Interregional transfers via the federal government and social security

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Introduction

Alongside the provision of public goods and services whereby the government performs its allocative function, the redistribution of resources among residents is a key government objective. That redistribution takes place via government revenues – which also fund public goods – and certain government expenditure such as social security benefits.

This article examines redistribution in Belgium from a territorial perspective. More specifically: what redistribution between the three regions do Belgian public finances generate? This territorial perspective is interesting because there are significant demographic and socio-economic differences between the regions, and because the regions have ever more policy levers which influence socio-economic developments.

The study describes redistribution via the "transfers with no direct counterpart" from the federal budget and social security. On the revenue side, this concerns taxes and social contributions. On the expenditure side, the main items are social benefits and business subsidies. These transfers are the means whereby the government performs its redistribution function. Note that redistribution between the regions does not take place directly but via transfers from and to a region's residents and from and to business establishments in a region. We also examine how redistribution between the regions is effected via grants from the federal budget to the Communities and Regions.

This article builds on a study published in the Bank's Economic Review in September 2008 (Dury *et al.*, 2008). The methodology applied here is largely the same. However, since the 2008 study more detailed data have become available, permitting a more accurate calculation of the interregional transfers. Furthermore, since 2005 – the latest year examined in the aforementioned study – there have been various developments affecting on the (composition of the) interregional transfers, such as demographic (e.g. population ageing), socio-economic (e.g. increased employment rate) and institutional changes (e.g. the sixth State reform).

The first part of this article explains the methodological aspects of interregional transfers: what is considered an interregional transfer and what is not, and how are they calculated? The second part shows the results of the calculation of interregional transfers for the year 2019, the most recent year for which data are available, and identifies their main determinants. Finally, part three puts interregional transfers in Belgium into perspective:

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how have they evolved over time, how do they compare to similar transfers between provinces, and how large are interregional transfers in other EU countries.

1. Interregional transfers: methodology

This methodological section first explains what is meant by the concept of interregional transfer. A number of choices are made and justified. Next, it explains in detail which distribution keys, based on which data, are used to calculate the transfers.

1.1 Definition of interregional transfers

This study only takes account of transactions which can be regarded as transfers with no direct counterpart. The principal government revenues that meet this condition are taxes and social contributions. Although the government uses those revenues partly for the provision of communal facilities, the considerations in question are indirect. On the expenditure side, this concerns social benefits – such as pensions, sickness and unemployment benefits, etc. – and health care expenditure. A number of business subsidies are also taken into account.

These transactions are the principal means whereby the government performs its redistribution function and organises solidarity within society, as taxes are levied with due regard for the taxpayers' economic capacity, which includes their income level, wealth and household characteristics. In addition, social benefits offer partial protection against the income implications of various social risks which hamper participation in the work process, such as old age, sickness or unemployment. Regional variations in these socio-economic determinants thus lead to redistribution across regional borders.

In contrast, there is a direct counterpart corresponding to other government transactions such as dividends received by the government and proceeds from sales, and the wages which it pays to government staff, purchases of goods and services, investment expenditure and interest charges; these are therefore disregarded [1].

Interregional transfers only result from government transactions which fall within the jurisdiction of the federal government or social security and which take place between the government and residents or companies. Federal grants to the Communities and Regions, most of which are distributed according to the Special Finance Act, are also included in the analysis. Revenue or expenditure which falls within the fiscal competence of the Communities and Regions is disregarded because it does not, in principle, involve redistribution across regional borders. Transactions which come under local authorities are likewise irrelevant in this context.

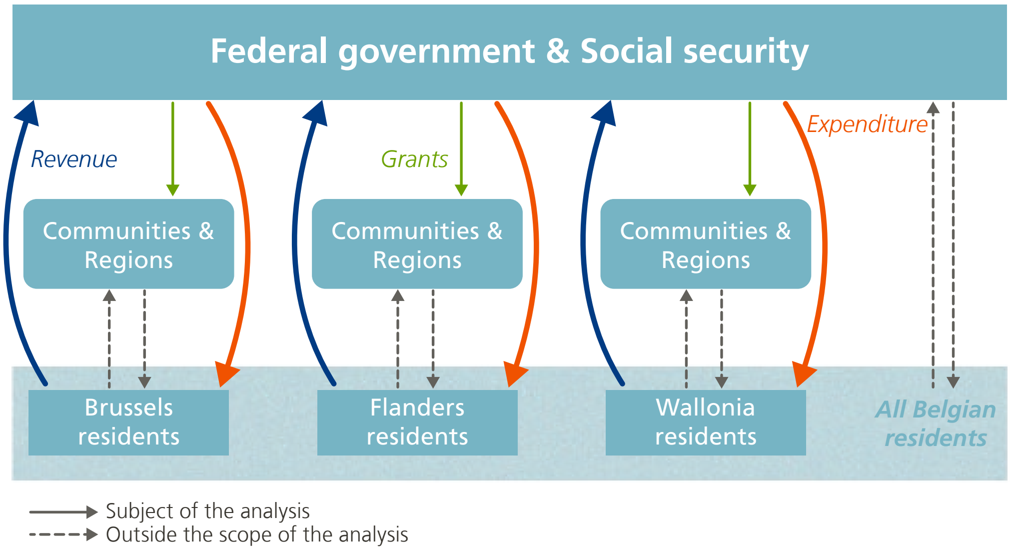
Finally, it should be noted that for practical reasons the analysis is not exhaustive, in the sense that government transfers involving only a small budget and/or for which no reasonable regional allocation key is available are excluded. Their impact on the overall picture of interregional transfers should be very limited. The selected items for the analysis are listed in section 1.2.

To determine whether a particular transaction gives rise to an interregional transfer, the per capita average for a region is compared with the national per capita average. Deviations from the national average give rise to interregional transfers. If the per capita payments made by residents of a particular region to the federal government and social security – e.g. in the form of personal income tax, social contributions or corporation

1 This exclusion of transactions involving a counterpart is equivalent to making the simplifying assumption that the corresponding flows are distributed among the regions in proportion to their respective populations and therefore do not generate interregional transfers. It should also be noted that the financing of expenditures with no counterpart through fiscal and parafiscal revenues is well taken into account in the analysis.

Figure 1

Conceptual framework

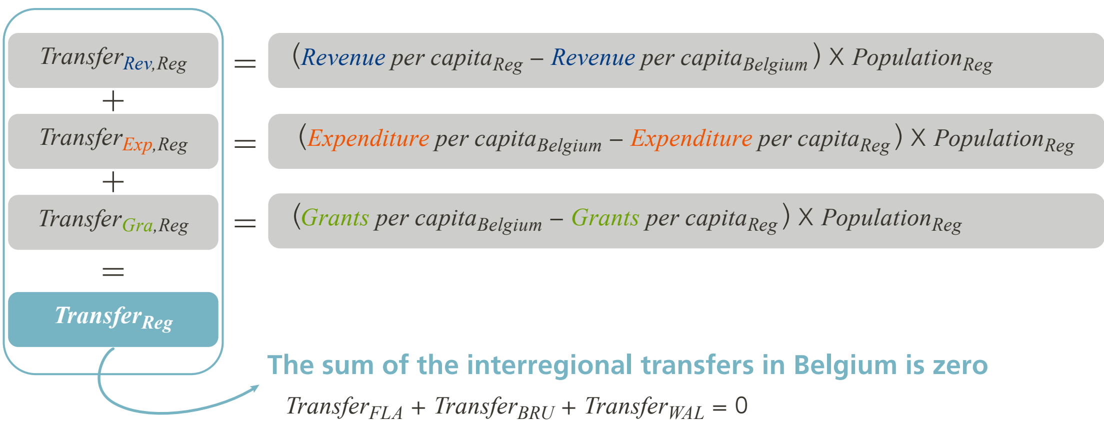


tax – exceed the national per capita average, then that region is regarded as paying for interregional transfers via public revenues. Conversely, a region is the beneficiary of such transfers if it contributes proportionately less than would be expected purely on the basis of its share of the population. In regard to payments which households receive from the government, e.g. via social benefits, a region is regarded as paying for interregional transfers if it receives less per resident than the national average. The same reasoning applies to transfers which arise from the award of grants to the Communities and Regions.

The per capita transfers can then be converted to total transfers by multiplying them by the population of each region. The net transfer position of each region is determined by taking together all the interregional transfers effected via public revenues, expenditure and grants. A region is defined as a net payer if its net transfer position

Figure 2

Calculation of the transfers



is positive and as a net beneficiary if that position is negative. The sum of the interregional transfers for the three regions together is equal to zero, by definition.

1.2 Allocation keys

The payments received or made by the federal government are allocated to each region on the basis of an allocation key. Where possible, this study uses allocation keys derived from the regional accounts [1]. The regional accounts methodology has two criteria for the allocation of transactions, namely the counterparty's place of establishment (place of residence criterion) for (redistributive) income transactions, and the place of production (workplace criterion) for production-related transactions. Transactions between the government and households are thus assigned on the basis of the household's place of residence, including the social contributions paid by employers [2]. In the case of transactions between the government and corporations, this is done on the basis of the place where the company operates or creates value. This chosen method is totally consistent with the logic of the regional accounts and also conforms to the institutional logic of the Special Finance Act.

By making use of the detailed regional accounts compiled at the level of the administrative districts, it is possible to use allocation keys with a high degree of precision. In this exercise we mainly use the regional accounts of households for that purpose. For production-related transactions, use is made where necessary of the regional allocation of value added as an approximate key for the place of value creation. Where necessary, these keys are supplemented by additional calculations.

Below is a description of the data sources used to create the regional allocation keys which form the basis of the regional accounts or which result from additional calculations [3].

1.2.1 Revenue

Direct taxes

The income tax levied on households is allocated in the regional accounts on the basis of the personal income tax payable according to the annual tax returns, obtained from the FPS Economy Directorate General of Statistics (Statbel). This allows for a very precise distribution according to the taxpayer's place of residence. The corporation tax is allocated according to the value added created by the sectors comprising non-financial corporations and financial institutions on the basis of the location of the operating unit [4]. It should be noted that the territorial division based on value added is only an approximation for the allocation of the corporate tax liability. A precise distribution would require determination of the taxable profit per establishment unit, for which no data are available.

Indirect taxes

The VAT charged on consumer goods and services is calculated on the basis of the regional consumption expenditure per category of goods and services classified according to COICOP [5] – supplied by the household budget survey – which is linked to the VAT rate per COICOP-category in the national accounts. Excise duty on tobacco and fuel is also allocated in that way.

1 This study distributes the transactions from the public accounts for the period 1995-2019. The regional allocation of household accounts including consumption expenditure according to the regional accounts is currently available up to and including data year 2018. For the distribution of government transactions for the year 2019, the allocation keys from the regional accounts for the year 2018 were adopted.

2 In studies of this kind, the question arises whether the workplace criterion should not also be applied to income redistribution transactions. For a discussion, see Dury et al. (2008) and for a practical analysis see Decoster and Sas (2017).

3 For a fuller description of the methodology used to compile the regional accounts, see the methodological notes, published at https://www.nbb.be/en/statistics/nationalregional-accounts/methodology

4 Transfers concerning companies with more than one operating unit are allocated according to the location of the operating unit.

5 https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Classification_of_individual_consumption_by_purpose_(COICOP)

The VAT on housing construction is allocated on the basis of information collected by Statbel. For new buildings this concerns the total area of new construction per region; in the case of renovation, the number of renovated dwellings per region is used.

Social contributions

Social contributions are divided into contributions paid by businesses and contributions paid by households. The households' contributions are then further divided between employees, self-employed persons and persons not in work.

Since the employers' social contributions are calculated as a percentage of wages, they are allocated according to the employee's place of residence on the basis of the tax data concerning earned income, derived from personal income tax.

The households' contributions are also a percentage of wages and likewise follow the regional allocation of wages. For the self-employed, the contributions are allocated according to the income in part 2 of the tax returns and classified according to the taxpayer's place of residence. For those not in work, the contributions follow the regional allocation of pensions (see below).

1.2.2 Expenditure

Social benefits

The regional allocation of social security cash benefits is based on information per district of the place of residence of the benefit recipient, made available by the various institutions in the social security sector such as the National Employment Office (NEO), the National Institute for Health and Disability Insurance (NIHDI), the Occupational Diseases Fund, the Business Closure Fund (FFE/FSO), the Federal Pensions Service (FPD) and the National Institute for the Social Security of the Self-Employed (NISSE)[1].

Apart from the various social benefits in cash, health care reimbursements also form part of the social benefits included in the regional allocation. In the national accounts, these reimbursements are regarded as market output purchased by the government and subsequently made available to households. The regional allocation of these social benefits in kind is therefore based on the regional allocation of the government's consumption expenditure. The NIHDI provides details of this expenditure per district, province and region on the basis of the beneficiary's place of residence.

Other benefits for specific target groups, such as the income guarantee for the elderly, allowances for disabled persons and the subsistence benefit are regarded as social assistance. These benefits are allocated on the basis of a geographical breakdown made available by FPS Social Security. In regard to the subsistence benefit, the analysis takes account of the federal government grant to local authorities for payment of that benefit.

Subsidies

The subsidies included in the analysis comprise those relating to service vouchers and the target group reductions granted on employers' social contributions or reductions in payroll tax which must be classed as subsidies according to the ESA 2010[2]. The allocation of subsidies relating to service vouchers is based on information provided by the National Social Security Office (NSSO) concerning the number of workers paid by means of service vouchers. The distribution here is therefore based on the location of the service voucher

1 The pensions taken into account include pensions for statutory officials who work for the Communities and Regions, and for the local authorities, and for whom budgetary competence is at the social security level.

2 European System of Accounts.

company's operating unit. The target group reduction is also allocated according to specific information made available by the NSSO on employers who are granted a reduction in their social contributions for employing certain target groups. Finally, the payroll tax reductions are allocated by approximation on the basis of value added.

Since the last State reform in 2015, the way in which subsidies paid to businesses affect the regional reallocation has changed. Subsidies relating to service vouchers were transferred in full to the regions. The reduction in employers' contributions for certain target groups was also largely transferred to them, with only a small part being paid out by the NSSO since 2015. Consequently, since 2015 the subsidies at the federal level have consisted primarily of the payroll tax reductions.

1.2.3 Grants

In Belgium, the Regions and Communities receive specific federal government grants for the purpose of pursuing the policies corresponding to their respective powers.

Like the revenue and expenditure described in the preceding sections, the grants give rise to an interregional transfer only if the per capita amount of the region's grants differs from the national average per capita grants.

The methodology used to determine the transfers via grants is an institutional approach based on the Special Finance Act for the Communities and Regions of 16 January 1989, as amended following the various State reforms. The scope is therefore closely linked to the definitions of the powers of the federated entities. For example, at the time of the sixth State reform in 2014, it was decided to devolve the power relating to "family allowances" to the federated entities. Consequently, the amount of the grants was revised upwards while the social security expenditure received by households was cut by the same amount, since the federal government no longer intervenes directly in this connection. Another example concerns the regional additional percentages on personal income tax. The explicit assignment of responsibility for part of that tax to the regions reduced the federal revenues by the amount of the part which now goes directly to the regions (about a quarter of the total PIT). It is therefore important for interregional transfers via grants and via federal and social security expenditure and revenue to be considered as a single entity.

In order to determine the interregional transfers, it is necessary to attribute the various grants to the regions defined by their territories. That is straightforward in the case of grants to the Walloon Region, the Flemish Region and the Brussels-Capital Region. More care is needed in attributing Community grants to a particular area. In the case of Communities unambiguously linked to a region, the attribution is still obvious. This applies to grants to the German-speaking Community, which will be attributed to Wallonia, and grants to the Brussels Community institutions (namely the Common Community Commission or COCOM, the French Community Commission or COCOF and the Flemish Community Commission or VGC), attributed to the Brussels Region. Conversely, specific adjustments are needed in the case of grants to the Flemish Community and the French Community.

For grants to the Flemish Community and the part of the grants to the French Community not concerned by the adjustments described in the next paragraph, the resources were imputed to the regions on the basis of their share of the population and, for Brussels, taking account of the 20/80 apportionment formula specified by the Special Finance Act. That apportionment formula is implicitly based on the assumption that 20 % of residents of the Brussels-Capital Region belong to the Flemish Community and 80 % to the French Community.

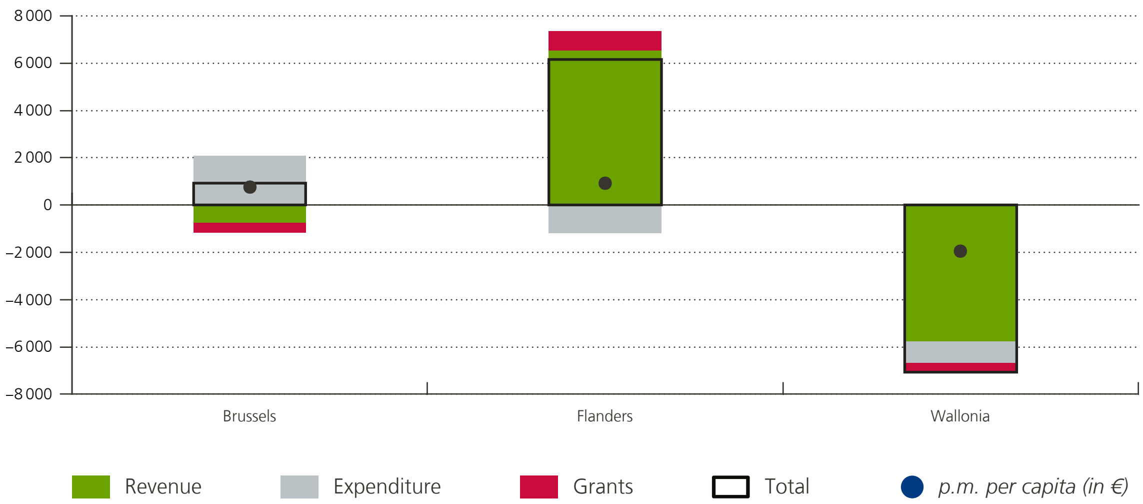
A specific adjustment is also needed for grants to the French Community, as it is necessary to take account of the transfers within the French-speaking entities which arise from the "Saint Emilia" agreements. In the wake of the sixth State reform those agreements specify that, from 2015 onwards, the French Community is to transfer some of its powers and part of the corresponding grants to the Walloon Region. This concerns in particular the powers relating to family allowances, care of the elderly (retirement homes, etc.), health and personal assistance, and the funding of non‑academic hospitals (2016). The resources transferred are equivalent to what the French Community receives from the federal government for those powers. They also include the corresponding budgetary accountability arrangements (the transitional amounts and the contributions for the consolidation of the public finances corresponding to the grants, and the contribution to the cost of ageing for civil servants[1]). The grants are also adjusted according to the mechanisms of the Special Finance Act (which takes account of indexation and population changes). In the Brussels‑Capital Region, these powers are mostly exercised by the COCOM, and are therefore already taken into account in the grants. In addition, there are the – smaller – transfers from the French Community to the COCOF.

For completeness and to conclude the chapter on methodology, it is worth mentioning a few technical conventions. As stated in the section on expenditure, the notional transfers from the federal government for the pensions of the "civil servants" of the Communities and Regions, included in the national accounts, are recorded here as pension expenditure and are therefore not included in the grants. For the pre‑2015 period, the grants include the grant to the German‑speaking Community and the Regions' drawing rights which concern getting the unemployed back into work. The grant for investment in the Brussels‑Capital Region (Beliris) is also taken into account over the whole of the period. For the pre‑2002 period, an adjustment is made to take account of the reform of the Special Finance Act introduced by the Lambermont agreements in 2001[2]. Although this analysis aims to be exhaustive, it disregards a number of smaller grants for which no detailed information is available.

Chart 1

Overview of interregional transfers

(2019, in € million unless otherwise stated)



Sources: NAI, NBB.

1 See for example Bisciari and Van Meensel (2012) for more details.

2 The 2001 reform gave the regions greater fiscal autonomy by regionalising the revenue generated by various taxes and the associated powers, such as registration fees, gift taxes and motor vehicle duties. By way of compensation, a "negative" term was deducted from personal income tax. This negative term was retropolated in order to track the interregional transfers via resources resulting from the Special Finance Act during the period 1995‑2005. This obviates the calculation of the regional distribution of taxes before 2002, when the taxes were still federal.

2. Result and determinants

2.1 Overview

Every year the federal government and social security collect an average of € 12 900 in revenue per capita in the form of fiscal and parafiscal levies. The amount varies according to the region: in 2019, it was € 11 300 in the Walloon Region (Wallonia), € 12 200 in the Brussels-Capital Region (Brussels) and € 13 800 in the Flemish Region (Flanders). Thus, Flanders residents contribute proportionately more to the federal budget than residents of Brussels and Wallonia. Geographically speaking, the federal fiscal and parafiscal revenues collected from households and businesses therefore imply interregional redistribution which, in 2019, amounted to € 6.5 billion.

Conversely, the federal State spends an average of € 9 000 per person in the form of direct transfers to households and businesses. That figure also varies between the regions: in 2019 it came to € 7 300 in Brussels and € 9 200 in Flanders and Wallonia. Thus, taking account of their number, Brussels residents receive less by way of federal expenditure than their Flemish and Walloon counterparts. In these circumstances, expenditure

Table 1

Details of interregional transfers

(2019, in € million unless otherwise stated)

	Brussels	Flanders	Wallonia
Revenue	–760	6 529	–5 770
Personal income tax	–972	2 528	–1 557
Social contributions	–599	2 944	–2 345
Corporation tax	1 319	715	–2 034
VAT	–438	498	–59
Excise duties	–70	–155	225
Expenditure	2 079	–1 190	–889
Pensions	2 047	–2 241	194
Health care	574	–394	–180
Incapacity for work	155	341	–496
National Employment Office [1]	–181	524	–342
Social assistance [2]	–298	604	–306
Other social benefits [3]	39	50	–89
Business subsidies [4]	–257	–74	331
Grants	–401	823	–422
Solidarity mechanism	–289	607	–318
Excl. solidarity mechanism	–112	215	–103
TOTAL	918	6 162	–7 080
p.m. Total per capita (€)	*759*	*935*	*–1 948*

Sources: NAI, NBB.

1 Total benefits paid on account of unemployment, career breaks or time credit.

2 Includes guaranteed income for the elderly, the income replacement allowance for disabled persons, the payment to the public welfare centres (CPAS) for the subsistence benefit, and the tax credit for low incomes.

3 Includes payments on account of accidents at work or occupational diseases.

4 This category is confined here to payroll tax exemptions, targeted reductions in social contributions, and subsidies paid to service voucher enterprises. For the latter two sub-categories, partly or entirely regionalised since the sixth State reform, expenditure at federal level was very limited in 2019.

with no direct counterpart, paid to businesses and households by the federal government, gave rise to interregional redistribution totalling € 2.1 billion in 2019.

Finally, the federal government made grants to the Communities and regions averaging € 3 900 per capita. That corresponded to € 3 800 in Flanders, € 4 100 in Wallonia and € 4 300 in Brussels. Redistribution via grants thus represented € 800 million in 2019.

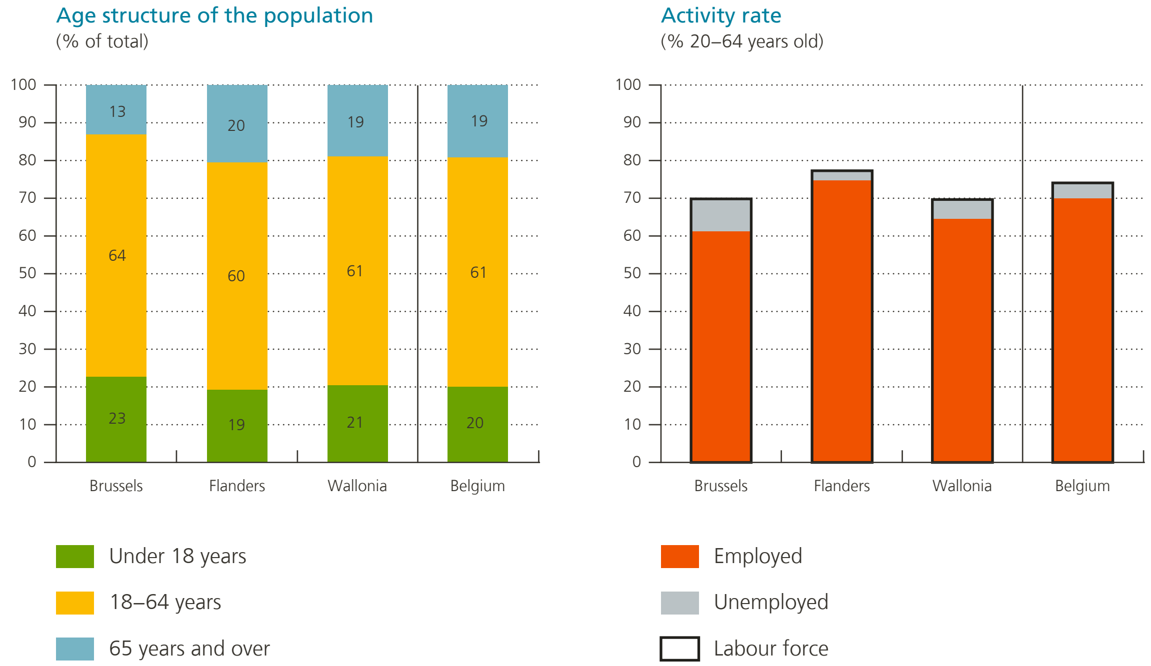
Consolidation of the flows implicitly generated via federal level revenue, expenditure and grants provides an overview of redistribution between the regions. In 2019, Flanders evidently made a net contribution of around € 6.2 billion to these transfers. Brussels was likewise a net contributor, in the sum of around € 900 million. These amounts benefited Wallonia, which therefore implicitly received € 7.1 billion in that year. In per capita terms, the contributions of Flanders and Brussels were similar, at € 900 and € 800 respectively. On average, Walloon residents received around € 1 900 via the redistribution effected by the federal government and social security.

These interregional transfers arise from drawing up and implementing a budget with provision for the collection of revenue and the allocation of expenditure, which is central to public policy. By this means, governments redistribute resources among economic agents in order to achieve certain aims, including solidarity objectives. Since the federal rules apply in the same way everywhere, differences between one region and another logically reflect variations in the structure and profile of the resident households and businesses. In fact, the three Belgian regions feature significant demographic and socio-economic disparities which are summarised in the following section.

Chart 2

Demographic specificities and the labour market

(2020)



Source: Statbel.

2.2 Demographic and socio-economic context

The profile of the Brussels Region is quite distinctive in terms of population by age. On average, Brussels residents are younger than those in Flanders and Wallonia. In Brussels, the under-18 age group represents 23 % of the population, while 64 % are of working age. These two ratios are higher in Brussels than in the other two regions. Consequently, the proportion in the 65+ age group is considerably smaller (13 %) than in the rest of the country. In comparison, the Flemish and Walloon Regions both have fairly similar ratios for the working age population. For the rest, those in the under-18 age group slightly outnumber those in the 65+ age group in Wallonia, while the opposite is true in Flanders.

The labour market situation varies considerably from one region to another. In 2019, the employment rate (persons in work as a ratio of the working age population) in the 20-64 age group stood at 62 % in Brussels, 65 % in Wallonia and 76 % in Flanders. In this last region, the higher employment rate reflects a higher activity rate (labour force as a ratio of the working age population) combined with a lower unemployment rate (unemployed job seekers as a ratio of the labour force). In the other two regions, the activity rates are lower and at comparable levels, though Wallonia's lower unemployment implies that it has a more favourable employment rate than Brussels.

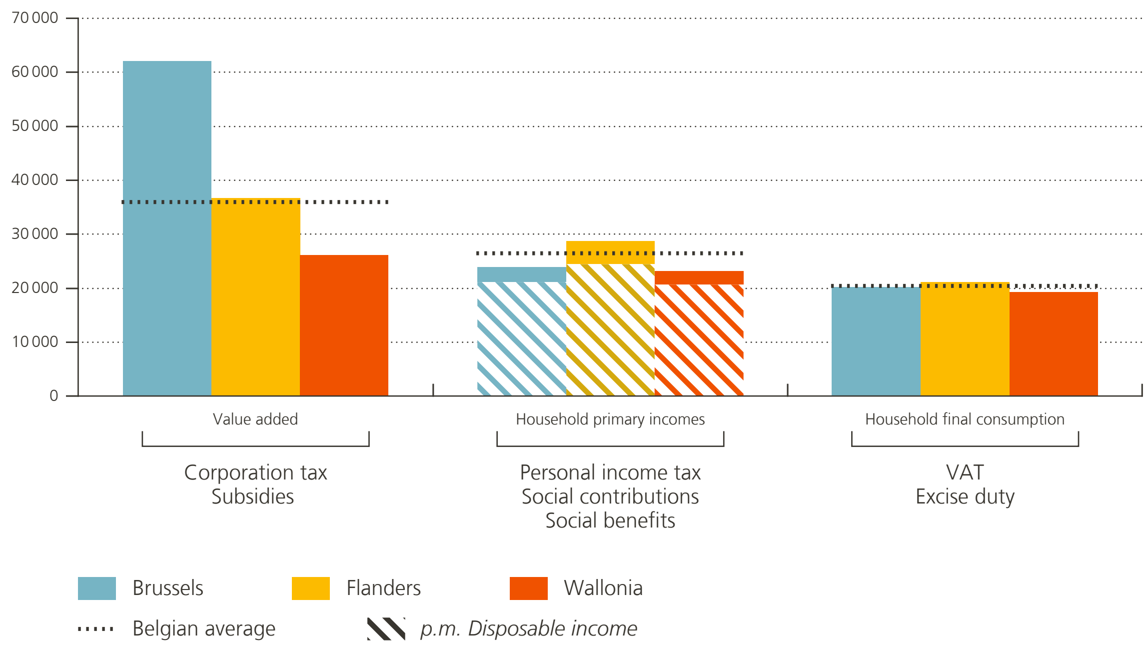
The various dynamics operating on the labour market are logically reflected in the levels of households' primary income per capita specific to each region's residents. That ratio is thus considerably higher in Flanders than in the other two regions. In 2018, primary household income per capita there was 9 % above the national average. Conversely, in the Walloon Region primary household income per capita was 13 % below that average, and in the Brussels-Capital Region the negative gap was 10 %.

The State budget has the effect of smoothing out household income variations to some degree. That redistribution fulfils solidarity objectives between active and retired persons, workers and job seekers, high and low wage earners, etc. It is implicitly reflected in interregional transfers where a geographical approach is adopted, as

Chart 3

Value added, household primary income and household consumption

(2018, in € per capita)



Sources: NAI, Statbel, NBB.

in this article. The impact of taxes and social contributions plus social benefits on the disposable income of households is in fact relatively more favourable in Brussels and Wallonia than in the Flemish Region: while gross disposable income per capita in this last region was still 7 % above the national average in 2018, that gap is smaller than the difference in primary income per capita. The opposite situation applies in the Walloon Region and the Brussels-Capital Region since the negative gaps between disposable income per capita and the national average there are reduced to 10 % and 8 % respectively.

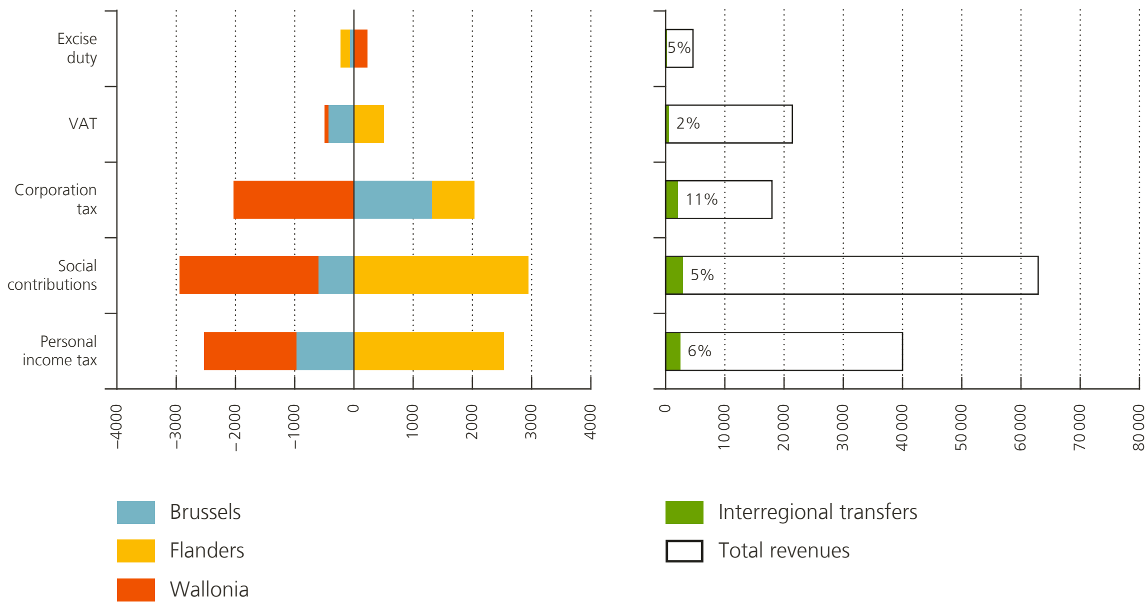
The discrepancies in household consumption expenditure logically reflect differences in disposable income. However, they are less pronounced since some expenditure cannot be scaled down, and that results in a higher savings ratio in Flanders. As in the case of income, these differences will give rise to regional divergences in levels of indirect taxes per capita. More specifically, household consumption expenditure and household investment in the form of new building and property renovation feed into the State budget via value added tax (VAT) and excise duty.

The socio-economic variables discussed so far relate to households and are distributed regionally based on the place of residence of the households. As far as businesses are concerned, it is interesting to look at the value added produced by operating units established in each region. In relation to the population, value added is much higher in Brussels, a region where many business establishments are concentrated, at € 62 000 per capita, against € 37 000 in Flanders and € 26 000 in Wallonia. Here, too, the budget items broken down according to this allocation key will generate implicit redistribution between regions. For businesses, the main budget flows analysed in this study are corporation tax (on the revenue side) and subsidies (on the expenditure side)[1]. The regional distribution of value added clearly differs from the breakdown of households' primary income. First, note that regional primary income is only available for the household sector – not for the corporate sector –, which blurs the comparison between the two concepts. Second, workers commuting from their place of residence in Flanders and

Chart 4

Interregional redistribution via federal revenues

(2019, in € million)



Sources: NAI, NBB.

1 Apart from employers' contributions which are linked to wages so that their distribution is the same as for personal contributions, in line with the worker's place of residence.

Wallonia contribute to (much of) the production created in the Brussels Region, while their income is registered in their region of residence. This raises Brussels' value added while lowering its per capita primary income.

2.3 Revenue analysis

The main sources of fiscal and parafiscal revenue for the federal government and social security are personal income tax, social contributions, corporation tax, VAT and excise duty. Aspects relating to the allocation of that revenue among the regions are discussed in this section.

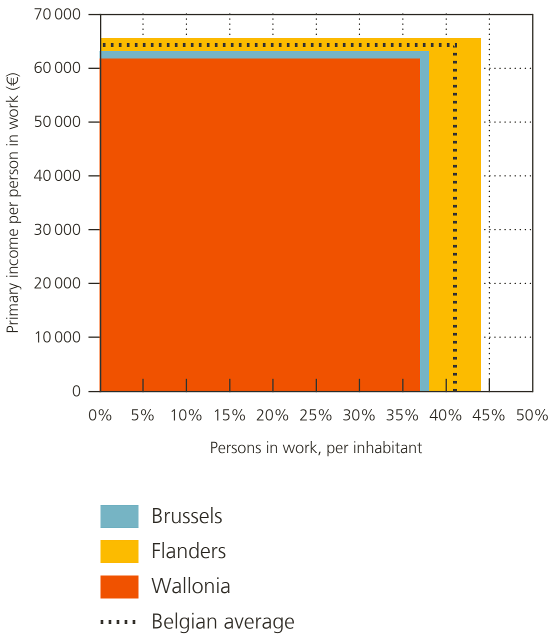
In regard to the geographical origin of federal revenues, Flanders is a net contributor overall, in favour of the Brussels and Walloon Regions. However, the direction and scale of these flows vary according to the revenue categories, which are reviewed in the following sections.

Social contributions and personal income tax (PIT) are the two largest revenue items in the federal budget, together exceeding € 100 billion. It is therefore logical that these categories give rise to a considerable degree of redistribution between the regions. The average primary income per capita is a good approximation of the basis for calculating both the PIT and social contributions (taking personal and employers' contributions together). That ratio can be broken down into two factors, namely the average number of workers per inhabitant and the average

Chart 5

Employment, the main determinant of transfers via PIT and social contributions

(components of primary income per capita, 2018)



Sources: NAI, Statbel, NBB.

level of primary income per worker. The first factor, a concept close to the employment rate, gives an idea of the situation on the labour market. Flanders clearly performs better in that respect: 44 % of the total population is in work, compared to 38 % in Brussels and 37 % in Wallonia. The second factor reflects the level of remuneration per worker. In that respect, the ranking of the regions is the same but the differences are very small. The product of these two factors determines the worker tax base, which is significantly larger for Flanders residents. Logically, that results in the Flanders Region making a per capita contribution to PIT and social contributions in excess of the national average. In regard to these revenues, Flanders can therefore be classed as a net contributor to interregional transfers. Conversely, the Walloon and Brussels Regions generate lower than average fiscal and parafiscal revenues, and are therefore beneficiaries of interregional transfers in that respect, with any differences attributable to the level of the employment rate rather than the level of individual remuneration.

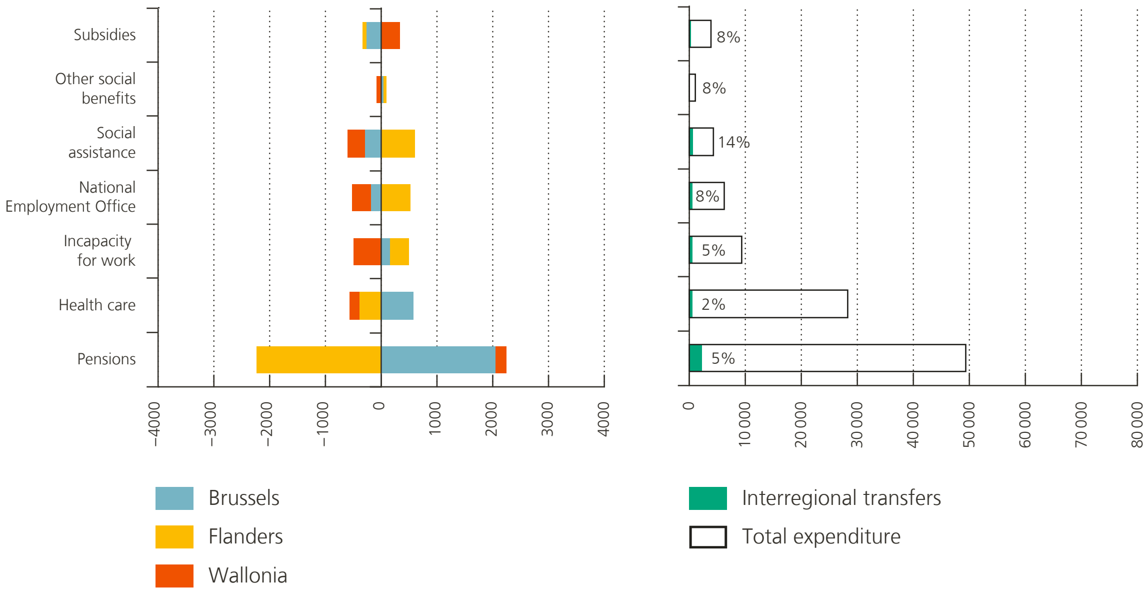
In regard to corporation tax, the largest contribution is made by the Brussels Region, which – with its central geographical location and function as the capital of both Belgium and the EU – attracts many businesses. As a result, in per capita terms, the revenue from corporation tax collected in this region is well above the national average. The Flemish Region also contributes to interregional transfers via corporation tax, albeit to a lesser degree. The Walloon Region benefits considerably from these transfers.

In regard to VAT, the Brussels Region is the main beneficiary of transfers from Flanders. Brussels is distinguished primarily by comparatively low expenditure on residential construction investment. Thus, Brussels is home to 11 % of the country's population but represents only 6 % of renovation projects and just 2 % of new building, this latter figure being due to the density of the existing buildings. Owing to the urban character of this region, its car ownership rates are also lower (52 % of households, compared to 84 % in Flanders and 86 % in Wallonia in 2018), which has the effect of lowering per capita VAT receipts.

Chart 6

Interregional redistribution via federal expenditure

(2019, in € million)



Sources: NAI, NBB.

Interregional transfers via excise revenues are smaller than those generated by VAT revenues. Wallonia is a net contributor because its residents consume relatively more products subject to excise duty, in contrast to the situation in Flanders. Brussels is also a net beneficiary in regard to excise duties, the main reason being the lower expenditure on fuel in the capital.

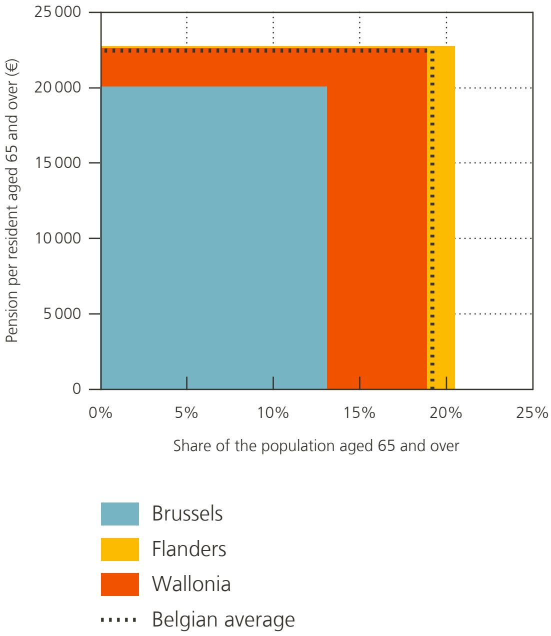
2.4 Expenditure analysis

In regard to the regional distribution of federal expenditure, the Brussels Region is a net contributor overall, in favour of the Walloon and Flemish Regions. However, the direction of these flows varies from one category

Chart 7

Population structure, a determinant of transfers via pensions

(components of pensions per capita, 2019)

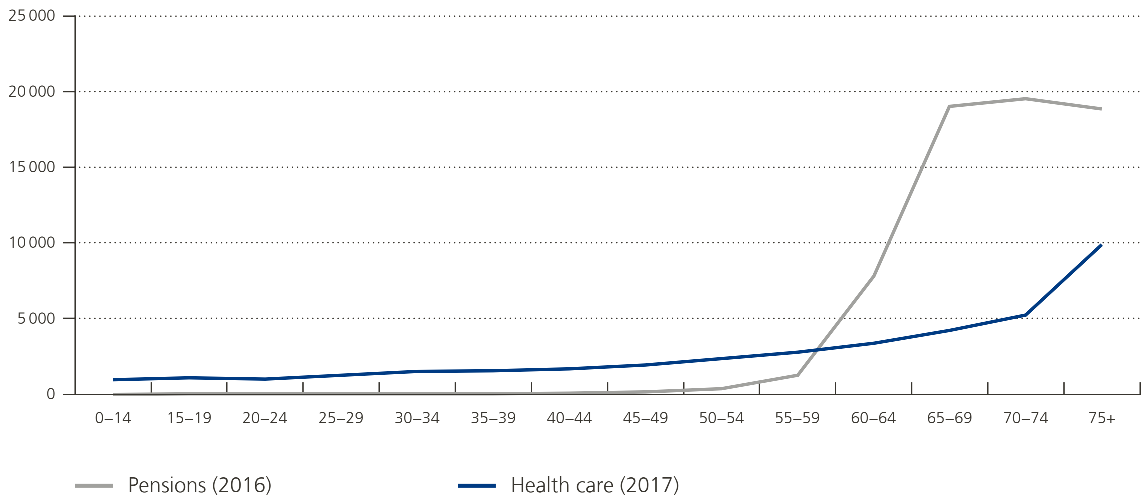


Sources: NAI, Statbel, NBB.

Chart 8

As in the case of pensions, expenditure on health care is concentrated on the elderly

(in € per person)



Sources: NIHDI, Social security database (CBSS), NBB.

to another. Those categories are reviewed in the paragraphs below.

On average, Brussels residents draw significantly less by way of pensions than their Flemish and Walloon counterparts. Given the same characteristics, all pensioners are obviously treated equally by the federal government, whatever their place of residence. It is demographic disparities between the regions that are the main determinant of these interregional transfers by way of pension expenditure. In each region, the pensions bill in relation to the number of residents can be broken down into two factors: a volume factor (proportion of the population in the 65+ age group) and a price factor (pension paid per person in the 65+ age group). In both cases, Brussels is clearly in a special position, having a small proportion of elderly persons combined with a lower average pension figure. In Flanders and Wallonia, the average pension amounts are very similar, but Flanders has a higher proportion of pensioners. These two factors together explain why Brussels, and to a lesser extent Wallonia, are net contributors to pension expenditure. Overall, interregional redistribution concerns 5 % of pension expenditure.

Interregional transfers under the heading of public expenditure on health care are comparatively modest since they represent barely 2 % of the federal budget for that item. In this case, the benefits that Brussels residents receive are considerably below the level implied by their share of the total population, in favour of Flemish and Walloon households. Here, too, this peculiarity is closely linked to the fact that the Brussels population is younger than the national average, since health care expenditure is evidently linked to age, as are pensions. The average amount of pensions takes off between the age of 55 and 65 years, after which the per capita expenditure levels out. In the case of health care, the increase in payments is less pronounced, but it begins earlier, accelerates with age, and is accentuated further beyond the age of 75 years, reaching an annual average of around € 10 000 per person.

The allowances paid for incapacity for work (primary incapacity and disability) give rise to net transfers to Wallonia from Brussels and Flanders. That redistribution represents 5 % of the corresponding federal expenditure. These differences are due both to the proportion of persons unable to work and to the average daily allowance that they are paid. In the specific case of disability, Wallonia appears to have higher values for both these ratios. NIHDI points out differences in household composition, with a proportionately greater number of Walloons receiving a higher – family-related – allowance. The disability ratio is also higher in Wallonia, notably on account of a larger proportion of manual workers, who are more vulnerable owing to the nature of their job. More generally, NIHDI mentions that health inequalities are closely linked to individuals' socio-economic situation, determined by factors (level of education, income and employment) which vary between the regions [1].

In the case of unemployment benefits and other allowances paid by NEO (mainly for career breaks and time credit), Flanders is a net contributor while the other two regions are net beneficiaries. This situation clearly reflects the different dynamics operating on the labour market. Indeed, the comparatively low unemployment rate in Flanders is the main factor explaining the regional differences, although its impact is somewhat tempered because the average benefit is higher there than in the other regions.

Social assistance benefits (including the income guarantee for the elderly, the income replacement allowance for the disabled, the payment to the CPAS for the subsistence allowance, the tax credit for low income earners) give rise to net transfers from Flanders to Wallonia and Brussels. For this category of expenditure, with beneficiaries generally on the margins of the labour market, the activity rate which varies between the regions plays a dominant role in the discrepancies. Interregional redistribution represents 14 % of the federal social assistance budget.

We can see that interregional transfers via public expenditure take place essentially through social benefits. The residual expenditure that can be broken down by region includes subsidies. Here, Wallonia emerges as a net contributor in favour of the Flanders Region, and especially the Brussels Region. These implicit flows are probably due to the relatively denser network of businesses in the Brussels Region. However, we should

1 NIHDI (2012).

mention that a regional breakdown was only possible for part of the subsidies paid by the federal government and social security.

2.5 Analysis of the grants

The regional distribution of the federal government grants to Belgium's other federated entities was described in detail in the first section. Since the grant that each region receives is not based simply on its demographic weight, the Special Finance Act naturally influences interregional transfers.

Taking account of the total resources under the Finance Act, Flanders contributed € 800 million to the interregional transfers in 2019. Wallonia and Brussels each received around € 400 million by way of interregional transfers.

An explicit solidarity mechanism

Among the interregional transfers resulting from grants we can identify the transfers pursuant to the "solidarity mechanism". This mechanism explicitly aims at vertical solidarity between the federal State and the regions where per capita PIT is below the national average. At present, the Walloon Region and the Brussels-Capital Region receive transfers while the Flemish Region receives nothing. The analysis of the interregional transfers therefore reveals an implicit transfer from the Flemish Region to the other two regions, since the amount received by Flanders is, by definition, below the national average.

The solidarity mechanism which has applied since the latest reform of the Special Finance Act is less generous than the pre-2015 version[1].

Since the entry into force of the Special Finance Act in 1989, the Walloon Region has always received interregional transfers by way of solidarity support. In the Brussels-Capital Region, per capita personal income tax revenues have fallen sharply compared to the national average. While the gap was still decidedly positive in the early 1990s, it has systematically diminished, becoming negative from the end of the 1990s and ultimately giving rise to a transfer in favour of the Brussels Region from 2003. The Flemish Region has never benefited from this mechanism, and has therefore always been a contributor.

Other grants

On the subject of grants other than those resulting from the solidarity mechanism, which represent the bulk of the grants, interregional transfers have favoured the Flemish Region and been unfavourable to the other two regions until the sixth State reform that entered into full force from 2015 onwards. As described by Dury *et al.* (2008), "the reason is that, during the transitional period of the Special Finance Act between 1989 and 1999 and during the period following the Lambermont agreements, growing importance was attached to personal income tax revenues in each region for the allocation of these transfers." Flanders, where we have shown that the population's tax base is, on average, larger than the average for Belgium, therefore benefited from the interregional transfers in question, while Wallonia and Brussels were contributors[2].

Conversely, since 2015 the relative position in terms of transfers has been reversed. Flanders is now a net contributor to the said interregional transfers, while the other two regions are beneficiaries. The role played by personal income tax revenues in the allocation of these grants was in fact greatly reduced after 2015. Since the regionalisation of part of the PIT (now excluded from the analysis since it concerns a regional competence), Flanders contributes less to the federal budget via revenues but also receives less in return by way of transfers

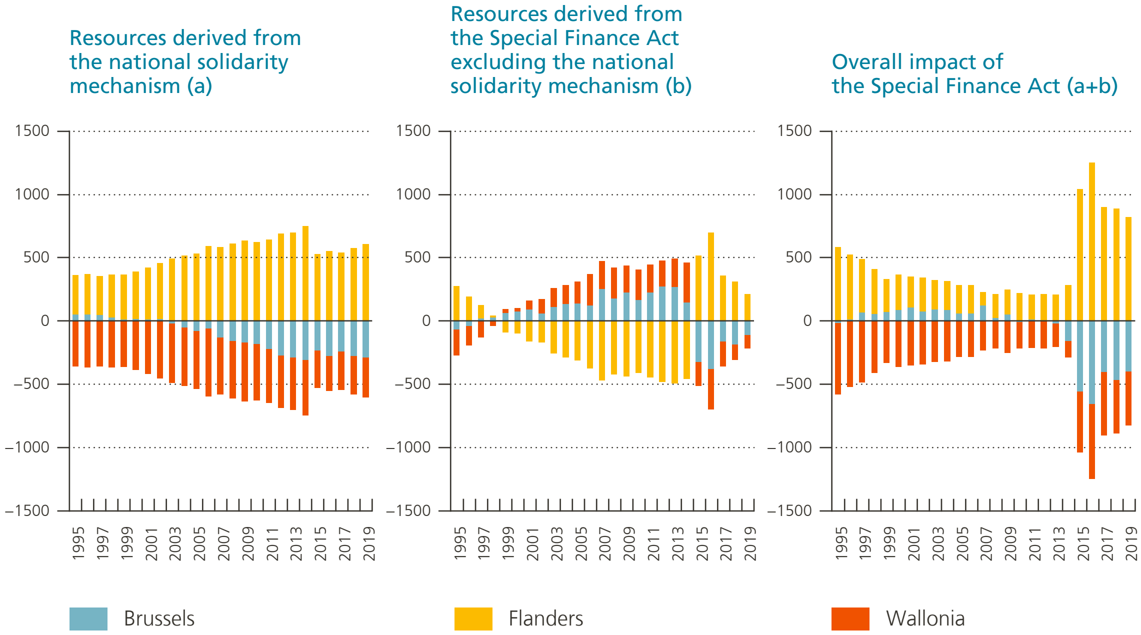
1 This mechanism was adapted at the time of the sixth State reform to avoid the risk of the "poverty trap" which had been identified in the old "national solidarity support system" in force since 1989. In fact, when a Region's PIT declined, the resulting loss for that Region was outweighed by the ensuing gain in terms of solidarity. See for example Bisciari and Van Meensel (2012).

2 Nevertheless, the transfers resulting from the solidarity support system compensated for these positions.

Chart 9

Impact of the Special Finance Act grants on interregional transfers[1]

(in € million)



Sources: FPS Finance, NAI, NBB.

1 A positive figure indicates a transfer from the region concerned while a negative figure indicates a transfer to that region.

in the form of grants. By adopting a temporal perspective for all these transfers we can better illustrate these phenomena since various factors tend to offset one another, at least in part (see section 3.1). It is important to bear in mind that the institutional approach adopted requires to take account of the definition of the powers of the federated entities, how that has changed over time, and its impact on the various transfer components in order to analyse the various developments correctly.

Although the other grants do not result from an explicit solidarity mechanism, various implicit solidarity mechanisms nevertheless play a role. That applies primarily to the Community grants under the reformed Special Finance Act, which are allocated partly on the basis of need. That is evident from the use of specific allocation keys (number of children for family allowances, number of elderly for resources connected with support for the elderly, the pupil key for funds earmarked for education), or the introduction of the transitional mechanism to avoid impoverishing the federated entities, though that mechanism is time limited.

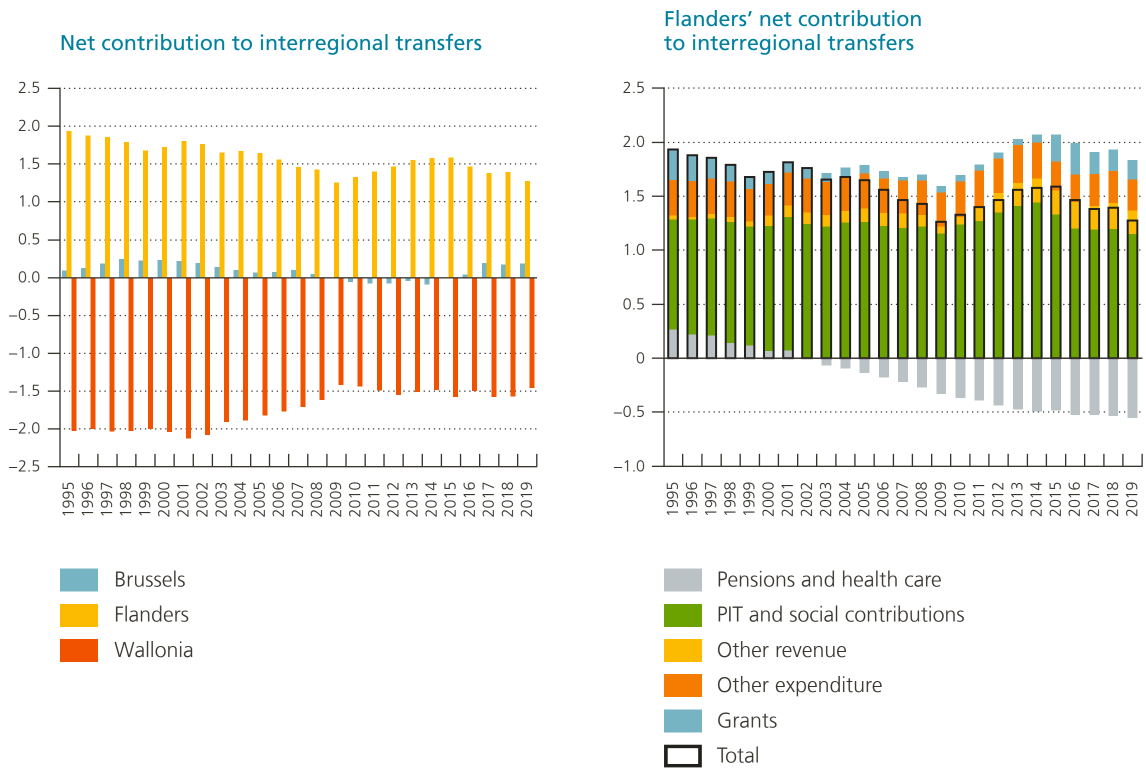
3. The analysis viewed in perspective

It is somewhat arbitrary to examine federal revenue and expenditure from a regional angle. As we have seen, the flows identified in the previous section are closely linked to the way in which the State collects and redistributes its resources. In reality, the federal government's tax and social policies are based on the characteristics of households and businesses, and not on their place of residence. In absolute terms, if ad hoc data were available, a similar analysis could equally consider transfers between women and men, young and old, workers and job seekers, the sick and the well, Belgians and foreigners, etc. However, these various angles

Chart 10

Population ageing has reduced the extent of interregional transfers

(in % of GDP)



Sources: NAI, NBB.

are beyond the scope of this article. In this section, we shed additional light on the analysis by adopting a triple perspective: first temporal, then interprovincial and finally international.

3.1 Changes over time

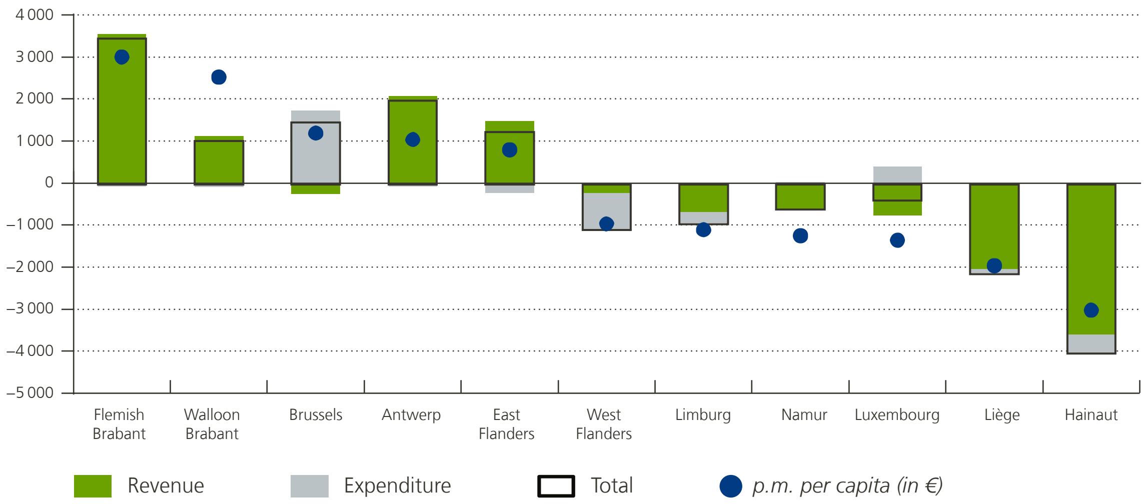
The changes in interregional transfers since 1995 reveal that, leaving aside cyclical fluctuations, the transfers have tended to become smaller over the years. To identify the underlying factors, it is helpful if the net contribution made by Flanders over the period as a whole is broken down per category. We then find that the downward trend is explained mainly by expenditure relating to population ageing. The Flemish contribution to pensions and health care thus became negative in 2003 and has become increasingly negative since then.

Another striking point in this historical perspective is the impact of the sixth State reform. Its effect is not visible in the total transfers, which were unchanged from 2014 to 2015, but it can be seen in the breakdown between categories. First, the State reform devolved additional powers to the federated entities, in practice eliminating the previous corresponding transfers via federal expenditure. That applies, in particular, to family allowances, service vouchers and targeted reductions in social contributions. The impact of the latest State reform is also apparent in federal personal income tax revenues, which were cut by the amount which became the regional PIT. These lower contributions have been partly offset since 2015 by federal government grants to the Communities

Chart 11

Interprovincial transfers via the federal budget

(2019, in € million, unless otherwise stated)



Sources: NAI, NBB.

and Regions under the Special Finance Act. Furthermore, with effect from 2016 the federal tax shift is perceptible via a reduction in taxes and parafiscal levies on labour, which indirectly reduced the interregional redistribution.

3.2 Interprovincial redistribution

In this section, we retain the geographical perspective but take it a step further, to the level of the provinces. However, on that scale it is not possible to apportion the grants paid to the Communities and Regions under the Special Finance Act. On the basis of the available statistics, the provincial analysis is confined to the following categories: personal income tax, social contributions and corporation tax on the revenue side; pensions, allowances for incapacity for work, NEO benefits and payroll tax exemptions on the expenditure side.

In these categories, as in the case of the regional dimension, we can compare each province with the Belgian average, enabling us to chart the implicit interprovincial flows via the federal budget. For full coverage of the national territory, the Brussels-Capital Region is included in the analysis and regarded as an eleventh province, in accordance with the NUTS (Nomenclature of Territorial Units for Statistics) classification level 2.

It is perfectly logical that the implicit interprovincial flows reflect the redistributions already demonstrated at regional level. In fact, the Flemish provinces are joint net contributors while the Walloon provinces are joint net beneficiaries. However, we can identify some specific provincial characteristics which supplement the analysis so far.

Thus, only two of the five Flemish provinces are net beneficiaries in terms of revenue, and hence net beneficiaries for the federal budget as a whole: they are Limburg and West Flanders. In the latter province, pension expenditure plays a major role due to a comparatively high proportion of retired residents. Results for the Walloon provinces vary in regard to the implicit flows relating to expenditure. Conversely, only Walloon Brabant is a net contributor in terms of revenue, including for the federal budget as a whole. Luxembourg, a net beneficiary, is affected by the number of border residents who work and pay their taxes and social contributions in the Grand Duchy, thereby reducing the fiscal and parafiscal revenues generated by that province.

In relation to population size, the territories of what used to be Brabant form the main basis. The net contribution thus represents € 3 000 per capita in Flemish Brabant, € 2 600 in Walloon Brabant and € 1 200 in Brussels. The rest of the country receives a redistribution from these three entities amounting to some € 6 billion via the federal budget, a similar figure to the contribution of Flanders to the interregional transfers. At the other end of the scale are the provinces of Liège and Hainaut, the latter being a net beneficiary receiving € 3 000 per inhabitant.

3.3 International comparison

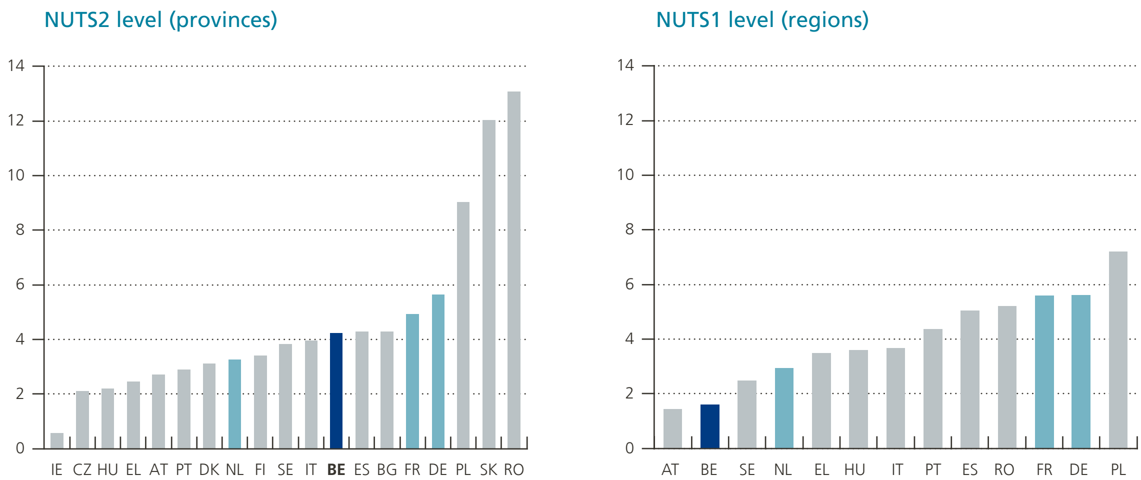
A comparison with interregional transfers operating in other European countries may provide a relevant benchmark for assessing the scale of the transfers in Belgium.

To be able to compare Belgium with other countries we limit the analysis to interregional transfers through households and use the regional accounts of households, which are drawn up according to the ESA 2010 harmonised methodology for all EU countries. The regional accounts of households include households' primary incomes and their disposable income, the difference between the two being due to transfers paid to governments in the form of taxes on income and social contributions, and transfers paid by governments in the form of social benefits and other current transfers. Note that this households-based approach provides less complete coverage of the transfers than in the preceding sections on Belgium: it takes no account of any grants to the regions (as in the interprovincial analysis), and it excludes corporation tax, business subsidies, indirect taxes and health care expenditure. However, it is interesting to note that despite these differences the indicators of interregional redistribution obtained at provincial level are consistent with those obtained in the previous section

Chart 12

Compared to other EU Member States, Belgium features relatively low interregional transfers at NUTS 1 level

("Interregional transfers per capita [1] / national primary income per capita" ratio – standard deviation in 2018 in EU countries [2], in percentage points)



Source: EC, NBB.

1 Interregional transfers are defined as the difference between the NUTS region and the national indicator for per capita transfers, which is computed as primary income minus disposable income.

2 EU countries with minimum 3 NUTS1 level or 3 NUTS2 level regions are considered.

(except for Brussels, whose position changes from contributor to beneficiary if corporation tax is disregarded). The correlation between the two series is almost 90 %.

The regional accounts are available at various geographical levels. The three Belgian regions correspond to the NUTS 1 aggregation level. The NUTS 2 level which comprises smaller geographical areas corresponds to the ten Belgian provinces plus the Brussels Region. According to Eurostat, in principle the NUTS 1 classification comprises regions with a population averaging between 3 and 7 million. There is therefore no NUTS 1 aggregate for relatively small countries. The NUTS 2 classification corresponds to regions with a population of between 800 000 and 3 million. Another notable point is that for some countries, in contrast to Belgium, these classifications do not correspond to any internal administrative subdivision. That applies, for example, in the Netherlands, Italy, Spain and France where the NUTS 1 aggregate is above the level of the "domestic" regions or provinces. Conversely, in Germany this level corresponds to the level of the federated entities (Länder).

Based on the difference between primary income and disposable income at the regional level, interregional redistribution due to household income taxes, social security contributions and social benefits can be calculated within each country. Anologous to the methodology followed in the rest of the article, interregional transfers are calculated as the difference between the level of redistribution per person in a region compared to that calculated on average for the country. In order to compare the importance of interregional transfers across countries, it is appropriate to scale the interregional transfers per capita to or from each region (in euro), by using the ratio of the interregional transfers per capita to the national primary income per capita in the country. The dispersion of these ratios within a country, measured by their standard deviation, indicates the extent of redistribution within that country, and can be compared across countries.

The analysis of the regional redistribution rate at NUTS 1 level reveals that transfers from one region to another are relatively moderate overall in Belgium. The degree of interregional redistribution turns out lower in Belgium than in most other EU Member States. If we consider the NUTS 2 level (provinces), however, Belgium is ranked in the middle. The interregional transfers are considerably higher in Romania and Poland, but also higher in neighbouring countries Germany and France. For example, in Germany the ratio of transfers per capita to primary income per capita at NUTS 1 level is 5 to 10 % above the national average in Hamburg, Bavaria, Hesse and Baden-Württemberg, while it is about 17 % below the average in Saxony and Saxony-Anhalt, two Länder forming part of the former East Germany. In contrast, in Belgium the Flemish Region is contributing more with a ratio of 4 % above the average, while the Walloon Region – the biggest receiver – is 6 % below the national average.

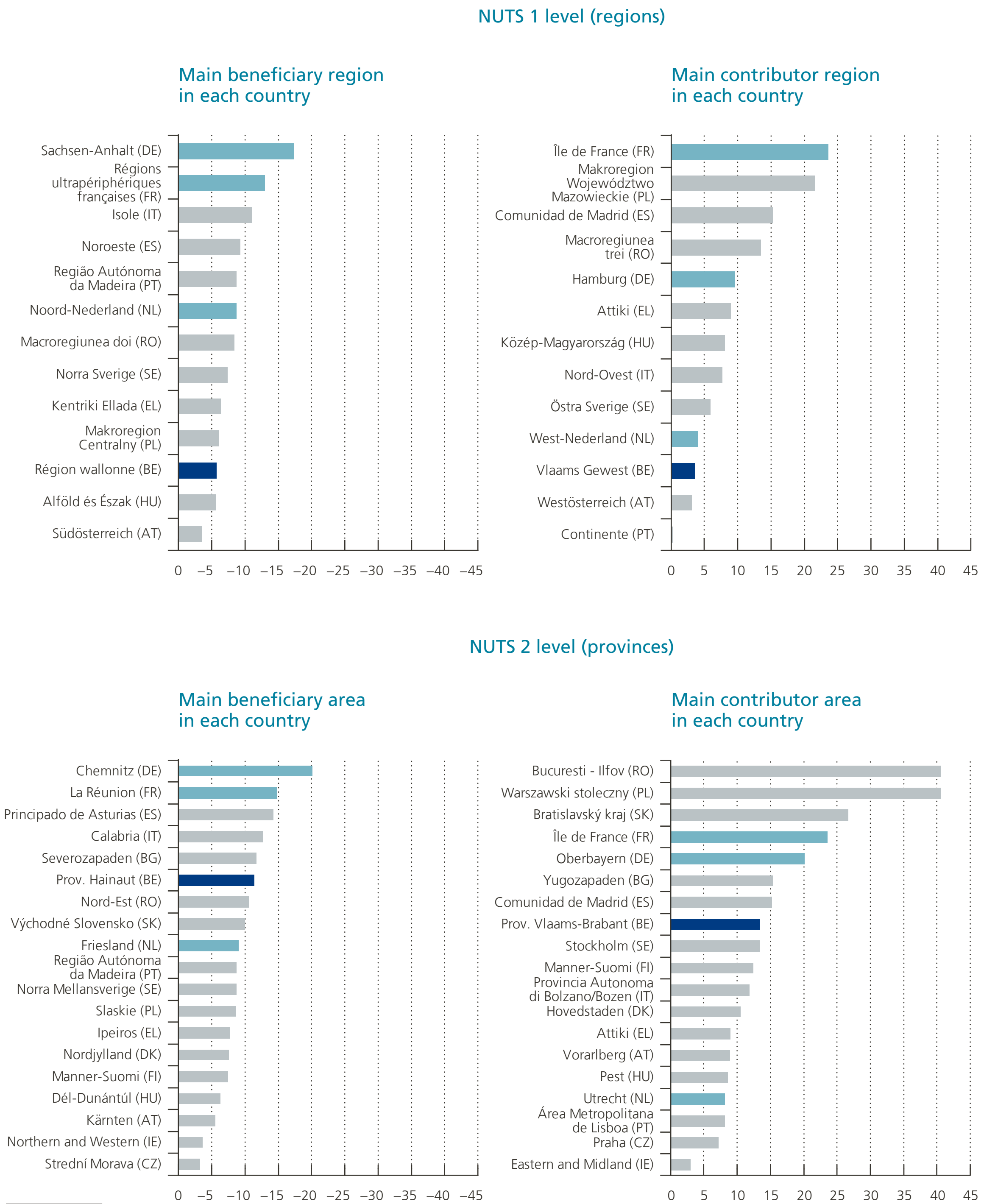
When looking at the extreme regions in each country, the Bucharest region in Romania and the Warsaw capital region in Poland are the NUTS 2 regions making the largest contribution. Ile de France also emerges as a major contributor region (ranked first in NUTS 1 and fourth in NUTS 2). Saxony in the former East Germany stands out among the leading beneficiary regions. It is also a district of Saxony that heads the ranking at NUTS 2 level, namely Chemnitz, with a deviation of 20 % from the average. The extreme NUTS 1 regions in Belgium (Wallonia and Flanders) turn out to deviate among the least from the national average. At provincial level, the provinces of Hainaut and Flemish Brabant are positioned slightly above the median of our sample.

If we visualise the position of the various NUTS 2 regions on a map of Europe, two main lessons emerge. First, the countries' central regions, i.e. typically those which include the capital, are generally significant contributors whereas the main beneficiary regions are often in a more peripheral location. Also, a number of other regions likewise appear as contributors. Most of them are large metropolises, areas enjoying comparative advantages such as access to an international port, or particularly productive regions. These more prosperous regions are concentrated around an arc extending from the North Sea to northern Italy and passing through southern Germany.

Chart 13

In Belgium, at NUTS 1 level the largest contributor and beneficiary regions exhibit a lower rate of redistribution than in most other EU countries [2]

(“Interregional transfers per capita [1] / national primary income per capita” ratio, in %, 2018)



Source: EC, NBB.

1 Interregional transfers are defined as the difference between the NUTS region and the national indicator for per capita transfers, which is computed as primary income minus disposable income.

2 EU countries with minimum 3 NUTS1 level or 3 NUTS2 level regions are considered.

Conclusion

Via the federal government and social security budgets, Flanders and Brussels are net payers in terms of interregional transfers, while Wallonia is a net recipient. In 2019, Flanders evidently made a net contribution of around € 6.2 billion to these transfers. Brussels was likewise a net contributor, in the sum of around € 900 million. These amounts benefited Wallonia, which therefore implicitly received € 7.1 billion in that year. In per capita terms, the contributions of Flanders and Brussels were similar, at € 900 and € 800 respectively. On average, Walloon residents received around € 1 900 via the redistribution effected through the federal government and social security. That is due to divergences in demographic and socio-economic characteristics between the various regions.

Flanders contributes primarily via the levies on income from labour, mainly because the employment rate in Flanders is considerably higher than the Belgian average. Flanders is a net recipient of government expenditure since its relatively old population receives more of the pension and health care expenditure. In the past twenty years, transfers from Flanders have fallen slightly by roughly half a percentage point of GDP due to an ageing population.

Brussels, with its relatively young population, is a net payer in terms of age-related expenditure. On the revenue side, Brussels residents are net recipients in terms of the charges levied on labour incomes, in view of their relatively low employment rate. However, this is largely offset by the net contributions to corporation tax, reflecting the high per capita production in the Brussels-Capital Region.

Wallonia is a net recipient of interregional transfers owing to the low employment rate and below-average income levels, which reduce labour income-related levies and increase income-related social benefits. In addition, with output per capita below the national average, Wallonia is also a net recipient via corporate income tax revenue.

Demographic forecasts for the three regions also predict more rapid population ageing in Flanders and Wallonia in comparison with the Brussels-Capital Region in the decades ahead. The contribution of Brussels via age-related expenditure can therefore be expected to rise. In the case of the other main driver of interregional transfers – the employment rate – the picture depends to a greater degree on policy choices. If the federal government and the regional authorities, with ever more levers at their disposal, succeed in driving up employment towards the level prevailing in Flanders, the interregional transfers from Flanders will decline.

A provincial perspective shows that outgoing transfers per capita are highest in centrally located Brussels and the two adjacent provinces, namely Flemish Brabant and Walloon Brabant. The principal beneficiaries are the provinces of Hainaut and Liège.

A European perspective shows that the interregional transfers in Belgium are modest overall at the level of NUTS 1 regions (the 3 regions of Belgium) and average at the level of the NUTS 2 areas (the Belgian provinces).

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