

**Property Tax Incentives and Economic Development:
A Review of the Literature and Implications for Toronto**

A report prepared for the Toronto Office Coalition

**Enid Slack
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The City of Toronto has introduced a property tax incentive to “attract new businesses consistent within the City’s key economic sectors, expanding the City’s property tax revenues with a net positive impact on the City over the long term” (City of Toronto, 2007, p. 3). The incentive is known as a tax increment equivalent grant (TIEG) that is available city-wide for a period of ten years and is linked to the development of key economic sectors. TIEGs are funded from the new incremental tax revenues that, but for the provision of this financial incentive, are not expected to be realized by the city.

This paper reviews the literature on tax incentives and economic development with a focus on whether property tax incentives have a positive and significant impact on economic development and whether they should be used to stimulate growth. The literature is almost entirely based on U.S. jurisdictions, in large part, because of the proliferation of tax incentives in that country.¹ The goal set out for most of these incentives is to increase employment and/or income generated in the jurisdiction (Wassmer, 2007). They are also designed, in many cases, to increase the property tax base of the jurisdiction and property tax revenues (Wolman & Spitzley, 1996).

¹ Almost all of these studies are based in the U.S. probably because, until recently, Canadian municipalities were not permitted to offer fiscal inducements (such as property tax reductions and exemptions) to new firms or businesses. A recent study of stand-alone property tax abatements in the U.S. indicates that 35 states allowed for these abatements in 2004 (Dalehite, Mikesell, & Zorn, 2005). In 2007, there were at least 7 other states that allow municipalities to offer a reduction in property taxes but only in conjunction with a larger economic development program (Wassmer, 2007).

This review focuses on three major questions:

- Do property tax incentives have a positive and significant impact on economic development?
- Should property tax incentives be used to stimulate economic development?
- Should the property tax on non-residential properties be reduced?

Following the discussion of these questions, the paper reviews briefly the use of tax increment equivalent grants in other Ontario jurisdictions and describes a similar program recently introduced in Montreal. Finally, the paper sets out the implications of the findings for tax incentives in Toronto.

1. Do property tax incentives have a positive and significant impact on economic development?

Property taxes represent a component of the costs of a firm or business. To the extent that property taxes are correlated with the cost of public services that are used by businesses, they are similar to other input costs such as wage and salary payments for labour. If the taxes are unrelated to the cost of public services, however, they represent a fixed charge that has to be paid (fixed in the sense that it is unrelated to the consumption of public services or income generated by the business).

Since firms or businesses generally locate where they can maximize profits, fiscal inducements such as lower property taxes may influence the location decision in the same way as would a reduction in other production costs. If tax differentials reflect better local public services for which firms are willing to pay, then higher taxes will not have an impact on location (Wasylenko, 1981, p. 159) because higher taxes are compensated for by better services. If tax differentials do not reflect better services, their importance to a firm's location will depend on a number of factors including the magnitude of the tax differential between different locations and whether the differential is large enough to offset the differentials in other costs or market factors.

Empirical studies of the statistical significance of different factors that influence the location decisions of businesses began in the U.S. in the 1950s but really came into prominence during the 1980s. In these studies, a measure of a jurisdiction's economic activity (income, employment, number of manufacturing jobs, etc.) or change in activity is correlated with a set of explanatory variables that are theoretically expected to have an impact. Some studies estimate the overall influence of property taxes on various

measures of economic activity; other studies estimate the impact of property tax incentives on business activity. The first type of analysis is much more widespread than the second.

The advantage of this type of empirical analysis (known as regression analysis) is that it allows the researcher to separate the independent effect of property taxes (or property tax incentives) from other variables that are expected to influence economic activity.² These studies have been done for states, municipalities, or a combination of the two. The data include one particular jurisdiction over a period of time (time-series), or a number of states or municipalities in a particular year (cross-section), or a combination of both (panel data).

The studies in the 1950s, 1960s, and 1970s generally concluded that local property taxes did not have a statistically significant impact on business location decisions and economic activity. The explanation offered for these findings was that local taxes accounted for only a small percentage of production costs and that there were many more significant factors that influenced the location decision. These findings reflect, to a large extent, that the authors were comparing property taxes *between* metropolitan areas or states and not *within* metropolitan areas, however.

Intra-Metropolitan versus Inter-Metropolitan Studies

More recent studies focus less on decisions *between* metropolitan areas (inter-metropolitan location decisions) and more on decisions *within* metropolitan areas (intra-metropolitan location decisions). The findings of these studies indicate that, while property taxes are not a major factor in inter-metropolitan location decisions, they have played a role in intra-metropolitan location decisions (Kitchen, 1985); (Bartik, 1991); (Ontario Fair Tax Commission, 1992). Four studies in the 1980s, for example, find that the property tax (and other local taxes) have a statistically significant effect on business activity in jurisdictions within a metropolitan area:

- Wasylenko found that property taxes on a number of firms had an impact on their relocating to the Milwaukee suburbs from 1964 to 1974 (Wasylenko, 1980).

² Surveys of businesses to determine the impact of property taxes on location have also been used to gather information on property taxes and business location. The findings of these surveys are generally discounted in the literature because of the perceived bias in favour of a negative impact of taxes on businesses if those interviewed think that they can change public policy in a way that will affect their bottom line (Wassmer, 2007, p. 24). Only empirical studies of business location are summarized in this paper.

- Fox examined the impact of taxes and spending on the amount of industrial land in the Cleveland metropolitan area in 1970 and found that fiscal variables were a significant factor – less land was demanded for industrial use in communities with a high property tax rate (Fox, 1981).
- Charney found that local taxes had an impact on firm locations in zip code areas in Detroit from 1970 to 1975 (Charney, 1983).
- McGuire estimated that property taxes had an impact on the location of business building permits in the Minneapolis-St. Paul metropolitan area from 1976 to 1979 (McGuire, 1985).

The most comprehensive review of the studies in the 1980s on the impact of property taxes on business activity (Bartik, 1991) concludes that state and local taxes have a larger impact on business location within metropolitan areas than between metropolitan areas. The reason for this conclusion is that municipalities in different metropolitan areas are not as close substitutes as municipalities within the same metropolitan area. These results are not surprising. In terms of inter-metropolitan location decisions, business activity is most influenced by market conditions, the availability and cost of a skilled labour force, the presence of necessary production materials, and proximity to markets. Different metropolitan areas have different labour markets with potentially large differences in wages and the quality of available labour. There could be vast differences, as well, in the cost of transporting goods to and from the metropolitan area. If property taxes account for a relatively small proportion of the total costs of a business, any reduction in the tax is unlikely to be large enough to initiate a relocation decision or to encourage significant business activity.

Intra-metropolitan location decisions, on the other hand, may be affected by property tax differentials. The smaller the area over which the business is choosing to locate, the more similar are the non-tax factors. Within a large urban or metropolitan area, for example, market conditions and cost variables (such as labour, transportation, and energy costs) tend to be reasonably uniform. In this context, the fiscal factors take on more significance: lower property taxes in one community will generate lower costs at the margin and higher profits for businesses locating in that particular community (Bartik, 1991, p. 39). The review of intra-metropolitan studies suggests an average elasticity of -2.0 for taxes with respect to business activity. This estimate means that a reduction in taxes of 10 percent will increase

business activity by 20 percent (Bartik, 1991). The elasticity within metropolitan areas is about four times the elasticity between metropolitan areas (Bartik, 1991).

Another important review of the literature (Wasylenko, 1997) also concludes that taxes do not have a large impact on economic activity across states but there is convincing evidence that state and local taxes can matter to intra-state levels of local employment, employment growth, manufacturing employment, and births of manufacturing firms. His elasticity findings are similar to those estimated by Bartik.

Stand-Alone Property Tax Abatement Programs

The studies summarized above test the impact of property taxes (and not property tax incentives) on various measures of economic activity. Wassmer reviews studies from 1984 to 2006 that analyze the impact of stand-alone property tax abatement programs on economic activity (Wassmer, 2007). The following summary of the findings of these studies suggests that stand-alone property tax abatement programs probably do not have a significant impact on economic activity:

- McHone estimates the impact of tax abatements on economic activity using data from 26 standard metropolitan statistical areas (SMSAs) that cross state boundaries over the period from 1970 to 1979 (McHone, 1984). The author decomposes employment growth of the SMSAs and each of their constituent counties into two parts: the part that can be attributed to national average growth and the part that is associated with the competitive advantage offered by the county (such as industrial development incentives which are unique to some counties in the SMSA).

The findings of this study show a weak relationship between differences in intra-urban employment growth and industrial development incentive advantages that a county has over other parts of the metropolitan area. Another set of regressions, however, suggests that the *probability* of a county experiencing an employment growth rate that exceeds that of the SMSA is influenced by industrial development incentives (specifically, state administered industrial bond programs, land and capital property tax exemptions, and accelerated depreciation of equipment).

- Mullen analyzes data from all of the communities in New York State and concludes that the property tax abatement increases the fiscal stress of the municipality because it increases the tax rate on unabated property (Mullen, 1990). His findings indicate that a one percent increase in the amount of local property that is granted a partial exemption from property taxes is expected to result in a 0.83 percent increase in the property tax effort compared to a representative tax rate necessary to generate the median revenue yield across all communities.
- Wassmer investigates whether the positive relationship between an abatement by a jurisdiction and economic activity is causal (Wassmer, 1994). In other words, did the abatement really cause the economic improvement or was it merely offered at the same time that the improvement would have happened anyway? His statistical analysis checks whether the abatement moves the jurisdiction off of its long-term growth trend for different measures of economic activity. For only 5 of the 31 area cities in metropolitan Detroit that he examined was the manufacturing or commercial abatement found to exert the desired positive effect. Moreover, the expected effect was more likely to be found for manufacturing activity and in localities that were particularly unattractive to business.
- Anderson and Wassmer estimate the impact of Michigan's stand-alone manufacturing and commercial property tax abatement programs on 112 municipalities in the Detroit metropolitan area over the period from 1977 to 1992 (Anderson & Wassmer, 2000). They test the impact of a \$10 million increase in the yearly abatement of property tax base in a locality on the values of manufacturing property base, commercial property tax base, employment rate, poverty rate, property tax rate, industrial development bonds, tax increment finance adoption, and downtown development adoption.

Their findings indicate that, over the early part of the period that the abatement was in place (from 1974 to 1977), the simulated increase in manufacturing abatement is expected, on average, to generate a \$7.6 million increase in the actual (not taxable) manufacturing property base. The same \$10 million increase in manufacturing abatement was not correlated with manufacturing property value if offered between 1978 and 1982 and was negatively correlated with local manufacturing if offered between 1983 and 1987. As the authors report, the average

percentage of property value granted an abatement across the 112 communities was around 2 percent in 1977 and rose to nearly 35 percent in 1992. They believe that the reason for this growth is that abatements were losing their impact after other municipalities began to offer them and firms began to expect them.

In terms of commercial abatements, the authors' regression-based simulations show that a \$10 million local increase was related to a local decrease in commercial property value. They conclude that communities offer this type of abatement to try and offset local losses in commercial activity but the abatements have little impact. As Wassmer concludes: "the intra-metropolitan location of commercial activity corresponds with the strength of a local market and local property tax reductions can do little to offset a weak local market" (Wassmer, 2007, p. 32).

- Bollinger and Ihlanfeldt use regression analysis to determine the variation in economic activity at the neighbourhood level in Atlanta, Georgia over the period from 1985 to 1998 (Bollinger & Ihlanfeldt, 2003). A full abatement was given for five years to commercial and industrial properties newly located in census tracts designated as "depressed" by the state. The abatement declined to 20 percent in the last 5 years of a guaranteed 25-year abatement. Beginning in 1987, a similar residential abatement was provided for under-populated and depressed areas. Their results showed that the non-residential abatement resulted in about 80 new jobs per census tract per year. The residential abatement had no measurable impact on new housing development, however.
- In a recent article by Fullerton and Aragoes, the authors provide evidence that tax abatements in El Paso, Texas, which were first introduced in 1988, were ineffective (Fullerton & Aragoes-Zamudio, 2006). They employed causality tests to determine whether changes in property tax abatements precede changes in economic activity (measured by gross metropolitan product, residential housing values, personal income, retail sales, and jobs). Their findings indicate that changes in abatements do not precede changes in economic activity for any of the economic activity indicators. In short, abatements are not effective in stimulating economic activity.

There are a number of reasons why different studies come up with different results. For example, the measure of business activity varies across studies and can include measures such as employment, investment opportunities, sales, and other measures for both new and existing businesses. The extent to which non-tax variables are used along with the property tax variable to explain business activities will also result in different findings. The nature of the property tax variable (whether it is the effective property tax rate or property tax revenues) and how it is measured will affect the results. Three other factors will also affect the results:

- Whether or not a measure of public services provided by the tax revenue is included;
- The type of industry being analyzed;
- Whether or not other jurisdictions match the tax incentive.

Each of these factors is discussed below.

Service differentials

The inclusion of public services into the model to reflect that firms consider the benefits from public goods and services as well as property taxes when they make their site selection changes the results on the impact of property taxes on business activity (Wasylenko, 1997). Public services influence economic development by providing an un-priced input to production for businesses (for example, public highways). Expansion of public services may reduce the prices paid for those services by business (for example, education expenditures may reduce the quality-adjusted prices of labour by increasing the supply of workers of a given quality) (Bartik, 1991). In short, firms prefer to locate in communities with extensive business-related services because, without local government provision of these services, the firms would likely have to provide them on their own (Fox, 1981).

Indeed, the studies that control for differences in service levels across jurisdictions are more likely to find that the property tax has a negative impact on business activity. The reason is that studies that do not control for public services may confuse the negative effect of taxes with the positive effects of services and thereby under-estimate the impact of taxes (Bartik, 1991, p. 103). A review of 26 studies on the effect of state and local public services on an area's economic growth concludes that 15 of the studies found effects that are positive and significant (Bartik, 1991).

Studies that have analyzed the effects of government spending on economic activity show that education spending has a positive effect on business activity in 12 of the 19 studies reviewed and a positive and significant effect in 6 studies (Fisher, 1997). Similarly, spending on public safety had a positive effect on business activity in 5 of the 9 studies reviewed and it was significant in 4 of the studies. Most of these studies, however, analyzed spending at the state level rather than at the local level.

A more recent study by Gabe and Bell investigates the effects of *local* fiscal policy on location decisions of 3,763 establishments that began operations in Maine between 1993 and 1995 (Gabe & Bell, 2004). Their empirical results suggest that businesses favour municipalities that spend high amounts on public goods and services, even when these expenditures are financed by an increase in local taxes. These findings suggest that a policy of reduced local government spending to balance a tax cut may attract fewer new businesses than a policy of additional spending and higher taxes.

Finally, a study on Michigan's economic competitiveness makes the argument that business tax cuts that are financed by a reduction in local public services could have a negative impact on the economy in two ways (Bartik, Erickcek, Huang, & Watts, 2006). First, reduced spending on public services can result in a reduction in jobs and wages for public employees and employees in private organizations that contract with the government. The reduction in jobs and wages will, in turn, lead to reduced consumer spending. Second, reduced government spending that leads to a reduction in the quality of local public services can reduce the attractiveness of the state (or local government) to both businesses and households. For example, the quality of roads, education, and other infrastructure may affect the productivity and costs for business. Reduced spending on these items may deter businesses and households from locating in that state. Moreover, if individuals choose not to locate there, there could be a negative effect on the cost and availability of labour which will eventually discourage businesses from locating there.

Type of business activity

The influence of the property tax on business location, even within metropolitan areas, varies for different types of business activities because industries differ in terms of their responsiveness to fiscal variables. For example, tax-sensitive firms are more likely to locate in a low-tax jurisdiction. According to studies that have been undertaken on different industries, manufacturing location decisions tend to be sensitive to taxes than non-manufacturing location decisions. The reason is that the manufacturers are more oriented to the national market. Local costs will have a larger effect on their profits because it will

be more difficult to pass these costs on to consumers. Moreover, manufacturers tend to be more capital intensive and local property taxes are taxes on capital (Bartik, 1991). Empirical studies confirm that capital-intensive industries are more sensitive to taxes on capital than are other industries.

Where there are advantages to locating near similar activities (a phenomenon known as agglomeration economies), the tax will have a less significant impact. Some examples might include a trendy shopping area or the financial district where there are significant advantages from being in a particular location. In these cases, the property tax will be less important in the business location decision than in those cases where business is fairly mobile.

An empirical study that shows that different industries are not attracted and repelled by the same set of characteristics was undertaken by Papke (Papke, 1991). His data comprise 22 states and five manufacturing industries from 1975 to 1982. He finds that the effective tax rate has a significant negative influence on location for two of the five industries tested (outer wear and book printing) and a marginally significant negative influence for communication equipment. These industries are all considered to be highly competitive. The effective tax rate was positive but not significant for the other two industries in his study – furniture and electronic components. In terms of the impact of public spending on location, police and fire expenditure were positive and significant with the exception of the furniture industry. His conclusion is that fiscal variables do play a significant role in manufacturing location decisions but that industries differ markedly in their responsiveness to those variables.

Do other jurisdictions match the tax incentive?

It seems obvious that if one jurisdiction lowers its property tax rate on businesses and neighbouring jurisdictions keep their taxes the same, the expected impact on business activity in that jurisdiction is likely to be much greater than if all jurisdictions in the metropolitan area lower their business tax rates (Wassmer, 2007).

A study by Anderson and Wassmer investigates how municipalities behave over time with respect to offering property tax abatements to manufacturing firms (Anderson & Wassmer, 2000). Their analysis shows that the decision to offer an abatement depends on the rate of property taxation, the percentage of the property tax base that is manufacturing, the distance to the central business district of the metropolitan area, median income, and population (Wassmer, 2007, p. 30). After controlling for other important factors, the amount of abatement for the typical city rose, on average, almost 12 percent per

year. The authors use these findings to conclude that, at least in part, municipalities in a metropolitan area offer abatements because their neighbours are doing it.

There is also a significant literature on tax competition that suggests that some tax mimicking does go on with respect to the property tax. In other words, local officials do consider the property tax burdens of neighboring municipalities when making their own decisions about taxes: (Ladd, 1992), (Heyndels & Vuchelen, 1998), (Allers & Elhorst, 2005), (Revelli, 2001), and (Brueckner & Saavedra, 2001).

A Canadian study (Brett & Tardif, 2005), using data for 100 municipal governments in New Brunswick from 1983 to 2003, however, finds that although neighboring jurisdictions show more similarity in their tax policies than do non-neighboring jurisdictions, they could find no evidence of tax competition. A study of 147 municipalities in British Columbia in 1987 and 1991 also found no evidence of tax competition (Brett & Pinsky, 2000). One of the reasons for the different findings in Canada and the U.S. on tax competition is likely that Canadian municipalities have not been permitted to use property tax incentives to attract new business.

Summary of the Literature on the Impact of Property Tax Incentives

What do all of these studies over the last 50 years tell us about the impact of property tax incentives on business activity? The following summarizes the findings of the literature review:

- Property tax differentials will have more influence over business location decisions within metropolitan areas than between metropolitan areas. In other words, if a firm is choosing to locate in Toronto or Buffalo, property taxes will not play a significant role. If a firm chooses to locate in the Toronto area, however, the specific location within the GTA will likely be affected by property tax differentials.
- The size of the property tax differential will have an impact on the location decision – the larger the differential, the more likely it will have an impact on the location decision.
- Service levels in a municipality also affect a business location decision. Lower taxes combined with lower service levels are unlikely to attract new firms.

- Property tax incentives will be more successful at stimulating economic activity when only one jurisdiction uses them. If many municipalities in a metropolitan area use tax incentives, they are less likely to be effective in any one jurisdiction.
- Property tax abatements are more effective for some businesses than others. Manufacturing firms will be more influenced by property tax differentials, for example, than other industries. Where there are significant advantages from being in a particular location, property taxes will have less of an impact.
- Property tax abatements are likely to result in higher tax rates for properties not receiving the abatement.

2. Should property taxes be used to stimulate economic development?

Although there is some consensus in the academic literature that property taxes have a small but significant influence on business location within metropolitan areas, there is no consensus that property tax incentives are an effective strategy to achieve economic growth. This section of the paper sets out the arguments in the literature for and against the use of property tax incentives to stimulate economic development.

Arguments Against Property Tax Incentives

The following are the arguments against using property tax incentives to attract business investment:

- The traditional view of property tax incentives focuses on the zero-sum game aspects of tax competition: development at one location will be at the expense of development at another location (Kitchen, 1985). The underlying assumptions are that the overall supply of capital is fixed and that it is responsive to price (tax) changes. These assumptions mean that tax competition would not increase the national capital stock but, rather, only move it around. Tax competition would simply result in a redistribution of resources from local taxpayers to industry.
- Tax incentives are often wasted on firms that would have located there anyway. If the economic activity would not have occurred “but for” the tax incentive, one could argue that the tax

incentive is a good thing. If, however, the economic activity would have occurred even without the tax incentive, the tax incentive is probably wasteful (Wassmer, 2007). Moreover, tax incentives can lead to unfair competition among businesses and can lead to a situation where no major investments occur without them.

- Tax competition results in inefficiently low taxes and public services (Oates, 1972), (Zodrow & Mieszkowski, 1986); (Wildasin, 1989); (Wilson J. D., 1986); and (Wilson J. , 1999). Oates, for example, argued that tax competition which is designed to attract firms that are looking at where to locate, will lead officials to reduce taxes. When deciding on the level of public services to be financed by taxes, communities will take account of the cost of losing potential firms. The result is public goods and services will be under-provided. If all jurisdictions follow the same strategy, none will gain a competitive advantage but they will all have lower revenues and lower levels of public services. Bartik also stresses the adverse effects of tax reductions on state and local public services (Bartik, 1991, p. 106). Tax cuts need to be financed in some way and, if they are financed by cutting public services that businesses want, the net effect on economic development could be negative.
- Tax incentives can have negative distributional implications: lower taxes for specific firms mean higher taxes for all other taxpayers. Whether this redistribution is progressive or regressive depends on who bears the burden of the higher taxes. For example, non-residential property taxes could be borne by the owners of non-residential property, they could be passed forward on to the consumers of products produced by the firms, or they could be passed backward onto labour. If lower taxes on new firms mean higher taxes on the people working in existing firms, for example, the tax incentive will likely be regressive.

The literature against property tax incentives argues that the provision of services that, at the same time, provides direct benefits to existing residents and firms is preferable to tax incentives (Bartik, 1991), (Fisher, 1997). In particular, the provision of infrastructure would not only influence firms to locate in the municipality but it would also provide a tangible resource to the community. Moreover, these studies argue that lowering non-residential property taxes for all businesses in the municipality is preferable to tax concessions to any specific business. In other words, policy-makers should concentrate

more on the issues of general tax policy for all firms (such as equity and efficiency) than on tax incentives for specific firms:

When the business climate of a state becomes so problematic that tax laws need to be changed routinely to attract businesses, the practice may be a symptom of problems with the tax system itself and a signal that systematic tax reform might be a more useful approach. In effect, tax reform treats existing and new firms equally, and responsible reform will also systematically account for any tax revenue lost due to reform. It is probably the case that sound tax and fiscal policy obviates many of the tax perks that businesses seek (Wasylenko, 1997, p. 49).

Arguments in Favour of Property Tax Incentives

Notwithstanding the above arguments opposed to property tax incentives, some authors have been in favour of them. The following arguments are used to justify property tax incentives to attract business investment:

- On efficiency grounds, it has been argued that, where there a large number of small, homogeneous communities each with a different tax and expenditure package and where consumers are mobile between jurisdictions, there will be an efficient allocation of public goods between communities (Tiebout, 1956). In terms of industry, municipalities compete by using tax-subsidies up to the point where the marginal cost of providing the tax subsidy is just equal to the marginal benefit to the community of having the business locate there. The marginal cost would include the cost of municipal services required by businesses as well as environmental and other costs imposed by businesses on the community.

For efficiency to be achieved, a number of conditions need to be met.³ Although many authors believe that these conditions are met sufficiently to ensure that tax incentives are efficient, some authors disagree. Musgrave, for example, argues that tax competition will not be efficient and will result in the bidding down of taxes below what is required to provide the desired level of public services (Musgrave, 1991). Moreover, given the empirical evidence that taxes have a

³ There has to be a sufficient number of local jurisdictions competing for economic development within the same market area. There can be no service spillovers across jurisdictions. In other words, the benefits of public services have to be confined within each jurisdiction. If there are spillovers, tax prices will not reflect the true social costs of providing those services and efficiency will be reduced. Capital has to be fully mobile. There can be no tax exporting. Where taxes are exported to non-residents (for example, where the non-residential property owner passes the tax onto the consumers of the product and these consumers are residents of other jurisdictions), the taxes will not reflect the benefits of local public services to the local community.

fairly small effect on business location, a large tax incentive is needed to have an impact on firm decisions.

- Some authors argue that tax incentives are justified because the firms that receive them provide benefits to the community that exceed the costs to the municipality for business services and environmental degradation caused by the businesses (Glaeser, 2002). In economics terms, the tax incentive generates a “consumer surplus” to citizens in the jurisdiction in which they locate. The reason that local policymakers engage in local tax competition is to attract and keep taxpayers who are believed to contribute more in local revenues than they consume in government services.
- New investment can bring in other benefits to a municipality in addition to increasing production, wages, and property tax revenues. Specifically, there will be benefits from agglomeration economies (Garcia-Mila & Mc Guire, 2002, p. 100). Agglomeration economies refer to the benefits that firms gain from locating near each other. When a large number of firms are clustered together, the cost of production will be lower because firms will have many different competing suppliers, they can take advantage of greater specialization, and they will have a larger market for their goods and services. If the location of new firms results in agglomeration economies, effective tax incentives may improve the welfare of the community that attracts the new business. Because jurisdictions differ in terms of agglomeration economies received and offered, selective tax breaks may be justified (Glaeser, 2002). Although there is some validity to this argument, it is not clear the extent to which an individual city will be able to determine which firms should receive the tax incentive and how much that incentive should be.
- A jurisdiction can offer a unique location that some firms desire more than others (Glaeser, 2002). If this is true, it can capture the greatest business property tax revenue by charging different taxes to different firms. Those firms that really want to be there are charged a higher tax; those firms that have other options are charged a lower tax. Selective use of tax incentives can achieve this result.

- Tax incentives are an indication that the municipality is pro-business. The political rationale for tax incentives is that the benefits of claiming credit for job creation and investment outweigh all other considerations (Brunori, 2003, p. 39). This rationale holds even if the incentives have a very small chance of producing the desired results.

3. Should the Property Tax on Non-Residential Properties be Reduced?

It has been argued that businesses are leaving Toronto and moving to suburban municipalities in the Greater Toronto Area because non-residential property taxes are higher in Toronto than in the suburbs (Canadian Urban Institute, 2005). Whether or not the property tax is the reason for the move in all cases, it is nevertheless clear that business properties are over-taxed in Toronto compared to residential properties⁴ and compared to non-residential properties in the rest of the Greater Toronto Area (GTA).

Table 1 shows municipal and education property tax rates by property class for selected municipalities in the GTA in 2005. Toronto has the highest tax rate on commercial property compared to the other municipalities and the commercial property tax rate is much higher than in the other municipalities in the Table. The industrial tax rate is at the high end but it is not the highest. Table 1 also shows that, for all of the municipalities, the commercial and industrial tax rates are considerably higher than the residential tax rates.

There is no economic justification for the over-taxation of non-residential properties. The differential property tax treatment does not necessarily reflect the differential use of services by different property types. For example, users of non-residential property often provide their own garbage collection, security, and fire protection. The following studies provide evidence of the over-taxation of businesses based on benefits received from local services:

- A review of property taxes and municipal expenditures in eight municipalities in Ontario in 1990 concluded that non-residential property taxes ranged from 28 to 51 percent of total local property taxes but accounted for only 31 to 40 percent of municipal expenditures (Kitchen & Slack, 1993).

⁴ The over-taxation of non-residential properties compared to residential properties happens around the world (Bird & Slack, 2003).

**Table 1: Municipal and Education Property Tax Rates,
Selected Municipalities in the Greater Toronto Area, 2005
(%)**

| | Residential | Multi-residential | Commercial | Industrial |
|---------------|-------------|-------------------|------------|------------|
| Toronto | 0.91 | 2.56 | 4.51 | 4.89 |
| Mississauga | 1.05 | 1.53 | 2.81 | 3.17 |
| Brampton | 1.24 | 1.91 | 2.96 | 3.37 |
| Oakville | 1.09 | 2.10 | 2.69 | 4.00 |
| Markham | 1.07 | 1.07 | 2.62 | 2.93 |
| Richmond Hill | 1.07 | 1.07 | 2.62 | 2.94 |
| Vaughan | 1.07 | 1.07 | 2.62 | 2.94 |
| Oshawa | 1.73 | 3.27 | 3.72 | 5.25 |
| Pickering | 1.38 | 2.55 | 3.22 | 4.47 |
| Whitby | 1.43 | 2.65 | 3.29 | 4.53 |

Source: (BMA Management Consulting Inc., 2005)

- A U.S. study at a similar time (Oakland & Testa, 1995) estimated that the business-related share of state/local expenditures in the U.S. is less than the business-related share of state/local tax revenues. The ratio differed from state to state, however.
- A study by Hemson Consulting Ltd. for The Canadian Institute of Public and Private Real Estate Companies (CIPREC) concluded that the office sector in Toronto pays \$360 million more in property taxes than it receives in services (Hemson Consulting Ltd., 2003, p. 12). Stated another way, the office sector pays 17 percent of municipal taxes in Toronto but generates only 5 percent of the expenditures financed from property taxes.
- A recent study in the City of Vancouver (MMK Consulting, 2007) compares the consumption of services to taxes paid by the different property classes and concludes that the non-residential sector pays \$2.42 in taxes for each \$1 of benefit received, while the residential sector pays \$0.56

for each \$1 of benefit.⁵ The study also concludes that the non-residential share of services consumed is 24 percent of the total; the residential share is 76 percent.

It has also been argued that property taxes should be heavier on those components of the tax base that are least responsive to a tax increase (least elastic in supply). Since businesses tend to be more mobile than homeowners (in other words, they are more responsive to tax changes), efficiency arguments lead to the conclusion that non-residential property should be taxed more lightly than residential property. In reality, however, lower rates are generally applied to residential properties. Differentially higher taxation distorts land use decisions favouring residential use over commercial and industrial use (Maurer & Paugam, 2000).

The higher taxation of non-residential property also creates problems of accountability because municipalities can easily export the tax to residents of other jurisdictions. For example, a portion of the property tax on an automobile manufacturer will likely be passed on to the purchasers of new cars. Since most cars are shipped outside of the taxing jurisdiction, taxpayers in other jurisdictions bear the burden of the property taxes. These taxes raise revenue from non-residents to pay for the benefits enjoyed by residents.⁶ As noted in the Smith Committee Report (Ontario Committee on Taxation, 1967), there is no accountability at the local level when municipalities can export property taxes to residents of other jurisdictions. As Thirsk notes: “every fiscal tub should be required to stand on its own bottom, and no fiscal unit should be allowed or encouraged to reach out and tap other people’s pocket books in order to finance expenditures whose benefits are confined to residents of the taxing area” (Thirsk, 1982, p. 397).

Overall, from an economics perspective, the higher taxation of non-residential properties cannot be justified on the basis of equity (benefits received), efficiency, or accountability.

⁵ As noted in the Report of the Vancouver Property Tax Policy Review Commission (2007), the MMK study only looks at the direct benefit from services. It does not consider the quality of life in a city, the perceived level of safety, the availability of a high quality park and recreation system, and the provision and maintenance of high quality infrastructure all of which are important factors in attracting skilled labour to a community (Vancouver Property Tax Policy Review Commission, 2007). Another key consideration not included in the MMK Report is that property tax is a deductible expense, for income tax purposes, for taxable businesses. This shift would suggest that in 2006 the business share of services would rise to about 32 percent.

⁶ The only Canadian study that estimates the extent of tax exporting of the non-residential property tax is (Thirsk, 1982). He estimates the rate of exporting to be 56 percent but there is considerable variation across municipalities.

Notwithstanding the arguments for lower commercial property taxes, a shift onto residential property taxpayers is problematic. The reason is that residential taxpayers represent the majority of municipal voters and the property tax is a very visible tax. Unlike the income tax, for example, the property tax is not withheld at source. Unlike the sales tax, it is not paid in small amounts with each daily purchase. Instead, the property tax generally has to be paid directly by taxpayers in periodic lump sum payments. This means that taxpayers tend often to be more aware of the property taxes they pay than they are of other taxes. Moreover, the property tax finances services which are also very visible, such as roads, garbage collection, and parks. Visibility makes taxpayers aware of the costs of local public services. This awareness enhances accountability but it makes it difficult to increase the tax.

The over-taxation of non-residential property was identified in Toronto many years ago. As noted earlier, high business taxes are often cited as the reason why businesses have left Toronto and moved to the suburban municipalities of the GTA (Canadian Urban Institute, 2005). For this reason, the City of Toronto has undertaken a plan to reduce the tax ratio of commercial properties from approximately 4.0 times the residential rate to 2.5 times the residential rate over the next 15 years (an accelerated phase-in of up to 8 years will apply to smaller businesses). The tax policy initiative involves a 0.3 percent annual tax shift, or approximately \$6.00 for the average household, from Toronto's business and multi-residential property classes to the residential property class. It will also permit budgetary tax rate increases on the business and multi-residential property classes of up to one third of any tax rate increase on residential properties.

4. Tax Increment Equivalent Grants

The city-wide tax increment incentive program in Toronto is a tax increment equivalent grant (TIEG) under Section 28 of the Planning Act. Under this grant program, municipalities can designate an area or the entire municipality as a community improvement project area. They can then implement a community-improvement plan (CIP) with grants and/or loans which can, if the municipality chooses, be calculated on a tax increment basis. In other words, the municipality can offer developers a grant or loan that is based on the higher property tax that is generated from development (the tax increment).

Tax equivalent increment financing is used in a number of communities across Ontario. The City of Cambridge, for example, offers TIEGs to stimulate property improvements and investment in the downtown core areas of the city. The city has a three-year phased program that provides grants equivalent to a percentage of the city's portion of the increase in property taxes as a result of property

improvements. Eligible developments are those where property improvements result in an increase in municipal property taxes and can include the restoration and redevelopment of contaminated sites.

The City of St. Catharines provides grants to applicants who undertake rehabilitation activities that increase the property assessment and municipal property taxes. Grants are available up to a maximum period of 10 years. In the first year, the grant is equal to 90 percent of the tax increment and falls by 10 percent per year after that.

TIEGS are also used in other cities in Ontario. Examples include Hamilton, Guelph, Kitchener, Brantford, and Cornwall. Since this program is fairly new, there do not appear to be any empirical studies that analyze the impact of these incentives on economic activity in each municipality.

Montreal has recently introduced a similar program to enable property owners who invest in their industrial facilities to be reimbursed for their property tax increase. The rationale for this incentive is to strengthen the business environment in the face of competition from other major urban centres in North America. The program, which was announced in October 2007, is designed to encourage the owners of industrial buildings in the metropolitan area to accelerate investment in buildings, improve the competitiveness of Montreal, maintain a diversified economic structure in Montreal, and increase the value of the stock of industrial buildings.

The program offers owners of non-residential buildings the possibility of a grant to reimburse the increase in their property taxes as a result of improving their property (through construction, conversion, or increasing the size of the building) for 5 years. Eligible property owners have three years to do the upgrades. The grant will cover 100 percent of the property tax increase in the first three years, 80 percent of the tax increase in the fourth year, and 60 percent of the tax increase in the fifth year. Eligible activities include: manufacturing in general, film and video production, data processing systems, software, call centres, head offices, and research and development in the physical sciences, engineering, and life sciences. Properties in some locations (e.g. industrial zones that are on the verge of transformation, properties near transit stations, etc.) can receive an additional bonus. In those cases, the grant will cover 100 percent of the property tax increase for 5 years.

5. Implications for Tax Incentives for Toronto

The literature on the impact of property taxes on business location suggests that property tax differentials are more likely to have an impact within a metropolitan region than between metropolitan

regions. This finding means that property tax incentives are more likely to have an impact on location decisions within the Greater Toronto Area than between Toronto and other metropolitan areas. And this conclusion only holds to the extent that other municipalities in the Greater Toronto Area do not offer similar tax incentives.

Studies also show that property tax incentives will be more effective at attracting businesses that are sensitive to property tax differentials and are mobile across jurisdictions. In other words, firms that have to be in a particular location are unlikely to be very responsive to property tax differentials. Because businesses also respond to service differentials among municipalities, the city needs to ensure that tax incentives are not accompanied by a reduction in service levels. Indeed, some authors have argued that improving services and infrastructure will do more to attract business than property tax incentives and will, at the same time, provide a benefit to existing residents and businesses.

An overall reduction in business property taxes in a jurisdiction has been shown to increase business activity more consistently than the selective use of property tax abatements to specific firms (Wassmer, 2007). In other words, lowering non-residential property taxes to all businesses in the municipality is preferable to tax concessions to any specific business. Toronto is currently working towards lower taxation of all non-residential properties compared to residential properties and this move should have a positive impact on business location in the city. It is unclear whether the tax incentive will do as much to attract new businesses as will the universal reduction in non-residential property taxes.

The particular incentive being proposed by the City provides a grant for some or all of the tax increment arising from an investment in non-residential property. These foregone revenues would presumably not have been available to the City in the absence of the incentive, assuming the businesses would not have located there “but for” the incentive. It is always difficult, however, to determine whether a firm would have located in a specific jurisdiction without the tax incentive.

Finally, if the City has to provide additional services because of the investment of new businesses, then it will have to increase property taxes on other taxpayers. The City needs to weigh the potential benefits against the associated costs of any tax incentive. There are potential benefits in terms of increased economic activity that could create more jobs for existing residents, more tax revenues for the city, and greater agglomeration economies for existing firms. The potential costs are the further public service needs arising from the new development. There are also potential environmental costs to the

community in terms of increased pollution, etc. Only if the benefits of the incentive outweigh the costs to taxpayers will the incentive be worthwhile.

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