Cold Cuts

The Impact of Cuts to the City of Winnipeg's Business Tax

By Ian Hudson and Andrew Buchel

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Introduction

It is probably safe to say that Sam Katz' mayoral campaign was long on enthusiasm and short on detail. There was talk about a more business friendly direction to city hall and getting rid of "red tape" but little in the way of concrete policy. The one exception to this vague platform was a promise to reduce the city's business tax. The goal of this policy was to send a signal that Winnipeg was "open for business" by eliminating one of the taxes that Katz claimed was particularly vexing to businesses. This paper takes a closer look at the proposal and attempts to weigh its costs and benefits.

The City's Business Tax

Firms located in the City of Winnipeg pay a business tax in addition to any property tax that they might pay. The tax is levied on the Annual Rental Value (ARV) of a business premise, which is deemed to include the cost of providing heat and other services necessary for the comfortable use of the premises. The ARV adds an estimated base rent (square feet multiplied by a rate that varies depending on the type of property) to estimated costs (square feet multiplied by a different rate for different costs such as heat, water, air conditioning). The tax base (the value of the activity on which a tax is levied) of the business tax is then the assessed ARV for all of the businesses in the city. The tax rate levied on the ARV was 9.75% in 2004 and will be reduced to 7.75% in 2005 for businesses in the downtown area. This is, in essence, a tax on the value of the space occupied by businesses. The reason for this quite peculiar form of business taxation is that cities in Canada are limited to taxing property. Without the business

> Since the tax differential between the downtown and the rest of the city is only supposed to be temporary, it would seem unlikely that businesses in the city would make any long term location decisions on this basis, making it quite doubtful that the tax will act as a catalyst

tax, only those businesses that owned property would pay any municipal tax.

The absolute amount of revenue generated by the City will depend on both the tax base and the tax rate. It is theoretically possible for an increase in the tax base to compensate for the decline in the tax rate. This could happen in either of two ways. The City assessors could simply increase their estimate of ARV for businesses to compensate for the rate decrease. This study will assume that this will not happen, as it would defeat the purpose of the rate decrease. The second method in which the tax base could increase is if the tax rate decrease increased economic activity within the city. This could drive up rental values in the city, a possibility to which we will return in the benefits section.

Winnipeg is not alone in levying business taxes. Table 1 provides an overview of the very wide variety of business tax regimes in different Canadian cities.

Winnipeg's rate for non downtown businesses is only marginally higher than that of Calgary, usually cited as the preferred destination for mobile firms.

The Mayor has proposed cutting the business tax gradually. He has argued for the tax reduction as a downtown revitalization scheme by first applying the 2% point reduction to downtown businesses and then promising that it will be extended to the whole city. In addition, the long term plan is to phase out the business tax entirely. Since the tax differential between the downtown and the rest of the city is only supposed to be temporary, it would seem unlikely that businesses in the city would make any long term location decisions on this basis, making it quite doubtful that the tax will act as a catalyst for downtown redevelopment. Therefore, this study will focus on the city wide implications of this tax cut, starting with the potential costs for the municipal budget.

Table 1 **Comparison of Municipal Business Taxes in Western Canada (2005)**

City	Tax Rate	On
Vancouver	0	
Calgary	8.77	Assessed value of business space
Edmonton	7.7	Assessed value of business space
Regina	0	
Winnipeg	9.75 / 7.75	Assessed value of business space

Costs

The most obvious cost of the elimination of the business tax would be on the City's ability to deliver services. At the 2004 tax rate of 9.75%, the City collected over $60 million in business taxes. This made up around 9% of total municipal revenue (Table 2).

If this is the amount of tax that can be earned with a rate of 9.75%, then it is possible to estimate the loss in revenue from the proposed 2% point reduction in the tax. If the tax base remained the same (an assumption to which we will return) then a 7.75% tax rate would generate $49.8 million dollars, a decrease of $12.9 million or 1.8% of total revenue. Clearly, the gradual elimination of the tax would involve forgoing this entire revenue stream.

The reduction in tax revenue is especially important because the property tax revenue on which the city relies has not grown rapidly. The City collected $658 million in revenue in 2000 and $694 in 2004, an increase of only $36 million, or 5%. The Mayor is proposing to give back one third of that increase when he extends the 2% business tax rebate to the whole city, and will more than offset the accumulated growth of five years in revenue should the tax be eliminated completely.

Cutting the business tax is not costless. It represents a transfer from the government of the City of Winnipeg and the programs that it funds to firms in the city. A look at the city's expenses can demonstrate what eliminating this amount of revenue would cost in terms of programs. The majority of the city's budget is dedicated to two budget lines: the police and fire department (35% $250 million), and the streets and waste collection (27% $192 million). Even the seemingly modest $12.9 million that the 2% point tax reduction would cost represents one third of the subsidy paid to Winnipeg

Transit ($35.5 million) and would pay the entire street lighting budget ($9.6 million). It also represents the entire amount paid out by the city for grants to different organizations, which in 2004 amounted to $11 million. If this were to be the budget line sacrificed, funding would be eliminated to organizations like the Manitoba Children's Museum, Main Street Project, Rossbrook House and Winnipeg Harvest as well as the more affluent beneficiaries with better name brand recognition like the Winnipeg Goldeyes and True North.

The full impact of the cuts would be rather more significant. The $60 million price tag of an elimination of the business tax would exceed the entire subsidy to Transit, the whole budget of the Water and Waste department ($33 million), and make up 75% of the Community Services budget, which pays for libraries and recreation services. Of course, the City is unlike-

Table 2 City of Winnipeg Business Tax Revenue ($millions)

	2003	2004 (budget)
Business Tax	62.4	62.7
Total Revenue	684.9	694.2

Source City of Winnipeg Adopted Operating Budget 2004 and Preliminary Operating Budget 2005

Table 3 Spending Per Capita

	Winnipeg	Calgary	Edmonton
2001	1,164	1,371	1,384
2002	1,197	1,339	1,414

Source www.winnipeg.ca/cao/pdfs/news_releases/200212.pdf

ly to completely eliminate an entire department. However, even were the cost of the tax cuts spread across all of the departments, this would merely mean that rather than one program bearing the entire burden of the cuts, while the rest remain unscathed, all of the departments would be forced to reduce their services. It is certainly interesting that the Mayor has been pleading poverty, lamenting the lack of money, especially to overcome the infrastructure deficit, and arguing that the city needs larger transfers from other levels of governments, while at the same time he is voluntarily giving up a sizeable source of revenue (Katz, 2005, 7-9).

It is, of course possible that revenue could be foregone and the exact same level of services provided if efficiencies could be found. However, the last several years of tax freezes have trimmed much of the "fat" off city hall. In fact, the City spends less per capita on its programs than most other cities (see table 3). "Fat" does not mean programs which any single individual does not deem worthy. Some may object to money going to a new arena, others might object to public transportation. However, this is not actual "fat" rather it is a matter for debate about spending priorities among competing public priorities.

Benefits

Of course, a transfer of money from the government to the private sector does not only hurt the government and the people who use its programs. It also benefits those who were paying the tax. While part of the benefit is the static benefit of transferring income to those who previously paid the tax, there may also be an important dynamic gain as lower taxes increase economic activity. We will first turn to the static gains of the transfer.

If we take the $12.9 million loss in revenue from the 2% point reduction, this does not create much of a windfall for the business taxpayers of the city. According to Statistics Canada, there were 38,694 businesses in the city in 2002 (Market Research Handbook, 2004). Therefore, on average each business can expect to save $336 each year. The saving per business will not be particularly spectacular even when the entire tax is eliminated. The $60 million dollar tax would yield an average tax saving of $1,550 per business.

However, this average hides the fact that many firms, especially those with large, expensive properties or rental locations can benefit substantially. We can take three different, entirely hypothetical firms, to demonstrate how the benefits might vary to different types of firms. Table 4 illustrates the taxes that are currently paid by three types of hypothetical businesses. These are illustrative examples only, not meant to represent the taxes of any actual business. Since many properties are unique, assessments can vary greatly. With these caveats in mind, these are the rates at which these types of properties are assessed and so can provide an indication of the business taxes that are levied on different types of firms.

The city arrives at its actual tax bill by applying the tax rate (in this example 9.75%) to the

ARV. The ARV is calculated by adding together two totals — the base rent, which multiplies the square footage by a rate that varies with the type of business and its location, and the costs associated with "comfortable occupancy" such heat and hydro.

The businesses that currently pay the most tax are those whose businesses require a large physical space and those that are taxed at a higher rate. Per square foot, the sliding tax rate charges manufacturing less than big box stores, which in turn have a lower rate than downtown space. The firms in this example are the types of firms that would pay well above average taxes due to either their large square footage or their downtown location.

Taxes Paid

It is important not to jump to conclusions about who will actually benefit. The person that pays the tax is not always the person who bears the burden of a tax. For example, despite the fact that it is the gasoline companies that actually hand over the gasoline tax to the government, they are able to pass on this tax to the consumers by simply raising the price of gas. In order to determine who actually bears the burden of a tax we must examine the *tax incidence* (McKenzie, 1998).

The main determinant of tax incidence is the elasticity of supply and demand for any given product. Elasticity refers to the extent to which the quantity demanded and supplied respond to changes in price. If those that demand the

Table 4 **Comparative Tax Rates for Different Types of Businesses (2005)**

	Large Manufacturing	Big Box Retail	Downtown Office
Base Rent			
Square Feet	165,276	33,730	16,166
Rate	$4.65	$8.25	$10.60
Total	**$768,533**	**$278,272**	**$171,360**
Costs			
Heat @ 0.53/sf	$87,596	$17,877	$8,568
Hydro @ 0.41/sf	$67,763	$13,829	$6,628
Water @ 0.10/sf	$16,528	$33,730	$1,617
AC @ 0.36/sf	$59,499	$12,143	$5,820
Total	**$231,386**	**$77,579**	**$22,632**
ARV	**$999,920**	**$355,851**	**$193,992**
Tax @ 9.75%	**$97,492**	**$34,695**	**$18,914**

Source Communication with the City of Winnipeg Assessor's Office

product have a low elasticity, they are quite unresponsive to price changes and firms can pass the tax on to the consumer. This is the case with gasoline where, at least in the short term, increases in price do not reduce consumption. On the other hand, the higher the elasticity, the more difficult it is to pass on the tax because consumers will reduce consumption dramatically in response to price increases and the more of the tax firms will have to bear.

While the business tax is actually paid by firms in the city, it is possible that this tax might not decrease their profits. Rather it is possible that the tax might actually be borne either by landlords, who rent the space or by the consumers of the products of Winnipeg businesses. The business tax is actually a tax on one specific, albeit fairly crucial, input for firms — the rental value of their establishment. The tax incidence of an input tax will depend on the elasticities of supply and demand in both the rental market and the product market.

Whether the tax falls predominantly on businesses in general, or landlords in particular, will depend on the ability of firms to substitute for space in the city. Since the only businesses within the city that are exempt from the tax are those that operate out of private homes, which is hardly a viable option for most businesses, then if firms remain in the city, they would have little choice but to pay for space despite any cost increase associated with the business tax. However, this does not mean that firms must stay in the city. Firms could avoid the tax by moving elsewhere. We will pick up this point later, but for now it is worth mentioning that if firms were leaving the city in large numbers, this would imply that landlords in the city, rather than the business community in general, would have to bear the burden of the tax in order to try and compete with other regions.

This is not to say that the tax does not create distortions in firms' decisions about where to locate in the city. The business tax does create an incentive for firms to operate in establishments that have the lowest ARV to reduce the base on which the business tax is levied. Therefore, moving to a big box store from a more expensive retail location will be taxed at a lower rate per square foot. However, this is more an argument for reforming the business tax than for eliminating it.

In the product market, the ability of firms in Winnipeg to pass on that portion of the business tax that they incur (as opposed to the landlords) depends on the extent to which consumers will forgo the products of Winnipeg businesses as a result of a price increase. One of the most important determinants of this is the substitutability of the product. If Winnipeg firms are competing against firms from other cities that are not subject to the business tax, it would be very difficult for them to pass on the tax to consumers. However, if firms are only competing with other city businesses, as would be the case for local area services such as restaurants for example, then the ability of the firm to pass on the tax depends on the conditions in that specific product market. However, it is likely that in these types of markets, some portion of the tax will be borne by the consumer.

To sum up the previous section, while it is possible to conclude that the reduction of business taxes is a transfer from the City of Winnipeg (and the beneficiaries of City services) to those that previously paid the business tax, it is much more difficult to determine just who exactly pays the tax. Part of the benefit of the tax reduction undoubtedly will go to firms in the city, but part will also go to consumers of the products produced by businesses in the city.

Tax Cuts and Economic Growth

Advocates of tax reductions argue that there is an important dynamic gain from increased economic activity as firms have more incentive to expand their operations in, and relocate to, a low tax region. Although the business community claims that the business tax limits its profits and, therefore, reduces investment and slows economic growth, this claim must be carefully analyzed. First, as we have seen, businesses will not pay the entire tax, and therefore, will not reap the entire benefit of the tax reduction. Second, even if eliminating the business tax does increase profits, it is important to attempt to examine the extent to which this will result in an increase in investment.

It is first well worth noting that Winnipeg does not have a competitiveness problem. In other words, the current tax structure in the City does not make it an unattractive location to invest. In *Competitive Alternatives 2004*, a comparison of the relative attractiveness of different municipalities by consulting firm KPMG, Winnipeg actually scores quite well compared to other cities. In the Midwest region, Winnipeg ranks third out of seventeen cities, only slightly behind Edmonton and Saskatoon, and higher than Calgary.

Even if we only compare the tax structure in Western Canada, Winnipeg businesses, as a whole do not appear to be at a competitive disadvantage. While the business tax in Winnipeg is not the lowest in the West, this is compensated for by its quite low rate of non residential property tax. The share of Winnipeg tax revenue that is paid by businesses (combining business and non residential property tax) is 45%. Only Saskatoon (33%) is lower in the West. In Vancouver (58%), Edmonton (50%) and

Calgary (61%) non residential taxation makes up a larger proportion of total municipal tax revenue (City of Winnipeg, 2002).

Interestingly, *Competitive Alternatives 2004* looks at how different types of costs contribute to the total cost for a firm. Taxes only make up between 5% and 11% of manufacturing and 3% to 8% of non-manufacturing costs. If firms are genuinely interested in decreasing costs, they are much more likely to compare other costs, which contribute more substantially to their bottom line.

Predictably, the ideologically loaded question of whether taxes are a drag on economic growth has been the subject of considerable empirical investigation. After decades of research and scores of articles, authors have come to a wide variety of conclusions regarding the effect of taxes and tax differentials on economic growth. The often contradictory nature of these results stems from a range of problems. Much of the uncertainty revolves around a few sizeable problems in correctly capturing the impact of taxation: the difficulty of accurately modeling business decision making, lack of consideration of past economic conditions, the inability to correctly measure the other influences on economic growth, and the inability to include all factors that influence decision making in the modeling process (Phillips 1995 p.321).

Despite these substantial impediments, a degree of consensus has started to emerge among those who have evaluated the literature. For example, Bartik concludes that the range of plausible inter-regional tax elasticities is between -0.1 to -0.6. What this represents is a relationship where a one percent reduction in taxes, will result in an increase in economic activity (measured either in terms of investment, firm births, or employment growth) within the region in which the tax cut took

place of 0.1 to 0.6 percent (Bartik 1997 p.68). Bartik notes that in his survey analysis of the literature he attempted to discriminate between those studies that used sophisticated and rigorous techniques and those that did not. As well, there were attempts to heavily weight the results of those studies for which some, or all, of the problems listed above were addressed. This range of elasticities has been given a degree of support by other authors who have pursued similar surveys of the literature.

Notably, Wasylenko, who also surveyed the existing literature available at nearly the same time as Bartik, found that, with the inclusion of some additional studies, the elasticity measure could be placed in the neighborhood of -0.2 (Wasylenko 1997 p.45). Wasylenko also notes that the significant differences in data, time periods under study and the variability in the explanatory variables used in the studies may be to blame for the highly variable results in the literature (Wasylenko 1997 p.38).

Additionally, Phillips and Goss provide a meta-analysis of the results found in the studies surveyed by Bartik in his 1991 piece. Their meta-analysis, rather than using what they describe as a narrative style of the classic survey piece, attempts to use the results of other studies as datum for regression analyses (Phillips 1995 p.322). By regressing the elasticity estimates calculated from the studies surveyed by Bartik[1], on a series of binary variables representing characteristics of the various studies, a tax elasticity can be estimated (Phillips 1995 p323-329). In the meta-analysis of inter-regional studies the three regression models used by Phillips and Goss reported elasticities of the following values: -0.216, -.320, -0.3457 (Phillips 1995 p.324-

327). These all fall within the range outlined by Bartik.

In a Canadian study, Beaulieu *et al.* estimated the impact of changes in the effective tax rate on marginal cost (ETRMC) on the number of manufacturing establishments operating in a given political jurisdiction. Their effective tax rate measures the tax rate on one more unit of output by a firm by combining all of the taxes in that region into one aggregate measure that also takes into account the tax incidence issues that were discussed above. They estimate an ETRMC elasticity of -0.33, meaning that a 1% decrease in ETRMC will lead to a 0.33% increase in businesses in a region. This elasticity is likely to overstate the degree of responsiveness in the economy as a whole since manufacturing firms, who produce and ship physical goods, are much more mobile than many services (such as restaurants and retail) that must be close to their customer base.

Finally it is also important to note that later studies that have taken into consideration the insights provided by the previously mentioned authors have found elasticity measures in the range noted by Bartik (for example, Knight 2002). From these results one can with some degree of confidence accept the Bartik range of elasticities of -0.1 to -0.6 for inter-regional tax competition studies. In addition, given the lower results of the studies by Beaulieu *et al.*, Wasylenko and Goss and Philips, and the fact that most of the studies are on manufacturing firms, it seems quite likely that the elasticity falls in the lower range of this band, most likely -0.3 or lower.

All of these elasticities are based on either average or marginal effective tax rates. The effective tax rates combine all of the numerous taxes into one aggregate rate. Therefore, it is not reasonable to suggest that a 1% decline in the city's business tax will lead to an increase

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1 A full list of the calculated elasticities reported in the Bartik piece can be found in the 1995 meta-analysis done by Phillips and Goss.

in economic activity, however defined, of 0.1 to 0.3, since the business tax is only one component of the overall taxes paid by firms.

Given the complexity of the tax system, with its numerous exclusions and taxation of different types of income at different rates, it is very difficult to come up with a calculation of how important the city's business tax would be in the overall calculation of an effective tax rate. The degree of the difficulty in measuring an effective tax rate and the range of discretion for any individual author is well illustrated in past studies, which have measured effective tax rates in very different ways. There is an important distinction between studies that measure marginal effective tax rates (the increase in the cost of producing one more unit due to taxation) and those that measure average effective tax rates (taxes divided by the tax base). However, even studies that are claiming to measure the marginal effective tax rates are often not measuring the same thing and, therefore, appear to arrive at very different estimates. For example, Beaulieu et al. (2004) and McKenzie et al. (1998) both appear to be estimating the marginal rate of taxation on costs, yet Beaulieu et al. claim that this is 19% in Manitoba, while McKenzie et al. arrive at the figure of 7.6% for Canada. The difference between the two studies is not only due to the difficulties of aggregating the taxes of very different inputs into production across all industries in Canada, or the different geographical scope, but also how the tax rate is expressed. In the McKenzie et al. paper, the tax rate was expressed with respect to input costs excluding taxes and the Beaulieu et al. study measure the tax rate as the percentage increase in marginal production costs due to the taxation of business inputs.

Despite these difficulties, in an effort to provide a little insight into how the reduction in the city of Winnipeg business tax would change

Table 5 **Federal and Provincial Taxes Paid By Manitoba Business 2002**

Type of Tax	$ millions
Federal	**315**
Direct Taxes from Corporations	515
Minus Transfers to Business	200
Provincial	**599**
Direct Taxes from Corporations	320
Corporate Taxes, not on Profits	139
Non Residential Property Tax	75
Payroll Tax on Corporations	256
Minus Transfers to Business	191
Total	**914**

Source Source Provincial Economic Accounts 2003 Catalogue 13-213

the overall taxes borne by corporations, we can examine the extent to which the city business tax makes up the overall tax burden of corporations. In doing this there are two important choices to make. The first is whether to choose marginal or average effective tax rates. This study will estimate an average effective tax rate. While marginal tax rates are the preferred option in terms of economic theory, as it reflects business decisions about making an incremental investment, it is significantly more difficult to calculate in terms of both the data requirements and investigator latitude in determining the outcome (for some idea about the level of assumptions that must be made and the difficulty of the calculation see McKenzie 1998 or Beaulieu 2004). Ruggeri (2000) argues that the much more easily calculated average effective tax rate is quite useful in examining where to locate a business.

Calculating the average effective tax rate involves aggregating the taxes paid and dividing it by the amount of pre tax income. Data are not available on the amount of tax paid by each municipality. However, it is collected at a provincial level. Table 5 shows the total amount of federal and provincial taxes that were levied on Manitoba businesses in 2002.

Of course not all of the taxes collected from Manitoba come from Winnipeg. However, if we assume that the portion of the federal and provincial taxes borne by the corporations in Winnipeg is the same as its share of GDP, we can estimate how much of these taxes are paid by businesses in Winnipeg. The city makes up about 55% of total provincial GDP, so we can estimate that 55% of the $914 million come from Winnipeg, a total of $503 million.

To this number we need to add the business taxes that are levied by the city. The city taxes firms through both property tax and the business tax as is shown in Table 6 for 2002. By adding the $183 million that go to the City to the $503 million that go to the higher levels of government we get a total of $686.

In order to complete the calculation of the average effective tax rate, we need a measure of business income. There is no accurate measure of business income at the municipal level, but we can create a rough estimate using provincial data from Statistics Canada.

Since this represents business income for the entire province we need to adjust this down to the city level. We will assume that the city also earns 55% of business income, creating an estimated business income of $3,265. The average effective tax rate can now be determined by dividing the amount of taxes levied on firms by the amount of business income.

$$AETR = (Taxes\ on\ business / Business\ Income) \times 100$$

$$AETR = (686 / 3265) \times 100 = 21\%$$

In order to determine the extent to which changing the Winnipeg business tax would reduce the average effective tax rate, we can again look at the impact of a 2% point reduction and a complete elimination using our 2002 data. The 2% reduction in the business tax rate would yield a slightly smaller loss of $11.7 million, given the $57 million figure for the business tax in 2002. The average effective tax rate as a result of this change is 20.7% (674/3265). The change from 21% to 20.7% represents a 1.4% (.3/21) reduction in the average effective tax rate. If we take the higher end of our elasticity band as 0.3, then this would yield an increase in

Table 6 **Taxes on Business by the City of Winnipeg**

Type of Tax	$ millions
Non Residential Property Tax	126
Business Tax	57
Total	**183**

Source City of Winnipeg, CAO Secretariate, 2002

Table 7 **Business Income Manitoba 2002**

Type of Income	$ millions
Corporate Profits	3,179
Income from Non farm Unincorporated Business	2,472
Total	**5,937**

Source Statistics Canada, Provincial Economic Accounts 2003, Catalogue # 13-213

economic activity of 0.42%. However, the low end of the band of 0.1 would place the increase at only 0.14%

An identical calculation can be made for the total elimination of the $57 million dollar business tax. The average effective tax rate after the $57 million dollar reduction is 19.3% (629/3265), a reduction of 8% (1.7/21). Again, taking the high end of our band of 0.3, this would yield an increase in economic activity of 2.4%. The lower end of the band would provide a 0.8% increase. Broadly speaking, the impact of this tax reduction makes a very small impact on the overall tax burden, which is, in turn, a small component of total firm costs. The result is that it is unlikely to generate a great deal of economic activity.

In the general debate about taxes and economic activity these kinds of numbers are often used to support tax reductions. However, it should be noted that this only captures the beneficial economic effects of the tax decrease. This would only be accurate if the tax decreases were not met by spending decreases. While it is possible for this to happen through deficit financing in the short term (although it certainly runs counter to the balanced budget philosophy that is currently dominating politics at all three levels), this is an impossibility in the long term and, as we have been stressing, spending decreases as a result of the tax cuts should be considered. While we have focused in the costs section on decreased amenities such as drivable roads, swimming pools and public transit, it is also important to note that pubic investment also helps to stimulate private investment. One obvious example is that a well maintained transportation infrastructure improves the ability of firms to ship goods. Another is that a healthy, well educated population is more productive. These do not only directly increase the economic growth of a region, but will also attract private investment, further stimulating economic activity. None of the studies mentioned in this section, and, therefore, our own estimates which use their numbers attempt to take these important factors into consideration.

A Final Consideration

While it is true that decreasing taxes will increase economic activity, it is important to bear in mind that decreasing government spending will also decrease economic activity. However, one dollar spent by the government does not have the same economic impact as one dollar in business pockets. The reason this is true is that virtually all of the spending by the City of Winnipeg is done in the local economy (building a road in the city for example), while a portion of the tax money returned to Winnipeg businesses will be spent outside the region.

It is possible to use the concept of the multiplier to determine the propensity of the people of Winnipeg in general to spend outside their economy. The concept of the multiplier reflects the fact that any increase in economic activity will, to a certain extent, circulate through an economy, increasing overall economic activity by more than the initial injection. For example, when the city builds a road, the income paid to the construction worker is not buried in their back yard, but is spent on goods or services from the local economy, spent on goods and services from abroad, or saved. The more money that is spent in the local economy, the more money will circulate within a region and the larger the multiplier. The mathematical expression of this is:

Multiplier = 1/1-MPCl

Where MPCl is the marginal propensity to consume from the local economy.

Statistics Canada computes multipliers at the provincial level for different industries. In general the multipliers for Manitoba are around 1.3. Given the above equation, we can calculate that the marginal propensity to consume local goods within the province is 0.24. That is, for every extra dollar injected into the province, 0.24 will be spent on local goods and services and the remainder will either be saved or spent outside the province. Of course, this somewhat overstates the propensity to consume locally when the city is our area of analysis, since some Winnipeg spending will occur outside the city but inside the province. However, this will bias our results in favour of a larger impact for tax cutting. An MPCl of 0.24 means that when $1 is returned to the owners of businesses in Winnipeg, only 24 cents will be spent in the local economy. Of the $60 million dollar tax reduction, only $14.4 million will be spent in the Winnipeg economy. This is then subject to the circulating effects of the multiplier, so the local impact will be $18.7 million (14.4 × 1.3). Since almost all of the city's spending is done within the municipal area, the full $60 million is subject to the multiplier, making the overall impact $78 million (60 × 1.3). In other words, the fact that not all of the savings from the tax cuts will be spent in Winnipeg, while almost all government spending is, will actually result in less local economic activity, creating a drag on any economic growth generated by the tax cuts.

Conclusion

The logic of the business tax phase out rests on two possible benefits. The first is that the transfer of income away from the city and the people who benefit from its services to those who previously paid the tax is beneficial. While a definitive statement about just who is paying the business tax is less straightforward than it first appears since both consumers and firms should benefit, it is reasonable to assume that a fair amount of the benefit falls to firms in the city. However, even under the extreme assumption that businesses gained the whole transfer, the average tax reduction per firm in the city is very low. On the other hand, the $60 million in revenue generated by the tax provides some crucial public services, many of which benefit those at the lower end of the income spectrum.

The second benefit is that reducing taxes on business will provide an incentive for firms to increase their economic activity in the city. Few economists would doubt that all else being equal, lower taxes on business will increase investment and economic activity. However, given the range of estimates available in the literature, and the relatively small size of the business tax in Winnipeg, the increase in eco-nomic activity that can be expected from the tax elimination is minimal.

Further all else is rarely equal. Private investment is not the only type of investment that fuels economic growth. The public sector also invests in capital in the form of infra-structure and human capital through commu-nity and education programs. In fact, private investment is often dependent on these types of programs. If the decrease in city taxes also means a decrease in public investment then the overall impact on economic growth is even more uncertain. Finally, it is worth mentioning that a greater portion of government spending remains within the local economy when com-pared to tax reductions.

While businesses in the city will obviously benefit from the proposed tax cut, although the dollar figure is not huge, the expected payoff for the rest of the city is very modest. In con-trast, the costs to the city as a whole, includ-ing business who benefit from many of the city services and infrastructure, would be great. If the Mayor is looking for a symbol to indicate that Winnipeg is open for business, he should choose one where the benefits more clearly out-weigh the costs.

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