

What kind of public expenditure is high in Belgium? A comparison with neighbouring countries

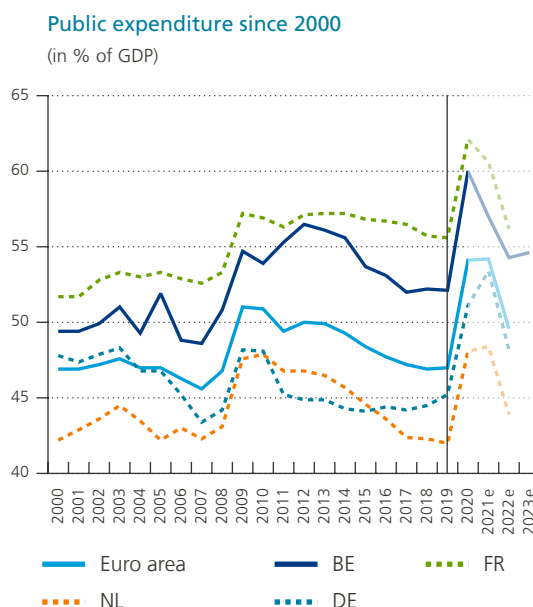
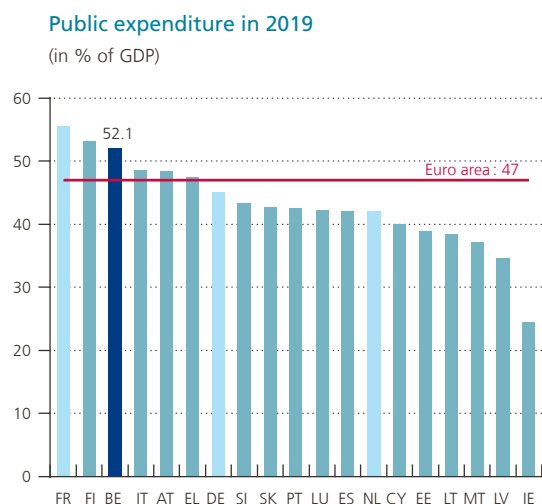
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Introduction

In 2019, total Belgian public expenditure, i.e. primary expenditure plus interest charges, amounted to 52.1 % of GDP compared to an average of 47 % in the euro area. Belgium was thus the country with the third highest expenditure, after France and Finland. This comparatively high level in Belgium dates back several decades. Between 2007 and 2009 the public expenditure ratio increased particularly strongly in the wake of the economic

Chart 1

Public expenditure is high in Belgium



Sources: EC, NBB.

* The authors would like to thank Luc Aucremanne, Diederik Kumps and Claude Modart for useful comments and suggestions.

and financial crisis. While countries such as the Netherlands and Germany subsequently managed to bring their expenditure ratio back down to pre-crisis levels, Belgium was only partially successful in doing so.

The aim of this study is to document the structural finding of high public expenditure in Belgium prior to the COVID-19 pandemic. Following the 2020 health crisis, expenditure once again increased substantially. Another challenge will be to prevent this increase from becoming (partially) persistent.

This study examines Belgian public expenditure in detail on the basis of the classification of public spending by function and sub-function, and by cross-referencing public expenditure classified by function and by type of transaction. It uses the same spending categories in neighbouring countries as a benchmark to define whether the spending is high or not. Further, it pays particular attention to the relative importance of the various government sub-sectors in Belgium in the high spending categories.

This article is divided into five sections. The methodology underlying the analysis is presented in the first section. Next, section 2 offers a general comparison of public expenditure. Section 3 presents an in-depth analysis of certain sub-items of expenditure which are particularly high in Belgium, and at the same time focuses on the relative weight of the various government sub-sectors. Section 4 first draws attention to some empirical studies on public spending efficiency, and then elaborates on elements of the budgetary framework encouraging responsible use of public expenditure. The last section summarises the main conclusions of the study.

1. Methodology

A recent snapshot, an historical perspective and a relevant geographical benchmark

In terms of public spending, the year 2020 – dominated by the health crisis – brought a marked rise in primary expenditure, among other things. Consequently, 2020 clearly deviates from the structural trends in public finances seen in recent years. 2019 better reflects those trends, continuing the pattern of budget outcomes achieved by Belgium in the preceding years. This analysis therefore concentrates mainly on public expenditure relating to 2019, with occasional historical perspectives. The start of the 2000s will be the main historical benchmark because that was the period when primary expenditure began to rise.

Choice of the geographical benchmark is also important as a complement to the chosen reference period. Rather than referring to the average for the euro area or the EU-15 – both fairly heterogeneous in terms of public expenditure and socio-economic situation – the principal benchmark chosen in this study will be the average for the main neighbouring countries, namely Germany, France and the Netherlands. Obviously, there is still some heterogeneity between those countries.

Public expenditure classifications

Eurostat defines two main types of public expenditure classification in the framework of the European System of National Accounts (ESA2010). First, the economic classification by transaction breaks down expenditure according to its nature, namely compensation of employees, subsidies, intermediate consumption, property income paid, social benefits, gross capital formation and other transfers.

Next, the Classification of the Functions of Government (COFOG), developed by the OECD, classifies government spending according to the purpose for which the funds are used. The data are thus divided into 10 “function” groups (general public services, defence, public order and safety, economic affairs, environmental protection, housing and community amenities, health, recreation, culture and religion, education and social protection). There are also various sub-items (see below) for each of the 10 main COFOG categories.

As well as being intuitive, the COFOG classification has the advantage of permitting very accurate comparison of the purposes for which public money is spent via the many categories offered. This study will mainly use this classification by function. The economic classification by transaction will be used occasionally to identify the type of spending concerned by differences found within functions. In this study, another particularly interesting dimension is the cross-referencing of the two types of classification to identify major expenditure items in relation to our benchmark. Of course, total expenditure is the same according to classification by function or by transaction.

Table 1

Public expenditure classifications

By function (COFOG)	By transaction
General public services	Compensation of employees
Defence	Subsidies
Public order and safety	Intermediate consumption
Economic affairs	Property income
Environmental protection	Social benefits
Housing and community amenities	Gross capital formation
Health	Other transfers
Recreation, culture and religion	
Education	
Social protection	
→ Classification according to the purposes for which funds are used	→ Economic classification: according to the nature of the expenditure

$$\Sigma \text{ expenditure by function} = \Sigma \text{ expenditure by transaction}$$

2. Overall analysis

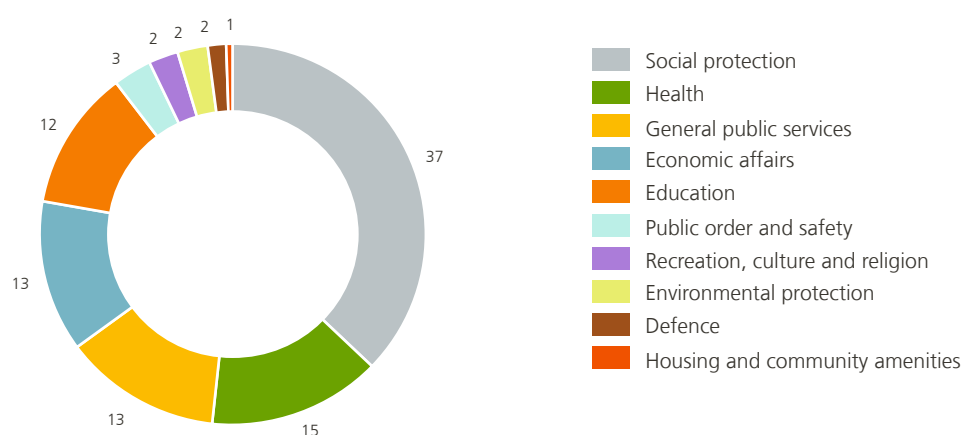
In Belgium, five categories covered 90 % of public expenditure in 2019. Half of public expenditure comprised spending on “social protection” or “health”. “General public services”, “economic affairs” and “education” represented a comparable share of total expenditure, at around 13 % each.

This section first identifies the COFOG categories and sub-items in which spending is particularly high compared to the average for neighbouring countries. Differences in relation to the benchmark will also be analysed from a historical perspective, compared to the early 2000s. Spending per (sub-)category will also be broken down by government sub-sector. The categories identified as relatively high will be analysed in depth in section 3 of this study.

Chart 2

Half of Belgian public expenditure consists of expenditure on “social protection” or “health”

(breakdown of public expenditure in Belgium in 2019, based on classification by function)



Sources: NAI, NBB.

2.1 The main differences

In 2019, the level of public expenditure in Belgium was 4.5 percentage points of GDP above the average for the main neighbouring countries. Table 2 breaks that difference down for all expenditure categories and sub-items according to the COFOG classification. The darker the background colour (red or blue) the bigger the differences (positive or negative) in Belgium compared to the neighbouring countries. We find that the differences are particularly marked in three COFOG categories, namely general public services (+ 1.8 pp of GDP), economic affairs (+ 2.3 pp of GDP) and education (+ 1.3 pp of GDP).

The corresponding COFOG sub-items do not systematically record higher expenditure. For example, in general public services it is expenditure on executive and legislative organs, financial and fiscal affairs, external affairs, basic research and public debt transactions that is higher. In the case of economic affairs, the main items concerned are general economic, commercial and labour affairs and transport expenditure. In education, most of the positive differences compared to the average for the neighbouring countries concern expenditure on basic education (pre-primary and primary), secondary education, and education non definable by level.

In addition, we also find some COFOG sub-items where the differences are greater without that being true of the whole category in question. Examples include expenditure on pollution abatement as a sub-item of the “environmental protection” function, but also expenditure on family and children as a sub-item of the “social protection” function.

In the rest of this study we focus on positive differences of at least 0.4 pp of GDP compared to neighbouring countries. There are two exceptions to this criterion. First, the COFOG sub-item outpatient services in the health care category is disregarded because the total difference in the COFOG health care category is marginal compared to neighbouring countries. In the social protection category, the differences seen under “old age” (mainly pensions) and those concerning survivors (survivor’s pension for the surviving partner) offset one another. These two sub-items were therefore also excluded from the more detailed analysis in this study.

Table 2

Certain types of expenditure are relatively high in Belgium compared to the benchmark

(expenditure differences compared to the neighbouring country average in 2019, in percentage points of GDP)

General public services	Executive and legislative organs	Foreign economic aid	General services	Basic research	R & D	Public debt transactions	Transfers between levels of government	
1.8	0.4	−0.2	0.0	0.6	0.0	1.0	0.0	
Defence	Military defence	Civil defence	Foreign military aid	R & D				
−0.6	−0.4	0.0	−0.1	0.0				
Public order and safety	Police services	Fire protection services	Law courts	Prisons	R & D			
0.0	0.1	−0.1	−0.1	−0.1	0.0			
Economic affairs	General economic, commercial and labour affairs	Agriculture, forestry etc.	Fuel and energy	Mining etc.	Transport	Communications	Other industries	R & D
2.3	2.2	−0.1	−0.2	−0.1	1.0	0.1	−0.2	−0.2
Environmental protection	Waste management	Waste water management	Pollution abatement	Protection of biodiversity	R & D			
0.3	0.0	−0.1	0.4	0.0	0.0			
Housing and community amenities	Housing development	Community development	Water supply	Street lighting	R & D			
−0.3	0.0	−0.2	0.0	0.1	0.0			
Health	Medical products, appliances and equipment	Outpatient services	Hospital services	Public health services	R & D			
−0.1	−0.5	0.4	0.2	0.0	−0.2			
Recreation, culture and religion	Recreational and sporting services	Cultural services	Broadcasting and publishing services	Religious and other community services	R & D			
0.1	−0.1	0.0	0.0	0.1	0.0			
Education	Pre-primary and primary	Secondary	Post-secondary non-tertiary	Tertiary	Non-definable by level	Subsidiary services	R & D	
1.3	0.6	0.4	0.0	0.0	0.5	−0.2	0.0	
Social protection	Sickness and disability	Old age	Survivors	Family and children	Unemployment	Housing	R & D	
−0.3	0.1	−0.4	0.4	0.4	−0.3	−0.3	0.0	

Sources: EC, NAI, NBB.

2.2 Historical perspective

In the past twenty years the difference in relation to the benchmark has more than doubled from 2.1 pp of GDP in 2001 to 4.5 pp of GDP in 2019. However, the historical pattern is variable for the expenditure categories featuring the biggest differentials in 2019. The expenditure category for which the difference in relation to neighbouring countries has increased the most is economic affairs. In 2001, expenditures in this category didn't tower yet above the neighbouring countries' average. The sub-items where the gap has widened the most are general economic, commercial and labour affairs and transport.

Next, expenditure on social protection has also risen steeply. In 2001, the gap between that expenditure and the benchmark was decidedly negative. This was the function category with the most negative differential in relation to neighbouring countries. In Belgium, social protection expenditure was then around 2 pp of GDP lower

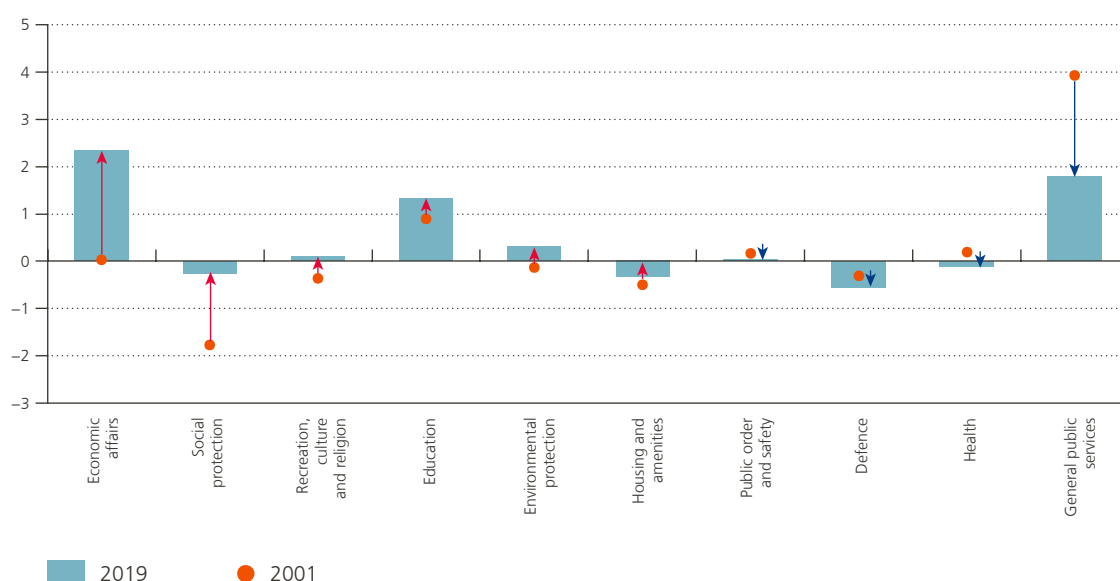
than the average in neighbouring countries. Since that time it has risen substantially as the gap in relation to the benchmark was nearly closed by 2019. In particular, expenditure in the sub-items sickness, disability and old age has risen while it has declined in the unemployment category. Despite the rise over the past twenty years, this study will largely disregard that function since the corresponding expenditure is currently hardly any different from that in neighbouring countries.

The positive gap of education expenditure dates back from at least the beginning of the century, and was further broadened. Finally, the gap in general public services, which remains significant, narrowed markedly, which is to do with the sharp fall in interest charges since 2001.

Chart 3

While the gaps in the “economic affairs” and “social protection” categories have become more positive since 2001, the gap in the “general public services” category came down

(deviation from the average for neighbouring countries, in percentage points of GDP)



Sources: EC, NAI, NBB.

Thus, over the past two decades interest charges on the public debt have clearly declined, also in comparison with the neighbouring countries. However, that fall was more than compensated by the steeper rise in primary expenditure than in the neighbouring countries over the same period.

2.3 Breakdown by government sub-sector

In view of Belgium’s institutional structure, it is worth examining whether the biggest differences concern the federal government and social security (Entity 1) or whether they occur at the level of the Communities and Regions and local authorities (Entity 2). Chart 3 compares the gap in relation to neighbouring countries for the ten COFOG expenditure categories with the share of Entity 2 in that expenditure.

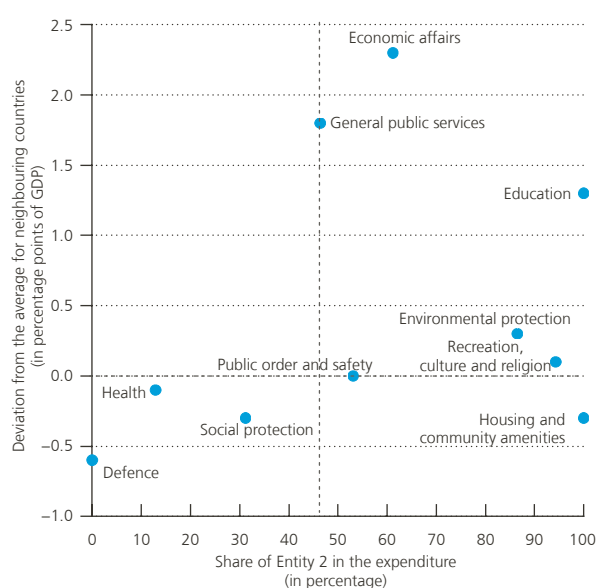
On average, in 2019 the share of Entity 2 in total government expenditure in Belgium was around 47%. Two of the three main categories where expenditure exceeds the average for neighbouring countries, namely economic affairs and education, are mainly attributable to Entity 2. A closer look at the sub-items of

expenditure which are relatively higher in relation to the benchmark logically reveals that Entity 2 accounts for all the expenditure on education. The distribution of the differentials in the various sub-items of economic affairs is more balanced between Entities, as we will explore in section 3.1. Entity 2 is also the principal spender on the sub-item “pollution abatement” in the “environmental protection” category. In the case of general services, more than half of the differentials concern the sub-item “public debt transactions”, for which Entity 1 is mainly responsible.

Chart 4

High public expenditure is more attributable to Entity 2

(expenditure differential in relation to neighbouring countries and share of Entity 2 in that expenditure)



Sources: EC, NAI, NBB.

3. Analysis by sub-item

In this section, the large deviations from the average for the main neighbouring countries in 2019 are examined for each sub-item of expenditure. A breakdown of the differentials according to the type of expenditure per transaction is also presented. That reveals whether the expenditure gaps observed in some functions concern relatively higher compensation of employees or investment, for example. Following that cross-comparison, this section describes the changes in the differentials since the early 2000s and the expenditure share of the various government sub-sectors in Belgium. It also presents a series of concrete examples and details specific to the categories examined.

3.1 Economic affairs

In 2019, expenditure on economic affairs in Belgium was 2.3 percentage points higher than the average for the main neighbouring countries. The breakdown for this category in table 3 indicates that only the sub-items comprising general economic, commercial and labour affairs (+ 2.2 pp of GDP) and transport (+ 1 pp of GDP) generated higher expenditure in Belgium. That higher expenditure on general economic, commercial and labour affairs in fact consisted mainly of subsidies, while compensation of employees is the principal factor in the case of the transport sub-item.

Table 3

In the case of expenditure on economic affairs, the differentials are substantial in “general economic, commercial and labour affairs” and “transport”

(breakdown of expenditure differentials in economic affairs in 2019, in percentage points of GDP)

Gap between expenditure on economic affairs in Belgium and the average in neighbouring countries (in percentage points of GDP, 2019)	ECONOMIC AFFAIRS	General economic, commercial and labour affairs	Agriculture, forestry, etc	Fuel and energy	Mining, manufacturing and construction	Transport	R&D	Economic affairs n.e.c
ECONOMIC AFFAIRS	2.3	2.2	-0.1	-0.2	-0.1	1.0	-0.2	-0.1
Compensation of employees	0.7	0.3	-0.1	0.0	0.0	0.5	0.0	0.0
Subsidies	1.5	1.7	0.0	-0.2	0.0	0.0	0.0	0.0
Intermediate consumption	0.2	0.1	0.0	0.0	0.0	0.2	-0.1	0.0
Property income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social benefits	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Gross capital formation	-0.2	0.0	0.0	0.0	0.0	0.1	-0.2	0.0
Other transfers	-0.1	0.1	0.0	0.0	0.0	-0.1	0.0	0.0

Sources: EC, NAI, NBB.

3.1.1 General economic, commercial and labour affairs

The “general economic, commercial and labour affairs” category covers all policies designed to support economic activity and the labour market. This category includes wage subsidies for businesses (payroll tax exemptions, targeted reductions in social contributions, service voucher scheme, etc.), which represented 55 % of total expenditure on this sub-item in 2019.

Expressed as a percentage of GDP, total expenditure on general economic, commercial and labour affairs has doubled in Belgium since the beginning of the 2000s. Compared to neighbouring countries, the difference is particularly marked in relation to the Netherlands and Germany, where that expenditure diminished over the same period while remaining stable, on average, in the euro area. Around 42 % of expenditure in this category is attributable to the federal government and social security and 53 % to the Communities and Regions.

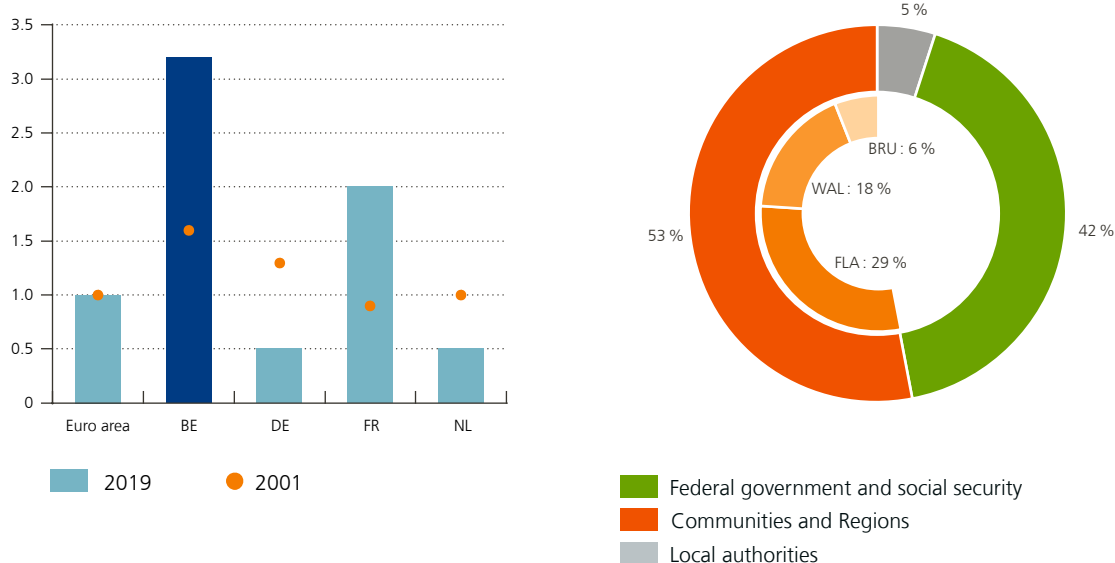
Central Economic Council (CEC) data show that wage subsidies to the private sector represent a much larger share of the wage bill in Belgium than in neighbouring countries. These subsidies have increased substantially since the early 2000s. In 2019 they represented 4.7 % of the wage bill, compared to less than 3 % in France and under 1 % in Germany and the Netherlands. The increase in wage subsidies can explain a large part of the widening gap with the neighbouring countries for spending on “general economic, commercial and labour affairs”.

This marked growth since the early 2000s is due mainly to the introduction of payroll tax exemptions (at federal level) and the system of service vouchers (at regional level since 2015). These two schemes represent more than half of wage subsidies in Belgium. Targeted reductions in social contributions (mostly at regional level since 2015) have risen more steadily but nevertheless substantially over the past twenty years. The expansion of other categories of wage subsidies has been more moderate.

Chart 5

Expenditure on “general economic, commercial and labour affairs” is rising

(trend and breakdown per sub-sector of expenditure on general economic, commercial and labour affairs)



Sources: EC, NAI, NBB.

In Belgium, the first payroll tax exemptions were introduced at the beginning of the 2000s. Since then, each legislature has created new ones and modified existing exemptions. There are currently ten exemptions from payment of payroll tax in force¹. From a fiscal point of view, the main reductions are the ones relating to night work and shift work and those concerning research and development. These two reasons for exemption respectively represented 51 % and 30 % of the total payroll tax exemptions, which came to € 3.2 billion altogether in 2019.

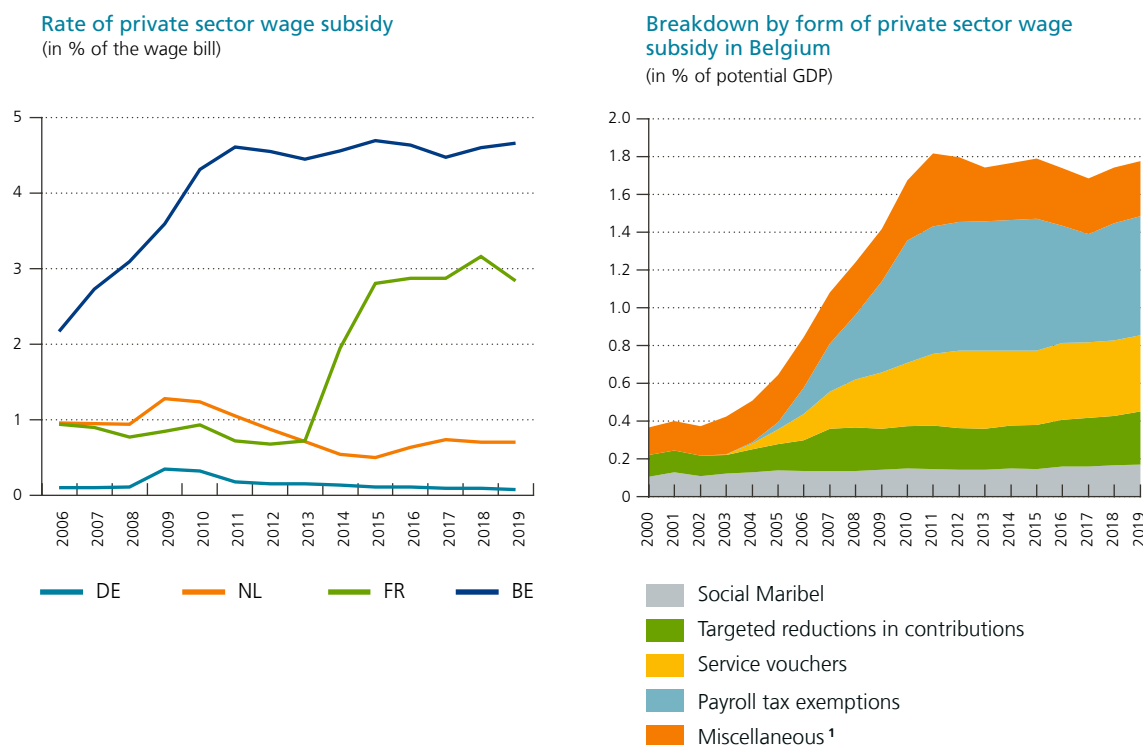
It is important to point out that these apparently generous wage subsidies in Belgium are granted in the context of a particularly heavy burden of taxes and parafiscal levies on labour. There is in fact a degree of offsetting between these two aspects: firms recoup in the form of subsidies part of what they pay to the State in taxes and social contributions.

Such offsetting should not be considered good practice. Instead, the ideal approach would be to embark on an in-depth review of taxes on labour in Belgium – and particularly fiscal and parafiscal levies – rather than regularly adding one or more new layers of wage subsidies or exceptions to the system which thus becomes increasingly complicated. In practice, only a small number of exceptions should be justifiable, preferably targeted in order to allow for significant social externalities that the market does not take into account, such as promoting innovation by supporting research and development activities, and where the means employed are sufficiently effective.

¹ The ten payroll tax exemptions concern: overtime; the merchant navy, dredging and towage; research and development; sea fishing; night work and shift work; sportsmen and women; the wage adjustment (or “exemption from the intersectoral agreement: AIP”); areas eligible for aid; new businesses; young workers.

Chart 6

Wage subsidies have increased particularly strongly



3.1.2 Transport

The “transport” sub-item covers the budgets allocated to public transport operators (such as SNCB, Infrabel, STIB, De Lijn, TEC), but also public expenditure on the construction, management and maintenance of transport infrastructures (rail, road, water, air). It is important to mention that the SNCB is not part of the public sector whereas the regional transport companies (and Infrabel since 2014) are. Consequently, public expenditure destined for the rail transport company consists mainly of subsidies, while expenditure concerning the regional transport operators takes the form of wages, investment and purchases of goods and services. In that respect, the compensation of employees in the “transport” sub-item is paid mainly by the Communities and Regions (56 %), with federal expenditure here representing 26 %, the remainder coming from the local authorities (18 %).

Expressed as a percentage of GDP, expenditure on transport has risen in Belgium since the early 2000s; that is not the case for the average neighbouring country. In 2019, expenditure on transport in Belgium represented 2.9 % of GDP, compared to an average of less than 2 % of GDP in Belgium’s neighbouring countries. Two-thirds of all that expenditure was covered by Entity 2. For this sub-item, it is possible that in neighbouring countries the private sector accounts for a relatively larger share of transport services, as is true of the management of the motorway network in France, for example, or private enterprises operating on the bus network in the Netherlands. The way in which public transport is organised and supplied is not the same in all countries.

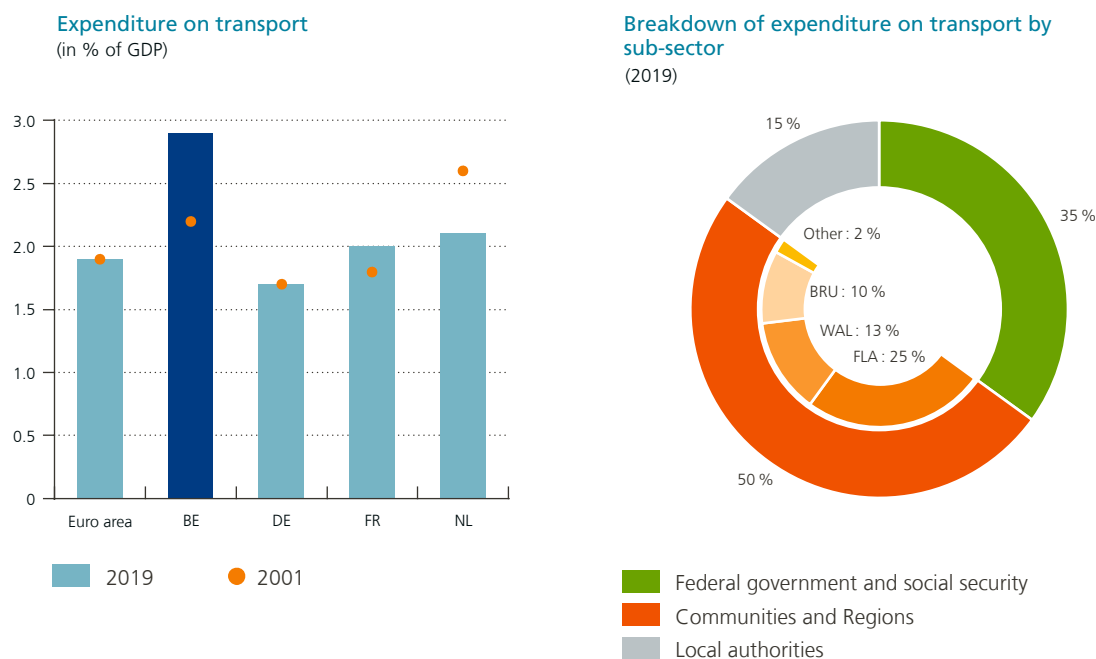
One theory that might explain the high budgetary cost of transport in Belgium concerns the extremely dense network of communication routes compared to other countries with a similar or even greater population density.

Belgium also suffers from endemic congestion problems, attributable to the continuing dominance of private cars. These characteristics are connected with the particularly marked urban sprawl in Belgium, whereas urban development is more concentrated in other countries, making it easier and cheaper to organise transport in general, and public transport in particular (Cornille *et al.*, 2017).

Chart 7

Expenditure on “transport” is rising

(trend and breakdown by sub-sector of expenditure on transport)



Sources: EC, NAI, NBB.

3.2 Education

Alongside spending on economic affairs, public expenditure on education is also high in Belgium compared to the average for neighbouring countries in 2019 (+ 1.3 pp of GDP). The cross-referenced table (table 4) shows that this higher expenditure on education is attributable essentially to basic and secondary education, but not tertiary education. Compensation of employees (2.1 pp of GDP higher than in neighbouring countries) is the sole factor accounting for these significant differences.

If we take a more precise measure of education expenditure, namely the ratio of expenditure on basic education per child aged between 3 and 11 years, and the ratio of expenditure on secondary education per child aged between 12 and 18 years, it is confirmed that expenditure is higher in Belgium than in neighbouring countries, and higher than the euro area average.

Table 4

In education, expenditure is higher in the case of basic education, secondary education and education non definable by level

(breakdown of education expenditure differentials in 2019, in percentage points of GDP)

Education expenditure differential in Belgium compared to the average for neighbouring countries (in percentage points of GDP, 2019)		EDUCATION						
		Pre-primary and primary	Secondary	Post-secondary non-tertiary	Tertiary	Non definable by level	Subsidiary services	R&D
EDUCATION	1.3	0.6	0.4	0.0	0.0	0.5	-0.2	0.0
Compensation of employees	2.1	0.9	0.8	0.0	0.1	0.3	-0.1	0.0
Subsidies	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermediate consumption	-0.1	0.0	-0.1	0.0	-0.1	0.1	-0.1	0.0
Property income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social benefits	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross capital formation	-0.1	-0.1	-0.2	0.0	0.0	0.1	0.1	0.0
Other transfers	-0.3	-0.1	-0.1	-0.0	-0.0	0.0	0.0	0.0

Sources: EC, NAI, NBB.

Higher expenditure on education may also be due to a smaller number of pupils per full-time equivalent teacher. The OECD data reveal that this ratio is relatively lower in Belgium, except in the case of tertiary education. For basic and secondary education, these results are consistent with previous observations showing higher expenditure per pupil. Various explanations are possible: classes in Belgium might be smaller, the number of hours of lessons per teacher could be lower, or the number of hours of lessons per class might be relatively higher. In all cases, a higher number of teachers per pupil is reflected in the average expenditure per child.

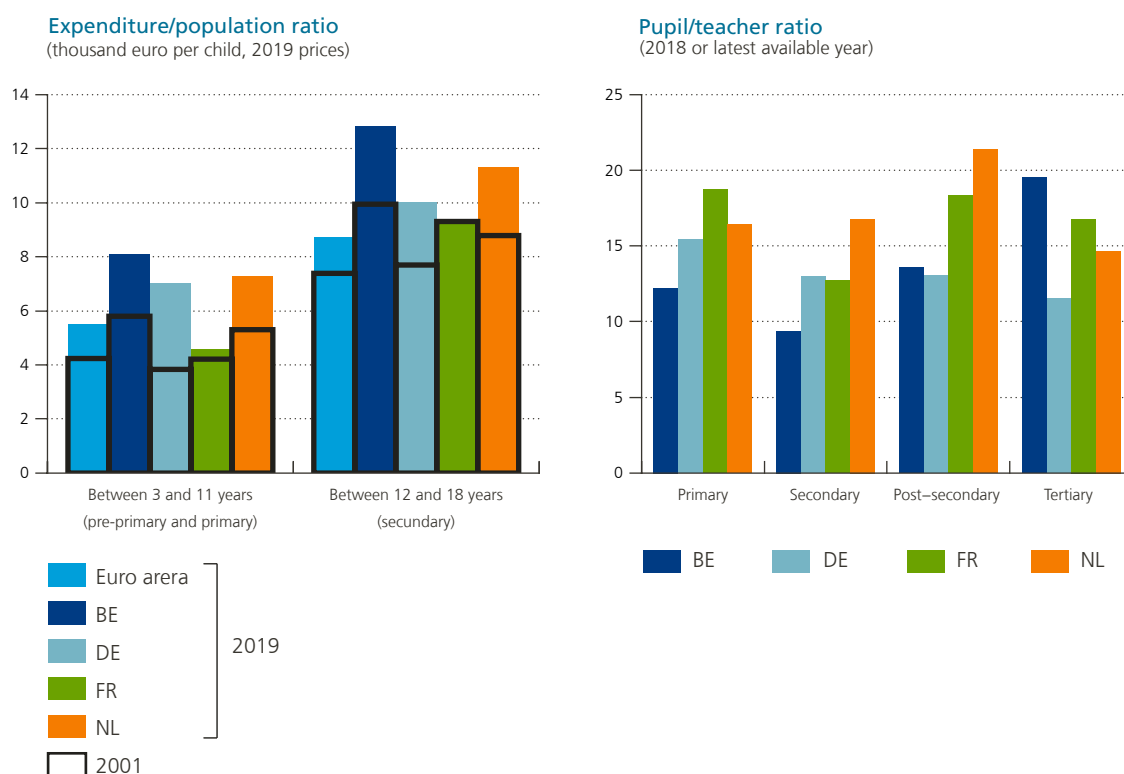
Apart from the budgetary impact of teacher numbers, the relatively high cost of pre-primary, primary and secondary education in Belgium could also be due to such factors as division into language communities, the coexistence of different networks, a high rate of duplication, or compulsory education up to age 18 (Cornille *et al.*, 2017). Another point to mention is that, in 2017, the share of the public sector in primary, secondary and post-secondary non-tertiary education was greater in Belgium (97 %) than in France (91 %), but especially greater than in the Netherlands (88 %) and Germany (87 %). The OECD average was 90 % in 2017 (OECD, 2020).

Allocating substantial budgets to education is a laudable aim since this expenditure is productive and has a beneficial long term impact on economic activity and equalising opportunities. But the funding must also be put to good use. From that point of view it is worth measuring the efficiency of public involvement in this area by comparing the means deployed and the results achieved.

Every three years the OECD conducts the PISA survey of young people aged 15 years. The survey assesses the acquisition of knowledge and skills essential to everyday life in many countries, including Belgium. Analysis of the level of expenditure per young person combined with the PISA survey score tells us more about the performance

Chart 8

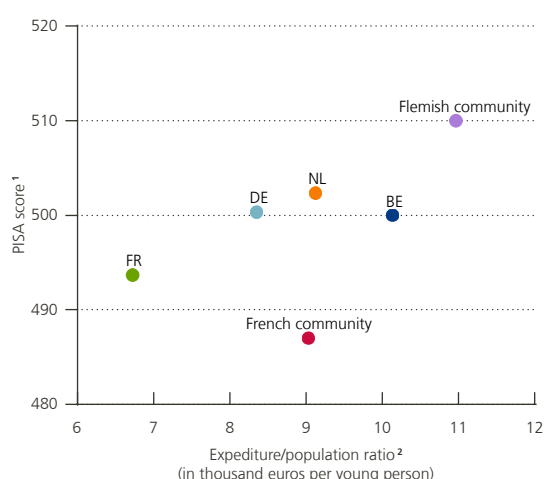
Ratio of education expenditure per child and pupil/teacher ratio



Sources: EC, NAI, OECD, Statbel, NBB.

Chart 9

The performance of education expenditure is not always commensurate with the amount invested



Sources: EC, IBSA, NAI, OECD, Statbel, NBB.

1 Average scores in reading, mathematics and sciences in 2018. The OECD average for these three dimensions was 488 in 2018.

2 2019 expenditure ratio in pre-primary, primary and secondary education to the number of children aged between 3 and 18 years.

of education systems for a given level of expenditure. In Belgium, in view of the higher public expenditure on basic and secondary education, it must be said that the results achieved are not commensurate with the amount invested (chart 9).

In Belgium, the PISA score is no higher than in the Netherlands and Germany although the expenditure ratio per pupil is lower in those two countries. If we distinguish between the scores per community¹, the differences are greater. With comparable resources, the Netherlands achieves a higher PISA score than the French Community. As regards the Flemish Community, expenditure per pupil is higher (particularly in pre-primary and primary education), but the results achieved are also higher than in the countries considered.

3.3 General public services

The third COFOG category for which the expenditure differential compared to the average for neighbouring countries was particularly marked in 2019 is the general public services category (+ 1.8 pp of GDP). A new detailed table shows the three sub-items responsible for that higher expenditure, namely executive and legislative organs, financial and fiscal affairs, external affairs (+ 0.4 pp of GDP), basic research (+ 0.6 pp of GDP) and public debt transactions (+ 1 pp of GDP). This cross-referenced table shows that the differentials in

Table 5

In general public services, there are large differentials in the sub-items “executive and legislative organs, financial and fiscal affairs, external affairs”, “basic research” and “public debt transactions”

(breakdown of expenditure differentials in general public services in 2019, in percentage points of GDP)

Expenditure differential in general public services in Belgium compared to the average for neighbouring countries (in percentage points of GDP, 2019)	GENERAL PUBLIC SERVICES							
	GENERAL PUBLIC SERVICES	Executive and legislative organs	Foreign economic aid	General services	Basic research	R&D	General services n.e.c.	Public debt transactions
GENERAL PUBLIC SERVICES	1.8	0.4	-0.2	0.0	0.6	0.0	-0.1	1.0
Compensation of employees	0.6	0.3	0.0	0.0	0.3	0.0	0.0	0.0
Subsidies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermediate consumption	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
Property income	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Social benefits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross capital formation	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Other transfers	-0.2	0.1	-0.1	0.0	0.0	0.0	0.0	0.0

Sources: EC, NAI, NBB.

¹ IBSA data enable us to allocate Brussels children to education in the French or Flemish Community on the basis of the number of teachers per community in Brussels: 23 % for the Flemish Community and 77 % for the French Community. In addition, local authority expenditure on education was divided between communities on the basis of the percentage of the total number of teachers working in the French Community (41 %) and the Flemish Community (59 %).

the sub-items executive and legislative organs, financial and fiscal affairs, external affairs and basic research are recorded mainly in compensation of employees. In the sub-item public debt transactions it is property incomes paid (which include interest charges) that account for the whole of the difference in relation to the average for neighbouring countries.

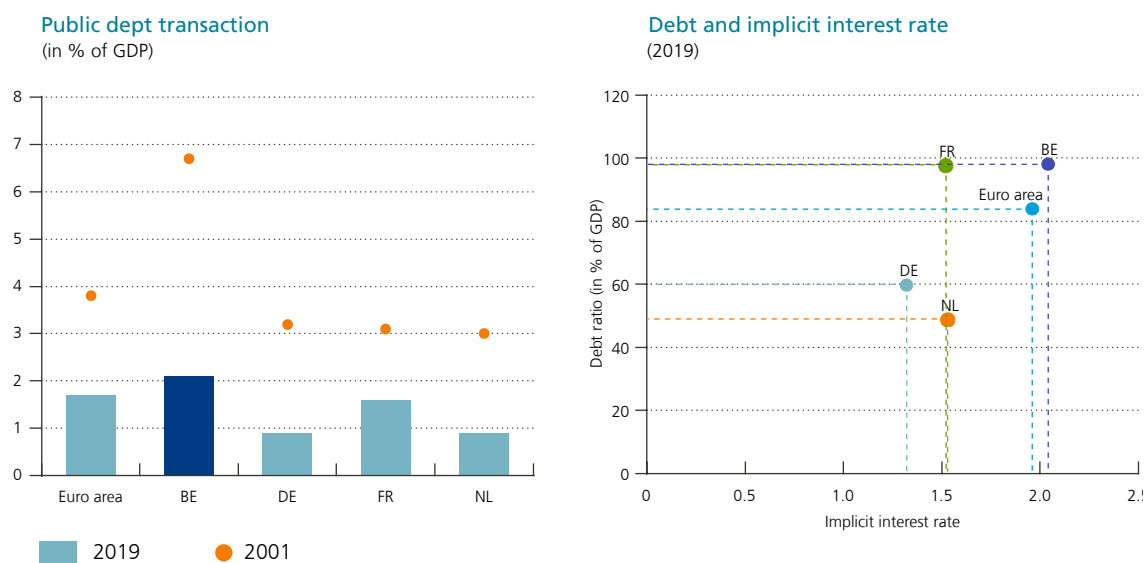
3.3.1 Public debt transactions

The sub-item public debt transactions mainly covers interest charges on the government debt. In 2001, public debt transactions represented just under 7 % of GDP, but by 2019 that ratio had fallen to just over 2 % of GDP. Despite this sharp reduction, which was driven by the fall in interest rates and is more pronounced in Belgium than on average in the euro area and in neighbouring countries, interest charges are still relatively high in Belgium. For example, they represent less than 1 % of GDP in Germany and the Netherlands (chart 10).

These relatively higher interest charges as a percentage of GDP in Belgium are a reminder of the high cost of debt compared to the Netherlands and Germany. In comparison with France, which had a debt ratio similar to Belgium's in 2019, the cost of debt is also greater owing to the higher implicit interest rate. That is due partly to the relatively higher debt maturity in Belgium, which in turn has the advantage of limiting the impact on interest charges of a future interest rate increase.

Chart 10

Although expenditure on “debt transactions” remains high, it has fallen sharply



Sources: EC, NAI, NBB.

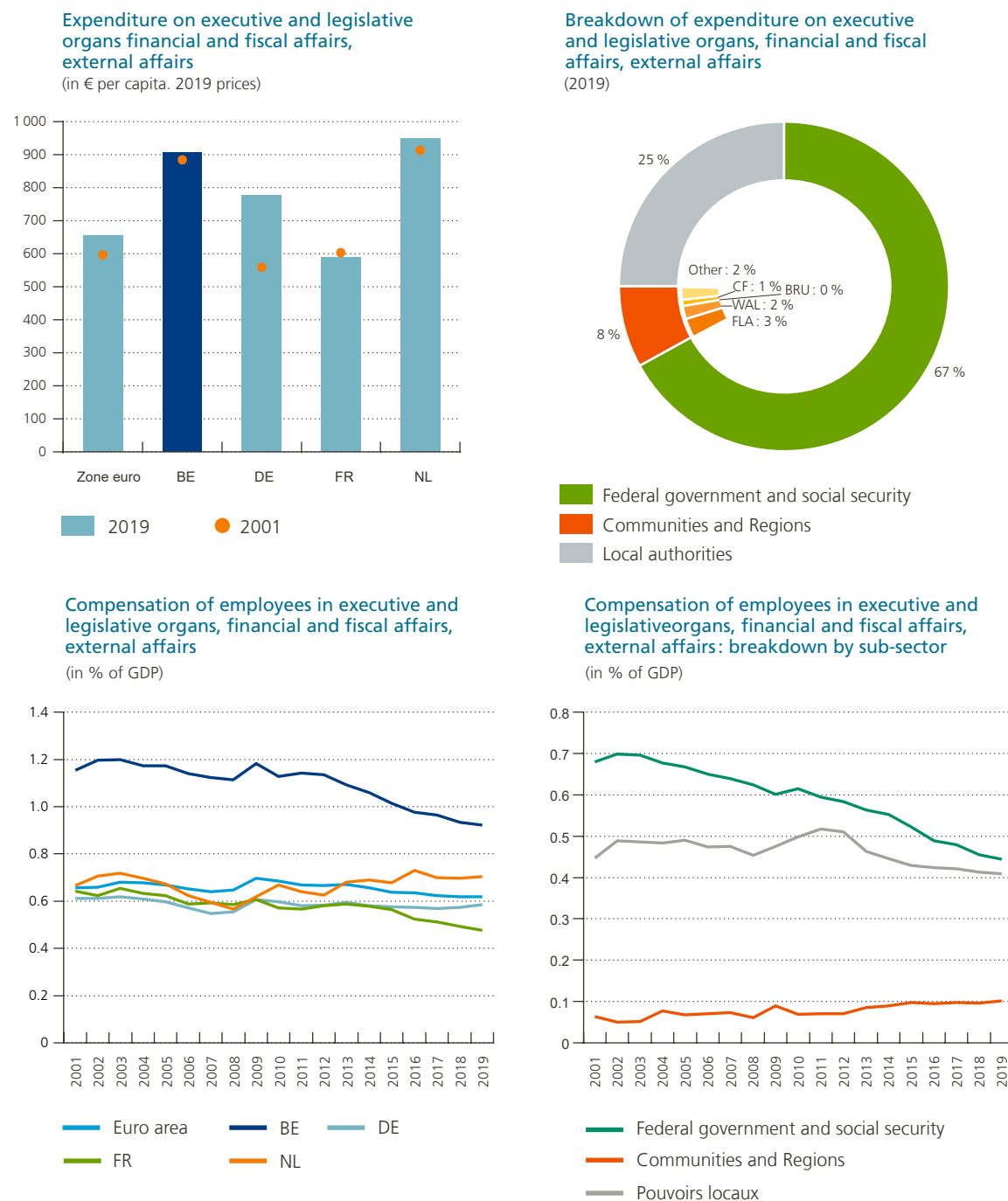
3.3.2 Executive and legislative organs, financial and fiscal affairs, external affairs

Another aspect of general public services where public expenditure is higher than in neighbouring countries is the sub-item “executive and legislative organs, financial and fiscal affairs, external affairs”. This category covers overall State operations including the public services dealing with foreign affairs, domestic affairs and finance, and the running of the parliaments and ministerial offices.

Expressed in 2019 prices, expenditure on operations per capita is relatively stable in Belgium: approximately € 900 per capita, or around € 250 per capita higher than the euro area average. The figure for the Netherlands is similar to the level in Belgium, but the ratios for Germany and especially France are lower. The importance of Entity 1 in this category (around two-thirds of expenditure) is due to the intrinsic nature of the items included. They mainly concern powers specific to the federal government in Belgium.

Chart 11

Expenditure on executive and legislative organs, financial and fiscal affairs, external affairs is still high in Belgium



Sources: EC, NAI, NBB.

As already mentioned, compensation of employees accounts for most of the differential in this category. Expressed as a percentage of GDP, compensation of employees for this sub-item clearly deviates from the average for the euro area and the main neighbouring countries. Conversely, the figure has fallen in Belgium since the beginning of 2012. That reflects in particular the cuts made by the federal government during that period. All the same, in 2019 the federal level still accounted for most of the expenditure in this category. In contrast, expenditure on this item by the Communities and Regions is increasing, partly as a result of the transfer of powers in 2015, though it is still fairly marginal. Local authorities also accounted for a large part of compensation of employees in this category. For these latest, it includes part of the compensation of employees of civil servants in the administrations of municipalities, local social services and provinces.

3.3.3 Basic research

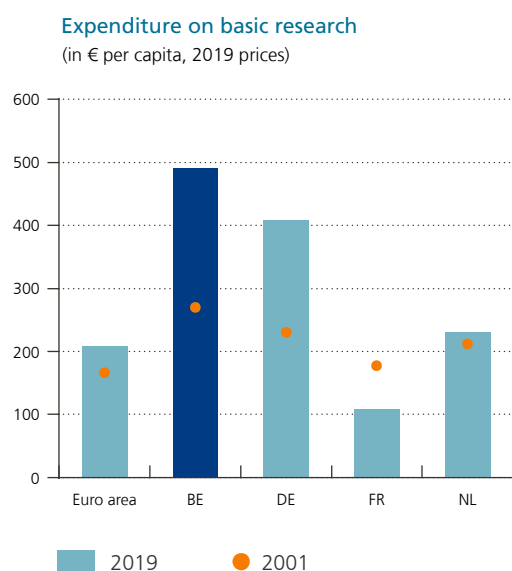
Another type of spending that appeared to be higher in Belgium than the average in neighbouring countries is expenditure on basic research. If these budgets are used effectively, this is productive expenditure that benefits society as a whole.

Compared to the early 2000s, per capita expenditure on basic research at constant prices has almost doubled in Belgium to reach nearly € 500 per capita in 2019. That is almost five times the figure for France, where spending on this item has actually fallen compared to the 2000s. It is also double the average for the euro area in 2019. However, it is possible that some expenditure classed as basic research in Belgium may come under applied research in neighbouring countries, so these findings should be interpreted with caution.

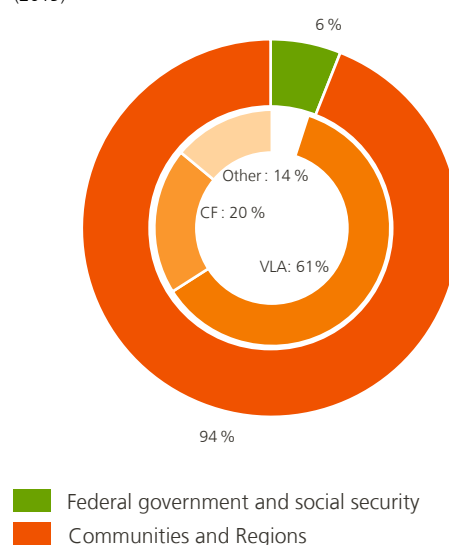
Entity 2 accounts for almost all expenditure on basic research in Belgium. More than 60 % of expenditure on basic research in Belgium takes place in Flanders, and essentially concerns research and development activities in universities.

Chart 12

Expenditure on basic research has risen since 2001



Breakdown of expenditure on basic research
(2019)



Sources: EC, NAI, NBB.

3.4 Family and children

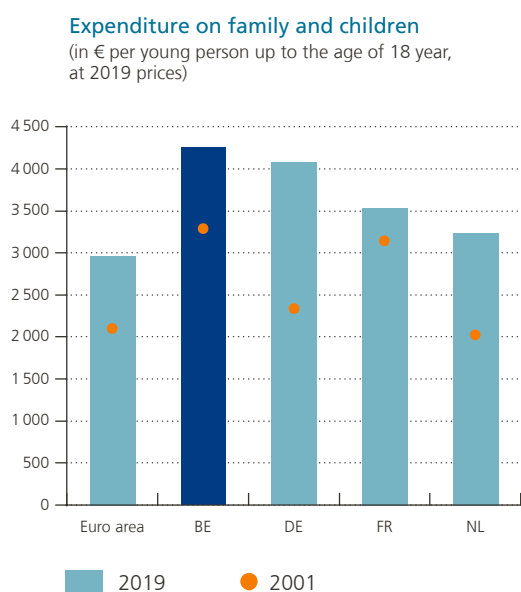
Another COFOG sub-item for which expenditure was relatively high (+ 0.4 pp of GDP) in Belgium in 2019 compared to the average for neighbouring countries is “family and children”. It mainly covers social benefits such as family allowances, parental leave, maternity leave, paternity leave, etc.

If we calculate the expenditure ratio for “family and children” per young person up to 18 years of age, two findings emerge. First, for Belgium, neighbouring countries and on average in the euro area, expenditure on this category was higher in 2019 than in the early 2000s (at constant prices). Next, in 2019 this item represented around € 4300 per young person in Belgium, which was more than in neighbouring countries (€ 4100 in Germany, € 3500 in France and € 3200 in the Netherlands). The difference is even greater in relation to the euro area average (around € 3000).

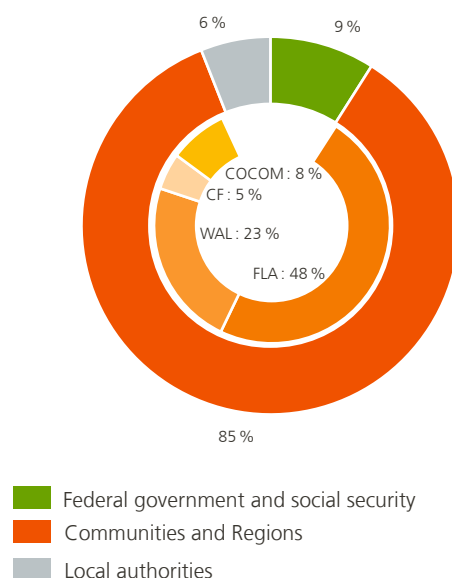
Most of this expenditure is attributable to the Communities and Regions, accounting for around 85 % of total expenditure in this category. This high proportion reflects the allocation of powers between levels of government, as family allowances were devolved to the Regions under the sixth State reform.

Chart 13

Expenditure on family and children



Breakdown of expenditure on family and children by sub-sector
(2019)



Sources: EC, NAI, NBB.

3.5 Pollution abatement

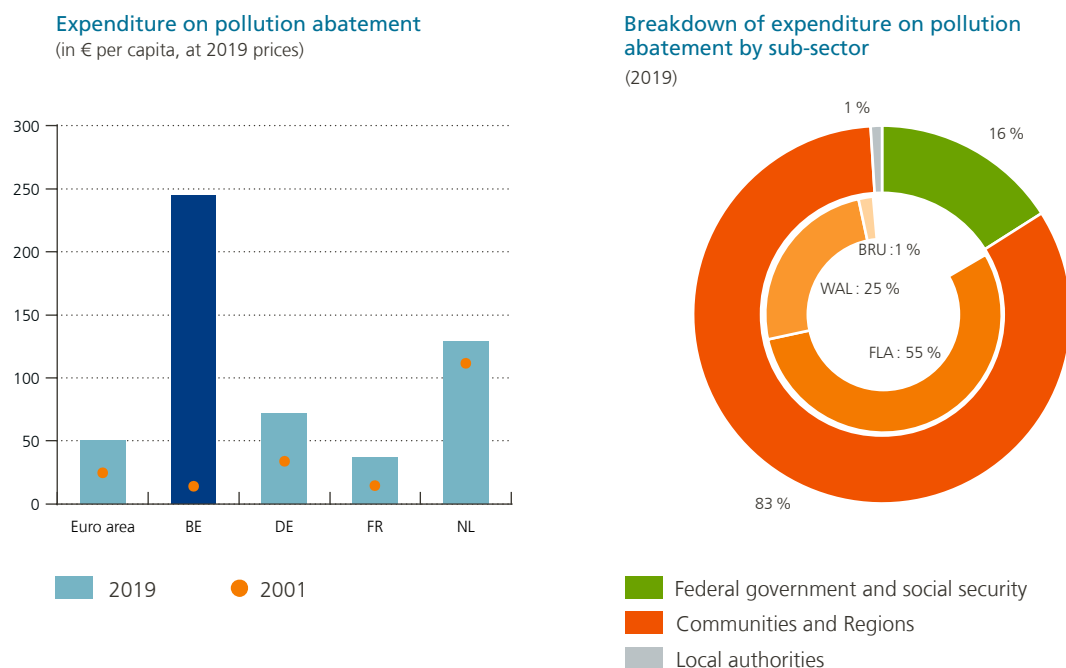
To conclude this section, one last COFOG sub-item for which expenditure in Belgium is relatively higher than the neighbouring country average is “pollution abatement” under the COFOG function “Environmental protection”.

In the early 2000s, environmental protection expenditure per person was lower in Belgium (around € 14 per capita at 2019 prices) than in neighbouring countries and the euro area. At that time, the Netherlands was

where that spending was higher. In 2019 the situation was very different. Compared to the 2001 per capita figure, that expenditure has risen sharply in Belgium to well above the average for neighbouring countries and the euro area. Subsidies make up almost the whole of that expenditure.

Chart 14

Expenditure on pollution abatement



Sources: EC, NAI, NBB.

Most of this expenditure is attributable to the system of green certificates, initiated by the Regions (primarily for the promotion of solar panels) and the federal government (for the support of off shore wind parks) at the beginning of this century, in order to promote the production of renewable energy. Green certificates represented 70 % of the € 2.8 billion spent on this sub-item in 2019.

The green certificate mechanism is statistically similar to a system in which the government grants subsidies to green electricity producers and levies surcharges on electricity suppliers. The subsidies thus find their counterweight in the surcharges levied. In the end, the climate objective of green certificates is thus pursued while preserving, in principle, budgetary neutrality.

While the subsidisation of solar panels massively increased adoption, the efficiency of the system has proven low. Research on the Flemish subsidy system in the period 2006-2012 demonstrates that an upfront investment subsidy instead of future production subsidies would have reduced public expenditure by € 1.9 bn or 51 % of the amount spent (De Groote and Verboven, 2019).

Further, we cannot be sure that similar systems in other countries are recorded equivalently in the public expenditure statistics by function.

4. A more detailed assessment of public expenditure is needed

The above expenditure benchmarking exercise shows Belgium's position in relation to a relevant reference point for various expenditure categories. However, this study needs to be supplemented in order to draw more conclusions regarding the advisability of increasing or reducing the expenditure. This section briefly addresses some key aspects of such an analysis. First, the importance of public expenditure efficiency is discussed: does the expenditure achieve the aims in view? Next, the focus is also on the way in which fiscal frameworks can encourage responsible use of public expenditure.

4.1 What is the cost of achieving which aims?

To assess the efficiency of certain public expenditure, it is necessary to conduct specific studies linking expenditure (input) to the objectives (output). This can be done by using macroeconomic data, in the same way as Cornille *et al.* (2017) and to some extent in this article, for expenditure on education, but microeconomic analyses can provide more accurate results. In that regard, this sub-section presents some examples of recent microeconomic analyses specific to Belgium. The brief description of those analyses does not aim to be exhaustive, but rather to illustrate the value of such analyses. There are in fact numerous studies analysing the effects of government measures.

The FPB has analysed the impact of the regional reforms of family allowances on the risk of child poverty (Nevejan *et al.*, 2021). The study shows that the reforms have had little effect on the child poverty risk and that child poverty has hardly been reduced at all compared to the previous situation. The authors consider that it is still possible to target family allowances better in order to combat child poverty.

A report by the Court of Auditors published in 2021 analyses the measure relating to exemption from social contributions for first recruitments. That expenditure is classed as subsidies according to the ESA classification. Since 1 January 2016, entrepreneurs are granted full exemption from employer's contributions for the first worker recruited, with no time limit. This measure encourages entrepreneurs to recruit their first workers, to support employment and to improve business viability. This report reveals that the volume of labour has not risen proportionately to the increase in the budgetary cost of this exemption in recent years. According to the authors, the measure therefore seems less cost-effective than the flat-rate reductions for first recruitments which were in force before the 2016 overhaul. The Court of Auditors therefore recommended assessing whether a time-limited flat-rate reduction would be more appropriate, given that it is more cost-effective. In addition, an FPB study (López Novella, 2021) has also assessed the effects of the first recruitments measure on the survival of small firms and new businesses and the effect of the 2016 reform. According to that study, the measure boosts the chances of survival for these businesses, although the new arrangements introduced in 2016 do not seem to improve those chances.

An FPB assessment (Dumont, 2019) provides robust evidence that the different schemes of partial exemption from payment of the withholding tax on the wages of R&D personnel are effective in stimulating additional R&D activities. However, the stimulating effect of R&D tax credits and the IP-box regime on additional private R&D investment cannot consistently be illustrated. Recently, a comprehensive overview of the effectiveness of tax incentives for R&D was given by Schoonackers (2020). In this study – and based on the existing literature – the author concludes that the choice of policy instrument to be used in fact depends on firms characteristics. Direct subsidies mainly influence the decisions of small or young businesses, whereas tax incentives for R&D seem more beneficial in the case of larger companies. In Belgium, young companies account for only a small amount of R&D expenditure, yet they are the ones which often have the best growth potential. It could therefore be beneficial to rethink the Belgian R&D support systems by focusing more on these young, dynamic companies.

Regarding payroll tax exemptions, used in a growing number of spheres and equivalent to a policy of granting subsidies or reductions in social contributions, another report by the Court of Auditors published in 2019 finds that their aims are not clearly defined and their results are not assessed. It is precisely the lack of specific, measurable aims (e.g. boosting productivity, reducing undeclared employment, encouraging research and development, etc.) that makes it impossible to assess the scheme. Yet assessment is necessary to measure whether the benefits outweigh the costs for public finances, to assess the spin-off benefits and to choose between payroll tax exemptions and other public policy instruments which might serve the same aims.

4.2 A supportive fiscal framework

An appropriate fiscal framework can provide vital support for the continuous assessment of expenditure. Here we focus on two aspects of the fiscal framework for expenditure: spending reviews and expenditure rules.

4.2.1 Spending review

A spending review is a coordinated, detailed analysis of public spending aimed at identifying any efficiency gains or making cuts in non-priority items, because a high level of funding does not necessarily guarantee the quality of goods and services provided by the government. Earlier studies have also drawn attention to scope for improvement in the efficiency of government in Belgium in various spheres (Cornille *et al.*, 2017).

A spending review can contribute to fiscal consolidation objectives, but may also reveal scope for new policies, such as new investment and expenditure to stimulate growth. This is a particularly useful tool if it always forms part of the budgetary process. The European Commission encourages this practice, as spending reviews can help to improve the composition and effectiveness of expenditure in order to respond better to economic and societal objectives (EC, 2020).

Two main approaches to spending reviews are possible (Vandierendonck, 2014). First, a strategic approach that questions the actual use of public funds to finance a policy or a body. Once the strategic approach has been applied, the tactical approach consists in improving the balance between the level of public funding and the results achieved. Most spending reviews are targeted. They cover specific branches of public spending that represent a small proportion of total expenditure.

At federal level, a plan for optimising expenditure and improving the efficiency of public services was launched in 2015 (EC, 2020). Following this exercise, some federal public services were merged, a central procurement agency was set up, and a plan was launched for managing the federal government's real estate assets. After his first experience of a targeted spending review, in 2021 the federal government conducted a new series of pilot projects, the initial conclusions of which are to be taken into account in drawing up the 2022 budget. In Flanders, a first pilot project for a targeted spending review in the service voucher sector was conducted in 2019. The results of that project will be used with the aim of incorporating spending reviews as a structural element of the annual and multiannual budgeting process.

Although it is not a spending review in the true sense, the preparation of a "zero-based budget" shares the aim of improving the management of public spending. This method involves systematically justifying expenditure and revenues according to their usefulness and their relevance during preparation of a budget. The exercise amounts to starting with a blank sheet, in contrast to the traditional procedure which instead consists in allocating amounts specified in the previous year's budget. The Walloon Region, in particular, introduced a zero-based budget programme to be completed in multiple phases, the first having commenced in 2020.

4.2.2 Expenditure rule

In 2011 an expenditure rule was introduced in the EU governance framework as a tool to assess compliance with fiscal rules under the Stability and Growth Pact. The expenditure rule is considered to set limits for the annual change in public spending, which must remain below medium-term potential economic growth. For this purpose, public spending excludes interest charges, the cyclical component of unemployment expenditure and all spending relating to EU-funded programmes.

In practice, a norm is set for each Member State in order to achieve gradual convergence towards the medium-term fiscal objectives (MTOs). If growth exceeds expenditure, spending must then be offset by additional discretionary measures concerning revenues in order to maintain the fiscal balance. This rule is now part of the preventive arm of the Stability and Growth Pact. However, in the wake of the health crisis the European Commission decided to activate the Pact's general escape clause. The spending growth norm, which forms part of the European budgetary framework, was therefore also suspended until 2022.

In Belgium, the national fiscal framework does not currently include any fiscal rule relating to expenditure, other than the norm which specifically governs the real growth of health care expenditure. However, such rules have already been applied at federal level in the past, with some success (Bisciari *et al.*, 2020). At regional level, there is a master plan which was published in October 2020 to set a norm for expenditure growth in Flanders. At federal level, a project to design an expenditure rule for Belgium was recently initiated at "Public Sector Borrowing Requirement" section of the High Council of Finance, in cooperation with the European Commission and the OECD.

5. Conclusion

In 2019, public spending in Belgium exceeded the average in the main neighbouring countries by 4.5 percentage points of GDP. The gap has widened in recent decades despite a sharp fall in interest charges compared to the same countries. If expenditure is broken down by function on the basis of the COFOG classification, we find that both the spending categories which were more the responsibility of the federal government and those which were primarily the responsibility of the regional and local authorities displayed a positive differential, albeit more so in the latter case. The analysis of the COFOG categories and sub-items indicates that spending is relatively high in general public services, economic affairs and education. That is not currently the case for social benefits, although it must be said that over the past 20 years those benefits have risen by 1.5 percentage point of GDP more than the average in neighbouring countries.

The main differences concern compensation of employees and business subsidies, two categories which are not generally among the most productive. In particular, wage subsidies are high in Belgium. In the past 20 years they have risen strongly, and were often introduced to offset the high labour cost and heavy tax burden on labour, in particular. Unless subsidies adjust for significant externalities, such as those concerning the environment or innovation, they risk distorting the allocation of (labour) market resources. In the case of wage subsidies, it is advisable to reform the burdensome, complicated taxation of labour rather than use subsidies to offset it. Also, the relatively higher spending on government operations raises the question whether additional economies could still be made in this area.

This study also shows that expenditure on education, a category known for its prosperity-boosting potential, is substantial. But performance in this area measured on the basis of PISA scores is uneven. It is better in the Flemish Community than in the French Community.

Further, the relatively high level of interest charges compared to neighbouring countries is a reminder of the public spending implications of a high debt.

Obviously, the level of public spending reflects certain choices that society makes in order to boost prosperity. Even in this case it is still important to examine whether the aims are achieved sufficiently, in view of the expenditure involved. One of those aims might be more sustainable growth, for example, via more spending on basic research and pollution abatement, or the expansion of public transport. Governments may also decide to increase some forms of redistribution via family allowances.

It remains essential to place efficiency systematically at the heart of government action so as to avoid any expenditure slippage, in order to create sufficient scope for a dynamic response to future challenges. Future studies are still needed to assess government efficiency so that the spending mix can ultimately be adjusted. Improvements in the fiscal framework, such as the introduction of spending reviews and an expenditure rule, can support the responsible use of public expenditure.

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