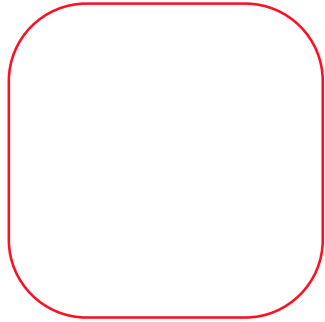
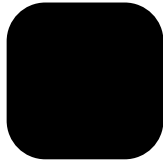


National Productivity Board



Annual report

2023

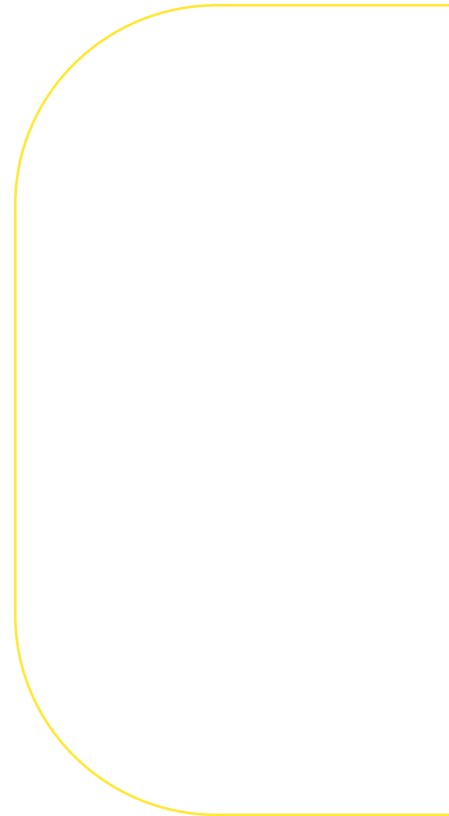


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Executive summary

The national and regional diagnosis show a generalized deceleration in labor productivity growth

National diagnosis

The slowdown in economic growth following the war in Ukraine has negatively influenced the growth of hourly labor productivity in Belgium. Over the period 2019-2022, the average annual productivity growth rate reached less than half a percent. This development is explained by a very dynamic increase in hours worked while the growth in value added in volume remains limited. It also corresponds to a generalized slowdown in labor productivity growth within industries of the manufacturing while productivity gains in market services increase compared to the 2012-2019 period. For the latter, the good performance recorded over the period 2019-2022 is mainly due to the year 2020 and only concerns half of the 12 industries constituting market services.

Regional diagnosis

By comparing two recent periods without a major crisis, we observe that, in the three Belgian regions, the growth rates of hourly productivity slowed down drastically on average between the periods 2003-2007 and 2012-2019. This reduction in hourly productivity gains is more marked in the Brussels Region and in Flanders where the volume of hours worked showed greater resilience than in Wallonia in the face of the generalized slowdown in economic growth between these two periods. At the sectoral level, the manufacturing continues to record higher productivity growth than the rest of the economy. Productivity gains in manufacturing, however, declined sharply in the Brussels Region and Flanders between the periods 2003-2007 and 2012-2019, while they remained stable in Wallonia. They also dropped in the important market services sector in Brussels and Flanders, unlike in Wallonia.

For 2020, data from regional accounts confirmed that the loss of activity linked to the health crisis mainly resulted in a sharp drop in working hours for the three regions and much less in an adjustment in employment. Hourly productivity therefore increased significantly in each region in 2020, while apparent labor productivity decreased due to the limited decline in the number of workers.

Calculations based on the interregional input-output table for the year 2015 also shows the interconnection between the three regions. Indeed, each of the regions contributes in a significant extent to the gross added value and employment of exports from another region, with the Brussels Region contributing significantly to the exports of other regions.

A policy focused on productivity growth is more necessary than ever

Productivity growth is crucial

As the main determinant of economic growth – if not the only source of potential long-term output growth – productivity growth makes many of the challenges we face today financially easier to address. Think about the sharp increase in social spending linked to the ageing population, but also the major investments needed to face the climate change and its transition, as well as other societal challenges that arise, for example in terms of mobility, of social cohesion, new developments in healthcare... These challenges require additional resources/investments, both private and public, which, in the absence of economic growth, should be financed by a reduction in consumption and/ or would jeopardize the viability of public finances. Furthermore, productivity growth is also an important condition for real income growth.

Productivity growth has been declining for some time while challenges lie ahead

Productivity growth has systematically declined over the past five decades. In the 1970s, when Belgium achieved productivity gains by integrating American technologies, productivity growth reached 4.5 % per year on average. Since the 2000s, it has only been 0.8 % per year on average. Now that the catch-up phase is over, the

technological frontier needs to be moved, which poses a much greater challenge. Furthermore, productivity growth can be expected to be significantly dampened by climate change, particularly because investments in productive capital and innovation are sacrificed in favor of investments in climate transition and adaptation to climate change.

A policy attentive to productivity growth is necessary

Given the challenges and importance of productivity growth, policies to boost productivity are perhaps more important now than ever. In its report, the NPB identifies three areas which, according to it, should be prioritized to stimulate productivity growth.

Ensuring a sufficient supply of qualified labor

Human capital is a key factor for boosting productivity. However, the shortage of labor and the new skills required by the digital and ecological transitions mean that employers are facing increasingly difficulties to recruit workers with the right skills.

This challenge requires action in several areas. For example, it is important to address labor shortages and skills mismatches, including by strengthening the activation of disadvantaged groups in the labor market. Training is essential in general. First of all, it is necessary to put in place quality basic training paying sufficient attention to STEM and the skills necessary for the digital and ecological transitions. But it is also important to strengthen continued training. In this context, the NPB refers to its previous recommendation to ensure a broad-based strategy that responds to the main challenges to be addressed. We must therefore ensure not only a supply of quality training to support industrial policy, but also the demand for training (targeting in particular specific groups such as those over 55 and low-skilled people).

Guarantee sufficient public investment

Growth in productivity and TFP in particular also requires sufficient investment in quality infrastructure. In Belgium, public investments have remained low for many years. As a result, there has even been a downward trend in the net capital stock of public administrations expressed as a % of GDP since the 1990s, which harms the quality of public infrastructure and also weighs on private investment. This while the ecological and digital transitions require an actual increase in investments, including public ones.

Of course, the sustainability of public finances must also be the subject of particular attention and a medium-term budgetary consolidation strategy must be pursued. But the latter must be combined with investments and reforms favoring higher sustainable growth. In this context, it is important to maintain domestic public investment and effectively use grants from the Recovery and Resilience Facility and other EU funds. In addition to public investing, public administrations also have a major role to play in facilitating and regulating to encourage private investment, moreover by further streamlining permitting procedures, ensuring clear and coherent regulations and ensuring legal certainty.

Stimulate innovation

A third important determinant of TFP growth is innovation. Belgium is considered a leader in innovation at the European level, but it is important to understand why the strong increase in R&D spending in recent years has only resulted in weak TFP growth at the macroeconomic level. Indeed, at the company level, R&D spending is highly concentrated in a limited number of companies which generally have a high level of productivity. Furthermore, as in many other developed countries, the overall slowdown in productivity growth does not apply to these most productive firms, suggesting problems with technology diffusion.

Both innovation and its diffusion require an effective innovation system in which the different dimensions - which interact with each other - all matter. With regard to the Belgian innovation system, it is particularly appropriate to examine how R&D support measures can be further optimized, how entrepreneurial dynamism (including scale-ups) can be facilitated and whether innovation policy in Belgium is sufficiently oriented towards a low-carbon economy.

1. Findings

1.1 National diagnosis

a. Successive crises weigh on productivity growth in Belgium

In contrast, while the evolution of hourly labour productivity was unaffected during the Covid crisis compared to the 2008 financial crisis, in Belgium it was adversely affected by the economic slowdown that followed the war in Ukraine. This was also the case in France, as shown in Chart 1. The most recent years available show a higher dispersion of performance in terms of productivity growth among member states of the euro area.

Chart 1: Evolution of hourly labour productivity, 2000=100

Source: Eurostat, October 2023 and NAI, October 2023.

Examined over the entire period 2000-2022, the average annual growth rate of hourly labour productivity is less than 1 % in Belgium, as it is in the euro area as a whole (Table 1), continuing the declining trend in productivity gains that started in the late 1970s.

Table 1: Average annual growth rate of hourly labour productivity

In %

| | 2000-2022 | 2000-2007 | 2007-2012 | 2012-2019 | 2019-2022 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| Belgium | 0.7 | 1.3 | 0.1 | 0.7 | 0.4 |
| EZ19 | 0.9 | 1.1 | 0.8 | 0.7 | 0.7 |
| Germany | 1 | 1.6 | 0.4 | 0.8 | 0.7 |
| France | 0.6 | 1.3 | 0.3 | 0.9 | -1.1 |
| Netherlands | 0.8 | 1.4 | 0.4 | 0.3 | 1.3 |
| Austria | 1.1 | 2.1 | 0.6 | 0.6 | 1.8 |
| Finland | 0.8 | 2.1 | -0.8 | 0.7 | 0.5 |

Source: Eurostat, October 2023 and NAI, October 2023.

The growth rate of hourly productivity recovered in the recent period (2019-2022) in Austria and in the Netherlands. In contrast, it slackened in Belgium and even turned negative in France, where the sharp slowdown in value-added growth by volume was accompanied by an acceleration in the growth of hours worked (Table 2). In Belgium, hours worked also increased faster between 2019 and 2022 than during the previous period, but although value-added growth slowed slightly in the recent period, it still remained one of the highest among the countries in the comparison.

Table 2: Average annual growth rate of value added in volume and of hours worked

In %

| | 2000-2022 | | 2012-2019 | | 2019-2022 | |
|--------------------|-----------|-----|-----------|-----|-----------|------|
| | TW | U | TW | U | TW | U |
| Belgium | 1.6 | 0.9 | 1.6 | 0.9 | 1.5 | 1.1 |
| EZ19 | 1.2 | 0.4 | 1.6 | 0.8 | 0.9 | 0.2 |
| Germany | 1.2 | 0.2 | 1.5 | 0.7 | 0.3 | -0.4 |
| France | 1.2 | 0.6 | 1.4 | 0.5 | 0.3 | 1.4 |
| Netherlands | 1.6 | 0.8 | 1.8 | 1.5 | 2.3 | 1 |
| Austria | 1.4 | 0.3 | 1.4 | 0.8 | 0.6 | -0.7 |
| Finland | 1.2 | 0.4 | 1.1 | 0.3 | 1.1 | 0.6 |

Source: Eurostat, October 2023 and NAI, October 2023.

b. Divergent evolution of hourly productivity growth across sectors

When comparing the evolution of hourly productivity in the major sectors of the economy, we see for the entire period 2000-2022 that manufacturing had the highest productivity growth in Belgium, as well as in the three major neighbouring countries (Table 3).

Table 3: Average annual growth rate of hourly labour productivity, sectors

| <i>In %</i> | Belgium | Germany | France | Netherlands |
|----------------------------|---------|---------|--------|-------------|
| 2000-2022 | | | | |
| Total economy | 0.7 | 1 | 0.6 | 0.8 |
| Manufacturing | 2.1 | 1.9 | 1.8 | 2.6 |
| Market services | 0.9 | 1 | 0.4 | 1 |
| Non-market services | 0 | 0.1 | 0.6 | -0.1 |
| 2000-2007 | | | | |
| Total economy | 1.3 | 1.6 | 1.3 | 1.4 |
| Manufacturing | 3.4 | 3.6 | 3.6 | 4.1 |
| Market services | 1.3 | 1.5 | 1 | 1.4 |
| Non-market services | 0 | -0.2 | 0.8 | -0.2 |
| 2012-2019 | | | | |
| Total economy | 0.7 | 0.8 | 0.9 | 0.3 |
| Manufacturing | 2.1 | 1.3 | 1.7 | 1.5 |
| Market services | 0.8 | 1 | 0.7 | 0.3 |
| Non-market services | -0.2 | -0.1 | 0.6 | -0.3 |
| 2019-2022 | | | | |
| Total economy | 0.4 | 0.7 | -1.1 | 1.3 |
| Manufacturing | 1.2 | 2 | -2.1 | 4.1 |
| Market services | 1.1 | 1.1 | -1.3 | 1.8 |
| Non-market services | 0.1 | 0 | 0.1 | 0.3 |

Note: Manufacturing corresponds to heading C, market services cover headings G to N and non-market services cover headings O to U of NACE Rev. 2.

Source: Eurostat, October 2023 and NAI, October 2023.

Despite this good overall performance, manufacturing recorded the most conspicuous slowdown in productivity growth from one crisis-free period to the next, if we compare the periods 2000-2007 and 2012-2019. This trend has continued, and the period 2019-2022 saw a slowdown in manufacturing productivity growth in Belgium and, more strikingly, in France, where productivity was declining. Conversely, Germany and especially the Netherlands experienced an upturn in productivity growth in manufacturing over the same period.

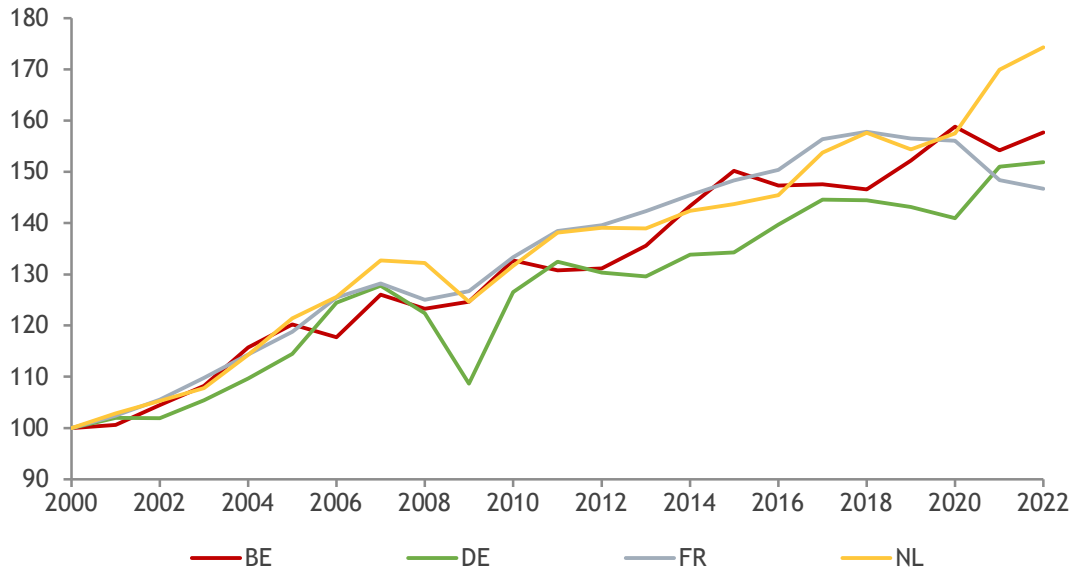
The recent period also saw an acceleration in the productivity growth of market services in Belgium, in the Netherlands and, to a lesser extent, in Germany. Among the countries being compared, only France showed a clear fall in productivity gains in market services, with a clearly negative growth rate over the period 2019-2022.

The two major sectors, manufacturing and market services, are analysed more in depth, as was the case in the 2021 report. This analysis is carried out on activities nomenclature A38 of the National Accounts, which is the most detailed industry level for which official data on hours worked are available in Belgium.

Manufacturing

As already highlighted in previous reports, productivity dynamics in manufacturing in Belgium were particularly weak between 2015 and 2018 (Chart 2). Germany also experienced a phase of lower productivity growth in manufacturing, but at different times compared to Belgium, with this phase starting in 2017 and ending in 2020. Since 2020, the distribution of productivity performance between the four countries studied has increased sharply due to significantly different trends between the Netherlands, where productivity growth accelerated, and France, which recorded productivity losses.

Chart 2. Evolution of hourly labour productivity in manufacturing, 2000 = 100



Source: Eurostat, October 2023 and NAI, October 2023.

In all 13 manufacturing industries in Belgium, we observe a general slowdown in average annual hourly productivity growth for the recent period 2019-2022 compared to the period 2012-2019 (Table 4). 7 industries have experienced declining productivity and 2 others (pharmaceuticals and electronics manufacturing) have seen a slowdown in growth. Most of the manufacturing industries, specifically 9 out of 13, experienced a decline in value added in volume over the period 2019-2022, with some of these declines being substantial, as was the case for the metal industry.

Table 1. Average annual growth rate of value added in volume, hours worked and hourly productivity in the Belgian manufacturing
In %

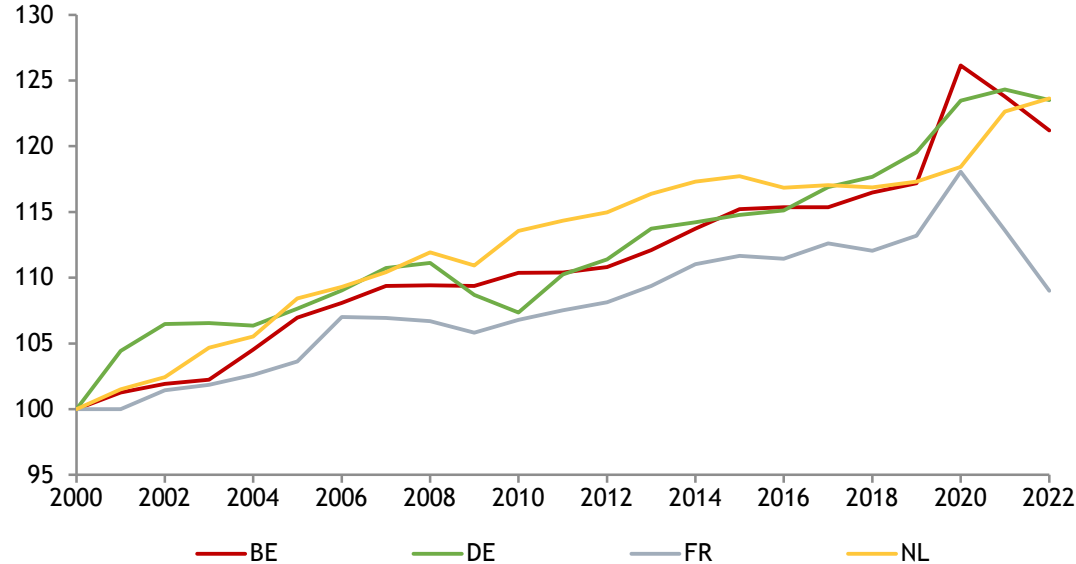
| | Value added | | | Hours worked | | | Productivity | | |
|--|-------------|-------|-------|--------------|-------|-------|--------------|-------|-------|
| | 00-22 | 12-19 | 19-22 | 00-22 | 12-19 | 19-22 | 00-22 | 12-19 | 19-22 |
| Manufacturing | 0.8 | 1.5 | 1.0 | -1.2 | -0.6 | -0.2 | 2.1 | 2.1 | 1.2 |
| Food industry | 1.7 | 1.3 | 2.4 | 0.1 | 0.6 | 1.3 | 1.5 | 0.6 | 1.1 |
| Textile industry | -4.5 | -4.1 | -3.2 | -4.7 | -3 | -1.8 | 0.2 | -1.2 | -1.4 |
| Wood and paper industry | -0.8 | -2.1 | -3.7 | -1.5 | -1.4 | -0.7 | 0.8 | -0.7 | -3 |
| Oil refining | 6.7 | 2.5 | 36.7* | -0.4 | 1.3 | -3.7 | 7.1 | 1.2 | 41.9 |
| Chemical industry | -0.4 | 2.0 | -4.7 | -1.1 | -0.7 | 0.9 | 0.7 | 2.7 | -5.5 |
| Pharmaceutical industry | 7.2 | 8.3 | 7.0 | 2.2 | 2.6 | 3.8 | 4.9 | 5.6 | 3.1 |
| Rubber and plastics industry | 0.8 | 0.7 | -1.9 | -0.7 | -0.3 | 0.1 | 1.4 | 0.9 | -2 |
| Metallurgical industry | -1.2 | 0.2 | -5.3 | -1.8 | -2 | -0.5 | 0.6 | 2.3 | -4.9 |
| Electronics manufacturing | 0.9 | 2.5 | -1.2 | -3.6 | -0.1 | -1.9 | 4.7 | 2.6 | 0.7 |
| Manufacturing of electrical equipment | -3.6 | -4.1 | -4.9 | -2.8 | -2.1 | -3.5 | -0.8 | -2 | -1.5 |
| Manufacturing of machines and equipment | 0.0 | -1.7 | 4.3 | -1 | -2.2 | 2.1 | 1 | 0.4 | 2.2 |
| Motor vehicle manufacturing | -2.3 | 0.0 | -1.7 | -3.6 | -2.3 | -4 | 1.3 | 2.4 | 2.4 |
| Other manufacturing industries | 1.1 | 3.1 | -3.3 | 0.7 | 2.1 | -2.3 | 0.5 | 1 | -1.1 |

* : the sharp acceleration in value added growth in volume terms is due to the double deflation of value added; production prices clearly rose less rapidly than the prices of imported intermediate consumption.

Source: Eurostat, October 2023 and NAI, October 2023.

Market services

The recent period also saw differences in productivity performance between Belgium and its three main neighbouring countries in the area of market services (Chart 3). Since the corona crisis, productivity has been declining for Belgian and especially French market services, while it remains stable in Germany and shows solid growth in the Netherlands. The chart also shows how important 2020 is in accounting for the acceleration of the average annual growth rate of productivity of Belgian market services over the period 2019-2022 compared to the period 2012-2019.

Chart 1: Evolution of hourly labour productivity in market services, 2000=100

Source: Eurostat, October 2023 and NAI, October 2023.

The analysis of the evolution of hourly labour productivity of the 12 industries of Belgian market services shows that the recovery of the overall annual growth rate of market services over the period 2019-2022 compared with the period 2012-2019 is based on the performance of 6 industries (trade, computer services, real estate activities, legal and accounting activities, scientific R&D and publicity and technical services) where productivity is accelerating, and of 1 industry where the reduction in productivity has slowed down slightly (publishing, film and video).

Table 5: Average annual growth rate of value added in volume, hours worked and hourly productivity in the Belgian market services

In %

| | Value added | | | Hours worked | | | Productivity | | |
|--|-------------|-------|-------|--------------|-------|-------|--------------|-------|-------|
| | 00-22 | 12-19 | 19-22 | 00-22 | 12-19 | 19-22 | 00-22 | 12-19 | 19-22 |
| Market services | 2.1 | 2.0 | 2.1 | 1.2 | 1.1 | 0.9 | 0.9 | 0.8 | 1.1 |
| Wholesale and retail trade | 1.4 | 0.4 | 2.0 | 0 | -0.3 | 0.4 | 1.4 | 0.7 | 1.6 |
| Transportation and storage | 0.7 | 0.6 | 0.2 | 0 | 0.6 | 1.1 | 0.7 | 0 | -0.8 |
| Accommodation and food services | 0.3 | 1.4 | -2.4 | 0.8 | 1.8 | 0.1 | -0.5 | -0.4 | -2.5 |
| Publishing, cinema, video | 0.1 | -1.1 | -0.5 | 0.2 | 0.4 | 0.9 | 0 | -1.5 | -1.4 |
| Telecommunications | 5.7 | 6.3 | 2.2 | -1.6 | -2.6 | -3.6 | 7.4 | 9.1 | 6 |
| IT services | 5.4 | 5.3 | 5.8 | 4.6 | 5.2 | 4.8 | 0.7 | 0.1 | 0.9 |
| Financial and insurance activities | -0.2 | -0.6 | -1.3 | -1.3 | -1.5 | -1.3 | 1.1 | 0.9 | 0.1 |
| Real estate activities | 2.7 | 2.0 | 3.0 | 2.5 | 3.1 | 1.2 | 0.2 | -1.1 | 1.8 |
| Legal and accounting activities | 3.7 | 3.6 | 4.2 | 2.6 | 1.2 | 0.9 | 1.1 | 2.3 | 3.3 |
| Scientific R&D | 4.4 | 3.1 | 10.4 | 3.4 | 4.8 | 5.7 | 1 | -1.6 | 4.4 |
| Advertising, technical services | 2.9 | 2.3 | 9.1 | 2.5 | 3.1 | 4.2 | 0.3 | -0.7 | 4.7 |
| Administrative and support services | 3.0 | 5.7 | 1.0 | 3.1 | 3.3 | 1.3 | -0.1 | 2.3 | -0.2 |

Source: Eurostat, National Accounts, October 2023.

The distribution of productivity performance in market services fell over the period 2019-2022 compared to the previous period, due to the fall in the average annual growth rate of hourly productivity of the most dynamic sector, telecommunications.

1.2 Regional diagnosis¹

The regional diagnosis is designed to analyse labour productivity data at the regional level, to highlight the dynamics from this perspective which were previously examined at the national level. There is a dual approach to this regional analysis: (1) the analyses from the national diagnostics are applied at the regional level, on the one hand, and (2) the importance of the link between productivity and exports at the level of the industries of the regions is analysed, on the other.

Methodology

DATA

The regional diagnosis is based on data from the regional accounts published by the National Accounts Institute (NAI) at the end of January 2023. As usual, value added was already provisionally estimated for the most recent year (2021), but no estimates were made for labour volumes, which are only available for the year before (2020). All of these statistical series start in 2003.

Additional assumptions

While the results are presented according to the major categories of activities (manufacturing, construction, market services, nonmarket services and other), the estimates of hourly productivity are first made for 38 sectors (A38).

However, the series of hours worked for the self-employed are only available for 10 sectors (A10) in the regional accounts. For each region, the hours worked of the self-employed in sector A38, the level of disaggregation by industry published for workers, therefore needs to be estimated. The following method was used: the average working hours of the self-employed in sector A38 is obtained by weighting the average working hours of the workers of the same region, in sector A38, by the ratio between the average working hours of the self-employed and the workers, both evaluated for sector A10. The result between these estimated parameters produces an estimate of the number of hours worked by the self-employed in sector A38². In each region, the distribution by sector A38 from this estimate is then used to break down the published volume of hours of each sector A10 between the different sectors A38 that make it up.

Furthermore, value added in volume per sector also needs to be measured. In the absence of regional information on prices, regional value added by volume, both in this analysis and in the regional accounts³, are obtained using the national deflators according to a level of detail of 64 sectors (A64) and additional assumptions regarding the volume of government activity in these sectors. This approach makes it possible to take into account regional price differences associated with the structure of the activity of regional economies.

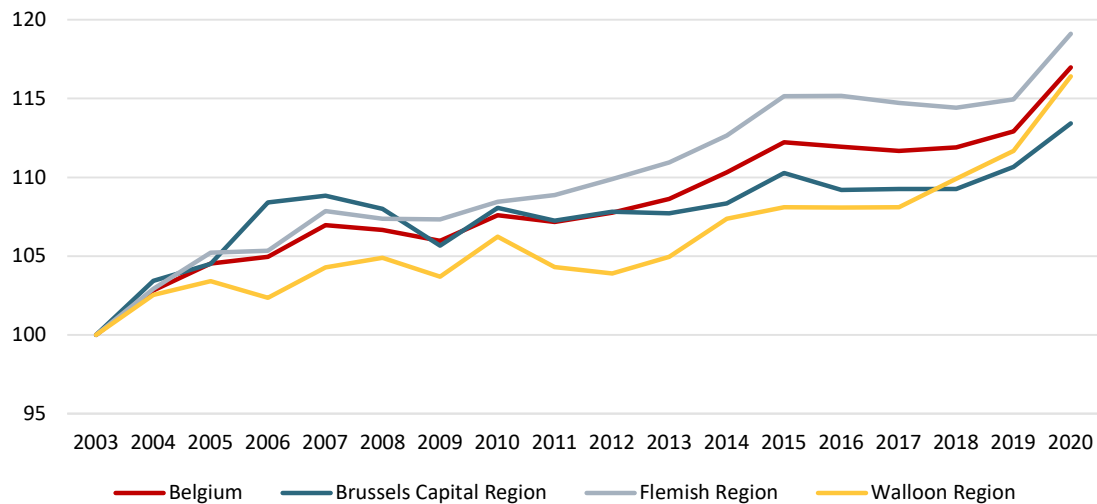
a. Analysis of the productivity dynamics of the Belgian regions

On average for the complete period 2003-2020, there is little variation in hourly labour productivity growth rates from one region to another. With an annual growth rate of 1.0 %, Flanders is slightly ahead of Wallonia (0.9 %) and the Brussels-Capital Region (0.7 %). Chart 4 shows how this average evolution masks differences in the growth trajectory of labour productivity across regions.

¹ The analysis of this part was prepared by the Brussels Institute for Statistics and Analysis (BISA), the Institut wallon de l'évaluation, de la prospective et de la statistique (IWEPS) and Statistics Flanders.

² An alternative estimation method, whereby the national series are regionalised by sector A38, produces similar results. As such, these results were not included in the analysis.

³ Nevertheless, the regional accounts of the NAI currently only provide aggregate volume for the economy as a whole.

Chart 4. Evolution of hourly productivity, 2003=100

Source: Regional Accounts.

The adverse effects of the corona crisis are visible today in the Regional Accounts published by the NAI in late January 2023. They confirm the unprecedented scale of the recession caused by the corona pandemic in the three Belgian regions, and the containment measures taken to slow the spread of the virus. According to these still provisional estimates, the fall in GDP in 2020 appears to have been more significant in Wallonia (-6.2 %) than in Flanders and Brussels-Capital (-5.5 % in the latter two regions).

In Belgium, as in various European countries, it has also been observed (see national diagnosis) that the loss of activity in 2020 is primarily reflected in a substantial decrease in working hours, and much less in an adjustment of work. Indeed, wage labour, especially of indefinite duration, was largely unaffected as conditions for accessing temporary unemployment measures were eased, and self-employment continued to grow markedly, boosted by the easing of the bridging right. The substantial adjustment in working hours was therefore reflected in a marked increase in hourly productivity in the three regions (Table 6), while apparent labour productivity decreased due to the limited decrease in the number of workers. By way of comparison, during the 2008-2009 global financial crisis, the decline in activity was comparatively better absorbed by a decline in apparent labour productivity (NBB, 2021).

We should note, however, that the extraordinary situation created by the corona crisis means that 2020 should be interpreted with caution.

Table 6. Annual growth rate of value added in volume, hours worked and hourly productivity, 2020

In %

| 2019-2020 | Value added | Hours worked | Hourly productivity |
|--------------------------------|-------------|--------------|---------------------|
| Belgium | -4.9 | -8.3 | 1.0 |
| Brussels-Capital Region | -5.6 | -7.9 | 0.6 |
| Flemish Region | -4.5 | -7.8 | 0.9 |
| Walloon Region | -5.6 | -9.5 | 1.3 |

Source: Regional Accounts.

Slowdown in growth of the hourly labour productivity in the regions

As is the case for Belgium as a whole, a general downward trend in productivity growth has also been observed for the regions for about a decade, as documented in previous NAI reports. This decline continued over the recent period, as evidenced by the slowdown in average annual growth rates of hourly productivity measured over the two periods in which there was no major crisis, specifically 2003-2007 and 2012-2019 (Table 7).

Table 7. Average annual growth rate of hourly productivity*In %*

| | 2003-2020 | 2003-2007 | 2012-2019 |
|--------------------------------|------------------|------------------|------------------|
| Belgium | 0.8 | 1.7 | 0.7 |
| Brussels-Capital Region | 0.7 | 2.1 | 0.4 |
| Flemish Region | 0.9 | 1.9 | 0.6 |
| Walloon Region | 0.7 | 1.1 | 1.0 |

Source: Regional Accounts.

The declining hourly productivity gains are most pronounced for the Brussels-Capital Region and Flanders, while the average hourly productivity in Wallonia has only declined slightly. This trend stems from the underlying regional developments in economic activity and from the different employment volumes (Table 8). Over the period 2012-2019, the general slowdown in average economic growth was similar in the Brussels-Capital Region and the Flemish Region, with the volume of hours worked being relatively constant. The increase in hours worked remained at 1.1 % per year on average in Flanders and even increased slightly in Brussels-Capital (0.4 % per year on average), but this growth remained lower than in the other two regions. In Wallonia, on the other hand, the growth in activity, which was similar to that in Flanders (1.7 %), was accompanied by a less pronounced rise in the number of hours worked (0.7 %).

Table 8. Growth rate of value added in volume, hours worked and hourly productivity, 2003-2007 and 2012-2019, average annual growth rate*In %*

| | Value added | | Hours worked | | Hourly productivity | |
|--------------------------------|--------------------|-----------|---------------------|-----------|----------------------------|-----------|
| | 2003-2007 | 2012-2019 | 2003-2007 | 2012-2019 | 2003-2007 | 2012-2019 |
| Belgium | 2.9 | 1.6 | 1.2 | 0.9 | 1.7 | 0.7 |
| Brussels-Capital Region | 2.2 | 0.8 | 0.1 | 0.4 | 2.1 | 0.4 |
| Flemish Region | 3.3 | 1.7 | 1.4 | 1.1 | 1.9 | 0.6 |
| Walloon Region | 2.7 | 1.7 | 1.6 | 0.7 | 1.1 | 1.0 |

Source: Regional Accounts.

Sectoral breakdown of productivity growth at the regional level

A comparison of the evolution of hourly productivity in the main sectors of the economy shows that during the period 2003-2019, the manufacturing industry as a whole in the three regions recorded significantly higher gains in labour productivity than the other main sectors. There has also been strong productivity growth in the construction sector in Flanders and Wallonia. The rise in hourly productivity of market services in Wallonia appears to lag behind the rises seen in Brussels-Capital and in Flanders. These results are shown in Table 9.

Table 9. Average annual growth rate of hourly labour productivity, sectors

| <i>In %</i> | Belgium | Brussels-Capital Region | Flemish Region | Walloon Region |
|----------------------------|---------|----------------------------|----------------|----------------|
| 2003-2007 | | | | |
| Manufacturing | 3.9 | 7.4 | 3.6 | 3.8 |
| Construction | 3.1 | 4.3 | 3.1 | 2.9 |
| Market Services | 1.7 | 2.3 | 2.0 | 0.8 |
| Non-market services | 0.2 | 0.8 | 0.1 | 0.0 |
| 2012-2019 | | | | |
| Manufacturing | 2.1 | 3.1 | 1.6 | 3.7 |
| Construction | 1.1 | -0.3 | 1.3 | 0.8 |
| Market Services | 0.8 | 0.7 | 0.9 | 1.1 |
| Non-market services | -0.2 | 0.0 | -0.4 | 0.2 |
| 2019-2020 | | | | |
| Manufacturing | 4.8 | -15.1 | 7.2 | 1.6 |
| Construction | 1.1 | 1.6 | -0.4 | 4.3 |
| Market Services | 6.8 | 6.9 | 5.7 | 9.6 |
| Non-market services | -1.1 | -1.4 | -1.1 | -1.1 |

Note: (1) Manufacturing corresponds to heading C, market services cover headings G to N and non-market services cover headings O to U of NACE Rev. 2. (2) A large part of the Flemish public services are located within the Brussels-Capital Region territory. These are therefore included in the "non-market services" sector in Brussels-Capital, and not in Flanders, which reduces the relative share of this sector in the Flemish economy.

Source: Regional Accounts.

A comparison of the recent evolution of sector productivity in the regions between the two periods in which there was no crisis, specifically the period 2003-2007 and the period 2012-2019, confirms that there are regional differences (Table 9). The marked slowdown in industrial productivity growth observed at the national level is particularly pronounced in Brussels-Capital, but also in Flanders. Overall, the Walloon manufacturing industry appears to have achieved average productivity gains between 2012 and 2019 that are more or less the same as the figures from before the financial crisis.

Wallonia also stands out from the two other regions thanks to a slight recovery in the productivity growth of market services, while the Brussels-Capital Region and the Flemish Region also suffered from lower labour productivity growth of the tertiary market sector, which was nevertheless much higher than in Wallonia. In contrast, productivity growth in the construction sector clearly slowed in the three regions, with the Brussels-Capital Region even experiencing productivity losses.

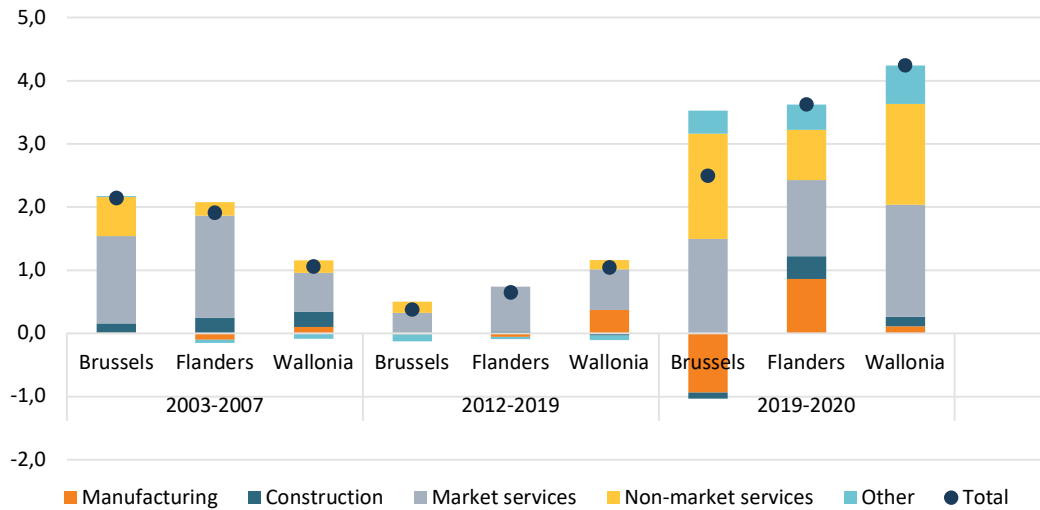
The impact of the corona crisis did not eliminate the regional differences in productivity by sector. In fact, Flanders recorded a strong rebound in industrial productivity in 2020, while this declined in Wallonia, and productivity losses were recorded by industry in Brussels-Capital, which clearly has less weighting in the economic fabric than in the other two regions. In contrast, productivity growth in market services accelerated in the three regions. Wallonia, and to a lesser extent Brussels-Capital, also benefited from significant productivity gains in the construction sector. Finally, all three regions contributed to the declining productivity of non-market services observed at the national level.

Productivity gains and contributions from sectors

A sector-by-sector breakdown of productivity growth, according to the contribution of the main sectors, makes it possible to assess the evolution of the contributions of the sectors to the growth in aggregate labour productivity (see NPB, 2022). Over the entire period (2003-2019), labour productivity growth was mainly underpinned by the development of market services and non-market services. In contrast, manufacturing made a negative contribution to productivity growth in Flanders and Brussels-Capital, and did not make a significant

contribution to productivity growth in Wallonia, where industrial activity followed the overall growth of the regional economy. The contributions of the sectors to productivity growth over the two periods in which there were no crises, 2003-2007 and 2012-2019, are shown in Chart 5.

Chart 5. Contributions of the sectors to hourly labour productivity growth (average annual growth rate)
In percentage points (contributions and total growth)



Note: Manufacturing corresponds to heading C, market services cover headings G to N and non-market services cover headings O to U of NACE Rev2.

Source: Regional Accounts.

The slowdown in aggregate labour productivity over the period prior to the corona crisis reflects the different evolution of the contributions of the sectors within the Belgian regions. Over the period 2012-2019, the decline in the average annual growth rate in productivity in Brussels-Capital and in Flanders is explained by a general decrease in the contributions of the sectors, with the contribution of market services leading the pack, and to a lesser extent non-market services. This trend is underscored by the fact that the construction sector made no contribution in the three regions. In Wallonia, the contribution of the tertiary industries remained broadly unchanged, while the manufacturing industry started to make a positive contribution again to average annual productivity growth.

During the corona crisis, the evolution of labour productivity within the three regions was mainly underpinned by the productivity gains of market services and non-market services, whose activity was severely restricted by the various lock-down and social distancing measures, without a corresponding readjustment of the volume of labour. The contribution of the manufacturing industry to labour productivity growth, which remained significant in Flanders, was clearly negative in Brussels-Capital, and negligible in Wallonia.

b. Research question

Productivity is related to the performance of an economy but also to its focus on exports in particular. Indeed, research has shown that productive companies are more export-oriented. See, among others, Muûls and Pisu (2009). Although the literature often shows that it is not clear whether firms export because they are already more productive, or whether it is exporting that makes them more productive. See in this regard Giordano & Lopez-Garcia (2019), Atkin (2015) and Franssen (2022). Duprez & Nautet (2019) also recently examined the economic flows between the Belgian regions.

This analysis starts at the sector level per region, and aims to examine whether productive industries are proportionally more export-oriented than less productive ones, regardless of causality. It also examines how much gross value added and employment are associated with exports of productive and less productive

industries. Finally, it is also possible to ascertain a region's contribution to the gross value added and employment generated by another region's exports. This gives an idea of the level of interdependence between the regions.

c. The tool used in this regard is the 2015 interregional input-output table

An interregional input-output table (RIOT) summarises the monetary flows in the economies of the regions (Figure 1). As such, the intermediate flows (supply of goods and services in the production process), the flows to final demand (consumption (C), investment (I) and exports (X)) and the flows of primary inputs (elements of gross value added, such as wages and taxes) are shown for each sector and for each region. The RIOT used pertains to 2015, and was drawn up by the Federal Planning Bureau in accordance with ESA 2010. 137 sectors are identified in the extended version. For this analysis, these sectors will be grouped at the NACE 2-digit level, as used by the Flemish Department of Employment and Social Economy, (WSE in Dutch). For more information, see Avonds et al. (2021).

Figure 1. Schematic overview of an interregional input-output table.

| | intermediate use | | | Final use (C, I, X) | | | Output |
|--|------------------|----|----|---------------------|----|----|--------|
| | BCR | FR | WR | BCR | FR | WR | |
| Brussels-Capital Region | | | | | | | |
| Flemish region | | | | | | | |
| Walloon region | | | | | | | |
| Import | | | | | | | |
| Primary inputs (elements of gross value added) | | | | | | | |
| Job | | | | | | | |

Note: C=consumption, I=investments and X=exports. BCR=Brussels Capital Region, FR=Flemish Region, WR=Walloon Region
Source: Statistics Flanders.

Sectors are interwoven, as they supply each other. Companies from certain sectors provide intermediate goods and services to each other and also to other sectors, which then use these in their own production process. Conversely, companies are also buyers of products from their own sector or another one. In addition, there is also trade between companies in the 3 regions (interregional exports and imports).

In the first instance, a RIOT provides insight into the input structure of production. Indeed, to produce goods and services, companies need supplies of raw materials or auxiliary products (intermediate supplies) from their own region, as well as from the other regions and imports from abroad. Ultimately assembling these intermediate supplies and imports into a product or service requires labour, capital and government services. The revenue earned from these constitutes the components of gross value added.

A RIOT also makes it possible to ascertain how much gross value added is created or how much labour is employed to meet final demand. In other words, how much gross value added is generated or labour employed for the various sectors or to provide consumption, investment and exports as components of final demand. Finally, it is not just about a given region. The extent to which each region contributes to the gross value added and employment of other regions can also be quantified.

d. Identifying productive versus less productive sectors

It is first necessary to identify which industries are productive and which less productive.

To this end, the ratio of gross value added to employment is taken for each region and for each NACE 2-digit industries. The employment used here relates to the number of persons by industries where, as the case may be, they perform their main activity. This is the labour productivity per NACE 2-digit industries. This is followed by a calculation of the median for each region. The industries above the median for that region are then productive; those below are less productive. It follows from this that the list of productive and less productive

industries may vary from region to region. The calculations were performed on all NACE, i.e., for the entire economy.

Table 10. List of sectors by productivity level (productive sectors marked with a "1")

| Description | NACE | Brussels-Capital Region | Flemish Region | Walloon Region |
|--|------|-------------------------|----------------|----------------|
| Agriculture, hunting | | | | |
| Forestry | | | | |
| Fisheries | | | | |
| Mining | | | | |
| Food & drinks | | | | |
| Textiles & ready-to-wear | | | | |
| Timber industry | | | | |
| Paper | | | | |
| Printing companies | | | | |
| Coking and refining | | | | |
| Chemistry | | | | |
| Pharmacy | | | | |
| Plastic | | | | |
| Diamond, ceramic | | | | |
| Metal industry | | | | |
| Metal products | | | | |
| Electronic products | | | | |
| Electrical devices | | | | |
| Machines and equipment | | | | |
| Motor vehicles | | | | |
| Other means of transport | | | | |
| Furniture, other industry | | | | |
| Repair and installation | | | | |
| Electricity, gas | | | | |
| Water | | | | |
| Waste management | | | | |
| Construction industry | | | | |
| Trade in motor vehicles | | | | |
| Wholesale | | | | |
| Retail | | | | |
| Land transport | | | | |
| Water transport | | | | |
| Aviation | | | | |
| Storage and transport support activities | | | | |
| Post; telecommunications | | | | |
| Horeca | | | | |
| Publishing houses | | | | |
| Media | | | | |
| IT consultancy | | | | |
| Banks | | | | |
| Insurances | | | | |
| Insurance support activities | | | | |
| Real estate | | | | |
| Business services | | | | |
| Technical advice | | | | |
| Research | | | | |
| Advertising and market research | | | | |
| Scientific and technical activities | | | | |
| Rental and leasing | | | | |
| Employment agencies | | | | |
| Travel agencies | | | | |
| Security and management of offices | | | | |
| Government | | | | |
| Education | | | | |
| Human healthcare | | | | |

| | | | | |
|--------------------------|--|--|--|--|
| Social services | | | | |
| Culture | | | | |
| Sports, recreation | | | | |
| Associations | | | | |
| Repair of consumer items | | | | |
| Other personal services | | | | |
| Household services | | | | |

Source: RIOT 2015, calculations Statistics Flanders.

e. Exports by the sectors

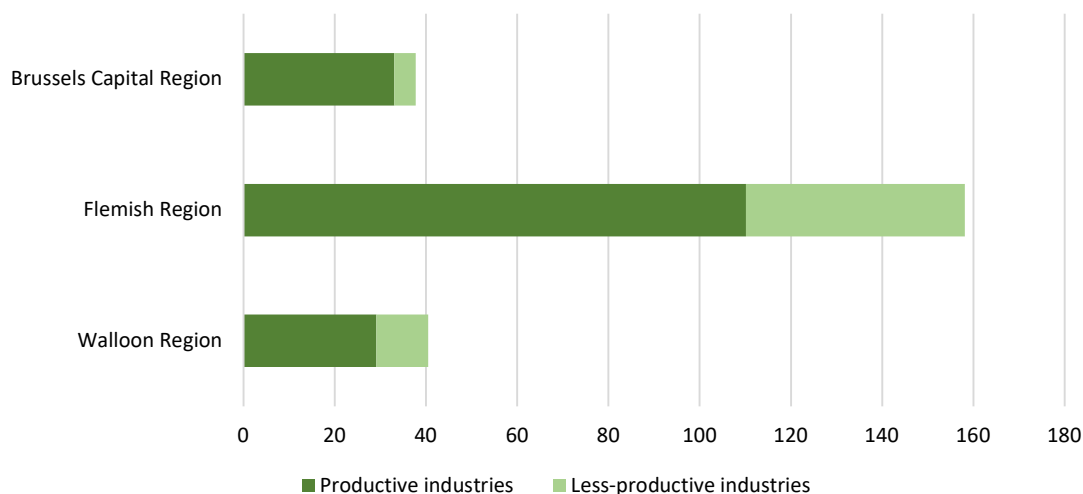
The 2015 RIOT gives an overview of the total exports of goods and services of the regions, as well as how much the various industries export. Because there are differences in size between the group of productive and less productive industries, export performance is also compared to total gross value added (export ratio) and employment (exports per worker). Chart 6 shows the amount of exports by region, by productivity of the industries.

According to the RIOT, exports from the Brussels-Capital Region amounted to €37.7 billion in 2015 (30 % goods and 70 % services). The bulk of these exports (€33.1 billion) came from the productive industries. Less-productive industries exported goods and services worth €4.6 billion. The export ratio for the total Brussels-Capital economy was 53.3 %, and €54,400 of goods and services were exported per worker. These ratios were much higher for the productive industries than for the less productive industries (export ratio: 79.2 % vs. 16.0 % and exports per worker: €145,300 versus €10,000). The top five industries accounted for 53.5 % of exports. These were business services, petroleum refining⁴, banking, wholesale and postal & telecommunications. These are all productive sectors.

Total Flemish exports of goods and services came to €158.2 billion in 2015 (65 % goods and 35 % services). The productive industries exported more than the less productive industries did (€110.2 billion versus €48.0 billion). The overall export ratio was 72.9 %, and goods and services worth €58,800 were exported per worker. Again, the ratios were a lot higher for the productive industries. Their export ratio averaged 93.0 %, compared to 48.7 % for the less productive industries. And exports per worker were €122,000 for the productive industries versus €26,900 for the less productive industries. The top five industries with the highest export figures were chemicals, food and beverages, wholesale trade, business services and metals. With the exception of business services, these are all productive industries. Together, they accounted for 43.5 % of Flemish exports in 2015.

Finally, the Walloon Region exported €40.5 billion in 2015 (60 % goods and 40 % services). With a figure of €29.1 billion, the productive industries exported more than the less productive industries (€11.3 billion). The overall export ratio for the Walloon Region came to 47.3 % and exports amounted to €32,800 per worker. The productive industries had a markedly higher export ratio than the less productive industries (73.3 % versus 24.8 %). Their exports per worker were also higher (€87,300 versus €12,600). The top five industries accounted for 43.7 % of Walloon exports. These were pharmaceuticals, metals, business services, chemicals and food and beverages. Except for business services, these are productive industries.

⁴ This is contract work that a Brussels company entrusts to another company from the same group elsewhere in the country.

Chart 6. Exports of the 3 Belgian regions by productive/less productive industries, 2015, in billion euros

Source: RIOT 2015, calculations Statistics Flanders.

f. Gross value added and employment for exports

A RIOT makes it possible to ascertain how much gross value added is realised and how much labour is employed to meet final demand, in this case exports. This is a cumulative effect of all the industries involved, in any region, whether directly or as suppliers. Chart 7 shows the results for gross value added and Chart 8 for employment.

In 2015, €20.9 billion of gross value added was generated to meet Brussels-Capital exports (in any region), according to the RIOT. Of this, 79.1 % came from productive industries and 20.9 % from less productive industries. The top five contributing industries were business services, banking, wholesale trade, postal and telecommunications, and insurance support activities. Together, these industries accounted for 43.2 % of the gross value added produced for exports of goods and services from the Brussels-Capital Region. These were all productive industries.

As of 2015, 188,800 people were employed for Brussels-Capital exports (in whichever region), 68.4 % of them in productive industries and 31.6 % in less productive industries. These were primarily business services, banking, wholesale trade, insurance support activities and advertising and market research. Together, these 5 industries accounted for 35.8 % of employed labour. Again, these are all productive industries.

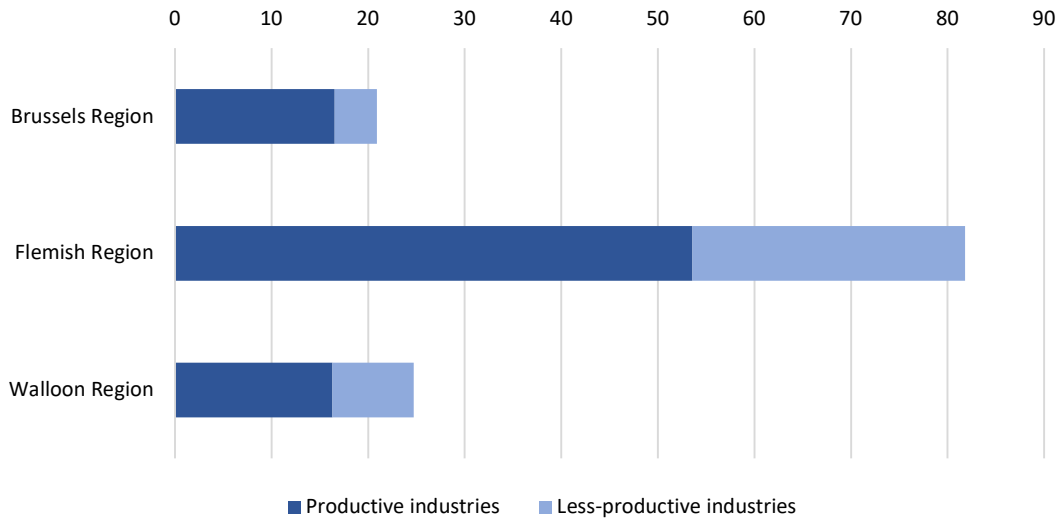
Using the RIOT, we can calculate that €81.8 billion of gross value added was produced for Flemish exports in 2015. 65.5 % of this was by productive industries and 34.5 % by non-productive industries. The 5 main industries here are wholesale trade, business services, chemicals, food and beverage, and warehousing and transportation support activities. Together, these already account for 41.1 % of the total gross value added generated for Flemish exports. With the exception of business services, these are productive industries.

894,700 workers were needed for Flemish exports of goods and services, 56.5 % of whom are counted among the productive and 43.5 % among the less productive industries. The 5 main industries were business services, wholesale trade, food and beverage, warehousing and transport support activities and chemicals. This top five accounted for 37.4 % of deployed labour for Flemish exports, and are all productive industries, with the exception of business services.

In the Walloon Region, €24.7 billion of gross value added was needed for exports in 2015, according to the RIOT. 66.0 % was produced by productive industries and 34.0 % by less productive industries. The top five contributors were business services, pharmaceuticals, wholesale trade, food and beverage and chemicals (32.2 % of total gross value added for Walloon exports). With the exception of business services, these are all productive industries.

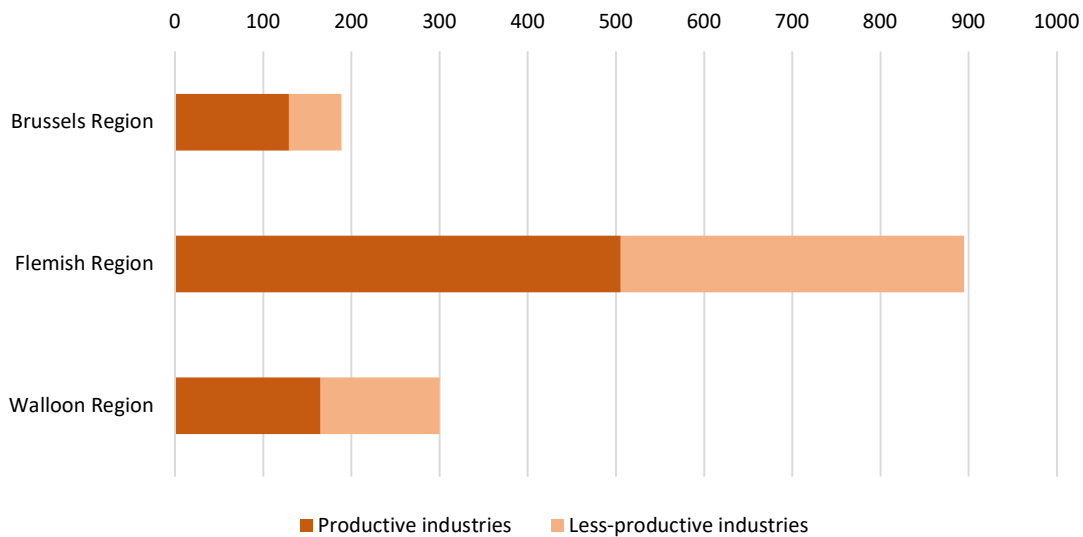
Walloon exports provided work for 300,400 people, 55.0 % in productive industries and 45.0 % in less productive industries. These were primarily business services, food and beverage, wholesale, pharmaceutical and retail. Within this top five, business services and retail are not among the productive industries. This top five accounted for 29.6 % of the total labour employed for Walloon exports.

Chart 7. Gross value added produced for exports of each region, by level of productivity of industries, in billion euros



Source: RIOT 2015, calculations Statistics Flanders.

Chart 8. Labour employed for the exports of each region, by productivity level of industries, in 1,000 persons



Source: RIOT 2015, calculations Statistics Flanders.

g. Relations between the regions

General

Using gross value added and employment for exports is of course not a purely regional consideration. The economic interwovenness between the regions ensures that each region also contributes to another's exports to a greater or lesser extent. This may be because regions supply goods and services to each other, or because a trader can generate a mark-up when selling goods originating from another region.

For the total economy, the Brussels-Capital Region produces gross value added of €4.8 billion for Flemish exports, while the reverse (Flemish gross value added for Brussels-Capital exports) is lower (€2.8 billion). Similarly, for Walloon exports, the Brussels-Capital Region records a higher gross value added (€2 billion) than the other way around (€1.2 billion). The (absolute) differences for the Flemish-Walloon Region relationship are less significant (€3.2 billion gross value added in the Flemish Region for Walloon exports versus €3.4 billion the other way around). It therefore appears that the Brussels-Capital economy is a bigger contributor, in absolute and relative terms, to the exports of the other regions than vice versa. This is especially the case for productive industries (Chart 9a). For less productive industries, the absolute flows between the Brussels-Capital Region and the other regions are much more similar (Chart 9b).

Chart 9a. Gross value added by region for each region's exports, productive industries, by size

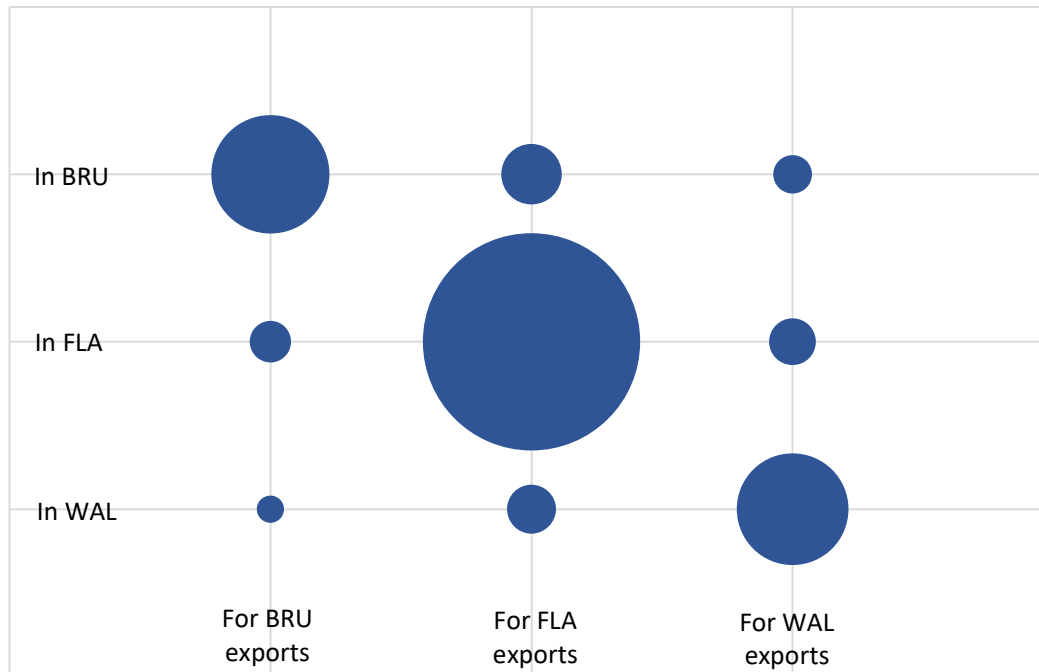
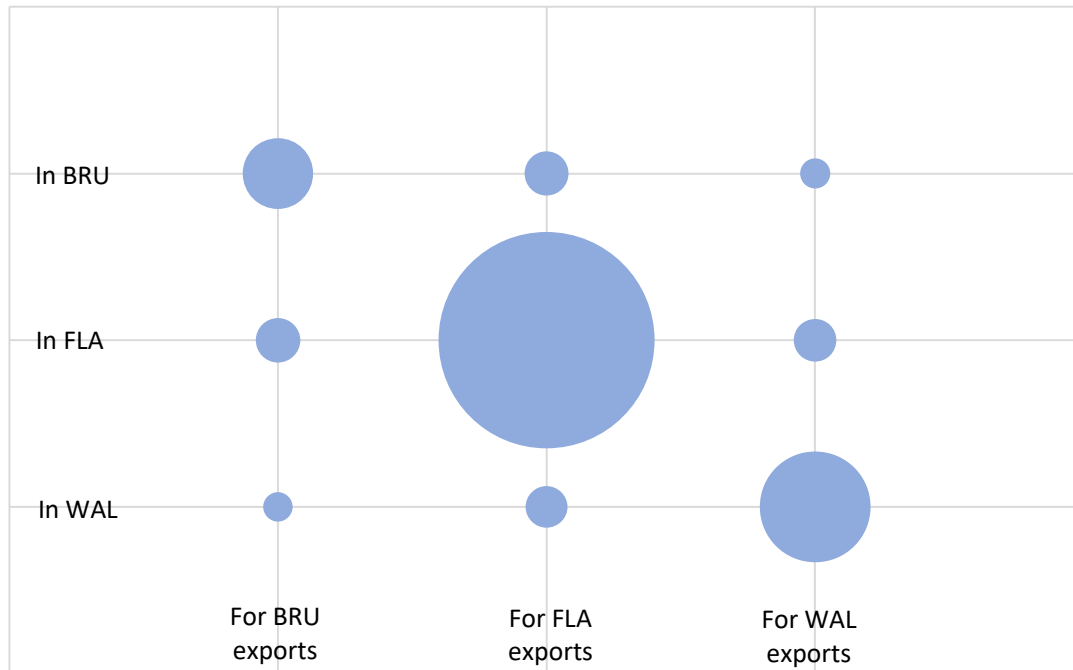


Chart 9b. Gross value added by region for each region's exports, less-productive industries, by size



Source: RIOT 2015, calculations Statistics Flanders.

For employment, the picture is somewhat different. In terms of the total economy, 39,700 people are employed in the Brussels-Capital Region for Flemish exports. This compares with 33,600 people working in the Flemish Region for Brussels-Capital exports. Indeed, here too the Brussels-Capital contribution to the Flemish Region is bigger than the other way around, but the difference is less pronounced than for gross value added. There is hardly any difference between the Walloon and Brussels-Capital Regions, even in absolute numbers (18,300 in the Brussels-Capital Region employed for Walloon exports versus 18,700 in the Walloon Region employed for Brussels-Capital exports). One striking aspect is the larger number of Walloons employed for Flemish exports than vice versa (52,200 persons compared to 39,900). That was not the case with gross value added. These conclusions are largely applicable for the category of productive industries (Chart 10a). For the less productive industries, the relationships are different: in each case, more people in the Flemish and Walloon Regions are employed for Brussels-Capital exports than vice versa. And the differences between the Flemish and Walloon regions are smaller (Chart 10b).

Chart 10a. Employment by region for each region's exports, productive industries, by size

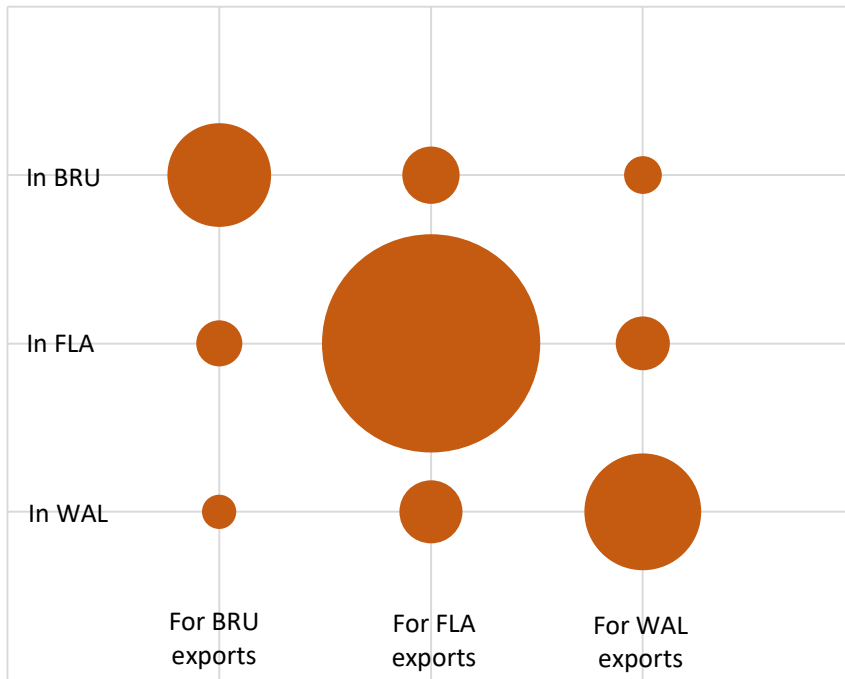
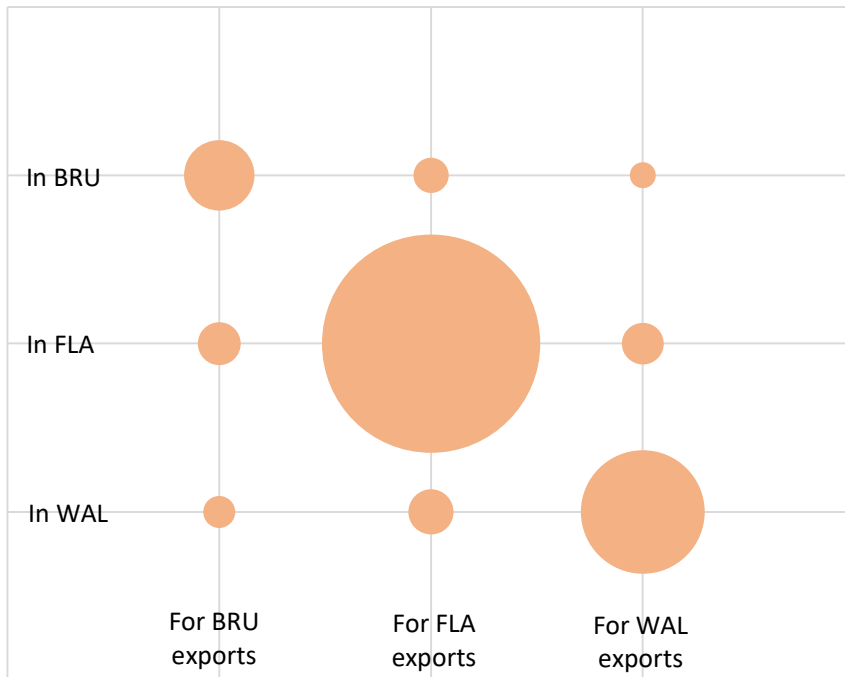


Chart 10b. Employment by region for each region's exports, less-productive industries, by size



Source: RIOT 2015, calculations Statistics Flanders.

Level of industries

It can be seen that the main industries for gross value added and employment for a region's exports also belong to that particular region. This is the case everywhere in the top 10, except for employment for exports in the Brussels-Capital Region, where Flemish business services are in 10th place (Table 11).

Table 11. Gross value added and employment in the top 10 industries for each region's exports

| Gross value added | | | | | | | | | | | |
|------------------------------|------------------------------------|-------|---------------|---------------------|--|-------|---------------|---------------------|------------------------------|-------|---------------|
| 100: Brussels-Capital Region | | | | 200: Flemish Region | | | | 300: Walloon Region | | | |
| Region | Description | NACE | Million euros | Region | Description | NACE | Million euros | Region | Description | NACE | Million euros |
| 100 | Business services | 69-70 | 3,153.5 | 200 | Wholesale | 46 | 8,131.8 | 300 | Business services | 69-70 | 2,376.4 |
| 100 | Banks | 64 | 2,831.9 | 200 | Business services | 69-70 | 7,891.3 | 300 | Pharmacy | 21 | 2,110.7 |
| 100 | Wholesale | 46 | 1,155.0 | 200 | Chemistry | 20 | 7,489.2 | 300 | Wholesale | 46 | 1,258.5 |
| 100 | Post; telecommunications | 53+61 | 1,109.3 | 200 | Food & drinks | 10-12 | 5,624.5 | 300 | Food & drinks | 10-12 | 1,113.1 |
| 100 | Insurance support activities | 66 | 796.3 | 200 | Storage and transport support activities | 52 | 4,519.3 | 300 | Chemistry | 20 | 1,096.9 |
| 100 | Advertising and market research | 73 | 670.6 | 200 | Pharmacy | 21 | 2,912.8 | 300 | Insurance support activities | 66 | 923.5 |
| 100 | IT consultancy | 62-63 | 588.5 | 200 | Metal industry | 24 | 2,804.4 | 300 | Metal industry | 24 | 772.7 |
| 100 | Rental and leasing | 77 | 498.3 | 200 | Land transport | 49 | 2,403.3 | 300 | Retail | 47 | 566.7 |
| 100 | Government | 84 | 485.1 | 200 | Machines and equipment | 28 | 2,276.8 | 300 | Diamond, ceramic | 23 | 565.2 |
| 100 | Land transport | 49 | 472.5 | 200 | Motor vehicles | 29 | 2,116.5 | 300 | Technical advice | 71 | 537.6 |
| Total economy | | | 20,939.7 | Total economy | | | 81,874.3 | Total economy | | | 24,727.5 |
| Employment | | | | | | | | | | | |
| 100: Brussels-Capital Region | | | | 200: Flemish Region | | | | 300: Walloon Region | | | |
| Region | Description | NACE | People | Region | Description | NACE | People | Region | Description | NACE | People |
| 100 | Business services | 69-70 | 35,028 | 200 | Business services | 69-70 | 94,782 | 300 | Business services | 69-70 | 33,884 |
| 100 | Banks | 64 | 11,494 | 200 | Wholesale | 46 | 77,633 | 300 | Food & drinks | 10-12 | 15,160 |
| 100 | Wholesale | 46 | 8,730 | 200 | Food & drinks | 10-12 | 69,395 | 300 | Wholesale | 46 | 14,798 |
| 100 | Insurance support activities | 66 | 6,256 | 200 | Storage and transport support activities | 52 | 48,081 | 300 | Pharmacy | 21 | 13,421 |
| 100 | Advertising and market research | 73 | 6,075 | 200 | Chemistry | 20 | 44,565 | 300 | Retail | 47 | 11,598 |
| 100 | Government | 84 | 5,701 | 200 | Land transport | 49 | 32,511 | 300 | Catering industry | 55-56 | 10,681 |
| 100 | Security and management of offices | 80-82 | 5,330 | 200 | Motor vehicles | 29 | 28,958 | 300 | Technical advice | 71 | 10,075 |
| 100 | Post; telecommunications | 53+61 | 5,186 | 200 | Metal industry | 24 | 26,858 | 300 | Insurance support activities | 66 | 10,007 |
| 100 | Catering industry | 55-56 | 5,180 | 200 | Catering industry | 55-56 | 25,738 | 300 | Chemistry | 20 | 9,439 |
| 200 | Business services | 69-70 | 5,063 | 200 | Construction industry | 41-43 | 22,701 | 300 | Metal industry | 24 | 9,405 |
| Total economy | | | 188,837 | Total economy | | | 894,665 | Total economy | | | 300,439 |

Source: RIOT 2015, calculations Statistics Flanders.

h. Conclusion

The literature suggests that productive firms tend to be more export-oriented. The interregional input-output table for 2015 makes it possible to verify this for the 3 Belgian regions, at the level of industries.

The results seem to confirm this: productive industries export more than less productive industries, both in absolute terms (amount of exports) and relative terms (export ratio and exports per worker). This is the case for every region.

Exports are important for the region's economies. €21 billion, 82 billion and 25 billion of gross value added is realised, respectively, for exports in the Brussels-Capital, Flemish and Walloon Regions. For exports, 189,000, 895,000 and 300,000 workers are employed in the above-mentioned 3 regions, respectively. The productive sectors are always the main contributors. The top five largest contributors to gross value added in the 3 regions are smaller than the top five largest exporting industries. This is even more so for employment. This suggests that the labour employed for exports is broader than the labour of the purely exporting sectors.

Each region contributes more or less to the gross value added and employment of another region's exports, although its own industries are the strongest contributors in each region. In both absolute and relative terms, the Brussels-Capital Region contributes more in terms of gross value added and employment to the exports of the 2 other regions than the other way around. This is especially the case for productive industries. This stronger Brussels-Capital contribution is less noticeable in employment in productive industries. Among less-productive industries, there is even more employment in the Flemish and Walloon regions working for Brussels-Capital exports than vice versa. Furthermore, more Walloon labour is employed for Flemish exports than vice versa. That is not the case with gross value added.

2. Focusing on productivity growth is crucial

2.1. A number of key societal challenges demand additional financial resources

Our society is facing various challenges that need to be addressed. For example, there will be sharply rising social spending in the coming decades. Spending on pensions and health care in particular is expected to rise sharply. In its reference scenario, the Study Committee on Ageing (SCvV) assumes an increase in social spending of 2.4 pp by 2030 (from 25.7 % in 2022 to 28.1 % GDP in 2030) and by 4.4 pp by 2050 (to 30.1 % GDP in 2050).

But climate change also poses serious challenges. There is the climate damage we will incur in any case, even if substantial investments are made today in reducing greenhouse gases. A study commissioned by the National Climate Commission calculated that in a scenario of no change, the economic losses due to extreme weather events (extreme heat, drought and floods) are expected to amount to roughly €9.5 billion per year in Belgium by 2050⁵. This corresponds to about 2 % of Belgian GDP, more than three times higher than the benefits of milder winters, which amounts to 0.65 % GDP. Moreover, by the end of the century, the costs of climate change will rise more than the gains. (De Ridder et al., 2020) There is considerable uncertainty regarding these estimates, but the consensus is that economic damage rises disproportionately as temperatures rise further.

Additional investments will be needed to counteract climate change. Based on analyses by the European Commission (EC), the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA) and others, Darvas et al. (2021) conclude that the green investments needed to meet the EU climate goals will need to be increased immediately by around 2 pp of GDP every year, whereby public investment will be between 0.5 % and 1 % of GDP⁶. Moreover, in addition to investments to achieve the climate objectives (and thus prevent

⁵ The simulations were made under the RCP8.5 scenario (from the IPCC 5th Assessment Report) in which greenhouse gas emissions continue to rise at the current rate. The report looked at the economic impact of climate change on health; labour productivity; infrastructure; the energy sector; agriculture and forestry; ecosystem services; insurance; and cross-border impacts (through foreign trade and migration).

⁶ Market failures (including externalities and public goods) mean that some investment will have to be financed by the public sector. The proportion of public funding needed will depend in part on the mix of policy instruments to achieve the climate ambitions, such as the willingness of the public sector to tax emissions (so that investments in climate infrastructure are made more profitable for the private sector).

or reduce greenhouse gas emissions into the atmosphere), mitigation investments will also be necessary to prevent or minimise the damage that climate change may cause.

Both the ageing population and the climate challenges will therefore entail significant additional investments/expenditure in the future. And there are other societal challenges (e.g. the digital transition, certain challenges in the area of health care, mobility, inclusion, etc.) that require additional financial resources - both private and public - that are easier to bear if there is economic growth. Indeed, in the absence of sufficient economic growth, additional private investment/expenditure must be financed by a higher level of savings and will therefore be at the expense of consumption. And without sufficient economic growth, it also becomes difficult to ensure the sustainability of the public finances⁷. This is a problem, because if the financial markets deem that the sustainability of public finances is at risk, this will be reflected in a rapid rise in the risk premium paid by the state on its new borrowings, which will make it difficult to ensure sufficient leeway for future policy.

And the financial sustainability of the public finances poses a risk in Belgium: with unchanged policies, the EC expects Belgium's public debt to continue growing, reaching 121.6 % GDP by 2033 (EC, 2023a). Moreover, Belgium is a member of the EMU and must therefore comply with budgetary rules that stipulate a maximum public deficit of 3 % of GDP and, as part of the proposals for a new economic governance, a multi-year budgetary plan that would credibly reduce the debt ratio in the medium term. Using this new fiscal framework as the starting point, Denil et al. (2023) calculated that a fiscal adjustment of 1 % of GDP is required over a 4-year period to ensure compliance with the 3 % deficit limit for 10 years after the 4-year adjustment period and a sustained and credible debt reduction⁸. In order to avoid the need to significantly reduce other government expenditure and/or substantially increase taxes, economic growth will therefore be crucial in ensuring the sustainability of the public finances⁹.

In general, economic growth will be important to finance the additional investment/spending (both public and private) needed to respond to the various societal challenges.

2.2. Productivity growth as the best way of increasing the financial resources

Economic growth (measured as the increase in real GDP/capita) can be realised in several ways. First of all, the inhabitants of a country can work more. When relatively more people are in work, or when people in employment work more hours on average, GDP per capita increases. A second factor that has a positive effect on GDP/capita is labour productivity, or the contribution per hour worked to realised value added.

Even though there is still currently potential for further increasing the deployment of labour (by increasing the employment rate), the margin is smaller than previously. Moreover, increasing the deployment of labour is made difficult by the declining proportion of the working-age population. As such, the forecasted costs of ageing by the EC and the Study Committee on Ageing assume only a small contribution of labour supply to output growth - indeed, in the EC's view, the contribution of employment becomes negative from 2040 onward; in the longer run, productivity growth is seen as the only source of potential output.

⁷ In general, public debt is deemed 'sustainable' if the primary balance needed to at least stabilise the debt is economically and politically feasible, so that the debt level is associated with an acceptably low refinancing risk and with maintaining potential growth at a satisfactory level (see IMF, 2013).

⁸ If reforms and investments are proposed that are conducive to economic growth and the sustainability of the debt, the period in which adjustments can be made is extended to 7 years. In this case, the fiscal adjustment would represent 0.7 % of GDP every year over seven years.

⁹ The importance of economic growth for the sustainability of the public finances is confirmed in the sensitivity analysis conducted by the Study Committee on Ageing (SCvV). One of these alternative scenarios assumes lower long-term productivity growth (1 % instead of 1.5 % in the baseline scenario), whereby social spending would rise to 32.2 % of GDP by 2070. This would increase the fiscal cost of ageing by 2.3 percentage points of GDP over the baseline scenario.

Table 12. Macroeconomic assumptions in the European Commission's Ageing Report 2021 and in the report of the Study Committee on Ageing (July 2023)

| | | AVG 2019- 2070 | 2030 | 2040 | 2050 | 2060 | 2070 |
|---|-------------|----------------------|-------|--------|--------|--------|--------|
| Real GDP (growth) | EC (2021) | 1,2 % | 0,9 % | 1,3 % | 1,3 % | 1,4 % | 1,4 % |
| | SCvV (2023) | 1,5 % | 1,2 % | 1,4 % | 1,6 % | 1,6 % | 1,7 % |
| Employment (growth) | EC (2021) | 0 % | 0,2 % | -0,2 % | -0,2 % | -0,1 % | -0,1 % |
| | SCvV (2023) | 0,3 % | 0,4 % | 0,1 % | 0,1 % | 0,1 % | 0,2 % |
| Labour productivity per hour* (growth) | EC (2021) | 1,2 % | 0,7 % | 1,5 % | 1,5 % | 1,5 % | 1,5 % |
| | SCvV (2023) | 1,2 % | 0,8 % | 1,3 % | 1,5 % | 1,5 % | 1,5 % |

Note: * The SCvV looks at the evolution of productivity per worker.

Sources: EC, 2021, p. 276 and Database of the Study Committee on Ageing (July 2023).

Sources of productivity growth

There are several ways to raise labour productivity. One way is through capital deepening (i.e., using more capital per worked hour), a strategy that has driven Belgian productivity growth in recent decades. However, declining marginal returns on capital also place limits on this strategy. Indeed, the more capital-intensive (higher capital-labour ratio) an economy already is, the smaller the additional returns from deploying additional capital per worker, meaning that in the long run, extra capital generates virtually no productivity gains. Consequently, the only way to permanently raise productivity is not by using more capital per worker, but by increasing the efficiency with which labour and capital are deployed in the production process, i.e., through an increase in TFP (not only linked to technological advances but also to improvements in the allocation of factors of production e.g., through better market efficiency or an improvement in the characteristics of the labour force). Moreover, this strategy has the advantage that it does not come at the expense of employment, which is often the case with increasing capital deepening.

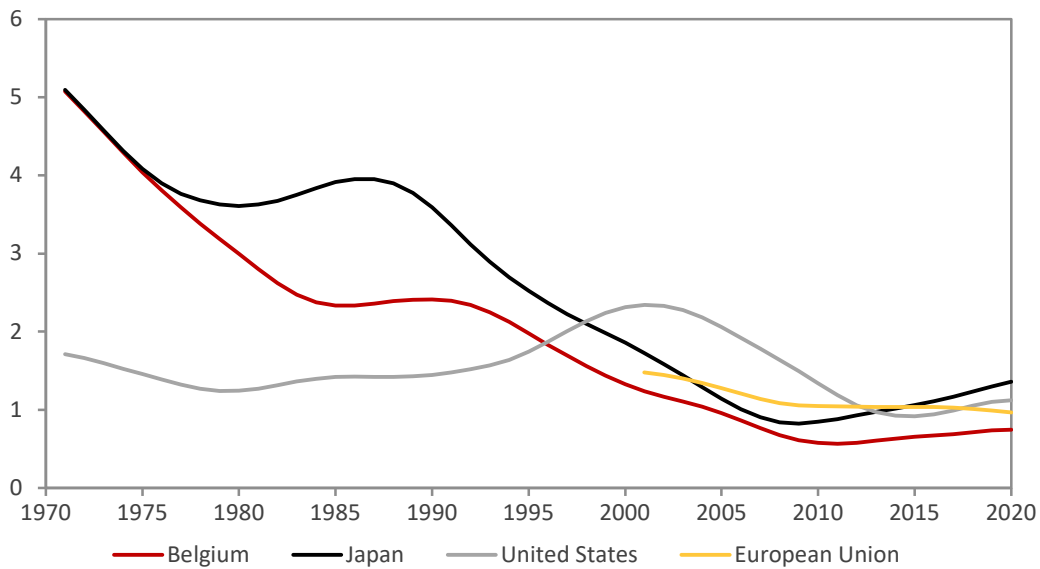
2.3. ... and also necessary for a sustainable rise in income

The income of the population - both from capital and from labour - is also determined by productivity growth.

If nominal wages (or income from capital) were to rise without increasing productivity, firms will raise prices if market conditions allow, which reduces the real effect of the wage increase (rise in income from capital). If market conditions mean that this is not possible - think of companies operating in highly competitive (often international) markets, which do not have the possibility to raise their prices without being priced out of the market - an increase in nominal wages without productivity gains will be at the expense of the company's profitability which will therefore have a negative impact on the investments that are nonetheless necessary in the context of the green and digital transition and, more generally, will have an adverse impact on the company's chances of survival.

3. Productivity growth has been on a downward trend for some time and there are challenges for the future

Over the past 5 decades, productivity growth has fallen systematically. Whereas it was still 4.5 % per year on average in the 1970s, average annual productivity growth over the period 2000-2021 was only 0.8 % (with an additional slowdown following the 2008 financial crisis).

Chart 11. Evolution of labour productivity per hour, 1970-2020

Note: Growth rate filtered by Hodrick Prescott.

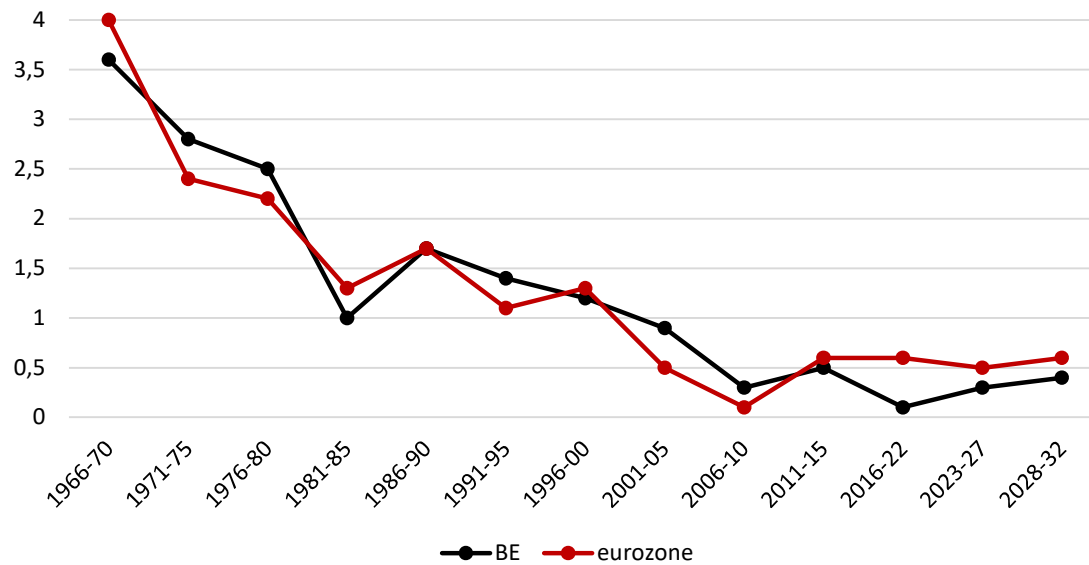
Source: Ameco, DG-ECFIN, May 2023.

In any case, we see that the sharp decline in productivity growth occurred not only in Belgium - and within Belgium, also in the three regions individually - but it can also be seen in other developed countries that can no longer benefit from 'catching-up' more productive countries.

This was different in the 1970s, when Belgium, among other countries, was catching up with the U.S. and was able to make productivity gains by incorporating U.S. technologies. Now that the catch-up phase is over, the technological frontier has to be pushed out, which is a lot harder. Productivity growth must now come primarily from TFP growth, rather than capital deepening as was the case during the catch-up phase. (Deboeck, 2023, p. 32)

In the medium term, the EC already anticipates that TFP growth will remain low compared to the growth rates of the 1970s.

Chart 12. Contribution of TFP to economic growth, medium-term outlook relative to past contributions



Source: Deboeck (2023, p. 42).

As regards the long term, there is no consensus among economists as to what 'normal' growth rates are. The pessimistic view is that innovation has simply become less disruptive and we should therefore not expect a permanent return to a higher growth path. The more optimistic view assumes that TFP growth will rebound, but argues that new technologies need time to mature and time is also needed to overcome barriers to the spread of innovation, whereby the important role of structural policies is underscored (see below).

In any case, climate change and the necessary transition to a low-carbon economy also constitute significant headwinds. Climate change itself can lead to significant productivity losses, including through lost work hours, damage to capital stock and a shift from investment in productive capital and innovation to investment in climate change adaptation. These effects are expected to get worse with more frequent and extreme weather events. But the transition to a climate-neutral economy is also expected to have a temporary negative impact on productivity. In the longer term, although well-designed environmental policies can have a positive impact on innovation and ultimately boost productivity (Porter, 1991; OECD, 2017), during the transition period, some of the investments that went to expanding productive capacity or improving labour productivity are sacrificed to make way for investments in the climate transition¹⁰. (Pisany-Ferry et al., 2022, p. 9)

At the macroeconomic level, the scale of the expected slowdown in labour productivity due to the energy transition is highly uncertain. A calculation made for France suggests -0.3% per year over 40 years. That is not much different from a calculation made for the global economy, which estimates a loss of growth of around 0.35 percentage points during the energy transition¹¹ (Epaulard, 2023, p. 35). This is a significant impact, especially given the low productivity growth we have witnessed in recent years¹².

¹⁰ In theory, the investments could also come on top of existing investments, but a sustained investment surplus of around 2 points of GDP raises questions about the financing capacity of businesses, households and the government.

¹¹ These two calculations are based on unfavourable assumptions (green R&D comes at the expense of general R&D and does not generate spillovers to the rest of the economy).

¹² It is, however, the case that the impact differs depending on the initial productivity of the firms: the best-performing firms have been able to raise their productivity as a result of stricter environmental regulations. This appears to be even more so when these firms have access to credit and operate in countries where environmental policies already exist, so they are aware of the existence of abatement technologies (Pisani-Ferry and Mahfouz, 2023, pp. 111-112). Another important conclusion is that the degree of slowdown in productivity depends on the policies implemented to launch and guide the transition and the speed with which environmental policies are initiated.

4. Three priority challenges/strands for policy

In general, it can be concluded that a context of low productivity growth, combined with various important societal challenges ensure that the need for a policy intended to boost productivity is perhaps bigger than ever. The following section identifies three strands that the analyses of the NPB suggest that policy should prioritise to boost productivity growth.

4.1 Ensure an adequate supply of skilled labour

Human capital is a key factor in boosting productivity. Indeed, with the necessary skills and knowledge, workers can perform their tasks more effectively, and by investing in higher education, governments can create conditions for innovation and productivity growth.

Pfeiffer et al. (2023) simulated the potential impact of eliminating the human capital gap with the best performers in Europe and found that increasing the share of the medium-skilled in Belgium (at the expense of the low-skilled) has a relatively large effect on output in particular.¹³ Bijmens and Dhyne (2021) found that increasing the share of highly skilled workers by 1 pp. among the workforce of firms raises their productivity by 0.6 %.

The availability of sufficient and high-quality human capital is therefore crucial, but human capital is increasingly a scarce commodity. Employers are finding it increasingly difficult to hire workers with the right skills. According to the latest survey by the European Investment Bank (EIB), a large proportion of European companies say a lack of skills is a barrier to long-term investment. In Belgium, this share is even higher than the EU27 average: 91 % versus 85 %. The tightness of the labour market is also reflected in the higher job vacancy rate in Belgium, which reached 4.7 % of the total number of jobs (filled or open) in the first quarter of 2023, one of the highest rates in Europe. This applies to both low-skilled and high-skilled jobs, with the largest shortages in catering, ICT, professional, technical and scientific jobs and health care. (EC, 2023b, p. 11) This tightness poses a serious threat to the growth opportunities of many firms, and may also make it harder to attract foreign investors. Moreover, the green and digital transitions are making many skills obsolete, and new skills are therefore needed in order to make these transitions. Solving these challenges requires action in various domains.

First, getting more people into work is vital. Since the unemployment rate is relatively low, it will be necessary to mobilise the non-professionally active segment of the population more. Indeed, there remains a large group of people of working age who do not profile themselves in the labour market. In 2022, 24 % of the Belgian population aged 20-64 were not 'in work or were unemployed'¹⁴; for Flanders, Wallonia and Brussels-Capital, the figures were 21 %, 28.6 % and 26.5 %, respectively.

There also needs to be a focus on students in this mobilisation strategy. Indeed, students are taking longer and longer to complete their education. For the academic years 2005-06 to 2010-11, 30 % of starting students earned a bachelor's degree taking at least 1 year longer, and about 28 % of starting students did not earn a degree. This entails significant social costs, including a slower progression of students into the labour market. (Declercq and Verboven, 2014) There must therefore be reflection on how to address this.¹⁵

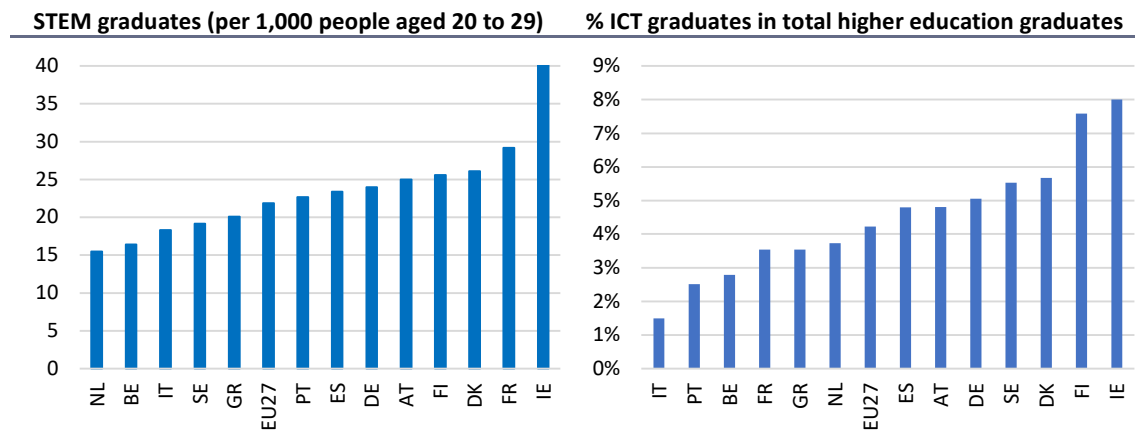
¹³ On a 20-year time frame, the authors find (based on the QUEST III-RD model) an impact on GDP of more than 1 %, and in the long run there is an impact of almost 4 %. Increasing the share of highly skilled people and the quality of education also have a long-term impact on GDP of more than 2 %.

¹⁴ On the one hand, these are job-seeking or available non-professionally active individuals who do not meet all the criteria to be included in the official ILO definition of unemployment (i.e. not in a job, have actively searched for work in the past four weeks and are available to start work within two weeks) and, on the other hand, the group that is neither seeking work nor available (the disabled, students, housewives and househusbands, pensioners, etc.), some of whom become employable in the future after completing studies or with the necessary support at work.

¹⁵ For example, Declercq and Verboven (2014) showed that introducing moderate admissions requirements in higher education can make students graduate more rapidly without necessarily resulting in fewer graduates.

But the field of study is also important. Previous reports by the NPB show that STEM profiles in particular are becoming (increasingly) important, both for achieving productivity growth¹⁶ and realising the digital and green transition. It is essential that STEM is already chosen by enough students at secondary level, and that technical disciplines are also revalued. The Flemish STEM Monitor (June 2022) shows, for example, that the number of students choosing the study areas construction, woodwork, welding-construction, cooling and warming, machine tools, etc. remains alarmingly low, resulting in shortages in the labour market. But opting for STEM should also be encouraged more in higher education. The number of higher education graduates (per 1,000 persons aged 20-29) in STEM fields remains low in Belgium; it is the same when we look at the share of ICT graduates in the total number of higher education graduates.

Chart 13. STEM and ICT profiles, 2021



Source: Eurostat.

There needs to be reflection on how to make these study areas more attractive¹⁷. In this regard, it should also be examined how the untapped potential of girls and underprivileged youth can be increased in STEM fields.

Besides encouraging STEM, the quality of education must also be monitored. A relatively large proportion of secondary school students do not achieve a sufficient basic level to take part in a knowledge-based society. Based on the latest PISA survey, it was found that more than one fifth of 15-year-old students fail to reach the basic level in reading, maths and science. In particular, students from low socio-economic backgrounds underperform in reading, maths and science (EC, 2023b, p. 12). The PISA surveys also highlight declining average performance by students in the areas of reading, maths and science between 2003 and 2018¹⁸.

Besides high-quality initial training, especially in a context of tight labour market conditions and rapid technological transitions, strengthening lifelong learning is also crucial in reducing skills shortages and skills mismatches. Based on Bel-First data for the period 1997-2006, Konings and Vanormelingen (2015) found that an increase in the proportion of workers who received (formal) training by 10 pp is reflected in productivity gains

¹⁶ A 1 percentage point rise in employment of STEM profiles increased the productivity of firms by 0.2 % in 2000-2007 and by 0.26 % in 2012-2018. In other words, the productivity gains from increasing the share of STEM workers grow over time. (Bijnens, Dhyne 2021).

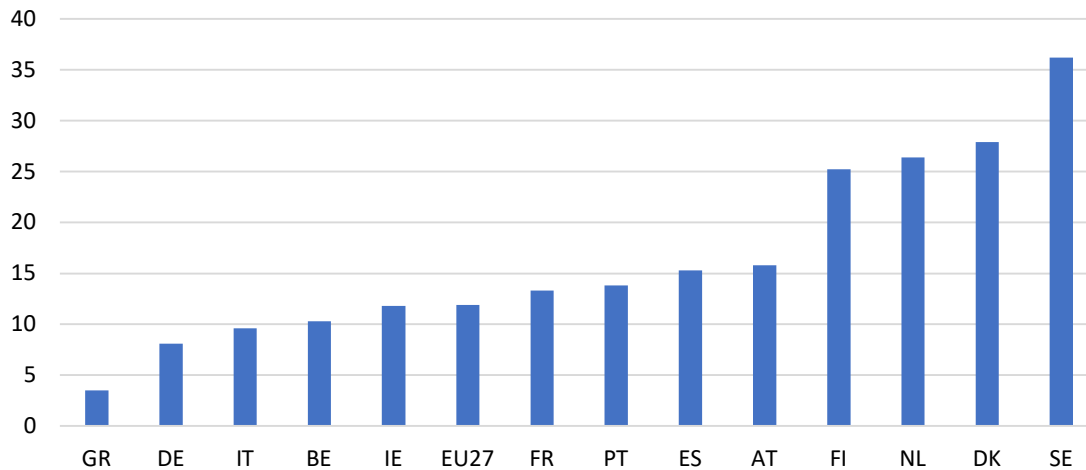
¹⁷ One avenue that could be explored, for example, is setting up a central technical university (following the example of MIT) that specialises in training engineers, in order to enhance the visibility and attractiveness of the training.

¹⁸ <https://www.ocwincijfers.nl/sectoren/onderwijs-internationaal/education-at-a-glance/leerlingen-en-studenten/internationale-prestaties-pisa>

of between 1.7 % and 3.2 %, depending on the specification chosen. Other studies also find that training has a positive effect on productivity (cf. HRW, 2021, p. 61).

Belgium has low participation rate in training. The proportion of 25- to 64-year-olds who report that they received formal or informal training in the past 4 weeks is 10.3 % in Belgium, lower than the euro area average (12.1 %). Top countries in this field are Sweden (36.2%), Denmark (27.9 %), the Netherlands (26.4 %) and Finland (25.2 %).

Chart 14. % of 25-64 year olds who took part in education and training in the past 4 weeks, 2022



Source: Eurostat.

Participation rates in continuous education are also well below the national average for some groups, particularly those over 55 and the low-skilled. Nevertheless, these are groups that could enjoy significant benefits from training. For the over-55s, to prevent their skills from becoming obsolete, and for the low-skilled, to raise their qualifications to a higher level to improve their chances of employment. Furthermore, we also see that small businesses offer less training; learning in these businesses is primarily informal.

POLICY RECOMMENDATIONS

The NPB endorses the European Council's recommendation to Belgium to eliminate labour shortages and skills mismatches, in particular by enhancing the mobilisation of disadvantaged groups in the labour market. The performance and fairness of education and training systems also needs to be improved; indeed, the European Council's recommendation to continue the reforms planned by communities to strengthen the teaching profession will be an important element in this regard.

The NPB also endorses the European Council's recommendation that more effort is needed to foster the skills needed to realise the green transition. In general, education and training programmes must incorporate the new skills required needed for the transitions we face, to a sufficient extent.

Specifically for training and education, the NPB refers to its earlier recommendation to ensure a comprehensive strategy that addresses the key challenges (not only in terms of the training offering, but also with sufficient attention to demand for it) and which supports industrial policy. The Higher Employment Council set out a number of recommendations in this area in the context of its 2021 thematic report.

4.2 Ensure sufficient public investment

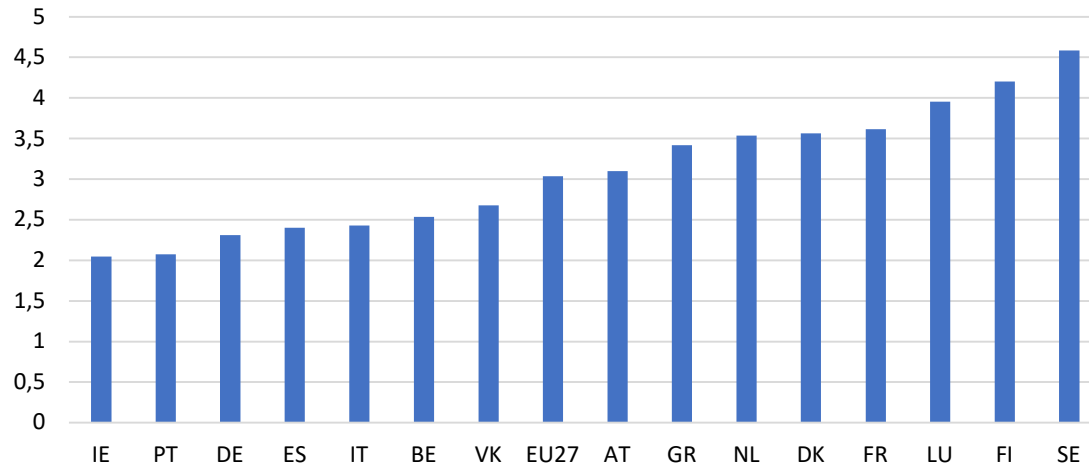
Productivity growth, and TFP in particular, requires sufficient investment in high-quality infrastructure. This involves not only private, but also public investment.

Bom and Ligthart (2013) evaluated the output elasticity of public (tangible) capital through a meta-regression analysis. They found an average output additionality of public capital (provided by the central government) of 0.106, meaning that on average for every €10 of investment made by the national government, output increases

by an additional €1.6. The benefit increases with time; the authors find an output elasticity of 0.083 in the short term that rises to 0.122 in the long term.

Public investment has been low for many years in Belgium (see chart 15). Due to years of underinvestment in the public sector, we have seen a downward trend in the government's net capital stock expressed as a % of GDP since the 1990s, which undermines the quality of public infrastructure and also weighs on private investment. Moreover, the green and digital transition demand an increase in public investment.

Chart 15. Average annual gross public investment (tangible and intangible) as a % of GDP (2012-2021)



Source: Eurostat.

The federal government laid down the objective of increasing public investment for Belgium as a whole to 4 % of GDP by 2030 (see Government Agreement 30 September 2020). In the meantime, the ambition is to bring public investment to 3.5 % of GDP by 2024 - i.e. the European average.

In the context of the European Recovery and Resilience Facility, the various Belgian entities drew up a Recovery and Resilience Plan (RRP)¹⁹ in mutual dialogue: 35 structural reforms and 105 investment projects worth €5.9 billion (i.e. 1.2 % of GDP in 2021 over the period 2021-2026). The investments are largely focused on the green and digital transition, which was also a European requirement²⁰.

Belgium is in the process of implementing its National Recovery and Resilience Plan (RRP), albeit with a risk of delay (as of June 2023, 13 % of projects had been 'postponed'). Moreover, following the successful recovery after the pandemic in 2021, the total amount of support was revised downwards: the maximum financial contribution for Belgium was revised from €5.9 billion to €4.5 billion (a difference of almost 24 %). In contrast, in response to the ongoing energy crisis, on 22 March 2022, the EU published a REPowerEU Plan that allows countries to supplement their Recovery and Resilience Plan with a REPowerEU chapter to finance energy-related reforms and investments. In this context, Belgium received €282 million in financial aid that did not have to be repaid. There are also additional resources from the transfer of the provisional allocation on the Brexit Adjustment Reserve (BAR) to the Recovery and Resilience Facility, worth €229 million, as well as loans amounting to €978 million. Meanwhile, the Belgian Recovery and Resilience Plan has been revised and supplemented with a REPowerEU chapter and has just been approved by the EC.

Additional green investments (public and private) are important because more action is needed to put Belgium on the path to climate neutrality. As such, the EC (2023b) has stated that Belgium will not meet the new 2030 climate targets for its ESA sectors, that ²¹more ambition is also called for in the field of renewable energy, that

¹⁹ Additional recovery plans were also adopted by the various governments.

²⁰ Of the total spending on the RRP, a minimum of 20 % had to contribute to the digital transition and a minimum of 37 % to the green transition.

²¹ A reduction of only 38 % instead of the target of 47 % compared to 2005.

energy efficiency gains in industry can be further boosted²², that the renovation challenge with a view to reducing fossil fuel demand is still high, and even more can be done to develop clean mobility solutions (such as public transport and soft mobility). The digital transition also requires additional investment, given that in 2022 only 17 % of households in Belgium were covered by Fibre To The Home (FTTH) compared to an EU average of 56 %, and Belgium's performance in terms of rolling out 5G is also well below the European average.

Owing to market failures, some of these investments will have to be financed by the public sector. At the same time, Belgium faces major challenges in terms of the sustainability of its public finances (see above). It will therefore be crucial to allocate government resources efficiently. In choosing investments, it is important to focus on the areas where we can expect a clear return in terms of productivity and which fall within a long-term digital and green transition.

The recently established Study Committee for Public Investment (as a new part of the High Council of Finance) can help in this regard. The Committee centralises public investment expertise at the federal level and advises the government in conducting its investment policy, to help improve the management of federal investments (including better coordination of public investment) and increase the socio-economic impact of the investments, in particular by developing methodological tools for the ex-ante evaluation of investment projects. The study committee will publish reports on a regular basis and may draft opinions on its own initiative or at the request of the government. It will also invite the regions and communities to a technical dialogue to help improve the effectiveness and efficiency of public investments between the entities.

POLICY RECOMMENDATIONS

The NPB endorses the European Council's recommendation that it is important for Belgium to pursue a fiscal strategy of gradual and sustained consolidation in the medium term, combined with investment and reforms that lead to higher sustainable growth. In this context, it is important to keep up the level of national public investment as well as effective absorption of grants from the Recovery and Resilience Facility and other EU funds, in particular to boost the green and digital transitions. The latter requires effective governance to ensure the rapid and gradual implementation of its Recovery and Resilience Plan (RRP).

In addition to making investments itself, the government also has an important facilitating and regulatory role in encouraging private investment. In this context, the NPB endorses the European Council's recommendation to accelerate the roll-out of renewable energy and the associated grid infrastructure, by further streamlining the permitting procedures, including the duration of appeals processes, and adopting legal frameworks to further encourage investment in renewable energy installations and facilitate energy sharing. In addition, the NPB highlights the critical importance of unambiguous regulation and legal certainty. Investors must be 100% sure that the rules, subsidies or charges will remain stable for the foreseeable future. Finally, the NPB reiterates the need to align and integrate regulations and policy actions across policy levels.

4.3 Stimulate innovation

As already indicated in point 3, the link between innovation and productivity is particularly complex, and there is debate in this regard between techno-pessimists and techno-optimists who take opposite views. Bloom et al. (2017) suggest that although research activity has risen significantly, research productivity has declined sharply. According to techno-pessimists such as Gordon (2012), inventions in new information and communication technologies are therefore less disruptive than in previous waves of technological revolution. For others (see, e.g., Brynjolfsson, Rock and Syverson, 2017), new technologies remain the guarantor of future productivity growth but, as the experience with electricity a century ago shows, large-scale technological changes may take some time before the productivity gains become tangible. It is important to look at how to maximise the chances of such an outcome. In any case, innovation is also essential to achieving the green and digital transition.

In general, Belgium is regarded as a European leader in innovation, along with Denmark, Sweden, Finland and the Netherlands (European Innovation Scoreboard, 2023). Belgium therefore has various trumps, but the analysis by the European Commission also reveals weaknesses in the Belgian ecosystem (including Design

²² For example, the EC has stated that there is scope for further boosting electrification and rolling out industrial heat pumps in companies with low heat demand.

applications, Environment-related technologies, Medium and high-tech exports, Lifelong learning and Non-R&D Innovation Expenditures) that need to be remedied to maintain a high-end innovation ecosystem. More specifically, we need to understand why R&D spending has steadily increased in recent years, reaching 3.22 % of GDP in 2021, while TFP growth remains very low.

An important element in this paradox is that it does not exist if we look at the company level. R&D spending is highly concentrated in a number of large (often international) firms in specific sectors (pharmaceuticals, electronic, optical and computer products, IT services and architectural and engineering services) and these firms generally have high levels of productivity (Biatour et al., 2020). Moreover, the productivity growth of Belgian frontier firms remains substantial, which is consistent with the earlier finding of Andrews et al. (2015) for a group of 23 OECD countries, namely that the aggregate slowdown in productivity growth does not apply to the most productive firms. The new technologies do create productivity gains in these companies, but this is not (or much less) the case for the other companies, whereby the gap with non-frontier firms grows, and Belgium is no exception in this regard (see De Mulder and Dhyne, 2022). This seems to indicate that the spread of technology is a problem.

It should also be noted that it is not only the amount of R&D and innovation and the degree of innovation diffusion that matters, but also the direction it takes. For example, innovation is an essential component in the transition to a low-carbon economy, but there are several reasons why markets are not investing enough in clean technologies²³. Based on the EC's eco-innovation scoreboard, there appears to be room for improvement for Belgium in this area²⁴. As with innovation in general, not only is there a need for the (further) development of new technologies, but also the diffusion of existing green technologies and innovations (innovation diffusion) will be important.

The first important condition for innovation diffusion is that the recipient firms have sufficient absorptive capacity to adopt the relevant technologies. In-house R&D activities mean that firms are better able to absorb knowledge spillovers from other firms (see, e.g., Berlingiere et al., 2020), but the composition of the workforce is also decisive for a firm's absorptive capacity. Indeed, the successful adoption of (digital) technologies often requires complementary investments in intangible capital (for example, software, branding and design, corporate culture, etc.) that are company-specific and developed in-house. The capabilities and characteristics of their own employees therefore determine the extent to which companies can successfully invest in intangible capital. Criscuolo et al. (2021) found that more than one-third of the gap between the best performers and median firms in the area of productivity can be attributed to differences in the composition of firms' human capital. In this regard, the authors find that not only is the level of skills²⁵ available to the firm an important explanatory factor, but the diversity of the workforce and whether there is high-quality and diverse management also play a crucial role in the performance of companies.

In addition to sufficient absorptive capacity, innovation diffusion also assumes interaction between innovation actors and the rest of the economy. The innovation actors should not be 'islands' but sufficiently anchored in (local) ecosystems, networks, local industrial clusters, etc. Links between universities/knowledge institutions and companies are crucial in this regard - one aspect where Belgium scores very well - but also interaction between companies themselves. This last aspect depends in part on the interdependence of firms in the value chain; for example, there are more opportunities for spillovers when R&D activity is more upstream in the value chain than when R&D activity is close to the end consumer (Liu and Ma, 2023), and in this sense, it is therefore essential to have sufficient R&D activity in technologies that are relatively central in the value chain.

²³ These technologies are often still in the early stages of development, with higher levels of uncertainty and risk (Tagliapietra and Veugelers, 2020). But there is also the risk of lock-ins of polluting technologies; companies that produced and invested in polluting technologies in the past prefer to continue innovating in polluting technologies in the future, primarily for reasons of profit. Finally, coordination failures are often a problem (e.g., due to the need for simultaneous investments in different parts of the value chain, the lack of markets, etc.).

²⁴ https://green-business.ec.europa.eu/eco-innovation_en

In 2021, Belgium achieved a substantially lower score than the EU average for budgetary public loans for environment and energy; ISO 14001 certificates; eco-innovation patents; energy efficiency; the export of eco-industries; employment and value added in environmental activities.

²⁵ It has been shown that more productive companies have a higher proportion of tasks with high skills, even though low and medium skills remain important ingredients of the skills mix.

Another important factor for the diffusion of new technologies/innovation is whether there is enough ambitious entrepreneurship, and therefore the creation and growth of new companies; after all, new companies are often leaders not only in the development of new technologies, but also in using them. Moreover, they encourage existing companies to innovate more intensively in order to overtake their competitors. (Aghion et al., 2005) The lack of business dynamism in Belgium is seen by the EC as one possible explanation for low productivity growth. (EC, 2023b, p. 3) The start-up rate in Belgium is among the lowest in the EU, and is also accompanied by a low company closure rate. The share of high-growth firms (average annual growth of 10 % or more over the past 3 years) is also lower in Belgium than the EU27 average (6.88 % vs. 9.43 % in 2020). Moreover, the share of rapid growth firms in the job creation of the most innovative sectors is much lower than the EU average. This highlights a certain weakness on the part of the Belgian economy in generating new growth businesses (EC, 2023b, p. 47).

POLICY RECOMMENDATIONS

In general, innovation and innovation diffusion need a well-functioning innovation ecosystem where the various factors - also interacting with each other - are all important. Everything hangs together; one weak or missing link in the system can have a major impact on the smooth functioning (and output) of the system as a whole and prevent new ideas from emerging or developing into commercial products. Innovative countries typically score well on all factors of the innovation system.

Some areas of concern for the Belgian innovation system include the following:

In terms of R&D spending, Belgium performs very well. This good performance must be continued, but consideration should be given to how R&D support measures can be further optimised, with a view to maximising the spillover effects of the R&D carried out. It should also be examined how the federal and regional R&D support measures can be better aligned. Indeed, the impact of the support measures decreases when federal and regional aid are combined.

The process of business dynamism must be fostered. This covers not only a policy focused on start-ups, but also attention to scale-ups and growth, for which policy has less of a focus. In general, there is a need for healthy and competitive market forces where regulation has a significant impact. As such, it should also be considered whether regulations put in place with a view to achieving other objectives (e.g., consumer protection, environment, workers, etc.) do not have an unnecessarily negative impact on market functioning.²⁶

Finally, it should be examined whether innovation policy in Belgium provides sufficient guidance, including towards a low-carbon economy. Besides the focus on knowledge creation, this also requires demand-driven policies (including correct price signals, regulations, public procurement, public acceptance of new technologies, etc.) and the presence of complementary infrastructure. In general, there is a need for integrated and coherent policies that are also consistent over the long term.

²⁶ A recent study based on mark-ups (ratio of selling price to marginal cost) finds that competition in Belgium is weakest in the following sectors: Electricity and Gas; Financial activities and insurance; Pharmaceuticals; and Telecommunications. With the exception of Pharma, strong increases in mark-ups were also implemented in these four industries. (Biatour et al., 2023) The EC (2023b, p. 50) also identifies retail as an industry with an increased risk of competitive distortions.

Activity Report

1.1. The Board

Creation of the Board

Following the report "[Completing Europe's Economic and Monetary Union](#)" prepared by the "Five Presidents" (22 June 2015), the Council of the European Union adopted a [recommendation](#) on 20 September 2016 encouraging Member States to set up a National Productivity Board. Setting up such a council responds to a desire to enhance competitiveness in the long term so that economies are more resilient and can therefore recover more quickly from economic shocks. The role of the Productivity Board is to analyse competitiveness in the broadest sense, to enrich the knowledge base and to contribute to the national debate, in order to strengthen the take-up of policies and reforms.

In Belgium, the National Productivity Board was officially set up on 14 May 2019, in accordance with the [law of 25 November 2018 establishing the National Productivity Board](#) (published in the Belgian Official Journal on 7 December 2018), which transposes the European recommendation.

Mission of the Board

The National Productivity Board in Belgium is responsible for:

- performing diagnoses and analyses of trends in productivity and competitiveness;
- analysing policy issues in the area of productivity and competitiveness;
- assessing the consequences of policy options in the above-mentioned areas.

In performing these tasks, the National Productivity Board may forge contacts with Productivity Board in other Member States, communicate publicly when opportune, obtain appropriate access to information available from public administrations and consult stakeholders.

The National Productivity Board performs its tasks in the context of the European Semester, in particular by assisting the European Commission in collecting data and by assisting governments in preparing the drafting of the national reform programme.

The National Productivity Board publishes an annual report.

1. Composition of the Board

The National Productivity Board is managed by a Bureau made up of:

- a Chair, proposed by the secretariat of the Central Economic Council (CEC) and
- two Vice-Chairs, one proposed by the National Bank of Belgium (NBB) and one by the Federal Planning Bureau (FPB).

The Bureau determines the agenda for meetings and the themes to be discussed by the Board.

The National Productivity Board has 12 members, six at federal level and six at regional level:

- Siska Vandecandelaere (CEC)
- Luc Denayer (CEC)
- Catherine Fuss (NBB)
- Tim Hermans (NBB)
- Chantal Kegels (FPB)
- Joost Verlinden (FPB)
- Micael Castanheira (Brussels-Capital Region)
- Koen Declercq (Brussels-Capital Region)
- Caroline Ven (Flemish Region)
- Joep Konings (Flemish Region)
- Marcus Dejardin (Walloon Region)
- Mikael Petitjean (Walloon Region)

The FPS Economy acts as Secretariat for the Board.

The members of the Board and the Secretariat are appointed by the King.

1.2. Activities 2023

Board meetings

The National Productivity Board met 7 times, including on:

- 26-01-2023 (video conference): Discussion on the content of the Annual Report 2023;
- 22-02-2023 (video conference): Discussion on the structure of the Annual Report 2023;
- 05-04-2023 (video conference): Discussion on the content of the Annual Report 2022 and Conference;
- 25-04-2023 (at the FPS Economy): Discussion on the content of the Annual Report 2023 and Conference;
- 21-08-2023 (video conference): Discussion on the texts of the Annual Report 2023 and Conference program;
- 18-09-2023 (video conference): Discussion on the texts of the Annual Report 2023 and Conference (guests);
- 17-11-2023 (video conference): Finalising of the Annual Report 2023 and Conference (catering, guests...).

External activities

In addition to the meetings of the National Productivity Board and the organization of a Conference, the members of the Board participated in a number of activities initiated by external organisations, notably the:

- Presentation of the 2022 report to EPC: 12-14-2022;
- Webinar on regional productivity OECD: 10-18-2023;
- 1st NPB Conference – The importance of public investments in strengthening productivity growth: 11-28-2023.

Annexe: avis Conseil Central de l'Economie (CCE 2023-2828) – 14 décembre 2023

1 Saisine

§1. L'article 4 de la loi du 25 novembre 2018 portant création du Conseil national de la productivité (CNP) prévoit dans son paragraphe 2 que les études et les rapports de cette institution puissent faire l'objet d'un débat au sein du Conseil central de l'économie (CCE), préalablement à leur publication. Si ce dernier souhaite formuler un avis, cet avis sera joint en annexe lors de la publication de l'étude ou du rapport. Le rapport annuel 2023 sur la productivité a été transmis au Conseil central de l'économie le 14 novembre 2023. Ce rapport a pour objectif de définir l'état de la connaissance sur la productivité et la compétitivité pour permettre d'en apprendre davantage sur les sources de la croissance de la productivité et d'identifier les causes éventuelles de son ralentissement.

§2. Le projet d'avis, qui est le résultat des discussions menées au sein de la sous-commission « Conseil de la productivité », a été approuvé en séance plénière le...

2 L'importance de la productivité et de la compétitivité dans la perspective des transitions écologique et numérique

§3. Pour le CNP, la croissance de la productivité constitue le meilleur moyen d'augmenter les moyens financiers nécessaires pour affronter les défis sociétaux auxquels la Belgique fait face (le changement climatique, le vieillissement de la population, la transition numérique, les soins de santé, la mobilité, l'inclusion...). Une croissance de la productivité permet également d'assurer une augmentation durable des revenus de la population.

§4. Le CCE rejoint l'analyse du CNP et souhaite mettre en évidence le caractère déterminant de la productivité dans le processus de création de richesse, dans les enchaînements macroéconomiques et dans la réponse aux défis sociétaux et environnementaux. Par ailleurs, le CCE rappelle que notre modèle de développement économique est confronté à des contraintes écologiques et qu'il y a lieu d'encourager autant que possible le découplage entre la croissance économique et l'utilisation des ressources naturelles (en particulier l'utilisation des combustibles fossiles).

§5. Dans la pensée économique courante, les gains de productivité représentent une condition nécessaire, mais pas suffisante, à la prospérité de la population, au niveau de la cohésion sociale et du financement des investissements nécessaires à la réalisation des objectifs environnementaux européens, soit la neutralité carbone à l'horizon 2050. À ce titre, la croissance de la productivité est l'un des indicateurs sélectionnés pour mesurer les progrès accomplis dans la réalisation des objectifs de développement durable (ODD)²⁷.

Productivité, revenus réels et compétitivité

§6. Les gains de productivité devraient être théoriquement le fondement d'une amélioration des revenus réels et de baisses des prix relatifs. Grâce aux gains de productivité, les entreprises peuvent aussi maintenir leur rentabilité, laquelle est déterminante pour les investissements futurs et la création d'emplois. Ces différents éléments sont nécessaires pour un maintien de la compétitivité. Le CCE définit ainsi la compétitivité *comme « la capacité d'une économie d'améliorer, à un rythme similaire ou supérieur à celui observé dans des pays de structure comparable, le niveau de vie de ses habitants et à leur procurer un taux d'emploi élevé et un haut niveau de cohésion sociale, et ce de manière durable, c'est-à-dire sans détérioration de l'équilibre extérieur, et en s'assurant de la soutenabilité des finances publiques et de la soutenabilité environnementale ».*

§7. L'amélioration de l'efficacité dans l'utilisation des ressources peut aussi être un moyen de limiter la répercussion d'une hausse des coûts de ces ressources (tels que les coûts énergétiques) sur les prix des biens et

²⁷ La liste officielle des indicateurs ODD (SDG) : <https://unstats.un.org/sdgs/indicators/indicators-list/>

services. Dans son dernier Rapport Emploi-Compétitivité (CCE 2023-2450), le CCE a souhaité analyser comment ont réagi les salaires, le marché de l'énergie, les politiques budgétaires, et les marchés de biens et services face au choc inflationniste, et quelles en ont été les conséquences économiques et sociales pour les ménages, les entreprises et l'État, afin d'en tirer les leçons pour les chocs futurs.

Productivité, cohésion sociale et environnement

§8. Aux yeux du CCE, la productivité, le progrès social et des politiques environnementales ambitieuses peuvent aller de pair, mais cela ne se fait pas spontanément. **L'environnement détermine dans une large mesure les possibilités de créer des richesses** pour les générations futures. Préserver la planète implique d'éviter l'épuisement des ressources naturelles et de sauvegarder la biodiversité, de lutter contre le changement climatique (et ses conséquences) et de promouvoir la qualité de l'environnement (air, eau et sol). Dans ce but, il faut œuvrer à la transformation du système économique vers une économie neutre en carbone et garantissant une création de bien-être avec une utilisation circulaire des ressources la plus efficace possible.

§9. Le CNP souligne dans son rapport que le changement climatique lui-même peut entraîner d'importantes pertes de productivité, notamment en raison des heures de travail perdues, des dommages causés au stock de capital et du passage de l'investissement dans le capital productif et l'innovation à l'investissement dans l'adaptation au changement climatique. Ces effets devraient s'aggraver avec l'augmentation de la fréquence des phénomènes météorologiques extrêmes. La transition vers une économie climatiquement neutre devrait également avoir des effets négatifs temporaires sur la productivité même si, à plus long terme, des politiques environnementales bien conçues peuvent avoir un impact positif sur l'innovation et, in fine, stimuler la productivité. Selon l'OIT²⁸, « le coût de l'inaction serait infiniment supérieur à celui des investissements à réaliser d'urgence pour mettre en place des économies et des sociétés résilientes, inclusives et écologiquement durables ».

§10. Pour le CCE (CCE 2022-3280), **les liens entre la productivité d'une part, et la prospérité, la cohésion sociale et l'environnement d'autre part** fonctionnent dans les deux sens. Ainsi, en matière de cohésion sociale, même si le sujet reste controversé dans la littérature économique, de plus en plus d'études²⁹ tendent à indiquer que les inégalités auraient un impact négatif sur la croissance, du moins au-delà d'un certain seuil. Les effets des inégalités sur la situation des individus (par exemple en matière de bien-être, de revenu, d'éducation et de formation, de santé et d'accès à l'emploi ou aux nouvelles technologies) ont tendance à se renforcer. Ceci a pour conséquence de ralentir la diffusion des gains de productivité, la productivité globale et la croissance – qui sont essentielles à toute élévation du niveau de vie multidimensionnel. D'après l'OCDE (2018, p.91), « la sous-utilisation et la mauvaise affectation des ressources dans l'économie – notamment les travailleurs qui se trouvent pris au piège d'activités faiblement productives et d'entreprises n'ayant pas la capacité de s'adapter au contexte changeant – contribuent à la lenteur de la diffusion de l'innovation, aux divergences en termes de croissance de la productivité entre les entreprises à la frontière et celles qui sont à la traîne, et à l'affaiblissement général de la productivité globale ». Il est toutefois à noter que la Belgique figure parmi les pays où le niveau des inégalités de revenus, de même que l'écart salarial entre hommes et femmes, sont les plus contenus. Le risque de pauvreté pour les travailleurs est également bas, bien que les taux d'emploi soient comparativement faibles (Cordemans 2019)³⁰. Assurer la prospérité de la population, renforcer la cohésion sociale et atteindre les objectifs environnementaux sont donc également des éléments cruciaux pour accroître la productivité.

Productivité et finances publiques

§11. La Belgique est aujourd'hui confrontée à des défis concernant la soutenabilité à moyen et à long termes de ses finances publiques, situation qui a été aggravée cette dernière décennie par les crises financière,

²⁸ Conférence internationale du travail – 111^e session, 15 juin 2023, compte rendu des travaux n°7A. Voir également le troisième volet du sixième rapport d'évaluation du GIEC (4 avril 2022) – (point C2 du résumé).

²⁹ Cingano (2014), Dabla-Norris et al. (2015).

³⁰ Les chiffres nationaux les plus récents montrent que les tendances de la pauvreté restent globalement stables par rapport aux années précédentes. Les mesures de soutien prises pendant la pandémie de COVID-19 ont permis d'empêcher une augmentation de la pauvreté, voire de la diminuer. Cela ne signifie pas que les conditions de vie se sont améliorées uniformément pour tous. Les groupes les plus vulnérables sont les personnes au chômage, les personnes issues de l'immigration, les parents isolés, les locataires et les personnes ayant un faible niveau d'éducation (Source : [Statbel](#)).

économique, sanitaire et énergétique. Cela pourrait limiter les possibilités de recours à des instruments budgétaires dans le futur. Dès lors, la croissance de la productivité est aussi nécessaire pour dégager les marges budgétaires permettant d'élargir la palette des choix politiques possibles et ainsi relever les défis tels que le vieillissement de la population, la cohésion sociale (en particulier garantir la viabilité de notre système de protection sociale à long terme) et les transitions écologique et numérique. Dans ses derniers rapports, le Comité d'étude sur le vieillissement a ainsi mis à chaque fois en évidence l'importance du contexte macroéconomique et plus particulièrement des gains de productivité lors de l'estimation du coût budgétaire du vieillissement. Une dette publique élevée et croissante réduit les options politiques disponibles, la marge de manœuvre politique, et elle est susceptible d'accroître la vulnérabilité des politiques publiques, particulièrement dans un contexte de hausse des taux d'intérêt (comme observé actuellement) et des primes de risque.

Travaux du CCE : Horizon 2030-2050

§12. Mené au sein du CCE, le projet Horizon 2030-2050 vise à interroger la manière dont notre organisation socio-économique peut répondre aux défis que représentent les différentes transitions (économique, technologique, climatique...) en étant tout à la fois durable, inclusive, et compétitive. La méthode de travail consiste à dessiner progressivement le monde dans lequel nous vivrons en traçant des routes possibles ; routes possibles entre lesquelles des choix politiques devront être effectués en tenant compte des conséquences économiques, sociales et environnementales de chaque option. 8 axes d'action ont été identifiés par le CCE : décarboner les activités ; préserver les écosystèmes ; maîtriser l'endettement public ; construire la résilience ; stimuler la productivité ; contenir l'inflation ; renforcer l'activité ; garantir un partage approprié de la valeur économique.

Coopération entre les niveaux de pouvoir

§13. Le CCE insiste sur l'importance de la **coopération** entre les diverses entités du pays en vue de répondre aux défis posés. Dans le cadre d'un avis commun (CCE 2023-0301), les conseils économiques et sociaux fédéral et régionaux ont ainsi demandé aux gouvernements des différents niveaux de pouvoir de se mettre d'accord sur un programme concret de coopération, en vue de parvenir à une vision systémique intégrée et des projets de coopération à court terme dans une série de domaines (dont la fiscalité environnementale, la mobilité durable, la planification des infrastructures visant la transition vers une société climatiquement neutre, la politique industrielle, la recherche et développement, le financement et l'inclusion, entre autres en termes de genre), et de mettre sur pied un programme de recherche clair, harmonisé et concerté, ainsi que les investissements nécessaires. Les conseils ont par ailleurs remarqué que, dans le cadre institutionnel actuel, il était possible de faire beaucoup mieux, comme le démontrent les exemples de la plateforme intra-belge Économie circulaire et la vision interfédérale MaaS.

3 Constats

3.1. Diagnostic national

§14. Dans ses différents rapports, le CNP a observé un ralentissement de la croissance de la productivité de l'économie totale en Belgique, comme dans les autres pays de comparaison, au cours des deux dernières décennies. Si l'évolution de la productivité horaire du travail a été préservée lors de la crise du COVID³¹ comparativement à la crise économique et financière de 2008, elle est par contre, en Belgique, négativement impactée par le ralentissement économique qui fait suite à la guerre en Ukraine.

§15. Il convient toutefois de nuancer ce constat. La croissance de la valeur ajoutée, principal indicateur de richesse d'une économie, dépend d'une part de la productivité du travail et d'autre part des heures travaillées. Pour que l'économie belge se développe, il est important de combiner un niveau élevé du volume de travail et une croissance élevée de la productivité du travail – un défi également mis en carte dans des travaux récents du

³¹ Le recours élargi à la possibilité de chômage temporaire a en effet permis une adaptation rapide des heures travaillées, ce qui a entraîné une hausse de la productivité horaire en 2020.

CCE (CCE 2022-2314). Entre 2019 et 2022, la croissance modeste, bien que positive, de la productivité du travail en Belgique s'est accompagnée d'une croissance significative du volume de travail, comme en témoigne la forte création d'emplois en 2021 et 2022. Par conséquent, la croissance de la valeur ajoutée (en volume) en Belgique a été supérieure à celle de la zone euro. Parmi les pays étudiés dans le rapport, seuls les Pays-Bas ont connu un taux de croissance annuel moyen de la valeur ajoutée (en volume) supérieur à celui de la Belgique, en réussissant à accroître de manière significative les deux facteurs cités (volume de travail et productivité). L'Allemagne a connu une contraction du volume de travail, la France une croissance négative de la productivité du travail.

§16. De plus, les caractéristiques ou la nature de la croissance sont également importantes. Les incidences de la croissance économique sur la création d'emplois productifs dépendent non seulement du taux de croissance, mais aussi de l'efficacité avec laquelle la croissance se traduit en emplois productifs. Pour résoudre ces problèmes de gain de croissance de la productivité, les politiques de création d'emploi doivent se combiner avec et s'accompagner de politiques de création de valeur.

3.2. Diagnostic régional

§17. Comme au niveau national, une tendance générale à la baisse de la croissance de la productivité a été observée par le CNP dans les trois Régions belges depuis plusieurs décennies. Sur l'ensemble de la période 2003-2020, les taux de croissance de la productivité horaire du travail diffèrent modérément d'une Région à l'autre (1,0% en moyenne annuelle en Flandre, 0,9% en Wallonie et 0,7% en Région bruxelloise).

§18. Le rapport 2023 du CNP se penche plus particulièrement sur les liens entre productivité et exportations. Il confirme que les entreprises situées dans les branches d'activité les plus productives exportent davantage que les branches d'activité moins productives.

§19. Les exportations sont importantes pour l'économie des Régions³². Les secteurs les plus productifs sont aussi les principaux contributeurs aux exportations. Chaque Région contribue également de façon plus ou moins importante aux exportations des autres Régions. Cela témoigne de l'importance du dialogue et de la coopération entre les Régions.

§20. Dans ce cadre, le CCE invite une nouvelle fois le CNP à présenter ses résultats et à entrer en dialogue avec les différents Conseils économiques et sociaux régionaux du pays. Des domaines importants analysés par le CNP relèvent en effet de la responsabilité partielle ou exclusive des Régions ou des Communautés.

4 Leviers de la productivité et de la compétitivité

§21. Dans son rapport annuel, le CNP identifie trois axes sur lesquels les politiques devraient se concentrer en priorité en vue de stimuler la croissance de la productivité : garantir des investissements publics suffisants, garantir une offre suffisante de main d'œuvre qualifiée, et stimuler l'innovation. Le CCE se penche sur ces trois axes avant de mettre en évidence quelques thématiques complémentaires également importantes pour assurer la croissance de la productivité et la compétitivité : la politique industrielle, la concurrence et le dialogue social.

4.1. Investissements

Investir pour assurer les transitions écologique et numérique

§22. Selon le CNP, la croissance de la productivité, et de la productivité totale des facteurs (PTF) en particulier, nécessite des investissements suffisants dans des infrastructures de qualité. Cela concerne non seulement les

³² Respectivement 21, 82 et 25 milliards d'euros de valeur ajoutée brute ont été réalisés en 2015 pour les exportations dans les Régions bruxelloise, flamande et wallonne. Les exportations employaient respectivement 189 000, 895 000 et 300 000 personnes dans les 3 Régions susmentionnées.

investissements privés, mais aussi les investissements publics. Des investissements sont particulièrement importants pour réaliser les transitions écologique et numérique.

§23. Le CCE partage cet avis. Les investissements sont importants en vue de se diriger vers une économie circulaire³³ et une utilisation des ressources de plus en plus sobre. En effet, la transition écologique à mener va induire une obsolescence accélérée d'une part importante des équipements et du capital. Des investissements sont nécessaires dans les infrastructures liées, entre autres, à l'énergie et à la mobilité. Outre les investissements en capital physique, des investissements seront aussi nécessaires dans des innovations conduisant à des produits et services neutres en carbone ainsi que dans la formation aux nouveaux métiers de la transition climatique et de l'économie circulaire.

§24. Il est également important de ne pas manquer la vague numérique, d'autant plus que les technologies numériques sont dites à usage général, ce qui signifie qu'elles peuvent être utilisées dans presque toutes les branches d'activité – à la condition que ces technologies soient suffisamment diffusées dans l'ensemble de l'économie. L'application de nouvelles technologies numériques est importante non seulement pour la croissance de la productivité³⁴ mais aussi, à condition que le processus soit inclusif et juste, pour la prise en main d'un certain nombre de défis sociétaux (les soins de santé, la mobilité, l'atteinte de la neutralité carbone à l'horizon 2050). En effet, ce n'est que de cette façon que tous les acteurs seront disposés à collaborer à la transition numérique, une condition sine qua non du succès de celle-ci. La transformation numérique devrait créer de nouvelles possibilités d'emploi dans le domaine des technologies émergentes, tandis que d'autres emplois seront, probablement, entièrement ou partiellement automatisés.

Accélérer le rythme et l'ampleur des investissements

§25. Dans un avis commun (CCE 2023-2500), le CCE et le Conseil national du travail (CNT) pointent **une nécessaire accélération du rythme et de l'ampleur des investissements tant publics que privés accompagnée d'un dialogue social** selon les règles légales et conventionnelles existantes afin que notre pays joue un rôle actif dans les transitions verte et numérique et ne soit pas à la traîne par rapport aux autres pays.

§26. Réaliser les investissements publics appropriés nécessite des marges budgétaires et pour cela, le **nouveau cadre budgétaire européen doit intégrer des incitations plus fortes à l'investissement public tout en garantissant la soutenabilité des finances publiques**. S'ils sont bien sélectionnés et réalisés, les investissements constituent une valeur ajoutée au regard de la croissance durable et de l'emploi mais aussi de la cohésion sociale. Ainsi, les investissements ont un effet positif sur la croissance potentielle et donc la croissance à long terme. La croissance potentielle est un élément essentiel pour garantir des finances publiques soutenables, en raison notamment des défis de long terme posés par le coût futur du vieillissement de la population et des coûts causés par les effets des changements climatiques, dans le prolongement des priorités énoncées dans le Green deal européen. Le CCE s'est prononcé sur la réforme de la gouvernance économique européenne à l'occasion de plusieurs avis³⁵. Une synthèse des recommandations du CCE est reprise au chapitre 5.

§27. Au niveau belge, une meilleure coordination budgétaire entre les entités fédérées permettrait à la Belgique d'atteindre plus facilement ses objectifs d'investissement public.

Création du Comité d'étude sur les investissements publics

§28. Le Comité d'étude sur les investissements publics (CEIP), installé à l'initiative du gouvernement fédéral en septembre 2023, devra centraliser et développer de l'expertise en matière d'investissements publics au niveau fédéral et conseiller le gouvernement dans l'élaboration de sa politique d'investissement. Sa mission comporte cinq volets : (1) dresser un état des lieux thématique en matière d'investissements publics ; (2) identifier les besoins et les opportunités en matière d'investissements publics, notamment dans le cadre de la double transition (écologique et numérique) ; (3) identifier et évaluer les obstacles dans la mise en œuvre des

³³ À ce sujet, voir l'avis du CCE sur le projet de Plan d'action fédéral pour une économie circulaire (CCE et CFDD 2021).

³⁴ Voir OCDE (2019b).

³⁵ CCE 2021-3530 : « Avis sur la consultation européenne portant sur le réexamen de la gouvernance économique européenne » ; CCE 2022-0950 : « La consultation européenne concernant le réexamen de la gouvernance économique européenne » ; CCE 2023-2185 : « Réforme de la gouvernance économique européenne ».

investissements publics et des pistes de solutions ; (4) recommander des outils méthodologiques et procédures ; (5) inciter le dialogue technique entre les entités du pays en matière d'investissements publics et organiser l'échange de bonnes pratiques entre elles.

§29. Dans la préparation des rapports et avis, le Comité devra travailler de concert avec d'autres institutions telles que le Conseil national de la productivité, le Conseil central de l'économie ou encore le Conseil fédéral du développement durable.

Favoriser les investissements privés

§30. Les investissements publics doivent avoir un effet d'entraînement significatif sur l'investissement privé et sur sa résilience en général, ainsi qu'un effet multiplicateur démontrable sur le reste de l'économie.

§31. Pour encourager les investissements privés, il faut un cadre réglementaire clair, cohérent et stable, garantissant aux investisseurs la sécurité juridique nécessaire. Celui-ci doit simultanément garantir les droits fondamentaux des travailleurs et des citoyens, la protection de la santé et de l'environnement et éviter un impact négatif sur la vitalité des entreprises (CCE 2021-2780).

§32. On peut en particulier viser à l'amélioration de l'accès au financement et au capital-risque pour les PME, en orientant et en attirant les investissements privés, en réduisant les risques liés aux projets innovants, en surmontant les défaillances du marché et en favorisant des liens plus étroits entre les instituts de recherche et les entreprises. Dans des domaines critiques, où il existe des barrières à l'entrée élevées et des coûts fixes importants, le déploiement d'une aide publique peut être justifiée dès lors que celle-ci est ciblée sur des projets présentant une valeur ajoutée claire afin de ne pas évincer les investissements privés et de préserver des finances publiques saines (Commission européenne 2022, p.16).

Marchés publics

§33. Dans le cadre des marchés publics, les pouvoirs publics ont également un rôle d'exemple à jouer en vue d'encourager les investissements en Belgique. Le CCE s'est prononcé à ce sujet dans un avis visant à tendre vers des marchés publics plus durables qui soutiennent au mieux l'activité et l'emploi local (CCE 2022-2610).

§34. La Belgique performe très mal au niveau des retombées des marchés publics pour son économie. Un quart des marchés publics (24 %) du pays sont en effet attribués à des entreprises étrangères, alors que la moyenne européenne s'élève à 4 %. Plusieurs actions peuvent dès lors être mises en place, selon le Conseil, pour maximiser les retombées des marchés publics sur l'économie belge et l'emploi local, tout en tenant compte du principe de réciprocité : concevoir des marchés publics circulaires, soutenir l'innovation, continuer la lutte contre le dumping social et la fraude sociale.

§35. Selon le Conseil, il est également crucial de veiller à garantir le principe de proportionnalité³⁶, en particulier en ce qui concerne l'accès des PME aux marchés publics. En Belgique, l'accès aux marchés publics pour les PME reste très compliqué et le pays est l'un des plus mauvais élèves européens en la matière.

4.2. Garantir une offre suffisante de main-d'œuvre qualifiée

§36. Les profonds changements qui se produiront dans le monde du travail au cours des prochaines décennies doivent être anticipés et appellent une contribution de tous les acteurs impliqués. Les nouvelles formes d'organisation du travail, notamment, sont à la fois sources d'opportunités et de défis, entre autres en matière de protection sociale et de conditions de travail.

§37. Ces changements impliquent une **responsabilité partagée** entre l'État (niveaux fédéral et régional), les interlocuteurs sociaux, les entreprises et les citoyens (tant les futurs travailleurs que les personnes en âge de

³⁶ Le principe de proportionnalité exige que toute mesure soit à la fois nécessaire et appropriée au regard du besoin à satisfaire.

travailler), y compris pour la formation tout au long de la vie. **Le dialogue social** doit faire partie intégrante du processus d'élaboration et de mise en œuvre des politiques.

§38. La double transition écologique et numérique nécessite de **nouvelles compétences** pour l'ensemble de la population. Comme le CNP le souligne, « les programmes d'éducation et de formation devraient intégrer suffisamment les nouvelles compétences nécessaires aux transitions auxquelles nous sommes confrontés ». Il est probable que les effets de la numérisation et de la décarbonation sur le bien-être des citoyens seront répartis de manière inégale. Ce qui exigera des réponses stratégiques fortes à tous les niveaux de décision. La transformation de l'économie sera une réussite si elle est durable, efficace dans l'utilisation des ressources mais en même temps créatrice de bien-être, inclusive où personne n'est laissé de côté et où la compétitivité et la viabilité des entreprises sont assurées. Elle vise également au renforcement de la résilience en remédiant notamment aux vulnérabilités des chaînes d'approvisionnement.

§39. **La réaffectation de la main-d'œuvre** entre les secteurs d'activité nécessitera des politiques publiques et des investissements dans la reconversion et/ou le perfectionnement professionnels pour permettre de relever efficacement les défis en matière de cohésion sociale et de compétitivité. Le CNT et le CCE plaident pour un apprentissage tout au long de la vie. Il est important que les filières de formations ne laissent personne de côté et puissent rencontrer les besoins des entreprises – petites et grandes. Ces filières devraient permettre, pour tous les citoyens (tant les futurs travailleurs que les personnes en âge de travailler), de faciliter la transition professionnelle du chômage ou de l'inactivité vers l'emploi mais aussi la transition entre emplois et notamment vers des secteurs et des professions émergents. Le gouvernement et les partenaires sociaux ont déjà prévu des trajets de formation. La loi a instauré à partir du 01/01/2024 un droit individuel de 5 jours de formation par an pour un travailleur occupé à temps plein. Ce nombre de jours peut être réduit par CCT sectorielle et il n'est pas applicable dans les entreprises de moins de 10 travailleurs.

§40. Les **entreprises**, pour s'adapter et rester compétitives, auront besoin de travailleurs disposant de compétences et de qualifications en phase avec les besoins du marché. C'est valable pour les entreprises existantes, mais aussi pour les entreprises naissantes et innovantes afin d'exploiter pleinement les opportunités de création d'emploi et de croissance. Cependant, pour répondre à leurs besoins de recrutement, elles devront tenir compte du nombre moins élevé de nouveaux entrants sur le marché du travail en raison du vieillissement de la population. En outre, pour (re)mobiliser les autres réserves de main-d'œuvre, il faudra notamment prendre en mains les défis des inadéquations entre l'offre et la demande de qualifications et de compétences. En l'état actuel, toutes choses étant égales par ailleurs, la pénurie de compétences et de qualifications engendrera une limitation de la croissance (CCE 2023-2500).

§41. La Belgique fait face à d'importantes pénuries de main-d'œuvre. Elle partage ce problème avec l'Autriche et les Pays-Bas, en tête du classement européen. Au fil du temps, ces difficultés se sont intensifiées dans les différentes Régions. La liste des métiers en pénurie est relativement diversifiée, mais trois secteurs notamment y sont surreprésentés : la construction, la santé et les technologies de l'information (Conseil supérieur de l'emploi, 2023). Les pénuries de main-d'œuvre observées risquent d'empêcher les entreprises d'innover et de profiter pleinement des opportunités offertes, par exemple, par le développement de l'e-commerce (CCE 2023-2422).

§42. Du côté des **citoyens** (tant les futurs travailleurs que les personnes en âge de travailler), ceux-ci se retrouvent dans un marché du travail en constante évolution dans lequel les compétences et les qualifications évoluent elles aussi, ce qui peut entraîner des incertitudes pour leurs situations professionnelles et donc pour leurs situations sociales, avec un risque de nouvelles fractures sociales, au détriment surtout des personnes peu qualifiées. Le grand défi de l'amélioration de la concordance entre l'offre et la demande sur le marché du travail s'accompagne dès lors également du défi de la sécurisation des carrières professionnelles³⁷, laquelle doit permettre la mobilité sur le marché du travail tout en assurant une sécurité de revenu et une sécurité d'emploi décent durant l'entièreté de la carrière (CCE 2023-2500). Le CCE estime qu'il est important, en raison des impacts de la double transition écologique et numérique sur les besoins du marché de l'emploi et sur les travailleurs, d'encourager et de promouvoir l'apprentissage tout au long de la vie afin de conserver et d'acquérir des

³⁷ La sécurisation des parcours professionnels accorde aux travailleurs les conditions pour mener à bien et garantir la stabilité de leurs projets professionnels, tout en tenant compte des besoins concrets et des réalités organisationnelles des entreprises.

compétences permettant de participer pleinement à la société et de gérer avec succès les transitions vers et au sein du marché du travail. À cette fin, il est d'ailleurs essentiel que l'employabilité de chacun soit encouragée au travers de la formation tout au long de la vie et dans le cadre d'une responsabilité partagée entre les individus, les employeurs et les pouvoirs publics afin de remédier à l'inadéquation qualitative et quantitative des compétences, et ainsi, pourvoir aux postes vacants.

Augmenter le taux d'emploi et réduire les inadéquations sur le marché du travail

§43. Le CCE mène actuellement un diagnostic sur les carrières professionnelles en Belgique. Cette analyse vise à comprendre à quels moments les individus entrent et sortent du marché du travail et quelles en sont les raisons, afin, dans une phase ultérieure, de voir comment augmenter la participation au marché du travail des personnes en âge de travailler et réduire le taux de chômage global ainsi que de certains groupes spécifiques.

§44. Deux objectifs prioritaires pour faire face aux enjeux du vieillissement sur le marché du travail ont été définis.

§45. D'une part, **augmenter le taux d'emploi**, grâce à une meilleure (ré)insertion ou un meilleur maintien sur le marché du travail des personnes et, en particulier, des groupes à risques dont les travailleurs de 50 ans et plus, les jeunes, les personnes ayant un passé migratoire, les femmes, les peu qualifiés et les malades de longue durée. Concrètement, ceci peut notamment être encouragé en prévoyant des dispositifs d'aide, de soin et d'accueil pour les enfants et autres personnes dépendantes, qui soient disponibles en suffisance, de qualité, et accessibles géographiquement, financièrement et en termes d'horaires ; en supprimant les pièges à l'emploi ; en prévenant le risque de tomber en incapacité primaire et invalidité via des politiques de prévention, d'activation et de réintégration efficaces, en veillant à ce que la faisabilité et l'attractivité des emplois tiennent compte de la capacité de travail de la personne intéressée ; tout en veillant aux conditions de travail. Le CCE rappelle le lien entre emploi, productivité et valeur ajoutée, comme expliqué au chapitre 3.1.

§46. D'autre part, **réduire les inadéquations sur le marché du travail**, en sensibilisant la population aux filières et aux orientations porteuses dans l'enseignement (par exemple les STEM³⁸, l'enseignement ou les soins de santé), en revalorisant certains métiers et les formations techniques et professionnelles, en améliorant les liens entre enseignement et marché du travail, en améliorant la mobilité (inter)régionale et la mobilité professionnelle, en encourageant la formation tout au long de la vie, en réduisant les pièges à la promotion, etc.

§47. Le CCE a par ailleurs réalisé récemment une analyse approfondie de l'insertion des jeunes sur le marché du travail et de l'impact de la crise du COVID-19 sur ces groupes (CCE 2022-2210). Les jeunes peu qualifiés, les jeunes issus de l'immigration et les jeunes en situation de NEET (qui ne sont ni à l'emploi et ne suivent ni enseignement, ni formation), ont été identifiés comme des groupes sur lesquels la politique doit être axée afin d'améliorer l'insertion des jeunes sur le marché du travail et d'éviter que les jeunes vulnérables ne s'éloignent trop du marché du travail. Le CCE souligne la valeur d'exemple du secteur public s'agissant du développement de trajets d'insertion des personnes vulnérables sur le marché du travail.

4.3. Innovation

§48. Comme l'indique le CNP, la Belgique dispose d'atouts en matière de recherche et d'innovation. Dans l'European Innovation Scoreboard, qui fournit annuellement une évolution comparative des performances en matière de recherche et d'innovation pour les États membres de l'UE, la Commission européenne (2023) place ainsi la Belgique dans le groupe des leaders de l'innovation en 2023, en compagnie des Pays-Bas, du Danemark, de la Finlande et de la Suède.

§49. Le CNP souligne que le lien entre l'innovation et la productivité est particulièrement complexe. Ainsi, lors de changements technologiques majeurs, les gains de productivité peuvent prendre du temps à se matérialiser. Il est important de réfléchir à la manière de maximiser les chances d'une telle matérialisation. Il est dans ce cadre

³⁸ Les orientations STEM sont définies comme des diplômes en sciences, mathématiques, informatique, ingénierie, fabrication et construction.

important pour le CNP de comprendre pourquoi les dépenses de R&D n'ont cessé d'augmenter ces dernières années pour atteindre 3,22 % du PIB en 2021, alors que la croissance de la PTF a continué à ralentir.

§50. Le CNP met en avant une série de points d'attention pour le système d'innovation belge : examiner comment les mesures de soutien à la R&D peuvent encore être optimisées en vue de maximiser les retombées de la R&D réalisées (notamment en examinant comment mieux aligner les mesures fédérales et régionales de soutien à la R&D) ; faciliter le processus de dynamisation des entreprises (via une politique axée sur les start-ups et scale-ups, et l'organisation d'un fonctionnement sain du marché) ; examiner si la politique d'innovation en Belgique est suffisamment orientée, entre autres vers une économie à faible émission de carbone.

Les politiques publiques en faveur de la R&D

§51. La Belgique fait face à des constats ou des recommandations répétés d'instances nationales (le Bureau fédéral du plan³⁹, la Cour des comptes⁴⁰) et internationales (la Commission européenne, l'OCDE⁴¹) quant à deux pistes d'amélioration possibles concernant les mesures de soutien à la R&D.

§52. La première piste concerne une meilleure efficacité de certaines mesures de soutien à la R&D. La Cour des comptes (2021) constate notamment que les niveaux politiques fédéral et régional ne se concertent et ne collaborent pas assez pour harmoniser et coordonner leurs politiques en matière de R&D et d'innovation. Dans son dernier rapport pays, la Commission européenne (2023, p.58) indique quant à elle que « le crédit d'impôt R&D et la déduction fiscale des revenus de brevets sont discutables, tandis que d'autres aides publiques à la R&D se sont révélées plus efficaces ». La déduction des revenus de brevets a été remplacée en 2016 (et supprimée en 2021) par une déduction pour revenus d'innovation.

§53. La seconde piste d'amélioration concerne une meilleure valorisation des résultats de la R&D financée par les pouvoirs publics au niveau de l'activité économique et de l'emploi.

Diffusion de l'innovation

§54. Dans son rapport, le CNP constate que la croissance de la productivité est importante dans les entreprises belges situées à la frontière technologique (ce qui témoigne du fait que les nouvelles technologies créent des gains de productivité dans ces entreprises), mais que l'écart avec les autres entreprises s'accroît. Cela semble indiquer que la diffusion technologique est un problème.

§55. Une attention particulière doit être accordée à la manière dont la diffusion peut être stimulée. Si la création de nouvelles technologies est évidemment importante, la diffusion de ces technologies est également considérée comme une source importante de croissance de la productivité agrégée. La divergence croissante de la productivité entre les entreprises qui se trouvent à la frontière technologique mondiale – ce qui signifie qu'elles sont parmi les plus performantes de leur branche d'activité au niveau international – et celles qui sont à la traîne est souvent attribuée à un manque de diffusion des technologies et des connaissances développées à la frontière (CCE 2021-2685). Des recherches supplémentaires apparaissent nécessaires pour comprendre comment améliorer concrètement ce processus de diffusion de l'innovation. Un des axes essentiels – et qui est spécifique à la Belgique – est le rôle joué par les innovateurs, à savoir les centres de recherche collective et de diffusion de l'innovation (en particulier vers les PME) qui sont organisés au niveau sectoriel.

Dynamisme entrepreneurial

§56. Le faible dynamisme des entreprises en Belgique est considéré par la Commission européenne (2023, p.3) comme une explication possible de la faible croissance de la productivité. En effet, la Commission relève que le ratio entre les enregistrements d'entreprises et les faillites en Belgique est l'un des taux les plus bas de l'UE, ce qui témoigne d'un manque de dynamisme des entreprises. Le CCE fait remarquer que le dynamisme entrepreneurial ne peut être réduit à la création et la disparition des entreprises, mais concerne également le

³⁹ Cf. Dumont (2019, 2022).

⁴⁰ Cf. Cour des comptes (2021).

⁴¹ Cf. OCDE (2019a).

développement des entreprises existantes. Une dynamique d'innovation doit être poursuivie et encouragée dans l'ensemble des entreprises, nouvelles comme existantes.

§57. Le CCE souligne l'importance de disposer d'un cadre réglementaire qui facilite l'entrée de nouvelles firmes à haut potentiel et la sortie ou la réorientation des firmes les moins efficaces, et qui permet aux entreprises de se développer et de mettre en place des conditions favorables à l'accroissement de l'efficacité. Dans ce cadre, le Plan national pour la reprise et la résilience (PRR) prévoit une réforme visant à simplifier la charge administrative des entreprises en numérisant entièrement la procédure de création, de modification et de dissolution des personnes juridiques. Il prévoit également une intensification de la numérisation de l'administration publique afin de permettre aux autorités d'accéder directement aux données sur la base du principe de la transmission unique d'informations.

§58. Par ailleurs, il conviendrait d'étudier l'impact des réformes de la législation relative aux faillites de 2018 et 2021 sur le dynamisme entrepreneurial⁴².

4.4. Thématiques complémentaires

Politique industrielle

§59. Pour assurer les transitions écologique et numérique, il faudra veiller à renforcer la résilience de nos chaînes de valeur en réduisant notre dépendance aux autres blocs géopolitiques et en diversifiant nos sources d'approvisionnement (CCE 2023-2500). On peut penser par exemple à la dépendance de la Belgique en matière de terres rares, de matières premières critiques⁴³, d'énergie, de composants électroniques... Cela importe d'autant plus que la Belgique est caractérisée par une consommation primaire d'énergie bien plus élevée que celle des pays voisins – due tant à une consommation plus élevée du secteur de l'énergie qu'à une consommation finale à usage énergétique (en particulier au niveau du secteur de l'industrie⁴⁴ et du secteur du transport) plus élevée que dans les pays voisins (CCE 2023-2430, p.31).

§60. La Commission européenne a publié récemment son « **Green Deal Industrial Plan** » pour la neutralité climatique afin de stimuler le développement des technologies propres dans l'UE et d'assurer l'autonomie stratégique de l'UE en réduisant sa dépendance à l'égard des pays tiers. Elle cherche ainsi à éviter un détournement de l'investissement européen vers les États-Unis sans susciter une course aux subventions entre États membres qui fragiliserait les règles de concurrence équitable. Ce plan constitue un pas positif dans la volonté d'articuler davantage le Green Deal et un agenda de compétitivité et une politique industrielle moderne. Dans la conduite des politiques publiques – et notamment à travers les marchés publics (cf. 4.1) –, il est important que la Belgique joue un rôle dans la révolution des technologies propres, tout en poursuivant des objectifs en matière de recherche, d'innovation, d'emploi, de formation, de création d'entreprises, de lutte contre la pauvreté et de revitalisation du tissu industriel.

§61. Toutefois, l'assouplissement et la perspective d'un recours accru aux aides d'État dans l'UE suscitent des questions quant au maintien du « level playing field » intra-européen et de la saine concurrence ; surtout à la lumière de la situation budgétaire de la Belgique (qui ne dispose pas des mêmes moyens que d'autres plus grands États membres qui ont massivement recours aux aides d'État).

⁴² Une réforme de la réglementation sur les faillites est entrée en vigueur en Belgique le 1^{er} mai 2018. En 2021, le gouvernement fédéral a également procédé à une réforme visant à assouplir l'accès à la procédure de réorganisation judiciaire en Belgique.

⁴³ Cf. Buysse et Essers (2023).

⁴⁴ L'industrie belge est spécialisée dans quelques secteurs spécifiques intensifs en énergie (comme l'industrie chimique et pétrochimique, l'industrie liée au ciment, au béton, l'industrie du papier, et l'industrie liée au métal).

Concurrence

§62. Les questions de concurrence et de concentration constituent une problématique importante eu égard notamment à la concentration du pouvoir de marché ces dernières années aux mains de quelques acteurs, dont certaines plateformes en ligne mais aussi certains secteurs de services. Il subsiste des **obstacles à la concurrence** dans plusieurs secteurs de services, comme le rappellent régulièrement la Commission européenne (2023) et l'OCDE (2020). Ces problèmes de concurrence peuvent constituer un des facteurs explicatifs de la dispersion croissante des performances de productivité entre les entreprises les plus et les moins productives. À cet égard, il convient de souligner qu'en 2021, la Belgique a vu doubler sa proportion de directives liées au marché unique non transposées dans le droit national. La Belgique fait l'objet d'un plus grand nombre de procédures d'infraction que la moyenne de l'UE (Commission européenne 2023, p.63).

§63. Vu l'effet négatif d'une concurrence entravée sur la productivité, le CCE demande que le CNP donne priorité à ce problème dans ses analyses futures.

§64. Le CCE (2021-2780) a déjà souligné à plusieurs reprises le rôle important de **l'Autorité belge de la concurrence** (ABC) dans la poursuite des pratiques anticoncurrentielles, dans le contrôle des principales opérations de concentration et de fusion et en ce qui concerne les abus de position de dépendance économique (B2B) (loi du 4 avril 2019). Si l'ABC s'est vu octroyer une augmentation significative de son budget lui permettant de recruter du personnel additionnel et de procéder à des investissements pour améliorer l'efficacité de son action, l'absence actuelle d'un président nommé porte atteinte au bon fonctionnement de l'ABC et est de ce fait préjudiciable pour les consommateurs et les entreprises. La CCS Concurrence s'est dès lors récemment adressée par [lettre](#) au gouvernement pour lui prier de nommer un président de l'ABC dans les meilleurs délais. L'augmentation des moyens de l'ABC lui a par ailleurs permis d'élargir son champ d'analyse et de se focaliser sur certains secteurs prioritaires. Le CCE plaide pour une augmentation additionnelle du budget afin de donner à l'ABC les moyens suffisants pour analyser de manière approfondie l'ensemble des secteurs de l'économie belge.

§65. Pour combiner des gains de productivité et l'atteinte des défis identifiés précédemment, il faut un cadre propice de politiques publiques qui doivent être bien conçues et cohérentes et garantir un « **level playing field** ». Promouvoir une gouvernance et des relations commerciales qui garantissent un « level playing field » pour les entreprises permet en effet d'éviter une concurrence déloyale avec des entreprises étrangères soumises à des législations moins contraignantes en matière (entre autres) de droits fondamentaux des travailleurs et des citoyens, ou encore de protection de la santé et de l'environnement.

Dialogue social

§66. Les données réunies notamment par l'OCDE attestent que les pays dans lesquels le dialogue social est solide se caractérisent souvent par de meilleures performances économiques et une répartition plus équitable des revenus (OCDE 2018a ; Dosi et al. 2020). Les perspectives de l'emploi de l'OCDE (Araki et al. 2022) étudient plusieurs enjeux structurels qui présentent un intérêt pour le fonctionnement et l'inclusivité du marché du travail dans un certain nombre de pays, comme le phénomène de concentration qui crée une situation de monopsonne sur le marché du travail. Le pouvoir de monopsonne, défini comme une situation dans laquelle les salaires sont fixés en dessous de ce qui prévaudrait sur un marché plus concurrentiel, est comparable au pouvoir de monopole en ce qu'il engendre des pertes d'efficacité économique et entraîne une baisse de la production de l'entreprise et de la qualité des emplois. La proportion de travailleurs en Belgique présents sur des marchés du travail qui sont modérément ou fortement concentrés est faible en comparaison avec les autres pays de l'OCDE étudiés.

§67. Il ressort des travaux d'[Eurofound](#) (2016) que des relations industrielles solides, efficaces et opérationnelles présentent les caractéristiques suivantes :

- ce sont des mécanismes efficaces impliquant les employeurs et les salariés dans la recherche de meilleures performances commerciales et de résultats équitables, conformément au principe de subsidiarité horizontale⁴⁵,

⁴⁵ Selon le principe de « subsidiarité horizontale », les partenaires sociaux sont les mieux placés pour déterminer si un accord doit être mis en œuvre au niveau des partenaires sociaux et des États membres ou au niveau de l'UE (Source : www.eurofound.europa.eu/fr/node/23779).

- ce sont des outils destinés à redistribuer les revenus et à atteindre la paix sociale,
- elles apportent un ensemble de valeurs collectives (telles que la confiance, la paix sociale et la cohésion), non seulement pour les acteurs pertinents, mais aussi pour la société dans son ensemble.

§68. À cet égard, il faut souligner l'importance du contenu et de la qualité du dialogue social.

5 La réforme de la gouvernance économique européenne

§69. Depuis la communication de la Commission européenne (CE) en février 2020, dans laquelle elle évalue le cadre de gouvernance économique de l'UE, le CCE s'est engagé dans l'organisation d'un débat sur les finances publiques et a souhaité apporter sa contribution au débat sur le cadre budgétaire européen à travers la publication de plusieurs avis.

§70. Pour le CCE, il est nécessaire de réformer le cadre budgétaire européen car :

- Il ne permet pas d'atteindre de façon suffisante ses objectifs, à savoir garantir le bon fonctionnement du marché unique et de l'union monétaire, réduire le risque d'une contagion liée à une crise de la dette entre les États membres en dehors de mécanisme d'ajustement entre États membres de l'union monétaire et veiller à ce que la dette de chaque État reste soutenable ;
- Il ne répond pas à un besoin de simplicité et de transparence des règles européennes ;
- Il ne stimule pas suffisamment l'investissement public.

§71. Le CCE a alors proposé quatre pistes de réformes des règles européennes à privilégier, à savoir :

- Le remplacement de la norme du déficit structurel et ses modalités par une norme de dépenses ;
- L'introduction d'une trajectoire de dette différenciée pour chaque État membre, à un niveau qui garantirait avec une grande probabilité la soutenabilité des finances publiques ;
- Des normes européennes qui encouragent les investissements européens ;
- L'introduction d'une politique plus intégrée qui doit compléter la politique monétaire.

§72. Dans son avis du 20 septembre 2023 sur la réforme de la gouvernance économique européenne, le CCE regrette que dans le cadre proposé par la Commission européenne (CE), les investissements publics en faveur de la transition écologique et les autres priorités européennes⁴⁶ ne feront pas l'objet d'un traitement particulier.

§73. Le nouveau cadre budgétaire devrait encourager l'augmentation du niveau des investissements. Aujourd'hui, dans les propositions de la Commission, c'est uniquement prévu lorsque les États membres (EM) qui ne répondent pas au critère de déficit ou de dette choisissent une période de consolidation de 7 ans au lieu de 4. Pour tous les autres EM, aucun objectif chiffré n'est imposé en ce qui concerne le niveau des investissements publics. Pour le CCE, certains projets d'investissement public devraient être exclus de la norme de déficit. Ceci concerne les dossiers d'investissement ponctuels, clairement identifiables, qui renforcent la position nette des actifs et ont un effet multiplicateur démontrable sur la croissance économique (de sorte que la dette contractée est remboursée). Un certain seuil de matérialité peut s'appliquer à ces investissements. Les investissements qui devraient être exclus des calculs du déficit (mais pour lesquels les emprunts augmentent bien la position de la dette) sont donc des investissements nets. À titre alternatif, la règle de comptabilité pour l'enregistrement des investissements dans SEC 2010 devrait pouvoir être adaptée, pour que seuls les amortissements des investissements soient repris dans le budget.

⁴⁶ Les priorités communes de l'Union sont les suivantes : (a) le pacte vert pour l'Europe, notamment la transition vers la neutralité climatique d'ici 2050 et sa transposition au niveau national par l'intermédiaire des plans nationaux en matière d'énergie et de climat ; (b) Le socle européen des droits sociaux, y compris les objectifs connexes en matière d'emploi, de compétences et de réduction de la pauvreté d'ici à 2030 ; (c) le programme d'action pour la décennie numérique à l'horizon 2030, qui se reflète au niveau national dans les feuilles de route stratégiques nationales relatives à la décennie numérique ; (d) la boussole stratégique en matière de sécurité et de défense — Pour une Union européenne qui protège ses citoyens, ses valeurs et ses intérêts, et qui contribue à la paix et à la sécurité internationales.

§74. Un traitement plus flexible des investissements ne supprime pas, par ailleurs, la nécessité de mener une politique budgétaire saine. Il demeure essentiel de veiller à la soutenabilité de la dette publique et de dégager des marges de manœuvre budgétaires.

§75. La question de l'émission de la création d'une « capacité budgétaire » commune financée entre autres par un endettement commun reste peu consensuelle dans l'UE. Un tel instrument permettrait pourtant d'accroître l'investissement public européen, pour renforcer la souveraineté de l'UE et soutenir la double transition, numérique et écologique, à l'image de la Facilité pour la reprise et la résilience (FRR). Le CCE est favorable à un instrument de suivi de la FRR qui renforce le budget pour les investissements dans la transition et qui permettrait aussi de créer des conditions de concurrence équitables pour attirer des investissements cruciaux, notamment pour les transitions numérique, énergétique et climatique.

6 Dialogue avec le CNP et travaux futurs

§76. Le CCE estime utile que le CNP établisse un **programme de travail** sur plusieurs années et qu'il présente une vue sur l'avancement des travaux en cours, ainsi que sur les prochains travaux envisagés.

§77. Le CCE tient à rappeler que le **dialogue** avec le Conseil national de la productivité est important pour que ce dernier puisse s'informer de l'évolution du processus d'appropriation au sein du CCE ainsi que pour garantir une cohérence des analyses et des méthodologies utilisées dans le débat national en matière de productivité et de compétitivité. De plus, il est indispensable d'être à l'écoute des positions exprimées par les différentes organisations représentatives de sorte à pouvoir définir les intérêts qui sont sous-jacents de ces positions. Par ailleurs, il convient de définir les critères communs autour desquels les différentes propositions de politique économique devront être testées pour être acceptées par le plus grand nombre.

§78. Améliorer la compréhension quant à l'évolution de la productivité et de la compétitivité en Belgique permet de mieux définir les politiques publiques susceptibles de stimuler la productivité ainsi que les conditions de leur mise en œuvre. La mise en exergue de la complémentarité et de la cohérence des politiques publiques par le CNP constitue sans aucun doute un apport important des travaux menés par cette institution sur les déterminants de la productivité. À cet égard, le CNP doit pouvoir mener des analyses approfondies, notamment sur la base des demandes formulées par le CCE. Pour cela, il doit pouvoir faire appel à des experts externes. Le CCE demande que des **ressources** soient mises à la disposition du CNP à cette fin.

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