

---

# FRBSF WEEKLY LETTER

Number 95-26, August 4, 1995

## Is State and Local Competition for Firms Harmful?

State and local governments in the United States often compete with each other for the location of private investment and production by using subsidy packages and preferential tax treatment. Some observers dispute the desirability of this competition. For example, Burstein and Rolnick (1994) argue that such "tax competition" is inefficient from a national perspective and recommend that the U.S. Congress prohibit it.

Indeed, a look at some recent deals suggests that the amount states spend on tax competition appears to be enormous compared to the amount of job creation involved. For example, Indiana recently packaged a \$300 million deal to attract a 6,300-employee United Airlines maintenance facility, and Kentucky issued \$140 million in potential tax credits to attract a 400-employee steel plant (*Wall Street Journal* 1993). Attracting firms also may involve other costs. Rio Rancho, New Mexico, for example, has succeeded in attracting investment, most notably from California-based Intel Corporation, using tax incentives. But according to a *Wall Street Journal* article (1995), they attracted so many new firms that now the local government has problems providing adequate public services, such as schooling: Students go to school in portable classrooms on dusty playgrounds, and the school board president claims they use portable toilets as well. States also have aggressively used incentives to attract foreign direct investment. A well-known example is Kentucky's \$125 million expenditure to lure a Toyota plant away from Missouri.

In this *Weekly*, we review the arguments for and against "tax competition" among localities. First, we examine the limitations of the arguments that have been put forward against such competition. Next we review some of the literature that argues that local tax competition can improve efficiency. We conclude that while arguments against local tax competition can be made on the basis of its implications for the distribution of income, there is no clear evidence that such competition harms economic efficiency, either by leading firms to

inappropriate location or output decisions, or by leading to a "suboptimal" level of government provision of goods and services.

### Arguments against local competition

There is a large literature in public finance theory that claims that tax competition based on *general* tax and spending programs can lead local governments to the optimal levels of taxation and provision of government goods and services, such as firefighting, police services, and so on. However, critics of state competition for firms argue that when tax competition among states and localities is directed at *specific* businesses, it can lead to adverse consequences in a number of dimensions.

One of these potential consequences is that tax competition for specific businesses reduces revenues, which leads state and local government to a suboptimal level of government provision of goods and services. However, these results typically are generated by models where the local government is limited to taxes on capital, such as a corporate income tax. Generalizing the model to allow governments other revenue sources, such as user fees for publicly provided goods and broad-based individual income and sales taxes, can overturn this result. The limited empirical evidence suggests that revenue losses from tax competition are at least partly offset by increased taxes from other sources.

It also is uncertain whether local tax competition results in an overall level of public goods provision that is too small. For example, Rivlin (1991) argues that tax competition among states and localities inhibits their revenue-raising capacity, and leaves the level of state and local expenditures "too small." She proposes reforms that would increase the size of state-level public expenditures. Nevertheless, Rivlin also portrays the federal government as "too large," in the sense of being an overprovider of public services. This means that the overall level of public good provision may be greater or less than that which

---

# FRBSF

would maximize welfare. In this situation, the welfare implications of increasing the level of state and local public good provision are unclear.

A second argument for prohibiting local competition is based on the premise that states involved in tax competition on average end up with fewer jobs and tax revenues from the target firm than they had anticipated. In the literature on auctions, this situation is known as the "winner's curse," and it arises when bidders have different beliefs about the value of an object. If people offer bids at their individual expected values, the winning bidder will be "cursed" in the sense that the true value of the object will be lower than his bid. This occurs because, all else equal, the winning bidder will be the individual who places the largest value on the object. In practice, however, agents who are aware of the "winner's curse" can adjust their bids accordingly, so that systematic overbidding need not emerge.

A third argument put forth by critics of tax competition is that policy biases investment by offering tax breaks to the most mobile producers and not to relatively captive producers. In principle, this could lead to relative overproduction of the types of goods made by the most mobile producers. However, this argument is based on the false premise that the degree to which a producer is "mobile," that is, the ease with which he can move into or out of a locality, is primarily determined by the type of commodity being made. In fact, firm mobility is also determined by the timing of fixed investments. Most firms are relatively mobile prior to locating production in a particular place, but the start-up of operations often requires substantial investments which render firms relatively immobile until that capital investment has depreciated. While tax competition may yield an advantage to new firms over existing firms, therefore, there is no reason to expect that this advantage will be systematically biased towards some industries at the expense of others, with the exception of area-specific industries such as those involved in natural resource extraction.

## Arguments for tax competition

Some argue that local tax competition may actually enhance efficiency. One argument is that properly managed tax competition can enhance positive spillover effects to the community. For example, tax competition could help localities exploit "agglomeration economies," that is, increases in the efficiency of production from the

concentration of activities that generate positive spillover effects. It also has been argued that, other things being equal, additional jobs have a greater impact on social welfare in a community with a high unemployment rate than in a community with a low unemployment rate (Bartik 1994). One could motivate this argument in terms of market externalities, such as if the profitability of local retailers is dependent on the level of domestic manufacturing activity. Alternatively, if the marginal cost of raising funds is higher for a high unemployment locality, the argument can be motivated in terms of the severity of the local government fiscal situation.

Arguments for tax competition also can be made in the presence of information problems. If localities have superior information concerning the likelihood of firm success, the willingness of a governmental entity to offer a tax holiday can signal to the firm that the entity governs a high productivity location. The fact that incentives often take the form of "tax holidays," reduced tax rates in the early years of a newly resident firm's operation, is consistent with such a scenario. Nevertheless, such an argument requires that the local government possess superior information to the private sector, and it is unclear whether this condition is factual.

Another argument for tax competition stems from the fact that many government-provided goods, such as transportation services, tend to be priced at average cost, or cost per unit. However, when cost-per-unit is decreasing in the amount of goods provision, as is often the case in transportation and other goods, the marginal cost of providing a new firm and its workers with these services would be less than the tax revenue they would generate. In this situation, a government can move closer to the optimal level of provision of goods and services by offering subsidies to increase the domestic use of government goods, such as subsidies for the entry of a new firm. This poses another channel for state tax competition to be welfare-enhancing.

## Does local tax competition represent wise policy?

We describe above why the efficiency implications of tax competition are unclear. Whether or not limiting state and local tax competition is wise national policy also could depend on possible distributive goals of government policy. In its simplest form, tax competition can be represented as a reduction in the tax rate on capital.

However, analysts often assume that local tax competition and development expenditures attempt to maximize the income of local workers, potentially at the expense of workers in other localities or of external owners of the capital stock. If this is the objective, then tax competition may confront localities with a "prisoner's dilemma." For example, if California finds itself losing new investment to neighboring states, it may be forced to offer tax reductions merely to stay even. However, these may trigger additional tax reductions by neighboring states, resulting in a series of tax breaks to firms with little actual change in the stock of capital across states. In such a situation, workers may find themselves increasingly worse off. A national ban on tax competition, by effectively enforcing collusion across states and limiting bidding away the rents associated with attracting firms, could help workers at the expense of owners of capital. However, even here the ability of such a ban to be effective is hindered by the potential of firms to locate abroad.

That said, the desirability of limiting tax competition still depends on the role of state and local governments in the overall fiscal system. The proper division of fiscal responsibilities between the state and federal governments has been widely debated, and the issue is beyond the scope of this *Weekly*. However, we note that it has been argued that local governments should primarily provide public goods and services, leaving redistributive efforts to the federal government. If one adopts this argument, then distributional concerns are not grounds for limiting tax competition among local governments. At the federal level, the distributional incentives for limiting local tax competition are unclear,

since these activities presumably benefit one locality at the expense of another.

Given that this is the case, we are reduced to efficiency concerns to motivate limiting local tax competition. It is not by accident that these are the concerns on which Burstein and Rolnick (1994) concentrate. Nevertheless, as we have argued above, the impact of local tax competition on economic efficiency is ambiguous. This channel therefore fails to provide a solid case for restricting local tax competition.

**Joe Matthey**  
Economist

**Mark Spiegel**  
Senior Economist

#### References

- Bartik, Timothy. 1994. "Jobs, Productivity, and Local Economic Development: What Implications does Economic Research have for the Role of Government?" *National Tax Journal* vol. 47, pp. 847-861.
- Burstein, Melvin L. and Arthur J. Rolnick. 1994. "Congress Should End the Economic War among the States." *Federal Reserve Bank of Minneapolis 1994 Annual Report*.
- Rivlin, Alice M. 1991. "Distinguished Lecture on Economics in Government: Strengthening the Economy by Rethinking the Role of Federal and State Governments." *Journal of Economic Perspectives* vol. 5, pp. 3-14.
- Wall Street Journal*. 1993. "Locales Still Shopping for a Corporate Catch" (July 6).
- Wall Street Journal*. 1995. "Rio Rancho Wooded Industry and Got it, Plus Financial Woes" (April 11).

# Research Department

## Federal Reserve

### Bank of

### San Francisco

P.O. Box 7702  
San Francisco, CA 94120

Printed on recycled paper  
with soybean inks. 

#### Index to Recent Issues of *FRBSF Weekly Letter*

DATE	NUMBER	TITLE	AUTHOR
1/20	95-03	Why Banking Isn't Declining	Levonian
1/27	95-04	Economy Boosts Western Banking in '94	Furlong/Zimmerman
2/3	95-05	What Are the Lags in Monetary Policy?	Rudebusch
2/10	95-06	Central Bank Credibility and Disinflation in New Zealand	Hutchison
2/17	95-07	Western Update	Mattey/Dean
2/24	95-08	Reduced Deposit Insurance Risk	Levonian/Furlong
3/3	95-09	Rules vs. Discretion in New Zealand Monetary Policy	Spiegel
3/10	95-10	Mexico and the Peso	Moreno
3/17	95-11	Regional Effects of the Peso Devaluation	Mattey
3/24	95-12	1995 District Agricultural Outlook	Dean
3/31	95-13	Has the Fed Gotten Tougher on Inflation?	Judd/Trehan
4/7	95-14	Responses to Capital Inflows in Malaysia and Thailand	Glick/Moreno
4/14	95-15	Financial Liberalization and Economic Development	Huh
4/21	95-16	Central Bank Independence and Inflation	Parry
4/28	95-17	Western Banks and Derivatives	Laderman
5/5	95-18	Monetary Policy in a Changing Financial Environment	Glick/Trehan
5/12	95-19	Inflation Goals and Credibility	Judd
5/19	95-20	The Economics of Merging Commercial and Investment Banking	Kwan
5/26	95-21	Financial Fragility and the Lender of Last Resort	Schaan/Cogley
6/9	95-22	Understanding Trends in Foreign Exchange Rates	Kasa
6/23	95-23	Federal Reserve Policy and the Predictability of Interest Rates	Rudebusch
7/7	95-24	New Measures of Output and Inflation	Motley
7/28	95-25	Rebound in U.S. Banks' Foreign Lending	Zimmerman

The *FRBSF Weekly Letter* appears on an abbreviated schedule in June, July, August, and December.