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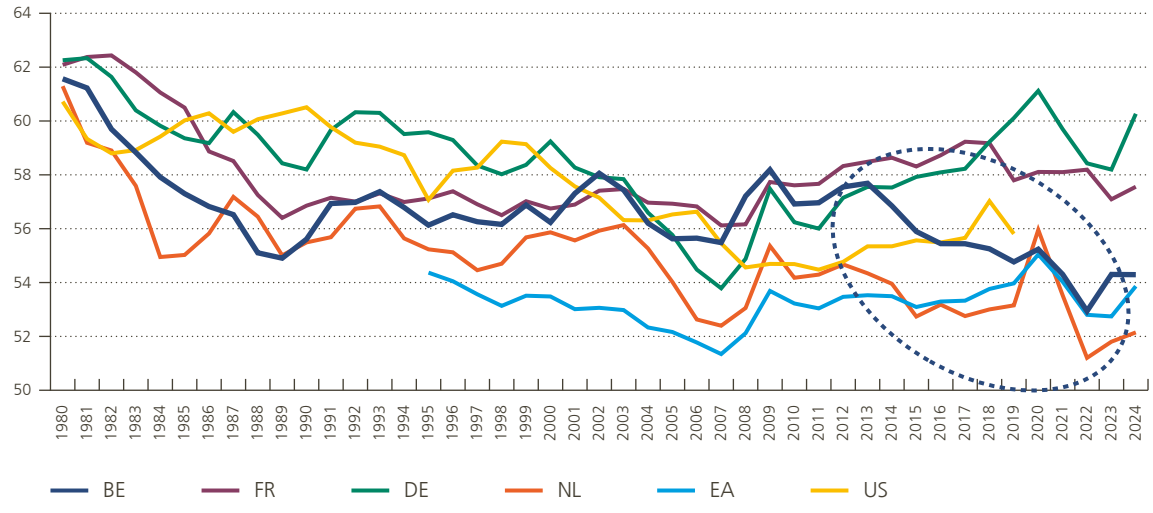
Introduction

Value added is often compared to an economic pie shared between labour and capital. The wage share represents the portion of value added that accrues to the labour factor of production. The evolution of the wage share is closely monitored as it reflects how the benefits of economic activity are distributed between workers and firms and can have important implications for income inequality, competitiveness, consumption and the budget. The wage share has generally been declining worldwide since the 1980s. According to the literature, this is attributable notably to globalisation and technological advances, which have shifted production to more productive firms. Autor et al (2017) call this phenomenon the "rise of superstar firms", meaning those with high profits and hence a low share of wages in their value added. In Belgium, the first pronounced decline in the wage share occurred in the 1980s, after which it remained more or less stable until 2013. In the euro area, by contrast, the wage share declined steadily until 2007. Starting in 2013, the wage share began to decline firmly again in Belgium. This article examines the wage share in Belgium from 2013 to the present.

Figure 1

Long-term trend in the wage share

(compensation of employees, as a % of gross value added)



Source: OECD.

In Belgium, the wage share has been declining since 2013, while the wage share in the euro area has been more or less stable since 2010. This decline may appear counterintuitive, as Belgium has a system of automatic wage indexation which shields household income to a considerable extent from the impact of inflation. In this respect, it should be recalled that a decline in the wage share does not mean that wages have fallen: it simply indicates that wage growth has been weaker than growth in value added. Nevertheless, the trend observed since 2013 raises important questions about the underlying drivers and potential economic implications. Does the decline result from wage moderation policies, changes in the structure or composition of the economy or other (intra-sectoral) factors, such as shifts in firm composition or productivity developments?

This article looks at the development of the wage share in Belgium over the last decade. In the first section, labour cost developments in Belgium are briefly explained and then linked to the wage share. It should be noted that in addition to gross wages and salaries, the wage share also includes employer social security contributions. Reductions in employer social security contributions have curbed labour cost growth, which has exerted downwards pressure on the wage share. We also show that the decline in the wage share is widespread among sectors of activity. We then turn to the contribution of productivity growth, which has outpaced real wage growth. Subsequently, the impact of composition changes in the Belgian economy, at both sector and firm level, is assessed. Changes in the composition of the Belgian economy (for example, the increased weight of the pharmaceutical sector) account for one-third of the decline in the aggregate wage share since 2013. The top 1% of firms in terms of value added are an important determinant of the aggregate wage share. Finally, the article delves deeper into the possible implications of a declining wage share.

1. From wages to the wage share

1.1 Labour costs in Belgium

Inflation is, through wage indexation, the main driver of wage growth in Belgium. Labour costs are determined by indexation, employer social security contributions and other increases stemming from collective agreements and wage drift. Figure 2 shows that, in Belgium, the main driver of labour cost growth over the past two decades has been indexation. As wages in Belgium are automatically indexed, they are adjusted relatively quickly to reflect a rise in the cost of living.

Real wage increases are limited by the Competitiveness Act. Wage formation in Belgium is governed by the 1996 legislation on the promotion of employment and the preservation of competitiveness (amended in 2017) (the "Competitiveness Act"), which acts as a counterweight to indexation. This law prevents labour cost increases in Belgium from deviating excessively from the rate prevailing in its three main neighbours (France, the Netherlands and Germany) by setting a ceiling on negotiated wage increases on top of inflation-related adjustments. Negotiated real wage growth has effectively flatlined since the introduction of a zero margin for real wage increases in 2023. In addition to these factors, the cost of labour can change due to wage drift. Wage drift captures additional components of remuneration, such as performance-based bonuses and compensation for overtime, as well as the effects of changes in the composition of the workforce, but tends to account for only a small portion of the change in total labour cost.

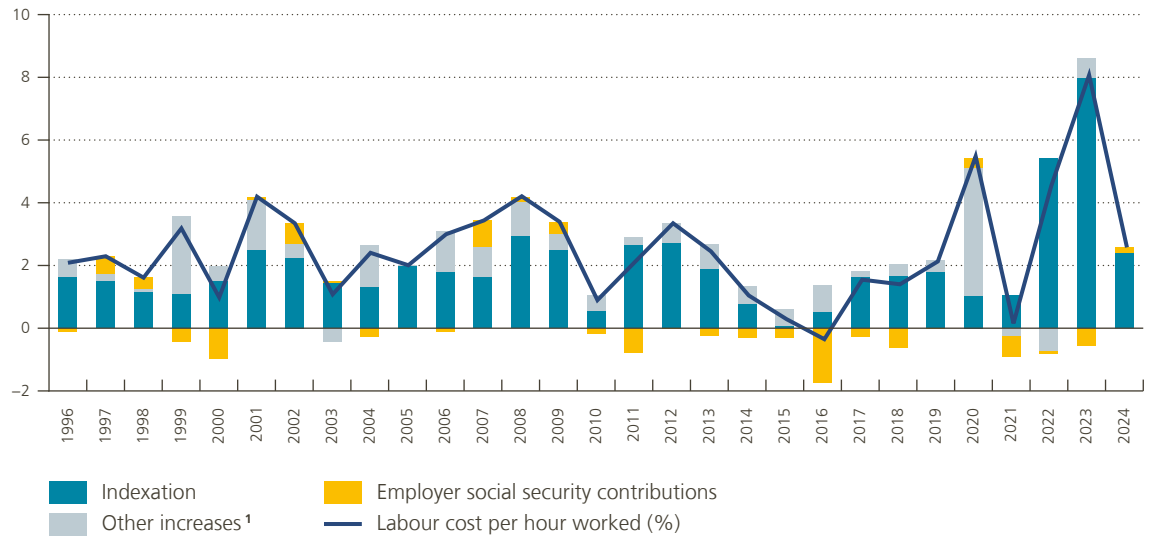
Reductions in employer social security contributions curbed labour cost growth in certain years. For instance, in 2016-2018, a tax shift (i.e., a move away from the taxation of labour towards other tax bases such as consumption and capital) was implemented, notably lowering employer social security contributions in a progressive manner. The most substantial reduction took place in 2016, with another in 2018. In 2021, support measures, including a further reduction in employer social security contributions, were extended to firms to make up for the economic losses they had incurred due to the Covid-19 pandemic and successive lockdowns.

In 2023, a similar package was introduced to help firms cope with higher labour costs owing to the surge in inflation. [1]

Figure 2

Hourly labour cost growth in the private sector in Belgium

(contribution to the change in labour costs, in percentage points, unless otherwise mentioned)



Sources: EC, FPS Employment, Labour and Social Dialogue, NAI, Statbel, NBB.

1 Wage increases defined by joint committees; increases and bonuses granted by firms above those provided for by collective agreements concluded at inter-professional or sector level; wage drift due to changes in the composition of employment and measurement errors.

The compensation of employees – the numerator of the wage share (see below) – consists of gross wages and salaries as well as employer social security contributions. Given that the latter account for +/- 25% of the gross wage bill, the compensation of employees is a broader concept than gross remuneration paid directly to employees. [2] This concept comes close to that of the cost of labour, but does not fully align with it since labour costs also include spending on vocational training, other expenditure by the employer and taxes less subsidies received on labour.

Belgium is considered to have a relatively high hourly labour cost. According to Eurostat, the average hourly labour cost was estimated at €37 for the euro area in 2024. Of the euro area member states, Belgium ranks in second place (after Luxembourg), with an hourly labour cost of €48 on average. However, hourly productivity in Belgium is higher than the euro area average: value added per hour worked was €68 in Belgium and €52 in the euro area in 2024. It should be noted that these productivity figures include the self-employed. While a high hourly labour cost pushes up a country's wage share, high productivity tears it down (see section 2).

1 More information can be found in the NBB's Annual Reports 2016, 2018, 2021 and 2023.

2 Moreover, it should be borne in mind that a sizable share of gross wages is transferred to the government through employee social security contributions and personal income tax.

1.2 Definitions of the wage share

The wage share corresponds to the portion of total value added paid to workers but can be defined in different ways. The most straightforward definition is compensation of employees divided by gross value added:

$$wage\ share = \frac{\text{compensation of employees}}{\text{gross value added}} \quad (1)$$

The compensation of employees is a key component of the income approach to GDP, the latter corresponding to total income earned within a country, i.e. the sum of the compensation of employees, gross operating surplus (including gross mixed income of the self-employed) and taxes on production and imports (net of subsidies).[3] The income approach reflects the way in which income from the production process is divided between the (labour and capital) factors of production and the government. Alternative ways of calculating the wage share are possible, some of which are shown on the left-hand graph in Figure 3:

- In Equation 1, the numerator includes only the compensation of employees (thus excluding the self-employed), even though value added is generated by both employees and the self-employed. This implies that this definition underestimates the true share of wages in total value added. In order to proxy the income of the self-employed, the same average wage for both employees and the self-employed is often assumed. This is of course an imperfect proxy given that the average wage of employees and the self-employed most likely differs. A different approach could consist of using the gross mixed income of households as a proxy for income from self-employment, but as the word "mixed" indicates, this concept includes remuneration for both the labour and capital inputs of self-employed workers. The yellow and green lines in Figure 3 show these two alternatives.
- Gross value added constitutes the denominator in Equation 1 but, alternatively, the compensation of employees could be expressed as a percentage of total GDP (the orange line in Figure 3). The difference between GDP and gross value added is product-related[4] taxes less subsidies (VAT, excise duties, etc.). We chose to exclude these items from the ratio as they do not constitute income for labour or capital and could therefore bias measurement of the wage share.
- Finally, the wage share may be limited to the private sector or to non-financial corporations (S11, the blue line in Figure 3).

Depending on the calculation method, the level of the wage share varies. However, regardless of the method used, the results all reveal a similar path, with relative stability of the wage share between 1995 and 2012 and a more obvious trend decline starting in 2013, partly countered by upward developments in the most recent years. This article focuses mainly on the decline in the wage share observed since 2013, using the simplest definition, namely compensation of employees divided by gross value added (the black line in Figure 3).

The decline observed in the wage share in Belgium since 2013 is generally widespread. At sector level, the highest wage share is in non-market services, which mostly consist of government services such as public administration, defence, education, etc. The very high wage share in this sector partly reflects the way value added is calculated for general government – i.e. the sum of labour costs and depreciation – but also follows logically from the inherently labour-intensive nature of these services. By contrast, the wage share for market services is low, notably as a result of the real estate sector. As stated by the OECD (2024), the value added of the real estate sector includes all (actual and imputed) housing rents in the economy, whereas the corresponding labour income relates only to workers in the sector. In construction and industry, the wage share is generally quite close to that of the total economy. It should be noted that since the wage share is expressed as a percentage of value added, the respective size of the sectoral wage share does not necessarily provide

3 Production-related taxes and subsidies are linked to production activity but are independent of the volume of goods and services produced. Examples include environmental fees, operating licence fees, grants for staff development, wage subsidies, etc.

4 Product-related taxes and subsidies are dependent on the quantity of goods and services sold or imported.

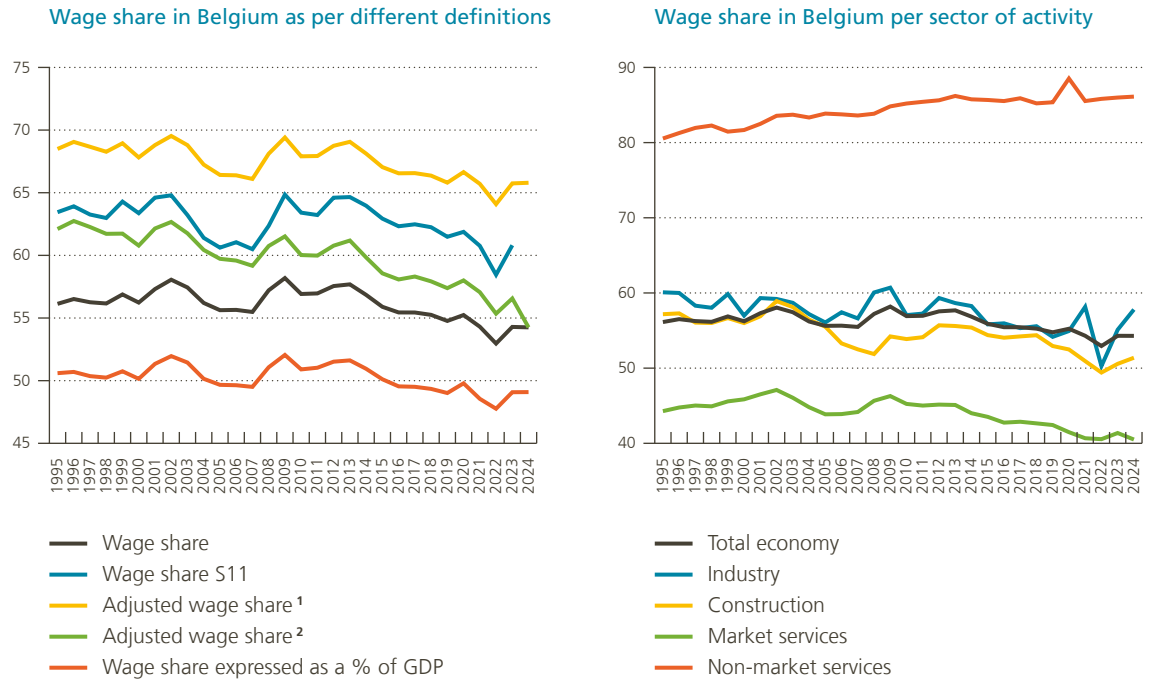
insight into the level of hourly wages. Indeed, average hourly wages are higher in industry than in non-market services, for example.

At regional level, the wage share for all regions has also displayed a downward trend since 2013, but the decline is somewhat more marked in the Flemish and Walloon Regions than in the Brussels-Capital Region.

Figure 3

Wage share in Belgium

(compensation of employees as a % of total value added, unless otherwise mentioned)



Sources: NAI, NBB.

1 Adjusted to include the self-employed by assuming that the average income of the self-employed is equal to the average labour cost per worker.

2 Adjusted to include the self-employed by adding the gross mixed income of households to the compensation of employees.

1.3 Impact of government measures

About two-thirds of the decline in the wage share seen since 2013 can be attributed to a fall in social security contributions expressed as a percentage of value added. In the national accounts, the compensation of employees consists of the sum of gross wages and salaries (in cash or in kind) and employer social security contributions. In Belgium, the latter have amounted to 25% of the total compensation of employees on average over the past three years. While this figure has come down over time, from over 27% in 2013, it remains substantial. Indeed, the rate of employer social security contributions in Belgium is higher than the euro area average (21.5%) and one of the highest among euro area member countries. When expressing compensation of employees as a percentage of value added to calculate the wage share (as per the standard definition given above), a decline of 3.4 percentage points can be observed between 2013 and 2024, of which 2.2 pp is due to the progressive reduction in social security contributions over the period 2016-2018. The remaining one-third is attributable to a fall in gross wages and salaries relative to gross value added.

Since 2013, other measures have been taken to curb growth in labour costs and improve the cost competitiveness of Belgian firms. The federal government imposed a zero-growth cap on negotiated real wage increases for the period 2013-2015. In 2015, automatic indexation (including for replacement income) was temporarily suspended, leading to a 2% decline in real wages (and replacement incomes). Moreover, in 2017, the Competitiveness Act was amended, as a result of which the method used to calculate the margin for real wage increases changed. More precisely, the secretariat of the Central Economic Council (CEC) now has to apply a correction factor (to account for both past differences in labour cost growth between Belgium and its three main neighbours and inflation forecast errors) and an additional safety margin when calculating the margin for real wage increases.

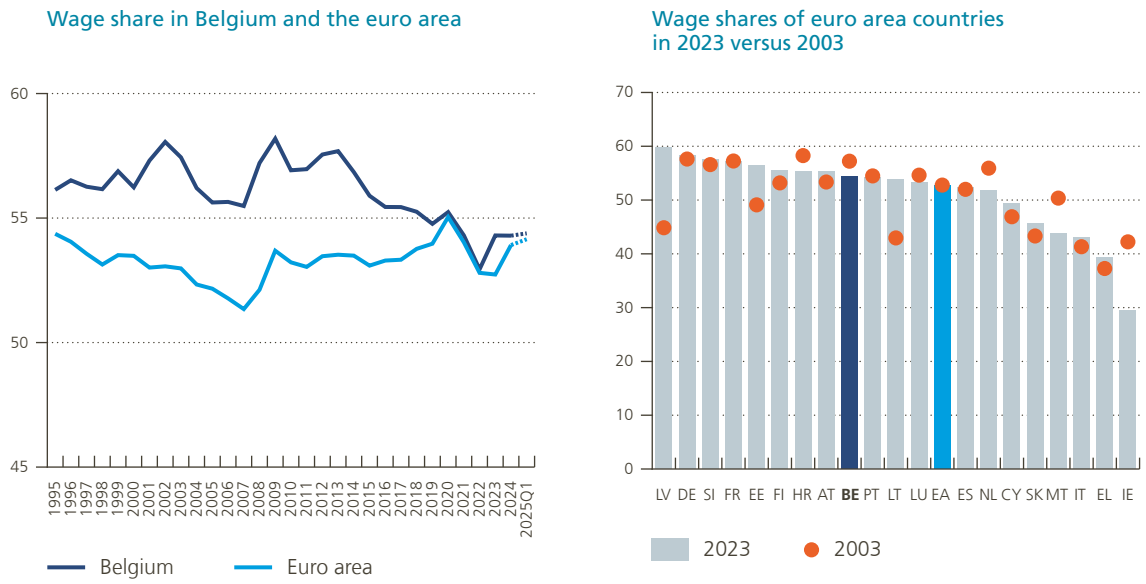
1.4 Benchmarking against the euro area

For about three decades, the wage share in Belgium was somewhat higher than the euro area average but the two recently converged. Over the period 1995-2019, the Belgian wage share was on average around three percentage points higher than that of the euro area, but this gap started to shrink in 2013 as the Belgian wage share moderated while the euro area's stabilised or even edged up somewhat. This ultimately led to convergence of the two series in 2020, although they temporarily diverged again in 2023 following the period of high inflation. Indeed, due to automatic indexation, wage growth is more rapid in Belgium than in the euro area. The reason for this is that wage growth is negotiated in most other euro area countries, meaning it generally takes more time for wages to reflect inflation spikes.

Figure 4

Wage share in Belgium versus the euro area (and its member countries)

(compensation of employees as a % of total value added)



Sources: Eurostat, NAI, NBB.

The euro area average masks clear differences between its member countries, with Latvia and Germany displaying the highest wage share in 2023 (close to 60%), whereas Greece and Ireland had the lowest (below 40%). Differences in the level of the wage share may be attributable to the composition of the economy.

In Germany, for example, a larger share of total value added is generated by the automative industry, which has a higher-than-average wage share. In Belgium, the automotive industry's wage share is also higher than that of other industries and thus higher than the average for the economy as a whole, but the share of this industry in total value added is smaller than in Germany. In Ireland, the opposite is true: the wage share is lower, inter alia because the pharmaceutical industry, which has a low wage share, is more heavily represented.

While the euro area wage share has changed little since 1995, this is not necessarily the case for its individual member countries. Whereas the Baltic states (Latvia, Lithuania and Estonia) have seen their wage share increase since 2003, a decrease was observed in other countries, most notably Ireland, Malta, the Netherlands and Belgium.

2. Impact of productivity growth

While the wage share reflects nominal compensation of employees versus nominal gross value added, it can also be rewritten to reflect the interplay between real wages per hour worked and productivity per hour worked (Battistini, Grapow, Hahn and Soudan, 2022).

To this end, the wage share can be decomposed as follows:

$$\frac{compensation\ of\ employees\ (CE)}{gross\ value\ added\ (VA)} = \frac{CE}{PCD * hours\ worked\ by\ employees} * \frac{hours\ worked * value\ added\ deflator(VAD)}{VA} * \frac{PCD}{VAD} * \frac{hours\ worked\ by\ employees}{hours\ worked} \quad (2)$$

where PCD is the private consumption deflator and VAD the value added deflator.

In other words, the compensation of employees is rewritten as real compensation per hour worked, while gross value added is rewritten as the inverse of real productivity per hour worked. The terms in grey represents a correction factor to take into account the use of different deflators and different concepts of hours worked. From an accounting perspective, the wage share rises when there is an increase in real compensation per hour worked, a decline in hourly labour productivity, a stronger increase in the private consumption deflator than in the value added deflator (which is associated with a deterioration of the terms of trade), a stronger increase in hours worked by employees than in total hours worked, or a combination of these factors.

The main cause of the declining wage share in Belgium is rising labour productivity without a corresponding increase in real hourly wages, as can be seen from the decomposition of the change in wage share since 2013 into the abovementioned components in Figure 5. This was mostly true for the period up to 2022.[5] Starting in 2023, however, the cumulative contribution of real hourly wages gradually became less negative, as there was some recovery of real wage losses following the inflationary period of 2022. The contribution of the correction factor is rather small and tends to average out at zero in the long run. Between early 2021 and early 2024, the cumulative contribution of the correction factor gradually turned from slightly negative to slightly positive, probably as a result of higher (imported) energy prices that fed through more rapidly to the private consumption deflator.

In the euro area, stronger productivity was accompanied by an even greater increase in real hourly wages over the period considered. This allowed for a broadly stable wage share. It should be recalled that the focus here is on the period as from 2013, but, as indicated in the introduction, most countries saw the most substantial decline in their wage share in the years 1980-2007.

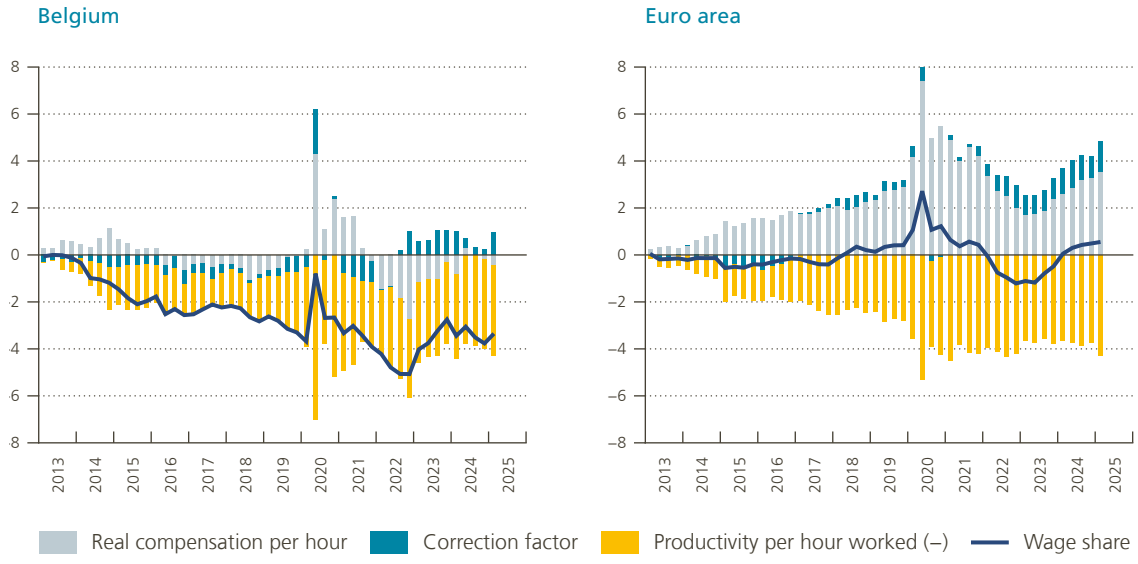
5 The Covid-19 pandemic heavily distorted wage statistics in 2020, especially in the first quarter of the year.

Since the declining wage share and the decoupling of productivity and real wage growth since 2013 appear largely specific to Belgium, these phenomena are probably due more to country-specific factors than to traditional explanatory factors such as globalisation. The finding that the wage share declines when labour productivity grows at a faster pace than real wages is not new and is among the factors cited to explain the decline in labour income shares in a majority of OECD countries observed since the mid-1990s (OECD, 2024). Higher labour productivity is generally attributed to long-term structural drivers such as globalisation, technological progress and changes to product and labour market regulation (ONS, 2024). In Belgium, the moderation in the growth of labour costs that has taken place over the past decade, as described in sections 1.1 and 1.3, has undoubtedly influenced the trend in the wage share since 2013. On the other hand, it is possible that Belgian firms invested in areas like automation in order to enhance productivity growth, specifically in response to relatively high labour costs.

Figure 5

Decomposition of the change in the wage share in Belgium and the euro area since Q4 2012

(cumulative change, in percentage points)



Sources: Eurostat, NAI, NBB.

Notes: Due to the use of furlough schemes, the volume of hours worked plummeted in 2020. In fact, hours worked dropped more than GDP or value added, making it seem as if productivity had increased at the height of the pandemic.

A negative contribution of "productivity per hour" means that productivity per hour has actually grown. Intuitively, if labour productivity rises, the unit labour cost drops, thereby lowering the wage share in the economy.

3. Sector- and firm-level analysis

This section analyses the impact of composition effects on the change in the wage share in more detail. Above, we touched briefly on the influence of the composition of the economy on the wage share. For instance, if sectors of activity with a low wage share gain weight in the economy, this will lead to a lower wage share, all other factors being equal. This section looks at whether these effects have contributed to the decline in the wage share observed in Belgium since 2013.

3.1 Composition effects versus intra-sector dynamics

The aggregate wage share can change over time due to either intra-sector dynamics or changes in the composition of the economy. Assume an economy consisting of only two sectors, each of which contributes 50% of value added. Sector A has a 30% wage share and sector B a 50% wage share. The aggregate wage share is thus 40%. If, over time, more production and value added shift to sector A (with the lower wage share), now representing 60% of value added compared with 40% for sector B, the aggregate wage share will drop to 38%, even if the wage share in both sectors remains unchanged. This is known as a composition effect: the aggregate wage share depends on the structure of the economy, i.e. the weight of its various sectors. If, by contrast, the wage share of a sector or firm drops, while its share of total value added remains unchanged, the wage share for the economy as a whole will also fall. The impact of such intra-firm or intra-sector developments on the aggregate wage share is referred to as intra-sector dynamics.

The wage share in Belgium fell by 3.4 percentage points between 2013 and 2023. In order to determine the share of this total attributable to intra-sector dynamics and that due to changes in the composition of the economy, the method proposed by J-P Berthier (2002) is used to calculate the contribution to the difference between two weighted averages, as described in the Annex.

The change in the aggregate Belgian wage share observed since 2013 is predominantly (two-thirds) due to intra-sector dynamics; about one-third is attributable to composition effects. The analysis was conducted for Belgium at A38 level; the various contributions to the change in the aggregate wage share were then re-aggregated to the main sectors: industry, construction, market services and other. Composition effects were most notable in the industry, although significant intra-sector effects were seen in the pharmaceutical industry as well. Indeed, the pharmaceutical industry has acquired more weight in the overall economy over the past ten years; it now accounts for 2.8% of total value added, up from 1.8% in 2013. Given this sector's relatively low wage share, the aggregate wage share has fallen (as seen in the abovementioned example of an economy with only two sectors). In addition, the pharmaceutical industry has seen its wage share decline further over time, meaning intra-sector dynamics make a negative contribution as well. This is more or less counterbalanced by the intra-sector dynamics of the chemical industry, whose wage share has increased since 2013. As for market services, its contribution to the change in the aggregate wage share stems mostly from intra-sector dynamics. Subsectors such as wholesale and retail trade, financial activities, insurance and real estate activities have all seen their wage share decline since 2013.

Figure 6

The fall in the Belgian wage share is due mostly to intra-sector dynamics rather than composition effects

Sources: NAI, NBB.

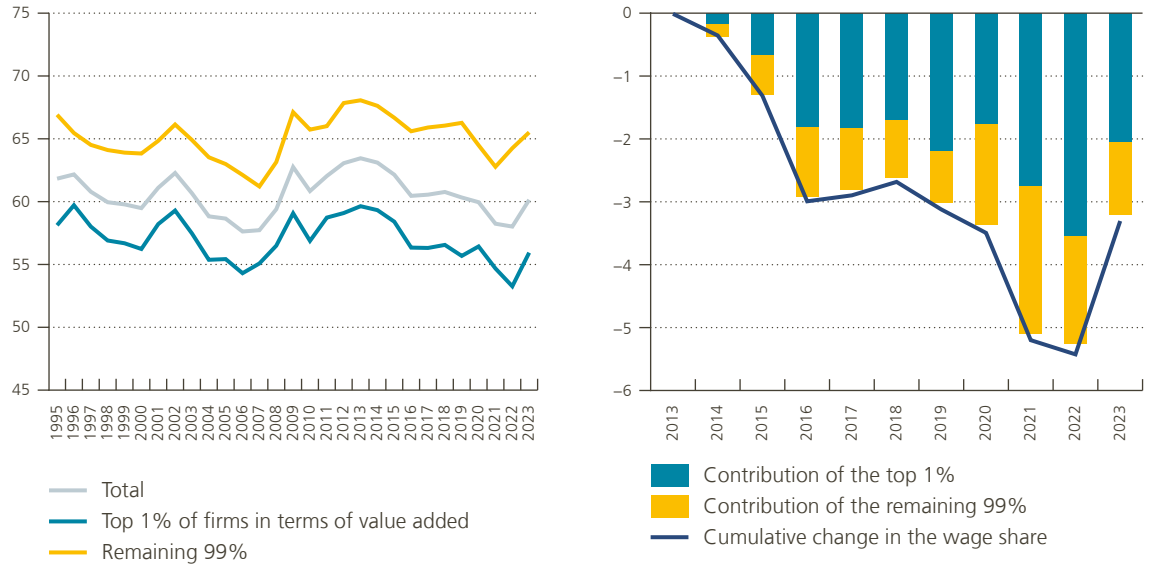
3.2 Impact of the top 1% of firms

Firms with very high value added (the top 1%) have a lower wage share. Based on data for around 170 000 firms (in 2013) to 190 000 firms (in 2023) with employees, we calculated the share of labour costs in their value added.[6] We then compared the average wage share for the top 1% of firms in terms of value added with the average wage share for the remaining 99%. This comparison revealed that firms with the highest value added generally have a lower wage share (see the left-hand graph in Figure 7). The most straightforward explanation for this finding is that these firms are usually more capital intensive, which automatically lowers the wage share.

The top 1% of firms are responsible for a large portion of the fall in the wage share. About two-thirds of the total decline in the wage share over the period 2013-2023 was driven by the top 1% of firms. The question then arises as to whether their share of total value added has risen or whether their wage share has declined more strongly. The answer is both. Their share of total value added increased slightly, from around 55% in 2013 to 56% in 2023. The cumulative decline in the wage share over the same period amounts to –3.7% for the top 1% of firms and to –2.6% for the other 99%.

Figure 7

Wage share of the top 1% of firms as measured by value added versus the remaining 99%



Source: NBB. Analysis based on microdata; only firms with employees were taken into account.

The proportion of firms with a low wage share has increased, but there is heterogeneity. The percentage of firms in the highest wage-share deciles has declined. It logically follows that the percentage of firms in low wage-share deciles has risen over the years. This means that there has been a shift in value added from firms with a high wage share to those with a lower wage share. However, abstracting from firm size and looking solely at the *number* of firms with a lower wage share in 2022 than in 2013,[7] it can be seen

6 The fluctuations in the wage share calculated based on microdata are broadly in line with those recorded for the wage share calculated using macrodata drawn from the national accounts.

7 Only firms in existence in both years 2013 and 2023 were taken into account.

that slightly more firms saw their wage share increase rather than decrease (52% compared to 48%). Thus, it is important not to jump too quickly to the conclusion that all firms saw their share of wages in total value added decline, since the opposite occurred at many – usually smaller – firms. In that respect, it should be kept in mind that the evolution of the wage share is heavily driven by the largest firms.

4. Discussion

4.1 Self-employed workers

Changes in the composition of the workforce, such as a rise in self-employment and non-traditional working arrangements (independent consultants, freelancers, gig work), may contribute to a decline in the wage share (Autor et al., 2017). In other words, these changes can impact how labour income is measured given that the mixed income of the self-employed is recorded together with gross operating surplus in the national accounts.

In Belgium, self-employed workers account for around 17% of total domestic employment; this share has not increased (dramatically) over time. In fact, it began to decline somewhat in 1995, reaching a low (of 16%) in 2008, after which it rose slightly again, reaching 17.5% in 2024. In absolute terms, Belgium has nearly 1.3 million self-employed workers; this number has risen substantially over the past decade. In any case, even including the compensation of self-employed workers through the use of correction factors (see the left-hand graph in Figure 3), the wage share still displays a downward trend.

4.2 Depreciation

It is often asserted in the macroeconomic literature that factor shares (the shares of capital and labour in value added) should be assessed in net terms (after depreciation) rather than gross terms to take into account the fact that capital may become obsolete more rapidly than it did in the past. The idea is that due to higher depreciation, there will be less (net) income to be distributed between labour and capital and that changes in depreciation trends over time may complicate long-run comparisons of factor shares. Indeed, Rognlie (2015) found, for a sample of G7 countries, that a long-term increase in the depreciation rate tends to limit the downward (or upward) trend in the factor share of labour (or capital). In an article on the development of profit margins in Belgium, De Keyser, Langenus and Walravens (2023) also pointed to this explanation, stating that the composition of capital stocks has shifted in favour of, for example, ICT equipment and R&D, which have a shorter service life.

In Belgium, the consumption of fixed capital by financial and non-financial corporations indeed rose from 10% of nominal GDP in 1995 to 12% in 2013 and to 13% in 2023. Nevertheless, while the Belgian wage share expressed as the ratio of compensation of employees to net value added (after depreciation) is higher than when expressed relative to gross value added, it still trended downwards between 2013 and 2024.

4.3 Housing

A final point of discussion pertains to the impact of the real estate sector on the wage share. As mentioned in section 1.2, the wage share for the real estate sector is very low since the value added of this sector includes all (actual and imputed)[8] housing rents in the economy, but without an offsetting wage

8 Imputed rent refers to the rent homeowners would theoretically pay if they had to rent their dwelling on the market.

component. Hence, including the real estate sector will mechanically lower the aggregate wage share and bias its long-term development if the sector's weight in the economy changes. The contribution of the Belgian real estate sector to the change in the wage share since 2013 is incorporated into the analysis illustrated in Figure 6, which shows that changes in the wage share in the real estate sector have had only a moderate (around 0.3 pp) impact on the change of the overall wage share.

Removing the real estate sector from the equation does not significantly change the downward trend observed in the wage share in Belgium. This is in contrast to the findings of Cette, Koehl and Philippon (2019) for France. They propose an alternative solution, i.e. calculating the wage share without the real estate sector. Thus, the aggregate wage share is calculated as the weighted average of all sectors excluding the real estate sector. The weights assigned to the other sectors are based on their share of gross value added for the economy as a whole excluding the real estate sector and are thus larger than their usual weights. The aggregate wage share without the real estate sector is higher than the standard wage share in Belgium, on average 61% (as opposed to 56%). However, this alternative measure of the wage share declined by around 3.4 percentage points between 2013 and 2023, which is in fact very similar to the fall in the aggregate wage share over this period.

5. Possible implications

5.1 Effects on revenue and the composition of GDP

The wage share has implications for government revenue and hence the financing of government spending. A declining share of the compensation of employees in value added weighs on government revenue as a percentage of GDP, as wages are subject to higher taxes than other sources of income (Bisciari et al., 2015). Moreover, the decline in employer social security contributions also weighs on government revenue. According to Atesagaoglu and Yazici (2025), the government should reform its tax system in order to make up for the fall in revenue. Their analysis states that a declining wage share is best accompanied by higher taxes on capital, but only if the wage share has fallen due to a decline in competition or an increase in pure profits.

Household income in Belgium, as is the case in many other developed economies, is heavily reliant on labour income, particularly wages and salaries. Over the past three decades, wages and salaries have accounted for nearly two-thirds on average of household disposable income. Moreover, even if households receive income from other sources (i.e. net social transfers, property income), income from labour is typically considered the most important driver of their consumption expenditure (Basselier, Langenus and Minne, 2019).

The share of household consumption expenditure as a percentage of GDP has fallen, by around one percentage point, since 2013. This trend mirrors the gradual decline in the compensation of employees as a share of gross value added. By contrast, business investment now represents 16% of GDP, which is approximately two percentage points higher than in 2013. Nevertheless, private consumption growth remains the most important driver of real GDP growth. Since 2013, this component has contributed an average of 0.6 percentage points to real GDP growth (which grew on average by 1.5% on an annual basis over that period), compared with an average contribution of 0.4 percentage points by business investment.

These findings regarding the composition of GDP are in line with those of Onaran and Obst (2016): "a priori, one would expect a falling wage share to have negative effects on consumption, but positive effects on investment and net exports." Thus, the impact on GDP growth is multifaceted, and the net outcome depends on whether the positive effect on investment and net exports outweighs the downward impact on consumption. In 2016, Onaran and Obst found that the decline in the wage share had stimulated growth in Belgium, one of the few euro area countries where a positive impact was observed, due to it being a small, open economy. However, their study focused on the wage share from 1960 to 2013, thus just before our period of analysis.

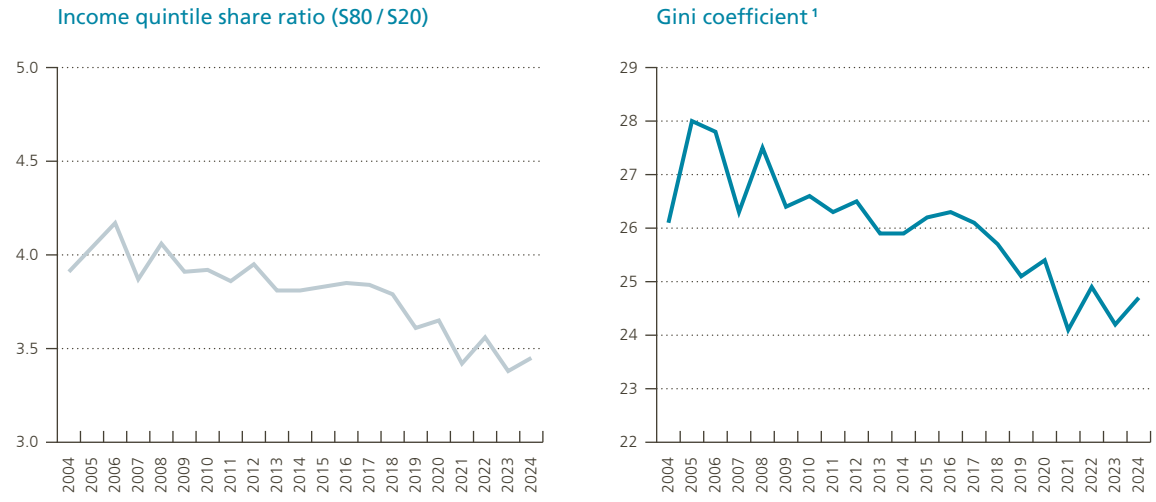
5.2 Inequality

A decline in the wage share is generally associated with an increase in overall inequality (Atkinson, 2009). This is because labour income is generally more evenly distributed across the population than capital income, meaning a fall in the wage share typically disproportionately benefits higher-income households. It should be kept in mind, however, that this relationship concerns the distribution of *primary income*, i.e. income before taxes and transfers. The distribution of *disposable income* – the ultimate determinant of inequality – is shaped by government intervention through taxes and social transfers, which can (partially or fully) offset rising inequality.

For Belgium, this association does not hold, as the decline in the wage share seems to have been accompanied by a drop in inequality. We proxied inequality using the S80/S20 income quintile and the Gini coefficient. Both measures have declined over the past decade. In Belgium, a fall in the unemployment rate likely prevented the declining wage share from pushing up inequality. More specifically, the Belgian harmonised unemployment rate fell from 8.5% in 2013 to 5.8% in 2024. This hypothesis has also been raised by the European Commission (2007), which postulates that an increase in income inequality due to a falling wage share may be offset by a decline in the unemployment rate.

Figure 8

Measures of income inequality in Belgium



Sources: Eurostat, Federal Planning Bureau.

1 Gini coefficient of equivalised disposable income, as per EU-SILC. The Gini coefficient measures inequality on a scale from 0 to 100, with higher values indicating greater inequality.

6. Conclusion

This article examines the development of the wage share in Belgium, which has generally declined since 2013, in contrast to the more stable euro area average. A diminishing wage share has been observed in nearly all sectors and across all regions. At the macroeconomic level, it appears that the decline in the aggregate wage share is due to an increase in productivity per hour worked since 2013, which has not been accompanied by a similar increase in real hourly wages. This could be due to the country's wage moderation policies and progressive reductions in employer social security contributions since 2013.

Composition effects have contributed to the fall in the wage share, particularly in the industry, but account for only one-third of the overall downward trend. Analysis shows that the decrease in the aggregate Belgian wage share between 2013 and 2023 is only partly due to changes in the weights of the various sectors in the economy. One example is the pharmaceutical industry, whose weight in the Belgian economy has increased in recent years, but which is typically more capital intensive and thus has a lower wage share. As this sector now represents a larger share of total value added, its lower wage share carries relatively more weight. The largest portion of the decrease in the aggregate wage share (two-thirds) can be attributed to a fall in the wage share in the individual sectors, particularly market services.

Large firms with a lower wage share also gained in importance. At firm level, production has shifted somewhat over time to firms with a lower wage share: those with the lowest wage shares accounted for a larger share of value added in 2022 than in 2013. This analysis also reveals some heterogeneity; although the aggregate wage share has fallen since 2013, slightly less than half of firms actually saw a drop in their wage share over that period. The change in the aggregate wage share is in fact strongly determined by the largest firms. These have reported a relatively larger fall in their wage share since 2013 and account for a greater share of total value added.

A declining wage share has implications. First, it is unfavourable for the government budget. In other words, when a smaller share of the economic pie goes to labour, government tax revenue falls as labour income is typically the most important source of such revenue. Second, it affects the composition of GDP, to the detriment of household consumption and to the benefit of business investment and net exports. The net impact on (potential) growth depends on which of these components predominates.

A declining wage share is generally associated with higher inequality, but we find no evidence for this in the case of Belgium. Income inequality indicators for Belgium suggest that inequality has declined over the past decade, despite the fall in the wage share. The drop in the unemployment rate most likely contributed to this.

In the most recent period, a partial recovery of the wage share has been observed as a result of rising real wage growth which has outpaced productivity growth. Continued monitoring of these dynamics is warranted given the implications for income distribution, consumption and investment.

Annex

In order to determine the change in the wage share attributable to intra-sector dynamics and that due to changes in the composition of the economy, the method proposed by J-P Berthier (2002) is used to calculate the contribution to the difference between two weighted averages, the aggregate wage share in 2023, WS_{2023}, and the aggregate wage share in 2013, WS_{2023}.[9]

The aggregate wage share in a given year (for example, WS_{2023}) is the product of sector-specific wage shares $ws_{i,2023}$ and the weight $share_{i,2023}$ of each sector *i* in the total economy's value added:

$$WS_{2023} = \sum_i ws_{i,2023} * share_{i,2023} \quad \text{with } \sum_i share_{i,2023} = 1,$$

To determine how much each sector *i* contributed to the total change in the aggregate wage share over time, for example between 2023 and 2013, the following equation is used:

$$C_i = share_{i,2023}\left[ws_{i,2023} - WS\right] - share_{i,2013}\left[ws_{i,2013} - WS\right]$$

$$\text{with } WS = \frac{1}{2}\left[WS_{2023} + WS_{2013}\right]$$

The total sum of contributions across all sectors *i* equals the total change in the aggregate wage share between 2013 and 2023:

$$\sum_i C_i = WS_{2023} - WS_{2013}$$

The contribution C_i above can be rewritten as follows:

$$C_i = share_{i,2023}ws_{i2023} - share_{i,2013}ws_{i,2013} + WS\left[share_{i,2013} - share_{i,2023}\right]$$

$$C_i = \frac{1}{2}share_{i,2023}ws_{i2023} + \frac{1}{2}share_{i,2023}ws_{i2023} - \frac{1}{2}share_{i,2013}ws_{i,2013} - \frac{1}{2}share_{i,2013}ws_{i,2013} + WS\left[share_{i,2013} - share_{i,2023}\right]$$

Or, to show the two effects more clearly:

$$C_i = \frac{1}{2}(share_{i,2023} + share_{i,2013})(ws_{i2023} - ws_{i,2013}) + (share_{i,2023} - share_{i,2013})\left(\frac{1}{2}(ws_{i2023} + ws_{i,2013}) - WS\right)$$

The first term in green represents the impact of intra-sector dynamics on the wage share of sector *i* between 2013 and 2023. The second term represents the impact of changes in the weight of sector *i* in the economy.

9 Such a decomposition was also done for the French and German profit shares by Dervaux and Plane (2021).

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Conventional signs

€	euro
%	percentage

List of abbreviations

Countries or regions

EA	Euro area
AT	Austria
BE	Belgium
CY	Cyprus
DE	Germany
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
IE	Ireland
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
MT	Malta
NL	The Netherlands
PT	Portugal
SI	Slovenia
SK	Slovakia

Other countries

US	United States

Abbreviations

CE	Compensation of employees
CEC	Central Economic Council (Belgium)
EC	European Commission
EU-SILC	European Union Statistics on Income and Living Conditions
FPS	Federal public service

GDP	Gross domestic product
INSEE	Institut national de la statistique et des études économiques
NAI	National Accounts Institute
NBB	National Bank of Belgium
OECD	Organisation for Economic Cooperation and Development
ONS	Office for National Statistics
PCD	Private consumption deflator
S11	Non-financial corporations sector
VA(D)	Value added (deflator)
VAT	Value added tax
WS	Wage share

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