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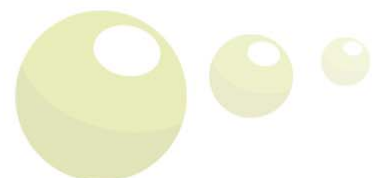
The transformation of work?

WP15 - A quantitative evaluation of change in work in Belgium

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works
CHANGES IN WORK

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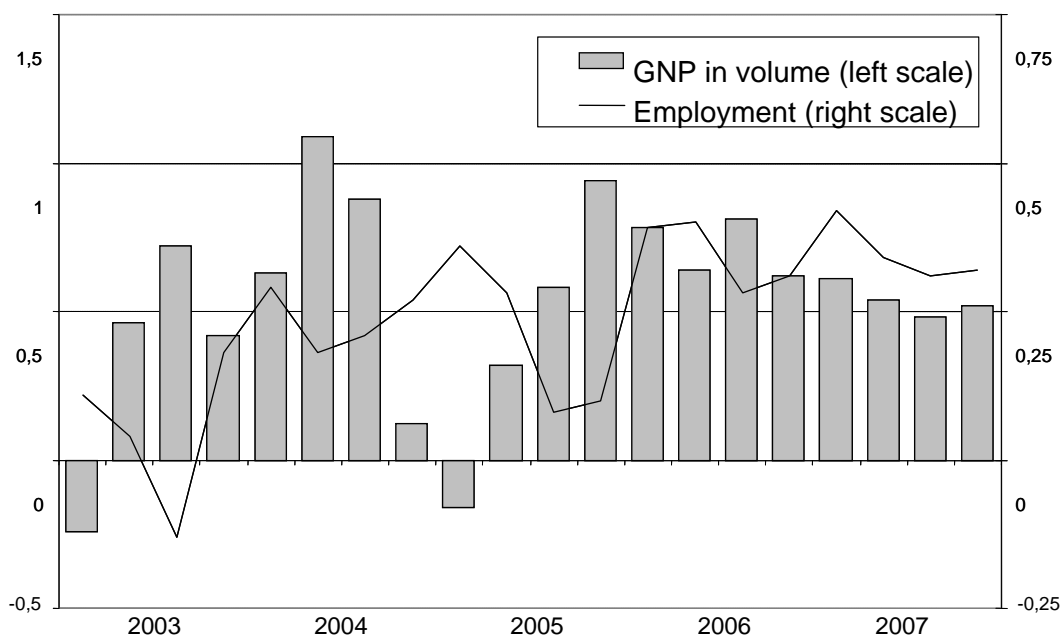
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1 Introduction

On the back of a stronger economic growth, the number of jobs has continued to increase in Belgium during the last few years. Usually, job growth or job decline follows fluctuations in economic activity with a delay of two to three quarters (Figure 1.1).

Figure 1.1 Evolution of employment and economic activity (percentage changes to previous quarter)



Source: HRW (2007)

But the employment rate of 61 *per cent* in Belgium remains far below the average of both EU-15 and EU-27. Belgium occupies the 19th place in the EU-27 ranking, only followed by countries in Southern or Eastern Europe and far below countries as Denmark, the Netherlands or Sweden where over 70 *per cent* of the population at working age is effectively at work.

Despite the increase in the number of jobs in Belgium, the employment rate has hardly risen during this decade, in contrast to most European countries showing a clear increase. This is mainly due to a rather big increase of the population at working age in Belgium. The targets as set in 2000 and 2001 in Lissabon and Stockholm for the European Union will therefore be very hard to achieve. For each of the three groups for which targets are

set, Belgium shows worse figures than the EU-averages (Table 1.2). Especially the gap in employment rate for older workers is very outspoken.

Table 1.1 Employment rates in EU-15, Eu-27 and Belgium in 2006

	Total 15-64 years	Women 15-64 years	Total 55-64 years
EU-15	66.0	58.4	45.3
EU-27	64.3	57.1	43.5
Belgium	61.0	54.0	32.0
<i>Target for 2010</i>	<i>70.0</i>	<i>60.0</i>	<i>50.0</i>

Source: HRW (2007)

The low participation rate of older persons - and to a lesser extent also of younger persons - combined with the high employment rates in the intermediate age groups, implies that careers in Belgium are compressed to a relatively few number of years during which a high productivity is required in order to maintain wealth. This leads to a high work pressure which in turn may contribute to older people choosing to leave the labour market prematurely.

Labour market characteristics differ, however, considerably between the regions of Belgium. Employment rates in the Flemish region are similar to the European averages, with the Walloon and Brussels regions lagging far behind. That is with the exception of the employment rate of older people which is similar to the rate in the Walloon region and below the rate of the Brussels region.

The increase in employment rates is also reflected in a decline of unemployment. Beginning 2007 the harmonised unemployment rate in Belgium has fallen to *7.4 per cent* from about *8.5 per cent* in the years before 2006. However the fall in unemployment rates in EU-27 has been more outspoken since 2005 and has currently achieved figures below the Belgian rate.

In the back of these general labour market features, we discuss in the following paragraphs the WORKS-themes as they have to be faced by Belgium, but in a comparative way to the other European countries. These themes are:

- global value chain restructuring (Paragraph 2);
- new forms of work organisation (Paragraph 3);
- flexibility (Paragraph 4);
- skills, qualifications, vocational training and mobility (Paragraph 5);
- quality of working life (Paragraph 6).

2 Global value chain restructuring, shifts in sectoral and occupational employment and changed occupational composition of sectors

Belgium is no exception to the general trend in most European countries of a desindustrialisation in the economy, at least in terms of employment. This entails a shift in employment between sectors. In this paragraph, we assess firstly the extent of desindustrialisation in Belgium compared to other European countries. Secondly, we assess to what extent this loss of industrial employment is due to changes in the value chain. On the one hand, the rise in service employment may be due to local outsourcing by industry. In this perspective desindustrialisation could be a shift of employment between industry and services instead of a real decline of employment. Taking the argument a step further: employment in industrial sectors may be declining, but this does not necessarily imply a decline employment working for industry. On the other hand, the decline in industrial employment may be due to off shoring of activities to foreign countries. Trade statistics can help to determine to what extent products and services are currently imported from foreign countries and thereby reduce local employment. But at the same time, these foreign countries are also customers for locally produced goods and services and thereby support local employment.

2.1 Assessment of shifts between sectors

Till the start of the seventies in the last century, industrial and service sectors were equally important in Belgium in terms of employment. From then onwards there is an increasing difference in the share of both sectors with regard to total employment. This is due to a decrease in the absolute number of employees in industry, reinforced by a faster increase in employment in service sectors and thereby also total employment. The share of employment in industry almost halved from 40 *per cent* in 1970 to about 20 *per cent* currently (Table 2.1).

Table 2.1 Employment by main sector (Belgium, on June 30th, in thousands)

	1980	1990	2006	% change (1980-2006)	2012 (<i>projec- tion</i>)
Agriculture	132	118	83	-37	73
Industry	1,258	1,042	870	-31	841
Marketable services*	1,633	1,944	2,503	+53	2,760
Non-marketable services**	757	760	800	+6	809
Total employment	3,780	3,865	4,256	+13	4,483

* Marketable services comprise a.o. transport and communication, trade and hotel-restaurant-cafe, credit and insurance, health care, ...

** Non-marketable services comprise mainly governments at different levels.

Source: Planbureau (2007)

Although this shift in employment is similar to many other European countries, the decline of industrial employment has been outspoken in Belgium. Especially during the seventies, the decline was rapid due to restructurations and closures of heavy industries in Wallonia. Since the eighties the decline in industrial employment has been at a lesser pace and projections suggest an almost stabilisation of industrial employment in absolute numbers (Table 2.1).

Over the decades considered, the decline of industrial employment in Belgium was mainly located in the clothing and textile industry, metallurgy, wood and furniture industry. Service sectors with an outspoken increase in employment are health care, societal services and the category 'other business services'.

To some extent the desindustrialisation is exacerbated by statistical inadequacies. An obvious one is the categorisation of all temporary agency work as 'services' even though they are working for industry. This categorisation contributes to a sharp increase in the share of employment in 'other business services'. In addition the increase in part-time work is mainly taking place in service sectors. The rising share of service employment is therefore not as impressive when expressed in full-time equivalents.

Such considerations can not, however, fully explain the observed fall in industrial employment. Explanations must also be sought in the rapidly increasing productivity in industrial sectors. Indeed, it would be a mistake to equate declining industrial employment with declining industrial output. Value added by industry has continued to increase over the last decade, despite the decrease in employment (Table 2.2).

Table 2.2 Evolution of value added and employment in seven Belgian sector groups, in *per cent* since 1995 (100 *per cent*)

	Change in value added 1995-2004	Change in employment 1995-2004
Agriculture	+5	-27
Industry incl. energy	+17	-12
Construction	+17	+0
Trade + transport	+15	+3
Financial + business services	+34	+34
Government and education	+12	+8
Health care + non-marketable services	+14	+21
Average for the Belgian economy	+20	+8

Source: SERV (2006a)

Over the last decade, value added created by industry increased 17 *per cent* while employment decreased 12 *per cent*, pointing at a dramatic fall in labour intensity in industry. By contrast, sectors as business services, government, health care or non-marketable services show an almost equal trend between growth in added value and in employment.

This productivity increase in industry - and its related decline in employment - is supported by the fierce international competition they have to face. Analyses (Idea Consult, 2000) show that the desindustrialisation in Belgium in terms of employment is not primarily due to its industrial structure in which some sectors would be more vulnerable to strong import competition or delocalisation compared to other countries, but mainly due to its striking productivity increases. Productivity in Belgian industrial sectors has increased more over the last decades compared to other EU-countries. This can be attributed to the open economy of Belgium in which more than half of industrial production is exported. Another contributing factor is the presence of many foreign groups in the country which can relocate production activities more easily within their global network if they should become insufficiently productive.

2.2 Changes in the value chain

Industrial employment is declining due to important productivity gains. However, industry is also creating employment in other sectors. The importance of industry, including in terms of employment, may therefore be much greater than industrial employment as such. At least if the indirect employment created by industry is greater than the indirect employment created by other sectors in industry.

Indirect employment is employment created by commands of goods and services of a given sector in other sectors. This regards outsourced tasks as temporary agency work, security tasks, *etc.*, but also raw materials or energy. The greater the purchases by a given sector, the greater its indirect employment effect. Analysis of indirect employment results in a comparison of the total employment working for a given sector with the total employment working in a given sector (Table 2.3).

Table 2.3 Employment by source and economic activity (all levels of indirect employment), in number of employed persons (Belgium, 2000)

	Empl. according to production process (intermediary consumption)	Empl. active for final consumption	Total empl.	<i>in %</i>	Total empl. as registered	<i>in %</i>	Diff.
Agriculture	18,100	30,400	48,500	1.2	100,700	2.5	-52,200
Industry incl. energy	490,600	460,400	950,900	23.3	681,900	16.7	269,000
Construction	118,600	118,400	236,900	5.8	234,700	5.7	2,200
Trade + transport	350,800	621,400	972,300	23.8	998,300	24.4	-26,000
Financial + business services	235,600	216,000	451,600	11.0	710,300	17.4	-258,700
Government + education	61,800	733,000	794,800	19.4	757,200	18.5	37,600
Health care + non-marketable services	123,600	509,600	633,200	15.5	605,200	14.8	28,000
Total	1,399,000	2,689,200	4,088,200	100.0	4,088,200	100.0	0

Source: SERV (2006a)

The biggest shifts occur in the sector groups 'industry' versus 'financial and business services'. According to the analysis, 951,000 people are employed directly or indirectly for industrial sectors. This is 269,000 employees more than officially registered as working in industry and their share in total employment thereby increases from 16 to 23 *per cent*. In this perspective, the financial and business services by contrast only employ 452,000 persons and their share in total employment decreases from 17 *per cent* to 11 *per cent*.

Looking at the changes occurring in indirect employment over time, employment creation by industry in other sectors has increased between 1995 and 2000 (Table 2.4). The table integrates the employment creation for each production process including indirect employment and employment registered in final consumption. It shows that industry has created over the five years considered more indirect employment than the loss of employment as registered by labour market statistics. In other words, while official statistics suggest a loss of employment in industry, total employment induced by industry has actually increased. Nevertheless, employment growth in financial and business services remains more important, even though it is less than registered numbers would suggest.

These data suggest that industry increasingly outsource activities. While employment in core industrial activities continues to decrease, total employment 'caused' by industry actually grows. Especially for the market sector therefore, industry and its indirect employment continues to be of great significance.

Table 2.4 Difference between 1995 and 2000, employment by source and production process (all levels of indirect employment), growth (+) or loss (-) of jobs (Belgium)

	Empl. according to production process (intermediary consumption)	Empl. active for final consumption	Total empl.	<i>in %</i>	Total empl. as registered	<i>in %</i>	Diff.
Agriculture	-3,600	-1,600	-5,200	-2.1	-10,800	-4.3	5,600
Industry incl. energy	49,700	10,400	60,100	24.2	-24,500	-9.8	84,600
Construction	3,300	-3,500	-300	-0.1	6,400	2.6	-6,600
Trade + transport	-29,800	-19,300	-49,100	-19.7	10,400	4.2	-59,500
Financial + business services	42,300	69,600	111,800	44.9	145,600	58.5	-33,700
Government + education	5,300	28,400	33,700	13.5	37,900	15.2	-4,300
Health care + non-marketable services	17,500	80,200	97,700	39.3	83,800	33.7	13,900
Total	84,500	164,200	248,800	100.0	248,800	100.0	0

Source: SERV (2006a)

Preliminary data after 2000, however, show that employed caused by industry is falling. Even if new employment in market services were exclusively caused by outsourcing from industry and thereby considered as its indirect employment, the sum of direct and indirect employment of industrial sectors diminishes. Increasingly, employment growth is located in health care and other non-marketable services.

Another source of shifts in employment is globalisation. The reduction in trade restrictions and the growing communication and transportation possibilities have lead to a great increase of export and import flows over the worked. As organisations are increasingly exposed to competition from other parts in the world, they are forced to focus on these market segments or production phases in which they have a particular advantage. This should especially hold for Belgium as it has the most open economy in Europe (Table 2.5).

Table 2.5 Openness of the economy, some selected countries (2006)

Belgium	Netherlands	Sweden	Germany	UK	France	Japan	USA
168.3	127.4	91.6	76.4	56.7	53.2	28.2	26.2

* Openness is defined as the total trade as a share of GDP.

Source: ATKearney (2007), globalization index

Over the last decades, the openness of the Belgian economy has steadily increased. This implies a growing import competition on the one hand leading to a loss of market share on the internal market with a negative effect on employment. This import competition has an additional effect on employment through productivity increases. Growing imports support process innovations, restructurations and delocalisation of activities by which productivity is further increased. But against reduction and shrinking, there is also expan-

sion of other activities as international trade contributes to growth in demand and an increase in employment in exporting companies. This can be assessed by analysing trade flows of a country and translating these in terms of employment by means of their labour intensity. Thereby an indication is provided of the positive and negative impact of globalisation in a given country.

Trade flows, imports as well as export of goods and services have increased significantly in Belgium over the last decade. As pointed out before, Belgium has a very open economy, which is due to its small size but also by its economic structure. Half-finished products dominate the supply of Belgian industry and have the biggest share in export.

Table 2.6 Sum of estimated national direct and indirect employment effect due to export, for seven sector groups, in number of employed persons (Belgium)

	2005	Change 2000-1995	Change 2005-2000
Agriculture: NACE 01:05	27,700	1,300	2,100
Textile, clothing and leather: NACE17:19	34,900	-2,400	-10,700
Chemical and energy cluster: NACE23:25 + 40:41	133,900	30,200	6,000
Metal cluster: NACE27:35	207,600	23,400	-13,800
Other industries incl. construction bouw: NACE14:16 + 26 + 20:22 + 36:37 + 45	172,000	13,500	2,600
Trade and transport services: NACE 50:64	113,300	15,600	3,500
Financial and business services: NACE 65:74	119,300	24,700	31,100
Non-marketable services: NACE 75:95	8,500	1,400	1,500
Total (A60)	817,300	107,800	22,300

Source: SERV (2006b)

The total national employment effect due to exports can be estimated at 817,000 persons. It shows a clear increase since 1995, especially till 2002 after which, due to falling labour intensity, the employment effect stabilises. This implies that about 20 *per cent* of employment in Belgium is dependent on Belgian export performance. As this employment is almost fully established in the private economy, the importance of export is especially important for private employment.

Conversely, the employment effects of imports can be estimated. In contrast to the employment effects of exports which are 'real' employees in Belgium working in the production of goods and services for export, the employment effect of imports is theoretical as it estimates the employment that would be created if all imported goods and services are produced locally.

Table 2.7 Sum of estimated national direct and indirect employment effect created if all imports are produced locally, for seven sector groups, in number of employed persons (Belgium)

	2005	Change 2000-1995	Change 2005-2000
Agriculture: NACE 01:05	41,300	-5,900	100
Textile, clothing and leather: NACE17:19	26,500	-4,500	-8,400
Chemical and energy cluster: NACE23:25 + 40:41	111,500	24,800	6,500
Metal cluster: NACE27:35	202,900	38,200	-20,000
Other industries incl. construction bouw: NACE14:16 + 26 + 20:22 + 36:37 + 45	139,200	6,100	-2,600
Trade and transport services: NACE 50:64	113,200	15,900	11,600
Financial and business services: NACE 65:74	96,600	26,800	19,500
Non-marketable services: NACE 75:95	12,200	2,200	3,600
Total	743,500	103,800	10,300

Source: SERV (2006b)

The total theoretical national employment effect of imports can be estimated at 743,000 persons. The employment effect increases till 2001 after which some years of stabilisation occur. These results are very much in line with the employment effects of exports. Again the employment effects are highest in industrial sectors.

The data show that the interaction of the Belgian economy with the global economy continues to grow, but the growth of imports and exports has increasingly less effect on employment. Nevertheless, the estimated employment effect of export outweigh the employment effect of import, suggesting a positive employment effect of the interaction from the Belgian economy with the global economy. This is in line with the study of Abraham and Brock (1998) that calculates a positive effect of international trade for Belgium. The expansion in employment as a consequence of new markets is greater than the decline in employment through growing imports. Konings (1998) also comes to a positive effect of globalisation on employment in Belgium as it has developed into an important export platform for Belgian and foreign companies. As a result, economic growth in Belgium is to a large extent supported by the export of the companies located in Belgium.

However, the positive and negative effects on employment is different according to sector and nature of activities. The impact of international trade is more negative in labour intensive sectors. Sectors as chemical, automobile and food industry realise a much greater export in relation to import compared to 1995. In other words, these sectors have added a lot of added value to their imported inputs. In sectors as clothing, textile, shoes, steel, *etc.* the import from low wage countries has increased strongly over the past decades, but the growth of imports from low-wage countries is slower than the total growth of imports in Belgium. This is a sign that the imports from low wage countries remains concentrated in these sectors. Studies from the Belgian Federal Planbureau (1997) show that the delocalisation of activities linked to a drop of employment in Belgium is mainly concentrated in sectors with a high labour intensity. By contrast, for products and services requiring high qualified work, the opposite is true. As a consequence, globalisation leads to important structural changes in employment between sectors.

2.3 Discussion

Despite the positive picture that emerges so far with regard to the effects of globalisation on employment, the specific situation of Belgium with its very high degree of openness and the strong presence of many foreign multinational companies also has its dangers. The strong Belgian specialisation in traditional industries is linked to the accumulated knowledge in these sectors. A knowledge that is very much focused on machines and processes and aimed at increasing productivity to meet the challenge of increasing costs. But it is less focused on new innovative products or developmental activities (De Backer & Sleuwaegen, 2003).

However, such a strategy based on productivity increases, price competition and cost control has its limits. The strong presence of foreign multinational companies in an open economy makes Belgium also very vulnerable to the increasing possibilities for companies to reconsider their spatial dispersion of activities and react flexibly to cost developments in specific regions. Indeed, starting in the nineties, the decrease of industrial employment has been especially outspoken in the group of foreign companies in Belgium. In this decade, foreign multinational companies have delocalised more to other countries than other domestic companies. This is a sign that these foreign owned groups react swiftly to changing circumstances thanks to the flexibility offered by their multinational network. The risk for the Belgian economy from globalisation, is that the knowledge for which it currently holds a strong position is quite prone to delocalisation, imitation and technology transfer thereby undermining its competitive position.

3 New forms of work organisation

New forms of work organisation is a broad term referring to changes in the way work is divided within organisations resulting in a different job design. Central to these changes is a shift away from a Tayloristic standardisation and fragmentation of individual jobs towards work groups with more responsibilities and autonomy for self-regulation.

There are, however, currently no European organisation surveys available providing us with comparable data on work organisation. The last attempt was made by the European Foundation with the EPOC-survey (European Participation in Organisational Change). The survey was executed over a decade ago and is considered to old to be presented here. Instead we rely on the ESWC (European Survey on Working Conditions) from the European Foundation. Although an employee survey, it provides information on the characteristics of jobs which gives an indication of the type of work organisation implemented. In this paragraph we review the position of Belgium concerning new forms of work organisation in the analyses made on the data of the ECWS, either from the survey executed in 2000 as in 2005.

3.1 Results of analyses on the ESWC

Bauer (2004) composes an index on work systems based on the ESWC-2000 data allowing for a ranking of countries in their implementation of new forms of work organisation. The index combines information from the survey on the use of teamwork, job rotation, horizontal and vertical communication as well as levels of autonomy.

Based on the composed 'country work system index', Belgium has an about average position in the implementation of new forms of work organisation with Nordic, but also Anglo-Saxon, countries on top of the list (Table 3.1).

Table 3.1 Country work system index of European countries (ESWC, 2000)

Country	Work system index
UK	0.675
Netherlands	0.660
Ireland	0.649
Denmark	0.617
Austria	0.602
Luxembourg	0.596
Finland	0.570
Sweden	0.570
Belgium	0.553
France	0.548
Germany	0.522
Italy	0.497
Spain	0.488
Portugal	0.487
Greece	0.477
EU-15	0.562

Source: Bauer (2004)

A more specific analysis is made by Ilmarinen (2005) as it is restricted to employees of over 45 years of age. The index composed takes into account the possibilities for employees to regulate their own work breaks, task order, work method and work quantity. Based on the results a ranking order is made of all countries on each item and the sum scores are calculated for men and women separately. The lower the final score the greater the possibilities for older employees to regulate aspects of their work (Table 3.2).

Table 3.2 Ranking score of EU-15 countries according to possibilities to regulate own work (ESWC, 2000)

Country	Men	Women	Total
Denmark	7	13	20
Sweden	9	28	37
Netherlands	22	24	46
Italy	23	27	50
France	28	28	56
Finland	29	33	62
Ireland	21	47	68
Greece	39	30	69
Belgium	32	39	71
Germany	40	33	73
Luxemburg	52	22	74
Austria	37	38	75
Spain	49	32	81
United Kingdom	39	42	81
Portugal	53	44	97

Source: Ilmarinen (2005)

Again Belgium is situated in an average position within EU-15 countries with many Nordic countries on top.

A more elaborate analysis from Lorenz and Valeyre (2005) takes into account no less than fifteen variables from the ESWC dataset related to the following issues:

- application of teamwork;
- application of job rotation;
- autonomy in work;
- factors determining work rhythm;
- repetitiveness of tasks;
- task monotony;
- quality control;
- task complexity;
- learning opportunities during work.

By means of multiple correspondence analysis, four clusters are identified representing four types of work organisation. The clusters can be described as follows:

- *Learning organisation* is characterised by the overrepresentation of the variables measuring autonomy and task complexity, learning and problem-solving and to a lesser degree by an overrepresentation of the variable measuring individual responsibility for quality management. The variables reflecting monotony, repetitiveness and work rate constraints are underrepresented. This cluster would appear to correspond to the Swedish sociotechnical model of work organisation.
- *Lean organisation* is characterised by an overrepresentation of team work and job rotation, the quality management variables and the various factors constraining work pace. This cluster, like the first, displays strong learning dynamics and relies on employees' contribution to problem-solving. Yet, compared to the first cluster, autonomy in work is relatively low and tight quantitative production norms are used to control employee effort. One recognises here the classic attributes of the 'lean' or 'high performance work' model.
- *Tayloristic organisation* corresponds in most respects to a classic characterisation of Taylorism. The work situation is, for the most part, the opposite of that found in first cluster, with minimal learning dynamics, low complexity, low autonomy and an overrepresentation of the variables measuring constraints on the pace of work. Interestingly, teams and job rotation are somewhat overrepresented in this cluster, confirming the importance of what some authors refer to as 'flexible Taylorism'.
- *Simple organisation* is poorly described by the work organisation variables which, with the exception of monotony in work, are all underrepresented. This class presumably groups simple forms of work organisation where methods are for the most part informal and non-codified.

Table 3.3 National differences in organisation model (*per cent* of employees by organisation type, ESWC, 2000)

Country	Learning organisation	Lean organisation	Tayloristic organisation	Simple organisation
Netherlands	64.0	17.2	5.3	13.5
Denmark	60.0	21.9	6.8	11.3
Sweden	52.6	18.5	7.1	21.7
Finland	47.8	27.6	12.5	12.1
Austria	47.5	21.5	13.1	18.0
Germany	44.3	19.6	14.3	21.9
Luxemburg	42.8	25.4	11.9	20.0
Belgium	38.9	25.1	13.9	22.1
France	38.0	33.3	11.1	17.7
United Kingdom	34.8	40.6	10.9	13.7
Italy	30.0	23.6	20.9	25.4
Portugal	26.1	28.1	23.0	22.8
Ireland	24.0	37.8	20.7	17.6
Spain	30.1	38.8	18.5	22.5
Greece	18.7	25.6	28.0	27.7
<i>EU-15 average</i>	<i>39.1</i>	<i>28.2</i>	<i>13.6</i>	<i>19.1</i>

Source: Lorenz and Valeyre (2005)

The learning type of work organisation is most present in Nordic countries, to a lesser extent Germany and Austria but is to be found less in Ireland and Southern European countries (Table 3.3). The lean production type is most present in Anglo-Saxon countries and Spain, while it occurs less in Nordic countries and Germany. The Tayloristic organisation has the reverse picture of the learning organisation model with an overrepresentation in Southern European countries and Ireland. The simple organisation model is mainly to be found in Greece and Italy. Once again, Belgium receives very average scores for almost all the four types of organisation.

A multiple correspondence analysis is also performed by Greenan *et al.*, (2006) on the ESWC-2005 survey results. A ranking order of EU-27 countries is made according to the level of work coordination and learning processes involved in the job. It combines information on task complexity, job rotation, quality standards, problem solving and learning, assistance from colleagues, discretion in how the work is carried out and in time allocation. All these dimensions relate to how work is co-ordinated and how information is processed, reflecting the content of jobs in terms of learning and complexity.

Nordic countries are ranked on top offering the most complex jobs with many learning opportunities. In order Denmark precedes Sweden, the Netherlands and Finland. Belgium is ranked at eight position, again receiving an average position within EU-15 countries. This eight position is maintained within EU-27 countries, as all new member states are ranked lower on the complexity of work index.

3.2 Discussion

The picture emerging from these different results is that Belgium occupies a very average position, at least within the EU-15 countries with regard to work organisation. This makes it more difficult to assess its position.

A contributing factor to this mediocre result may be the strong presence of foreign companies in Belgium, as was already noted in Paragraph 2. The decision centres are located outside of the country where one is more willing to take risks to engage in new concepts, including on work organisation. The Belgian plants are then at best 'early followers' of concepts that are elaborated elsewhere. As pointed out in Paragraph 2, Belgian plants get their high performance mainly through outstanding knowledge on products and processes rather than in new products or innovations for which new forms of work organisation may be more suited. As Arundel *et al.*, (2005) show in a further analysis of ESWC-data, there is a strong correlation between the main organisation type implemented and the innovativeness of a country. On both variables, Belgium is assigned a mediocre score.

Indeed, results from the Flemish organisation survey PASO investigating work organisation confirms that teamwork is especially linked to complex work (Delarue *et al.*, 2004). In organisations with mainly low qualified work, only 28 *per cent* applies teamwork. By contrast 83 *per cent* of organisations with mainly complex work, apply teamwork on a broad scale. In addition, when teams are applied they are much more likely to be of a sociotechnical nature, with large responsibilities for team members themselves and a high level of autonomy. By contrast, when organisations with mainly low qualified work apply teamwork they are mostly of a lean type, with limited responsibilities for team members themselves and restricted autonomy for self-regulation.

More broadly, the survey reveals that half of all organisations with teamwork in sectors belonging to the 'knowledge economy' apply a sociotechnical type of teamwork, while the teams implemented in organisations outside the 'knowledge economy' the sociotechnical type is exceptional with 19 *per cent*. This supports the thesis that the scores of countries regarding new forms of work organisation are influenced by the economic structure and development of the countries concerned.

4 Flexibility

Organisations need to respond flexibly to changes in demand in order to remain competitive. However, this flexibility can take many forms. By means of *contractual flexibility* the available work volume of organisations is adapted by engaging employees from outside the organisation on a temporary basis. Examples of contractual flexibility are temporary contracts, labour pools, temporary agency work, freelance work, ... By means of *temporal flexibility* the available work volume is adapted by means of changes in working times of own employees. Examples of temporal flexibility are overtime work, variable working times, temporary unemployment, ... In addition functional flexibility refers to the ability of organisations to shift employees between jobs or departments according to the needs. This form of flexibility is an aspect of new forms of work organisation already discussed in Paragraph 3.

In this paragraph Belgium will be compared to other European countries regarding some indicators of contractual and temporal flexibility. As the application of different forms of flexibility is to a large extent influenced by the regulations in a given country, the discussion on the position of Belgium regarding flexibility will deal with the regulations on contractual and temporal flexibility in Belgium in a comparative perspective.

4.1 Indicators on contractual and temporal flexibility

Temporary contracts are a major form of contractual flexibility for organisations. The share of temporary contracts differs widely between European countries from 2 *per cent* to 34 *per cent* of all employees. The share of temporary contracts in Belgium is considerably below the European average and also below the share of its neighbouring countries as France, Germany and the Netherlands (Table 4.1).

Table 4.1 Temporary contracts as a share of total employment (*per cent*, EU-25, 2006)

Country	Share of temporary contracts
Spain	34
Poland	27
Portugal	21
Slovenia	17
Sweden	17
Finland	16
Netherlands	16
Germany	15
France	14
Italy	13
Cyprus	13
Greece	11
Luxemburg	9
Belgium	9
Denmark	9
Czech Rep.	8
Hungary	7
Latvia	7
United Kingdom	6
Bulgaria	6
Slovak Rep.	5
Lithuania	5
Malta	4
Estonia	3
Ireland	3
Roumania	2
<i>EU-25 average</i>	<i>15</i>

Source: Eurostat, LFS

The share of temporary work has remained stable over this decade in Belgium, while on average the share in European countries has risen. However, the evolution shows a cyclical pattern suggesting that temporary workers are at least partly used as a buffer to deal with demand fluctuations. In periods of economic downturn as in 2001-2002, the share of temporary workers dropped both in Belgium and the EU, while rising again during the economic upturn afterwards (Table 4.2).

Table 4.2 Share of temporary work in total employment (2000-2006, Belgium, EU-15 and EU-25)

	2000	2001	2002	2003	2004	2005	2006
Belgium	9.1	8.8	8.1	8.4	8.7	8.8	8.7
EU-15	13.5	13.2	13.0	12.8	13.4	14.2	14.7
EU-25	n.a.	n.a.	n.a.	12.9	13.5	14.4	14.9

Source: Eurostat, LFS

For the most part, temporary contracts are applied for young employees. About a third of Belgian employees in the age category 15-24 years have a temporary contract. Young newcomers on the labour market are often recruited with a temporary 'trial contract'. But this

share is still lower than the EU-15 average. This is due to the fact that the combination of study and – typically temporary – student work is in Belgium not as common as in some other European countries. The share of temporary work sharply drops over 24 years, to 7.2 *per cent* in the category 25-49 years and 4.2 *per cent* in category 50-64 years. Belgian legislation restricts the use of temporary contracts. For instance, at most four temporary contracts are allowed with each a minimum period of three months and a maximum duration of two years.

Temporary agency work is a very flexible form of labour and on the rise in all European countries (Table 4.3). In most countries the use of temporary agency work has tripled or quadrupled over the last decade. In comparison, the rise in Belgium has been moderate but still on a high level. Temporary agency work reacts swiftly to the economic cycle with a stabilisation or drop during economic downturns but a rapid increase during upturns.

Table 4.3 Number of temporary agency workers (daily FTE x 1000, 1996-2006)

Country	96	97	98	99	00	01	02	03	04	05	06	% change 1996-2006	FTE/labour force (%)
United Kingdom	682	775	696	761	1,027	1,027	1,036	1,111	1,175	1,219	1,265	+185	4.2
Luxemburg	2	2	2	3	4	4	4	4	4	4	5	+150	2.6
Netherlands	147	163	180	186	183	178	169	154	157	176	207	+39	2.5
France	291	359	458	515	604	602	570	555	570	586	603	+107	2.3
Belgium	44	51	60	63	71	68	66	66	73	78	88	+100	2.0
Ireland	3	4	9	10	25	25	25	25	25	25	30	+900	1.6
Austria	15	18	21	24	30	33	31	38	44	47	59	+293	1.5
Switzerland	21	24	30	34	39	38	37	36	41	49	61	+190	1.5
Hungary	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	30	39	53	54	55	n.a.	1.3
Germany	149	180	203	243	283	288	267	276	323	375	500	+235	1.2
Norway	7	9	11	11	11	12	11	10	12	15	24	+243	1.0
Portugal	25	29	33	45	45	45	45	45	45	45	45	+80	0.8
Sweden	10	14	18	24	42	38	37	29	30	32	37	+270	0.8
Denmark	5	6	7	7	8	10	10	11	13	17	21	+320	0.7
Finland	9	9	9	8	9	11	11	12	14	16	18	+100	0.7
Italy	n.a.	n.a.	10	26	69	67	82	132	154	157	160	n.a.	0.7
Spain	60	90	110	133	133	126	123	123	124	130	141	+135	0.7
Poland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	19	25	27	35	n.a.	0.2

Source: Federgon

Temporary agency work is also bound to regulations. In Belgium it is only allowed for replacing a permanent employee, dealing with a temporary increase of work or with exceptional work. In addition, depending on the reason for temporary agency work, specific rules must be followed.

In contrast to contractual flexibility, comparative data for European countries on temporal flexibility are hard to find. We have to rely on the ad-hoc module of the Labour Force Survey of 2001 to get some data on overtime work (Table 4.4).

Table 4.4 Share of employees involved in overtime work (EU-15, 2001)

Country	Share of employees involved in overtime work
United Kingdom	30.5
Netherlands	28.2
Austria	26.5
France	16.0
Belgium	13.5
Sweden	13.3
Finland	11.6
Germany	11.3
Denmark	8.5
Portugal	7.5
Luxemburg	5.4
Italy	5.3
Greece	4.5
Ireland	3.7
Spain	3.1

Source: Eurostat, LFS-module working times

The use of overtime work is, however, very much dependent on the economic cycle and it is therefore difficult to draw conclusions from data on one single year. In addition, as the average number of hours worked in Belgium is low, the total amount of hours worked including overtime may still be lower than in other countries with less overtime work. Nevertheless Belgium seems to belong to the middle group regarding the used of overtime work.

A specific regulation regarding temporary unemployment in Belgium, however, provides organisations with much greater temporal flexibility than may seem from this table. Although this is restricted to blue-collar workers, organisations can put employees during slumps in demand on temporary unemployment during which employees receive an unemployment benefit but their labour contracts are not severed. Although some restrictions apply regarding its implementation, it remains an easy and cheap instrument for organisations to deal with changes in demand. At the same time, this longstanding regulation on temporary unemployment in Belgium is a first-rate example of flexicurity that enjoyed much attention recently.

4.2 Discussion

In making international comparisons on flexibility, caution is needed as regulations are quite different between countries. According to restrictions in a given country one type of flexibility may be more used than others. For example, when regulations on the break-up of permanent contracts are restricted, the difference between permanent and temporary contracts becomes small and organisations may no longer need to rely on temporary contracts to achieve contractual flexibility.

In principle, Belgium disposes of very extensive labour regulations, including on the issue of starting and severing labour contracts. In contrast to some other European countries, employers do not need to justify dismissal, but a term of notice must be respected that, especially for white-collar employees with high wages, can be long. In addition sev-

eral categories of employees are protected against dismissal such as trade union representatives, pregnant employees, ... In those cases, additional regulations need to be respected. Also in case of collective dismissals specific regulations must be followed, in which especially the preliminary consultation with trade union representatives is important.

The OECD (2004) composes an indicator to capture regulation on protection to dismissal and temporary work forms. This indicator deals with three issues: protection against individual dismissal, protection against collective dismissal and restrictions on the use of temporary forms of work. The composition of the index for Belgium is somewhat problematic as there is a great difference in legislation between blue-collar and white-collar employees. Table 4.5 provides further information on Belgian legislation on the issues and an evaluation of its rigidity compared to other European countries.

Table 4.5 Employment protection regulation in Belgium compared to European countries (2003)

Item	Belgian legislation	Rigidity compared to EU-15 countries
<i>Protection against dismissal</i>		
Notification of dismissal	Between oral notification and written report of reasons for dismissal	Low
Period before notification enters into force	7 days	Average
Length of term of notice	Seniority of 9 months: 2.1 months Seniority of 4 years: 2.8 months Seniority of 20 years: 11 months	High
Severance pay	Seniority of 9 months: no legal minimum Seniority of 4 years: no legal minimum Seniority of 20 years: no legal minimum	On average low due to high seniority
Description of justified dismissal	Competence employee or loss of job are sufficient reasons	Average
Length of trial period	3.3 month	Average
Compensation for illegal dismissal if 20 years of seniority	14 months of wages	Average
Possibility for reinstatement after illegal dismissal	None	Low
<i>Temporary forms of work</i>		
Possibilities to use temporary contracts	Between 'specific exemptions' and 'no restrictions on use'	Average
Maximum number of successive temporary contracts	4 successive contracts	Low, although some countries have no restrictions
Maximum cumulative duration of successive temporary contracts	30 months	High because many countries no restrictions
Types of work for which temporary agency work is allowed	Use of temporary agency work has some restrictions	High
Restrictions on the renewal of temporary agency contracts	Yes, restricted	Average
Cumulative maximum duration of successive temporary agency contracts	11 months	High, because many countries no restrictions
<i>Collective dismissal</i>		
Description of collective dismissal	3 specific regulations from 10 dismissals	Average
Additional requirements for notification	2 additional actors need to be informed	High
Additional duration before notification enters into force	38 days	Average
Other specific costs for employer (e.g. dismissal compensation, outplacement, ...)	1 additional requirement	Average

Source: OECD (2004), Idea Consult (2005)

With regard to protection on individual dismissal, Belgium has a rather flexible legislation. Yet, the difference on this issue between blue-collar and white-collar workers is great as the terms of notice for this group is still more restricted. With regard to collective dis-

missal, Belgium has a rather rigid legislation and is only preceded by Italy and Sweden. Temporary work is also rather strictly regulated in Belgium, even though legislation in France, Spain, Greece and Portugal are still more restrictive. As a whole the composite index of Belgium on employment projection legislation is slightly above the average of EU-15.

The most important differences between European countries are explained by regulations concerning temporary work. In a number of countries these have been relaxed in order to circumvent the often rigid protection on dismissals. Also in Belgium the most important changes in legislation have taken place on this issue as regulations on the use of temporary agency work and temporary contracts have been relaxed over the past few years.

5 Skills, qualifications, vocational training and mobility

A labour force that maintains and renews its qualifications during adult life is an indispensable component in the knowledge economy. This paragraph deals with the position of Belgian employees in the European context regarding skills and vocational training. As the policies regarding education and training are largely regionalised in Belgium, average scores for Belgium are sometimes difficult to evaluate. If necessary, reference therefore will be made to specific regional measures. In addition this paragraph will deal with mobility that contributes to diminish mismatches on the labour market. This concerns transitions between employment, unemployment and inactivity as well as changes in job and employer.

5.1 Vocational training

In total 9.4 *per cent* of the population between 25 and 64 years participates in training (Table 5.1). Scandinavian countries are leading in efforts for lifelong learning with a quarter or more of the population participating in training. The United Kingdom, Slovenia and the Netherlands seek connection with Scandinavian countries with participation rates over 15 *per cent*. Belgium is below the EU-25 average with a participation rate in training of 8.6 *per cent*. New member states have mostly low participation rates, with nine of ten new member states below the EU-average. This is also the case for Southern European countries.

Table 5.1 Share of the population (25-64 years) participating in training (EU-countries; 2004; reference period of four weeks; yearly averages)

Country	Participation in training
Sweden	32.1
Denmark	25.6
Finland	22.8
United Kingdom	21.2
Slovenia	16.2
Netherlands	16.1
Austria	11.6
Luxemburg	9.4
Belgium	8.6
Latvia	8.4
Germany	7.4
France	7.1
Estonia	6.4
Italy	6.3
Ireland	6.1
Lithuania	5.9
Cyprus	5.9
Czech Rep.	5.8
Poland	5.0
Spain	4.7
Malta	4.3
Slovak Rep.	4.3
Portugal	4.3
Hungary	4.0
Greece	1.8
<i>EU-average</i>	9.4

Source: Eurostat, LFS

Participation rates differ considerable according to age, sex, education levels or labour market position (Table 5.2). In Belgium, young people participate much more in training compared to older people but the difference remains smaller than on average in EU-25. Differences are the greatest according to the attained education level of people. People with a high education level participate much more in training compared to people with a low education level. Again differences in Belgium remain smaller than on average in EU-25. According to labour market position, participation rate of people seeking work is considerably high in Belgium which can be attributed to the well developed route counselling of unemployed in the Flemish region. Those inactive, by contrast, have low participation rates in training, probably due to the fact that most students finished initial education at 25 years of age in Belgium, while some other countries as Germany, Denmark, Finland or Sweden are still in education due to differences in the education system. Finally, the differences in participation rates in Belgium according to sex are again less outspoken in Belgium compared to the EU-average.

Table 5.2 Share of population (25-64 years) participating in training according to age, education, labour market position and sex (Belgium; EU-25; 2004; reference period of four weeks; yearly average)

	Belgium	EU-25
Age		
25-39 years	11.7	13.4
40-49 years	8.5	8.6
50-64 years	5.0	5.1
Education		
Low qualified	3.2	2.6
Average qualified	7.6	9.6
High qualified	16.0	18.4
Labour market position		
Working	10.0	10.4
Seeking work	9.7	7.2
Inactive	4.8	6.9
Sex		
Women	8.5	10.1
Men	8.7	8.6
<i>Total</i>	8.6	9.4

Source: Eurostat, LFS

Overall shares in participation rates are also influenced by the economic structure of a country. Participation rates in services are much higher compared to industrial sectors. In Belgium only 38.6 *per cent* of those working in industry participated in training over a reference period of one year, while 53.0 *per cent* in services. This is in line with the EU-25 averages with participation rates of respectively 39.0 *per cent* and 52.3 *per cent*.

5.2 Discussion

In general, participation in training is rather low in Belgium with scores at the level of EU-25 averages, but clearly below scores of EU-15 countries. The causes for this low participation rate may be attributed to supply side as well as demand side factors.

Although training is in principle open to all groups, in practice mostly high educated people and employees participate in training. There remains a number of structurally weak groups on the labour market that not only start with a lower level of initial education on the labour market, but also systematically participate less in training during working life.

From the demand-side there are clear restrictions for organisations to spend time on training. During economic upturns, training interferes in the busy daily activities of the organisation, but during economic downturns the Belgian system of temporary unemployment results in blue-collar workers being put on temporary unemployment (see also Paragraph 4). While in other countries a temporary slump in activities may be seized upon to provide training to employees, the system of temporary unemployment in Belgium leads – at least for blue-collar workers – rather to a ‘passive’ completion of calmer periods contributing to relatively low rates of participation in training.

The lack of transparency in the demand as well as supply on the training market is another contributing factor to the lower participation rates in Belgium. It is not clear what the

needs and wishes are of the demand-side as these are not systematically made clear and those providing training do not invest much in the analysis of needs. From the supply-side there is an obscure and shattered offer by a great number of different types of suppliers of training that each promotes a diverse and often overlapping package at varying prices and quality, contributing to a mismatch between demand and supply.

In an international perspective sectoral funds, financed by a tax on wages in the respective sectors, play an unique role in the supply and mediation of training in Belgium. However, their role is quite unclear as they are involved in mediation between demand and supply of training but also as organisers of own training and thereby compete with other institutions thereby disturbing 'market competition'. As a consequence there is some dissatisfaction on the depth and the flexibility by which training is provided.

Finally some policy initiatives to enhance participation in training have not resulted in the objectives put forward. An example is the initiative to provide 'training cheques' from the Flemish government subsidising the demand for training. Employees can get up to 50% of financial support to pay for training, career advice or competence measurement at an acknowledged provider of training. However, this initiative has important deadweight-effects. Despite the financial means made available, it remains unclear to what extent this has lead to additional training rather than replacement of training that would have been provided anyhow.

5.3 Mobility

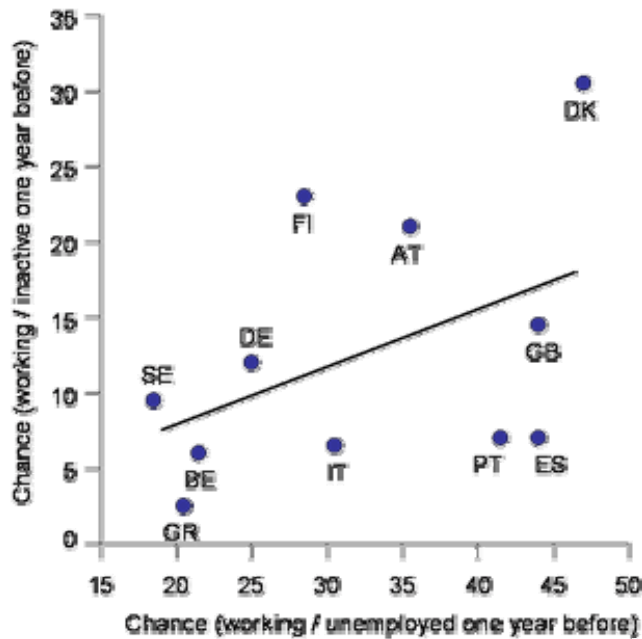
The mobility of labour as a production factor is much more limited than the mobility of capital. In addition labour is very heterogeneous regarding qualifications, skills, age, place of residence, ... so that vacancies can't be filled by all employees. This lack of homogeneity must be compensated by mobility in order to achieve an efficiently working labour market. This paragraph is restricted to two forms of mobility that contribute to the reduction of mismatches on the labour market. These are:

- socio-economic mobility: transitions between employment, unemployment and inactivity);
- functional and career mobility: changes in job and employer.

5.3.1 Socio-economic mobility

To assess socio-economic mobility in European countries some retrospective questions from the Labour Force Survey can be used. The population at working age can be divided in three groups: those seeking work, those inactive and those working.¹ Figure 5.1 considers the situation of each group one year later.

¹ Following the definition of the International Labour Office, even the performance of one single paid hour in the reference period is sufficient to be considered as working. Job seekers need to seek work and must be available to start working within two weeks. Inactives are those who are not working nor seeking work.

Figure 5.1 Transition of inactivity or unemployment to work between 2004 and 2005

Source: HRW (2006)

For those seeking work in 2004, the share that is working in 2005 varies between the countries from over 45 *per cent* in Denmark to under 20 *per cent* in Sweden. For those inactive in 2004 and having work in 2005, the transition varies from over 30 *per cent* in Denmark to a mere 3 *per cent* in Greece.

Many factors contribute to socio-economic mobility and the economic activity is certainly one of the major factors involved. But also different legislation between countries contribute to the observed variation. For Belgium, while unemployment benefits are rather low they are also unlimited in duration which may reduce transition rates from unemployment to work. Concerning the transition from inactivity to work, Belgium has a very low activity rate for elderly employees. For employees between 55 and 64 years activity rate in 2006 was a mere 33.6 *per cent* compared to 48.3 *per cent* for EU-15 countries and 46.5 *per cent* for EU-25 countries. This early retirement age in Belgium contributes to low transitions from inactivity to working as the inactivity for this age group is mostly permanent.

5.3.2 Career mobility

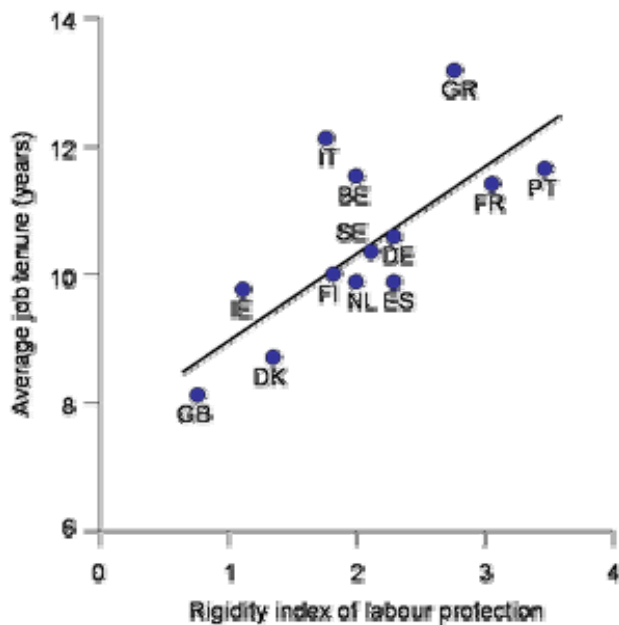
Career mobility refers to changes in employer (for employees) or in activity (for self-employed) and can be voluntary or involuntary. The Labour Force Survey includes comparable information for EU-countries (except Austria) on the seniority of respondents with their current employer or activity. Auer *et al.* (2005) calculated the average job tenure for EU-15 countries at 10.6 years in 2002. A result that has hardly changed since a decade ago. The average varies from 8 years in the United Kingdom and Denmark to over 13 years in Greece. Belgium with a job tenure of 11.6 years is also above the EU-15 average.

Again, job tenure is dependent on many factors such as economic climate, the composition of the workforce, the level of education of those concerned, ... However as far as differences

between European countries is concerned, the rigidity of legislation on labour protection is important. The OECD (2004) made an attempt to capture the severity of this legislation in a synthetic indicator (see also paragraph 3). The indicator takes into account the legal protection of permanent employees and the way organisations can make use of temporary workers.

In Belgium, the procedure for dismissal is not extensive – a registered letter is sufficient – and the restrictions are not numerous. There is a legal period of notice that varies for blue-collar workers according to seniority and for white collar workers according to seniority and monthly wage. The law does not prescribe an additional dismissal fee, resulting in a rigidity score considerably below the OECD-average. On the other hand, the Belgian legislation for the use of temporary work remains considerably more restrictive than on average in OECD-countries, despite liberalisations over the last decade to allow for a maximum of four consecutive temporary contracts with a maximum length of two years and the removal of a number of restrictions on the activities of temporary agencies.

Figure 5.2 Seniority* and rigidity** of legislation regarding employment protection



* Average seniority for 2002.

** Average score of protection indices of permanent and temporary employees for each country, data for 2003. A high figure reflects a high level of labour protection and therefore a rigid legislation.

Source: HRW (2006)

Figure 5.2 shows how average job tenure increases when labour protection of permanent as well as temporary employees is higher. For Belgium the divergent scores for permanent and temporary employees result in an average rigidity score similar to most European countries. However, considering this average score on employment protection, the average job tenure is rather high. Next to legislation, some additional practices may explain this high score. One such practice is the LIFO (Last In First Out) practice used when organizations reduce staff, while some other countries rather choose to dismiss first older employees with higher job tenure. Another practice is the wage system in Belgium that assigns wage increases with age and seniority thereby reducing external mobility. When employees change employer they

lose their seniority, while when they stay with the same employer there is a prospect of upwards functional mobility and higher wages. Furthermore, legislation on the transferability of additional retirement pay hinder the spontaneous mobility of employees.

As such the scores of Belgium reflect the relationship as established by the EFILWC (2006) between mobility of employees in European countries and the categorization of social security models. Work security is higher and mobility lower in countries with a 'corporistic' model, in which the social security system is generous but mainly financed by contributions of the beneficiaries to which Belgium belongs as are also France, Germany, Austria and Luxembourg.

6 Quality of working life

The European Survey on Working Conditions (see Paragraph 3) provides comparable data for European countries on working conditions. In this paragraph we will consider the position of Belgium on a number of physical working conditions, but also on a number of mental working conditions.

6.1 Physical working conditions

Greenan *et al.* (2007) performed a multiple correspondence analysis on the ESWC-dataset resulting in a single factor which clearly measures the quality of working conditions. Physical nuisances are especially important in the construction of this indicator: being exposed to vibrations from hand tools, machinery, to noise so loud that you would have to raise your voice to talk to people, breathing in vapours, handling and touching dangerous products or substances, radiation as well as wearing personal protective equipment have a high contribution in the synthetic indicator. In a ranking order of EU-27 countries Belgium obtains fifth position on best working conditions after the Netherlands, United Kingdom, Denmark and Ireland.

Despite this good score on working conditions, Belgian employees report being frequently absent from work due to health related problems. They also consider themselves much more unable to do the same job till 60 years of age compared to employees from other European countries (Table 6.1).

Table 6.1 Share of respondents answering positively to questions on health and retirement and number of days absent from work (ESWC 2005; Belgium, EU-15 & EU-27)

	Belgium	EU-15	EU-27
Able to do same job when 60	52.3%	61.0%	58.9%
Absent for health problems in previous year	28.8%	23.5%	23.4%
Average days health-related absence in previous year	7.0 days	4.5 days	4.7 days

Source: ESWC, 2005

Undoubtedly, these scores are also related to regulations on early retirement and sickness benefits. But it may also be a sign of the falling relevance of the traditional or 'industrial' definition of working conditions. Questions about physical working conditions are central to grasp the features of industrial working environment, but they are more peripheral in services where stress and mental strain are the more relevant health risks.

6.2 Mental working conditions

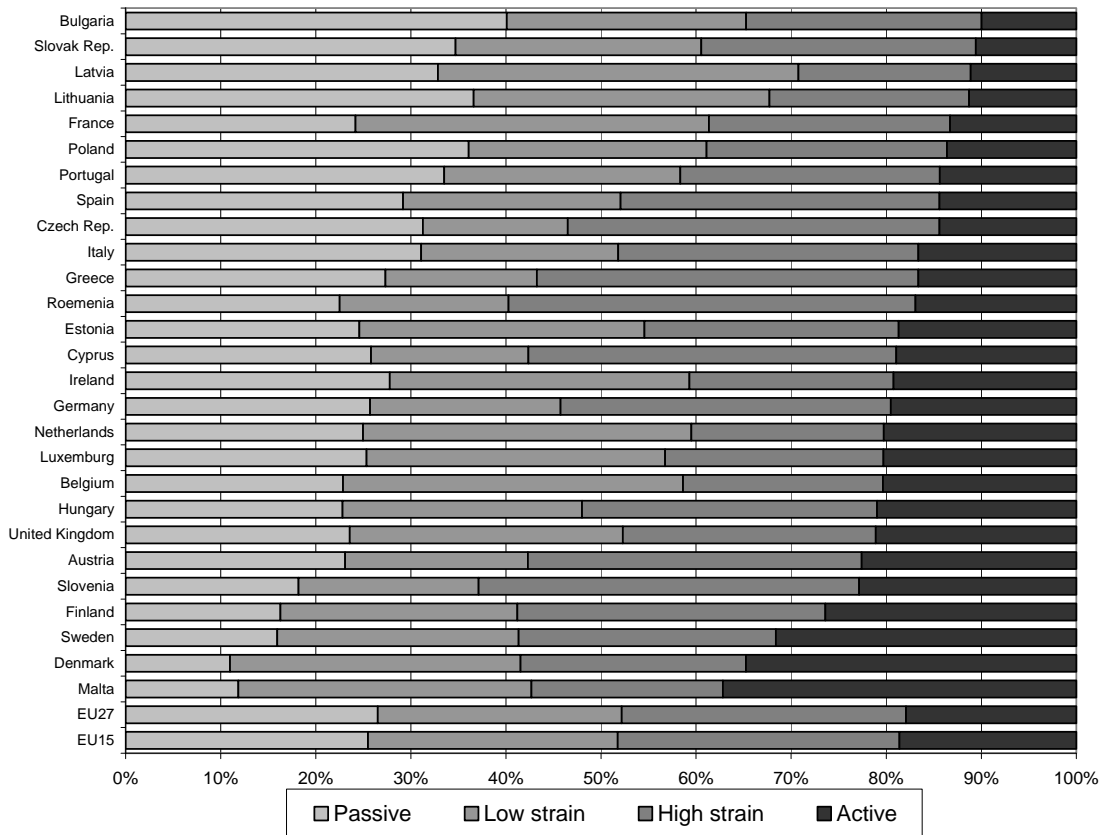
Stress risks in jobs can be identified with the 'job demand-job control model' proposed by Karasek (Karasek & Theorell, 1989). The model combines two dimensions, namely job demands and job control. Job demands are related to psychological job demands, whereas job control refers to worker craftsmanship and autonomy. The balance between both determines stress risks and learning opportunities of jobs. Combining both dimensions results in four types of jobs:

- active jobs: combination of high job demands and sufficient job control;
- passive jobs: combination of low job demands and insufficient job control;
- high strain jobs: combination of high job demands and insufficient job control;
- low strain jobs: combination of low job demands and sufficient job control.

The most adverse reactions of psychological strain (fatigue, anxiety, depression and physical illness) occur when psychological demands on the job are high and the worker's decision latitude in the task is low (high strain jobs). The employees job contains stress risks when job demands exceed job control.

The ESWC-survey contains a number of items that can be used to categorise jobs according to this typology. Items on the autonomy to determine the sequence of tasks, to choose work method and to set work rhythm are elements of job control. Items on the need to work at high speed and to work within strict deadlines are elements of job demands.

Figure 6.1 Stress risks of jobs in Europe according to Karasek's typology (EU-27, 2005)



Source: ESWC-2005, Van Hootegem *et al.* (2007)

Belgium achieves a good position in the ranking with a higher share of 'active jobs' than the EU-27 and also the EU-15 average (Figure 6.1). Nordic countries as Denmark, Sweden and Finland lead the ranking with regard to the share of 'active jobs'. The position of Belgium is all the more remarkable as it was ranked 12th place among EU-15 countries based on the ESWC-data of 2000 with a considerable smaller share of 'active jobs'. Analysis of the shifts make clear that the improved position can be ascribed to improved scores on autonomy in methods, rhythm as well as sequence resulting in a shift from 'passive' to 'active jobs'.

The reasons for this sudden shift are hard to determine. There is no consistent and broad-scale government policy to support new forms of work organisation that may influence the design of jobs and their accompanying stress risks. Yet, especially in the Flemish region the issue of stress and well-being at work has received broader attention over the last few years. The reduction of stress is seen explicitly as an indicator for the total safety and health approach at work. At the beginning of 2003 Flemish social partners committed themselves to develop a Flemish workability monitor on the quality of work, a measurement system to follow up the policy agreements made in the on improving the quality of work. For this purpose a scientifically based set of indicators was developed and measured in a representative sample of employees on the Flemish labour market.

Between the two waves in 2004 and 2007 and in line with the ESWC-data above, the degree of workability has increased (STV, 2007). This means that more employees are not psychologically exhausted by their work, they have a job which motivates them and provides sufficient learning opportunities, and their work and private life are in balance. Again an explanation of the improvements is not clear in the analysis, but the workability monitor provides government and social partners with an instrument to initiate or promote a policy towards the improvement of the quality of work.

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