

Income Tax Base Evolution in Brussels 1980-1999: The budgetary value of the Rich

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Abstract.

Een belangrijk kenmerk van alle belastingssystemen ter wereld is dat de hoeveelheid belastingen die een individu betaalt, verband houdt met zijn/haar inkomen. Rijken betalen meer dan armen. Bijgevolg zijn de rijken van een groter budgettaire (!) belang voor een overheid. Wij analyseren in welke mate de evolutie van het aantal rijken in Brussel over de periode 1980-1999 een invloed heeft gehad op de verslechterende budgettaire positie van de Brusselse gemeenten (en het Brussels Hoofdstedelijk Gewest). Het is immers duidelijk dat de opbrengsten uit de lokale inkomstenbelastingen in Brussel veel minder sterk toenamen dan in de rest van het land. Onze analyse toont aan dat zowel een afname van de bevolking als een daling in het gemiddelde inkomen van de bevolking hiervoor verantwoordelijk zijn. Brussel verliest inwoners en daarmee een deel van zijn fiscale grondslag. Belangrijker vanuit budgettair oogpunt is echter dat vooral mensen met hoge inkomens lijken te vertrekken. Waar in 1980 Brussel nog 65% meer inwoner met hoge inkomens had dan het landelijk gemiddelde, lag dit aantal vanaf 1996 onder het landelijk gemiddelde. Gegeven de progressiviteit van de inkomstenbelasting en de daaruit voortvloeiende budgettaire waarde van de rijken, lijkt het noodzakelijk dat de Brusselse beleidsvoerders extra aandacht aan deze stadsvlucht besteden.

Abstract.

INTRODUCTION

A clear characteristic of tax systems world-wide is that the taxes paid by individual taxpayers are related to their incomes. The rich pay more than the poor. While the degree to which this is the case differs (strongly) among countries and among levels of government the positive relation between taxpayers' wealth and taxes paid is quite universal. One implication of this is that rich taxpayers have "higher budgetary value" than poor taxpayers. It is this simple truth that we investigate in the present paper. More precisely, we analyse to what extent the evolution in the number of rich taxpayers can help explain the problematic budgetary evolution of Brussels municipalities and of the Brussels Region. Our empirical analysis focuses on a tax (the income tax) that is most explicitly related to taxpayers' incomes and that takes a central role in the current financing system in Brussels at both the municipal and regional level.

It is fair to say that the erosion of the income tax base is considered a main political issue in the Brussels Region and municipalities. Indeed, a normal functioning of government demands stable tax revenues. The *main aim* of our paper is to provide a better understanding of the sources of the Brussels tax base erosion or, more precisely, to provide a better insight into the nature of the tax base erosion. While our main focus will be on the municipal level of government, we will systematically refer to the relevance of our analysis for the Regional government too. To observe long-term patterns we analyse the evolution of (local) income taxes over the period 1980-1999.

In section 1 we document the role of local income taxes (LIT) and how they fit in the general revenue pattern of municipalities. We also show how local income tax revenues in Brussels' municipalities have evolved differently from the rest of the country. In order to better understand this evolution, it is necessary to analyse how tax revenues are generated, that is: it is necessary to decompose the local income tax revenues into its main components. This is done in section 2. Sections 3 and 4 then analyse empirically how different components of the local income tax revenues have evolved over time. While section 3 summarises information on the evolution of the number of taxpayers and their average wealth; section 4 focuses on the main component for the present analysis: the presence or absence of high-income earners. Section 5 summarises and concludes.

1. FINANCING BRUSSELS MUNICIPALITIES THROUGH LOCAL INCOME TAXES

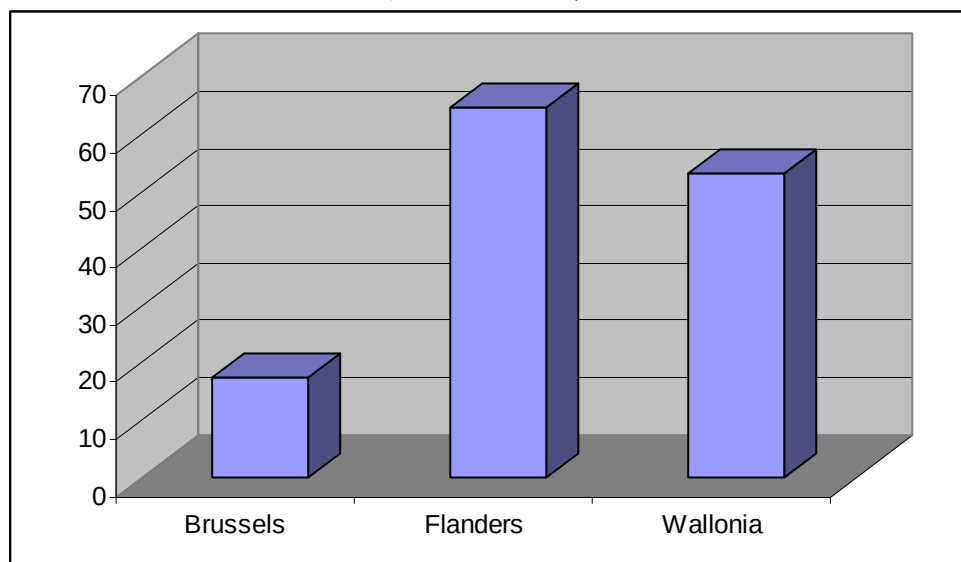
Local governments in industrialised countries typically depend on two main sources of revenue: grants and taxation. The Belgian, and by extension the Brussels municipalities are no exception. Brussels' municipalities receive **grants** from higher-level governments, typically from the Brussels Regional Government. They also rely to a large extent on **tax revenues**. Compared to local governments in many other countries, the Brussels' (Belgian) municipalities have far reaching powers in introducing taxes and setting tax rates. This local autonomy is reflected by the fact that municipalities typically raise as many as twenty different taxes. This wide fiscal diversity does not prevent, however, that about 80 percent of municipal tax revenues

come from two sources only: the local property tax (LPT) and the local income tax (LIT).

For the Brussels' municipalities, the single most important local tax in terms of revenue is the local property tax. This accounts for 58.4 percent of municipal tax revenues in the 1999 budget.¹ The second most important tax is the local income tax that raises 25.2 percent of local tax revenues. However, though the local property tax is the most important municipal tax *from a budgetary perspective*, it is fair to argue that *from a policy perspective* the local income tax is the more important one. The reason is that the local income tax is characterised by a very mobile tax base whereas the tax base for the local property tax is almost immobile. In simple words: people (who pay the income taxes) move more easily than houses and buildings (on which the property tax is paid). The local income tax is thus residence-based, the implication being that population movements have immediate effects on the size and composition of the (income) tax base. And, like many large European cities, Brussels has been confronted with a steady decline in its population and thus with a shrinking tax base. To illustrate this, one can observe that in 1981 the total population of the Brussels' Region amounted to 1,000,221 whereas today it is 959,381; a decline just over 4 % in 20 years.

That 'something is at hand' with the evolution of the local income taxes in Brussels' municipalities is documented in figure 1. There, we compare the evolution in the local income tax revenues across regions. More precisely, figure 1 gives the percentage change in the real local income tax revenues between 1980 and 1999.

**FIGURE 1: INCREASE IN REVENUES FROM LOCAL INCOME TAXES 1980-1999
(REAL TERMS)**



As can be observed from the figure, revenue from the local income tax has increased overall. More precisely, in 1999 the total revenues from local income taxes in all (589) Belgian municipalities were 55.7 per cent higher than in 1980. Note that this

¹ DEXIA. *De Financiën van de Lokale Overheden in 1999*. Dexia Bank, 94 p.

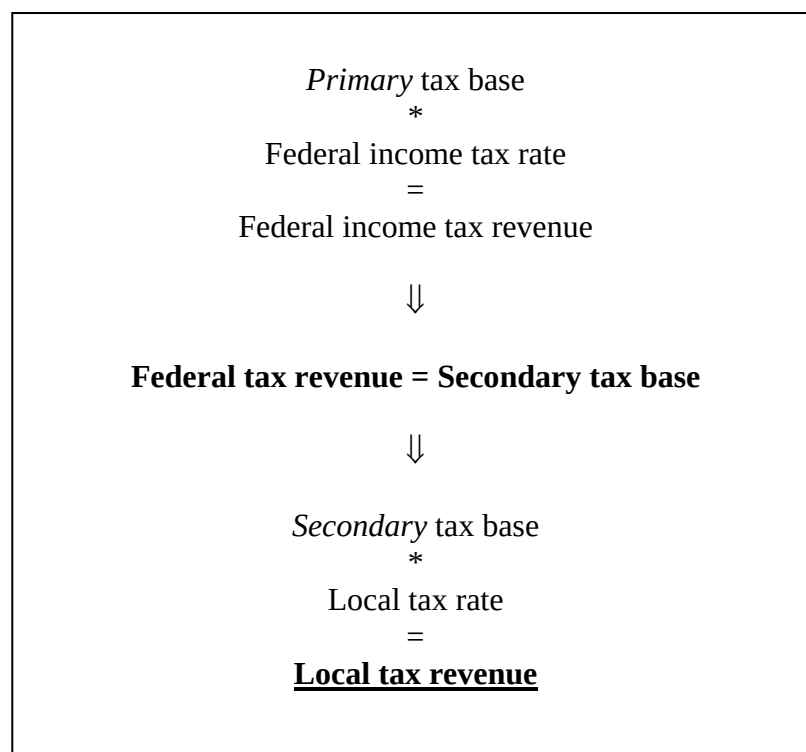
increase is expressed in real terms, the effect of inflation has been corrected for. This increase in local income tax revenues mimics a general increase in municipal taxation which in turn mimics the increase in local public expenditures (municipalities have become ‘more important’ in budgetary terms) but also the decrease in grants. There has indeed been a tendency of Federal and Regional governments to cut back on grants to the municipalities, ‘forcing’ these to compensate grant cutbacks by increases in local taxes.

The increase in local income tax revenues is general in the sense that it can be observed in each of the three regions. Still, most important for the present analysis is the fact that substantial differences can be observed between the regions. Indeed, the increase in local income tax revenues has been very modest in the Brussels municipalities. Here, revenues from the local income tax in 1999 was ‘only’ 17.60 per cent higher than in 1980. The increase in tax revenues is strongest in Flanders: 64.74 per cent and less so in Wallonia (53.14 per cent).

2. THE COMPONENTS OF LOCAL INCOME TAX REVENUES

To understand the evolution of local income tax revenues it is necessary to have an insight into how these revenues come about. As, indeed, they happen to be the result of a relatively complex system. The first thing to note is that, while municipalities are free to set the tax rate they want, the definition of the tax base is exogenous to the municipalities. The reason is that the local income tax – like the local property tax – is a surcharge. This means that the tax-base for the municipalities corresponds with the tax revenues levied by another level of government, in the case of the local income taxes: by the federal government. These federal income tax revenues form the *secondary* tax base on which the local tax is levied. The situation is illustrated in figure 2. Here it is shown how a local tax (surcharge) relates to its secondary tax base which itself is the product of the primary tax base and the federal tax rate.

FIGURE 2: LOCAL INCOME TAX REVENUES and THEIR SUB-COMPONENTS



The federal tax revenue is calculated as the result of the taxpayers' income (this taxable income constitutes the primary tax base) on the one hand and the federal income tax rate on the other. For the present analysis it is crucial to note that 'the' federal tax rate does not exist. Actually, 'the' federal tax rate refers to a scheme of tax rates that reveal a progressive tax structure. This means that the average tax rate paid by a taxpayer increases with his income (tax base). In other words, richer taxpayers – in terms of taxable income – not only pay more taxes than poorer ones in absolute terms; they also pay more in relative terms. For example a taxpayer who is twice as rich than another pays *more* than twice as much in federal taxes. This notion will become very relevant later on. The idea behind progressive taxation is that tax policy should be used for redistribution purposes. Still, proportional (non-progressive) taxation also leads to redistribution as the rich pay more taxes than the poor for an equal amount of government services. Progressive taxation merely reflects strong redistributive preferences on the side of the tax legislator.

From that perspective, it can be said that the scheme of statutory tax rates reflects how much the tax legislator wants to 'redistribute' (quotation marks refer to the fact that, of course, the tax in itself does not redistribute by the simple fact that any taxpayer pays a non-negative amount of taxes). Table 1 gives the federal statutory marginal tax rates that were in use in 1999. It can be seen that marginal rates start at 25 % for that part of the personal income that lies between the minimum Y_0 (which equals BEF 165.000 for a single taxpayer) and BEF 255.000. Marginal tax rates t_α increase up to a maximum rate of 55 % for that part of income that is larger than BEF 2.443.000.

TABLE 1 : MARGINAL TAX RATES APPLICABLE ON INCOMES EARNED IN 1999

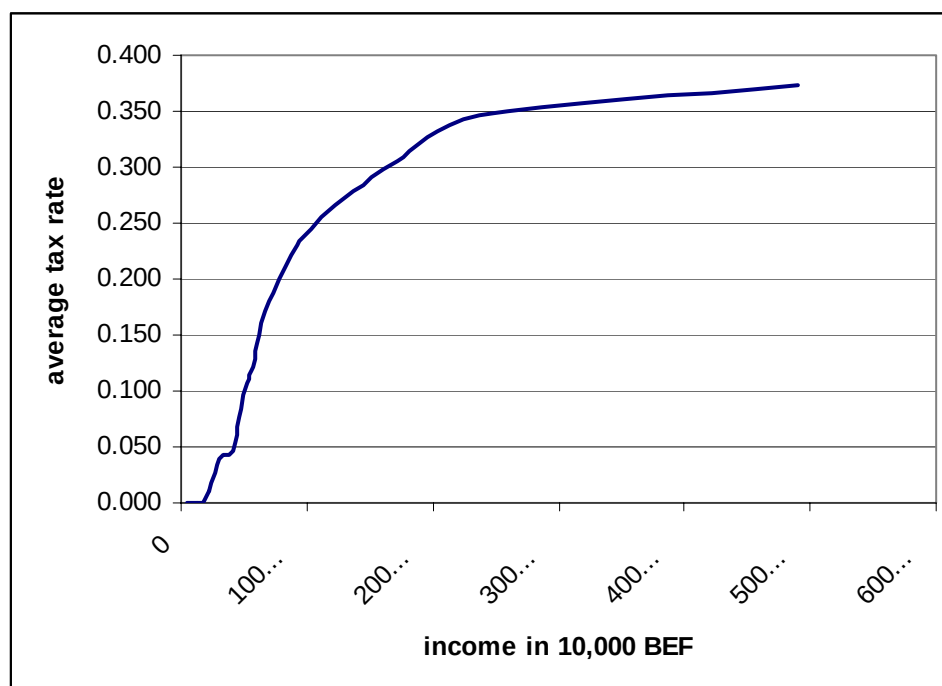
Taxable income	Marginal tax rate
in BEF (in EUR)	
Y_0 - 255.000 (6.321,28 EUR)	25 %
255.000 (6.321,28 EUR) - 339.000 (8.403,59 EUR)	30 %
339.000 (8.403,59 EUR) - 483.000 (11.973,26 EUR)	40 %
483.000 (11.973,26 EUR) - 1.110.000 (27.516,18 EUR)	45 %
1.110.000 (27.516,18 EUR) - 1.665.000 (41.274,27 EUR)	50 %
1.665.000 (41.274,27 EUR) - 2.443.000 (60.560,39 EUR)	52,5 %
Over 2.443.000 (60.560,39 EUR)	55 %

Source: www.minfin.fgov.be

A table of statutory tax rates, like the one presented, gives a rather 'technical' view on the existing progression of the income tax system. A graphic presentation of the average tax rate as a function of taxable incomes allows for a more 'intuitive' view as it allows capturing the idea of progression into one single measure. Such a

presentation is given in figure 3. The information is for 1999 and is based on the actual federal taxes paid by all Belgian residents.

FIGURE 3: AVERAGE TAX RATE AS A FUNCTION OF TAXABLE INCOME



It can be seen that the average tax rate rises with income (a sufficient condition for the income tax to be classified as progressive) at a decreasing rate. Still, information on marginal and average tax rates – as given above – remains ‘abstract’ from a budgetary perspective. Indeed, consider the extreme situation of a country with a progressive tax structure as in figure 3 but where all taxpayers have incomes equal to zero. It is obvious that – despite the statutory rate structure – little revenue will be collected and little redistribution will take place. In order to get a view on the *actual* revenue raising capacities and on the *actual* degree of redistribution, one has to take into account the pre-tax income distribution, i.e. the ‘presence’ or ‘absence’ of the tax base.

As can be seen from figure 2, the federal tax revenue (which results from applying the federal tax rate scheme on the federal – or primary – tax base) forms the so-called secondary tax base for the municipalities. Two municipalities that have identical tax rates will have the same tax revenues only if their secondary tax bases are identical. Thus for a given municipality it is harder to raise money to the extent that the federal income taxes paid by its residents grow slower or even decline. All this means that the evolution of federal income taxes raised within each of the regions reflects the budgetary pressure on the municipalities within that region. Table 2 shows clearly that the evolution of federal income tax revenues has been such that Brussels municipalities were not in a ‘privileged’ position.

TABLE 2:
SHARE OF FEDERAL INCOME TAXES RAISED IN EACH REGION

	1980 Share (%)	1999 Share (%)
Flanders	56,17	62,20
Wallonia	30,44	28,78
Brussels Region	13,39	9,02
Belgium	100,00	100,00

The crucial information from the Brussels perspective is that residents from the Brussels Region paid 13.39 % of the federal income taxes in 1980. However, this share has since then decreased dramatically. In 1999 only 9.02 % of federal taxes came from within the Brussels region. This clearly reflects the erosion of the tax base for the Brussels' municipalities. Not only the erosion in itself, but also the speed of it, suggest that budgetary problems are unavoidable within the Brussels Region. At the municipal level – not presented in the table – a similar pattern has occurred in each of the 19 Brussels municipalities individually.

3. ERODING TAX BASE: LOSING POPULATION OR WEALTH?

We observed that federal income tax revenues raised within the set of 19 Brussels municipalities has evolved at a much slower pace than within the rest of Belgium. The federal tax scheme is by definition identical for inhabitants of the different regions. So it follows that the evolution that we observed can be attributed mainly (as there is a progression effect here too!) to the evolution of the **primary tax base**, that is: of the incomes of all Brussels residents. That Brussels is suffering from strong tax base erosion can indeed be seen in table 3. This table shows the percentage change in the primary income tax base over the period 1980-1999. We again present only real changes. It is easy to see that the Brussels Region has a very different evolution from the rest of Belgium.

It can be observed that, at the national level and over the 20-year period, the base of the federal income tax increased by 40.93 % (in real terms). Of central interest is, however, that the Brussels Region is evolving in a much slower way. Indeed, it is suffering a relative decline at a “startling” rate. In real terms the tax base increased by 51.58 percent in Flanders. In Brussels the increase was only 1.47 percent! It is, therefore, fair to say that Brussels has a problem of (relative) tax base erosion. Moreover, when compared to the analysis of Heyndels (1993), it is clear that the situation has not steadied but has got worse over the past decade.^{2,3}

² It could be noted that the growth in primary tax base in Brussels is much smaller than the growth in municipal income tax revenues (as summarised in figure 1). This difference reflects to a large extent the fact that Brussels municipalities have increased their local income tax rates.

TABLE 3:
CHANGES IN PRIMARY TAX BASE 1980-1999 (%)

	Real Change
Flanders	51.58
Wallonia	36.50
Brussels Region	1.47
Belgium	40.93

The situation is illustrated more clearly still in table 4. There we summarize the shares of each region in the federal income tax base. Of course, these shares are much in line with the shares of the federal income taxes paid as given in table 2. The reason is that a single federal tax scheme is applied for all Belgian residents (the differences that do appear are a consequence of different composition of the tax bases between regions). What is clearly apparent from table 4 is that the Brussels region has suffered a large fall in its primary base. In 1980, it had 11.86% of the primary tax base whereas by 1999 this had been eroded to 8.54%.

**TABLE 4: SHARE IN PRIMARY
(FEDERAL) INCOME TAX BASE BY AREA**

	1980 Share (%)	1999 Share (%)
Flanders	56.90	61.20
Wallonia	31.25	30.26
Brussels Region	11.86	8.54
Belgium	100.00	100.0

The question that then imposes itself is whether this decline in Brussels can be attributed to a declining population (i.e. losing taxpayers) OR to an impoverishing remaining population. It is indeed clear that the primary tax base constitutes of two parts: the number of declarers and their average wealth. So the erosion of the tax base can have two causes: people moving out or people getting poorer. To analyse what has driven the observed evolution in the federal income base (see tables 4 and 5) within the Brussels Region, Ashworth and Heyndels (2001) compare the actual

³ HEYNDELS (B.). Federale Belastinghervormingen en hun invloed op de Brusselse gemeentefinanciën. In: *Bres Periodiek Bericht*, 1993, nr. 5

evolution of the federal income tax base in Brussels with a hypothetical evolution.⁴ The latter evolution assumes that the relative position of Brussels remained unchanged over the period 1980-1999. More precisely, it is assumed that in 1999 Brussels had the same share of federal income tax base as in 1980. Moreover, it is assumed that over the period 1980-1999 the number of taxpayers as well as their average income in Brussels evolved at the same rate as in the rest of Belgium. This gives a theoretical tax base (and theoretical tax revenues) for Brussels under the assumption that ‘nothing changed’. Comparing this ‘nothing changed’ tax base with the actual 1999 tax base allows to see how much has changed and – more important – what are the sources of the change.

The general results from Ashworth and Heyndels (2001) are summarised in table 5. There, we give the so-called ‘non-realised local receipts’ for the 19 Brussels municipalities. This refers to the difference in receipts the Brussels municipalities would have received if the Region had kept pace with the rest of Belgium (in terms of income and number of taxpayers) and what they actually receive now. The information in table 5 clearly documents the problematic situation in Brussels. *If* the average income in Brussels would have grown at the national average and *if* the number of taxpayers in Brussels would have kept up with the rest of the country *then* using the municipal tax rates existing in 1999 would have led to an income tax revenue for the 19 municipalities that is 48,11 % higher than what was actually collected!

Interestingly, table 5 also allows to identify the ‘source of the problem’. Columns 3, 4 and 5 summarise this decomposition. Each column shows to what extent each of the presented elements (number of declarers and average income) is responsible for the non-realised local receipts. Column 3 gives the percentage of non-realised receipts lost because the average income in their municipality did not keep up with the rest of the country. Column 4 gives the part attributable to the differential change in the number of taxpayers. Column 5, finally, represents the part of the tax base change that cannot be allocated unambiguously to either of the two sources.

TABLE 5: COMPONENTS OF CHANGE IN INCOME TAX BASE (IN %)

	<u>Non-realised local tax revenues as % of the actual 1999 tax revenues</u>	<u>Term 1</u> Fixed Number Declarers	<u>Term 2</u> Fixed Average income	<u>Term 3</u> Residual Changes
Flanders	-9,70	45,28	24,30	30,42
Wallonia	5,77	-16,73	47,97	68,76
Brussels Region	48,11	30,80	31,96	37,24
Belgium	0,00	0,00	0,00	0,00

⁴ ASHWORTH (J.), HEYNDELS (B.). *The Structural Evolution of Income Tax Revenues and Income Tax Rates in Brussels Municipalities*, Work commissioned by the Research in Brussels Programme, November 2001, 142 p.

From table 5 we learn that there is no unique source of the tax base erosion in the Brussels Region. Indeed, the effects of the (relatively) declining number of declarations and the (relatively) declining average income are about of equal size. They each explain about one third of the forgone revenues. Technically, two interpretations of the results in table 5 are still possible. One is that the Brussels Region has suffered from a loss in population *and* that the remaining population has lost wealth. The other is that the Region lost population *and* that the higher income earners were over-represented among the emigrants.

From a policy perspective, this distinction matters. Actually the first scenario (people leaving Brussels and the remaining population losing wealth) may demand a policy that stimulates economic activity in the Region. The second scenario (people leaving Brussels, especially the high-income earners) suggests rather that there is need to make the Region more attractive as a place of residence for this category of people. In section 4, we will present a more detailed analysis of this evolution. More precisely, we will focus on the evolution of high-income tax declarations and compare this evolution in Brussels with the rest of Belgium. There, we will also demonstrate the budgetary importance of such population movements. We will show that even very moderate population movements – if they are undertaken by specific subgroups of the population – can have extreme budgetary consequences.

4. INCOME DISTRIBUTION & THE BUDGETARY VALUE OF THE RICH

The number of tax declarations and the average income per declaration are main indicators of the fiscal richness of a region and/or municipality. However, the average income has a special function. More specifically, the budgetary significance of the average income is twofold. First, richer taxpayers within any given municipality pay more income taxes to the federal government than poor taxpayers. As such, each 1 % surcharge in local income taxes gives a larger ‘return’ when the population of the municipality is on average richer. Secondly, the progressive nature of the federal income tax strengthens this budgetary value of a rich taxpayer. Indeed, a progressive tax means – by definition – that the average tax rate increases with income (cfr. section 1). So, one taxpayer with an income of, say, 1,000,000 BEF is “worth” more than twice the budgetary value of two taxpayers each earning 500,000 BEF.

That the contribution per BEF income differs markedly between the Brussels Region and the other areas is documented in table 6. There, we give the average federal tax rate paid by inhabitants in each of the 3 areas and for Belgium as a whole. Concentrating on the 1999 data we observe that the average taxpayer in the Brussels Region pays approximately 23.35 % of his income to the federal tax authorities. The average taxpayer in Wallonia and Flanders pays 24.96 % and 25.94 % respectively. This means that the average taxpayer in Flanders pays a higher percentage of his (higher) income. It follows that when the average municipality in the Brussels Region sets a local income tax rate of 1 %, it can expect less revenues from this than when the average Flemish municipality would introduce this 1 % income tax rate. More precisely, the average Brussels municipality can expect to receive 0.2335 % of the average taxpayer’s income for each percent of local income tax. For the average

municipality in (richer) Flanders this amounts to 0.2594 %. As the richer taxpayers pay a higher share of their taxable income under progressive taxation, the data in table 6 reveal a striking divergence in the fiscal capacity among the 3 Belgian regions.

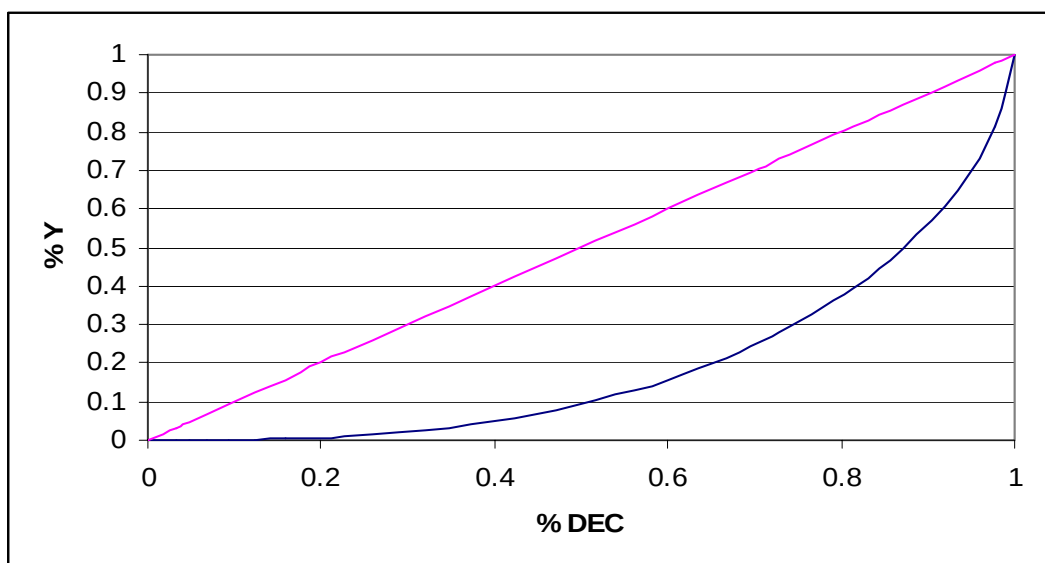
TABLE 6: AVERAGE FEDERAL INCOME TAX RATE

	1980	1999
Flanders	29,09	25,94
Wallonia	25,42	24,96
Brussels Region	25,09	23,35
Belgium	25,75	24,56

Another important characteristic of the progressive nature of income taxation is that not only the level of the (average) income is important, but also the composition of the tax base. As a general rule, it can be said that, for given average revenue, a government will collect more revenue from income taxation to the extent that income inequality is higher. The reason is intuitively clear. Consider, in a jurisdiction with average income Z , the tax payments of two ‘teams’ of taxpayers. The first of these ‘teams’ consists of two taxpayers with incomes equal to $Z-A$ and $Z+A$ respectively. The other ‘team’ has two taxpayers that both earn exactly the average income Z . Now, team 1 – with high income inequality – will pay more taxes than team 2 – where there are no income inequalities. The reason is as follows. Given the progressive nature of the tax system, the amount that is paid less than the taxes paid by someone earning Z by the first taxpayer (who earns $Z-A$) is smaller than the amount that is paid more than the tax paid by someone earning Z by the second taxpayer (earning $Z+A$). Thus, the first ‘team’ – with taxpayers that have incomes of $Z-A$ and $Z+A$ – pays more taxes than ‘team’ 2 – which has two taxpayers each having an income of Z .

Ceteris paribus, and *from a pure budgetary point of view*, income inequality is therefore a ‘good thing’ for a jurisdiction. A government can collect more tax revenues – *ceteris paribus* – in a jurisdiction with higher income inequality. Income inequality also leads to ‘tax contribution inequality’. This can be visually represented by a Lorenz curve as given in figure 4. There we plot the cumulative share of taxes paid as a function of the cumulative share of tax declarations (ordered by taxable income). The data are for the Brussels Region and apply to 1999. To ‘read’ the figure, note that if all taxpayers within the Region would have identical incomes, then the Lorenz curve would be given by the diagonal line: the x % lowest incomes pay x % of the taxes; the $x+y$ % lowest incomes pay $x+y$ % of the taxes. In reality, however, income inequality exists: the x % lowest income earners pay less than x % of taxes.

FIGURE 4: LORENZ CURVE OF FEDERAL TAXES PAID IN BRUSSELS



From figure 4, it is immediately clear that the federal taxes paid are distributed very unevenly over the population. To be precise, the 20 % taxpayers (declarations) with the lowest income pay less than 1 % of all federal taxes. Put differently: one fifth of the population contributes less than 1 per cent of all taxes. Given that municipal taxes are calculated as a (uniform) percentage of the federal taxes, the same proportions apply for the local governmental level. So, from a budgetary point of view these taxpayers are almost “negligible”. At the other end of the income distribution, we observe that the 20 % richest inhabitants pay over 60 % of total taxes. If we consider only the very rich, for example the top 2.2 % of income earners, we observe that these people pay no less than 18 % of all taxes! Needless to say that – again, from a purely budgetary point of view – the presence of such high-income earners in a municipality is a most interesting and welcome factor.

While giving a general impression of the tax contribution inequality, the visual representation of the Lorenz curve does not facilitate comparison over time or across jurisdictions. Thereto, it is possible to calculate an index of tax contribution inequality. The best known measure for measuring (income) inequalities is the Gini-coefficient. This index corresponds to the above figure by

$$\text{Gini Coefficient} = \frac{\text{Area between Lorenz curve and diagonal}}{\text{Area under diagonal}}$$

It can easily be seen that under complete equality – when all taxpayers pay the same amount of taxes (and have identical incomes) – the Gini-coefficient will be zero. At the other extreme, the Gini coefficient has a value of 1 when all taxes are paid by a single (group of) taxpayer(s). In general, higher values for the Gini-coefficient reflect higher inequality.

Using the information of figure 4, we find the Gini-coefficient in the Brussels Region to be equal to 0.61 for 1999. Table 7 gives comparable values for Belgium as a whole, as well as for the Brussels Region and Belgium in the past (data for 1980 were

not available, therefore we present coefficients for 1985 instead). The higher values for Brussels indicate that the tax base as well as the taxes paid to the federal government are more unevenly distributed among the population in the Brussels region.

**Table 7: GINI-COEFFICIENTS
FOR TAX BASE & FEDERAL TAXES**

		1985	1999
Brussels	Tax Base	0.373	0.408
	Federal taxes	0.586	0.610
Belgium	Tax Base	0.346	0.384
	Federal taxes	0.564	0.582

As we already mentioned, of special – budgetary (!) – interest is the relatively small group of richest taxpayers. As is implicit in figure 2, the small fraction of taxpayers that declared an income between 2 and 3 million BEF or even over 3 million BEF, contribute a lot to the governmental budget. It is, therefore, important to investigate how this group has evolved over time. Such an evolution is plotted in figure 5. This figure compares the relative presence of high-income declarations (over 2 million BEF) in Brussels with the Belgian average. With relative presence, we mean that we have calculated an index that equals 100 for the whole country in each year. The absolute values are given in table 8.

**FIGURE 5: RELATIVE SHARE RICH 1985-1999 IN BRUSSELS REGION
(COMPARED TO NATIONAL AVERAGE = 100)**

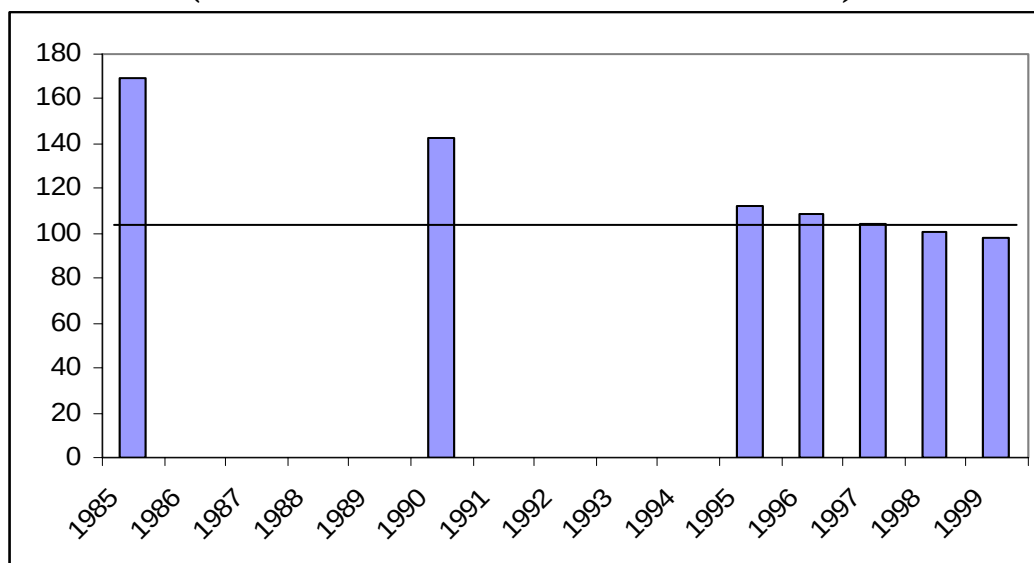


Figure 5 clearly documents the dramatic evolution for the Brussels' Region. In 1985 the 'density' of high-income earners in Brussels was very high: the share of taxpayers that declared over 2 million BEF was 1.93 in Brussels and 1.14 in Belgium as a whole (see table 8). Put differently, and as pictured in figure 5, Brussels had 69 percent more high-income earners than the national average. This budgetary advantage, however, disappeared completely over the next 15 years. Indeed, in 1999 the share of incomes above 2 million BEF was smaller in Brussels than in the rest of the country! Such a dramatic loss at such a high speed has certainly had severe budgetary consequences if we remember (from figure 4) that those high-income earners contribute much more than proportionally to the public finances. Taking the precise data underlying figure 5, we observe that in 1999 the over 2-million taxpayers (or 6,67 % of all taxpayers) paid no less than 35 % of all taxes. So losing about 69 % of such taxpayers in a 15-year period, as Brussels has done, means losing a significant part of tax base and therefore tax revenues.

Table 8: RELATIVE SHARE OF DECLARATIONS OVER 2 MILLION BEF

	1985	1990	1995	1996	1997	1998	1999
Brussels	1,93	3,19	5,97	5,99	6,05	6,40	6,67
Flanders	1,07	2,23	5,49	5,73	6,11	6,67	7,22
Wallonia	1,02	1,99	4,86	5,03	5,16	5,68	6,03
<u>BELGIUM</u>	1,14	2,24	5,33	5,53	5,80	6,33	6,80

The dramatic 'disappearance' of the highest-income earners is a general Brussels phenomenon that occurs in most of the 19 municipalities. Still, table 9 illustrates that the intensity of the problem differs markedly among. In that table we present information on the share of high-income taxpayers among the municipal population in the 19 municipalities that constitute the Brussels Region. Concentrating on the numbers for 1999, we find that in Sint-Joost-ten-Node only 1,90 per cent of the taxpayers declared an income over BEF 2 million (compared to the national average of 6,80 per cent – see table 8). The same table also documents that Brussels has some municipalities with substantial rich populations. For example, in Sint-Pieters-Woluwe 14,52 per cent of the taxpayers has an income over BEF 2 million.

Still, from a structural long-term perspective, what really matters is how the share of high-income residents evolves over time. Information on this is given in the last column of table 9. There we give how the share of high-income taxpayers has evolved compared to the national average. In Belgium as a whole this share increased by 500 per cent (this can be calculated from the numbers in the last row in table 8: $6,80 / 1,14$ per cent of population – however, this high number to a large extent reflects the influence of inflation!). It is immediately clear that in most

Brussels municipalities the share of high-income residents has grown slower (index below 100). Actually, only in one municipality – Evere - the number of rich taxpayers increased more than the national average (index equals 153 indicating that the number of rich increased by 765 %). It should be noted that Evere is a clear exception as it is the only Brussels municipality that had an increase that was stronger than the national average. It should immediately be noted, however, that this is mainly due to the fact that initially – in 1985 – the municipality had very low share of rich inhabitants (only Sint-Joost-ten-Node had fewer rich!). In general we observe marked differences among the 19 Brussels municipalities. For example, in Ukkel and Sint-Pieters-Woluwe the number of high-income earners has increased very slowly (by about 150 % compared to the Brussels average of 245 % and a Belgian average of about 500 %). As both are relatively rich municipalities to Brussels standards (also to Belgian standards), these numbers might be taken as a slight indication of convergence in income terms.

**Table 9: SHARE OF DECLARATIONS OVER 2 MILLION BEF
AT MUNICIPAL LEVEL**

	1985	1999	EVOLUTION Belgium = 100
Anderlecht	0.90	4.21	74
Oudergem / Auderghem	2.65	9.43	51
St Agatha Berchem	1.72	8.79	82
Brussel / Bruxelles	1.63	5.29	45
Etterbeek	1.39	5.94	66
Evere	0.72	6.23	153
Vorst / Forest	1.41	5.71	61
Ganshoren	1.71	6.58	45
Elsene / Ixelles	2.22	7.01	43
Jette	1.22	6.13	80
Koekelberg	1.00	5.45	89
St-Jans-Molenbeek / Molenbeek-St-Jean	1.13	3.88	49
St-Gillis / Saint-Gilles	0.76	3.03	60
St-Joost-ten-Node / St- Josse-ten-Node	0.55	1.90	49
Schaerbeek / Schaerbeek	1.07	4.41	62
Ukkel / Uccle	4.56	11.41	30
Watermaal-Bosvoorde / Watermael-Boitsfort	3.09	11.56	55
St-Lambrechts-Woluwe / Woluwe-St-Lambert	2.59	9.86	56
St-Pieters-Woluwe / Woluwe-St-Pierre	5.63	14.52	32

5. Summary and Conclusion

The eroding tax base has long been recognised as a major challenge for both the Brussels Region and most of the 19 municipalities. This erosion acts as a strong budgetary constraint that undermines many potential policy actions. Brussels municipalities and the Region as a whole have little scope for active budgetary initiatives as they lack the financial resources to finance them. Over the years a general political awareness has grown in Brussels that “something should be done”. Still, in order to know what action has to be taken to solve a problem, it is necessary that the problem is well defined. Helping to define the problem of Brussels' tax base erosion has been the main aim of our analysis. We started from general knowledge on the problem at hand and documented (again) how Brussels' municipalities have been confronted with a most unattractive evolution in their tax base. Whereas in Flanders and Wallonia the tax base increased systematically over the period under consideration (1980-1999), in Brussels there has hardly been any growth. Two main reasons have been confirmed: (1) the Brussels Region has lost inhabitants and (2) the remaining inhabitants have become poorer.

The novelty of the present analysis is that we investigate the role of the top-income earners. Given the highly progressive federal income tax system, rich taxpayers pay proportionally much more income taxes than the less rich. We found that – in general – the 2.2 % highest income earners paid no less than 18 % of federal (and thus: local) income taxes! It goes without saying that municipalities that are confronted with an out-migration of these high-income earners can be expected to have significant budgetary consequences. Our analysis on Brussels municipalities clearly demonstrates that these have been confronted with a dramatic drop in high-income earners. Whereas in 1980 the Brussels population had 69 % more high-income earners than the rest of the country, by 1999 this (budgetary) advantage had disappeared completely. Actually, since 1996 the share of high-income earners was lower in Brussels than elsewhere.

As such our analysis clearly indicates that losing inhabitants may be a problem for the Brussels region but it certainly shows that the loss of rich residents is most problematic. Therefore, from a policy perspective, it should absolutely be recommended that this is taken into account. This means for example that city-marketing efforts to present Brussels as a more attractive place of residence should be more explicitly focused to high-income earners.

Finally, it should be recognised that the budgetary value of the rich as analysed in the present paper focuses on a partial aspect of the problem only. Indeed, the presence or absence of rich people within the population has a relevance that is far more important than the purely budgetary effects on the revenue side. The presence of many rich inhabitants also imposes specific demands on the expenditure side of the budget. Further, and maybe even more important is the normative view on what constitutes a ‘sociological optimum’. Indeed, from a purely budgetary perspective, it is optimal to have a municipality with only high-income earners. Whether this is also optimal from a sociological point of view is less straightforward. Moreover, one should note that the ‘optimality’ is defined locally. Thus, the fact that a municipality or region attracts high-income residents automatically implies that it attracts them from other regions or

municipalities. Thus investments in attracting residents may be seen as 'waste' from a general perspective. On the other hand, it has been shown that this competition among local governments enhances efficiency - as it forces municipal governments to create attractive policies - thus reducing 'political waste'.