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Incentives to collude exist in every competitive market. Nonetheless, the successful formation of cartels among private-sector firms is rare, in part because the cartel must overcome the costs of organizing and then of policing the members' agreement. This difficulty to form a cartel has frequently led organized groups of firms to turn to an authority with coercive power (government) for support. Indeed, as George Stigler (1971) explained, economic regulation is most clearly understood as a process by which government established legal cartels by fixing prices, assigning quotas, and limiting entry. Even in the case of cartelization through regulation, however, rent dissipation occurs in the process of rent-seeking competition (e.g., Tullock 1967, Posner 1975, Tollison 1982, Benson 1984) and nonprice competition (e.g., Stigler 1968, Douglas and Miller 1974, Fournier 1985).

The purpose of the following discussion is to extend Stigler's economic theory of regulation, with its roots in the theory of the firm and public choice theory, by illustrating that similar kinds of incentives to collude exist for competing governments.[1] However, as with private firms, successful collusion is generally thwarted by high costs of

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[1]Vedder (1990) discusses interstate tax competition in the context of a theory of the firm/public choice model, and McKenzie and Staff (1981) propose an extension of Stigler's theory of economic regulation to include government units in the context of their discussion of revenue sharing. The presentation that follows extends Vedder's analysis by considering the incentives to collude, and the consequences of nontax-rate competition. It also involves a more extensive analysis of the form and consequences of interstate competition than appeared in McKenzie and Staff and consideration of efforts to avoid competition beyond just revenue sharing. In the process, certain oversights by McKenzie and Staff (1978, 1981), as well as by Friedman and Kurth (1981), will be rectified.

organizing and policing. Consequently, any relatively long-term success typically requires the assistance of a higher authority with some coercive power over the government units attempting to form a cartel. These arguments are developed in the context of an examination of interstate competition for business investment and tax base.

## Politics and State Tax Rates

The impact of state and local taxes on capital investment are examined in Benson and Johnson (1986b) where interstate tax competition is accounted for by using a relative tax-rate measure. Furthermore, the econometric procedure was designed to reflect the possibility of a lagged impact of changes in relative taxes on capital formation and to detail the time profile of the lag. Our results indicated a statistically significant lagged response. The major portion of the long-run effect of relative tax changes on capital investment occurs within three to four years of the change. The estimates indicate that the mean long-run elasticity of a change in relative taxes on relative capital expenditures is $-1.02$.[2]

The finding of a significant distributed-lag effect of state and local taxes on economic activity is important in the context of a theory of the firm/public choice explanation of interstate tax changes and differences. Dwight Lee and James Buchanan (1982) argue that political decisions are made on the basis of a limited time perspective. Politicians are seen as having little motivation to consider consequences much beyond their next re-election effort. These incentives are heightened by the notion that voters tend to be rationally ignorant about the long-run consequences of tax policies.

In the context of the findings in Benson and Johnson (1986b), a politician who increases tax rates to provide additional benefits to supporters, and who argues that the increases will not affect economic growth, may have a short-term re-election advantage over an opponent who contends that such tax increases will have a significant negative impact on economic activity. By the time the evidence is accumulated, the election may be over. As Lee and Buchanan (1982, p. 354) noted, "so long as government makes its fiscal decisions on the basis of a time horizon shorter than the period required for full taxpayer adjustment to tax rate changes, observed tax rates will be higher than those that a far-seeking or 'enlightened' government would impose."

Roughly half of the negative impact of an increase in relative taxes occurs within two years (Benson and Johnson 1986b), however; thus,

[2]Also see Vedder (1990) and references cited therein.

state and local tax policy should be constrained to some degree by interstate tax competition. Interstate tax competition can be expected to moderate the tendency toward excessively high state and local taxes, and to narrow the distribution of tax levels across states. This competitive impact can be seen by considering what happens when a state gets too far out of line with competing states.

According to the Advisory Commission on Intergovernmental Relations (ACIR 1981), for example, the tax burdens of New York and Massachusetts got out of line by the mid-1970s, relative to their neighbors. New York's public sector outlay per dollar of personal income was about 30 percent higher than the rest of the nation by the middle of the decade, for instance. As a consequence, among the 303 major manufacturing firms within the food, textiles, apparel, fabricated materials, machinery, and electrical equipment industries that relocated between 1969 and 1976, 91 left New York (ACIR 1981, pp. 46–47). Of those, 29 moved to other states in the Mideast. Massachusetts lost 25 major manufacturing establishments to states within the New England region alone (17 moved to New Hampshire) during the period. The experience of New York and Massachusetts suggests that if a state government raises taxes without regard to tax levels in other states, that state will find itself growing at a substantially slower rate within a few years. As a consequence, states are likely to react by offering more competitive taxes. Both New York and Massachusetts did exactly that. In 1979, New York Governor Hugh L. Carey wrote: "During the past four years, New York State has demonstrated that the way to provide tax relief and revive the economy is to control the growth in spending. Spending increases have been held far below the rate of inflation, making tax cuts possible three years in a row" (ACIR 1981, p. 29). Indeed, the rate of increase in New York's state and local tax burden (1.1 percent) was below the national average (1.2 percent) for 1975–78, and, perhaps more importantly, it was considerably below Connecticut's (2.5 percent) and New Jersey's (2.3 percent) increases.

The concept of tax-rate competition among states does not imply that states will have identical overall tax rates. This is not a perfectly competitive market. It is more appropriately described as oligopolistic. But, to the extent that interstate tax competition interferes with the objectives of politicians, we can anticipate attempts by public officials to avoid competition (i.e., collude).

## Efforts to Reduce Interstate Tax Competition

There are many examples of efforts by state governments to collude. The governors of six Great Lakes states, for instance, discussed

the possibility of "calling a truce on attempts to pirate industry from each others' states" (Carlson 1983, p. 31). However, the six governors were unable to reach an agreement. Minnesota's governor took the lead; after unsuccessful attempts to convince governors from Iowa and the Dakotas to reduce competition for industries, he reached an agreement with Wisconsin. The governors of Minnesota and Wisconsin publicly pledged not to initiate any state-sponsored business recruiting in the other's state, although contacts by firms from the other state could still be pursued. Governors from Indiana and Illinois refused to join such a pact, however, despite interest by Michigan and Ohio.

Even such a limited agreement is not likely to be effective. Firms that consider relocating or branching could still initiate contact with state officials, and negotiations for tax concessions and financial inducements could follow.[3] Furthermore, the "no-raid" agreement did not put any limit on direct tax-rate competition, nor was it an agreement to set tax rates analogous to a price-fixing cartel. Yet even this extremely limited agreement could not be negotiated with most of the states in the region. This lack of cooperation is not surprising. Private sector cartels are extremely tenuous arrangements if they can be achieved at all. The same appears to hold true of public cartels. As Robert Kleine (1977, p. 170) noted, "At the state level, tax competition could be reduced by cooperative efforts of regional economic planning groups such as the Southern Growth Policy Board (SGPB). Neither the SGPB nor any of the other regional groups currently in existence has taken steps to reduce competition among member states."

Under certain circumstances it might be anticipated that collusion should be relatively easy. For instance, Montana and Wyoming have huge deposits of low-sulfur coal. It is by far the cheapest coal in the

[3]This point brings up an important issue that pertains to much, if not all, of the literature on state and local taxes, location choice, and economic growth. The literature includes Vedder (1990) and Benson and Johnson (1986a, 1986b), and treats the taxes as endogenous to the firms making location choices. Actually, firms may have a significant impact on the taxes they pay. They can bargain directly for tax breaks, and perhaps more importantly, they can lobby for changes in tax rates. Thus, the most attractive site in terms of tax considerations, *ceteris paribus*, may not be the location with the lowest current tax rates, but rather, it may be the location with the political system that appears to be the easiest to influence with regard to future taxes.

Tax rates may be negatively correlated with determinants of political ability to influence, of course, but the correlation is clearly far from perfect. New York is a high tax-rate state, for example, but it also has a very substantial tax concession program. Newly locating or highly mobile firms may be able to obtain very favorable tax treatment from the state despite the fact that current residents and relatively immobile firms pay high taxes.

United States to produce, so even when transportation costs are added, the coal competes very favorably in the Midwest and Southwest markets of the United States (Kolstad and Wolak 1983, p. 449). Furthermore, excise taxes on such coal are largely exported, so citizens of the states find such taxes to be quite desirable, and the source of the tax—coal—is highly immobile so it cannot flee (although coal producers had the choice of developing the reserves in Montana or Wyoming, or of using more expensive coal elsewhere). When Montana raised its severance taxes of surface-mined coal to 30 percent, Wyoming could have followed suit, tacitly colluding, or it could have taken advantage of its competitive position in attracting coal development and left its taxes alone. Wyoming responded by raising its taxes, but by substantially less than Montana had. Charles Kolstad and Frank Wolak (1983, p. 455) contended that Montana and Wyoming could actually have charged substantially higher taxes than they did, through collusion; instead, there were "substantial losses in market power as a result of interregional competition, but despite these loses, . . . [the two states] captured sizable amounts of rents".[4] Even when the situation appears ripe for interstate tax collusion (i.e., a small number of competitive states, an immobile tax base, and an exportable tax), it does not appear to materialize.[5] Taxes may be higher than they might be in a more competitive environment, but they do not approach the perfectly collusive level.

Private sector firms that want to limit competition will typically turn to the government for help (Stigler 1971). Similarly, several organizations of state and/or local governments exist for the primary purpose of lobbying the federal government. These lobbying groups include the Northeast-Midwest Economic Coalition of more than 200 members of Congress from 18 states, the Western Governors Association with governors from 14 states and 3 territories, the National Governors Association, the U.S. Conference of Mayors, the National League of Cities, and so on.

Of course, there is little that the federal government can do, constitutionally, to reduce interstate tax competition directly. Congress and the courts rarely interfere with the taxing powers of sovereign states. Nonetheless, the federal government has established institutional arrangements that can significantly curtail the impact of inter-

[4]Zimmerman and Alt (1981) and Church (1981) also estimated that the cartel tax rate on such coal substantially exceeded the actual tax rate.

[5]OPEC successfully formed a cartel under similar circumstances, of course, but with the added political impetus of the Arab-Israeli conflict. However, this cartel was successful for only a relatively short time until internal cheating (exceeding of quotas) and entry into the market (North Sea oil, etc.) made the cartel ineffective.

state tax competition and can reduce incentives to compete. Two factors of this type stand out. One is deductibility of state and local taxes from federal taxes.[6] The other is the growing share of state and local expenditures that are covered by federal revenues. Let us briefly consider each of these factors.

*Federal Deductibility of State and Local Taxes*

The allowance of state and local tax payments as business expenses for federal taxes, along with the deductibility of state and local income and property taxes from federal personal income taxes, effectively reduces real state and local tax rates to well below their nominal rates. In addition, such deductibility substantially narrows the actual tax differentials between states (ACIR 1981, Benson and Johnson 1986a, Vedder 1990).

Table 1 provides some evidence of this effect. In 1977, the range of total personal taxes relative to the average for a person with $50,000 in income, when state and local taxes alone were considered, was from .53 in Texas to 1.63 in New York. However, when federal taxes were added in, the range narrowed, with Texas at .90 and New York at 1.13.

The deduction of state and local taxes substantially diminishes the cross-state variation in taxes by transferring much of the federal tax burden from residents of high-tax states to residents of low-tax states. It also reduces the incentives to hold tax rates down. For instance, it seems reasonable to expect that New York and other high-tax states would be forced to make tremendous tax cuts to prevent substantial economic decline if deductibility were eliminated. On the other side of the coin, Texas's apparently competitive tax policy actually reduces personal taxes only by a relatively small percentage below the average, because Texas citizens have had fewer deductions from their federal taxes. In other words, federal deductibility substantially reduces the competitive impact of a low-tax policy and reduces the incentives to compete in terms of tax rates. For every dollar in revenue that state politicians give up, the state's citizens and businesses gain less than a dollar in overall tax relief.

It might be noted that federal deductibility of state and local taxes apparently was not solely designed to mute interstate tax competition. Its purpose supposedly was to guarantee that individuals' total tax rates would remain below 100 percent. In fact, however, interstate tax competition would guarantee this anyway, and the actual impact

[6]Also see Benson and Johnson (1986a) and Vedder (1990) for discussions of the impact of federal deductibility on interstate tax competition.

*TABLE 1*

COMPARISON OF 1977 PERSONAL TAXES IN SELECTED STATES, $50,000 INCOME

| States | State and Local Taxes as Percent of Income | Index[a] | State, Local, and Federal Taxes as Percent of Income | Index[a] |
|---|---|---|---|---|
| Arizona | 7.7 | .74 | 27.9 | .95 |
| California | 12.0 | 1.14 | 30.4 | 1.03 |
| Colorado | 8.7 | .83 | 28.5 | .96 |
| Connecticut | 8.5 | .81 | 28.4 | .96 |
| Georgia | 9.2 | .88 | 28.7 | .97 |
| Illinois | 8.0 | .76 | 28.0 | .95 |
| Indiana | 8.8 | .84 | 28.5 | .97 |
| Kentucky | 9.6 | .91 | 29.0 | .98 |
| Maine | 12.0 | 1.14 | 30.4 | 1.03 |
| Massachusetts | 14.4 | 1.37 | 31.8 | 1.08 |
| Michigan | 9.2 | .88 | 28.8 | .97 |
| Minnesota | 14.8 | 1.41 | 32.0 | 1.08 |
| New Hampshire | 7.0 | .67 | 27.5 | .93 |
| New Jersey | 13.3 | 1.26 | 31.1 | 1.05 |
| New York | 17.1 | 1.63 | 33.4 | 1.13 |
| North Carolina | 8.3 | .79 | 28.2 | .96 |
| Ohio | 8.1 | .78 | 28.2 | .95 |
| Pennsylvania | 11.8 | 1.12 | 30.2 | 1.02 |
| Rhode Island | 12.6 | 1.21 | 30.8 | 1.04 |
| Texas | 5.6 | .53 | 26.7 | .90 |
| Vermont | 10.0 | .95 | 29.2 | .99 |
| Wisconsin | 14.1 | 1.34 | 31.6 | 1.07 |
| Average | 10.5 | 1.00 | 29.5 | 1.00 |

[a]Total personal taxes relative to the average.
SOURCE: ACIR (1981).

of deductibility appears to be that total tax rates are higher than they would otherwise be. Furthermore, whether or not muting interstate competition was the purpose of deductibility, states certainly have taken advantage of the situation. High-tax states have been able to shift part of their tax burden onto the federal tax base. That is why proposals in the early 1980s to eliminate deductibility met with such intense lobbying in opposition, particularly from politicians in relatively high-tax states. Deductibility protects those states from competition, at least to a degree, and elimination of deductibility would force them to lower their tax rates substantially or face signifi-

cant losses as business activity shifts to other states. Politicians from low-tax states also benefit from deductibility in the sense that it reduces the incentives to compete in terms of tax rates, thus possibly allowing them to set rates that are higher than they would otherwise be.

*Fiscal Federalism*

In 1961, 11.1 percent of total state and local revenues were transfers from the federal government. The portion of state and local revenues coming from the federal government rose throughout the 1960s and 1970s. By the 1965–66 fiscal year, this value had reached 13.4 percent, and the 1970–71, 1975–76, and 1979–80 figures were 15.7, 18.2, and 18.4 percent, respectively. (Reagan administration policies reversed this trend, as discussed below.) Total federal transfers to state and local governments grew from 1.4 percent of GNP in 1959 to 3.3 percent in 1980. This growing portion of revenues coming from the federal government should be considered in the context of growing state and local tax burdens and of increasing variance in taxes across states (see Vedder 1990 and Table 2). State and local government lobbying has played a major role in the development of

*TABLE 2*

MEAN AND STANDARD DEVIATION OF TAX RATES FOR 48 STATES, 1960–81

| Year | Mean | Standard Deviation | Year | Mean | Standard Deviation |
|---|---|---|---|---|---|
| 1960 | .097 | .014 | 1971 | .117 | .014 |
| 1961 | .098 | .012 | 1972 | .122 | .015 |
| 1962 | .101 | .012 | 1973 | .123 | .015 |
| 1963 | .100 | .011 | 1974 | .118 | .016 |
| 1964 | .103 | .011 | 1975 | .116 | .015 |
| 1965 | .105 | .012 | 1976 | .120 | .016 |
| 1966 | .106 | .012 | 1977 | .121 | .017 |
| 1967 | .105 | .012 | 1978 | .121 | .017 |
| 1968 | .107 | .013 | 1979 | .117 | .015 |
| 1969 | .110 | .013 | 1980 | .112 | .015 |
| 1970 | .114 | .014 | 1981 | .111 | .015 |

NOTE: The tax rate is defined as total state and local revenue divided by state personal income. Tax revenue data are from U.S. Department of Commerce, Bureau of the Census, *Governmental Finances*, various years. State personal income is from U.S. Department of Commerce, Bureau of Economic Analysis, revised data, August 1983.

the system wherein federal tax revenues are used to cover state and local expenditures.

There are "public interest" explanations for state government lobbying efforts to obtain federal transfers, of course. For example, it has been argued that economies of size exist in tax collection and administration. Thus, low-cost federal collection followed by federal transfers (e.g., revenue sharing, grants-in-aid) to state and local governments will supposedly allow those governments to lower taxes. However, this argument has been questioned. There is evidence indicating that the primary goal behind lobbying for federal transfers has been to increase state and local expenditures. For example, a 1977 study of revenue sharing, which actually has been a relatively small component of total federal transfers, concluded that more revenue-sharing dollars were used to maintain or expand programs than to reduce taxes (Juster 1977). Only 20 to 25 percent of revenue-sharing funds went toward tax abatement uses during the first few years of the program's existence (it was started in 1972). Similarly, a study of the impact of grants-in-aid concluded that only 15 percent of the grants were used for tax relief (McGuire 1979). The implication is that total taxes from federal, state, and local sources collected to cover state and local expenditures are substantially higher than they would have been without such transfers (as explained below, these results are relatively short-lived because incentives to compete still exist; the form of the competition simply changes).

Thus, just as a successful private-sector cartel, established and policed through regulation, raises revenues through a centralized pricing policy, federal centralized tax collection and subsequent distribution to the states tend to raise total tax revenues and state government expenditures. But the implications of the availability of large amounts of federal funds for state and local use go beyond the immediate impact that studies, such as those just cited, are able to detect. At the same time as the tax collecting function has increasingly been centralized and performed by the federal government, the variance-reducing impact of deductibility has increased. Therefore, incentives to lower state and local tax rates for competitive purposes have declined.[7]

On June 30, 1981, President Reagan told the National Conference of State Legislatures that the ultimate objective of his federalism policy initiatives was "to use block grants as a bridge leading to the day when you will have not only the responsibility for programs that properly belong at the state level, but you'll have the tax sources now

[7]See McKenzie and Staff (1978, 1981) for similar conclusions regarding revenue sharing.

usurped by Washington returned to you—ending the round trip of the people's money to Washington and back minus carrying charges."[8]

Indeed, the share of state and local revenues coming from the federal government fell from its 1979–80 high of 18.4 percent to 14.7 percent in 1984–85 and 13.6 percent in 1986–87. Significantly, however, this percentage remains above what it was in the mid-1960s, *and* even though the percentage has fallen, the actual dollar value of federal transfers fell only during the first year of the Reagan administration (from $90.3 billion in 1980–81 to $86.9 billion in 1981–82); thereafter, federal transfers rose continuously throughout the Reagan period. Federal transfers to state and local governments reached nearly $115 billion in 1986–87, for a 32.3 percent increase over five years. Furthermore, the relative reductions achieved by the Reagan administration were part of a political deal wherein substantial reductions in federal controls on state uses of funds were made at the same time. With the reductions in federal controls, state and local officials had more discretion in the use of the transferred funds and were more willing to accept the relative decline in federal monies.

### *The Economic Regulation Analogy Revisited*

The Lee-Buchanan view of the incentives that government officials have to set relatively high tax rates is an important consideration in the context of this discussion, because the theory of the firm analogy is imperfect. For instance, McKenzie and Staff (1978) contend that state governments are likely to reduce the quantity and quality of goods and services with a reduction in competition accompanying increased revenue sharing. This result is certainly expected in a profit-seeking, private-sector, regulation-created cartel. But elected government officials presumably do not restrict output to raise profits. They are more likely to increase revenues to *increase* the quantity and quality of benefits that they provide to their supporters, thereby enhancing their re-election opportunities.

Another point of confusion created by the theory of the firm analogy involves the McKenzie-Staff (1981, p. 373) prediction that tax variances among states should decrease when interstate competition is muted. In fact, variance has increased as interstate competition has been muted (see Table 2). Price variance may diminish under certain circumstances as a private sector cartel becomes effective (variance might also fall as competition is increased; however, parallel action can reflect either competition or collusion). Nonetheless, federal

[8]Quoted in the *National Journal*, 22 August 1981, p. 1492.

muting of interstate tax-rate competition enables politicians in states with relatively high taxes to keep their taxes high and even raise taxes with relatively less fear of significant consequences, thus tending to increase variance. Simultaneously, there is a reduction in the competitive impact of low taxes and, therefore, in the incentives to hold taxes down in low-tax states, thus tending to reduce variance.

The net impact of these two anti-competitive forces on variance is not predictable. However, if, as Vedder (1990) hypothesizes, the elasticity of demand for government services is higher in traditional low-tax states than in traditional high-tax states, then the variance should increase. This is clearly the case when we compare the 1970s to the 1960s. Vedder's (1990) results indicate that changes in deductibility and in federal transfers that occurred during the early Reagan years may have reduced interstate tax variance, but that these changes were short-lived. This result may reflect the continued increase in the absolute level of federal support, but it also could reflect other institutional developments that typically accompany cartelization.

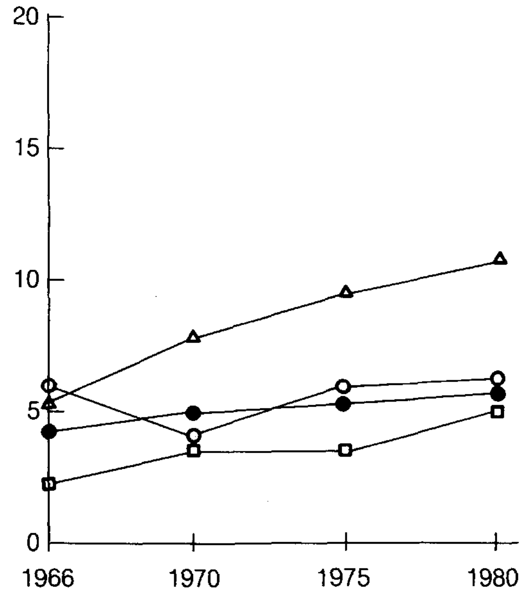
*Nontax Competition*

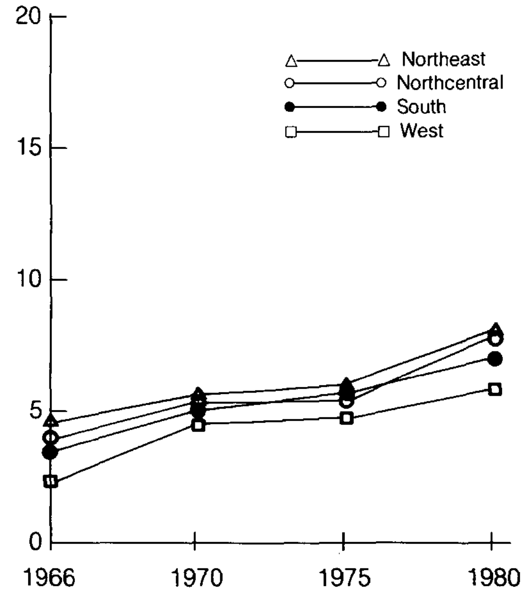
Regulatory-generated cartel rents in private markets tend to be competed away through nonprice competition (Stigler 1968, Douglas and Miller 1974, Fournier 1985). The same type of phenomenon has occurred in the intergovernmental competition to attract tax base. As federal deductibility and federal transfers have worked to mute the incentives to lower tax rates for competitive purposes, interstate competition has taken on a different form. Nontax-rate types of competition have become commonplace.[9] There has been a substantial increase in the use of tax and financial incentives by states to attract and hold business firms. Between 1966 and 1980, virtually every state introduced at least one new financial incentive, tax exemption, or special service in an effort to attract or retain industry (Miller 1983). During that period, 34 states added at least 10 new direct-assistance programs, and the number of such programs more than doubled in 28 states. Initially, these programs tended to be directed toward attracting new firms or branches, but recently they have been used to encourage expansion of firms already located in the state. Figure 1 details the upward trend in the availability of such programs by census region.

[9]There is another form of competition as well. States now compete for federal transfers much as other interest groups compete in the rent-seeking process.

*FIGURE 1*

GROWTH OF STATE FINANCIAL AND TAX INCENTIVE PROGRAMS BY CENSUS REGION




SOURCE: Miller (1983, p. 5).

The spread of such programs follows the same competitive process as tax-rate competition. State politicians prefer not to compete at all, of course, and federal institutions have reduced the pressure to compete on the basis of overall tax rates. Nonetheless, state and local officials have strong incentives to devise policies that can be selectively applied in cases where they may make a difference. But once one state introduces such a policy instrument, its neighbors meet the competitive pressure with an instrument of their own to offset the competitive disadvantage. The ultimate consequence is that states are unable to avoid competition, since each state keeps its tax concession and financial inducement program in line with its competitors. The ACIR (1981, p. 5) concluded that "widespread state enactment of incentives to businesses in the 1960s and 1970s has tended to neutralize their pulling power." Tax rates appear to vary more across states because, as a consequence of federal activities, these rates do not matter to politicians as much as they otherwise would. However, competition has simply taken on a different form, and the theory of the firm/public choice model still explains the process.

In this light, it should be clear that overall state and local revenues are not likely to rise above the "competitive" level in the long run, even when federal programs mute the effectiveness of one avenue of competition. Findings by Martin McGuire (1979) and Thomas Juster (1977) suggest that grants-in-aid and revenue sharing have increased state and local revenues. However, David Friedman and Michael Kurth's (1981) examination of revenue sharing suggests that this is a short-lived occurrence. In particular, they contend that total receipts (taxes plus revenue shared) exceeded what taxes would have been without revenue sharing between 1972 and 1976. But after 1976, tax collections were reduced by the full amount of the revenue-sharing funds (note that Juster's study was based on data up to 1977 so his results do not contradict Friedman and Kurth). Tax collections fell because of nontax-rate competition, just as rents in private sector cartels are dissipated. As Friedman and Kurth noted, "getting the monopoly solution is not as simple as fixing price" (1981, p. 365).

Note that the fact that revenue-increasing consequences of federal programs are short-lived does not imply that lobbying by state and local officials to establish such programs is irrational, even if they can accurately predict this result. Given the relatively short time horizon of elected public officials, an action is desirable if spending can be increased for even a short period without increasing taxes.[10]

[10]This conclusion also implies that state and local officials benefit most from new

Federal muting of tax-rate competition does cause long-term changes, even though state and local revenue enhancement is not likely to be a long-term phenomenon. Within-state tax variation should be greater because of the increasing use of tax concessions and financial inducements. Between-state tax rate variations are also greater, as noted above. Thus, federal interference with interstate tax competition tends to create greater disparity in the taxes that citizens pay to state and local governments, even though they do not pay higher taxes on average *to these government units*, in the long run. This average includes those who receive special concessions, of course, so the "average" citizen who receives no tax concessions pays higher taxes even though average taxes still reflect interstate competition. Furthermore, *total* taxes paid by citizens are likely to be higher with federal revenue transfer programs because of "carrying charges," to use President Reagan's terminology (unless there really are significant economies of scale in tax collection).

Finally, federal programs have redirected the competitive incentives, leading politicians to innovate, and have developed many new forms of nontax-rate competition. Now that these mechanisms have been instituted, even if federal programs muting tax-rate competition are reduced, a rapid return to such competition is unlikely. Politicians now know that they can compete for new and mobile businesses without holding tax rates down for everyone. Vedder's (1990) findings that taxes matter more than ever in terms of their impact on economic growth is not surprising in this context, since tax-rate competition is less intense and many people pay higher taxes than ever as a consequence.

## Conclusion

Competition in the political sector appears to have some of the same impacts that it has in the private sector: In particular, it constrains behavior. But as in the private sector, those who feel constrained have incentives to reduce competition. State governments have attempted to reduce interstate tax competition, and while apparently unsuccessful on their own, they do appear to use the offices of the federal government with some success. The existence of federally established institutions, such as deductibility of state and local taxes from federal taxes, mute the impact of interstate tax-rate competition.

federal programs rather than from long-established programs, so they have incentives to lobby for fairly continuous changes in the federal transfer process. Furthermore, it may help explain why states did not resist more strongly the relative reduction in federal transfers under the Reagan administration.

However, the benefits that state and local politicians gain from reduced interstate tax competition are at least partially dissipated through nontax forms of competition. Incentives to compete do not disappear in the face of a lessening of the effectiveness of one particular avenue of competition.

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