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# Geographic Scales and the Competition for Economic Growth

## States, Subnational Governments, and Cities

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*One of the key features of globalization is the increase in capital mobility, which propels national and subnational governments alike into a heightened competition for investment as more locations become feasible for any particular investment. This can be seen most clearly in the case of state and local governments in the United States, where the absence of controls on development incentives allowed a rapid increase in their level during the 1990s. State and local governments are caught in a Prisoners' Dilemma that can only be solved at the federal level. In the absence of such intervention, many local organizations have tried to at least bring more transparency and accountability to the use of development incentives, with some success in moving the deals out of the back rooms and institutionalizing clawbacks of incentives where recipients fail to produce the promised investment.*

**Keywords:** *capital mobility; competition for investment; economic development; foreign direct investment*

**Competition for economic activity**, especially for investment, is virtually everywhere geographically and takes place at all levels of government. From Silicon Valley to Auto Alley, and from the European Union's (EU) supranational commission to suburban governments for 5,000 people, none are spared the competition, and everyone is affected by it, for better or for worse. Although the strategies vary somewhat (perhaps less than one might expect), the goal of economic prosperity is the same, yet its benefits may be more or less equally distributed, depending on the jurisdiction in question.

Lest one think this is a small problem, my estimates suggest that in the United States in 1996 there were approximately \$98 billion in federal subsidies to business and \$48.8 billion in state and local subsidies (\$26.4 billion of which was specifically designed to attract investment).<sup>1</sup> Excluding federal agricultural subsidies of \$15.6 billion, this total of \$131.3 billion equals 18.2% of gross fixed nonresidential investment for 1995 (Thomas, 2000, p. 160).<sup>2</sup> The recent introduc-

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tion and widespread adoption of new subsidy techniques such as single-factor apportionment,<sup>3</sup> and the data trends I have documented between 1992 and 1996 (Thomas, 2000, pp. 158-159), strongly suggest that the number is continuing to climb. Although subsidies can be an appropriate policy in some circumstances (and opinions will differ on what those circumstances are), we should always scrutinize them carefully because of three potential problems (Thomas, 1997b, pp. 119-120): inefficiency (inducing firms to less efficient locations or to continue inefficient production), inequity (average taxpayers subsidizing the rich), and for some types of investments, environmental problems (such as building in floodplains or encouraging sprawl).

This article argues that the ultimate basis for this competition lies in two factors. The first is summed up in Charles Lindblom's (1977, p. 173) pithy observation that business must be "induced" to carry out its public function of investment. The second, which creates the multi-jurisdictional aspect of competition for investment, lies in capital mobility, which comprises the crucial element in what is popularly called "globalization." As capital mobility increases, the number of feasible sites for any given investment grows, giving investors greater options and governments greater headaches in trying to coordinate a growing number of actors to rein in the competition. As I analyze below, this rising *n*-person Prisoners' Dilemma can only be solved in practice by centralized enforcement, as suggested both by game theory and by the actual failures of voluntary regional "no raiding" zones in the United States and Canada. In the absence of federal intervention, myriad national, state, and local organizations have worked strenuously to increase the transparency and accountability of the process.

After building the theoretical model, I will consider the types of investment attraction strategies used. The bottom line is that despite predictions of more entrepreneurial government, "shoot anything that flies, claim anything that falls" (Rubin, 1998) remains the dominant approach. What differs is the intensity with which various governments must resort to this strategy, due to their relative attractiveness to investors. What also varies is the extent to which investment attraction is centralized in various countries, with the United States the least centralized, Canada next (most provinces prohibit their local governments from giving subsidies), and EU countries generally the most centralized (often a single agency, such as Ireland's Industrial Development Authority [IDA], will dominate most or all investment attraction activities). Moreover, the EU's Commission exercises centralized control over all types of subsidies throughout the Union's territory, leading to a falling trend in subsidy use that stands in stark contrast to the increases in the United States.

My consideration of the EU and Canadian approaches suggests some possible policy reforms in the United States. Most crucially, there is a need for transparency in state and local government subsidy use. Due to the EU requirement to pre-notify subsidies to the Commission, the data exists and is widely publicized about what various governments provide to firms. In the United States, state and local governments are often loath to publicize the true extent of subsidies they

offer and most commonly use tax measures to provide them, which are inherently less transparent than the on-budget grants that predominate in the EU and, to a lesser extent, in Canada. Lack of transparency inhibits democratic consideration of both individual subsidy offers and subsidy policies generally. In all likelihood, if the true extent of subsidization in this country were known, it would become a more salient issue than at present. Second, the widespread practice of supplying subsidies to firms to relocate from another jurisdiction is the most widely recognized substantive problem in this issue area, and the one where a consensus for action is most likely to be achieved. Third, discussion should begin on defining what are acceptable uses and levels of subsidization and how to monitor and enforce limits. No doubt, this process will not be completed until the first two reforms are achieved, but even today, the type of guidelines used in the EU have found their way into proposed reforms at the state and local government levels.

### **THE GEOGRAPHIC EXTENT OF COMPETITION FOR INVESTMENT AND ECONOMIC ACTIVITY**

Investment is a prerequisite to any goal a state might have (Thomas, 1997a, p. 46). Without it, there is neither economic activity to tax nor economic outcomes that are satisfactory to the populace (Bennett & Sharpe, 1985, p. 45).<sup>4</sup> As a result, governments everywhere seek to attract and keep investment. Moreover, because investment is geographically mobile (and increasingly so since World War II; see Thomas, 2000, pp. 28-29), governments must make competing offers to attract investment to their territory.

There are two caveats on this blanket claim. First, some countries compete directly for economic activity rather than investment, or so it appears. For example, the EU in the 1970s set up the first of a long string of subsidies for Airbus, and it has been suggested in some quarters that its decision in anti-trust cases such as Boeing/McDonnell Douglas were motivated by protectionist concern for Airbus. Similarly, Japan's economic growth strategy has long been one that strongly discouraged inward foreign direct investment, except in a few sectors. If we look deeper, however, the motivation for such policies is to encourage domestic capital holders to invest. For this reason, I will normally refer in this article to the competition as being one for investment.

Second, a government totally without resource needs may not need to compete for investment, but such cases are few and far between. As Winters (1996, pp. 8-9) suggests, rural societies may not have much of an "investment imperative," as he calls it, but even in some urban areas, there are a few jurisdictions that do not need to compete for investment.<sup>5</sup> Typically, this will be a high-income suburb where residential property taxes alone are sufficient to maintain municipal services. Such a location also may be attractive for financial services or law firms and may not need to offer any special incentives to attract them. Because it

has no resource needs, it could even keep out development it does not want, perhaps by providing no industrial zoning whatsoever within the jurisdiction. Yet even localities that appear to be in such an attractive situation will compete for investment quite directly and will invariably benefit from investment incentives given by state government. For example, Santa Clara, California, in the heart of Silicon Valley, gives property tax reductions as well as piggy-backing on state tax reductions for new investments that were crafted specifically to attract investment from Intel ("Intel Given Tax Break," 1994; Kershner, 1993, p. A11).

Indeed, attractive locations for investment will generally provide the least inducement to prospective investors and be in the strongest position to regulate investors' activities. This is not surprising if we consider the development of theories in international political economy on the relative bargaining power of host governments and multinational corporations (MNCs). Indeed, it does not matter whether the investor is an MNC or a domestic firm as long as it has sufficient capacity to choose alternative locations. The factors that determine the need for and intensity of incentives or policy concessions to attract investment are the economic situation of the community (income, unemployment, size, etc.), availability of alternative projects, the collective action possibilities of governments and firms, and so forth (Thomas, 1997a, pp. 9-18; see especially Table 1.1, p. 14).

### **THE GOVERNMENTAL EXTENT OF COMPETITION FOR INVESTMENT**

Besides the geographic extent of competition for investment, we should note also the governmental extent. That states and cities are involved in constant efforts to attract investment, some of it quite high profile, is not news. We can recall the specter of seven governors on the *Donohue* show to woo General Motors' Saturn plant or the recent battle for the new headquarters of Boeing Corporation. The U.S. federal government has numerous programs designed specifically to subsidize business, including ones that are arguably World Trade Organization (WTO) illegal export subsidies (i.e., the Foreign Sales Corporation program and its descendents). However, federal programs are rarely designed to attract individual firms, a function normally carried out at the state and local level.<sup>6</sup> In Europe and Canada, central governments generally are involved with firm-specific investment attraction, sometimes in coordination with a provincial or regional government. At the supranational level, the EU itself, not just individual member states, plays a part in the battles for investment and economic activity through its provision of investment subsidies via the structural funds for poorer EU members and regions, through its long-time subsidies to Airbus, and more arguably through anti-trust decisions in such cases as Boeing/McDonnell Douglas and GE/Honeywell.

Below the big headlines, however, tiny communities have thrown themselves into the fray as well. In the St. Louis metropolitan area, a number of the suburban municipalities have at least one full-time economic development officer. For example, according to the Hazelwood (2000 population: 26,206) Web site, it employs an economic development officer who is part of the City Manager's Office. Slightly larger cities, such as the fast-growing suburbs of St. Peters (51,000) and St. Charles (60,000) have separate Departments of Economic Development. At least three cities in St. Louis County with populations less than 10,000 have given tax increment financing (TIF) subsidies for various projects (Brentwood, Richmond Heights, and St. John).

We can see, then, that the competition for investment includes governments from the largest to the smallest, encompassing any area complex enough to be subject to Winters's "investment imperative."

#### **ATTRACTING INVESTMENT UNDER CONDITIONS OF RISING CAPITAL MOBILITY**

In one sense, competition for investment is irrational. As Note 6 pointed out, state-level competition for investments such as foreign automakers diluted the bargaining power the United States as a whole might have had with these firms. The same number of jobs was coming to the United States whether, for instance, Mercedes located in Alabama or North Carolina. The same irrationality exists from the Canadian national standpoint vis-à-vis the provinces or for the EU as a whole in relation to individual member states.

From the standpoint of individual governments, however, there is nothing irrational about their behavior. As Stephen Guisinger's "market for investment" model implies, controlling government competition for investment is well modeled as a Prisoners' Dilemma.<sup>7</sup> All governments would be better off if they did not offer investment incentives, but an individual government would lose a significant amount of investment if it unilaterally ceased to give location subsidies. In essence, he argues that if governments were all to refrain from offering investment aids to help persuade firms to locate within their jurisdictions, it is likely that the resulting distribution of investment would be little different from that which results when all states provide such incentives.<sup>8</sup> Thus, if states did succeed in avoiding location subsidies, they would receive what might be called their "fair share" of investment while spending nothing on incentives, an improvement over the current situation where they must spend substantial amounts of money on location inducements to receive their fair share of investment. However, this is a better outcome for governments than not spending money for incentives while other governments continue to do so because they would thus receive less than their fair share of investment while the other states would receive more than their fair share.<sup>9</sup> These four outcomes can be ranked as

**TABLE 1: The Prisoners' Dilemma of Location Subsidies**

	<i>Government 2</i>	
	<i>Doesn't Subsidize</i>	<i>Subsidizes</i>
<i>Government 1</i>		
Doesn't subsidize	S,S	W,B
Subsidizes	B,W	T,T

NOTE: B = best outcome, S = second-best outcome, T = third-best outcome, and W = worst outcome.

follows and placed in the standard Prisoners' Dilemma  $2 \times 2$  game matrix (using only two governments here for ease of exposition):

- B (best outcome): your government provides incentives, whereas the other does not, increasing your investment share at the expense of the other government;
- S (second-best): your government does not provide incentives, neither does the other one, and you receive your "fair share" of investment (as does the other government);
- T (third-best): your government provides incentives, and so does the other government, thereby giving you your "fair share" of investment, but at the cost of the incentives (this is also true for the other one);
- W (worst outcome): your government does not provide incentives, whereas the other one does, and you receive less than your "fair share" of investment.

Using these letters to designate pay-offs gives a familiar Prisoners' Dilemma matrix (Government 1's pay-off appears first), as shown in Table 1.

Table 1 illustrates clearly the basis for the Guisinger claim. If Government 2 does not subsidize, Government 1 gets a higher pay-off by subsidizing (B) than by not subsidizing (S). If Government 2 does subsidize, Government 1 is still better off subsidizing (T) than not subsidizing (W). In other words, Government 1 is better off subsidizing no matter what Government 2 does. The same is true for Government 2,<sup>10</sup> so if each pursues its interests without cooperating, both will subsidize and both will receive lower pay-offs (T,T) than if neither subsidized (S,S). This matrix also shows another important point: neither can move from the current situation (both subsidize) by itself without making itself worse off, because its pay-off for doing so would decline from T to W. This characteristic defines it as an equilibrium. Because neither has an incentive to change strategy by itself, they remain in the noncooperative equilibrium rather than the Pareto-optimal situation of neither subsidizing. If this Prisoners' Dilemma were played just once, it would be rational for both governments to subsidize.

This is not to say that cooperation is impossible. As both Russell Hardin and Robert Axelrod have emphasized, even without third-party enforcement agreement of cooperation, it can occur in situations when the possibility of future benefits is high enough. In that case, noncooperators can be punished by the loss of

future benefits; their anticipation of this occurring may be sufficient to prevent defection from cooperative agreements (Axelrod, 1984, p. 12; Hardin, 1982, p. 13).

With more than two actors, the problem of cooperation is more difficult still. As the number of players increases, cooperation is made less likely because organizing the group becomes more complicated, because each actor still has a greater disincentive to cooperate, and because monitoring and enforcement of punishment for noncompliance is harder to achieve (Hardin, 1982, pp. 43-44, 173-187). Although it may not be necessary to get all parties to cooperate for the group to enjoy benefits from cooperation, there will be some minimum number that must cooperate to be net beneficiaries. Hardin calls this a  $k$ -group. An example should make this clearer. If Ontario refrained from offering investment incentives, but no other province did, Ontario would lose investment to other provinces. If both Québec and Ontario refrained, they might still lose out overall. But if all the provinces except Prince Edward Island refrained from using subsidies, the nine cooperating provinces would surely benefit because Prince Edward Island can only absorb a small amount of Canadian investment. It is difficult to determine exactly what the minimum would be,<sup>11</sup> but it is between 3 and 9. By contrast, if provinces agreed not to use location inducements in the automobile industry (which is heavily concentrated in Ontario and secondarily in Québec), an agreement including just Ontario and Québec would probably be sufficient for them to benefit secondarily in Québec and an agreement including just Ontario and Québec would probably be sufficient for them to benefit regardless of what other provinces did because of the difficulty of establishing facilities far from presently existing ones. Here,  $k = 2$ . As Hardin argues convincingly, the difficulty of achieving cooperation in an  $n$ -person Prisoners' Dilemma depends not on  $n$  but  $k$  (Hardin, 1982, pp. 42-49).

Even this analysis, however, is static. Prisoners' Dilemma alerts us to the difficulty in achieving cooperation to obtain restraint of state aid, and the failure of U.S. states in the Midwest and Northeast to maintain "no-raiding zones" only confirms this view.<sup>12</sup> In fact, under conditions of increasing capital mobility, the cooperation problem faced by governments grows increasingly difficult. The reason is precisely that increasing mobility of capital implies that the number of feasible potential locations increases; in our terms above, it increases  $k$ .

As a result, governments seeking to attract investment do not simply face an  $n$ -person Prisoners' Dilemma. Because of rising capital mobility they face a situation where  $n$  (and more important  $k$ ) is rising. That is, capital mobility makes more locations potentially substitutable for one another. This means that reaching and enforcing a cooperative solution is increasingly difficult.

In addition, not only is the number of actors sometimes quite large (50 at the state level alone in the U.S. case, for example), the small number of really large projects (auto assembly plants, aircraft maintenance facilities, etc.)<sup>13</sup> makes it impossible to follow the "Tit-for-Tat" (TFT) strategy advocated by Robert Axelrod and widely endorsed for national governments in the international



arena (Axelrod, 1984, pp. 109-123).<sup>14</sup> The small number makes it impossible for states to retaliate in a way that is distinguishable from business-as-usual competition for investment. Moreover, even with smaller projects, it is unclear that there are enough projects for TFT. This means that the prospects of decentralized cooperation emerging on this issue are negligible.

Because the moral of Prisoners' Dilemma is precisely the difficulty of obtaining cooperation, it is immediately comprehensible why we have seen so little cooperation on this issue. Further evidence that controlling competition for investment is a Prisoners' Dilemma that requires solution by a higher level of government can be found in the experience of the United States and Canada. In the United States, two regional groupings of states have attempted to form "no-raiding zones," where none would offer incentives to firms in another state in the grouping to induce the company to relocate to their state. One was established by the Conference of Great Lakes Governors in the Midwest, but it ended before it began "when one of the states took the opportunity to lure a firm from a neighboring state." Similarly, when New York, New Jersey, and Connecticut signed a no-raiding agreement in 1991, it was violated within a year, primarily through attempts to lure firms out of New York City. Even when such efforts were not successful, it was because New York gave costly retention incentives to the targeted firms (Schweke, Rist, & Dabson, 1994, pp. 28-29, 70). In Canada, voluntary arrangements to limit investment subsidies were made both in the Western provinces and the Maritimes, but according to Mark Ronayne (1993, pp. 52-54), neither has been particularly successful.

### STRATEGIES OF ATTRACTING ECONOMIC ACTIVITY

Despite Peter Eisinger's (1988) optimistic predictions of the rise of the entrepreneurial state, his favored "demand side" approach to economic development never mounted a serious challenge to the dominance of "supply side" use of locational subsidies or other efforts to boost business profitability.<sup>15</sup> As Scott Loveridge (1996) puts it, "Local practitioners appear to see these new strategies as supplements, rather than replacements, for the tradition of industrial recruitment" (p. 152). What is striking is that despite the periodic introduction and subsequent proliferation of new subsidy tools (such as tax increment financing in the 1980s and early 1990s and single-factor apportionment in the late 1990s and early 2000s), the real difference among jurisdictions is the intensity with which they engage in subsidy provision. This, in turn, is a function of their attractiveness to investors, at least in the general case.<sup>16</sup> If we think of attractiveness as conferring bargaining power on jurisdictions, we can usefully draw on international relations theorizing about the relative bargaining power of multinational corporations and host governments for likely indicators of attractiveness. Factors that improve the bargaining position of host governments, as enumerated in that literature (see Thomas, 1997a, pp. 9-18), can be adapted to urban areas to

create potential alternatives to just giving more subsidies. Savitch and Kantor (2003) discuss such alternative strategies, many of which revolve around regional cooperation. In principle, regional cooperation can strengthen the governments' hands in economic development, and I argue that we have seen this in the EU's ability to reduce subsidy use over the past 20 years (Thomas, 2000), but this cooperation cannot be taken for granted. Moreover, for the kind of municipal regions Savitch and Kantor (2003) discuss, the extension of regulatory reach may not matter all that much because the region itself is still too small. Indeed, the success they adduce to regional cooperation in the Paris region is due in part to its embeddedness in broader national regional policy and EU policies as well. By contrast, the failure they see in the New York City region came despite a no-raiding agreement in the NY-NJ-CT area, largely because of the lack of enforcement mechanisms of a type the EU possesses. This brings us to a more direct comparison of the EU and North America.

### **STRUCTURAL DIFFERENCES IN COMPETITION FOR INVESTMENT IN THE EU AND NORTH AMERICA**

There are two major axes on which investment competition differs among the United States, Canada, and the EU. The first is how centralized industrial recruitment is in each area. The second is the existence of control mechanisms. As we will see, the United States is the most decentralized on both of these dimensions.

The theme of this special issue of *American Behavioral Scientist* exemplifies the decentralized nature of U.S. economic competition precisely in its focus on urban economic development. Not only do state governments compete for investment but local governments do so as well with very little, if any, restriction from their states. Moreover, virtually no federal restrictions exist: only limitations on the use of tax-free industrial revenue bonds and anti-piracy regulations in the main federally sponsored economic development grants (Community Development Block Grants, Workforce Investment Act, and Small Business Administration programs) to state or local governments (Thomas, 2000, pp. 164-166).

In Canada, investment competition is generally centralized to the provincial level. Ontario is typical: "Cities in Ontario are prohibited from offering tax abatements, loans, loan guarantees, and lease-back arrangements. Any land owned, developed, or 'banked' by the municipality must be sold to developers at current market cost" (Reese, 1993, p. 576). Not all the provinces have such stringent restrictions, but tight constraints on municipalities are the norm, cutting thousands of jurisdictions out of the investment subsidy game. Moreover, truly large projects, such as auto assembly plants, are generally subsidized through a combination of provincial and federal funds.

In the EU, there are even more aspects of centralization. First, whether a location can give subsidies at all depends on whether it is classified as a development area as provided for on aid maps jointly agreed to by national authorities and the European Commission's Directorate-General for Competition (Thomas, 2000, p. 89). Second, in several countries (such as Ireland, Greece, Luxembourg, and Italy), a single agency will be charged with attracting foreign firms. Even when there is decentralization, this will be only to the level of major regions, such as Wallonia and Flanders in Belgium. Finally, even when local governments can give concessions to firms, this will only be true if they are in an EU-approved area, and generally according to non-discretionary rules regarding the conditions and amounts of support.<sup>17</sup>

The existence of control mechanisms, and their effectiveness, differs in the EU and North America as well. The EU's founding document, the Treaty of Rome, requires all Member States to notify the European Commission, in advance, "of any plans to grant or alter aid" and not to proceed with the plans without the Commission's approval (Article 88, paragraph 3).<sup>18</sup> The Commission's Directorate-General for Competition, which carries out this function (as well as anti-trust actions), thereby has a powerful mandate for centralized monitoring and control, which have been strengthened by several decades of practical experience and case law (Thomas, 2000, Chap. 3, 4). The Commission can act on its own initiative to investigate reported or unreported state aid; no complaint is required, although, of course, many cases do begin with complaints. This control structure has resulted in a substantial decline in the amount of state aid given overall in the EU, as well as providing a detailed database on the subsidies given by Member States.<sup>19</sup>

In North America, Canada has slightly more centralized control than the United States does, although neither has much. As part of the 1994 Agreement on Internal Trade, the Canadian federal government, provinces, and territories established a Code of Conduct on Incentives, the most important provision of which is to ban the use of relocation subsidies to attract a firm from one province to another. The complaint-based procedure was shown to be quite cumbersome the only time it was invoked, when British Columbia claimed that New Brunswick violated the Code of Conduct in its subsidies to United Parcel Service in 1995. After claim and counterclaim over the applicability of the Code, the complaint effectively died, although it was never formally withdrawn (Thomas, 2000, pp. 177-178). As far as information availability goes, the provinces and territories must report their incentives given to the Internal Trade Secretariat, but the only report completed to date covers 1995-1996 and is not a publicly available document.<sup>20</sup>

In the United States, as noted above, federal controls involve only industrial revenue bonds and anti-piracy rules in federal programs. There is no compilation of subsidy data at the state and local level, only estimates such as the one I present above. What does exist is a growing citizens' movement for transparency and accountability in the use of business subsidies. There are liberal,

**TABLE 2: Possible Factors Affecting Cooperation Over Investment Competition in the United States, Canada, and the European Union**

<i>Factor</i>	<i>United States</i>	<i>Canada</i>	<i>European Union</i>
Number of actors	50+	10	6-15
Relative strength of central government	Highest	Next	Lowest
Central monitoring	No	No	Yes
Enforcement	None	Complaints	Own initiative

conservative, and environmental organizations in this movement, corresponding to the equity, efficiency, and environmental problems of subsidies, respectively. There are national organizations involved (such as ACORN, Good Jobs First, and the Cato Institute) as well as state and local groups (such as Minnesota Alliance for Progressive Action, sponsor of the first and most extensive subsidy transparency legislation in the country). Working separately and together, these organizations have helped increase the availability of what data exists at the state and local level, and it was their efforts that lay behind the adoption of anti-piracy rules in federal programs. They have worked to tie government subsidies and contracts to wages and benefits (the “Living Wage” campaign).<sup>21</sup> As befits decentralized investment attraction, the control efforts are themselves decentralized.

These differences in centralization of control are reflected in the relative success of efforts to control investment competition. As Table 2 (taken from Thomas, 2000) suggests, the finding that EU states have been best able to cooperate on a framework to regulate the competition for investment is due in part to the fact that the EU has centralized both monitoring and enforcement mechanisms (for the importance of which, see Lipson, 1984, p. 7). Similarly, the decentralization of subsidy provision in the United States and increases in capital mobility mean there are potentially huge numbers of actors involved in the implicit cooperation problem, making success less likely (Olson, 1965, p. 35). The only factor that could lead to a better outcome in the United States is the stronger potential for federal controls over state actions such as those used in the United States in the cases of civil rights and raising the drinking age to 21 (Thomas, 2000, p. 252); however, to date, efforts for federal control of state and local subsidies have met with opposition from the National Governors Association (Kayne & Shonka, 1994, p. 25) and made little headway in Congress.

## CONCLUSION

This analysis of the competition for economic activity has both theoretical and policy implications. Due to the combination of governments’ investment imperative and growing capital mobility, governments face a Prisoners’

Dilemma that appears in practice to require a centralized solution. The United States, with its mixture of highly decentralized investment attraction and virtual lack of centralized control mechanisms, has seen substantial increases in the amount of resources devoted to wooing and keeping business. Voluntary multi-state agreements to solve even the most egregious problem, relocation subsidies, have been tried only twice and were completely unsuccessful in both cases. For this reason, it is unlikely that anything short of federal control can ultimately stop this competition. At the opposite pole, the EU has more centralized investment attraction, a centralized subsidy policy, and a 20-year trend of declining state aids. A further benefit to the EU of centralized subsidy control is that it has achieved substantial transparency in government use of location incentives and other subsidies. Nothing like the data generated by the Directorate-General for Competition exists in either the United States or Canada. This suggests that the most important short-run policy goal in this area is simply to achieve transparency by forcing state and local governments to report the business support they give, preferably in an internationally comparable manner. In fact, this should already be happening under the WTO's Agreement on Subsidies and Countervailing Measures, but so far neither U.S. nor Canadian subsidy notifications have included spending figures by subnational governments.<sup>22</sup> As citizens become more aware of the costs of investment attraction, it is likely to become a more salient political issue.

Canada's experience, more centralized than the United States but less centralized than the EU, suggests that a first substantive step beyond transparency is to ban relocation subsidies. There is widespread understanding that this is the least defensible location incentive used, but there is no consensus yet as to the best mechanism to implement such a ban. It may well be that a ban enforceable in U.S. courts would prove more effective than Canada's, which is hampered by a cumbersome enforcement procedure.

Finally, more general discussions need to take place on what will be considered legitimate uses of subsidies to attract investment. Providing subsidies can be a proper policy under some conditions, but their use must always take into account the potential for efficiency losses, increased inequality, and environmental harm. Individual governments rarely take the externalities of subsidy provision into account when deciding to use incentives; therefore, a set of guidelines for their use is crucial. From the standpoint of political feasibility, this will not go far until after transparency and relocation subsidies have been addressed, but even now there are signs in the United States of trying to bring subsidy use under the kind of regionally differentiated criteria that are standard in the EU.<sup>23</sup>

## NOTES

1. Due to frequent inquiries for this specific number after the publication of *Competing for Capital*, I went back to the original sources to calculate this figure in early 2001.

2. If one excludes \$32.2 billion of federal accelerated depreciation, the total non-agricultural subsidies amount to \$99.1 billion, or 13.7% of gross fixed non-residential investment. For a discussion of the pros and cons of including accelerated depreciation, see Thomas (2000, pp. 157-161).

3. In normal three-factor apportionment, states will calculate a multi-state firm's taxable income for that state on the basis of the proportion of sales, employment, and production in that state in the company's U.S. totals. With single-factor apportionment, a state will calculate taxable income based on sales alone, which substantially reduces the income (and hence taxes) of any firm that sells a large proportion of its production out of state.

4. Whereas Lindblom's (1977) analysis assumes that this dynamic plays out in democracies, Jeffrey Winters (1996) shows that the structural power of capital is equally important in non-democracies. Bennett and Sharpe's (1985) formulation anticipates Winters in this regard.

5. Although one can imagine a stable rural area without resource needs, it may have relatively poor infrastructure and thus not be attractive as an investment location. By contrast, a suburban location without resource needs will almost invariably be attractive to some kinds of investment.

6. Note that the subnational competition for investment in the United States dilutes the bargaining power one would expect the United States to have vis-à-vis foreign multinational corporations (MNCs) due to its tremendous market size. Probably thousands of foreign firms over the years would have located production facilities in the United States without any subsidy at all due to the market opportunity only to find they were able to receive subnational subsidies, sometimes in the hundreds of millions of dollars.

7. Note that I am here using game theory in the sense of a "model" described by Duncan Snidal (1985, pp. 32-34). In particular, I am extending Guisinger's (1985) analysis by asking if changing one of the main parameters (number of players) changes the outcome in ways suggested by previous analysis of Prisoners' Dilemma, that is, a greater number of players will have a more difficult time achieving cooperation, all other things equal.

8. Partly for this reason, it is often argued that investment incentives are "ineffective." (The other reason is that these subsidies are rarely cited by firms as being among the top location determinants.) As Guisinger (1985) nicely demonstrates, the claim that incentives are ineffective is rhetorical sleight-of-hand; that is, many analysts critical of investment subsidies imply that they do not even affect investment location, which would necessarily make them bad policy. That is not my approach. I consider them bad policy precisely because they do affect investment location (as Guisinger makes quite clear), which is a precondition for the Prisoners' Dilemma model of this chapter to make sense. (See Guisinger [1992] for an excellent discussion of this issue.)

9. The 1985 Guisinger study examined the importance of investment incentives by formulating questions of investors posed specifically with Prisoners' Dilemma in mind. Thus, instead of asking firms how important incentives were to the decision, the scholars taking part in the study asked whether investments would have been made in the absence of the incentives received, if all other countries continued to offer their incentives. Two thirds of the projects surveyed in four industries (automobiles, computers, petrochemicals, and food processing) would have been located in other countries, according to their respondents ( $N = 74$ ) (see Guisinger, 1985, pp. 48-49) Given the contrast with the other way of posing the question, this result strongly confirms the Prisoners' Dilemma conceptualization of the problem.

10. We would then describe subsidizing as the dominant strategy for both governments because it provides a higher pay-off than any other strategy (see Hamburger [1979], p. 45).

11. This is because it is difficult to know in the abstract how many more provinces beyond Ontario and Québec would need to cooperate for all to benefit, even in the face of defection by the remaining provinces.

12. On the Midwest, see Gauf (1992). On the CT-NY-NJ case, see Prokesch (1992) and Myers (1994).

13. Loveridge (1996, p. 152) reports that there are only 200 to 300 major projects annually in the United States.

14. For examples of the application of Tit-for-Tat to international Prisoners' Dilemmas, see Lipson (1984) *passim*. Moreover, note that for U.S. states, many of the alternative means of sanctioning, such as tariffs and countervailing duties, are obviously unavailable.

15. Although in the text I focus on subsidies or tax breaks, there is a wide variety of other policies that could improve the financial performance of a firm in a particular location, such as interventions in the labor market (e.g., "right to work" laws or weakening the unemployment insurance program).

16. An important caveat is that poorer jurisdictions may not be able to afford to outbid richer ones or to outbid other poor jurisdictions that are part of a richer entity (e.g., compare Greece with Eastern Germany). There is some evidence for this in both the United States and the European Union (EU) (Thomas, 2000, p. 6). One possible explanation for higher income or lower unemployment countries giving more subsidies than might be expected is that they wish to reward business supporters (Neven, 1994, p. 1).

17. This is my summary of the "Country Surveys" of all regional aid programs within the EU in Yuill, Allen, Bachtler, Clement, and Wislade (1995, pp. 140-401).

18. Prior to the 1997 Treaty of Amsterdam, this was numbered Article 93, and older literature refers to it as such.

19. For a detailed evaluation, see Thomas (2000, Chap. 6).

20. See the Secretariat's Web site at <http://www.intrasec.mb.ca/eng/progress.htm>, under Chapter 6, investment. According to one provincial official, the reason the information is not public is that "it would be like waving a red flag in front of the U.S. Trade Representative" (confidential interview).

21. No list could hope to be comprehensive. For a beginning, see Thomas (1997b; 2000, pp. 168-176 and Appendix 4).

22. For the United States, see Thomas (2000, p. 152); for Canada, see the Canadian WTO notifications at the Department of Commerce's Electronic Subsidies Enforcement Library at <http://ia.ita.doc.gov/esel/notify/ddf1/ddf1ndx.htm>.

23. For instance, tax increment financing (TIF) reform in Missouri has been designed to allow some forms of TIFs to be used only in objectively designated poorer areas of the state. In 2002, both the House and Senate passed bills reflecting these considerations but they were not reconciled before the end of the legislative session.

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