

## 5. Placing the economy on a broader footing

*Like many other European countries, Belgium is facing significant challenges, specifically related to its steep government debt levels, the budgetary costs of population ageing, its low employment rate and the marked slowdown of productivity gains. Key measures have been implemented since 2011 and the newly elected government announced further steps after the May 2014 elections, with pension reform again claiming a central position. More generally, job creation in the market sector and productivity enhancements should help assure a sustainable consolidation of public finances. Eight out of ten jobs created between 2000 and 2013 are mainly paid from government resources and labour costs in Belgium are higher than in neighbouring countries, particularly due to very high fiscal pressure. These costs affect the demand for low-skilled labour and hamper the transition to paid work. To improve this transition, the country needs to introduce appropriate financial incentives, coupled with education and activation policies to help reduce labour market mismatches. Smoothly functioning product and labour markets should also encourage a reallocation of production factors to the most efficient companies, and serve as an important source of productivity gains in the economy, notably in the services sector. However, Belgium is struggling with thin business creation. Meanwhile, long-life-cycle investment is required to prevent looming shortages in electricity supplies, for which a stable and predictable regulatory framework is a prerequisite.*

### 5.1 Major challenges

In 2014, the Belgian economy again performed less well than expected, as was generally the case elsewhere in Europe. Yet the rate of fiscal consolidation slowed, monetary policy remained accommodating and financial conditions were favourable. This underlines the need to reinforce the economy's ability to boost economic activity and employment on a long-term basis. There is a need to strengthen the economy's resilience to strong cyclical fluctuations and, at the same time, in combination with Belgium's fiscal policy, to safeguard prosperity and consolidate support for the social protection of today's and future generations.

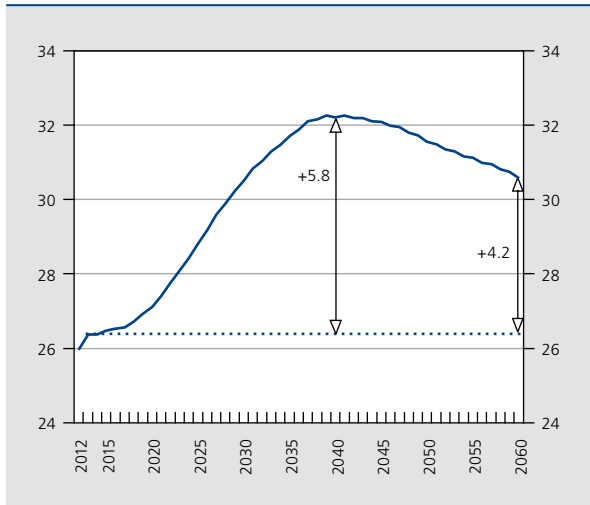
In this respect, Belgium faces the same challenges as most other European countries. It should therefore follow the shared European strategies and comply with the recommendations that have been drawn up. In doing so, it will contribute to the proper functioning of the Economic and Monetary Union (EMU), which brings major benefits for

the country. That said, Belgium has specific characteristics that require special treatment and priorities in order for the economy to be able to perform optimally.

Characteristics that are specific to Belgium are the high (and still rising in 2014) level of public debt, the budgetary costs of ageing, the low employment rate and the sharp downturn in productivity gains.

High public debt reduces the scope of budgetary policy to help cushion cyclical downturns and makes the economy more vulnerable to increases in financing costs, especially if these continue to rise. What is more, the budgetary costs of ageing are very high in Belgium, and accelerating fast. According to the most recent forecasts from the Belgian Study Group on Ageing (July 2014), the weight of benefits as a percentage of GDP will add 5.8% between 2013 and 2040 if policies are left unchanged; and the European Commission is predicting an even stronger increase on the basis of other macroeconomic hypotheses and different expenditure parameters.

**CHART 78 BUDGETARY COSTS OF AGEING**  
(in % of GDP)



Source: Study Group on Ageing.

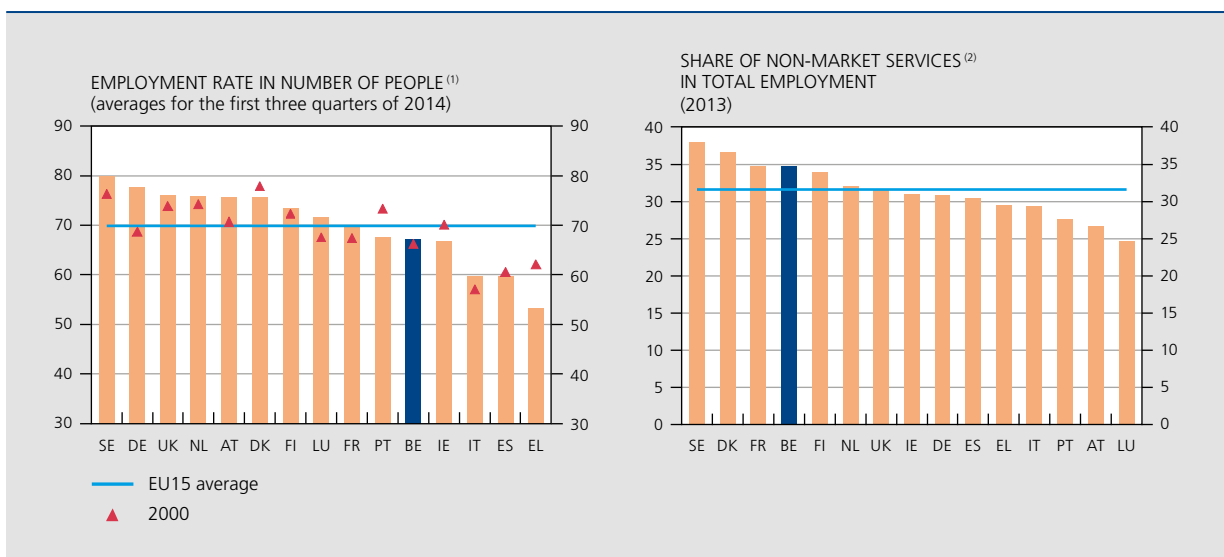
Since the previous government had launched an initial range of measures – whose effects were factored into the Study Group on Ageing forecasts – the newly elected federal government has announced it will tighten up the age and minimum career length conditions for early retirement, raise the statutory pension age to 66 in 2025 and 67 in 2030, and review the parameters for calculating civil

servants' pensions. With no precise implementing details available at this stage, it is not yet possible to estimate the effects of these reforms on the cost of an ageing population. It will take a more detailed assessment to work out to what extent these new measures might reduce these costs, especially in the early stages when they will grow the fastest.

The employment rate amongst people aged 20-64 years averaged 67.2 % in the first three quarters of 2014. Not only is this 2.6 percentage points below the EU15 average and nearly 13 percentage points lower than in Sweden, it is well below Belgium's own objective of 73.2 % set in the context of the Europe 2020 strategy. The economic crisis has undoubtedly squeezed the employment rate, but does not entirely explain why Belgium is falling behind, as demonstrated by the modest difference between the unemployment rate of 8.6 % on average in 2014 and the structural unemployment rate of 7.8 % according to EC estimates.

The employment rate for the 55-64 age bracket is clearly too low (42.3 % compared with an average 53.8 % for the EU15), although it has risen significantly since 2000. The same applies to low-skilled workers (46.5 % of those who have not obtained a certificate of higher secondary education or the equivalent are in employment, against 52.8 % for the EU15). Employment is particularly low among nationals from outside the EU, only 41 % of

**CHART 79 INTERNATIONAL EMPLOYMENT COMPARISON**



Source: EC.

(1) As a % of the population aged 20-64 years.

(2) As a percentage in line with the national accounts. The non-market services comprise public administration, national defence, education, health care, social services and other services.

**TABLE 25** EMPLOYMENT TRENDS BY MAIN BRANCH OF ACTIVITY

(in thousands of people)

	Change	Level
	2000-2013	2013
Domestic employment . . . . .	429	4 543
Market activities <sup>(1)</sup> . . . . .	159	2 966
Non-market services . . . . .	270	1 577
<i>p.m. Service vouchers</i> . . . . .	118	118
<i>p.m. Jobs largely funded by the government</i> <sup>(2)</sup> . . . . .	352	1 659

Sources: NAI, NSSO.

(1) Agriculture, industry, construction, trade, transport, hotels and restaurants, information and communication, financial and insurance activities, real estate activities and business services.

(2) Jobs in non-market services and estimated share of service-vouchers based employment in market activities.

whom are in work – i.e. almost 30 percentage points less than Belgian nationals. Other categories, such as women and the under 30s, also have a lower probability of being employed, while regional differences are also very marked, with the employment rate in Flanders over

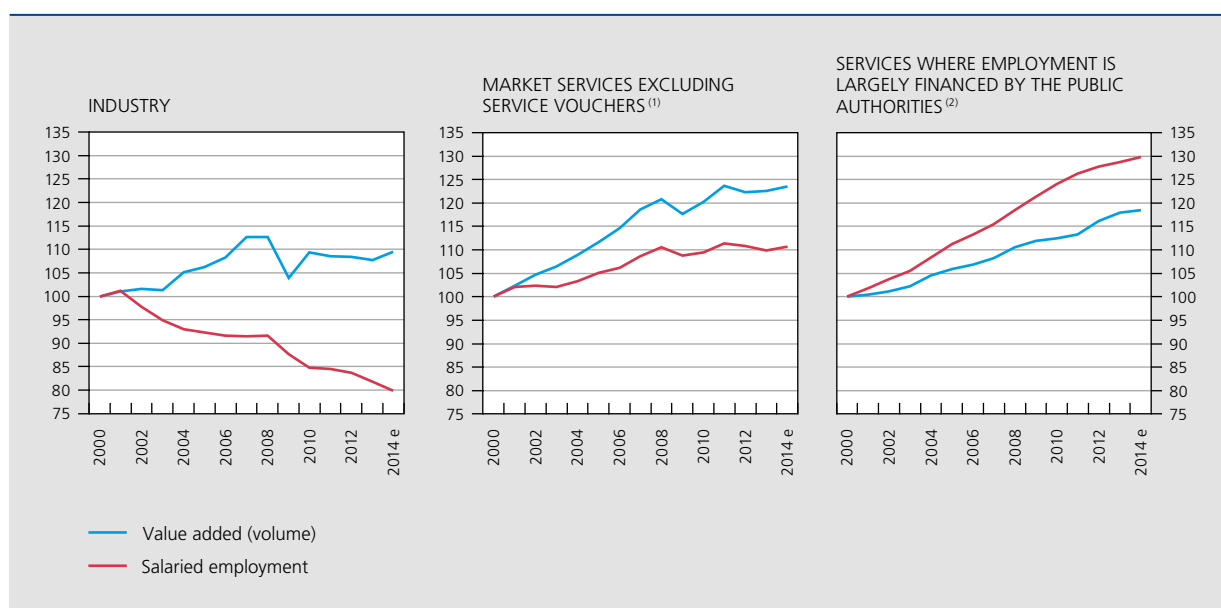
10 percentage points higher than in Wallonia (71.8 % as against 61.7 %) and Brussels (58.4 %).

What is more, the percentage of jobs in the non-market sector is relatively high in Belgium, standing at 34.7 % in 2013 compared with an average 31.6 % in the EU15. In fact, employment growth in Belgium since the early 2000s has been mostly on the back of the net creation of jobs that are partly or wholly funded by the government. And this does not just concern additional people in public administration and education, who saw their numbers swell by 100 000, but primarily around 170 000 extra workers in health care and social services and people who work for private sector employers under the service voucher scheme. In all, an estimated eight out of ten jobs created between 2000 and 2013 primarily rely on government funding.

Value added and employment trends vary widely from one sector to the next. In industry, growth in economic activity was rudely interrupted by the great recession, the lingering effects of which had still not disappeared by the end of 2014. The sector's value added increase is in stark contrast with its falling employee numbers, and reflects an accumulation of significant productivity gains. These are much more modest in market services, where value added growth more closely reflected employment,

**CHART 80** EMPLOYMENT AND VALUE ADDED IN THE MAIN BRANCHES OF ACTIVITY

(data adjusted for seasonal and calendar effects, indices 2000 = 100)



Sources: NAI, NBB.

(1) Trade, transport, hotels and restaurants, information and communication, financial and insurance activities, real estate activities and business services, disregarding service-voucher jobs from market activities.

(2) Non-market services, including service-voucher-related employment in market services.

while the crisis had much less of an impact and proved more temporary than in industry. By contrast, non-market services hardly felt the recession at all: employment was up sharply and staged the highest growth in the economy, with economic activity trailing slightly behind.

Public services and personal service activities undoubtedly contribute to community well-being, and respond to the needs of a society whose socio-demographic make-up and lifestyles are changing. By providing education and health care, in particular, these services also support growth potential. But these trends also imply risks – to the sustainability of public finances in particular – if they do not coincide with sufficient job creation in the market sector. Sustainable public finances can only be secured if the economy has a sufficiently wide range of income-generating activities, as non-market services that weigh on the primary balance are not neutral for government budgets.

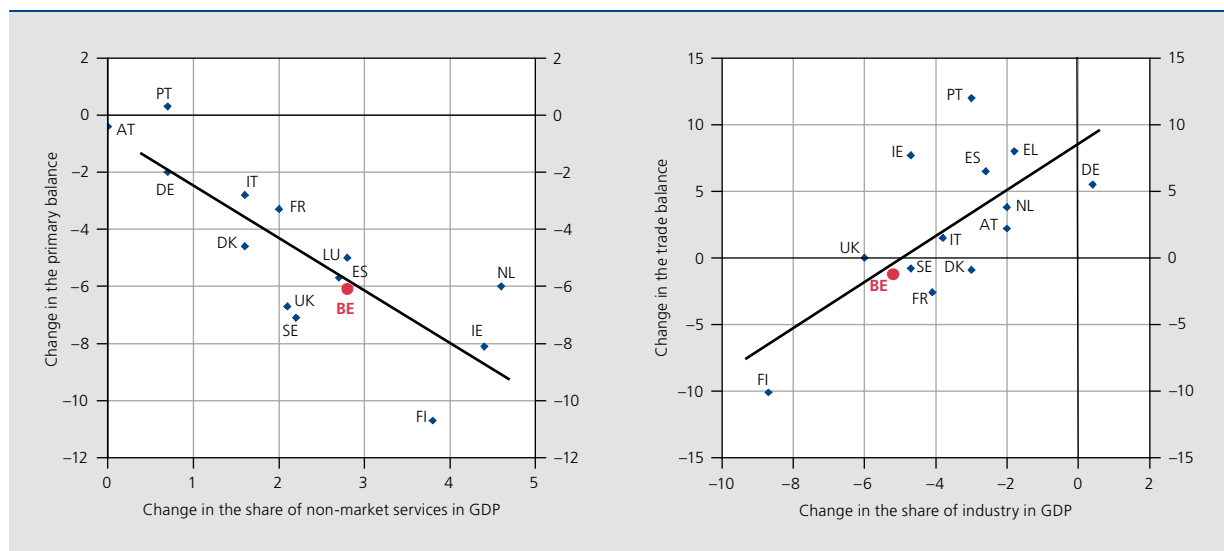
While the Belgian economy was changing in structure, its trade balance also deteriorated, from a surplus of 2.9% of GDP in 2000 to a deficit of 0.2% in 2013 according to the balance of payments. Broadly speaking, a decline in the relative weight of market activities – and industry in particular – erodes an economy's ability to export goods and services. The 2002-2013 period witnessed net annual destruction of jobs in the manufacturing industry, which lost a total of no less than 117 000 jobs.

To a degree, the decline ties in with restructuring of production processes in industry itself: jobs that were previously done within the sector have been transferred to service suppliers to create greater flexibility and improve cost control, and research into the production process underlying exported goods has shown that part of their value lies in services sectors providing intermediary services to the manufacturing industry, such as legal and accounting services, management, services from architects and engineers, supervision, technical analysis and so on. Service suppliers increasingly also operate as commercial go-betweens, taking care of re-exported goods, or acting as an intermediary in the export of Belgian-made goods. That said, de-industrialisation has also brought a discontinuation of certain product lines that have only partly been replaced by new chains. With industry remaining the gateway to the global economy and the first to flag up new demand, a declining industrial sector weighs down on the trade balance.

More so than services, industry is a key source of productivity gains in the economy. Estimates show potential growth – and more specifically total factor productivity (TFP) – to have slowed in Belgium since the 2008-2009 economic recession. An international comparison flags up barriers that curb TFP growth, both in industry and in services – the latter typically known for weaker TFP figures.

Companies typically develop on their own merits and qualities, conquer positions in global value chains and

**CHART 81** PUBLIC FINANCE AND TRADE BALANCE CHALLENGES  
(changes between 2000 and 2013, in percentage points of GDP)



Source : EC.

so support productivity and employment, and some companies in Belgium are outstanding at doing just that. However, an analysis of the makings of a successful process reveals that the government also has a role to play, by taking measures to enhance intangible capital, channel resources to the most productive companies, encourage the implementation and spread of innovation, provide effective infrastructure and facilitate appropriate funding. More broadly, the government should create the conditions that help the economy create more jobs. All other things being equal, costs will be a decisive factor for where the different stages of the value chains will be based, both industrial production and its related services. And incidentally, this also applies to activities that focus on domestic demand, such as construction.

At the end of 2011, Belgium launched a series of key measures to address the structural problems vexing the domestic economy. New federal, community and regional governments took office in October 2014 and are planning their next moves in this direction. In view of the challenges and the feedback loops between them, these measures and their effects will demand close and constant scrutiny, as it would appear essential to operate the levers of employment creation and productivity development that will help achieve a sustainable consolidation of public finances.

## 5.2 Boosting job creation in the market sector

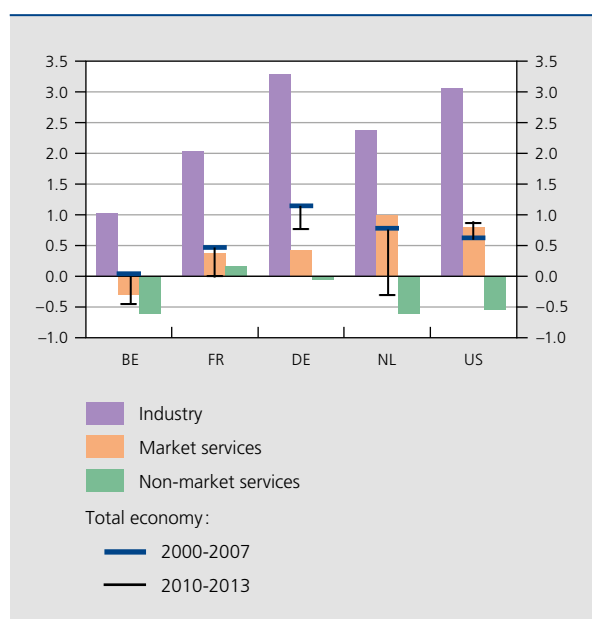
Creating more employment by encouraging job growth in the market sector means striking a better balance between supply and demand in the labour market. To that end, the labour market must operate flexibly in order to allow more robust demand from employers to match an appropriate supply of labour of the right quality. The World Economic Forum puts Belgium in 18th position among the 144 countries it compares in its Global Competitiveness Index (7th among EU15 countries). However, it performs worst on labour market efficiency, where it ranks 60th (10th among EU15 countries). This indicator draws on actual data (participation of women, redundancy costs) and on the annual WEF Executive Opinion Survey. There are five factors executives identify as hampering the labour market in Belgium: the effect of taxation on incentives to work (141st out of 144 countries), its strict hiring and firing practices (139th), its centralised wage negotiations (129th), the weak link between wages and productivity (100th) and, lastly, the lack of cooperation between social partners (78th).

This perception of Belgium's executives matches earlier empirical findings, such as the importance of fiscal and parafiscal pressure on income from employment and the rather loose correlation between productivity and labour costs.

OECD data suggest that employment protection rules governing temporary contracts and individual redundancies of people on permanent contracts in Belgium are not really any more rigorous than in other euro area countries. By contrast, collective redundancies are subject to much stricter rules. Available indicators for an international comparison relate to the situation as at 1 January 2013. Two important developments have taken place since then. The first is the harmonisation of the status of blue-collar and white-collar workers; some points still have to be firmed up but blue-collar workers will be offered wider protection. And the second is the simplification of company closure and collective redundancies procedures (Renault Law), planned by the government, particularly by shortening them.

Many European countries have taken a range of measures concerning the functioning of the labour market, more particularly countries that were faced with dramatic increases in unemployment in the wake of the 2008 economic and financial crisis and the social repercussions of greater joblessness. Their implementation is in many cases so recent as to make it impossible to gauge their outcomes. A common trend would appear to be greater flexibility in terms of working hours (easier

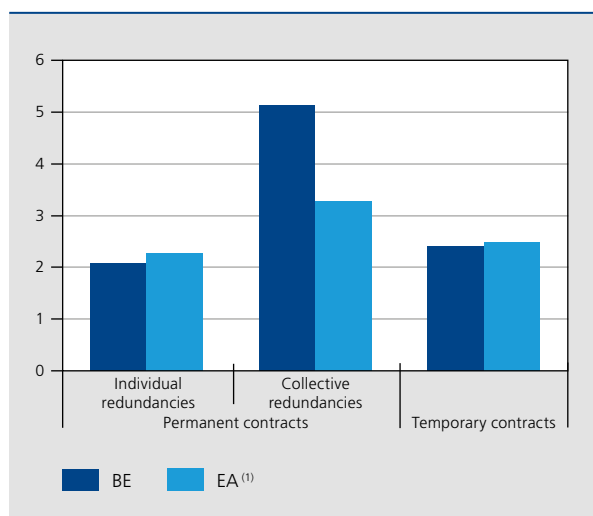
**CHART 82** TOTAL FACTOR PRODUCTIVITY (TFP)  
(average annual growth between 2000 and 2007, in %, unless otherwise stated)



Sources: Conference Board, EU KLEMS.

### CHART 83 EMPLOYMENT PROTECTION LEGISLATION

(indices, scale of 0 to 6, from less to more restrictive, situation in 2013)



Source: OECD.

(1) Data not available for Cyprus, Latvia and Malta.

to work overtime or change hours to fit demand on companies' output) and tighter early retirement access rules. In the case of temporary contracts or fixed-term contracts, opposing measures have been taken – and sometimes even in the same country – to prevent a two-tier labour market and at the same time encourage labour market participation.

## Demand for labour

Of all the factors influencing the demand for labour, the most challenging are linked to wage-setting mechanisms and, more specifically, to wage levels. Belgium is among the countries with the highest hourly wage costs, which is very detrimental to employees whose productivity does not reflect or no longer reflects the labour costs for their employer, as may be the case for the lower-skilled – including younger people – or for some older employees.

### Labour costs higher in Belgium than in neighbouring countries

Despite recent favourable labour cost trends compared to Belgium's three neighbouring countries – as described in section 2 – a comparison of wage levels reveals that significant differences remain. In 2013, hourly labour costs

in the broader business sector amounted to over € 40 in Belgium, compared with € 35 for France and around € 32 for the Netherlands and Germany – and the differences are even more marked when compared with the average for the euro area. Of course, this average is heavily influenced by the countries of Southern Europe, whose standard of living, productivity and costs are clearly below average. Some of them however, are true competitors in the export markets.

Belgium's steep wage levels are the result of a combination of high net wages and an exceptionally heavy tax charge on labour (including employer and employee social security contributions and personal income tax). Average net hourly wages in Belgium – excluding levies – are estimated at € 24, which is about the same as in Luxembourg but exceeds the nearly € 20 in Belgium's three main neighbouring countries.

The € 960 million measures announced by the government to help reduce labour costs in 2016, particularly by reducing employer contributions, should help narrow the gap in hourly labour costs with neighbouring countries. These fresh measures will come on top of similar but less far-reaching ones in 2013 and 2014. What is more, any shift of the fiscal pressure on labour to other tax bases could also help improve companies' competitiveness, depending on how it is applied (see Box 11).

Both in industry and in market services, Belgium has the second heaviest hourly labour costs in the EU, hard on the heels of Sweden. And this continues to be the case at a less aggregated level, for instance when wage subsidies are taken into account, so the difference for all Belgian companies as a whole cannot be solely attributed to the structure of the economy.

High labour costs can get in the way of preserving and improving an economy's competitiveness. In Belgium, these are at least partly offset by equally high productivity levels at the aggregate level, but broken down by sector the offset may be stronger or less strong, in some sector even reversing into a drag on productivity. Analyses in 2013 of data drawn up in line with ESA 95 found that, in Belgium, unit labour costs were below those in its three main neighbouring countries in ten of the sectors surveyed while they were higher in the other eleven. However, this does not lead to an unambiguous conclusion as to whether higher productivity levels are a cause or an effect of higher labour costs. Where there are substitution options, high labour costs typically require companies to find capital or tap external resources, but they will translate into fewer jobs if there are financial restraints.

**CHART 84** HOURLY LABOUR COSTS IN THE BUSINESS SECTOR<sup>(1)</sup> IN 2013  
(in €)



Source: EC.  
 (1) Companies with ten or more employees.  
 (2) Labour costs less estimated fiscal and parafiscal levies.  
 (3) Estimated by applying the implicit rate of tax on labour (employers' and employees' social security contributions and personal income tax) in 2012 to hourly labour costs in 2013.

### Labour costs affect demand for low-skilled labour

For economic reasons, employers will only take on more employees if the value generated by these exceeds their costs. Low-skilled young people, who lack experience to make up for any gaps in their initial training, will be the first to suffer from an unfavourable cost-to-productivity ratio. Other factors may also come into play, of course, but there appears to be a negative correlation between wage levels for young employees and the age group's employment rate. To prevent any distortions from differences in general wage levels between countries, the analysis uses the Kaitz Index, i.e. the lowest gross wages for unskilled youngsters as a ratio of median gross wages in the economy.

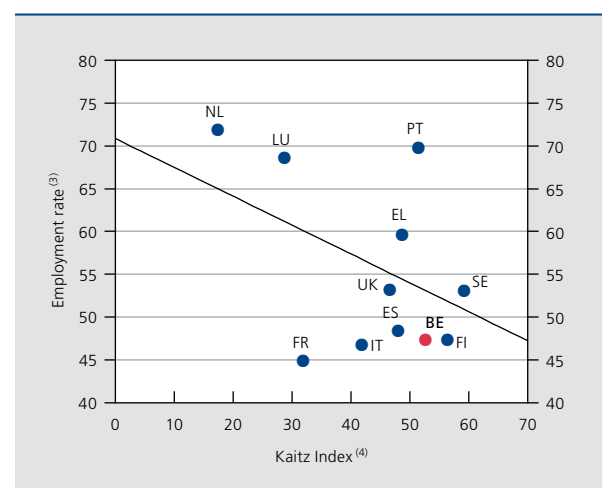
High minimum wages may help to reduce the likelihood of poverty for employees and – given relative benefit levels for people out of work – avoid any curbs on labour supply, but they do raise labour costs for low-skilled employees, who risk being pushed out of the labour market altogether. People with real or perceived extra productivity constraints, such as young people, older people or low-skilled workers of foreign origin, are likely to be hit hardest.

Only a few European countries impose a minimum wage that applies to the entire economy, and Belgium's is on the high side in an international perspective, while sector-wide agreements typically go higher still. What is more, Belgium has phased out lower minimum wages for young people, which often serve to mitigate the dangers of labour market exclusion and which have been implemented in nearly half of the OECD countries concerned. Sectoral agreements will still be able to set lower minimum wages for young people, but they will not be allowed to dip below the national statutory minimum wage.

### Wages and seniority

Just like in other countries, wages in Belgium typically rise with age. In theory, pay-scale increases should reflect the declining effect of experience acquired in a specific position, that is, starting off high, then levelling off and

**CHART 85** WAGES AND EMPLOYMENT OF LOW-SKILLED YOUNG PEOPLE<sup>(1)</sup> IN EU15<sup>(2)</sup> IN 2010  
(in %)



Source: EC.  
 (1) Non-student 15-29 age group without secondary level qualifications.  
 (2) No data available for Austria, Denmark, Germany and Ireland.  
 (3) In % of the corresponding population.  
 (4) Ratio for each of the countries between the fifth percentile of the distribution of gross wages of low-skilled young people and the total median gross wage, in %.



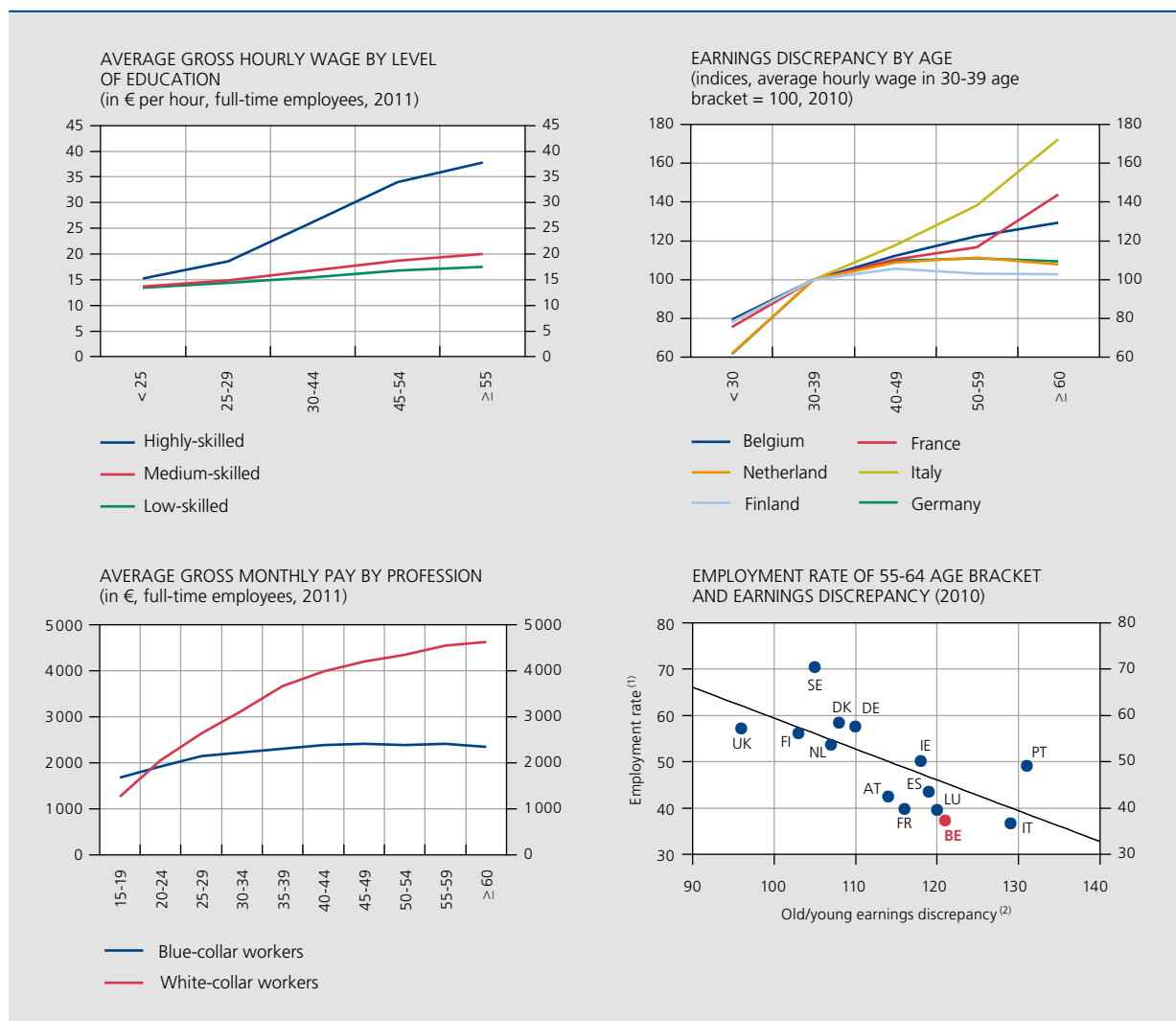
eventually ceasing altogether. It is typically Belgian that these pay-scale increases – at least for white-collar workers – do not slow down towards the end of people's careers. This causes the differences between wages and productivity to widen, and the resultant higher relative cost of older employees erodes their position in the labour market.

International comparisons based on such aggregate data should nevertheless be interpreted with caution, as these are prone to composition effects. For example, in terms of education levels, the composition of employees changes in the oldest age groups in Italy, Belgium and France – the number of highly-skilled workers increases; the low-skilled (who often earn below-average wages)

more often drop out of the labour market via early retirement schemes. And Belgium's age-related wage profile is largely explained by early retirement – at the initiative of either the employees and/or the employers – and not just by seniority-related differentials. By contrast, countries working with apprenticeships typically have lower average wage levels for young people.

Although the low-skilled tend to leave the labour market prematurely more often than other groups, there is still a notable employment rate difference between the over-(55s) and the middle-aged group in Belgium. Generally speaking, there is a clearly negative correlation between seniority-related wages and the employment rate of older workers.

CHART 86 WAGES BY AGE <sup>(1)</sup>



Sources: EC, DGS.

(1) Ratio of workers aged between 55 and 64 to the total population in this age bracket, in %.

(2) Ratio of average monthly pay of employees between 50 and 59 to monthly pay of employees between 30 and 39, with wage levels of this latter group set at 100.



Incidentally, technology-related changes and longer working lives than currently will also require changes to the way labour is organised and human resources are managed. Lifelong learning typically contributes to professional development and so preserves productivity that matches wage development.

## Labour supply

### Appropriate financial incentives for transition to employment

To promote the supply of labour, work should be more appealing – not least financially – than unemployment or inactivity. The gap between net wages and social security benefits should be sufficiently large to make up for the expenses of having a job, such as the cost of transport, clothes and child care, but also the loss of the financial advantages of being a benefit claimant (income taxes, child allowances, access to certain government services). Most potential employees do not face this problem, as their expected earned income is significantly higher than social benefits. However, for the low-skilled, the difference between the two is sometimes too small to serve as a real incentive to accept a job that matches their skills and therefore will be low-paid.

The financial incentive in Belgium appears to be on the low side when compared with the other euro area countries and the European average. From an inactivity baseline, a job earning 67 % of the average wage makes for a net income increase of around 70 % in Belgium,

**CHART 87** FINANCIAL INCENTIVE TO ACCEPT A LOW-PAID JOB<sup>(1)</sup>

(net increase in disposable income, in %, situation in 2013)



Source: EC.

(1) Job remunerated at 67 % of the average wage for employees. Average situation for six types of households.

as against a European average of 100 %. Yet the advantage is still substantial and subsistence benefit does not appear to serve as a financial job employment trap. Things are different for low-skilled job-seekers, though. In the euro area, they can look forward to an improvement in

**TABLE 26** EXPENDITURE ON ACTIVE LABOUR MARKET POLICIES IN 2012  
(in € per unemployed job-seeker in the relevant Region, unless otherwise stated)

	Brussels	Flanders	Wallonia	German-speaking Community	Federal	Belgium
Total (in €) . . . . .	1 594	4 472	1 030	1 938	3 032	5 430
In % of the total per Region						
Labour market services . . . . .	44.9	21.0	14.2	43.0	29.1	26.4
Training . . . . .	31.2	24.4	28.0	13.1	13.3	18.9
Employment incentives . . . . .	0.0	3.1	5.0	7.7	48.3	28.3
Supported employment and rehabilitation . . . . .	14.5	41.9	46.0	35.8	0.2	17.4
Direct job creation . . . . .	9.2	9.6	6.8	0.4	8.6	8.8
Start-up incentives . . . . .	0.2	0.0	0.1	0.0	0.5	0.3

Source: FPS ELSD.

their net incomes by 35 %, but in Belgium this is a mere 15 %. Only in Slovenia and particularly Luxembourg can an even smaller difference be found. In November 2012, this state of affairs in Belgium prompted the implementation of degressive benefits over time, in a move to gradually step up the financial incentive while at the same time offer job-seekers an income that gives them enough time to find a position that matches their expectations and skills.

Job-seekers in Belgium do not receive unemployment benefit unconditionally, and have to prove they are doing whatever is necessary to find a job, in which they are supported by regional employment services. Following the sixth State reform, these organisations are now also responsible for checking job-seeker availability. A large number of other competences – like economic migration, target group policies, service vouchers and outplacement – were also decentralised on 1 July 2014. The federal government remains in charge of labour and social security legislation, including rules on unemployment.

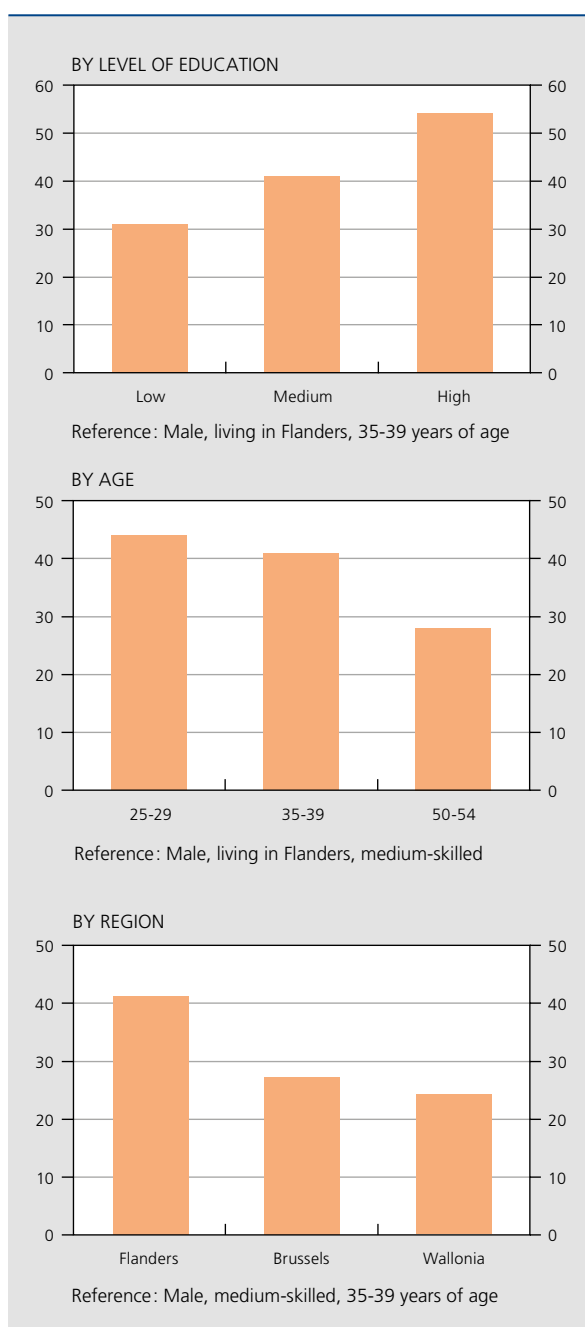
### Active labour market policies to support job-seekers

Drawing on a set of measures to activate job-seekers, the authorities can tailor their actions to the characteristics of the unemployed population and labour demand in their own Regions. The most recent data refer to 2012 and thus do not reflect the new division of competences. At the time, an average of € 5 400 per year was spent per unemployed job-seeker. Employment incentives were a largely federal matter, while supported employment and rehabilitation measures for the disabled were mainly drawn up by the Regions and the Communities. Ignoring the federal level, a comparison of the regional authorities gives some idea of the resources used and the choice of the specific measures selected at the time. Flanders spent nearly € 4 500 per job-seeker, significantly more than the other two Regions and the German-speaking Community. The latter's average budget was around € 1 900, compared with nearly € 1 600 in Brussels and just over € 1 000 in Wallonia. Relative to total resources used, Brussels and the German-speaking Community focused more on job-seeker guidance, while Flanders and Wallonia devoted more resources to work for the disabled, mainly in sheltered environments. Training expenses take second place in employment activation policies.

### Slower transition from unemployment to work for some categories of job-seekers

An analysis of survey data, which factors in residence, gender, level of education and age, reveals major differences in the chances of finding employment in Belgium. In the bracket 'male, 35 to 39 years old and living in

**CHART 88** TRANSITION FROM UNEMPLOYMENT TO WORK<sup>(1)</sup>  
(transitions within a year, in %, situation in 2013)



Sources: DGS, NBB.

(1) Results based on a multivariate analysis, from which the effect of a variable can be measured while controlling for the effects of other available covariates.

Flanders', a little more than 30 % of the low-skilled will find a job within the year, compared with nearly 55 % of highly-skilled workers. Comparable gaps are found in other sections of the population. In other words, unemployment spells among the low-skilled are significantly longer.

Age is another key determinant in finding work. The reference group's job-seekers between 50 and 54 have only a one in four chance of finding a job within the space of one year, while the percentage is 41 % in the 35-39 age bracket. One possible explanation of this lower return-to-work rate from the age of 50 could be the notion of the reservation wage, which posits that job-seekers turn down jobs commanding lower wages than what they think they should earn. Job-seekers might be pegging their reservation wage too high because they compare their current situation with what they used to be paid, without allowing for the fact that a proportion of this former wage paid them for specific skills at their former employer that are not necessarily useful in a new position. And employers might have various reasons – for some of which there are no objective grounds – not to hire older job-seekers, perhaps because they fear older workers will have a harder time adjusting to a new workplace or will be absent more frequently for health reasons.

Region also has a part to play: irrespective of level of education, gender or age, job-seekers in Flanders move more quickly out of joblessness and into work than those living in Brussels or in Wallonia, with the transition percentage for medium-skilled men between 35 and 39 at 41 % in Flanders, 27 % in Brussels and barely 24 % in Wallonia. This regional variable is down to a range of factors, the most important of which is more plentiful employment opportunities in Flanders than in the other Regions. Of course, it might also reflect other differences ignored in the model, such as perhaps Flemish job-seekers doing better on average in terms of characteristics such as experience or language skills, or perhaps also the resources Flanders uses to get people back into work.

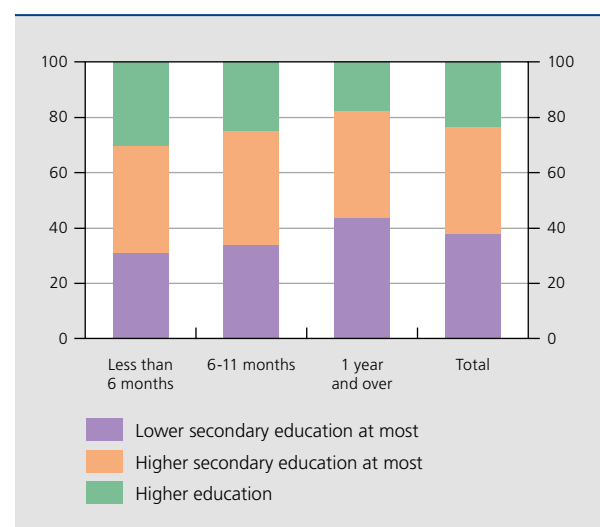
### Skills mismatch

A low level of education reduces employment opportunities, as elementary occupations that do not require high skill-sets account for barely 10 % of total employment, a proportion that has been fairly stable since early 2000. By contrast, highly-skilled jobs such as managers and professionals have risen to 45 % of the total, and now claim as large a share of employment as medium-skilled jobs such as administrative personnel, salespeople or skilled blue-collar workers, a group that has proportionately been on the decline.

These are the hallmarks of a labour market transitioning to a knowledge economy – a trend visible to a greater or lesser extent depending on the sector. In industry, low- and medium-skilled jobs have been lost, partly because they have been outsourced, while highly-skilled jobs have been created. That said, this is still a sector with mainly medium-skilled, typically technical jobs. In services – and particularly in market services – elementary jobs have increased both in numbers and in their relative share of total employment, although this is still no more than 12 %. This is partly explained by the transfer of low-skilled jobs from industrial companies to the services sector, as well as by the development of the service voucher scheme, which primarily employs low-skilled workers. Non-market services, by contrast, have a high concentration – i.e. six out of ten – of highly-skilled jobs, such as intellectual and scientific professions.

This qualification-based employment structure does not match the skill-sets of job-seekers, three-quarters of whom were low-skilled or medium-skilled in 2013, which is to say that they had a certificate of secondary education at most. What is more, early school-leavers are over-represented among the long-term unemployed. Nearly one in four job-seekers does have a certificate of higher education – university degree or equivalent. This goes to show that some tertiary education courses are less well rewarded and their graduates run into problems when entering the labour market – which is obviously not the case for engineers and graduates from scientific disciplines.

**CHART 89** BREAKDOWN OF UNEMPLOYMENT BY DURATION AND LEVEL OF EDUCATION  
(in % of the total, situation in 2013)



Source : DGS.

In the 18-24 age group, a total of 11 % had not completed secondary education in 2013 and were not enrolled in a training course of any kind. This breaks down into 7.5 % in Flanders, 14.7 % in Wallonia and 17.7 % in Brussels, taking Belgium's proportion of early school-leavers to just below the European average. The Belgian government has made a commitment to reduce this percentage to 9.5 % by 2020.

In this context, there has been too little focus on technical and vocational training, and in particular on apprenticeships and internships. The number of apprentices between the ages of 15 and 29 is reported to be below 1 % in Belgium, compared with an average of 3.7 % in the EU (boosted in particular by Germany's large proportion). The new transition internship scheme for young job-seekers in Belgium has seen limited success: it has brought only 3 000 contracts since its launch in 2013. Nevertheless, such schemes offer real employment opportunities for young people who are put off by the idea of excessively formal training. More generally, specific attention needs to be focused on the situation of young people of foreign origin, both in terms of their school careers and their entry into the labour market.

### Greater need for lifelong learning as careers last longer

The recurrence of numerous jobs in the lists of critical occupations released each year by the public employment services proves the structural problem of filling specific profiles – technical in Flanders and Wallonia, and administrative in Brussels. Although few new occupations have emerged in recent years, many jobs have become more complex, and employers increasingly insist on people complementing their formal training and professional skill-sets with “transversal” competences.

Lifelong learning makes it easier to match labour supply and demand, and supports economic growth by enabling a better allocation of resources. As the population ages and measures are taken to lengthen careers, and as the work environment keeps changing and shifting, skills will need to be developed and updated throughout people's working lives, to bolster both the productivity and employability of workers and the competitiveness of companies.

However, access to lifelong learning remains fairly limited in Belgium, and barely 6.7 % of the population between the ages of 25 and 64 were enrolled in some kind of course or training in 2013 – nearly four percentage points below the European average. Comparatively more

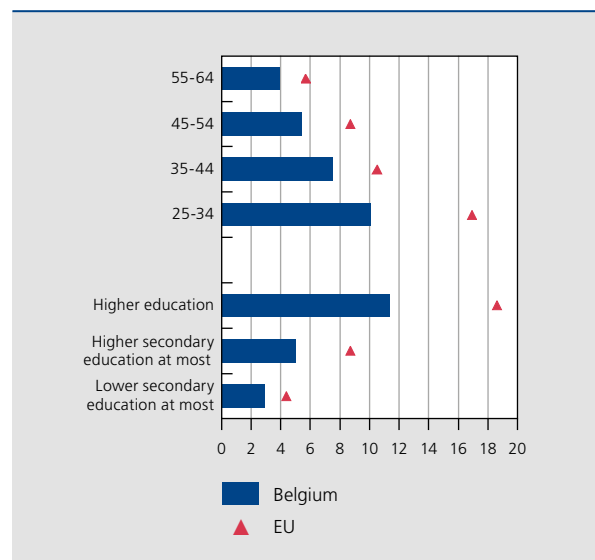
job-seekers were taking courses, principally under the guidance of the regional public employment services.

Also, the proportion of training participants increases in step with the initial level of education: 11 % of highly-skilled adults received education or training, compared with 3 % of people who never finished their secondary education. And this is a phenomenon noted in all European countries. In terms of age, too, access to education is unevenly distributed: In Belgium, only 4 % of the 55-64 age group had followed a training course, compared with 10 % of the 25-34-year-olds – a negative average correlation found across the EU, including the Nordic countries which are generally considered as role models in vocational training. Investment in further training was long considered unnecessary, as these people were known to drop out of the labour market well before reaching the statutory retirement age.

With all the measures taken to make people work longer, this ‘end-of-career’ effect should become a lot less significant, and those in work should start to think differently about the value of further training. However, there is a risk that they will not, if they consider themselves sufficiently capable of handling their daily duties, if the training courses on offer do not help improve the quality of their daily work or their career opportunities, or if these courses do not match their learning skills and capabilities.

**CHART 90** ACCESS TO LIFELONG LEARNING

(percentage of the 25-64-year-olds, in %, who report having received education or training in the four weeks prior to the survey, situation in 2013)

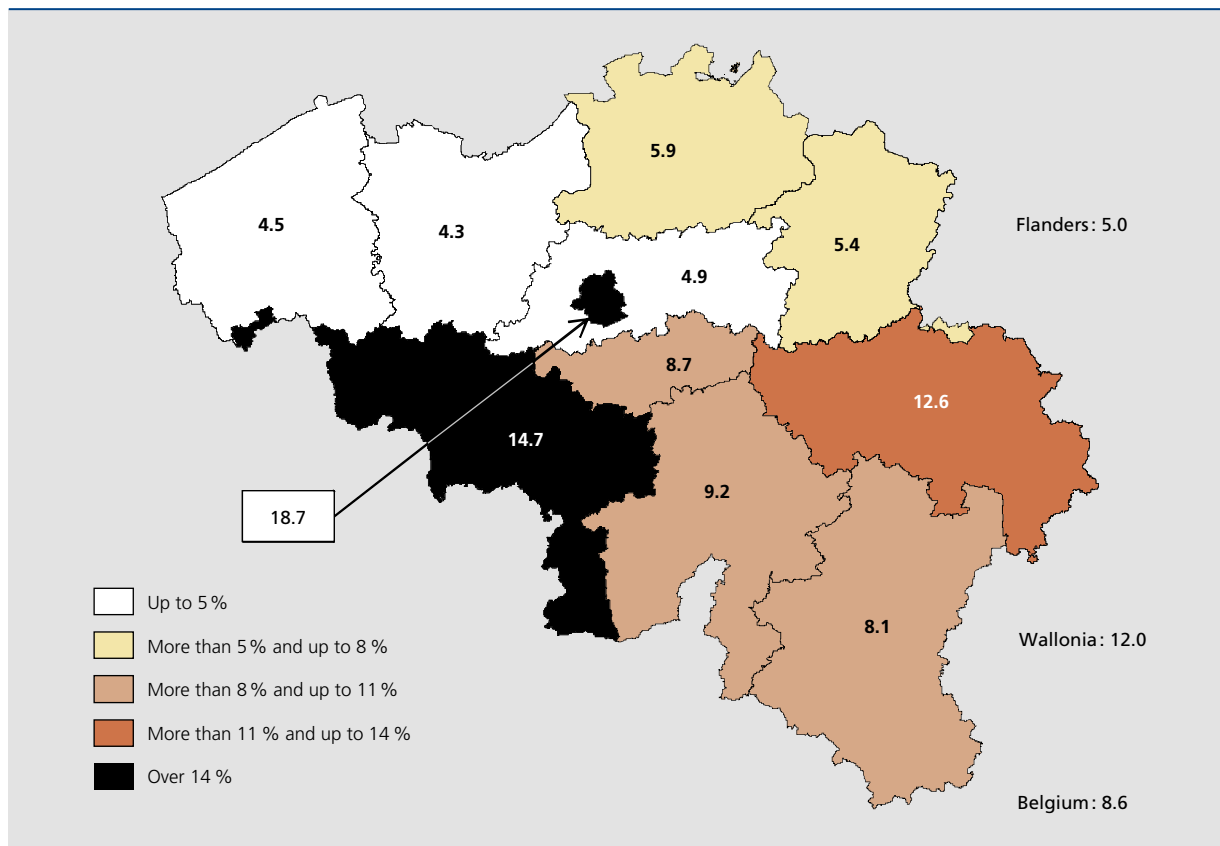


Source : EC.

**CHART 91**

**UNEMPLOYMENT IN GEOGRAPHIC PERSPECTIVE**

(in % of the labour force aged 15 to 64, average of the first three quarters of 2014)



Source : DGS.

**Persistent geographic mismatches**

Divergent transition opportunities from unemployment to employment as broken down by Region (place of residence) are inevitably visible in the unemployment figures as well. On average, 8.6% of the Belgian labour force was looking for work in the first three quarters of 2014. There were major differences between the Regions and even between neighbouring provinces: in Flanders, 5% of the labour force was out of work, compared with 12% in Wallonia and even 19% in Brussels, which is facing specific big-city issues in terms of matching labour supply and demand. At the provincial level, the unemployment rate stood at 4.3% in East Flanders and at 14.7% in the Hainaut. Antwerp was the Flemish province returning the highest unemployment figure, at 5.9%, and was still ahead of the province in Wallonia that registered the lowest joblessness figure: Luxembourg, at 8.1%. The intra-regional differences are also markedly bigger in Wallonia: the unemployment rate spanned a range of nearly 7 percentage points, as against less than 2 percentage points in Flanders.

A proportion of vacancies in low unemployment provinces might be filled by job-seekers from other Regions. Increased job mobility could therefore help boost economic growth – a process in which the government has significant leverage, as it sets the rules for suitable work for job-seekers. Given the ongoing regionalisation of labour market powers, regional public employment services should work closely together, as in fact they already do when exchanging job offers, or organising language training.

**5.3 Towards a more dynamic and flexible economy**

**Shifts in activities and jobs to support growth**

Although efficient labour markets are a necessary condition for more employment in the market sector, sustainable numbers of new jobs can only emerge in an environment based on solid activities. Entrepreneurial dynamism

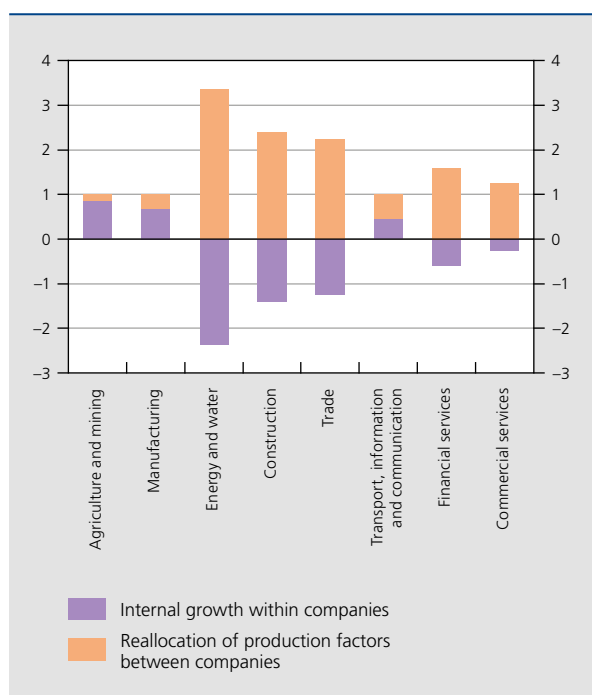
acts as a catalyst for total factor productivity, or TFP. As highlighted at the October 2014 international conference held by the Bank, and further illustrated in the introduction to this section, TFP growth in advanced economies has seen a major slowdown over the past two decades. With the services branches of activity known for their relatively modest TFP gains, the shift to services in the economy has been an important contributory factor. Moreover, industry and the services sector have their own dynamics when it comes to productivity gains. In manufacturing, these are achieved by existing companies through R&D investment among other things, while the services sector records generally low – or even negative – productivity gains in its companies, the ICT sector being the only notable exception. The same is true for non-market services, which are traditionally characterised by very low productivity gains. By contrast, reallocation of production factors to the most efficiently operating service companies has proved a key source of aggregated growth, achieved by creating new companies or by growing the most productive ones at the expense of the most outdated.

The economic dynamics, with some activities or companies rising and growing while others are falling, of course make for a constant flow of job creation and destruction.

Between 2006 and 2013, the Belgian economy saw an average of 209 000 new jobs created per annum, nearly 6 % of the existing total. At the same time, no less than 185 000 jobs have disappeared, an average 5 % of the number of people in work. One-fifth of new jobs were created in new companies, underlining the importance of a dynamic business environment. In a labour market characterised by high adjustment costs and asymmetric information, the extent of these workforce movements shows how big the challenges are and how essential a properly functioning market is to economic growth, by ensuring a smooth reallocation of workers between different jobs, both within the same sector and between different sectors.

The trade, transport, accommodation and food service activities accounted for a little over 30 % of all jobs created and destroyed in the Belgian economy. The accommodation and food service activities branch is particularly notable for its high churning rate, due to both its high numbers of start-ups and closures and to its wide use of temporary contracts and less favourable labour and wage conditions. The biggest number of jobs created by new companies is found in trade. Job creation and destruction were roughly balanced in commercial services, in industry and energy and in construction, while health care and social services saw many more jobs created than there were lost, as evidenced by the high share of this sector in net job creations in the economy as a whole.

**CHART 92** SOURCES OF INTERNAL AND EXTERNAL TFP GROWTH  
(contributors to TFP growth of 1 % between 1998 and 2009, in percentage points)



Source : Van Beveren and Vanormellingem (2014).

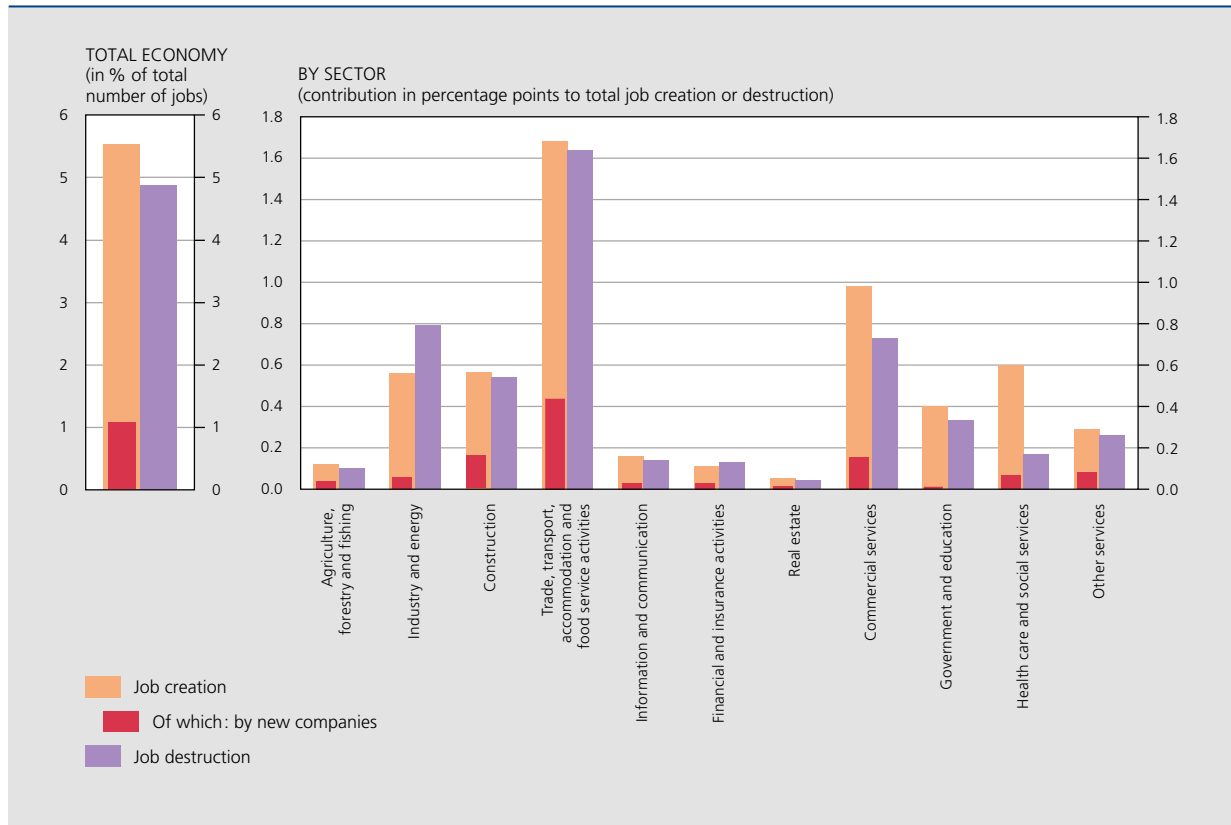
### Low start-up ratio depresses economic dynamism

European Commission data show that there are fewer newly established companies in Belgium than in the other European countries, both in industry and in market services. This trend is unlikely to reverse any time soon, as fewer people have recently started a business or are planning to do so in the next three years.

There are likely to be a plethora of reasons behind this reluctance on the part of potential entrepreneurs to start a business. OECD indicators of Product Market Regulation (PMR) and the World Bank's Doing Business indicators suggest that entrepreneurship in Belgium is hampered by administrative, legal and tax constraints. The formalities and costs linked to registering ownership, tax charges, the cost of setting up a business and minimum capital requirements are all greater in Belgium than on average in the EU.

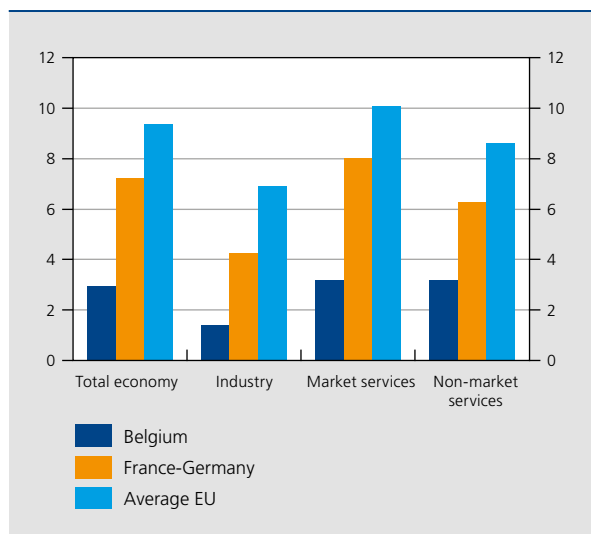
Not all indicators are flashing red for Belgium, though. The time required for setting up a business is comparatively

**CHART 93** JOB CREATION AND DESTRUCTION IN THE 2006-2013 PERIOD



Source : DynaM-Belgium.

**CHART 94** BUSINESS START-UPS<sup>(1)</sup>  
(in % of the number of companies active in 2012)



Source: EC.

(1) Start-ups are defined as new companies that have used new production factors, particularly new jobs. Start-ups do not include mergers or company restructurings, nor dormant companies that resume their activities within two years.

short, tax is collected fairly efficiently and the execution of contracts is less expensive and less subject to disputes. However, on a very large number of indicators, Belgium saw its relative position deteriorate compared with the EU and its neighbouring countries, between the 2008-2010 period and the more recent 2013-2014 period. In this regard, efforts in other countries have been more extensive or have produced better results than they have in Belgium.

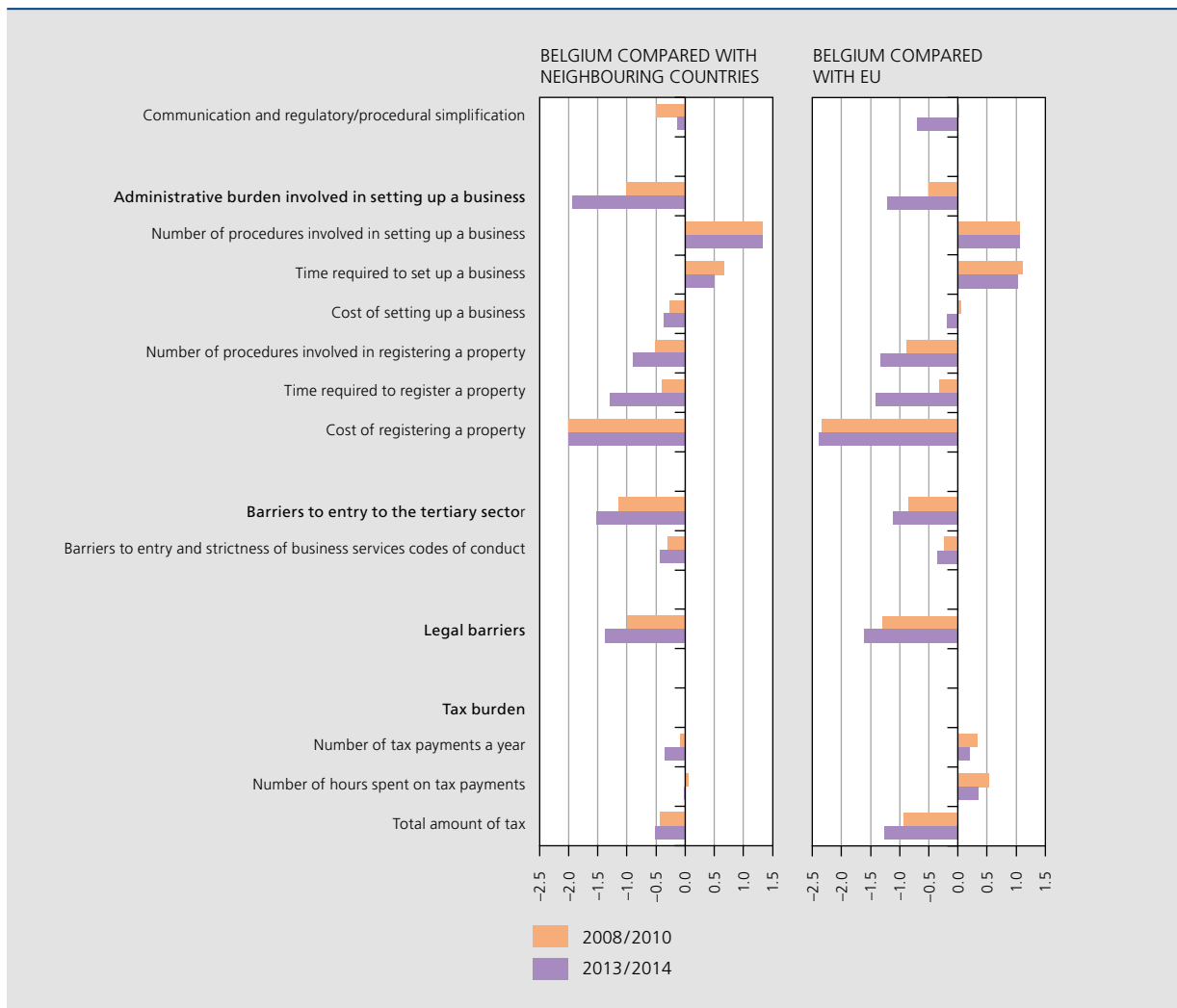
Ignoring all these barriers, it is generally entrepreneurial spirit that needs strengthening in Belgium. Paradoxically, the Community Innovation Survey (CIS) considers the opportunities for starting a business in the current general economic climate more favourable in Belgium than elsewhere. It would seem that psychological barriers, such as relative risk aversion, play a part, as Belgians report a greater fear of bankruptcies than do other nationalities and potential entrepreneurs feel their knowledge and competences are inadequate for starting a business. Media images of entrepreneurs are less favourable than in neighbouring countries and in the EU as well, with company success stories enjoying less media exposure.



CHART 95

ADMINISTRATIVE BARRIERS

(standardised differences between Belgium and the reference area)



Sources: World Bank (Doing Business indicators, 2010 and 2014), OECD (PMR indicators, 2008 and 2013).  
 Note: A negative value indicates a more difficult situation in Belgium than the average in the reference area.

When looking at the alternatives, aspiring entrepreneurs might also feel their potential income is too low and end up preferring other professions.

Diverging outcomes on innovation

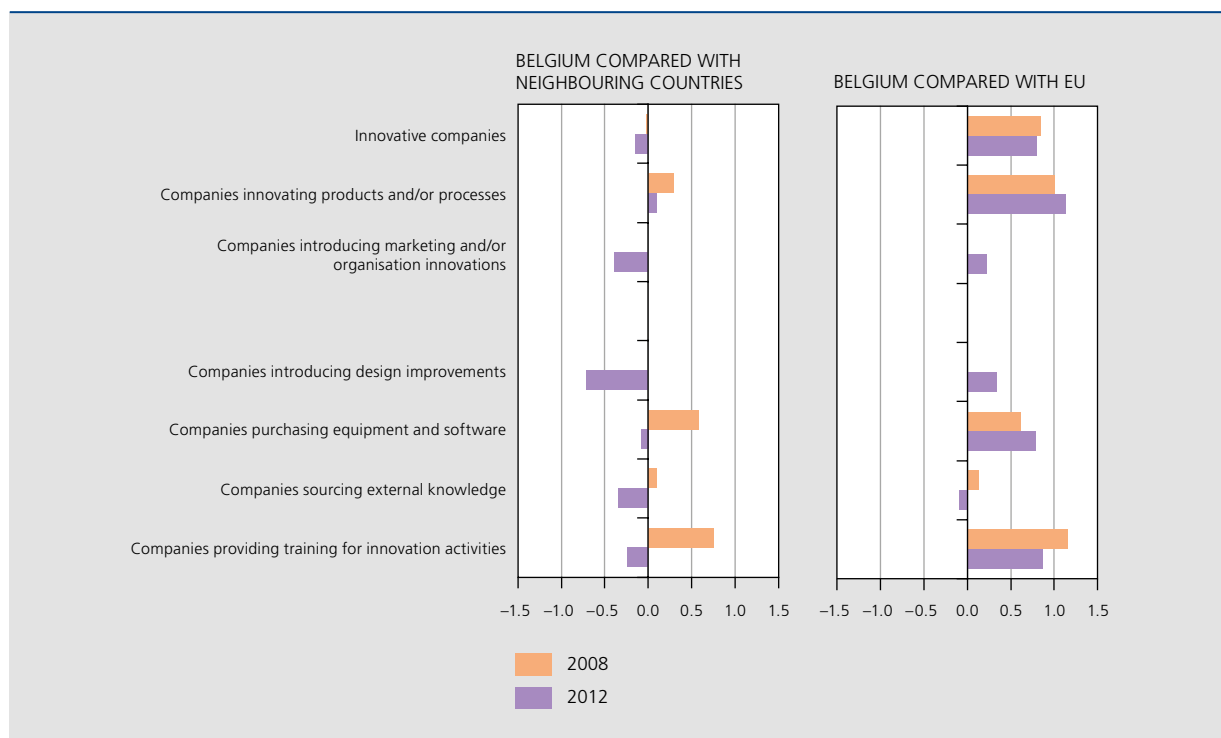
To foster the positive dynamics of new start-ups, conditions need to be in place to help them develop and flourish, with innovation one of the key ways to achieve this in a highly competitive world. Innovation can take many shapes and forms, ranging from fundamental research into the adoption of new management techniques to adjusting production or sales processes.

Despite all government efforts to encourage innovation, the R&D spending that is so seminal to the expansion of industry in Belgium lags below the average in advanced countries and is mainly limited to industrial multinationals. According to the OECD, Belgium's relative R&D weakness is attributable to the structure of its economy, which is more services-focused. Service companies typically spend less on R&D and acquire new technologies from external sources.

To encourage more R&D, different policy echelons have put in place measures and practical recommendations to help SMEs innovate. Specifically, regional government offers hands-on support by funding projects in areas of

**CHART 96** INNOVATION

(standardised differences between Belgium and the reference area)



Source: EC (Community Innovation Survey).

growth. The federal government chips in by alleviating the cost of R&D investment, by offering tax relief to researchers and tax deduction on patent income.

Economic growth does not depend exclusively on R&D expenditure, especially in an economy focused on providing services. The OECD's Oslo Manual, which proposes guidelines for collecting and interpreting technological innovation data, describes innovation as a much wider concept that also includes later stages of development and testing, as well as new production processes, marketing new products, training employees, design, etc.

Belgium has about as many innovative companies as its main neighbouring countries, but their results on innovation in its broadest sense show moderate progress on design, marketing or organisational aspects. This is a general observation that applies to both industry and market services, and specifically to small companies, which tend to have a harder time innovating.

The main reason Belgian companies cited for innovation weaknesses – in a survey conducted by the OECD – was difficulties in freeing up funds. In 2013, only 2.3 % of GDP was invested in venture capital in Belgium, only 30 % of

which was earmarked for financing the later development stages of the companies, compared with an EU15 average of 2.9%. This is not just a Belgian phenomenon, it is an EU-wide problem: even the three EU15 countries scoring highest – i.e. Ireland, Finland and Sweden – are trailing over 11 percentage points behind the United States, where this type of financing accounts for 17.5 % of GDP.

In addition to funding, companies mentioned a shortage of capable employees. Although Belgium has a large number of people taking long higher education courses, the number of students in scientific or technical fields is low compared with the rest of the EU and neighbouring countries. And this is precisely the employee profile companies are looking for when trying to encourage innovation.

### Business environment curbs services activities

Service activities deserve a special mention, in view of their importance in the functioning of advanced economies, as well as the characteristics of the production and trade methods in this area. What is more, in Belgium, these activities are marked by higher and more persistent

increases in consumer prices than in the main neighbouring countries, and by relatively unfavourable productivity trends, as demonstrated in the discussion on prices and labour costs in section 2.3.

The heavy regulatory framework that characterises the services sector can act as a brake on growth. And although a majority of the European countries face similar problems, Belgium has a specific set on its own. For one thing, its liberal professions are more rigorously regulated than in the neighbouring countries or on

average in the EU. Except for engineers, Belgium's other liberal professions accountants, lawyers and architects are bound by strict rules governing their entry to the market and the way they carry out their profession. There is undoubtedly a need for a framework addressing market imperfections – e.g. the problems clients may experience in evaluating the quality of proposed services ex ante – but this should be set up in such a way that it does not impede the development of these activities. Retail trade is also more highly regulated in Belgium than in the rest of the European Union,

### Box 13 – Regulating service activities at European level

Market services are a dominant economic sector in Europe, accounting for 50.7% of total value added and 43.2% of employment in the economy as a whole. Moreover, other economic sectors that use services in their production processes benefit from productivity gains in market services. Services are particularly important for global value chains, as exporting industries typically outsource many of the services relating to their activities – such as transport, marketing, accountancy, financial, technical and other specialist services – either to businesses in their own countries or to companies in other European countries.

In general, however, productivity gains in the European services sector are limited. The OECD attributes this to a number of factors, including the rigidity of market regulations. Indicators of Product Market Regulation (PMR), for example, show that professional services tend to be most highly regulated in the countries of Europe, with the exception of the United Kingdom and the Nordic countries of Sweden, Finland and Denmark.

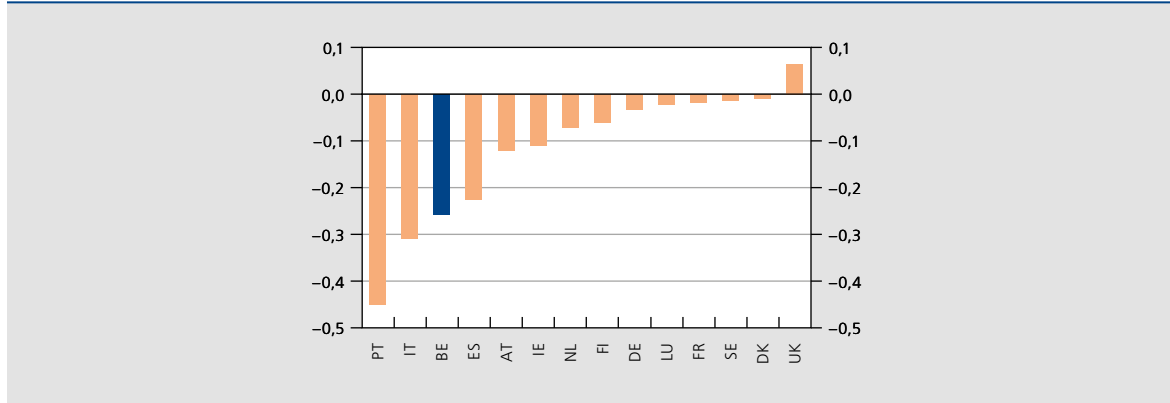
Although stringent regulations may be introduced with a specific goal, such as defending the public interest, protecting consumers or monopoly control, they may also shelter companies from international competition. It will hardly come as a surprise, then, that the services sector is among the least efficient of all sectors in terms of the allocation of means of production. An analysis of the indicator for 'allocative efficiency', which sheds light on the relationship between productivity and market share, shows that – unlike production in the manufacturing industry – production in the services sector is not necessarily generated by the most productive groups of companies.

However, relaxing regulations governing services activities could generate growth potential and productivity gains. This would, moreover, offer the best guarantee that the labour market reforms in most European countries will produce optimum results. As competition may erode any benefits gained, it would raise the chance of these reforms resulting in a fall in prices, productivity gains and the creation of employment rather than in higher profits for the companies protected. EC estimates show that a decline in the PMR indicator in the professional services sector would facilitate business start-ups and lead to an improved allocation of the means of production.

It is against this background that the EC sought to relax the regulatory framework in its economic policy. It urged Member States to transpose the Services Directive into national law by 2009. The purpose of this Directive was to remove legal and administrative barriers. Despite the efforts made by many countries, a large number of barriers are currently still in place, five years after the Directive entered into force. Most progress made in this area to date has resulted only in the partial removal of these barriers.

In accordance with another aspect of its economic policy under the European Semester, the EC also draws up specific recommendations for Member States, including recommendations for market regulation. In 2014, for

MEASURING THE EFFICIENCY OF THE ALLOCATION OF PRODUCTIVE RESOURCES<sup>(1)</sup> IN PROFESSIONAL SERVICES<sup>(2)</sup>



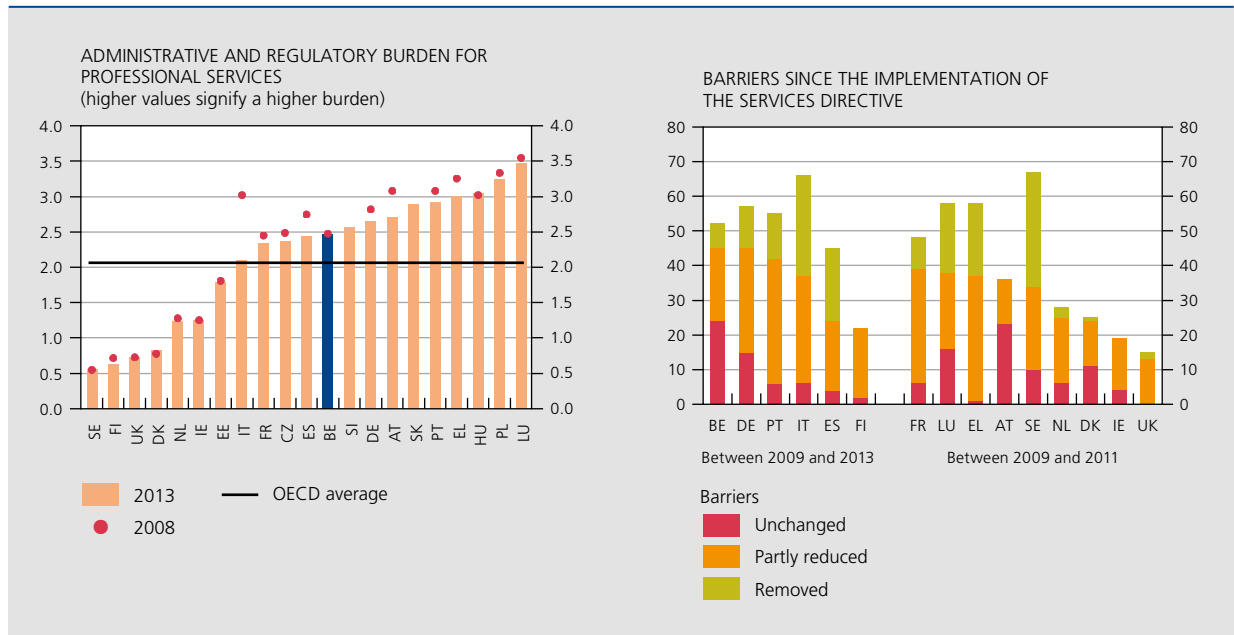
Source : EC.

(1) A value of the indicator of -0.2, for example, indicates that actual labour productivity is 20% lower than the calculation based on a baseline scenario in which means of production are randomly allocated to the various company size categories using a uniform distribution. A positive value means that actual productivity is higher than in the base scenario.

(2) Professional, scientific and technical activities.

example, Belgium, Denmark, Germany, Estonia, Finland, France, Hungary, Ireland, Italy, Austria, Poland, Portugal, Slovenia, Spain and the Czech Republic were urged to simplify the procedures in their services sectors or to remove access barriers in an effort to strengthen competition. These recommendations applied not only to professional services but also to network industries and to the construction industry.

CHART 97 REGULATORY FRAMEWORK FOR SERVICES ACTIVITIES



Sources: EC, OECD.

including standards governing seasonal sales, market impediments to protect existing companies and licences required to start a trading company.

The OECD's PMR indicators suggest that Belgium has made little progress on simplifying its administrative procedures since 2008. And it also happens to be among the countries that have made the least headway on implementing the Services Directive.

In view of the fact that a large number of services, principally network industries, professional services and distribution, have remained overprotected, the EC, OECD and IMF have recommended that Belgium encourage competition by removing legal and administrative barriers. After all, for professional service providers, sheer cost and excessive regulation prevent innovative business models from emerging and curb investment. The retail trade sector has also come in for closer scrutiny as prices have remained higher than in neighbouring countries. More specifically, the rules on seasonal sales and opening hours need some easing.

Moving beyond services, international institutions have repeatedly urged Belgium to do something about the risk of additional increases in energy distribution costs. Its power distribution rates are still among the highest in Europe and the regionalisation of these powers has only served to increase uncertainty over future price trends. Regionalisation of a set of economic powers is typically a cause for concern anyway: though facilitating greater flexibility, it increases the risk of uncoordinated action and could affect economic activity. Close cooperation at all policy levels and with the social partners is advisable in these circumstances.

These same institutions have suggested other measures as well, such as simplifying the complex regulatory framework of the network infrastructure industries by putting into place one regulator per sector across the country. They have also urged Belgium to restructure public service obligations, for public procurement for example. In 2013, Belgian legislation in this area was changed: the ceiling was raised on negotiated procedures without prior notice and electronic procedures were simplified, while the scope of public procurement legislation was expanded to include private social institutions such as hospitals, colleges of higher education and universities, etc.

## Infrastructure

In addition to the intangible assets, the actual quality of network infrastructure improves an economy's production

capabilities, particularly when it comes to information and communication technologies, transport and energy. Even ignoring the short-term effect on economic activity, investment in network infrastructure supports economic production in the longer term by enabling the economy to work efficiently.

Optimum use of extensive, high-grade and low-cost information and communication networks boosts an economy's potential and facilitates connectivity between people and companies. Remarkably, whereas the economic and financial crisis has only exacerbated the TFP slowdown in Europe, the United States has been notching up TFP gains since 2010 similar to those at the start of the millennium, mainly thanks to its investment in ICT. The European economies, on the other hand, have found it much more difficult to benefit from the digital revolution. And this is not about the contribution of the telecommunications sector to total TFP growth – which is significant – but about the lack of productivity gains that ICT has brought to other sectors of the economy.

In the 2010-2013 period, nearly 92 % of Belgian companies on average had broadband internet access, but a mere 38 % of companies employing ten people or more had access to a mobile broadband network (3G or 4G), compared with an average 45 % in the EU and 69 % for the three most advanced European countries in this respect. In terms of economic activity, Belgian companies generated only 15 % of their sales through e-commerce, compared with 21 % in the three best performing European countries. Belgium has principally fallen behind them in sectors of specialist, scientific and technical services, in addition to administrative and support services.

Quality of transport is also a key contributor to growth, as efficient transport networks ensure productivity gains by bringing down logistics costs and enabling better market integration. Between 1995 and 2011, State-held net capital stock in transport infrastructure has declined and capital investment has been insufficient to address wear in the existing network. The current situation is a worrying, as Belgium is the most congested country in Europe, and INRIX puts Brussels, Antwerp and Ghent in the Top 20 of most traffic-jam-prone cities. Research by the Belgian Federal Planning Bureau shows that congestion would be even worse by 2030 in the event of no policy changes, and that average driving speeds would fall even further, by 29 % during rush hour and by 16 % at other times.

However, the OECD noted that any expansion of the already dense road network would be expensive and an additional source of pollution, without necessarily solving the problem of traffic jams. The efficiency and planning

of investment needs to be improved by better use of cost-benefit analyses and coordination between the various policy remits. To influence use of different modes of transport, Belgium should ensure their externalities are more appropriately reflected in their costs, net of subsidies or tax relief.

### Security of power supply and risk of shortages

Energy is another key to a smoothly functioning economy. In 2014, the issue of having adequate infrastructure to guarantee energy provision, and electricity in particular, became a genuine concern.

### Fear of power shortages ...

Adverse events have dragged down the performance of the Belgian electricity generation capacity (fleet) in the past two years and fuelled fears of power shortages – a tricky situation both for residential users, for whom this is considered as a public service, and for professional users, who need power as an essential input in their production processes, with cost and security of supply being key influences on competitiveness.

In the absence of major storage facilities to help manage temporary imbalances, the security of power supply issue should also be assessed in the light of available production capacity and its flexibility to respond to peaks and troughs in demand, as well as the capability of transmission and distribution networks to ensure stability. In this context, the increasing integration of decentralised and intermittent power generation from renewable energy sources (RES) requires even more flexible means. In this respect, demand-side measures are equally relevant, both to adjust demand profiles and to reduce demand levels, but their implementation turns out to be a more delicate business, as power consumption is spread out over time and space.

In the event of a failure in the power grid, the production-consumption adjustment should be immediate. In this case, any room for manoeuvre is at the consumption end, in the form of power outages, as measures to recover production would be too slow to restore the grid immediately.

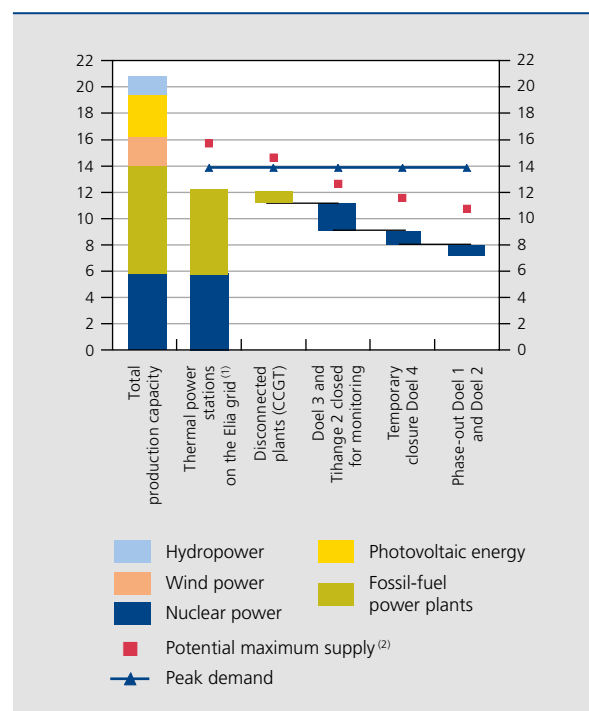
### ... when markets take an unexpected turn

Boasting a total capacity of almost 21 GW in 2014, Belgium's power generation fleet has nevertheless quickly evolved into a situation where the available capacity

became insufficient to meet the peak demand traditionally seen at the end of a winter's day. 3 GW worth of photovoltaic solar power capacity is obviously not effective at that moment, and the risk of under-capacity increases if the dangers of the loss of 1.7 GW in wind power capacity under harsh weather conditions are likewise factored in. In these circumstances, the production capacity from fossil-fuel-fired and nuclear power plants that grid operator Elia can call on amounts to 12 GW, compared with a total generation capacity of 15.3 GW connected to the grid.

Power shortage concerns emerged in the course of 2014, when the owners of two combined cycle gas turbines (CCGT) power plants decided to switch them off, as recent relative price trends compared with gas and coal and carbon prices did not move in their favour; these shutdowns were temporary in the case of one plant and until further notice for the other, involving 485 MW and 385 MW respectively. This was exacerbated by the unexpected unavailability – for an indefinite period – of two nuclear units (Doel 3 and Tihange 2 – 2 014 MW), as these had failed technical tests. At the start of the winter

**CHART 98** POTENTIAL ELECTRICITY SUPPLY DEPENDING ON THE UNAVAILABILITY OF PRODUCTION PLANTS (capacity in GW, in 2014)



Sources: DG Energy, Elia.

(1) Thermal power stations running on fossil fuels and nuclear fuels, excluding producers on the distribution grid.

(2) Remaining domestic production capacity after unavailability, plus maximum import capacity.

of 2014-2015, Belgium was facing a significant 25 % fall in the available minimum capacity to meet peak consumption, estimated at 13.9 MW. And the situation even got worse when another unit (Doel 4 – 1 039 MW) had to be shut down temporarily due to deliberate damage.

Belgium has interconnected transmission infrastructure in place (maximum capacity: 3.5 GW) to import power to make up for the shortfall, provided neighbouring countries' production capacity and connection capabilities allow them to supply the power, which depends on their own domestic demand. Yet, operational margins for running the Belgian power grid are growing increasingly thin, and without any guarantees regarding the availability of electrical energy to import.

The immediate challenge is to prevent any power outages, for the benefit and convenience of the general public and smooth operation of economic activities. In addition to the cost of interruptions in terms of activity adjustments, a perceived deterioration in the quality of the electricity supply damages a country's reputation and appeal as a location to develop new business activities. To date, Belgium's power system is considered very reliable in terms of power cuts and voltage stability – the country scores 6.4 on scale of 1 to 7, claiming 16th position among 144 countries. However, the World Economic Forum's executive opinion survey has pushed it down three places when compared with the 2009-2010 league table.

## A European agenda ...

Long-life-cycle investment will have to go into any solutions considered and/or agreed to address the stability issues currently hitting the electricity system, but swift and timely investment must also be tailored to future energy needs. All these decisions need to be grounded in a stable and predictable regulatory framework, involving numerous policy-makers and various pieces of legislation, from the EU down to the Regions and local governments.

At the European level, cross-border interconnection of network infrastructure is an essential component of a liberalised Single Market, facilitating transactions and competition between operators and contributing to secure supplies. In the past, security of supply was the responsibility of one national actor, which planned and developed the relevant infrastructure accordingly, but market liberalisation has changed all that and security of supply is no longer the sole domain of a single operator. Unbundling of production-transmission-sales activities,

together with restructuring of the sector and its expected development into an integrated European market open to new entrants, have spread this role across a set of actors, where necessary requiring a joint approach headed up by national authorities. After all, the interests of the various operators do not necessarily go hand in hand with a country's security of supply, but rather depend on their main generation options and on making their investment pay, also at European level.

The approval of a European low-carbon economy strategy in 2008 has had implications for the way electricity systems work and are developed, at the level of both production and transmission. Of the renewable energy sources on offer to power vehicles and produce electricity and heating, wind and photovoltaic power have proved most popular, with their respective capacity in the EU having increased by as much as half and by a factor of four between 2009 and the end of 2013 while their share in total output went up to 6.2 % and 2 % respectively in 2012. This has affected how electricity systems work in three distinct ways. First, the RES-related intermittent production pattern implies alternate and flexible production units that can step in and take over when one of them goes down, requiring greater flexibility of the system, at the international level too. Second, this flexibility structure also concerns transmission, as national grids – historically designed and established on the basis of centralised production units – need to be adapted to cope with decentralised production flows. Finally, given the steep start-up capital costs involved, renewable energy has been supported through subsidy mechanisms varying from one Member State to another, depending on the energy mix and political choices about allocating the cost of subsidisation. This massive growth in – subsidised – RES, which have virtually no marginal cost of production and to which the system gives priority access, has eroded the profitability of fossil-fuel-fired power plants, and these are used less as a result.

## ... and Belgian political choices ...

In view of this European agenda, margins are limited for a small, densely populated country with few fossil fuel resources. Moreover, regarding its energy mix, Belgium has made the sovereign choice to stop using nuclear power plants by 2025, while it has become effectively impossible to operate coal-fired power plants as local authorities refuse to grant environmental licences. Obviously, the transition to an electricity system guaranteeing power at an affordable price and under environmentally sustainable circumstances is not an easy one, and will have to take on board all these decisions.



... plus a range of challenges in terms of long-term solutions

If there is no policy change, the power production fleet will have to undergo significant adjustments to meet the aims of a low-carbon economy and low-carbon electricity generation, with only a limited possible choice of production systems in view of decisions made by the authorities. On Federal Planning Bureau projections, capacity needs to be boosted to 27 GW by 2030, from 20 GW today, once all these decisions have fully played out, while ensuring continued investment in replacing obsolete and dismantled production plants and in adjusting the grid. In financial terms, investment in production capacity has been estimated at around € 31 billion between now and 2030.

Finally, recent developments have thrown into sharp relief a number of shortcomings in the way the market currently functions. The current framework does not guarantee the continued operation of gas-fired plants, which might cause supplies to fall short in the event of peak demand. This market, which is subject to frequent changes in the regulatory climate, looks poorly suited to properly address the problem of security of supply and to provide encouraging and timely signals to generate the necessary investment. Other Member States have run into similar difficulties, albeit over different issues, and this has required the authorities to step in by launching tendering procedures to install capacity.