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The Economic Impact of Property

Joseph J. Chinn

In recent years, localities have relied to an increasing extent on property tax incentives as economic development tools. The desirability of using such incentives may be evaluated through an analysis of the resulting financial flows to firms and to various levels of government.

Past research has focused on the influence of the property tax on firms' location decisions. It has failed to specify the exact conditions under which firms open, expand, or relocate operations based on tax incentives; or receive subsidies despite lack of tax influence on location decisions. Most studies have found that property tax levels are not significant in determining firms' initial locations, and do not cause firms to relocate in other metropolitan areas. However, a consensus may be building that lower tax rates or lower assessed values can induce firms to move within metropolitan areas; several studies show an inverse relationship between tax rates and the level of business activity.

A locality seeking to attract businesses may offer property tax abatements (rebates), permitting firms locating in the area to pay reduced taxes for a period of years. Alternatively, under tax increment financing (TIF), a firm pays its full property tax but receives other governmental benefits for locating in a TIF district. TIF is a newer economic tool, which has been the subject of little research to date.

Tax Abatement and the Firm's Location Decision

A firm strives to maximize, over the long run, the discounted expected value of its after-tax profits. Because location can influence factors that determine both outflows (land, labor, and transportation costs; property and income taxes) and inflows (sales revenues and tax abatements), each firm must include location in its profitability analysis.

Local governments know that firms undertake such analyses, and may offer property tax abatements to entice firms to locate in their jurisdictions. Such offers

are not, of course, without risk for governmental units. In offering tax abatements, a taxing authority must consider three possible outcomes and the respective impacts on the locality.

Case I: An established firm relocates to the area only because of tax reduction; without the tax abatement it would earn more profits in an alternate location. The greater the disadvantage that the location would otherwise present, the greater the tax incentive the local government must provide to an entering firm. Yet abatement in this case is not a "zero-sum" game, with recipients gaining the full value given up by donors; it is a "negative-sum" game. The firm does not receive the full benefit of abatement, because it pays income tax on added profits, thereby transferring part of the local largesse to state and federal coffers. Society also suffers a loss, because the tax incentive causes the firm to bypass the optimal location.

Assume, for example, that a firm expects pre-tax profit of \$1 million if it locates in the optimal city, but of only \$900,000 in the local jurisdiction. A local tax abatement program, however, reduces the firm's property tax, and increases its profits, by \$250,000. Assume further that the firm faces 40% combined state and federal income tax rates. By accepting the incentives, the firm earns an extra \$150,000 in pre-tax profit, \$60,000 of which is paid as income tax. Cost to the community, however, of generating a \$150,000 benefit is \$250,000. Societal loss of \$100,000 results from a "successful" tax abatement program; that amount of value is lost to society through suboptimal land allocation.

The community, of course, expects net long-term benefits. Most states limit abatement periods by statute to ten years, and localities expect to receive full ad valorem taxes thereafter. Yet the firm earns positive income in that location only with tax incentives, and the more generous the abatement, the more likely it

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ORER News

HENSON TO SPEAK AT ALUMNI LUNCHEON

There will be a luncheon in Chicago for U of I real estate alumni on Friday, April 21. Gene Stunard has again arranged for the use of the Chicago Yacht Club. The speaker will be Illini Head Basketball Coach Lou Henson. A cash bar will be available. The special insert in *Letters* addressed to alumni contains details and reservation information.

COLWELL JOINS WEIMER FACULTY, IAR COMMITTEE

ORER Professor Peter F. Colwell has been appointed to the faculty of the Weimer School of the Homer Hoyt Advanced Studies Institute (HHASI). Through its Weimer School, the Hoyt Institute grants postdoctoral fellowships to promising scholars in the real estate and urban economics field. Each researcher in the program completes a project under the guidance of a faculty advisor. Those who serve as Institute faculty are senior members of the profession and fellows of the HHASI.

Colwell has also been appointed by Illinois Association of Realtors® President William Cahill to serve as a Director of the Illinois Real Estate Educational Foundation (REEF) and as a member of its Scholarship Committee. The Illinois Real Estate Educational Foundation provides and administers scholarships, and promotes educational programs in academic institutions and within professional organizations. Colwell will serve on the committee through the 1989 calendar

Tax Incentives

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is that the firm could benefit by moving to the optimal location (or to a new jurisdiction offering incentives) after the abatement period. Tax abatement, then, burdens society not only with financial loss, but also with disruption, as it increases the likelihood that firms will frequently relocate.

Case II: The firm receives an abatement, but would have located in the area even without incentives. Since it is impossible for a local government to distinguish between firms that would locate in the area even without tax relief and those that would require incentives, all firms entering the area (or expanding) receive abatements. A study using Ohio data determined that a substantial majority of abatements are given to firms that would not have required them. The result is a transfer of resources from local jurisdictions to firms, and to the state and federal governments through income tax collections. Strangely, though, there is no net loss to society under such circumstances.

Assume that a firm expects pre-tax profit of \$1.1 million, even without tax incentives, if it locates in the optimal location; but of only \$1 million in the second-best location. Tax abatement in the optimal location reduces the firm's property tax, and increases profit, by \$250,000. By locating in the optimal area and receiving an abatement from that community, the firm earns an extra \$250,000 in pre-tax profit, \$100,000 (again assuming 40%) of which is paid as income tax. Since it costs only \$250,000 to generate a \$250,000 total benefit, there is loss to the local community, but no societal loss.

Yet the result is still a negative-sum, rather than zero-sum, game. Tax abatement programs place high administrative costs on both the jurisdictions that establish them and the firms that participate.

Case III: A newly created firm locates in the area, or an established firm in the area expands, only because of tax abatement. However, if a new firm or an expanded operation could have been profitable (shown by positive net present value) without tax incentives, it would already have been established somewhere. If the new firm or expanded operation shows a positive net present value only with tax abatement, then a new firm or expansion has been created which otherwise would not have been viable. A later removal of the tax subsidy would, presumably, cause the new firm or expanded operation to fail. It is inefficient to channel scarce money to firms that, absent subsidies,

show negative net present values.

Is TIF the Solution?

Firms relocating in tax increment financing districts pay full ad valorem property taxes. The (perhaps indirect) benefit to relocating firms is that the incremental tax paid on the value of new property (or proceeds from bonds sold in anticipation of increased tax revenue) is allocated to public-purpose redevelopment uses. State laws typically require that TIF be offered only in blighted areas, but statutes provide different definitions of blight.

The benefit of TIF is that it can improve the economic efficiency of an area. Such a favorable result is possible, however, only if redevelopment expenditure is for infrastructure improvement that truly benefits the entire community. If the "public purpose" use of TIF funds is to prepare parcels for sale at reduced prices to private developers (land "write-downs"), the result to the community is the same as that provided by tax abatement. Yet in either case, taxes may be shifted from other taxing districts to TIF jurisdictions.

Land write-downs are designed to foster developments which would otherwise not be undertaken. Developers benefit by buying properties from the public sector at discounted prices (of up to 100% in cases of total write-downs). Though a firm developing property for its own use can receive a write-down, professional developers are the typical recipients. If a goal of local tax policy is to attract new business to the area, TIF is less desirable than tax abatement, unless developers share TIF benefits with end-user firms.

A sharing of the subsidy can be analyzed in a manner similar to that of property tax abatement. A firm will only locate in the TIF district if expected after-tax profits with the subsidy are higher than they would be in other locations. A firm locates based on a land write-down if the combined value of the write-down plus the expected pre-tax profit in the jurisdiction exceeds expected profit in the otherwise-optimal location. In this situation, inefficiency in the form of a net societal loss occurs for the same reason (sub-optimal allocation) as that which occurs under tax abatement. Revenue that the government foregoes is not property tax, but rather the discounted value of the land write-down given the firm.

Of course, a firm would locate in the TIF district if that location promised higher profit, even without subsidy, than other locations. If the government provides a land write-down to such a firm, there is a transfer from the local jurisdiction but not a net societal loss. The result is similar to that in the Case II tax abatement situation

discussed above.

Firms making location decisions must consider two main differences between tax abatement and land write-downs. First, abatement increases profit on a yearly operating basis, whereas a write-down reduces initial capital costs (unless the write-down causes an end-user to pay reduced periodic rent to a developer, in which case the write-down has the same effect as tax abatement). Second, a tax abatement goes directly to the end-user firm. If a write-down benefits the real estate developer, at best only a portion of the subsidy goes to the end-user, so tax abatement is of more value to the end-user firm than is a write-down. Therefore, there is greater likelihood that new firms will locate in the area because of abatement than because of write-downs. Of course, if an end-user acts as its own developer, then the value of a write-down is equivalent to that of a property tax abatement, assuming the costs to the public sector are the same.

Potential Tax Shifting With TIF

With TIF, there can be an effective tax shift from other taxing districts to the municipal district in which TIF is practiced. A shift occurs unless 100% of the increase in the tax base (total assessed value of all properties) is caused by TIF-related expenditures. If inflation or ordinary market forces increase assessed values, a tax shift ensues. Taxes can be shifted either from other taxing districts within the municipality practicing TIF or from districts outside the municipality.

Tax shifting is possible because the TIF district collects tax on all increases in assessed property values in excess of a base year value. Property taxes, then, shift from school, park, and sanitation districts to the general municipal taxing district. To the extent that tax district boundaries cross city boundaries, taxes are shifted from residents of other municipalities and the county. The county district extends beyond municipal boundaries, and in many areas school, park, and sanitation districts cross municipal boundaries. If a school district encompasses portions of several municipalities, an especially large tax shift is possible because school district millage rates tend to be substantially higher than municipal millage rates. Generally, the tax shift from one city to another (inter-city) is more of a policy concern than the shifting of taxes among districts within the TIF municipality (intra-city). Inter-city transfers hold more potential for abuse, because the municipality in which an intra-city transfer occurs is accountable to its own residents.

As noted, intergovernmental tax shifts

occur to the extent that property values are increased by inflation and market forces, rather than by TIF-financed development. Land write-downs for developments that would have located in the district even without incentives also cause tax shifts. Administrators of some TIF districts attempt to define their districts' borders to include sites whose owners have committed to additional construction. Construction, and an attendant increase in the jurisdiction's values, will occur after base year valuations are established. Added tax revenues attributable to higher total values accrue to the TIF municipality, though the TIF incentives did not cause the added investment.

The amount of actual tax shifting depends on various taxing districts' boundaries and millage rates. If TIF is to be effective, the shift should clearly be toward economically declining areas. Unfortunately, evidence suggests that TIF programs do not yield desired results. An important study involving Milwaukee and nearby communities in Wisconsin (a state that has made extensive use of TIF) determined that areas gaining the most from TIF were smaller communities experiencing rapid growth. Large, declining cities seem to have the least potential to gain from TIF programs.

TIF Infrastructure Improvements

TIF does carry the potential to correct a market imperfection that typically cannot be handled through other government action. Infrastructure projects that are not supported by user fees are usually financed with general obligation bonds, backed by the issuing municipality's full faith and credit and repaid through property tax collections. If a project financed in such a manner does not increase the local tax base enough to provide debt service on the bonds, then the local jurisdiction must raise added revenues by increasing either property tax rates or sales tax rates.

A market imperfection exists when a municipality does not undertake an infrastructure project which would provide a positive net present value to society. The municipal taxing district receives only a portion of the benefits (higher property taxes from an increased tax base) while incurring all the costs; other taxing districts receive benefits but pay none of the costs. A municipality facing intra-city and inter-city transfers would undertake a project if additional taxes accruing to various taxing units in the municipality exceeded the tax outflow to other municipalities. If there is loss of tax revenue to areas outside the district, the project creates some degree of positive externality. TIF can possibly correct

for such a problem by allowing the municipality to benefit from taxes that would otherwise accrue to other taxing districts.

Assume that a city expects expansion of its road system to result in increased economic activity. The accompanying rise in real estate values will increase property tax revenues over the next 30 years; the present value of the expected revenue increase is \$1.2 million. The present value of the project's costs is \$1 million. The municipal tax district retains 30% of all real estate taxes collected, and 75% of the taxes are collected by taxing districts within the city. A cost/benefit analysis yields the following results:

- 1) The municipal district, which overlaps city limits, retains only \$360,000 (30%) of the \$1.2 million benefit, but incurs the entire \$1 million cost, realizing a net present value of -\$640,000.
- 2) The city residents receive only \$900,000 (75%) of the \$1.2 million benefit, but incur the entire \$1 million cost, realizing net present value of -\$100,000.
- 3) Society receives the entire \$1.2 million benefit, so though it incurs the entire \$1 million cost, it still realizes a positive \$200,000 net present value.

The project is not undertaken because there is a negative net present value to both the municipal district and the city. However, such large positive externalities exist that the project should be undertaken for the benefit of society. TIF can possibly correct the problem, because it provides for the municipal taxing district to retain all incremental taxes generated from higher real estate values. Yet there are potential leakages; TIF-financed projects might raise property values beyond the district's borders, and a TIF system can collect the increment only during a statutorily limited time period.

The positive externality problem of general obligation bond financing may explain the neglect of the nation's infrastructure system in recent years. Such neglect is unfortunate; government surveys have shown that firms in virtually all industries not only weigh the availability of public works facilities heavily in their location decisions, but weigh such availability more heavily than the existence of tax or other financial incentives.

The findings suggest that localities may achieve more success in economic development through infrastructure improvement than through tax abatement or other business subsidies. Yet increased infrastructure expenditure is likely only if externality problems can be controlled. A municipal taxing district must be allowed either to retain most of the financial benefit resulting from infrastructure

improvements or to pass some of the costs along to other taxing bodies that share the benefits. Tax-increment financing allows for more of the benefits to be retained by the municipal taxing district.

Conclusion

Under any of the circumstances considered in the above analysis, property tax abatements are shown to provide negative results to society. Society could benefit from federal laws restricting the use of property tax abatement programs. Tax increment financing holds more promise as a tool of economic development, though tax shifting problems can result. Shifting might be reduced through indexing, which would permit the base year tax base to increase by the rate of inflation. Other possible improvements in the use of TIF might include permitting expenditures on infrastructure only, allowing affected taxing districts some control over expenditures, and establishing stricter guidelines for creating TIF districts.

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Foreign Ownership:

Peter F. Colwell and Joseph W. Trefzger

In a society without laws, ownership is nothing more than the ability to use property until a more powerful party terminates that use by force. Fortunately, the U.S. is a land where law rather than force rules. The ultimate benefit of ownership, where law prevails, is the right to receive residual income and other residual values. There certainly may be other attendant benefits, such as the right to use, although owners routinely assign rights of use to other parties through leases.

Yet vocal critics in this country, from businesspeople to legislators, have attributed much greater importance to the concept of ownership in bemoaning the presence of foreign purchasers in the U.S. real estate market. They note that the British, Canadians, Dutch, and, particularly, the Japanese (with abundant capital but little available real estate) purchase income producing buildings at record prices in U.S. cities, and fear that America is being sold away. Are their concerns well-founded?

We suggest that they are not. There are two reasons why we should welcome foreign purchases of U.S. income producing real estate. The first is the nature of the ownership right, and the second is the economic benefit that accrues to both the real estate market and the nation's economy as a result of foreign purchases.

One of the first lessons in any introductory real estate course is that real estate ownership, because of the immobility of the asset, involves a bundle of rights. The rights are protected, but also limited, by federal and, more directly, local laws. Among the limitations are taxation, emi-

nent domain, and the police power.

Through the police power, local governmental units have instituted rent controls on income producing residential property in several cities. Notable examples have been New York City and Berkeley, California. The owners of affected buildings, who are in many cases vocal, visible, and voting local citizens, are unable to curb rent controls when the majority of the local population favors them. Certainly we can not expect that foreign owners would fare any better in limiting voters' control of their investment returns. (The recognition that rent control can be enacted by unhappy citizens should not be equated with an advocacy of its use.)

In other words, if parties without the ability to vote were to control a high percentage of an area's income producing real estate (residential or commercial), and were to attempt to use that control to the detriment of the local economy, the citizenry could simply legislate away the owners' residual returns by enacting rent control statutes (or perhaps levying added taxes on real estate ownership, or even taking property under eminent domain). Foreign purchasers' fortunes are clearly tied to those of local owners, who have greater ability to influence land use issues. Foreign interests, then, have no incentive to become the majority landowners in a jurisdiction. The problem, to the extent that a problem may exist, is self correcting. In buying U.S. real estate, knowledgeable foreign investors show confidence in a system in which the protection of property rights limits political risk.

Foreign purchasing power also benefits local real estate markets. Well-meaning parties who worry that property may become priced beyond the reach of American buyers would nevertheless likely state that an owner should be allowed to sell for the highest possible price. We would not strengthen our real estate markets by assuring buyers that their artificially low purchase prices would be matched by artificially low future resale prices resulting from restricted ownership.

Finally, the inflow of foreign purchasing power benefits our nation's economy. For example, Americans buy Japanese consumer products, and use them in the U.S. to enhance the quality of life. The Japanese, on the other hand, buy U.S. real estate, and have no choice but to leave the property here for the benefit of domestic users. In addition, the foreign owners' dollar-denominated residual returns may well be spent on more dollar-denominated American goods.