ARE PROPERTY TAX RATES IN ATLANTIC CANADA RISING OR FALLING?*

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Abstract

There has been some media commentary that property taxes have been rising over time. However, aggregate data from Statistics Canada suggests that property taxes, for Canada as a whole, as measured as a share of income or as true rates, have been falling since 1997. This is true for both residential and non-residential property taxes, as measured as a share of nominal GDP, or using other measures.

While it true that property tax rates have been falling for Canada as a whole, taxes on property in Atlantic Canada have been falling less rapidly. In fact, taxes in New Brunswick have been steadily rising over the past three decades, and have been rising in Prince Edward Island since 2001. As a result, household property tax rates, since 2004, are actually higher in Atlantic Canada than for the nation as a whole.

Such a surprising finding could spell difficulty, for our region, in attracting businesses and entrepreneurs. This is so since property taxes could be an important location factor for new business investment.

I. Introduction.

This paper measures aggregate (effective) property tax rates for Canada and the ten provinces over time. Essentially, this paper is a descriptive paper, simply looking at whether or not property tax rates – for Canada, Atlantic Canada and the provinces – have risen over the two-and-a-half decades. To do this, we use look at a variety of property tax indicators. Looking at property tax rates – for Atlantic Canada vis-a-vis Canada – is important, since a body of literature suggests that property taxes – particularly taxes as paid by businesses – may be a key business location factor in provincial economic development.

The results are as follows. Property tax rate (like most other taxes) generally rose from 1981 to about 1995-97, then have gradually fallen since then. This is true for Canada as a whole and most provinces. But property taxes have fallen less for Atlantic Canada than the national as a whole. Indeed, for Prince Edward Island and particularly New Brunswick, property taxes have risen throughout the period of analysis. In 2006, household property tax rates were higher for all four Atlantic Canada than for Canada as a whole. For non-residential property taxes, New Brunswick for the 2003-05 period had a rate higher than that for the nation as a whole. These are surprising trends, since in earlier years Atlantic Canada had lower across-the-board property taxes. Atlantic Canada's competitive advantage, as to lower property taxes, is fast disappearing

This paper is organized as follows. Section II gives a very short review of the literature. Section III looks at changes in property and overall tax rates for Canada as a whole. Section IV looks at the same rates for the provinces, and particularly for the provinces for Atlantic Canada. Section V concludes.

II. An Abbreviated Review of the Literature

The earlier literature, that of the 1960s and 1970s, suggested that local and provincial taxes on businesses were not that important for business location. First, its was said that business taxes represented a small part of total business costs (Kitchen and Slack [1993], 49). Second, for property taxes, is was suggested that, since localities balanced their budgets, and since property taxes paid for local services to businesses, business faced similar property tax bills across jurisdictions. Indeed, the earlier econometric literature found tax elasticities with respect to business capital formation was near zero (Bartik, 1992, 103]). What capital mobility that did occur, according to the early literature, was limited to businesses moving from high-tax inner city locations to lower-tax suburban areas (Wasylenko [1997], 47).

Later empirical literature has suggested that lower business taxes does in fact attract business investment and stimulates economic development. Two writers citied above have undertaken meta-analyses of fiscal inducement of state economic development, and both suggest a significant relationship between business taxes and inter-state location of firms. Wasylenko suggest that "business tax" variables (i.e., corporate income taxes and business property taxes)

have a tax elasticity of between 0 and – .26, i.e, elasticities that suggest no much economic-activity response to business-tax differentials (Wasyleno [1997], 45). But Bartik does cite several studies finding higher negative elasticities, especially if public services variables are included with tax rates. According to this writer, those studies modelling only local/state tax rates have omitted variable bias, a bias that reduces the size of the estimated elasticity (Bartik, [1992], 104). Once public service variables are included, the mean of the business tax variables rises to about –.5) And Wasyleno cites other studies indicating a higher –1 to –1.14 tax-elasticity range (page 47).

Kitchen and Slack (1993, 35–49), however, surveyed both survey and econometric literature. Survey literature suggests that government taxes and incentives have about a nine-percent weight (out of 100) in business-location importance, smaller than the 22 ½ percent weight attached to wage costs and a 19-percent attached to transportation costs (page 42). The results of their meta-analysis of the econometric literature differs from the two other writers citied above. Kitchen and Slack show only two studies, out of eight, which find negative business-tax elasticities (page 47). They attribute the small number to the fact that property taxes make only a small part of business costs. But their study-citation list is smaller than that of Bartik and Wasyleno's meta-analyses, even though all three studies were done about the same time.

Although the econometric literature is mixed, some government policy initiatives have emphasized low property taxes as an incentive to business investment. A number of states have set up "enterprise zones" – of which some allow for complete property tax abatement for participating firms (Bartik [2006], Cassell (2003), Chalmers and Wassner [2007], Bohanon and McClure [1997]. Is was said that the New Brunswick government under Frank McKenna, when selling the province to prospective call-centre firms, provided data – including property-tax information – showing that New Brunswick was a low-cost province to operate a business (Murrell (1999), 72}

The position that we take in this paper is that property taxes can play a part in business location decisions. Economics development in Atlantic Canada traditionally lags that of the rest of the country, given a lack of cities, lagging natural resources, a long distances to markets. But our region has had positive business-location attributes, such as quality-of-life amenities , low property values, and low property taxes. We show that the last-named attribute had been important up to the early 1980s, but has become less so since then.

II Looking at Property Tax Rates, for Canada, Over Time

Perhaps the best way to look at property tax rates over time is to start with overall rates, for Canada as a whole, and to compare them to other government taxes. It is well known that taxes – both federal and provincial – increased from the late 1970s/early 1980s on, given the onset of federal and provincial deficits (and debt). And it is also well known – that as the federal government (and most provincial governments) began balancing their books – taxes began to

fall. The federal government eliminated its structural deficits by 1997, and many non-energy producing provinces began balancing their books soon after.

. One way to measure tax intensity is to compute various taxes as a percentage of nominal GDP. This is done in Table 1. In looking at movements in tax-intensity over a longer time frame, we take three-year (and two-year) averages to avoid spurious jumps in the data, Looking at "total taxes collected" first (the bottom row in the table), total taxes increased from the 1981-83 period, to slightly over 40 percent of nominal GDP in the 1997–99. (Taxes paid actually reached its peak in 1998, when taxes paid as a percent of current-dollar GDP hit 40.2 percent). Since 1997-99, total taxes paid has steadily declined, to 36.7 percent for 2004-05 (and 36.7 percent of GDP by 2005). The aggregate tax share by government fell, consequently, by over 3.4 percentage points. But note that the share of taxation is still above the 1981-83 average.

Looking at the various types of taxes, it is seen that virtually all taxes, with the exception of social insurance payments, declined from their respective 1997-99 peaks. In this brief descriptive section, we skip speculating as to the actual reasons for the specific reductions in taxes paid. Note that one has to be careful when discuss how such taxes rise or fall. It could be that tax bases vary, as a percentage of nominal GDP. Or it could be that the federal government (or provincial or local governments), legislated specific changes to tax rates or tax base definitions. For example, it is well known that the federal Liberal government, once it balanced its budget in 1997, announced a series of personal income tax reductions, through reductions in personal income tax rates, or through increases in various tax exemptions. Also, social security contributions, as a percentage of current-dollar GDP, rose, given difficulties in funding the Canada and Quebec Pension plans (see, Rosen et. al. [2003], 248-250). We also gloss over various provincial government tax policies. Generally, provincial governments, along with the federal government, typically registered deficits during the 1981-1998 period, and, one by one, began to balance their books afterwards. I do not delve into their various changes in tax intensities across provinces. Note, however, that in as much as most provinces have tax base harmonization with the federal government – with regards to the personal and corporate income tax systems, discretionary tax changes by the federal government can be passed on to provincial governments.

As Table 1 indicates, property taxes paid, at the national level, and as a share of nominal GDP, rose until 1997-99, and fell since then. It would be even more difficult to describe reasons why this is so. Most local governments cannot undertake significant deficits (or surpluses). Note also that the principal property tax base – the value of assessed property – is not properly part of nominal GDP[1]. And land prices can change independently from movements in current-dollar

[1] Nominal GDP represents a flow of income, and property taxes, as applied to land and buildings, are applied to a stock. The value of land and buildings in Canada has grown more slowly over time (since 1981) than nominal GDP. Thus, for the ratio of property taxes paid to nominal GDP to remain stable, it must be the case that mill rates must rise. Since the ratio has fallen since 1997, we suggest that mill rate rises have not kept up with the rise in nominal GDP.

GDP. Here we merely state that aggregate property taxes fell, as a share of national income.

Statistics Canada publishes property taxes in various ways, none of which is very satisfactory as to computing effective property tax rates (property taxes paid as a percentage of assessed property). One reason why this is so has to do with the many thousands of local jurisdictions setting mill rates and assessing property. Such data are available by surveying various municipalities, but Statistics Canada does not collect assessed property values at all. Here, Table 2 shows a number of mays of depicting property taxes at the aggregate level.

The first source of property tax information comes from Statistics Canada Family Expenditure Survey (see the first three rows of Table 2) . The first row shows the Consumer Price Index for Canada, for residential, owner-occupied property taxes. It is best to convert this data series into a real CPI series (the second row in Table 2). This row shows a rise in property taxes to 1997-1999, and a slight decline of 1.2 percent during the 2000s.

Line 3 shows property taxes paid, as a percentage of "total household expenditures". This annual data source surveys households' various consumption expenditures, including taxes paid and selected savings outlays. Unfortunately, these data go back to only 1997, so the table only depicts these rates, and the associated percentage point changes from 1997-99 to 2005-07. The percentages can be interpreted as an "average propensity to consume", but the "total household expenditures"differs from disposable income[2]. As can be seen by line 3, this "average propensity to consume" rose slightly from 1997-99 on.

There is one further shortcoming with line 3. "Total expenditures" includes households renting residences, as well as owner-occupied households. This cannot be helped, since the survey, for "expenditures on shelter", includes spending on rent and residence upkeep by tenants. So data in Table 3 should be treated with caution, since the ratio of tenants to households owning their homes does vary over time, and across provinces. Furthermore, families that own their own homes are somewhat richer than those who rent. Having said this, I present the data, since property tax information is scarce. Also, I present data in the next section which corrects for this bias, where I use public use sample tape of consumer spending data.

Line 4 of Table 2 shows effective residential property tax rates, for owner-occupied

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[2] Statistics Canada does not publish "household income" with these data. But "total expenditures" data includes taxes paid (property taxes and income), plus some savings outlays (contributions to RRSPs and registered pension plans, life insurance premiums, and payments to mortgage principal). Therefore, "total expenditures" is similar, but not exactly like, "total income". It difference, in that it excludes other savings outlays not listed above (outlays to non-RRSP investment, personal savings accounts, etc). But here we use "total expenditures" as a proxy for "total income", for lack of a true income variable.

housing, by dividing total property taxes collected by the value of property[3]. These rates are obtained from various Census from Statistics Canada. They represent "average property taxes paid", divided by the "value of residence". A straight-line interpretation was used for non-Census year data. For 2007, the "property tax" consumer prince index was used to project the 2006 census data forward. As can be seen from line 4, the average property tax rate for owner-occupied homes rose from .696 percent 1981-83 to .764 in 1997-99. It then declines to .579 in 2005-07. As above, it is difficult to pinpoint a reason for the rise and decline. It could be that, as housing prices rose quickly during the 2000s, localities found it in their interest to reduce mill rates to target local government revenues. It could be that "assessed housing valuation" has not kept up with "actual housing values", but this is speculation. All we show in Table 2 is that average property taxes across Canada rose, during the 1980s and 1990s, and then fell during this last decade. This finding is consistent with the real CPI results in line 2 of Table 2

While there is some residential property tax data available from Statistics Canada, the agency does not publish any non-residential property tax information. It is a puzzle why this is so. But the agency does not publish regular annual data series on business intermediate-goods and services spending, for Canada and the provinces. However, we calculated "non-residential" property taxes as a residual, but subtracting residential property tax spending (as used for line 4 above) from total property tax spending (as shown in line 6 of Table 2 or as in table 1). Note that our "non-residential" residual includes taxes paid by owners of apartment buildings, etc.

We calculate non-residential property taxes as a percentage of GDP only, since we do not have data on the value of non-residential property, as is the case with owner-occupied residential housing values. The results appear as line 5 in Table 2. This line shows that non-residential property taxes stayed the same from 1981-83 to 1997-99, but declined to about 2.26 percent of nominal GDP in 2003-05. Line 6 shows total property taxes as a percentage of GDP – and line 5 implies that (1) non-residential property taxes (as a percentage of GDP) did not fall as sharply, in contrast to residential property taxes, and (2) non-residential property taxes represent a higher percentage of nominal GDP, than is the case with house property taxes. This last result is consistent with the literature[4].

To summarize this section, we state that, for Canada taken as a whole, aggregate property tax intensity fell after 1997-99, for both residential and non-residential tax payments. Also, property taxes are higher for the non-residential sector than for owner-occupied housing.

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[3] It is difficult to obtain assessed value of property statistics, but Statistics Canada collects "value of property" statistics from two sources: Census data and national wealth estimates. The former source publishes both "property taxes paid" and "house value" statistics for owner-occupied residences only, by province and at the national (Canada) level. The latter source publishes the value of all forms of capital stock, but at the Canada level only.

[4] See, for example, Kitchen and Slack (1993, chapter 3, "Are Non-Residential Taxes Higher than Residential Property Taxes?", 8-10); Armstrong (2008, 6).

III Looking at Property Tax Rates by Province, Over Time.

The crux of this paper is to compare property tax intensities in Atlantic Canada with other provinces. The tables cited in this section contain the same data concepts as in Table 2, only broken out by province as well as for Canada. We discuss first household (owner-occupied) taxes, then non-residential taxes, then total property taxes. The discussion proceeds in turn.

A. Residential, Owner-Occupied Property Taxes by Province.

Table 3 shows CPI indexes, by province, the Atlantic region[5], and Canada, for property taxes paid by homeowners. This group may own single detached homes, duplexes or higher-numbered apartments buildings[6], condominiums, etc. As can be seen from this table, from 1997-99 to 2005-07, each of the Atlantic provinces display higher growth rates for this index, and this is true particularly for New Brunswick and Prince Edward Island. For the Atlantic region as a whole the CPI average is 113.4 for 2005-07, a higher average than that for the nation as a whole. Note that Quebec, Manitoba and Saskatchewan posted averages less than the Canada average; Quebec and Manitoba display very small growth rates from 1997-99 to 2005-07. Finally, note that New Brunswick had a very low property-tax CPI in 1981-83, and has recorded the highest such CPI in 2007-09. So over this 27-year period household property-tax increases has continually grown faster than the national average.

The analogous "real" property-tax CPI data is shown in Table 4. In many ways this table is more revealing than Table 3 – since Table 4 shows decreases as well as increases, although the patterns across provinces is similar. One noteworthy result is that the Atlantic Canada property tax CPI grew faster in the1981.83-to-1997/99 and 1997/99-to-2005/07 periods. As well, Canada's CPI for property taxes declined in the latter period, whereas the Atlantic region CPI rose significantly. Among the individual provinces, during the latter period, each of the Atlantic provinces. and British Columbia, recorded large increases; Ontario showed no appreciable changes, and the remaining four provinces posted declines.

We present family expenditure on property taxes, in the form of ratios of "gross spending", in Table 5. As mentioned above, these numbers, technically speaking, to not represent represent spending out of disposable income, since gross spending as published from family expenditure surveys include income and sales taxes spent, and exclude certain savings outlays.

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[5] The Atlantic region CPI, and the analogous "real" CPI index in Table 4 below, were computed using total population as weights. The provinces are rural in nature, with a high proportion of total population owning homes. But note that differences in the ratio of families owning homes to total families could cause a slight error in the Atlantic region CPI.

[6] The CPI index for such owners only applies to the property tax of the unit the owner lives in. Note then that any property tax paid indirectly by tenants through tax shifting is not included in this CPI index.

However, these results, at least at the regional and national levels, are consistent with the data in Table 3. Table 6 shows that the spending ratio in the Atlantic region rose by .1 percentage point, while at the national level it declined by .08 percentage point. Within the Atlantic region, New Brunswick, Prince Edward Island, and Newfoundland and Labrador all registered increases, and Nova Scotia showed no change. Among the other provinces, Saskatchewan posted an increase, British Columbia showed no change, and all other provinces showed declines. These results show – for the 1997/98-to-2005/07 period – some many similarities, but a few differences, with real-CPI results in Table 2.

Table 6 shows average property tax rates paid by homeowners. These data are close to, but differ from, real CPI rates, since nominal rates measure dollar-property-tax outlays paid by a representative family overt time, whereas real CPI compare such outlays to total family spending. The data in Table 6 should be interpreted as "average", or "effective", property tax rates, since they measure average property taxes paid divided by the value of the household property. In other words, these rates incorporate mill rates and the ratio of assessed home-property values to actual home-property values. But the value of the data in Table 5 is that property-tax levels, as well as rates, can be contrasted across provinces – which adds information to the CPI data in Tables 3 and 4.

From Table 6, it can be seen that for Atlantic Canada the owner-occupied property-tax rate fell slightly from 1997-99 to 2005-07, a smaller rate of decline than for Canada as a whole. This is consistent with the results from Table 4. As well, the average homeowner property-tax rate is higher in Atlantic Canada (.653 percent[7]) than for Canada taken as a whole (.579 percent). But the results in Table 6 show property-tax increases for Newfoundland and Labrador, and New Brunswick. and declines for Nova Scotia and Prince Edward Island. Notice that New Brunswick, and Newfoundland and Labrador, show long-run increases in taxes from 1981-03 on (when their tax rates were significantly below the national average) to 2005-07 (when their respective rates were considerably higher than the nation as a whole). The recent, comparatively-high rates are particularly true for New Brunswick. Finally, we note that the only provinces with tax rates below the national average are Alberta and British Columbia.

Table 8 also shows calculated effective residential property tax rates, for the 2003-05 period only, in the middle column. These data were calculated by taking the total residential taxes paid, as collected for the numbers in Table 6, computing percentages by dividing the numbers by assessed residential property values, as taken from unpublished Department of Finance worksheets[8]. The data reveal effective property tax rates that are considerably higher

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[7] Note what the .653 number means. This should be interpreted as follows: for a $100,000 home, a home owner is paying $653 in total taxes. This may seem low, but note that many rural homes pay little in property-based taxes.

[8] These data were obtained from an access-to-information request by the author. The data are used by the Department of Finance Canada in their equalization payments calculations.

than the results of Table 6. (We have no explanation of the discrepancy between the assessed value as from the Department of Finance Canada , and house values as published by Statistics Canada in their Censuses). The results in Table 8, however, when compared with the 2003-05 column of Table 6, correspond fairly well across provinces. All Atlantic provinces are higher than the national average, and Alberta and British Columbia are well below the national average.

In conclusion, the variety residential property tax statistics, as shown in Tables 3 to 6 and 8) show that in general taxes on owner-occupied property roughly equal to, or are higher, than such rates for Canada taken as a whole. This situation is particularly true for New Brunswick and Prince Edward Island.

B. Non-Residential Property Taxes, by Province.

Residential property-taxes, from homeowners, represent only part of total property taxes paid. Local and provincial governments also collect such taxes from businesses renting residential property, other commercial businesses, and, indeed, from governments (federal and provincial). Statistics Canada does not publish such information. One way of finding this information is to calculate it as a residual, subtracting owner-occupied residential taxes paid from total property taxes collected by provincial and local governments. This we did do, and divided the result by nominal GDP[9]. As we noted above, this residual includes residential taxes paid by businesses renting apartments and other dwellings.

The results are shown in Table 7. As stated above, this "residual" property tax ratio, at the Canada-wide level, declined from 2.73 in 1997-99 to 2.26 for 2003-05. The corresponding ratio for the Atlantic provinces is noticeably lower, but declined by less (from 1.93 in 1997-99 to 2.26 in 2003-05). Three of the Atlantic provinces registered declines, and in 2003-05 posted "residual" property tax rates lower than the Canada average. But New Brunswick's "residual" rate grew during the later time period under study (by .07 percentage points). Indeed, in the 2003-05 time period this province posted a higher "residual" property tax rate than that for Canada. We discuss this implication in our concluding section below.

As can be seen from the table, Quebec and Ontario have higher property tax intensities (due perhaps to high urban property values); Manitoba and Saskatchewan have higher property taxes; and Newfoundland and Alberta have much lower rates of property taxation. British Columbia has a long-run declining trend in property taxation,. Indeed, in the 1981-32 period British Columbia had the highest intensity of taxation (at 3.85 percent), and has declined steadily since then. And in 2003-05, New Brunswick (a province with low land values) has an intensity of

[9] It is difficult to find other time-series to use in the denominator. We did obtain non-residential assessed property values from the Department of Finance Canada, for 2003-05 only, and the resulting tax rates are shown in the right-hand column in Table 9 below. We experimented with using "corporate profits" as a cash-flow indicator, with little success..

taxation well above the national average. Finally, energy-related nominal GDP production can partly explain low rates, as perhaps seen in Alberta's and Newfoundland and Labrador's low rates.

Note that within the scope of this essay I do not attempt to explain variation in tax intensities across provinces. Differing land values – particularly in Ontario and Quebec – partly explain the relatively higher tax intensities. Differing assessment practices could play a role. Finally, various localities can charge higher (or lower) mill rates on property. Finally, changes in property values, assessment practices and mill rates affect property tax intensities overt time.

Finally, the right-hand column in Table 8 shows "residual" property tax rates, calculated by dividing the "residual" property taxes by non-residential assessed property values. The results are comparable to the 2003-05 column in Table 7 – although it must be stressed that the Table 7 data uses nominal GDP (a flow) and the Table 8 uses non-residential assessed property values (a stock). But the results are comparable. In Table 8, in 2003-05, Atlantic Canada's "residual" property tax rate (4.49 percent) was lower than that for Canada as a whole (5.32 percent). And like the results in Table 7, the Table 8 results show that Nova Scotia, Prince Edward Island, and Nova Scotia post lower rates than the Canada average, and New Brunswick registered a higher rate. Analogous comparisons can be made for the other provinces.

C. Total Property Taxes Paid by Province

Finally, we show total property paid (i.e., owner-occupied property taxes plus "residual" property taxes) as a ratio of nominal GDP, for Canada and the provinces. As the table shows, total property tax intensity in Atlantic Canada has consistently been lower than that for Canada as a whole, but the gap has closed somewhat during the 1997/99-to-2003-05 period. In particular, New Brunswick's total tax intensity (3.42 percent) is now higher than Canada's (3.19). Moreover, Nova Scotia (2.74 percent) and Prince Edward Island (2.80) now have tax intensities that no longer are appreciably lower than that for the nation.

The summary data in Table 9 should be treated with caution. As can be seen from the table, Alberta and Newfoundland and Labrador show very low rates – and this possible may be attributed to large nominal GDP emanating from energy production. We can conceptualize situations whereby provinces must provide local public services through local taxation, but have lower nominal GDP given few energy resources. Having said that, we claim that the traditional competitive advantage Atlantic Canada has had through comparatively low rates of property taxation is less true today. And for New Brunswick, we can say that the province is now faces a disadvantageous situation as to property taxation.

IV. Summary and Conclusions

In this paper, we have presented a fairly large set of data depicting property tax rates and intensities, by province and for Canada. We have showed that, looking at tax intensities (i.e, taxes paid as a share of national income), most taxes – including property taxes – in Canada have fallen from their 1997 peak. However, we have showed that for most Atlantic Canada provinces, the general decline in property taxation was not as strong as elsewhere across the country. And for New Brunswick in particular, we have shown that property tax rates, as well has intensity, have actually increased. Therefore, we claim that – to the extend that Atlantic Canada has had a traditional location advantage as to lower property taxes – today this advantage has been weakened. Indeed, for New Brunswick, this province no longer has a location advantage. High property taxes may in fact be deterring prospective businesses from locating there.

This paper does not explain the shrinking property tax differential between Atlantic Canada and the rest of the country. Clearly, there are many factors at work Local government need to balance their budgets. And with population shrinking in Newfoundland and Labrador, and only stable in the Maritimes (and with population growing elsewhere in Canada), local government elsewhere may be able to exploit economies-of-scale advantages and achieve lower per-capital local government increases, than would be the case in Atlantic Canada.

We purposely do not discuss differences in property value growth among the provinces, since province-wide property value data at present time is not available. We could speculate that, over the past 25 years, property values in Atlantic Canad have grown less fast than elsewhere, given migration trends, differences in urbanization rates, and differences in economic development. But even with probable differences in property value growth, local governments in Atlantic Canada could make up the differences by increasing mill rates. In this paper, we do not explore differences in mil rate taxation – vis-a-vis changes in property tax values – given the unavailability of data.

One other possible cause for Atlantic Canada's deteriorating property tax advantage has to do with how provincial government have given subsidies to local governments over the 25-year period under analysis. Province subsidize local governments (and for some provinces local school boards) for redistributive and efficiency reasons. In Table 10, we show the percentage of total local government revenue finance by provincial government subsidies, for the three time periods under analysis.

For Canada as a whole, the percentage share of local government spending finance by provincial subsidies declined from 1982–83 (50.9 percent) to 1997–99 (45.8 percent). This makes sense, given that most provincial governments were fighting deficits during this period.. But with the exception of Newfoundland and Labrador, the three Maritime provinces reduced provincial transfers-shares by fairly sharp amounts. And this drop was particularly severe in New Brunswick, where the share fell from 50 per-cent in 1981–83 to 27.42 percent in 1997-99. Since local government needed to maintain local government revenue, they increased local property tax

rates.

From 1997–99 to 2003–05, Canada as a whole increased, slightly, its collective provincial transfer-to-total local government percentage, by a .77 percentage point. But Atlantic Canada taken as a whole decreased its corresponding ratio by 2.64 percentage points. And this declined raged from a 1.1 percentage point decline in Prince Edward Island to a 3.46 percentage point drop in New Brunswick. Notice that localities in New Brunswick received only 24 percent of thier revenues from the provincial government – a percentage substantially lower than for Canada as a whole. Perhaps, because of relatively tighter provincial budgets (due to disproportionate health care burdens in an older Atlantic Canada), provincial government downloaded part of their deficit fighting only local governments. But in doing so they have lessened their respective provinces' location advantage for prospective businesses. And this is particularly true for New Brunswick.

Finally, we make mention of provincial government property taxation, i.e., property taxes that flow directly to provincial government coffers. In Atlantic Canada, only New Brunswick and Prince Edward Island do this. In Prince Edward Island, such taxes are comparatively low, in relation to province-to-local government transfers. In 2005 this province extracted $58-million in property taxes, while paying out $179-million in subsidies to local governments. But in New Brunswick, this province extracted a whopping $338-million in property taxes, while transferring only $142-million back to local governments! If one perceives property taxation as primarily a local government fiscal tool, in New Brunswick the province remarkably is extracting more in property taxes from localities than it gives them – a remarkable statistic.

Finally, it is clearly debatable as to over-generalizing this policy problem across all of Atlantic Canada, given the well-known fact that the four provinces differ markedly as to their respective economic development potentials. Clearly, economic development is brighter for Nova Scotia and Newfoundland and Labrador, given these provinces' energy-based growth. Indeed, it may be the case that New Brunswick and Prince Edward Island, lacking in energy resources, must undertake other economic development policies (such as lowering property taxes and increasing subsidies to local governments), to avoid property-tax location disadvantages.

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Table 1: Ratio of tax revenues, by type of tax, for all governments, as a percentage of nominal GDP, Canada, for selected year-averages			
tax type/ year	1981–1983*	1997– 1999	2004–2005
personal income taxes	11.73	14.92 (3.19)**	12.76 (– 2.17)
business taxes	3.41	3.97 (.56)	3.85 (– .12)
other personal taxes	.88	.80 (– .08)	.83 (.03)
non-resident taxes	.31	.36 (.04)	.41 (– .41)
social insurance and other	3.40	5.10 (1.70)	5.14 (.04)
production taxes	13.93	14.92 (.99)	13.66 (–1.27)
provincial prop. taxes	.27	.38 (.11)	.28 (–.09)
local prop. taxes	3.18	3.33 (.16)	2.91 (– .42)
total property taxes	3.45	3.71 (.26)	3.19 (– .52)
other production taxes n.e.s.	10.49	11.21 (.73)	10.46 (–.75)
total government taxes	33.67	40.08 (6.40)	36.64 (–3.43)
* The data represent three-year averages for the first two columns, and two-year averages for the third column. ** The numbers in parentheses represent percentage-point changes from the corresponding numbers in the previous column.			
Source: calculations made from CANSIM tables #38–40001, #38-40004..			

Table 2: Changes to Property Taxes Over Time, Canada, for Three Periods, Using Various Measures			
Property tax Measure	1981–1983	1997–1999	latest period*
1. Nominal CPI, property taxes index (1997=100)	43.4	96.2 (52.8)**	113.4 (17.2)
2. "Real" CPI, property taxes index (1997=100)	80.0	105.1 (25.1)	103.9 (– 1.2)
3. Household property taxes/ total household spending	n/a	2.32	2.24 (.08)
4. household property taxes/value of property	.696	.764 (.069)	.579 (–.186)
5. non-residential property taxes/nominal GDP	2.71	2.73 (0.02)	2.26 (–.46)
6. total property taxes/nominal GDP	3.40	3.72 (0.23)	3.19 (–.52)
* The "latest period" represents the three-year average of the latest available data. See tables below.			
** The numbers in parentheses represent percentage-point changes from the previous period.			
Sources: see sources for Tables 3 to 7, and Table 9, below.			

Table 3: Consumer Price Indexes, Property Taxes, by Province and Canada, three-year averages (1997=100)			
province	1981–1983 avg	1997–1999 avg	2005–2009 avg
Newfoundland	37.8	90.4 (52.9)*	111.5 (21.0)
P.E.I.	44.4	91.7 (47.3)	127.5 (35.8)
Nova Scotia	47.9	88.5 (40.5)	117.9 (29.4)
New Brunswick	32.2	89.7 (57.5)	121.8 (32.1)
Quebec	50.4	99.9 (49.5)	108.1 (8.2)
Ontario	40.3	95.9 (55.5)	116.1 (19.3)
Manitoba	38.9	99.0 (60.1)	103.4 (4.3)
Saskatchewan	37.8	91.6 (53.9)	109.3 (17.7)
Alberta	49.1	97.8 (48.8)	116.5 (18.6)
British Columbia	43.0	92.0 (49.0)	117.1 (25.1)
Atlantic Canada	40.2	89.5 (49.3)	116.3 (28.8)
Canada	43.4	96.2 (52.8)	113.4 (17.2)
* The numbers in parentheses are percentage-point changes from the previous time period.			
Source: calculated from CANSIM table #32–60021;			

Table 4: "Real" Consumer Price Indexes, Property Taxes, by Province and Canada, three-year averages (1997=100)			
province	1981–1983 avg	1997–1999 avg	2005–2007 avg
Newfoundland	64.7	97.4 (32.7)	101.9 (4.5)
P.E.I.	78.0	101.2 (23.2)	114.4 (13.2)
Nova Scotia	86.9	97.3 (10.4)	106.8 (9.5)
New Brunswick	57.8	98.7 (40.4)	111.4 (12.7)
Quebec	91.3	108.4 (17.1)	99.5 (– 9.0)
Ontario	76.5	105.4 (29.0)	106.0 (0.6)
Manitoba	73.2	107.6 (34.2)	96.1 (–12.5)
Saskatchewan	70.2	101.2 (31.0)	99.8 (–1.3)
Alberta	89.8	109.2 (19.5)	103.3 (–5.9)
British Columbia	76.0	98.3 (22.3)	108.3 (10.0)
Atlantic Canada	71.6	98.0 (26.4)	107.7 (9.7)
Canada	80.0	105.1 (25.1)	103.9 (– 1.2)
* The numbers in parentheses are percentage-point changes from the previous time period			
Source: calculated from Statistics Canada, CANSIM table #32–60021.			

Table 5: Property Taxes Paid, as a Percentage of "Total Household Expenditures" *, for Canada and the Provinces.		
province/ year	1997–99**	2004–06
Newfoundland	1.11	1.30 (0.19)***
Prince Edward Island	1.65	1.75 (0.10)
Nova Scotia	1.64	1.65 (0.01)
New Brunswick	1.40	1.57 (0.17)
Quebec	2.42	2.28 (–.13)
Ontario	1.89	1.73 (–.16)
Manitoba	2.67	2.33 (–.34)
Saskatchewan	2.26	2.38 (0 .12)
Alberta	1.91	1.72 (–.19)
British Columbia	1.90	1.90 (0.00)
Atlantic Canada	1.46	1.56 (0.10).
Canada	2.32	2.24 (–.08)
* "Total Expenditures" as defined by the Family Expenditure Survey is equal to total consumer outlay plus taxes paid, contributions to RRSPs, registered retirement plans, and mortgage payments towards the house principal.		
Source: Statistics Canada CANSIM table #20–30003.,		

Table 6: Average Property Tax Rates, for Owner-Occupied Residences, by Province and Canada (percent)**.

province/ year	1981–83*	1997–99	2005–07
Newfoundland	.387	.616 (.229)***	.627 (.010)
Prince Edward Island	.558	.738 (.180)	.693 (–.046)
Nova Scotia	.722	.760 (.038)	.601 (–.159)
New Brunswick	.424	.722 (.298)	.745 (.023)
Quebec	.908	1.003 (.094)	.724 (–.279)
Ontario	.744	.794 (.049)	.650 (–.144)
Manitoba	.999	1.331 (.331)	.898 (–.433)
Saskatchewan	1.088	1.177 (.088)	.984 (–.193)
Alberta	.528	.776 (.228)	.451 (–.304)
British Columbia	.453	.426 (–.028)	.319 (–.107)
Atlantic Canada	.510	.718 (.209)	.653 (–.066)
Canada	.696	.764 (.069)	.579 (–.186)

* The data represent three-year averages, for each column.
** The data represent "average property taxes paid" divided by the "average value of residences, including land".
*** The numbers in parentheses represent percentage-point changes from the corresponding numbers in the previous column.

Source: various Censuses, Statistics Canada. Off-years calculated by interpolation.

Table 7: Non-Household Property Taxes as a Percentage of Nominal GDP, by Province and Canada, for Three Time Periods			
province	1981–1983*	1997–1999	2003–2005
Newfoundland	0.94	0.80(–.14)**	.57 (–.23)
P.E.I.	1.87	1.78 (–.09)	1.86 (.08)
Nova Scotia	2.34	2.03 (–.30)	1.88 (–.15)
New Brunswick	2.34	2.53 (.18)	2.60 (.07)
Quebec	2.80	2.45 (–.15)	2.29 (–.16)
Ontario	2.75	3.22 (.47)	2.63 (–.59)
Manitoba	3.46	2.83 (–.63)	2.53 (–.30)
Saskatchewan	2.45	2.84 (.39)	2.45 (–.39)
Alberta	1.98	2.16 (.19)	1.52 (–.64)
British Columbia	3.85	2.50 (–1.36)	2.13 (–.36)
Atlantic Canada	1.99	1.93 (–.06)	1.76 (–.17)
Canada	2.71	2.73 (.02)	2.26 (–.46)

* The data represent three-year averages.
** The numbers in parentheses represent percentage-point changes from the previous time period.

Source: calculated data using information from Tables 6 and 9, and CANSIM table #38-40001.

Table 8: Effective Property Tax Rates*, Residential and Non-Residential, for 2003-2005 average, provinces and Canada

province	residential	non-residential**
Newfoundland	2.29	2.10
P.E.I.	2.29	2.97
Nova Scotia	1.83	5.04
New Brunswick	2.32	6.92
Quebec	2.01	5.70
Ontario	1.83	6.69
Manitoba	3.05	4.13
Saskatchewan	3.06	2.95
Alberta	1.72	3.37
British Columbia	1.06	5.02
Atlantic Canada	2.07	4.49
Canada	1.76	5.32

* Rates are calculated as property taxes paid divided by market value of property

** This component includes farm property taxes

Source: Information from Table 8; unpublished worksheet data from the Department of Finance Canada

Table 9: Ratio of total property taxes paid, as a share of nominal GDP, for Canada and the provinces, using three-year averages (percent)			
province/ year	1981–83	1997–99	2003–05
Newfoundland	1.32	1.45 (0.13)	1.08 (–.37)
Prince Edward Island	2.48	2.69 (0.21)	2.80 (0.11)
Nova Scotia	2.76	2.92 (0.16)	2.74 (–.18)
New Brunswick	2.75	3.27 (0.52)	3.42 (0.15)
Quebec	3.33	3.40 (0.07)	3.23 (–.17)
Ontario	3.66	4.34 (0.68)	3.80 (–.54)
Manitoba	4.44	4.05 (– .38)	3.23 (–.52)
Saskatchewan	3.41	3.75 (0.34)	3.21 (–.55)
Alberta	2.40	2.88 (0.48)	2.05 (–.83)
British Columbia	4.68	3.40 (–1.28)	2.96 (–.44)
Atlantic Canada	2.40	2.72 (0.31)	2.52 (–.20)
Canada	3.40	3.72 (0.23)	3.19 (–.52)
Source: Statistics Canada, CANSIM table # 38-40001, #38-40007.			

Table 10: Percentage of Total Local Government Revenue Financed by Provincial Government transfers to Local Governments, Atlantic provinces and Canada			
province and region	1981– 83	1997–99	2003–05
Newfoundland	74.83	76.42 (1.89)*	74.14 (–2.28)
P.E.I.	87.18	78.96 (– 8.22)	77.90 (–1.07)
Nova Scotia	64.54	51.11 (–13.43)	48.78 (–2.33)
New Brunswick	49.92	27.42 (–22.51)	23.95 (–3.46)
Atlantic Canada	66.78	56.70 (–10.09)	54.06 (–2.64)
Canada	50.89	45.87 (–5.02)	46.64 (0.77)
* The numbers in parentheses represent percentage point changes from the previous period.			
Source: Statistics Canada, CANSIM table #38–40004.			