
Unemployment and labour market policies: a comparative analysis of Belgium and Germany

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UNEMPLOYMENT AND LABOUR MARKET POLICIES: A COMPARATIVE ANALYSIS OF BELGIUM AND GERMANY

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Executive Summary

The goal of this thesis is to do a comparative analysis of the effects of labour market policies on unemployment. The two countries of comparison are Belgium and Germany. The aim is to take studies that have been done so far and to compare their results for both countries. Therefore, some reasons for the existence of unemployment will be presented, before moving to a description of several labour market policies, which include unemployment compensation schemes. Then, the effects of unemployment benefits will be discussed in a more detailed way, especially in the case of a reduction in the duration and the generosity of unemployment benefits. Although most policies seem to have similar effects in Belgium and Germany, some heterogeneities persist. Some policies have a stronger impact on unemployment than others, and in some cases, differences within the groups of the unemployed can be identified. All in all, however, it can be seen that the effects of the labour market policies are mostly in line with what is predicted by the literature. Being a broad and complex topic, the elements presented in this thesis are not exhaustive. The framework of this work would otherwise have been exceeded.

Table of contents

1	Introduction	1
2	Literature review	3
2.1	Reasons for unemployment	3
2.1.1	Demography	3
2.1.2	Education and formation	3
2.1.3	Wages	4
2.1.4	Economic cycles	5
2.1.5	Job shortages and skills mismatches	5
2.1.5.1	Job shortages	5
2.1.5.2	Skills mismatches	5
2.1.6	Technological change and sectorial restructuration	7
2.2	Labour market policies	8
2.2.1	Active labour market policies	8
2.2.1.1	Job search assistance and monitoring	8
2.2.1.2	Education and training	9
2.2.1.3	Labour mobility and migration	9
2.2.1.4	Short-time work	10
2.2.1.5	Early retirement programmes	10
2.2.1.6	Financial incentives	10
2.2.2	Passive labour market policies	11
2.2.2.1	Employment protection	11
2.2.2.2	Unemployment benefits	11
2.3	Job search behaviour	12
2.3.1	General presentation of job search	13
2.3.2	Reduction in the generosity of benefits	15
2.3.3	Reduction in the duration of benefits	17
3	Empirical part	19
3.1	Economic situation	19
3.2	Labour market	21
3.2.1	Unemployment situation	21
3.2.2	Labour market policies	33
3.2.2.1	General insights into the labour market legislation	33
3.2.2.2	Education and training	35
3.2.2.3	Labour mobility and migration	36
3.2.2.4	“Atypical” jobs	38
3.2.2.5	Retirement programmes	39
3.2.2.6	Financial incentives	42
3.2.3	Unemployment compensation	43
3.3	Job search behaviour	47
4	Discussion and Policy recommendations	51
5	Conclusion	52
	Bibliography	53
	Appendix	60

List of Figures

1	Increase in the minimum wage	4
2	Job shortages and skills mismatches	6
3	Annual economic growth in Belgium between 2000 and 2020	20
4	Annual economic growth in Germany between 2000 and 2020	20
5	Evolution of the employment rate in Belgium	22
6	Evolution of unemployment in Belgium	23
7	Unemployment rates in the different regions of Belgium in 2020	24
8	Evolution of vacancies in Belgium	25
9	Demographic evolution in Belgium	26
10	Evolution of unemployment in Germany	28
11	Evolution of the employment rate in Germany	29
12	Unemployment rates in the different regions of Germany in 2017	30
13	Evolution of vacancies in Germany	31
14	Demographic evolution in Germany	31
15	Comparison of the unemployment rates of Belgium and Germany	32
16	Mobility within Belgium and between its regions	37
17	Comparison of the net replacement rates of unemployment benefits	44
18	Job search activities	60

List of Tables

1	Summary table: Reduction in the generosity of unemployment benefits and its aftermaths	16
2	Summary table: Reduction in the duration of unemployment benefits	18
3	Summary table: Economic situation in Belgium and Germany	21
4	Evolution of the unemployment rates in the different regions in Belgium	24
5	Comparison of mismatches in 2016 between Belgium and Germany	25
6	Comparison of the long-term unemployed between Belgium and Germany	27
7	Comparison of people aged 55-64 on the labour market between Belgium and Germany .	41
8	Summary table: Labour market description of Belgium and Germany	46
9	Summary table: Effects on job search behaviour in Belgium and in Germany	50

1 Introduction

Labour market policies are introduced in order to fight unemployment. They are separated into active and passive labour market policies. In the former case, the goal is to actively push job seekers back into employment, by for example providing training, whereas the latter policies do not pursue this aim.

First of all, it is necessary to clarify who is considered as unemployed and consequently targeted by these policies. According to the ILO (International Labour Organisation), the criteria are that a person aged 15 or older must be without a job, immediately available to start working within the following two weeks and looking for a job.¹ If this is the case, the unemployed need to cooperate with the employment agency and they determine together what programme would fit the best to their individual situation.

The unemployed will benefit from job search assistance, guiding them to the most suitable job offers. In some cases, they might participate in education and training programmes in order to improve or update the skills and know-how and eventually even receive a subsidy serving as a financial incentive to search harder and accept an offer quicker. However, the effects of these programmes might be ambiguous and heterogeneous. For instance, training programmes can have a lock-in effect, especially if their duration is long. So, in the short-term, the effect on reemployment might be negative, and in the long-run, it will be positive. Differences between the various groups of participants can also be noticed.

During the entire search process, the unemployed, who are eligible, receive benefit payments as a compensation for the wage that they had before losing the job. Unemployment benefits are part of the passive labour market policies and their goal is to provide a financial insurance against involuntary unemployment (Solon, 1979). These benefits, however, can be expected to have controversial effects. On the one hand, they might increase the unemployment duration because the unemployed probably would look for a better job, even though they might have a job offer or they eventually just substitute work by leisure. On the other hand, job quality might be impacted by the duration and generosity of the benefit payments.

Theory expects, as explained by Lichter (2016), that the higher the unemployment insurance and the longer its duration are, the more the job search efforts will be reduced. The reservation wage also has an important role in the job search behaviour. It is the “minimum acceptable wage” that a firm must offer such that an individual accepts the job proposal (Deschacht & Vansteenkiste, 2021). It is the wage at which an unemployed is indifferent between working and continuing to search for a job (Mortensen, 1986).

Moreover, differences between countries can be spotted. For instance, Krueger and Mueller (2010) differentiate between European countries and the United States. In the US, the unemployed spend more time on job search than the average European. This goes from 41 minutes on weekdays in the US to an average of 12 minutes on weekdays for Europe. The authors explain that this difference is due to the fact that unemployment benefits in Europe are more generous than those in the US.

So, what might be possible behavioural adaptations when unemployment benefits would decrease or be completely cut? Cahuc and Lehmann (2000) state that France has since 1993 a system in which unemployment insurance pays high compensations at the beginning, but the amount declines over time. Therefore, the longer a person is unemployed, the lower unemployment benefits will become. They find that when taking wages endogenously, reducing unemployment benefits would have very costly effects on the long-term unemployed individuals. Abbring, Berg, and Ours (2005) illustrate the example of the Netherlands, where the system introduces sanctions when people exploit the generosity of the benefit payments. In this case, benefits will be cut by a certain percentage and a certain period of time.

¹Information extracted from <https://www.insee.fr/en/metadonnees/definition/c1129>

The next section presents some reasons leading to unemployment, before moving to the different labour market policies, that have the aim to reduce the unemployment rate. A distinction between active and passive labour market policies will be done. The literature review will end with a presentation of the job search behaviour. Section 3 is the empirical part. The aim here is to do a comparative analysis of Belgium and Germany. For this, the economic situation of both countries will be presented and a short comparison follows right afterwards. This structure is taken over for the remaining empirical part. Following the economic situation, the labour market will be presented. Initially, some insights into the labour market legislation will be given, since they define the main labour market policies that should be discussed. If available, some evaluations of these policies will be given. A presentation of the unemployment compensation scheme in both countries will follow. The last subsection gives an overview of the effects on job search behaviour. In this part, the focus will be put on the effects of a cut in the generosity and duration of the unemployment benefits. The fourth section consists in a discussion and giving potential policy recommendations. Section 5 gives some concluding remarks.

2 Literature review

This section starts with a presentation of some of the reasons for the existence of unemployment. Then, a subsection presenting several labour market policies follows, doing a distinction between active and passive labour market policies. This will finally lead to the part about job search behaviour, which will focus mostly on the effects of unemployment benefits. First comes a presentation of job search from a general point of view and then follows a deeper discussion about what happens if the generosity and duration of the unemployment benefits are reduced.

2.1 Reasons for unemployment

The labour market does not necessarily need to be at its equilibrium. It might happen that there is a discrepancy between supply and demand, which can lead to unemployment or open vacancies (Wieling & Borghans, 2001). Nevertheless, even if the labour market is at its equilibrium, unemployment will still persist because of the so-called “natural unemployment rate” or “structural rate of unemployment.” This is the equilibrium point between the wage-setting and price-setting curves. It depends on the unemployment benefits and the legislation (Blanchard, Amighini, & Giavazzi, 2013). It is the lowest possible unemployment rate that can be reached. Even if enough vacancies exist, new entrants into the labour market will first need to search for work for at least a short period of time until they get employed. Furthermore, because of job destruction and job creation, individuals keep being mobile on the labour market. This subsection will cover the following elements: demography, education and formation, wages, economic cycles, job shortages and skills mismatches and technological change and sectorial restructuring.

2.1.1 Demography

Recently, the role of demography is increasing in the context of unemployment because the population in industrialised countries is getting older. The baby-boom generation has nowadays the age to retire (Grenier, 2009; Maroy, 2008; Rayou, 2009). The complexity of this subject is that if they would retire, a huge amount of jobs would become vacant and one might think that this is good for unemployment because more jobs would be available for job seekers. However, this will be important when discussing the so-called “job shortages” (Handel, 2003; McGuinness, Pouliakas, & Redmond, 2018; Wets & De Bruyn, 2011) because there are not enough young people to enter the labour market. Therefore, in order to avoid a too high outflow of old workers, some policies aim to raise the legal retirement age. This will have as a consequence that job seekers might become older on average. Since they usually have more difficulties in finding a new job, the unemployment rate is pushed upwards. So, some ambiguity can be seen in this complex topic and it is not clear what effect will dominate.

2.1.2 Education and formation

The educational system is not lined up well enough with the needs of the labour market. Employers often complain that graduating students are lacking job specific skills (Cappelli, 2015). Furthermore, school-leavers might accept jobs below their level of education and will probably end up in part-time jobs. Consequently, their hourly payment is lower. The number of hours worked and the hourly wage influence the monthly wage. Since both are lower, the monthly income will decrease as well (Wieling & Borghans, 2001).

When talking about training, firms could provide specific training to their newly hired employees, if they estimate their skills to be deficient. However, they often hesitate and do not provide training because they do not want to encounter costs of training under the uncertainty whether the employee will stay within the firm or not. Thus, employers try to avoid these specific training programmes and are reluctant during the hiring process. Moreover, since the skills required for jobs strongly affected by the

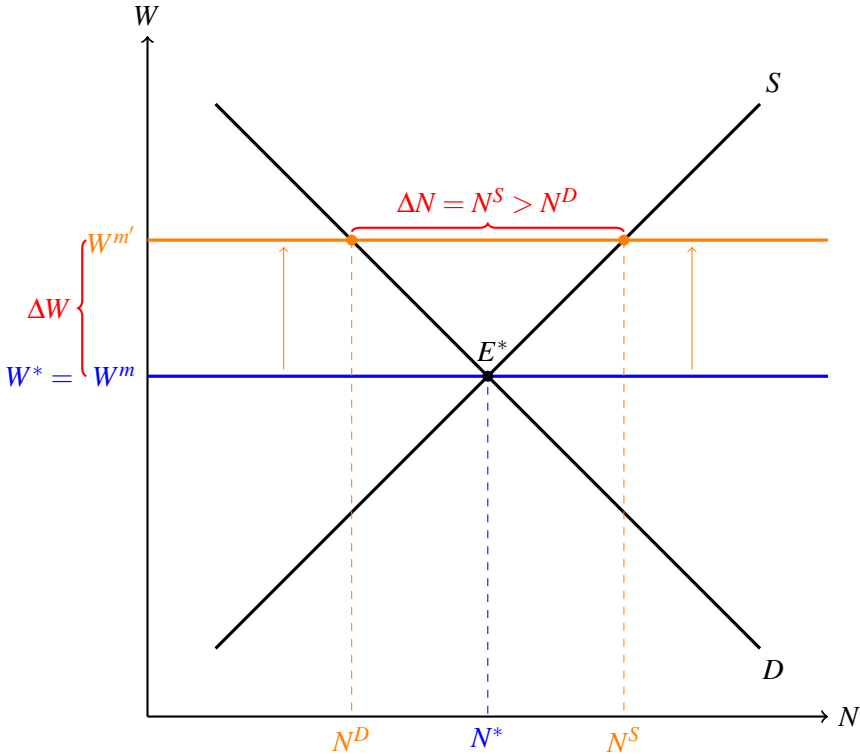
technological progress vary often and quickly, workers will be less likely to invest in training, which will decrease their access to these jobs (Brunello & Wruuck, 2019).

2.1.3 Wages

Over the last decades, the minimum wage has increased. This can be explained by the increase in the productivity of the firms, especially because they substitute labour with capital, since the costs for labour are higher than for capital, or when workers increase their efforts because they get a higher wage (Riley & Rosazza Bondibene, 2017). Therefore, if more capital is used instead of labour, unemployment can increase. It is also possible that employers prefer to hire more highly skilled workers in order to increase the productivity of the firms even more when using the new technology.

Figure 1 shows what happens when the minimum wage is increased, whereas labour demand and supply stay unchanged. The horizontal axis, denoted N , represents labour and the vertical axis W is the wage. The initial situation represents the equilibrium E^* between labour demand and supply (curves in black). The minimum wage is set such that it is equal to the equilibrium wage (blue line $W^* = W^m$). Imagining now that the minimum wage increases to $W^{m'}$, we notice that a discrepancy between labour demand and supply is created, if they stay unchanged. In that case, labour supply will be higher than labour demand, which will create unemployment, represented by ΔN .

Figure 1: Increase in the minimum wage



Source: own creation

So, an increase in the wage is accompanied by a higher unemployment rate (Minford, 1983). The wage influences the decision of the employers to create vacancies and thus the number of job seekers to employ. Even though the wage has an impact on employers, it must be mentioned that the wage also influences the decisions of job seekers. For instance, if the unemployment benefits increase, the reservation wage of the unemployed increases as well (de Groot & van der Klaauw, 2019; Mortensen & Pissarides, 1999). Thus, high unemployment benefits imply less job creation (Mortensen & Pissarides, 1999).

Depending on the unemployment rate and on how strong the demand by employers is, the job seekers can have a more or less powerful position in the bargaining process. If the unemployment rate is low or the demand by employers is high, the job seekers can bargain more since they can find an alternative job quite easily (Mortensen & Pissarides, 1999). Conversely, if the unemployment rate is high, their bargaining power is low and they have to “take as given” what employers offer. Under these circumstances, a job seeker, who does not perfectly match the job requirements, can easily be replaced by another unemployed.

2.1.4 Economic cycles

Economic cycles affect the unemployment rate because they have an impact on job creation and job destruction. During an expansion, job destruction is lower than job creation, whereas while the economy is in a recession, job destruction is greater than job creation (Davis, Faberman, & Haltiwanger, 2006; Desjardins & Rubenson, 2011). So, if the economy goes well, each type of worker has more chances to find work thanks to job creation. Employers are less picky in the level of skills possessed by the job seekers (Murtin & Robin, 2018). In a recession, however, low-skilled workers will face difficulties to find a job because their productivity will be too low. Therefore, they will stay longer unemployed or eventually be laid-off if they have been employed (Murtin & Robin, 2018). In general, it can be said that when the economy goes well, the unemployment rate is usually lower. Conversely, in times of a recession, the unemployment rate increases, since the low-skilled workers will be laid-off and have issues to find a new job.

2.1.5 Job shortages and skills mismatches

This leads to the next point, where the matching of skills and vacancies will be discussed in more details. As a short foreword, it must be mentioned that the matching is an important factor in order to get a job seeker more easily back into a job and to keep the worker employed. The better the matching is, the more likely it is that the individual stays for a longer period active in that specific job, even if the economy turns into a recession (Murtin & Robin, 2018). This is why job shortages and skills mismatches need to be discussed.

2.1.5.1 Job shortages

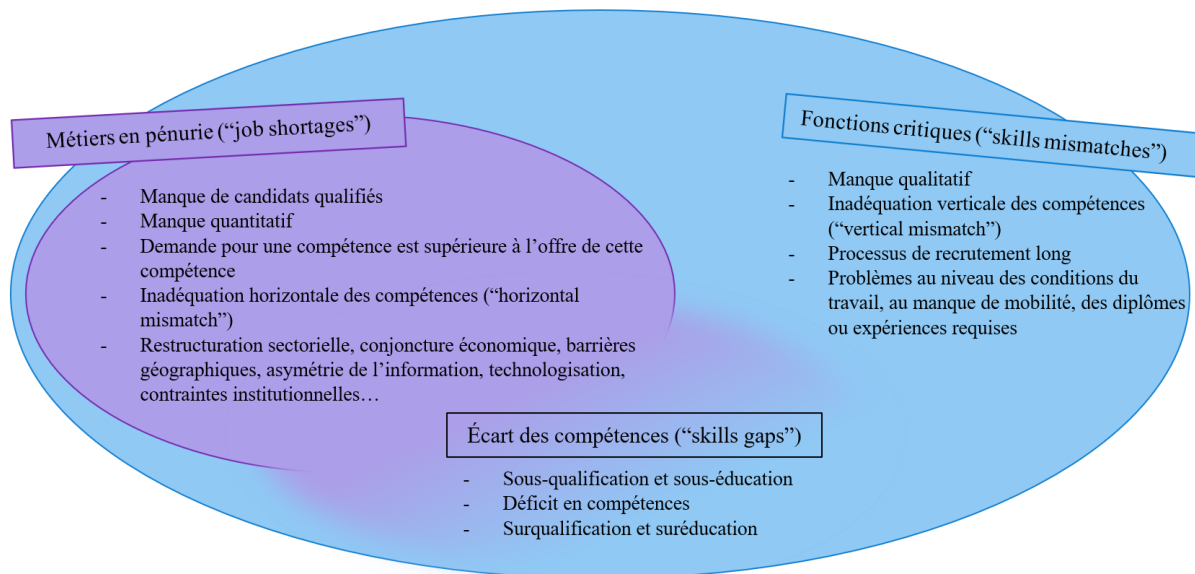
First of all, the two concepts need to be differentiated. When talking about a job shortage, one takes into account a lack of qualified job seekers for a specific job (Burstedde et al., 2020; Cappelli, 2015; Cedefop, 2010; Haskel, 2001; Vollmer, 2015; Wets & De Bruyn, 2011). Economically speaking, this is equivalent to say that the demand for a certain skill by the employers is higher than the supply of that specific skill by the job seekers (Burstedde et al., 2020; Cedefop, 2015; Wieling & Borghans, 2001). So, there is a quantitative lack (Grenier, 2009) of job seekers with respect to the vacancies open to be filled.

2.1.5.2 Skills mismatches

Skills mismatches are considered as a source of unemployment, too. This concept takes into account several types of frictions. Before presenting them, the concept of a skill mismatch must be explained. As this term indicates, a skill mismatch is when the skills that a job seeker possesses are not suitable to what an employer is looking for and what is required for a job (Handel, 2003). This can lead to difficulties during the recruitment and prolong the whole process. The issue here is therefore of qualitative nature (Grenier, 2009), but quantitative mismatches can also be the origin of skills mismatches. As indicated, however, this concept is very broad and includes different types of frictions: horizontal mismatches, vertical mismatches, skills gaps and skills obsolescence (Cappelli, 2015; Cedefop, 2010, 2015; McGuinness, Pouliakas, & Redmond, 2017; McGuinness et al., 2018). What follows now will give a brief insight into the different types of skills mismatches and how they are

related to each other and to unemployment. Figure 2 illustrates the interconnections between job shortages and skills mismatches, which might make the understanding of these concepts easier.

Figure 2: Job shortages and skills mismatches



Source: own creation, developed during the internship at IWEPS

Horizontal mismatch

The horizontal mismatch is when a job seeker has done studies in one field, but that these studies are not at all in line with the skills required for most vacancies. So, it is possible that the level required is suitable, but not the field of the skills (Battu & Bender, 2020; Cedefop, 2010; Sloane, 2014).

The issue here is that, if a job seeker has done studies in a field that is not linked to the domain of the skills required for a job, the employer will hesitate to employ that job seeker because it might be inefficient for him. This could incur costs to the firm to retrain that person. Furthermore, it is possible that this individual will change the job because the job might not be of high interest for the worker, since he or she is specialised in a different field. Thus, the employee will change the job until he or she finds the most suitable one (McGuinness et al., 2018; Sala, 2011). This explains the high labour flow at the beginning of the career of highly skilled workers.

Another scenario can be assumed. Many students do studies in one field, whereas a different field is asked by the employers. The issue arising is that the supply for one job will be in excess, whereas another one will be in shortage. This can push upwards the unemployment rate because not everyone will find a job in its domain of studies and employers will not be very pleased to organise retraining programmes, while knowing that the probability persists that the job seekers will leave after some time to look for a better match.

Vertical mismatch

Conversely to the previous part, a vertical mismatch, as its name indicates, is a mismatch in the level of the skills, whereas now, the field of studies and the domain of the skills required are in line with each other. This vertical mismatch can be identified by over- or under-education or over- or under-qualification (McGuinness et al., 2018). Over-qualification is when a worker possesses higher skills than what is required to do the job. Vice versa, when an employee has less skills than what is needed to properly execute the tasks, he or she is underqualified (Desjardins & Rubenson, 2011).

The link to unemployment in this case is that since the employer will notice that an individual is underqualified, the recruiter eventually will hesitate to employ the job seeker because the job-match quality would be low. Consequently, the productivity will suffer. On the other hand, if a job seeker is overqualified for a specific job, the employer might be pleased to employ that individual because the overqualified worker will be more productive than if his or her skills were exactly matching those required for the job (Cappelli, 2015; Kampelmann & Rycx, 2012; McGuinness et al., 2017, 2018; Sala, 2011). However, the satisfaction of that worker might be lower because he or she is not using all the skills possessed and so, as presented above, the labour flow might be higher at the beginning of the career.

Imagine many people are overqualified and employers employ them in order to benefit from their higher productivity. This would have as a consequence that the job seekers matching exactly with these jobs would not be employed, since the vacancies are already taken. So, they probably stay unemployed for a longer period of time. Furthermore, a too high over-qualification is a sign that the labour market is not allocating job seekers efficiently (McGuinness et al., 2018) and this would have costs for the entire economy (Mahy, Rycx, & Vermeylen, 2015).

Skills gap

The skills gap is a friction lying between the two previous ones. Precisely, it is “a misalignment between the skills required to do the job in the best possible way and the skills of workers” (Cedefop, 2015, p. 16). This can be viewed in two different ways. On the one hand, a skill gap can represent a “vertical gap” between the skill possessed by a job seeker and the one necessary for a job. In this case, an individual might be over- or underqualified (Sloane, 2014). On the other hand, a skill gap can be interpreted as a “horizontal gap.” Here, it would represent the difference between the skill domain that an employer needs and the field of skills possessed by the job seeker. A gap between the skill supplied and the skill required can be found in both cases. It depends on the point of view one takes and the complexity of this friction is to clarify whether a skill gap is considered as a vertical or a horizontal mismatch.

Skills obsolescence

Skill obsolescence is when the skills possessed by workers lose in relevance (Allen & de Grip, 2012). This can have several reasons. Technological progress, for instance, plays an important role. When jobs are destroyed and others are created, new or more sophisticated skills are usually required. Consequently, the skills possessed by the workers are not up-to-date and they need to participate in some training programmes such that their skills are in line with the requirements of the job. This is also true for unemployed individuals. Their skills become obsolete, too, because of technological progress. Furthermore, the longer they are unemployed, the longer their skills are not being used. Consequently, the unemployed lose some know-how and their skills lose in value. Hence, they will have difficulties to find a new job and their recruitment takes longer because they need to be retrained (Handel, 2003) in order to be productive enough. Age is also a reason for skills becoming obsolete. In this case, physical competences suffer most, because the older a person is, the weaker the body is and the more often one becomes sick (McGuinness et al., 2017).

2.1.6 Technological change and sectorial restructuring

This leads to a last important reason for unemployment, which is tightly linked to skills mismatches. Technological progress probably leads to new skills, which means that employers need more skilled workers (Cappelli, 2015; Haskel, 2001) or workers with more sophisticated skills. The more individuals are skilled, the easier it will be for them to adapt to new technologies (Cedefop, 2015) and the more productive they will be (Mahy et al., 2015). However, the labour market needs some time to adjust to the new technologies. Consequently, the new skills required for some jobs are not immediately available among the job seekers (Brunello & Wruuck, 2019; Cedefop, 2015). Thus, due to a skills mismatch,

these jobs will stay vacant even though enough job seekers might be on the labour market. This is where education and training will have an important impact. If they are not in line with the technological progress, skills mismatches will increase, which will worsen the situation of job shortages (Desjardins & Rubenson, 2011), and therefore also lead to higher unemployment rates and prolonged unemployment spells.

However, the effect of technological progress on unemployment is ambiguous because, on the one hand, this phenomenon is a source of job creation, but, on the other hand, also of job destruction. The jobs destroyed are usually less productive, whereas the jobs created should be more efficient and provide a positive return, because they use the “new” technology (Cahuc, Carcillo, & Zylberberg, 2014, Chapter 10). Nevertheless, since the new jobs created often require new know-how and more skilled employees, the workers laid-off because of job destruction will eventually have some difficulties to find a new job, which might push upwards, at least for a short period of time, the unemployment rate.

2.2 Labour market policies

After having discussed some reasons that lead to unemployment, the following part is dedicated to the presentation of several labour market policies that have the goal to reduce unemployment. A distinction between active and passive labour market policies will be done. The part about *Unemployment benefits* will be elaborated a bit more, because the subsection *Job search behaviour* has the aim to focus on the effects of unemployment compensation schemes on job search efforts.

2.2.1 Active labour market policies

Active labour market policies (ALMPs) can be defined as “public interventions designed to improve the situation, in terms of employment and wages, of the unemployed and of disadvantaged populations” (Cahuc et al., 2014, Chapter 14, p. 902). Their aim is to reduce job search costs, to increase the individual productivity and to improve the matching between job seekers and open vacancies. It must be mentioned that, even though unemployment insurance is viewed as a passive labour market policy, the monitoring of the search behaviour and the sanctions provided should be considered as being part of the active policy (Cahuc et al., 2014, Chapter 14).

2.2.1.1 Job search assistance and monitoring

Job search assistance programmes, on the one hand, include a lower but indefinite compensation for the unemployed who are not eligible anymore or who have exhausted their unemployment benefits (Cahuc & Lehmann, 2000). On the other hand, they consist of regular meetings with an agent of an employment agency in order to guide the job seeker in the job search efforts (Cahuc et al., 2014, Chapter 14) and to find the best suitable work possible. If needed, they will also help the unemployed to organise their participation in training or formation sessions to improve the skills possessed. Hence, the chances to find a job should be improved because the matching between jobs and workers is better (Meyer, 1995). So, the unemployed should go back to employment faster.

Furthermore, monitoring is an important part of ALMPs. Labour agencies monitor in order to verify whether job seekers are eligible to receive unemployment benefits or whether they have to be sanctioned because they are, for example, not looking hard enough for a job. When job seekers do not meet their obligations, they first get a warning about the possibility of an upcoming sanction. Afterwards, the sanction will materialise. Cahuc et al. (2014, Chapter 14) explain that both, the threat and the sanction, have a positive impact on the exit rate from unemployment. Ashenfelter, Ashmore, and Deschênes (2005) find that a sanction has a positive effect on the reemployment rate. Even though Van den Berg and Klaauw (2019) also find that the unemployment spell duration is shortened thanks to monitoring, their results indicate that job seekers tend to accept a job with a lower wage. According to them, this should however be no issue if labour mobility is high.

2.2.1.2 Education and training

Classroom training, which is used most of the time, is usually of short duration. Its aim is to give individuals the possibility to acquire some general or specific skills necessary for a job or “to bring the knowledge of skilled employees up to date” (Cahuc et al., 2014, Chapter 14, p. 903).

Youngsters often have the opportunity to take part in an apprenticeship. This can be helpful for young people who left school prematurely and who have difficulties to find a job. An apprenticeship “generally lasts from 3 to 12 months, and at the end of that period the employer has the opportunity to hire the trainee on a permanent basis” (Cahuc et al., 2014, Chapter 14, p. 903). Like this, they get the skills that are important for the jobs and they increase their employment opportunities. The drawback of training programmes is that they have a so-called “lock-in effect” in the short-term because the unemployed search less for a job while they are enrolled in such a programme. Thus, in the short-term, the effect of training programmes can be negative on the reemployment rate (Cahuc et al., 2014).

Furthermore, a job seeker could acquire exactly the skills needed for a job if the firm offered training programmes. The complexity in this situation is that the worker could leave the firm after having finished the formation. This would incur the firm with costs, but no benefits. Employers therefore often hesitate to provide training to job seekers. In order to incentivise the employers to offer such programmes, the government could intervene with subsidies as compensation for these training costs (Brunello & Wruuck, 2019; Cappelli, 2015; Desjardins & Rubenson, 2011). Sooner or later, they have to train their workers anyway because the employees need training within the life cycle in order to keep their knowledge and skills up-to-date, otherwise they can become obsolete and useless for their job (Cahuc et al., 2014, Chapter 4).

2.2.1.3 Labour mobility and migration

Labour mobility, a potential factor to reduce unemployment, can be improved by increasing the amount of highly educated people. They learn languages with more ease and will be able to adapt to new environments (Cahuc et al., 2014, Chapter 4). When job seekers are more mobile within a region or a country, they have more opportunities to find a job that matches to their skills.

Migration will also decrease unemployment in the country from which the job seekers emigrate in order to fill the vacancies in another country (Cappelli, 2015), which usually is more developed. This phenomenon can often be seen in poorer or developing countries. It is known as “brain drain.”² Even though one might think that if immigrants start to work in a local job, competing native unemployed would not find a job anymore and push upwards unemployment, Moreno-Galbis and Tritah (2016) find that the opposite happens. In the short run, immigrants push the employment rate of competing natives upwards. So, one can say that labour mobility and immigration represent possibilities to solve, at least partially, the “issue” of unemployment (Cahuc et al., 2014, Chapter 11).

European countries use migration since recent years more and more intensively. The European Union (EU) has implemented a programme called “Blue Card”, which gives the non-EU job seekers the permission to start to work within the EU. This is useful when the local labour market suffers lacks in certain skills, which are available in foreign countries (Cedefop, 2015).

²Brain drain is when educated and skilled individuals from one country migrate to another country for a better job and living conditions (Source: <https://www.merriam-webster.com/dictionary/brain%20drain>).

2.2.1.4 Short-time work

Short-time work is a good way to avoid increases in unemployment. This scheme is mostly used during recessions, as can be noticed for the recession of 2008-09 (Boeri & Bruecker, 2011; Hijzen & Venn, 2011) or also the recent Covid-19 crisis. During economic downturns, because of stronger employment protection, some countries³ like Belgium and Germany reduce the standard number of working hours in order to increase employment and to avoid a jump in unemployment during these periods (Cahuc et al., 2014, Chapter 2). So, the intention is to preserve jobs, even if a firm has financial issues or when the economy is in a recession. The workers also get financial support to compensate the reduced hours of work (Hijzen & Venn, 2011), such that they do not suffer a sharp reduction in the wage. Furthermore, if the employment protection is intense, high administrative costs can be avoided while using this system (Cahuc et al., 2014, Chapter 13).

If, however, this model is continuously used in “normal” economic times, there can be different effects. Employment might be pushed upwards, but the labour market segmentation eventually increases (Hijzen & Venn, 2011). The financial support will probably not be permanent. So, sooner or later, the wage of these workers will drop and the wage gap would increase.

2.2.1.5 Early retirement programmes

The legal system fixes a legal retirement age at which people can choose to retire or not. They can take their pension benefits before or after the legal age. This decision will impact the amount of benefits a retiree will receive, which will be represented either in a smaller or greater quantity. Financial incentives influence the decision of individuals at what age they will take the pension benefits (Cahuc et al., 2014, Chapter 1). The earlier they take their benefits and the less they lose when retiring earlier, the more they will be incentivised to stay unemployed when the potential benefit duration is extended. So, the shorter the period between unemployment insurance and pension benefits is, the less severe will be the consequences if the individual does not find a job before the benefits come to exhaustion (Lalive, van Ours, & Zweimüller, 2006).

Since older workers often have more difficulties to find a new job, because employers prefer to hire individuals that will stay longer with them, early retirement programmes could be an alternative to reduce unemployment. If the older workers, that do not find a job, could retire earlier, they would leave the labour market and thus the unemployment rate would decrease.

Having briefly approached the concept of financial incentives in the last paragraphs, the latter concept will now be covered.

2.2.1.6 Financial incentives

While discussing the situation of Belgium and Germany, the existence of different types of financial incentives will be identified. Some target the employers and others the unemployed (Cahuc et al., 2014, Chapter 14). Giving now a brief example, a first financial incentive would be a subsidy for the employers if they hire job seekers of a particular group. This payment can be temporary or permanent. Furthermore, individuals can get a financial aid for launching their own enterprise in order to become self-employed (Cahuc et al., 2014, Chapter 14).

³During the 2008-09 recession, 16 OECD countries used this short-time work programme in order to avoid an increase in unemployment. 11 of them used this scheme already before the crisis and the remaining five introduced this system during the financial crisis in 2007 (Hijzen & Venn, 2011).

Thus, what can be said so far, is that the government needs to intervene in order to create “the right incentives and institutional frameworks” (Cedefop, 2015, p. 18) such that the interest of employers as well as of job seekers is stimulated to participate in vocational education and training (VET) policies. VET is very important in the lifelong learning process as well as for providing job seekers with the skills required by the labour market.⁴ One can say that the higher the incentive is to look for a job, the higher is the probability that job seekers find a job more quickly (Meyer, 1995).

2.2.2 Passive labour market policies

Passive labour market policies include “unemployment compensation, payroll or employment taxes, and employment protection policy” (Mortensen & Pissarides, 1999, p. 2602). In contrast to ALMPs, passive ones aim at contributing financial help to the job seekers. They are not meant to push unemployed individuals back into employment. Even though other passive labour policies exist, this work will emphasize two aspects: employment protection and unemployment benefits. Including the part on the taxes would exceed the framework of this work.

2.2.2.1 Employment protection

Strict employment protection leads to high administrative costs when firing a worker. Consequently, the usage of temporary contracts becomes more intense (Hijzen, Mondauto, & Scarpetta, 2017). This leads to an increase in the labour turnover and eventually to more frequent unemployment spells. A consequence of this increase in the firing costs is that job creation is lower, such that less jobs will be destroyed. This would eventually lead to higher unemployment, since employers would hire less job seekers (Mortensen & Pissarides, 1999). Furthermore, Hijzen et al. (2017) find that lower productivity could be a potential consequence of temporary work. Since the labour mobility is higher, and so is the labour turnover, workers change their jobs more often and do not have time to properly acquire the skills and know-how needed to be the most productive and efficient at work.

The simultaneity of a high minimum wage and strict employment protection must lead to low exit rates from unemployment and the number of long-term unemployed might increase (Cahuc et al., 2014, Chapter 13). So, even though workers in permanent contracts benefit somehow from employment protection, those in temporary work suffer a loss in job security. Furthermore, it represents a cost for employers and for the economy in general (Hijzen et al., 2017).

2.2.2.2 Unemployment benefits

Job seekers usually receive unemployment benefits when they are considered as unemployed. They serve as a kind of insurance for being unemployed (Marinescu & Wolthoff, 2020). This, however, is not always the case and some criteria have to be fulfilled. The unemployed need to have worked for a certain period of time (Krueger & Mueller, 2010), meet their obligations or accept a job when they get an offer, otherwise their payments might be temporarily or permanently suspended. If they refuse to participate in a programme proposed by the employment agency, they also risk to be sanctioned (Cahuc et al., 2014, Chapter 5).

Unemployment benefits can be divided in two different groups. On the one hand, you have the *unemployment insurance benefits* and, on the other hand, the *unemployment assistance benefits*. The difference between these two payments lies in the duration of reception and the independency of past earnings. Whereas the unemployment insurance benefits are usually limited to a few months or years and depend on the last wage, the unemployment assistance benefits have no temporal limit and no dependency on earlier earnings, provided that the beneficiary is actively looking for a job and available for work (Cahuc et al., 2014, Chapter 13).

⁴Information taken from <https://op.europa.eu/s/pttN>

The unemployment benefit payments have two effects: the “liquidity effect” and the “moral hazard effect.” If the gap between the benefits and the previously earned wage is small, the liquidity effect will imply that the individuals have no need to hurry to find a job in order to smooth their consumption. Furthermore, given that the agent receives benefits for staying at home and having time for leisure activities, this will lead to the so-called moral hazard effect⁵ (Cahuc et al., 2014, Chapter 13).

Since the 1980s, European countries have higher and more persistent unemployment rates than the US. Americans devote much more time and effort to job search than their European counterparts (Krueger & Mueller, 2010). This is due to the more generous and longer benefit payments in Europe (Katz & Meyer, 1990). The duration of the benefit payments often is more than twice as long in Europe than in the US. The authors suggest that the potential benefits duration has a bigger impact on the duration of unemployment spells than the level of the benefit payments. Furthermore, they suggest that the rate of unemployed individuals benefiting from unemployment insurance is lower in the US than in Europe.

The question now is whether the unemployment benefits should be steady or decreasing over time. Currently, the benefit payments are, most of the time, decreasing with the unemployment spell. This can be explained by the unemployment assistance, which can take over from unemployment insurance as soon as the job seeker is not eligible anymore to receive the benefits. Furthermore, if the unemployed are forward looking, a decreasing scheme of the benefit payments would give them the incentive to increase their job search efforts (Cahuc & Lehmann, 2000).

Not only the benefit scheme is important to be mentioned when unemployment benefits are discussed, but also the sanctions that can be applied in certain circumstances. Sanctions are planned in the case where an individual does not comply with the rules and they consist in a reduction in the unemployment benefits (Abbring et al., 2005). The benefit payments can either be suspended for a short period of time or the unemployed can be entirely excluded from receiving these payments, depending on the strictness of these sanctions (Cahuc et al., 2014, Chapter 13). An aftermath of a sanction can be an increased monitoring (Abbring et al., 2005). Individuals who have been sanctioned will work less hours and have a lower hourly wage than the unemployed, who have not suffered a sanction. Furthermore, the jobs they hold are less qualified (Cahuc et al., 2014, Chapter 14). The reason is that if a person suffers a cut in the benefit payments, he or she will probably have liquidity issues. This will force the individual to take the first job offer in order to avoid a decrease in his or her utility.

In general, one can say that, as stated by Card, Kluge, and Weber (2018), job search behaviour is affected in different ways, depending on the type of labour market policies, the economic situation and the personal traits of the individuals, like the age, the gender, the duration of the unemployment spell, etc. For instance, a brief example is that the impact of human capital programmes (i.e. training and private sector employment) on the long-term unemployed is positive, whereas work first programmes (i.e. job search and other programmes) are relatively better suited for the reemployment of disadvantaged individuals.

2.3 Job search behaviour

The goal of this part is to present the impacts on job search behaviour after the generosity and the duration of the unemployment benefits have been reduced. For this, first a general overview on job search behaviour is presented, whereas the end of this section will give a more elaborated presentation of the effects on job search behaviour after a reduction in the benefits, while doing a distinction of both previously mentioned situations.

⁵The “moral hazard effect” is when someone does not have the full responsibility for taking a risk, or when someone is exploiting a situation and taking advantage of someone else. Here, job seekers can take advantage of the benefits provided by the employment agency. Further information can be found under the following link: <https://www.thebalance.com/moral-hazard-what-it-is-and-how-it-works-315515>.

2.3.1 General presentation of job search

When talking about job search, one must first have a look on the criteria to fulfil to be considered as a job seeker. This activity includes reading ads, sending applications to firms, being registered at an employment agency, but also talking to family and friends (Krueger & Mueller, 2010; Mortensen, 1986).⁶ So, in order to be considered as a job seeker, one must invest time and money into this quest, instead of using them for other activities. Important differences exist between the US and Europe when considering the unemployment rate and its persistence (Katz & Meyer, 1990). The last part of this section will give some insights into the reasons for these differences and explanations on how job search works and how this is affected by the two different types of benefit reductions.

An individual looking for a job will invest less time in this activity than someone employed investing time in the tasks for the job. When looking for a job, one only has the chance to get an interview and, subsequently, eventually be hired. If, however, an individual is employed, he or she derives a wage (Cahuc et al., 2014, Chapter 5). Job search is mostly concentrated on weekdays and, those having lost their job, search on average more than re- or new entrants or those expecting to be recalled. A difference between individuals having a working partner and those living alone can also be noticed. Unemployment benefits will have more likely smaller effects on those having a secondary income source than those living on their own (Krueger & Mueller, 2010).

Not only those who are unemployed are searching for work, but it can also happen that those already being employed are looking for another job. Even though “on-the-job search” will not be covered in detail in this work, since the focus is put on job search behaviour of the unemployed, it is still important to be mentioned. Individuals look for a job, while being employed, if they expect that another job could contribute to a higher productivity and thus, to a higher wage. So, if the net present value of the expected wage of another job is higher than the net present value of the income of the current job, then the individual will look for a job while being employed (Mortensen, 1986).

Such financial incentives also play an important role in the decision whether to look for a job or to stay inactive. Thus, the unemployed continue to search for a job when their opportunity cost of being unemployed is higher than their opportunity cost of working (Mortensen, 1977). They will continue to look for work until a firm offers them a suitable and acceptable wage, i.e. the wage offered is higher than their reservation wage (de Groot & van der Klaauw, 2019).

A high reservation wage indicates that the job seeker is more selective. Although the worker-job matching quality outcomes can be improved, the duration of the unemployment spell might be prolonged. This reverts to the depreciation of the skills and work experience. So, the positive effect on the job quality by the higher reservation wage might be offset (de Groot & van der Klaauw, 2019). Thus, long-term unemployed have more difficulties getting back into employment, due to obsolescence of skills and work experience and signalling low motivation (Faberman & Haider Ismail, 2020). However, the longer individuals are unemployed, the more the reservation wage should decrease (Kasper, 1967; Katz & Meyer, 1990), because they are “liquidity constrained”, i.e., the longer they are unemployed, the less money they have left. Moreover, long-term job seekers will not be able to take a credit anymore (Mortensen, 1986). Consequently, the unemployed will realise that the expectations about the employment opportunities were too optimistic and they finally accept a job with a lower quality (Faberman & Haider Ismail, 2020). Therefore, the reemployment opportunities as well as the job finding rate increase (Katz & Meyer, 1990).

⁶A list with further job search activities is included in Figure 18 in the Appendices.

However, the results by Kyyrä, Pesola, and Verho (2019) show that the longer a person is unemployed, the shorter will be the duration that an individual stays in the next job. This confirms that the job quality is lower. The peak in the exits of unemployment might not necessarily be due to the reservation wage, but mostly because job seekers accept jobs of lower quality and shorter duration when their benefits come to exhaustion. Furthermore, this might suggest that job seekers “store” jobs and wait until the moment when the benefit payments come to exhaustion, before accepting them (Kyyrä et al., 2019). The search effort increases as well (de Groot & van der Klaauw, 2019), because the individuals do not want their utility to decrease.

Unemployment benefits seem to have a negative effect on job search. The more generous they are, the lower will be the incentives of the unemployed individuals to look for a job (Boone & van Ours, 2012; de Groot & van der Klaauw, 2019; Faberman & Haider Ismail, 2020; Katz & Meyer, 1990; Murtin & Robin, 2018), because the difference between the wage that they received and the unemployment benefits that they obtain is smaller. Therefore, the expected search duration increases when the benefits are more generous, because the disutility of being unemployed decreases (Mortensen, 1977). This can either be used to find a more adequate job or “to substitute leisure for work” (Solon, 1979, p. 247). Thanks to the benefit payments, job seekers are not forced to accept the first offer they get, if they assume that this proposal is “ill-suited” for them (de Groot & van der Klaauw, 2019). It must be mentioned, though, that the unemployed receiving unemployment benefits search more than those who already exhausted the benefit payments (Faberman & Haider Ismail, 2020). Although generous benefits reduce the incentive to search, it seems that the search intensity is still higher while receiving benefit payments compared to when getting nothing at all (Krueger & Mueller, 2010).

Even though these payments are generally not permanent, but limited to a few months or years, some rare countries represent an exception, like for example Belgium, where the unemployment insurance period is not limited in time (Cockx, Dejemepe, & Van Der Linden, 2011; Cockx & Ries, 2004; Schmieder & von Wachter, 2016).⁷ In the US, the unemployment benefits are generally limited to 26 weeks (six months) (Faberman & Haider Ismail, 2020) and it clearly can be noticed that shortly before unemployment benefits come to exhaustion, the amount of time spent on job search increases tremendously (Krueger & Mueller, 2010; Mortensen, 1977). Several authors (see e.g., Card, Chetty, & Weber, 2007; Katz & Meyer, 1990; Kyyrä et al., 2019; Meyer, 1990; Moffitt, 1985) talk about exit rate spikes just before the date when the benefit payments exhaust. This is also called the “hazard rate” (Card et al., 2007). After that date, the exit rate drops again (de Groot & van der Klaauw, 2019). Card et al. (2007) find that the unemployment exit hazard is lower than the reemployment rate. This indicates that, when the benefits come to exhaustion, some individuals leave the labour market and others participate in a training programme. However, there seems to be no change in the job search behaviour of those who are ineligible for unemployment insurance (Cahuc et al., 2014, Chapter 5).

Despite many authors having discussed a spike in the exit rate, rare are those clearly explaining the reasons behind this phenomenon. According to Mortensen (1977), if income and leisure are substitutes, a decrease in the income would lead to a decrease in leisure. However, it was shown that, according to theory, the opposite is true. Leisure and income are complements, i.e. if income decreases, leisure increases. Krueger and Mueller (2010) suggest that this decrease in the job search effort, after the benefits came to exhaustion, could be due to discouragement because they did not find a job, even though they increased their search efforts before the benefits have come to exhaustion. Boone and van Ours (2012) identify differences in the spikes between long-term jobs and temporary jobs. It seems that “temporary jobs are less likely to generate benefit expiration spikes in the transition rate than permanent jobs” (Boone & van Ours, 2012, p. 424). They discover that the exit rate for temporary jobs is higher within the first months of an unemployment spell, whereas the exit rate for permanent jobs is lower at the beginning of these periods. This supports the existence of a higher exit hazard for permanent jobs when benefits come

⁷In order to get more detailed information about the benefit payments in Belgium, the following site is very useful: <https://www.cgsib.be/fr/allocations-de-chomage>.

to exhaustion and suggests that it is easier to delay the date of reemployment. Nevertheless, temporary jobs also show an exit spike, even if smaller, at the moment of benefit exhaustion. Boone and van Ours (2012) state that it is the acceptance of a delay between finding a job and starting to work in this job that is leading to a benefit spike shortly before the exhaustion of the unemployment benefits. A long-lasting job has a higher value to the firm, so the job seeker can bargain a longer delay before the starting date of the job. This could explain why there is a difference in the exit rate spikes between permanent jobs and temporary jobs.

Last but not least, the job seekers that are temporarily laid off, are those anticipating to be recalled by their previous employer (Burdett & Mortensen, 1980). They are expected to put lower efforts into job search (Krueger & Mueller, 2010) because most of them are waiting to be rehired subsequently. Thus, they do not look for an alternative job. They also are aware that employers often rehire individuals who already have some experience rather than new entrants without job specific skills (Burdett & Mortensen, 1980). Consequently, the reservation wage of those expecting to be recalled is higher. However, the longer the unemployment spell is, the more the reservation wage declines because each period that an unemployed did not get a recall lowers the likelihood of being called back (Katz, 1986), for the same reasons as discussed earlier.

Having discussed in a more “general” way how job seekers behave, the remaining of this section will focus more on a reduction in the benefits. This can be separated into two approaches: a cut in the generosity of the benefits and a cut in the duration of the unemployment insurance. The end of this section consists in presenting the effects on job search behaviour in both cases.

2.3.2 Reduction in the generosity of benefits

The longer the unemployment spells are, the more the unemployment benefits decrease. Furthermore, several studies (i.e., Boone and van Ours (2012); de Groot and van der Klaauw (2019); Katz and Meyer (1990)...) found that the more generous unemployment benefits are, the lower will be the incentive to intensively search for a job.

As mentioned previously, if job seekers do not meet their obligations in terms of job search efforts or accepting suitable job offers or training programmes organised under ALMPs, they might be sanctioned by a temporary benefit exclusion (Busk, 2016). However, this does not necessarily mean that the period of benefit payments is reduced when an individual is penalised. It can simply be “postponed by the period of the sanction” (Busk, 2016, p. 160). If a person repeatedly fails to meet the obligations required to be eligible for unemployment benefits, or if a person is a long-term unemployed or a youngster, Busk (2016) explains that the sanctions can be stricter.

Lalive, van Ours, and Zweimüller (2005) estimate that right after a sanction has been imposed, job search increases tremendously. The unemployed, who have been sanctioned, increase their job search efforts because the utility in being unemployed has decreased. Moreover, those who have not suffered a cut in benefits so far also increase the job search intensity because the requirements are stricter (Lalive et al., 2005). Job seekers try to avoid a decrease in the value of being unemployed. When the sanction approaches the end, they expect the job search efforts to decrease gradually over time. On top of this, Lalive et al. (2005) and Boone, Sadrieh, and van Ours (2009) state that a threat of an upcoming sanction, after there has been an infringement in the obligations in the job search, already has a positive effect on the unemployment exit rate. Busk (2016) also finds that stricter sanctions have a more positive effect on the reemployment rate than shorter sanctions. Furthermore, sanctions do not only push job seekers into employment. The unemployed also get into education, participate in ALMPs or leave, sometimes only temporary, the labour market. So, a benefit reduction does not only lead to increased exits from unemployment to employment, but also into training programmes or even out of the labour market.

When a person has been sanctioned, not only his or her benefit payments will be suspended for a certain period of time, but the monitoring by the employment agency will eventually be more intense. Furthermore, it seems that monitoring has a strong impact on the job search behaviour of the individuals and the reemployment rate (Abbring et al., 2005). The stronger the monitoring of job search efforts is, the higher is the pre-sanction exit rate from unemployment (Lalive et al., 2005).

Reducing the generosity of the unemployment benefits has a positive impact on the unemployment rate. As already indicated earlier, the more generous the unemployment insurance is, the longer and more persistent the unemployment spells will be (Katz & Meyer, 1990). Identically to a reduction in the generosity of benefits, sanctions can be a good way to decrease the duration of the unemployment spells, because the value of being unemployed drops if the benefit payments are suspended for a job seeker. During the sanction period, the reservation wage decreases and the job search efforts increase, which pushes the reemployment rate upwards. Since the individual knows the length of the sanction period, this behaviour would only be temporary. As soon as the sanction has reached its end, the job seeker will decrease the efforts in looking for a job and the reservation wage increases again (Busk, 2016). It is possible, though, that the sanction would have a permanent positive effect on the job search behaviour (Abbring et al., 2005; van den Berg, van der Klaauw, & van Ours, 2004) because the monitoring would be stricter and the job seeker wants to avoid to be sanctioned again in the future.

Furthermore, de Groot and van der Klaauw (2019) show that the stronger the reduction in unemployment benefits is, the higher will be the exit rate out of unemployment, because the reduction in the wage would be sharper for these individuals. Boone et al. (2009) also find that a reduction in the unemployment benefits, as well as a system including sanctions, have a positive effect on the probability of accepting a job. However, they mention that these effects depend on the sanction system and on the offered wage. Nevertheless, it seems that sanctions have most of the time an important impact on the probability to accept a job.

According to Katz and Meyer (1990) the effect of a reduction in the level of benefit payments on the job search behaviour seems to be smaller than the effect of reducing their duration, which leads to the next point.

Table 1: Summary table: Reduction in the generosity of unemployment benefits and its aftermaths

Author	Policy/Element	Effect
Abbring et al. (2005)	Sanctions	Long-term positive effect on the reemployment rate
	Monitoring	Positive effect on the job search behaviour and the reemployment rate
Boone et al. (2009)	Sanctions	Positive effect on the probability of job acceptance
	Benefit reduction	Positive effect on the probability of job acceptance
Busk (2016)	Sanctions	Positive effect on the reemployment rate while the sanction is “active”; when the sanction period is over, job search decreases
Lalive et al. (2005)	Monitoring	High pre-sanction exit rate from unemployment
van den Berg et al. (2004)	Sanction and monitoring	Sanction might have a positive effect on the job search behaviour in the long run, because of stricter monitoring in the aftermath

Source: own creation

2.3.3 Reduction in the duration of benefits

As has been seen so far, unemployment spells usually are limited in time and therefore have an exhaustion date. This induces a peak in the unemployment exit rate shortly before that moment (Boone & van Ours, 2012). The job finding rate is the highest during the month before as well as after the benefits come to exhaustion. According to job search theory, if the duration of unemployment benefits is extended, the length of unemployment spells should increase and the reception of unemployment insurance should be prolonged (Lichter & Schiprowski, 2021). So, the job finding rate decreases. This is however not problematic, if the worker-job matching quality is improved. Nevertheless, de Groot and van der Klaauw (2019) state that the longer a person is unemployed, the more the skills will depreciate and consequently, his or her job opportunities will decline.

If, conversely, the unemployment benefit duration is shortened, the reservation wage of the job seekers is expected to decrease. This would induce that they accept job offers more easily and quickly, i.e. the unemployment spell decreases. Especially “workers facing rapid depreciation of employment opportunities” (Cottier, Degen, & Lalive, 2020, p. 660), due to for example skills obsolescence or deterioration of the motivation, have higher chances that their unemployment duration is reduced when the potential benefit duration is shortened (Cottier et al., 2020). Thus, since they are somehow forced to find a new job more quickly in order to not get into financial troubles, the match quality eventually deteriorates.

After a reform in 2003 in Switzerland, the unemployment benefit duration has been shortened from 24 months to 18.5 months “for job seekers younger than 55 years” (Cottier et al., 2020, p. 660). Since the unemployed accepted job offers faster, employment increased. Furthermore, conversely to what is expected, it seems that the unemployed finding a new job quickly earn a higher wage during up to two years after they have been reemployed (Cottier et al., 2020).

In 2011 was the first time that several US states cut the duration of unemployment benefits due to low reserves after the financial crisis in 2007 (Johnston & Mas, 2020). The authors find that a cut in the unemployment benefits will lead to a shorter unemployment duration for the short-term unemployed. Hence, job search has probably increased. Nevertheless, the effects for the long-term unemployed are not very clear-cut and it seems that a cut in the benefits does not have any effect on their reemployment rate (Johnston & Mas, 2020).

In line with what theory predicts, van Ours and Vodopivec (2006) find that unemployment spells decrease when the duration of benefit payments is shortened. Marinescu and Skandalis (2021) estimate that job search intensity stays relatively high during the four quarters following the exhaustion of unemployment benefits. Moreover, van Ours and Vodopivec (2006) state that the more the duration of unemployment benefits is reduced, the stronger will be the incentive to find a new job faster. Thus, the exit rate from unemployment is higher as well. Since the exit rate increases, the job seekers are unemployed for a shorter duration. This has as a consequence a smaller depreciation of the skills. So, their job opportunities do not drop as much as they would otherwise (de Groot & van der Klaauw, 2019). The job-matching quality would in this case not suffer too much. However, van Ours and Vodopivec (2008) find that, even though the unemployment benefits are reduced, this has no effect on the quality of the post-unemployment job match. Despite the previous results, the estimations by Marinescu and Skandalis (2021) indicate that the job quality could suffer a decrease in the potential benefit duration. The shorter the duration is, the faster the job seekers want to find a new job. This could result in accepting jobs with a lower wage and requiring less skills than possessed by the individual. At the end, the satisfaction of the employee would decrease and the probability that the worker stays employed in this job only for a short period of time increases. Consequently, the contract stability decreases (Marinescu & Skandalis, 2021), and so the matching quality between the worker and the job.

Table 2: Summary table: Reduction in the duration of unemployment benefits

Author	Effect
Cottier et al. (2020)	Shorter unemployment spells; higher income during the first two years after reemployment
de Groot and van der Klaauw (2019)	Shorter unemployment spells, smaller depreciations of skills, no big impact on job quality
Johnston and Mas (2020)	Shorter unemployment for the short-term unemployed; unclear effect on individuals in long-term unemployment
Marinescu and Skandalis (2021)	High job search intensity during 4 quarters after UB exhaustion; negative impact on job quality (low wage, skills mismatch, contract instability)
van Ours and Vodopivec (2006)	Shorter unemployment spells; the more UB is reduced, the stronger is the incentive to find a job
van Ours and Vodopivec (2008)	Shorter unemployment spells, but no impact on job quality

Source: own creation

3 Empirical part

This section consists in analysing Belgium and Germany. In the case of Belgium, the focus will be sometimes set on Wallonia. First of all, in order to have some background information, the economic situation in both countries will be presented. However, since this is not a main element of this topic, this part is kept relatively short. A description of the labour market, where the unemployment situation, the reasons for unemployment, the labour market policies and the unemployment compensation are presented, will follow. Finally, job search behaviour in both cases will be analysed. Throughout the whole section, the most relevant elements will be picked and a comparative analysis will be done.

3.1 Economic situation

Belgium

“Belgium is a federal state composed of three regions” (Fonder, Lejeune, & Tarantchenko, 2019, p. 3), the Flanders, Brussels and Wallonia. Like other central European countries, Belgium is an industrialised country. Brunet et al. (2020) present that, in 2017, exports grew by around 5.5% and imports by a bit more than 4%. Therefore, the Belgian gross domestic product (GDP) can be considered as relatively dependent on international trade and so, the country can be viewed as a small open economy. Wallonia is the region having the lowest degree of international openness. Other regional disparities, caused by historical events, can be found, like differences in economic growth, the creation of jobs, etc.⁸

Having a look at Figure 3, we realise that the economic growth was most of the time at around 1.5% to 2%. Two exceptional periods can be spotted: the financial crisis in 2008 and the Covid-19 pandemic since 2020. Both drops confirm the strong dependency on international trade. Especially during the last crisis, the uncertainty about the future, provoked by the lockdowns and the sanitary situation, led to a decrease in demand and the international trade. Production came therefore almost to a standstill. The aftermath of this is clearly depicted by the decline in GDP of 6.3% in 2020.

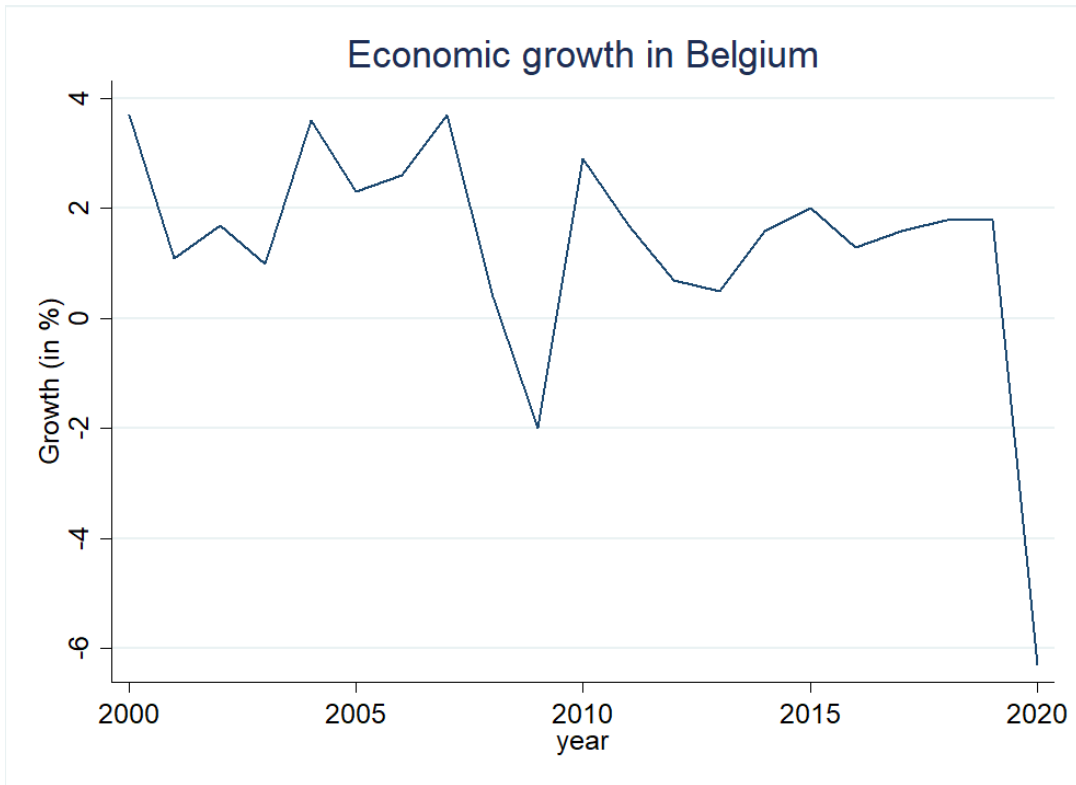
Thanks to the implementation of a new accounting law in 2010, the expenses in research and development (R&D) are included in the investments. Thus, the investments increased, which also pushes upwards the economic growth (Brunet et al., 2020). However, this growth slowed down in 2018, which can be explained by a slowdown in international trade, and consequently less exports (OECD, 2020a). This again shows how dependent the Belgian economy is on international trade. The largest decline could be seen in Wallonia, where the growth went from 2.3% to 1.3% between 2017 and 2018.

Germany

When talking about the German economy, one notices also regional disparities due to historical events, which will not be analysed in detail in this work. One should keep in mind, though, that after World War II, West Germany was under the influence of the capitalism by the United States, France and the United Kingdom. This allowed West Germany to have a good economic expansion, whereas East Germany, under the influence of the communism, had a poor economic development. Even after the reunification of Germany, economic and labour market discrepancies between West and East Germany can be identified, because many individuals living in the eastern part migrated to West Germany in order to start a new and better life (Kampmann, n.d.).

⁸Brunet et al. (2020) provide a detailed description of Wallonia and the differences with respect to the other Belgian regions. In order to not exceed the given framework, this short presentation of the economy in both countries should be sufficient for the understanding of the following parts.

Figure 3: Annual economic growth in Belgium between 2000 and 2020



Source: own creation, Data extracted from World Bank (Dataset: World Development Indicators)

Figure 4: Annual economic growth in Germany between 2000 and 2020



Source: own creation, Data extracted from World Bank (Dataset: World Development Indicators)

Germany is also known for the huge amount of small and medium enterprises (SMEs). This induces the need for a huge amount of working force in order to satisfy the labour demand and the proper functioning of the firms. Thanks to the generally high qualifications of the workers and the interconnection of the skills, Germany could deal, from the labour market perspective, relatively well with the financial crisis in 2008 (Bußmann, Flake, & Seyda, 2014). The German economic growth, as illustrated in Figure 4, was affected very negatively by the financial crisis and saw its GDP decline by almost 6%. The pandemic, as in the case of Belgium, also has a huge negative impact on economic growth because of the lockdowns and the uncertainty about the future. The German GDP declined by 4.9%, compared to a decrease of more than 6% in Belgium.

After the financial crisis, the German economy had a continuous positive economic growth until 2019. Nevertheless, it decreased slowly from year to year because the German industry had some weaknesses. Initially the growth was at around 2% in 2014, but in 2019 it reached only 0.6% anymore. International trade decreased due to less favourable economic conditions in the industrial context (Bundesministerium für Wirtschaft und Energie, 2020). This can be explained by the fact that Germany is a big country exporting relatively much. Therefore, as in the case of Belgium, the German economy depends strongly on international trade.

Comparison

Having presented the economic situation of both countries, we notice that regional disparities can be found in both of them. In Belgium, the Walloon region is struggling to pick up the economic backwardness and in Germany it is the eastern part of the country. Both of them managed to deal more or less well, from a labour market perspective, with the financial crisis in 2008. After the crisis, both countries had a good economic growth until around 2018-2019. Since both depend on international trade and because the international market worked less efficient around that period due to some uncertainties, economic growth was lower in both countries.

Table 3: Summary table: Economic situation in Belgium and Germany

Belgium	Germany
Regional discrepancies due to historical events	Regional discrepancies due to historical events
Small open economy	Large open economy
Depends on international trade	Depends on international trade
Hit by financial crisis in 2008, strong drop in GDP	Hit by financial crisis in 2008, severe drop in GDP
Severe decline in GDP caused by Covid-19 crisis	Severe decline in GDP caused by Covid-19 crisis

Source: own creation

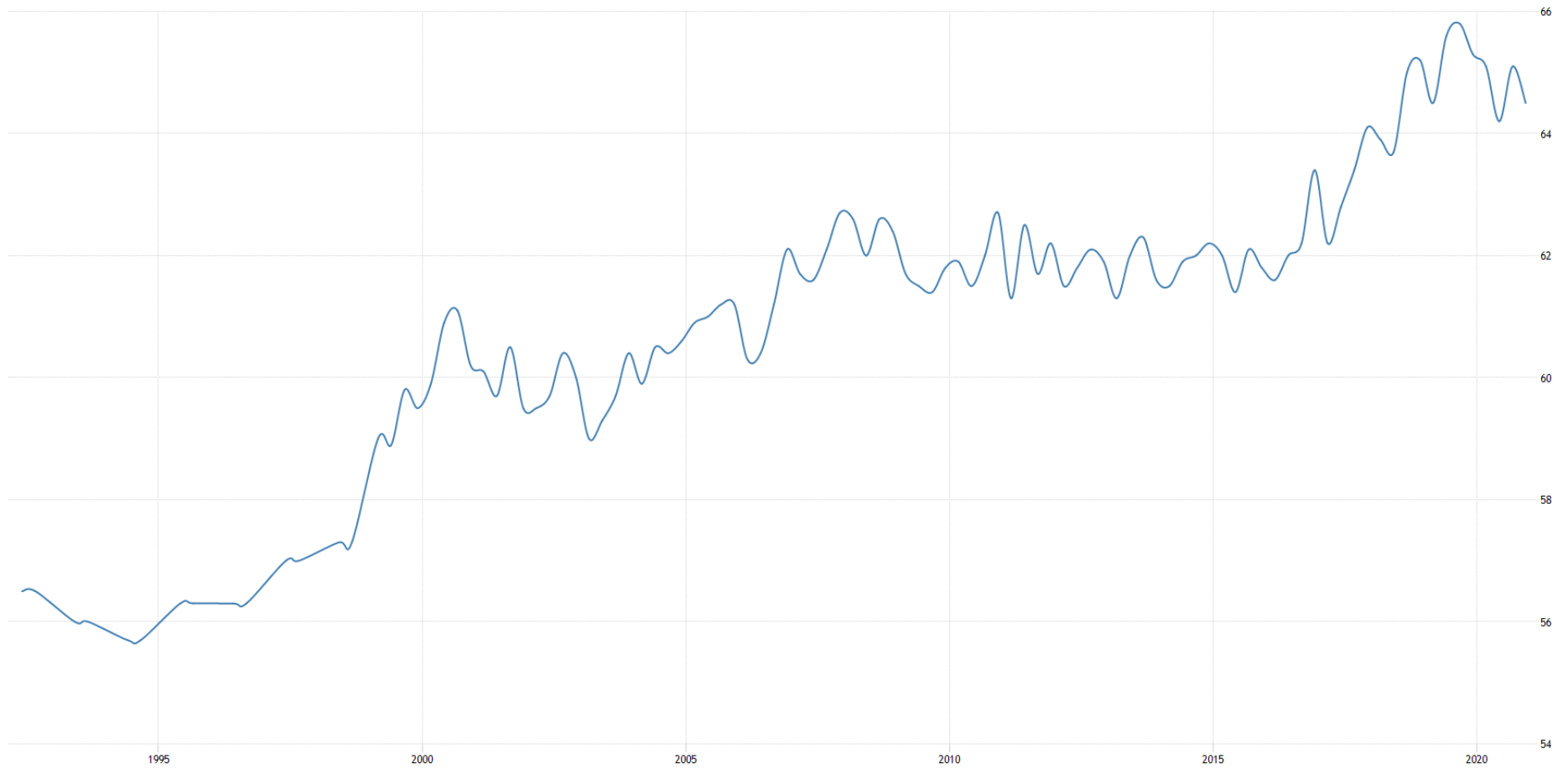
3.2 Labour market

3.2.1 Unemployment situation

Belgium

The objectives of the Lisbon treaty have been fixed in 2000 and one of their targets is that the European countries should reach an employment rate of at least 70%. Considering Figure 5, it can be seen that Belgium never reached this target over the whole time period. Even though Belgium still did not reach the 70% target by 2020, the country is getting closer to it, i.e. between 2018 and 2019, the employment rate went from 64.5% to 65.3%. In 2020, however, due to the Covid-19 crisis, the employment rate decreased slightly and reached 64.7% (Vander Stricht & Henry, 2021).

Figure 5: Evolution of the employment rate in Belgium

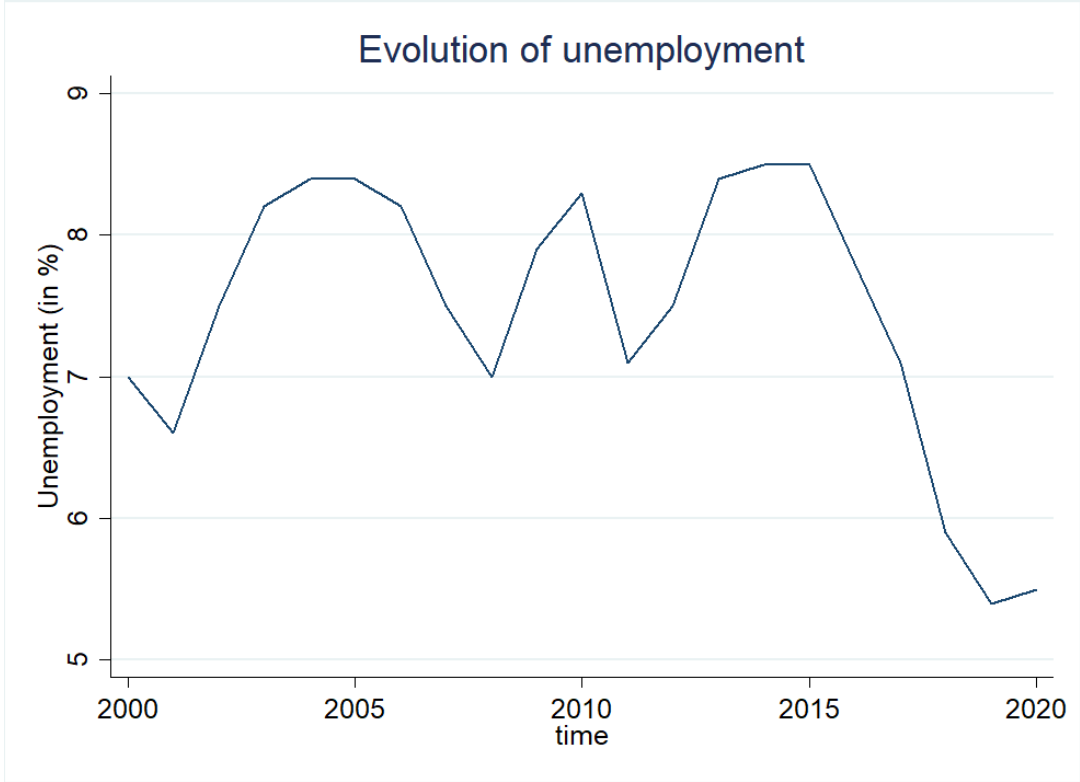


Source: Tradingeconomics.com | Eurostat⁹

⁹Graph extracted from <https://tradingeconomics.com/belgium/employment-rate>

Figure 6 depicts that the unemployment rate moves most of the time within a range of more or less 6.5% and 8.5% between 2000 and 2015. Afterwards, the unemployment rate decreases tremendously until it reaches 5.4% in 2019. 2020 indicates a small increase in the unemployment rate, which is due to the Covid-19 crisis. Taking a closer look on the situation of Wallonia, Vander Stricht and Henry (2021) present that the Walloon region has a higher unemployment rate than Belgium in general, i.e., it is higher than in Flanders, but lower than in Brussels, as can also be seen on Figure 7. The Walloon unemployment rate was at 8.5% in 2018 and went to 7.4% in 2020, as shown in Table 4.

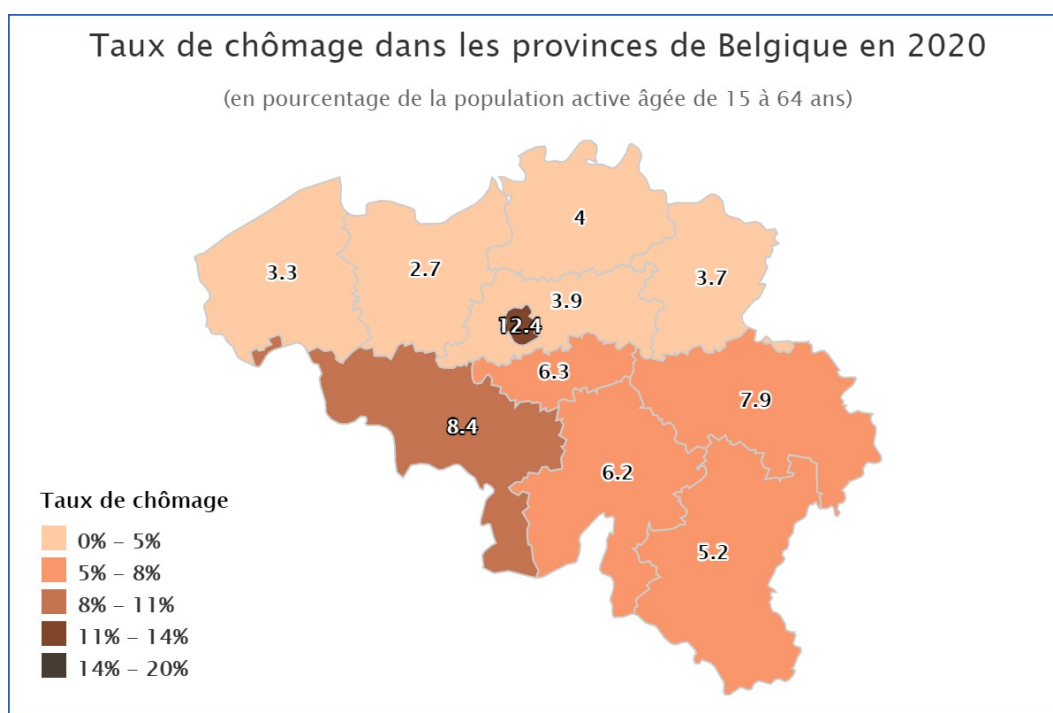
Figure 6: Evolution of unemployment in Belgium



Source: own creation, Data extracted from OECD.Stat (Dataset: Short-Term Labour Market Statistics)

Even though the unemployment rate was at around 8.5% between 2013 and 2015, the number of vacancies grew during that time, as it is depicted on Figure 8 on page 25. This phenomenon is quite counterintuitive. However, the skills mismatches and job shortages might be the reason behind this. As discussed earlier, it is possible that the skills required and supplied do not match. In this case, there might be a quantitative or qualitative mismatch. Furthermore, it can be seen that after 2015, the number of vacant jobs continued to increase until around 2019, then it decreased a little bit until 2020, before skyrocketing in the first quarter of 2021. This decrease can be explained by the lockdowns due to the Covid-19 pandemic, whereas the peak at the beginning of 2021 shows that the economy starts to recover and that new jobs are created, which is a common phenomenon after a crisis.

Figure 7: Unemployment rates in the different regions of Belgium in 2020



Source: National Bank of Belgium¹⁰

Table 4: Evolution of the unemployment rates in the different regions in Belgium

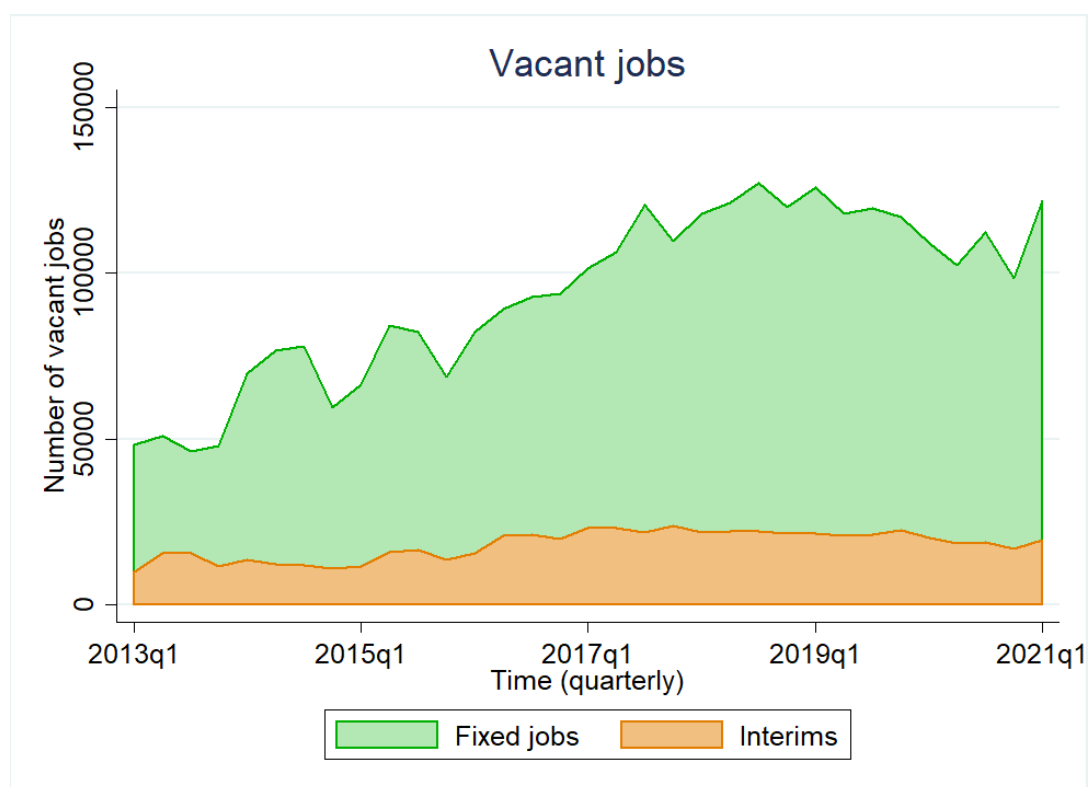
Year	Belgium	Brussels	Flanders	Wallonia
2010	8.4	17.4	5.2	11.5
2011	7.2	17.1	4.3	9.5
2012	7.6	17.5	4.6	10.1
2013	8.5	19.3	5.1	11.4
2014	8.6	18.5	5.1	12.0
2015	8.6	17.5	5.2	12.0
2016	7.9	16.9	4.9	10.6
2017	7.1	15.0	4.4	9.8
2018	6.0	13.4	3.5	8.5
2019	5.4	12.7	3.3	7.2
2020	5.6	12.4	3.5	7.4

Note: Unemployment as a percentage of the active population aged 15 to 64

Source: own creation, Data extracted from the National Bank of Belgium

¹⁰Figure extracted the 07/07/2021 from <https://www.nbb.be/fr/publications-et-recherche/evolutions-statistiques-de-emploi/marche-du-travail/taux-de-chomage-dans>

Figure 8: Evolution of vacancies in Belgium



Source: own creation, Data extracted from Statbel¹¹

Table 5 indicates that 28% of the workers were not employed in a job that is linked to their field-of-study, i.e., there was a horizontal mismatch. Considering now the qualification mismatch, the table shows that 34.5% of the workers have been affected by this mismatch in 2016. The qualification mismatches included 23.8% of workers who were underqualified and 10.6% who were overqualified. In general, it can be said that the issue of vertical mismatches seems to be more relevant than horizontal mismatches. Even though the numbers in Table 5 represent percentages of workers, one can expect horizontal mismatches to be lower than vertical mismatches within the unemployed, too.

Table 5: Comparison of mismatches in 2016 between Belgium and Germany

Country	Indicator (in %)			
	Field-of-study mismatch	Qualification mismatch	Qualification mismatch	
			Underqualification	Overqualification
Belgium	28.0	34.5	23.8	10.6
Germany	20.1	37.2	19.7	17.2

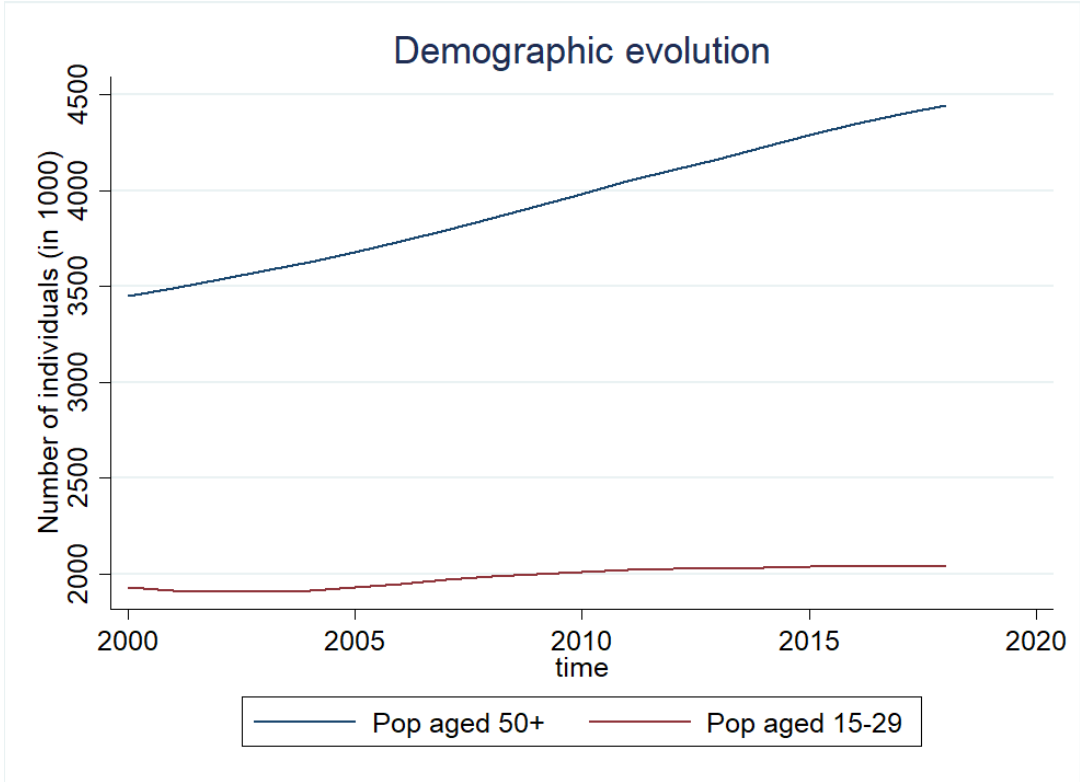
Source: own creation, Data extracted from OECD.Stat (Dataset: Mismatch)

¹¹Data used from <https://statbel.fgov.be/fr/themes/emploi-formation/marche-du-travail/emplois-vacants>

The next step is to have a look on the situation of long-term unemployment in Belgium because, as has been discussed earlier, skills mismatches can lead to prolonged unemployment spells. Table 6 shows that the percentage of the individuals being unemployed since one year and more¹² is quite high. It lies at around 50% and Belgium is one of the 15 EU countries that had the highest amount of long-term unemployed among total unemployment in 2008 (Nevejan, 2009). After the financial crisis, this percentage decreased a little bit before increasing again in 2010 and reaching its peak in 2015 (at 51.7%). In 2020, a similar situation can be seen, where the percentage of the long-term unemployed with respect to all unemployed is at 41.6%. This can be explained by the implementation of different mechanisms, like for example partial unemployment, that helped to avoid a huge increase in the unemployment rate.

As mentioned in the literature review, the demographic evolution can be a reason for unemployment, depending on the policies implemented by the government. Figure 9 clearly shows that Belgium has a huge gap in the amount of elderlies and youngsters. An increasing trend can be seen for the individuals aged 50 and more, whereas the population aged 15 to 29 increased only slightly until 2010, before staying relatively constant until the end of the analysed period. In 2018, the number of people aged 50 and more is more than twice as high as the number of youngsters.

Figure 9: Demographic evolution in Belgium



Source: own creation, Data extracted from OECD.Stat (Dataset: Historical population)

¹²Generally, an individual is considered to be long-term unemployed if he or she has been unemployed for at least 2 years. Since this dataset includes the individuals unemployed since 1 year or longer, the percentage of long-term unemployment, as presented here, might be higher than it would be if only the individuals unemployed since 2 years or more had been taken into consideration.

Table 6: Comparison of the long-term unemployed between Belgium and Germany

Time	Belgium					Germany				
	Duration									
	< 1 month	> 1 month and < 3 months	> 3 month and < 6 months	> 6 month and < 1 year	1 year and over	< 1 month	> 1 month and < 3 months	> 3 month and < 6 months	> 6 month and < 1 year	1 year and over
2000	7.9	13.4	11.2	13.2	54.2	6.0	11.7	14.8	16.1	51.5
2001	7.4	15.4	14.8	14.0	48.4	6.5	11.4	16.0	15.8	50.4
2002	7.1	14.4	14.1	15.7	48.8	5.8	12.5	16.9	17.0	47.8
2003	6.7	16.2	14.5	17.2	45.3	5.2	11.2	15.1	18.5	50.0
2004	6.5	15.3	13.6	15.5	49.0	5.3	11.7	15.4	15.8	51.8
2005	6.6	14.8	11.8	15.1	51.7	6.0	12.2	12.4	16.3	53.0
2006	6.2	14.7	13.9	14.0	51.2	5.8	11.7	11.3	14.9	56.4
2007	6.0	16.0	12.9	14.7	50.4	6.3	12.6	11.4	13.2	56.6
2008	7.2	17.3	14.1	13.8	47.6	6.8	13.8	12.9	14.0	52.5
2009	7.2	16.8	15.8	16.0	44.2	7.7	15.6	14.9	16.3	45.5
2010	5.4	15.6	13.0	17.3	48.8	7.6	14.7	14.3	16.1	47.3
2011	4.5	16.4	15.0	15.8	48.3	9.2	15.1	13.1	14.7	47.9
2012	4.7	17.9	16.5	16.2	44.7	9.9	15.9	14.2	14.5	45.4
2013	3.4	17.4	15.4	17.8	46.0	9.4	16.0	14.4	15.6	44.7
2014	3.6	15.0	15.2	16.2	49.9	9.9	16.3	14.2	15.3	44.3
2015	3.4	16.2	14.4	14.3	51.7	10.4	15.8	14.4	15.4	44.0
2016	4.0	16.4	14.0	14.0	51.6	11.9	17.6	14.7	14.7	41.1
2017	5.9	15.4	14.2	15.7	48.8	11.7	16.8	14.2	15.5	41.9
2018	6.1	17.1	14.2	13.9	48.7	11.9	17.5	14.7	14.6	41.4
2019	7.0	18.9	15.7	14.8	43.5	12.4	18.4	16.2	14.8	38.2
2020	5.9	18.6	16.7	17.2	41.6

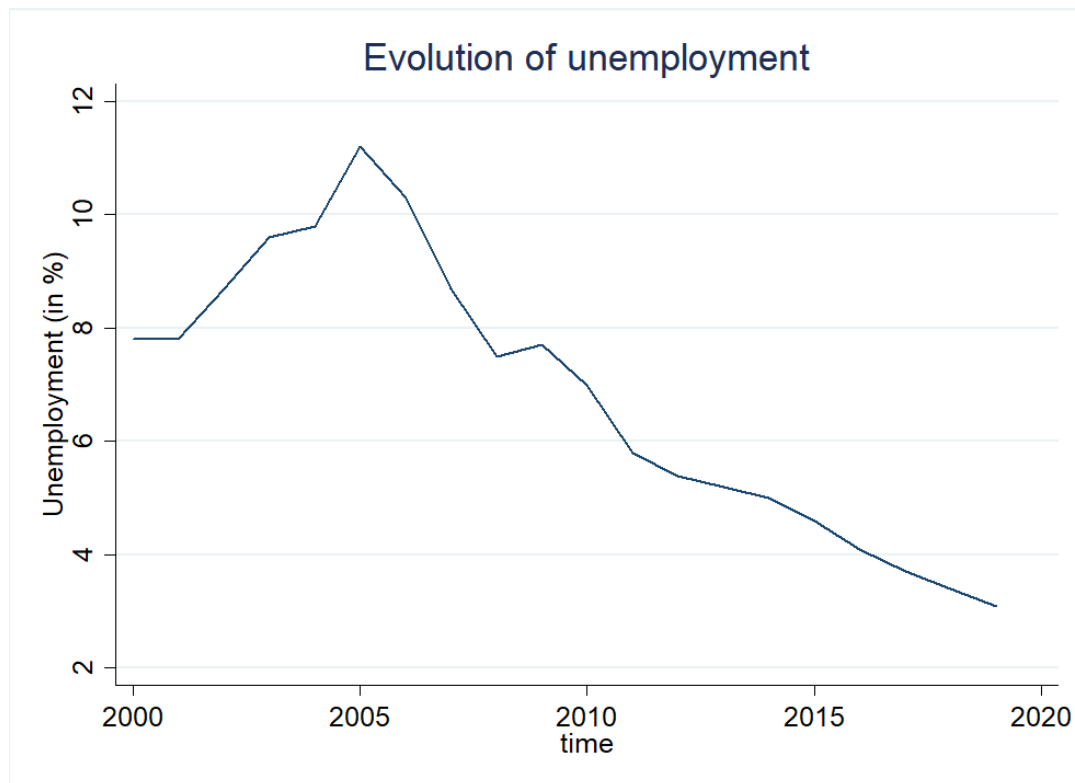
Note: percentage of unemployed among total unemployment

Source: own creation, Data extracted from OECD.Stat (Dataset: Incidence of unemployment by duration)

Germany

When having a look at Figure 11 on the following page, it can be seen that at the beginning of the 2000s, the employment rate of Germany had a slightly decreasing trend and some seasonal fluctuations. After 2005, the employment rate starts to increase sharply. The 70% employment rate goal, fixed by the agreement of Lisbon, has been reached since around 2009 and the rate further increased until reaching approximately 77% in 2020.

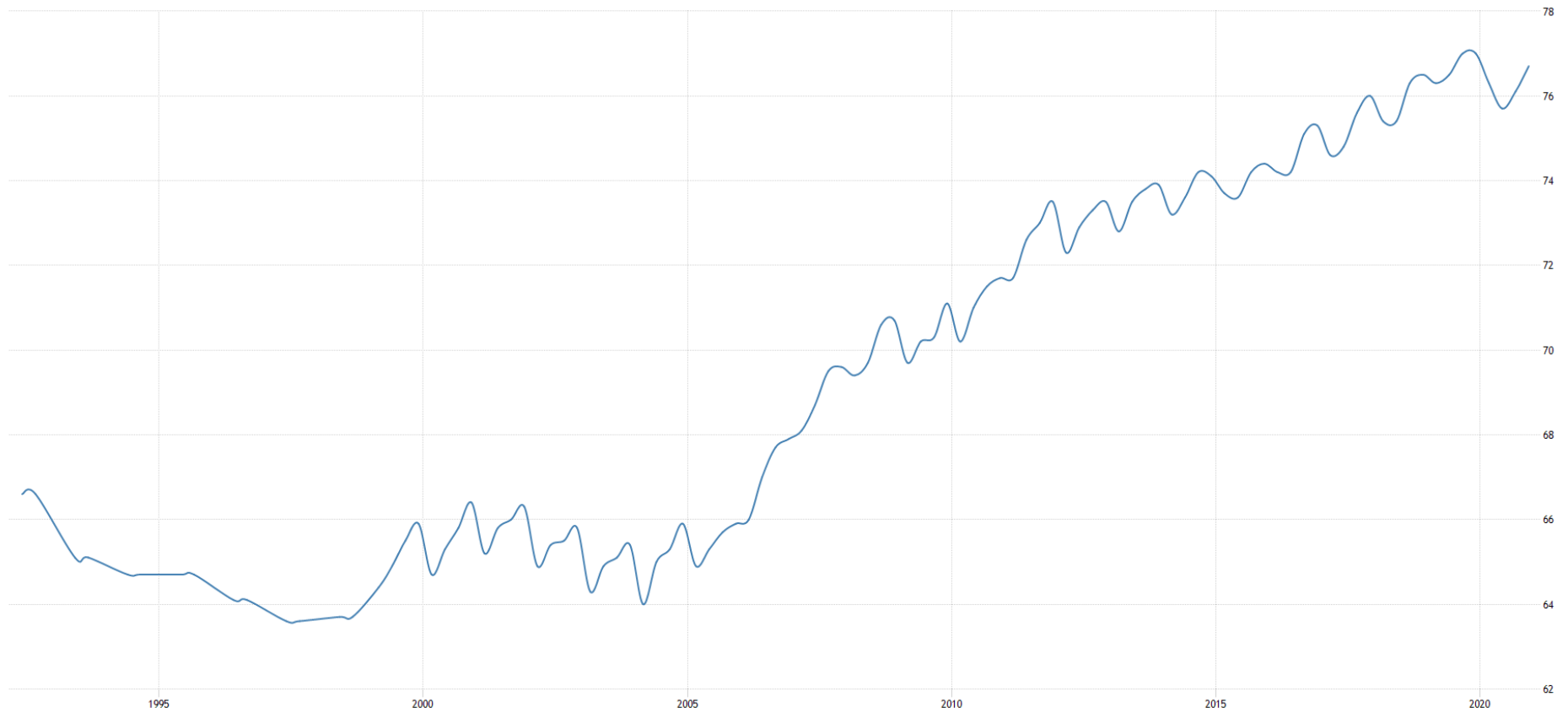
Figure 10: Evolution of unemployment in Germany



Source: own creation, Data extracted from OECD.Stat (Dataset: Short-Term Labour Market Statistics)

Figure 10 indicates a huge increase in the unemployment rate between 2001 and 2005. This might be related to the introduction of the Hartz reforms between 2003 and 2005, because a result of them was the combination of unemployment benefits and social benefits (Sell, Becher, Oschmiansky, & Bersheim, 2020). Afterwards, the unemployment rate decreased continuously, except between 2008 and 2009, where a small rise in the rate can be seen. This is due to the financial crisis in 2008. This general strong decrease in the unemployment rate over that period is also called the “German labour market miracle” (Krebs & Scheffel, 2013). This intense decrease of the unemployment rate is estimated to be a result of the Hartz reforms that have been introduced between 2003 and 2005. Their aim is not only to reduce unemployment, but also to decrease the amount of job shortages and skills mismatches. In 2019, the German unemployment rate even reached 3.1%. Even though the data for 2020 are missing in the OECD database, it can be expected that the unemployment rate increases a little bit because of the pandemic and the lockdowns, but the increase should be relatively limited because Germany has a well developed model of short-time work, which is relatively efficient to avoid a huge increase in unemployment during periods of recessions.

Figure 11: Evolution of the employment rate in Germany

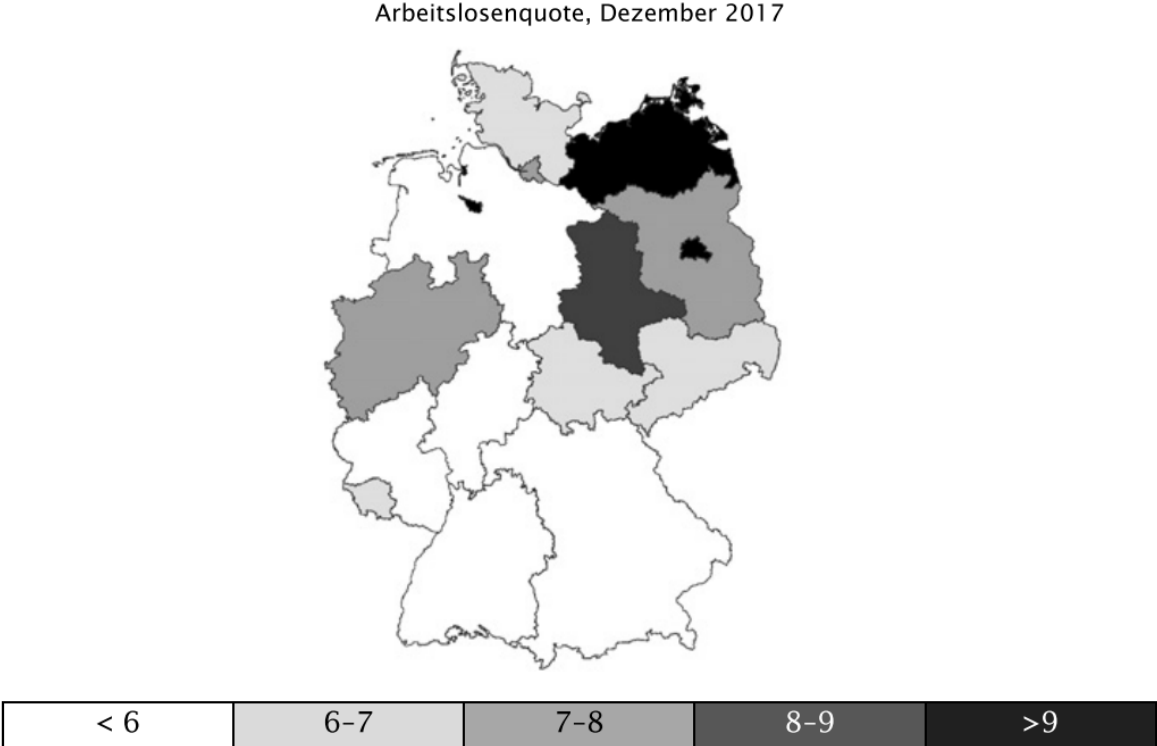


Source: Tradingeconomics.com | Eurostat¹³

¹³Graph extracted from: <https://tradingeconomics.com/germany/employment-rate>

As mentioned earlier, the Cold War led to discrepancies between the regions in Germany. The western economy was quite prosperous, whereas the eastern one suffered a slowdown. Even since the reunification in 1990, the unemployment rate is higher in East Germany than in West Germany. Doing a north-south comparison, one notices that northern Germany has a higher unemployment rate than the southern regions of the country. All in all, as illustrated by Figure 12, the north-east of Germany has the highest unemployment rates and the south-west and south of the country have the lowest ones.

Figure 12: Unemployment rates in the different regions of Germany in 2017

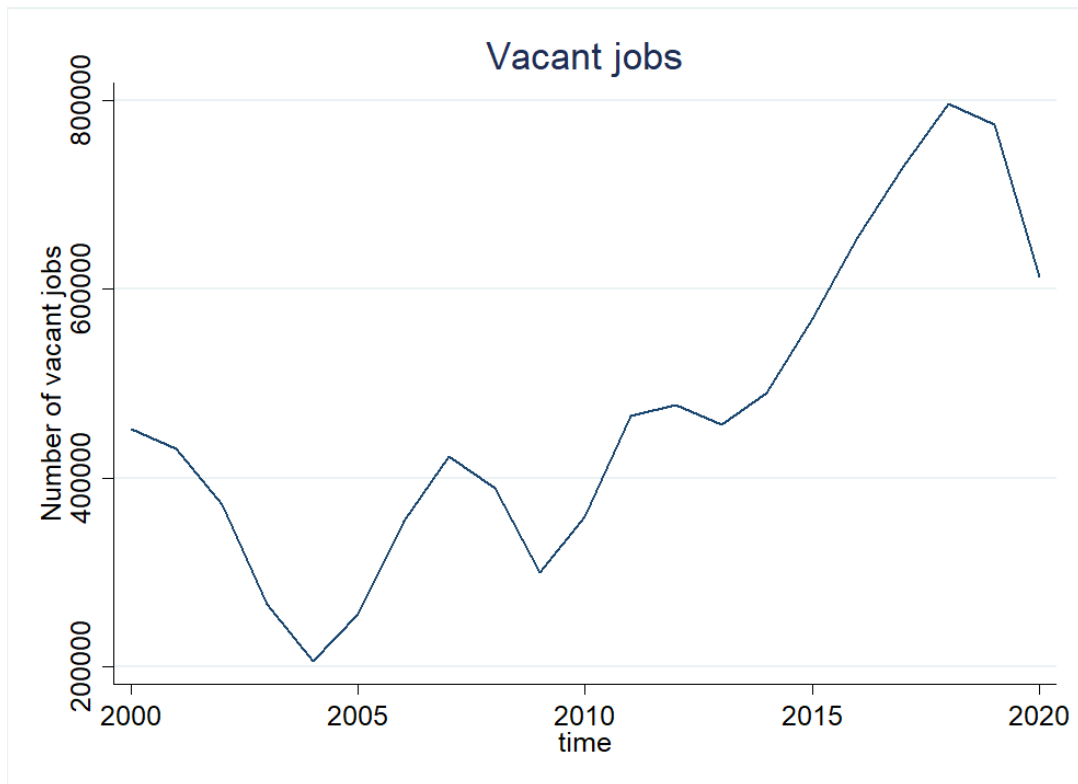


Source: Kubis and Rebien (2019, Figure 4)

Considering the vacancies in Germany, relatively big fluctuations can be seen on Figure 13. From 2000 to 2004, the amount of vacant jobs decreased significantly and then increased until the financial crisis took place. In 2008 and 2009, this number decreased. After that crisis, the amount of vacancies more than doubled until 2018 and reached approximately the number of 800,000. This huge increase in the number of vacancies between 2009 and 2018 can be explained by the continuous decline in the unemployment rate. Since less job seekers are available on the market, the choice by employers is reduced. A slight decrease can be seen in 2019, which might be explained by the unfavourable situation on the international markets. The following year, a more drastic decline, caused by the Covid-19 pandemic, can be identified.

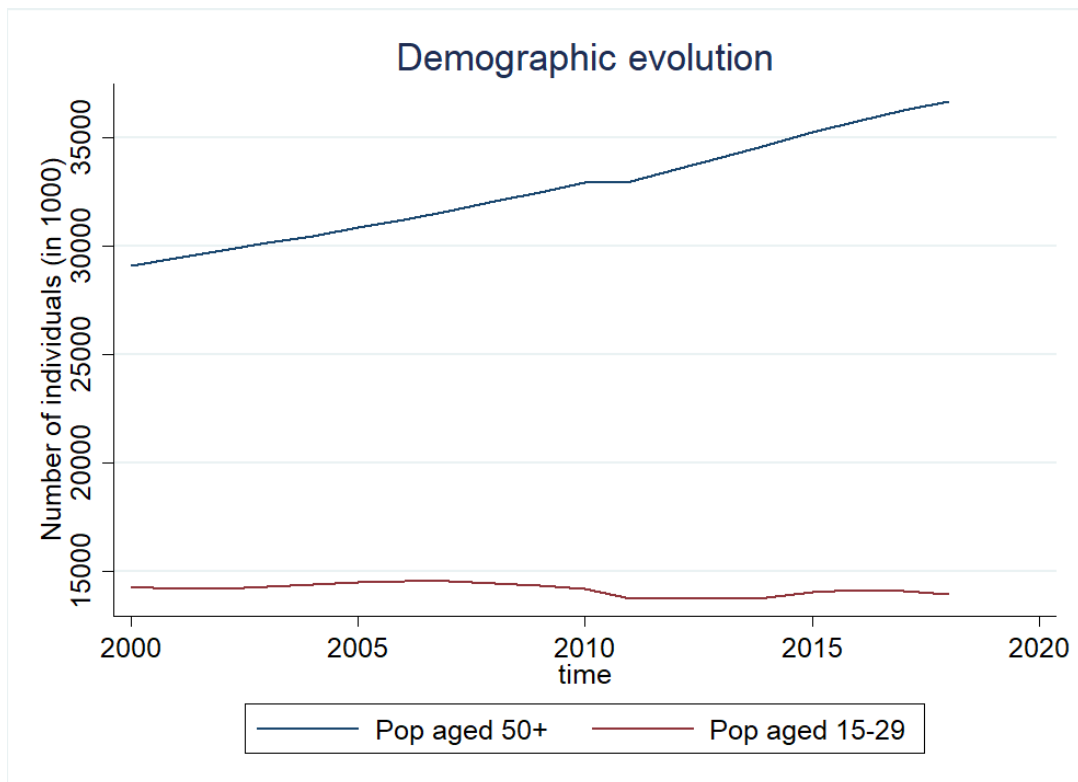
As discussed in the case for Belgium, Germany also had more qualification mismatches than field-of-study mismatches in 2016. Table 5 on page 25 indicates that the former represented 37.2% of the workers and the latter were at 20.1% of the work force. Within the qualification mismatches, 19.7% of the German workers were underqualified and 17.2% were overqualified. Overall, the situation was more or less comparable to that of Belgium. It can be seen, though, that less workers were horizontally mismatched, whereas the percentage of vertical mismatches was slightly higher. German employers seem to have preferred to recruit overqualified workers, because this ratio was 6.6 percentage points higher in Germany than in Belgium. On the other hand, the percentage of underqualified workers was slightly lower than in Belgium.

Figure 13: Evolution of vacancies in Germany



Source: own creation, Data extracted from OECD.Stat (Dataset: Registered Unemployed and Job Vacancies)

Figure 14: Demographic evolution in Germany



Source: own creation, Data extracted from OECD.Stat (Dataset: Historical population)

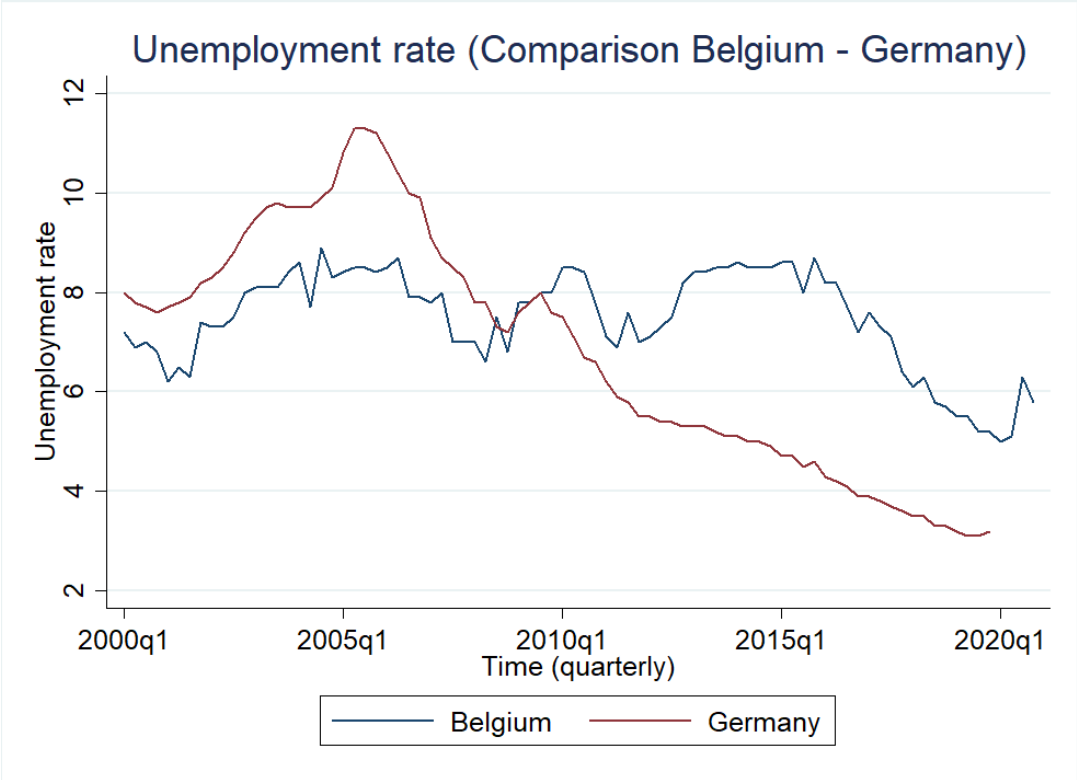
Table 6 on page 27 shows that Germany had an even higher rate of long-term unemployed with respect to total unemployment compared to Belgium and it reached in 2006 its maximum of 56.6%. As in Belgium, the rate increased a little bit after the financial crisis, but then decreased without interruption until 2019 and reached 38.2%. As will be discussed later, the Hartz reforms decrease the generosity of unemployment benefits and sanctions become stricter. This might have impacted the long-term unemployment ratio over the years following these reforms.

In Germany, as in most developed countries, the population is becoming older. Thus, the demographic evolution is a source of labour market discrepancies. As can be seen on Figure 14, Germany also has, exactly as Belgium, a huge gap between the amount of elderlies and youngsters, which is even growing. The amount of older individuals is growing more or less constantly, whereas the number of young individuals is relatively constant and even showing a slightly decreasing trend. In 2018, exactly as in the case of Belgium, the number of elderlies is more than twice as high as the amount of youngsters.

Comparison

When comparing both countries, it is difficult to interpret the numbers of long-term unemployment correctly, because the legislation and policies are not the same, which leads to regulatory differences. Nevejan (2009) explains that, since in Belgium unemployment benefits are not limited in time, the unemployed will affirm that they are actively looking for a job, because this is a condition to be eligible for unemployment benefits. In Germany, the unemployment benefits for the long-term unemployed are not generous at all. So, the incentive to lie about the job search efforts is small. Consequently, the number of long-term unemployed is also smaller. Compared to Belgium, Germany faced in 2008 an even worse situation when considering the percentage of long-term unemployment (Nevejan, 2009).

Figure 15: Comparison of the unemployment rates of Belgium and Germany



Source: own creation, Data extracted from OECD.Stat (Dataset: Short-Term Labour Market Statistics)

Having a look at the unemployment rate in Belgium and Germany simultaneously, Figure 15 illustrates that the German unemployment rate was higher than the Belgian one until around 2010. Then, the German unemployment rate decreased, whereas the Belgian one stayed more or less constant until 2015 and decreased from that year onwards. A discussion of some labour market policies, that aim to reduce the unemployment rate, follows in the next part. Their effects will be presented if they are available.

Having presented the unemployment situation in Belgium and Germany, some of the labour market policies in both countries, aiming the reduction of unemployment, will be discussed.

3.2.2 Labour market policies

This part will start with a discussion of the labour market legislation of both countries in order to have some background information. Then, the most relevant labour market policies, including elements discussed in the literature review, will be presented.

3.2.2.1 General insights into the labour market legislation

Belgium

The federal government is responsible for the labour market policies. It creates the legislation and regulates the unemployment insurance system (Fonder et al., 2019). In Wallonia, the FOREM¹⁴ is in charge of organising “the regional public employment and training service” (Fonder et al., 2019, p. 3).

Some of the labour market policies are apprenticeships and training programmes, early retirement programmes, financial incentives when for example hiring a job seeker into a non-profit organisation, etc. These programmes are effective in reducing the unemployment rate. If, for instance, the training programmes are organised such that they are in line with the needs of the labour market, the job seekers should find work more easily. The early retirement programme is a bit paradoxical because on the one hand, older job seekers can leave the labour market earlier. On the other hand, however, if they do so, the issue of job shortages will grow because not enough young individuals enter the market.

Unemployment insurance has undergone some changes as well. Since 2004, unemployment benefits have been made indefinite in time for everyone, as long as job seekers meet the obligations of actively looking for a job. For this, a monitoring procedure has been implemented, which is called the “procédure d’Activation du Comportement de Recherche d’emploi (ACR).” This includes monitoring and sanctions, interviews or help with the job search (Cockx et al., 2011). This procedure aims to facilitate the access by job seekers into ALMPs.

Between 2015 and 2018, the so-called “Gouvernement Michel” implemented several reforms concerning the labour market and some other elements. A brief presentation of what has been modified in the labour market policies follows now. First of all, the labour costs have been reduced, which increases the Belgian competitiveness in the wage with respect to the countries in the neighbourhood, like France, Germany and the Netherlands. As indicated earlier, Belgium’s economy had a good growth between 2014 and 2018. In this context, the reforms were favourable to decrease the unemployment rate and increase the employment rate (Direction générale du Trésor, 2021; OECD, 2020a). Sirlereau (2018) explains that the “Gouvernement Michel” has created around 200,000 jobs. Moreover, contrary to the early retirement programmes, that have been discussed previously, this government implemented a reform in which it is stated that individuals have to work until an older age in order to reduce the risk of financial issues in the pension system. Therefore, in 2025, the legal retirement age will be 66 years and it will be increased to 67 by 2030. The unemployment benefit payments have also been modified. They will be higher during the first six months of the unemployment spell, but afterwards they decrease

¹⁴Service public wallon de l’emploi et de la formation

faster than previously. The benefit payments keep being indefinite in time, as long as a person is eligible to receive them. Last but not least, the reforms try to create a more flexible labour market with the “Flexijob scheme.” This allows the workers to have more flexible working hours and a reduction in the taxation and the social security contributions. In 2019, approximately 44,000 individuals have been registered in this type of jobs (McGowan et al., 2020).

Germany

First of all, the institutions responsible for the German labour market will be presented. The BMAS¹⁵ ensures the protection at work and fights against unemployment. Taking into account the needs of the different German states, it creates the legislation for the labour market (Bundesministerium für Arbeit und Soziales, 2021). The BA¹⁶ has its headquarter in Nuremberg and every state has its own general direction. In total, 156 employment agencies are spread over the German territory (Bundesagentur für Arbeit, n.d.-a). Their aim is to guide and help the job seekers in their job search and to organise training and formation sessions if necessary. Furthermore, the BA has the role to allocate unemployment benefits to the unemployed. Since 2004, the IAB¹⁷ is a department of the BA (Institut für Arbeitsmarkt- und Berufsforschung, n.d.). It has the mission to analyse the labour market in order to provide the politicians with advices and to help them in their decision taking. It also includes the Integrated Employment Biographies (IEB) of “all individuals in Germany who are either in regular/marginal employment or receive benefits” (Lichter & Schiprowski, 2021, p. 3).

The Hartz reforms have been implemented between 2003 and 2005. They have different effects. The first three reforms, introduced in 2003 and 2004, “focused on the organisational structure of the public employment services and on active labour market policies” (Schmieder, Von Wachter, & Bender, 2010, p. 11), i.e. the introduction of new employment opportunities and additional wage subsidies and the restructuring of the Federal Employment Agency (Krebs & Scheffel, 2013). The forth reform, which has been introduced in 2005, has modified the unemployment insurance system. The generosity of the unemployment benefits for the long-term unemployed has been significantly reduced (Krebs & Scheffel, 2013), since the unemployment assistance was merged with the general social assistance system (Goebel & Richter, 2007). Individuals continuing to meet the requirements of eligibility will get payments, which are not related to the previous wage anymore, but are means-tested and unlimited in time (Schmieder et al., 2010). If this is not the case, Hartz 4 will be shortened to 12 months (HartzIV.info, n.d.).

The Hartz reforms pushed the number of job seekers downwards (Kubis & Rebien, 2019) and they try to bring the unemployed back to employment (Bourgeois, 2013). They have not only been efficient in reducing the unemployment rate, but also in shortening the duration of the unemployment spells (Krause & Uhlig, 2012). This confirms that the reforms facilitate the reemployment and decrease the skills mismatches by offering continuous training and more formations (Bourgeois, 2013). On top of this, the reforms create the so-called “atypical” jobs.¹⁸ The labour market becomes more flexible and a huge increase of the number of job destructions, that would otherwise have led to a strong increase of the unemployment rate during the Great recession, could be avoided (Krause & Uhlig, 2012).

Comparison

When comparing both countries, one can only say that the German labour market has undergone more significant reforms than the Belgian one since the beginning of the 2000s. It is however not easy to compare reforms because each country has a different economic and labour market situation. Thus, it is logic that each country will introduce different reforms, even if the mechanism behind them can be similar. In each country, the effects of the reforms also vary.

¹⁵Bundesministerium für Arbeit und Soziales (Federal Ministry of Labour and Social Affairs)

¹⁶Bundesagentur für Arbeit (Federal Employment Agency)

¹⁷Institut für Arbeitsmarkt- und Berufsforschung (Institute for employment research)

¹⁸More information follow when discussing the part about “Atypical” jobs

3.2.2.2 Education and training

Belgium

Teacher training has to be reformed and highly qualified teachers need to be attracted in order to improve the skills of disadvantaged students and trainees and thus to decrease the skills mismatches and to increase the general quality level of the skills on the labour market. A Pact for Excellence in Teaching has been discussed in the French community of Belgium in 2018. This plan foresees the recruitment of additional staff and “the establishment of a six year plan covering pupil performance” (OECD, 2019, p. 18). The Conseil supérieur de l’Emploi (2019) suggests that the educational system and formation programmes should adapt to the new technologies and that the teaching staff must follow formations to update their skills. Although it could be an interesting starting point to reduce the skills mismatches, it has not been implemented so far. Due to the Covid-19 pandemic, which obliged the education system to switch to home-schooling and digital learning, a project called “Teach-Transition”, which consists in creating a new academic programme for the academic year 2021-2022, has the aim to teach the skills required for the digital transition (Eurometropolitan e-Campus, 2020).

Lifelong learning and continuous training are important elements such that individuals have the skills and know-how required for different jobs. This would improve the job quality and might increase the wage as well (Nevejan, 2009). Therefore, it is important to guide the students into growth occupations (Conseil supérieur de l’Emploi, 2019). Furthermore, this is a good way to avoid skill obsolescence and to “facilitate transitions from declining jobs and sectors to new emerging occupations in a context of rapid technological change” (McGowan et al., 2020, p. 26). The authors state, though, that the participation in lifelong learning is only at 8.5% in Belgium in 2018 and that it is the lowest in Wallonia (6.7%). It is essential that the disadvantaged job seekers and workers benefit from training programmes (OECD, 2020a), such that the job quality and the work performance are improved.

In the last years, the FOREM has done huge improvements on training programmes in the Walloon region, like for example the introduction of the “Incitant+” or the “Plan Formation-Insertion.” The former programme aims to decrease the skills mismatches and will be explained in further details in the part on *Financial incentives*. The latter one gives the employers the possibility to train a job seeker according to a specific plan developed with respect to the needs of the employer. After the completion of the training, the employer must recruit the trainee for at least the duration that the training programme lasted. Moreover, when the trainee is recruited, the employer can ask to benefit from some public aid like for example the SESAM.¹⁹

In Wallonia, job seekers participating in a training programme do not need to actively look for a job. However, if a suitable job offer would be proposed, they must be available for the labour market. Consequently, this has the effect that job seekers with a short training programme find a job more quickly than those participating in a long training programme. For the latter, the lock-in effect is stronger within the first few months after the start of the training. In general, despite heterogeneities, it can be said that training programmes have a positive effect on the job finding rate (Fonder et al., 2019).

All in all, since youth unemployment and the number of youngsters neither employed nor enrolled at school is high in Belgium, it is important to incentivise them to participate in training programmes in order to acquire the necessary skills for the labour market (McGowan et al., 2020). Information sessions and several incentives might be useful for this.

¹⁹In order to respect the limitations of the framework of the thesis, this part has to be kept short. Further information can be found under: <https://www.leforem.be/entreprises/aides-financieres-plan-formation-insertion.html>

Germany

The goal of training programmes is to assess, maintain or improve the skills of the participants. Furthermore, because of technological change, it is important that the knowledge and skills are adjusted in order to be kept up-to-date with the progress. These programmes can also be an instrument for individuals wanting some vocational retraining in order to facilitate the reintegration into the labour market (Lechner, Miquel, & Wunsch, 2011). Furthermore, the authors explain that training programmes often combine classroom training and on-the-job training. This is also called “duale Ausbildung.”²⁰ Even though the authors describe the situation between 1991 and 2003, the idea behind the training programmes is still the same nowadays.

When doing the evaluation of ALMPs for 2011, Heyer, Koch, Stephan, and Wolff (2012) explain that training programmes usually have a duration of maximum 12 weeks. They include job application training as well as short qualification formations. The participants in these programmes do not only acquire the required know-how and skills, but their availability for the labour market is also verified. The training is either organised as an educational measure or within firms. Within a firm, these measures aim mostly to test whether the job seeker would be suitable for the job and to teach him or her the job specific skills if he or she is considered to fit well enough into the firm.

As discussed for the case of Belgium, Lechner et al. (2011) find that training programmes also have a lock-in effect in Germany. While the job seekers participate in such a programme, they decrease their job search efforts. Thus, the probability of receiving a job offer is lower. As soon as the training period is over, positive effects on the reemployment rate can be noticed because the participants have an increased knowledge and the required skills. So, in the short-run, the effects of training programmes on employment are negative, but in the long-run, the impact is positive.

Comparison

When comparing both countries, it can be said that the conception of the educational system in Germany is well thought out. The combination of classroom training and on-the-job training gives the students and the job seekers the opportunity to acquire some job-specific skills, which is a huge advantage in the job search and recruitment process. Belgium, however, has to do some work on the training programmes and especially on its educational system. It must be mentioned, though, that the FOREM has remarkably improved the training system with the introduction of, for example, the formations fighting the skills mismatches or the “Plan Formation-Insertion.”

3.2.2.3 Labour mobility and migration

Belgium

In order to improve the labour mobility, the different regions of Belgium signed an agreement in 2005, which envisaged linguistic courses and interregional training such that job seekers can look for a job in whatever region of Belgium. This agreement aims at reducing the job shortages and skills mismatches, and thus also to decrease unemployment. The “difficulty” of this is that high-qualified job seekers benefit from this labour mobility most often. Under-qualified individuals, and thus also generally those with low wages, are too liquidity constrained to accept a job in another region if they need to commute to work (Zimmer, 2012). Therefore, the question is whether commuting to work is profitable or too expensive. This depends on the personal situation of the job seeker. The author also finds that the distance between workplace and home is negatively correlated with the participation in this programme, i.e. the further the workplace is from home, the more expensive and time-consuming commuting to work would be and the less individuals will be incentivized to participate. Figure 16, an

²⁰English: dual apprenticeships or dual training/dual education

illustration by the Conseil supérieur de l'Emploi (2019), shows that despite the agreement between the regions, the interregional labour mobility stays quite low.

Figure 16: Mobility within Belgium and between its regions

		PROVINCE DE RÉSIDENCE										
		FL-OCC	ANV	LIM	FL-OR	BRA-FL	BXL	BRA-W	HAI	NAM	LIEG	LUX
LIEU DE TRAVAIL	FL-OCC	89	0	0	3	0	0	1	1	0	0	0
	ANV	0	84	6	10	7	1	1	0	1	0	0
	LIM	0	2	81	0	1	1	0	0	0	1	0
	FL-OR	7	3	0	76	1	0	0	0	0	1	0
	BRA-FL	0	6	4	3	55	7	3	1	1	1	0
	BXL	1	3	2	7	32	83	33	9	6	3	0
	BRA-W	0	0	0	0	2	2	53	4	5	1	1
	HAI	2	0	0	0	1	2	3	79	10	0	0
	NAM	0	0	0	0	0	0	3	3	65	3	3
	LIEG	0	0	1	0	1	0	3	0	1	84	1
	LUX	0	0	0	0	0	0	0	0	8	1	65
	Étranger	1	2	7	0	1	1	0	2	2	3	30

Source: Statbel.

Source: Conseil supérieur de l'Emploi (2019, Table 14)

Belgium also participates in the migration programme. In order to prepare the immigrated children and job seekers at best and to improve their employment outcomes, language courses and specific training for different jobs are offered. Furthermore, anti-discriminatory measures are organised in order to ensure a smooth recruitment process and a peaceful workplace environment (OECD, 2019). In order to facilitate their integration into the local labour market, “validation programmes for skills and degrees acquired abroad” (OECD, 2019, p. 19) should be developed.

Germany

In Germany, the increase of the employment rate of foreigners from 4.7% to 9.2% between 2014 and 2017 indicates that interregional mobility is not always possible (Kubis & Rebien, 2019). Remembering Figure 12 on page 30, it could be seen that the north-east of Germany has the highest unemployment rate and the south the lowest one. This huge distance makes it very difficult to commute on a daily or regularly basis. It would be very time consuming and in the long-term, this would become extremely expensive as well. Therefore exists a financial incentive, which helps the job seekers with the transportation costs or the paying of the rent. Interregional mobility is possible, when both regions are close to each other, but since Germany is a big country, labour mobility is not possible between all of the regions.

Migration is thus very essential for German employers. Since the implementation of the “Blue Card” in 2012 for the EU, Germany participated in this programme allowing non-European job seekers to find a job within its territory. In 2015, 24,640 participants have already been accounted for Germany and women are benefiting most often of this programme (Hanganu & Heß, 2016). The fact that German employers are looking in foreign countries to recruit job seekers is a sign that huge labour shortages exist within Germany and that labour mobility is restricted, for the reasons mentioned above.

Comparison

Since Belgium, compared to Germany, is a small country, labour mobility should be easier. It is possible to commute in Germany, but it is difficult to imagine that someone commutes for example between the north and the south of the country. The difference between both countries is that in Belgium, an agreement foresees to provide job seekers with language courses in order to reduce the language barrier between the Flanders and Wallonia. In Germany, a financial incentive exists, helping individuals financially to commute or to rent or buy a flat or house, if their work place is far away enough from their homes. Both countries use migration more often to fill the vacancies that could not be satisfied with the skills possessed by the local job seekers.

3.2.2.4 “Atypical” jobs

Belgium

An “atypical” type of work is a job that has a non-standard form, like for example temporary work, part-time work and self-employment. This provides more flexibility to the worker as well as to the employer. This flexibility can be beneficial for workers especially at the beginning of their career, because the unemployment rate should be decreased and it can be a gateway to a permanent contract. Around 40% of the temporary workers moved into permanent employment between 2016 and 2017. However, the question that arises is whether the job quality will suffer and disparities will increase or not. Since their pension contributions and taxations are reduced, new distortions might be created (McGowan et al., 2020).

Belgium has a legislation that aims to make short-time work more attractive. Since individuals work less hours under this regime, their monthly wage is also lower. Nevejan (2009) explains that, if a job seeker is available for a full-time job, but accepting a job for a schedule of at least 30% of that of a full-time job, this individual can benefit from the income guarantee allowance.²¹ The aim is to provide the job seekers with a guarantee that their wage does not drop below the level of the unemployment benefits, such that the unemployed are more incentivised to accept jobs for less hours of work-time. Consequently, the unemployment rate can be decreased.

Germany

In Germany, this type of jobs does not only reflect short-time work and part-time work, but also “mini-jobs” (Brunow, Gundert, & Kubis, 2014) and “midi-jobs.” These types of jobs have been introduced with the Hartz I and Hartz II reforms in January 2003. A mini-job is a job paying up to €400 (€450 since 2013)²² and for which the social security tax is eliminated. A midi-job is a job paying up to €800 (€850 since 2013)²³ and which has lowered social security contributions. Furthermore, the requirements for temporary work and fixed-term contracts have been designed in a less stringent way (Krebs & Scheffel, 2013). As soon as an individual earns more than €450, for example in a mini-job, he or she will pay taxes and social contributions, which is not the case below this threshold. Thus, it acts as a disincentive to earn more (Eichhorst, Wozny, & Cox, 2015).

Short-time work was an effective measure during the financial crisis in 2008 in order to avoid a huge jump in the unemployment rate. The slight increase is due to some firms going bankrupt (OECD, 2020b). The effectiveness of this short-time work scheme is that it provides the employers with some subsidies if they reduce the working hours of the workers instead of firing them. Like this, a huge increase in unemployment could be avoided during the Great recession (Boeri & Bruecker, 2011).

²¹ Allocation de garantie de revenu (AGR)

²² Information extracted from Berthold and Coban (2013)

²³ Ibid.

Comparison

In both countries, it can be noticed that short-time work was a relatively efficient measure during the financial crisis in order to avoid a drastic jump in the unemployment rate. In both cases, some subsidies have been handed out in order to guarantee that the workers do not suffer a decrease in their income and to incentivise the employers to not fire the workers, but instead, to shorten their schedule. Belgium and Germany use atypical types of contracts more commonly, even if the “usual” permanent contracts keep being predominant.

3.2.2.5 Retirement programmes

Belgium

As explained by Jousten, Lefèbvre, Perelman, and Pestieau (2010), the labour force participation rate by the elderly was very low in Belgium in 2001. This can also be verified in Table 7 on page 41. When looking at the evolution of their participation rate, it can be noticed that it increased over time, until reaching 55.6% in 2020. Early retirement programmes enable older individuals to leave the labour market earlier and thus free up space for the youngsters. This could decrease the unemployment rate, for the elderly and eventually also for the young job seekers. However, as discussed earlier, due to the ageing of the population, this programme might lead to job shortages. Furthermore, Jousten et al. (2010) also question that the unemployment rate of the young would really decrease because they often suffer skills mismatches. This issue only can be solved by reforming the educational system and lining it up with the needs of the labour market.

On the other hand, since the legal age to retire has started to be increased a few years ago until reaching the age of 67 in 2030 (OECD, 2020a), individuals stayed longer in the labour force, in order to not lose too much in the pension payments. This might explain the increase in the labour force participation rate of those aged between 55 and 64. McGowan et al. (2020) also explain that, since recent policy reforms, the income from pensions can be combined with the income from an independent or salaried activity for individuals aged 65 or having a 45 year career. This contributes to more flexibility and an increase in the participation rate of older workers.

Germany

In 2004, the legislation suggesting a shift in the retirement age has been refused because the unions argued that this would increase the unemployment rate of the elderlies as well as of the youngsters (Börsch-Supan & Schnabel, 2010). In 2007, it came back into the discussion, but nothing has been done. Finally, in 2012, Germany started to extend the working period and to push the legal age of retirement backwards. It is postponed each year by one month until 2024. Afterwards, the age is shifted each year by two months until reaching the age of 67 (JuraForum.de-Redaktion, 2020). This would happen in 2030, exactly as in Belgium. Börsch-Supan and Schnabel (2010) also estimate that the correlation between young employment and old employment in Germany is positive. A high employment rate of the elderlies means that the unemployment rate is lower. This could motivate the young to look harder for a job and to participate on the labour market. Furthermore, the more older workers are available, the better the young can be trained and the more experience they can acquire, which would be positively reflected in their job opportunities.

Before the system postponing the legal age of retirement has started, Germany already implemented a mechanism to incentivise the workers to not take the early retirement. This law, reducing the pension benefits if a person retires before the legal age, is called “Wachstums- und Beschäftigungsförderungsgesetz.”²⁴ Hanel (2010) delivers the expected results. Early retirement requests are postponed by around 14 months and the employment duration is extended by

²⁴Act on the Promotion of Growth and Employment (Hanel, 2010)

approximately 10 months. This difference, however, with a shorter employment extension compared to the postponement of the early retirement demands might increase the unemployment rate.

Comparison

In both countries, the legal age of retirement is postponed, which might be a drawback for the ageing of the population. Keeping the older workers employed for a longer period of time might increase the unemployment rate of the elderly and eventually that of the youngsters, but it reduces the risk of jobs to stay vacant because of job shortages, which would occur especially if the older workers, having attained the age to retire, would claim their retirement. Having a look at Table 7, it can be seen that Germany has a much higher labour force participation rate of those aged 55-64 than Belgium. For instance, in 2019, the German participation rate of the elderly was at 74.7%, whereas the Belgian one was at 52.1%.

Furthermore, we saw in both cases that the authors have doubts that pushing the elderly earlier into retirement would increase the amount of jobs available for the youngsters and thus decrease their unemployment rate. Jousten et al. (2010) explained that the young often suffer skills mismatches and Börsch-Supan and Schnabel (2010) state that the employment rate of the older individuals is positively correlated with the employment rate of the young individuals. In both cases, they come to the same idea and conclusion.

Table 7: Comparison of people aged 55-64 on the labour market between Belgium and Germany

Time	Belgium			Germany		
	Employment/population ratio	Labour force participation rate	Unemployment rate	Employment/population ratio	Labour force participation rate	Unemployment rate
2000	26.3	27.1	3.0	37.6	42.9	12.3
2001	25.1	25.9	3.1	37.9	42.9	11.7
2002	26.6	27.7	4.0	38.6	43.3	10.8
2003	28.1	28.9	2.8	39.0	43.1	9.7
2004	30.0	31.2	3.8	41.8	47.8	12.5
2005	31.8	33.3	4.4	45.5	52.1	12.7
2006	32.0	33.6	4.8	48.1	54.9	12.4
2007	34.4	35.9	4.2	51.3	57.2	10.3
2008	34.5	36.1	4.4	53.8	58.7	8.5
2009	35.3	37.2	5.1	56.1	61.0	8.0
2010	37.3	39.2	4.6	57.7	62.5	7.7
2011	38.7	40.3	4.0	60.0	64.1	6.4
2012	39.5	41.4	4.5	61.6	65.4	5.9
2013	41.7	44.1	5.4	63.6	67.5	5.7
2014	42.7	45.1	5.4	65.6	69.1	5.1
2015	44.0	46.6	5.6	66.2	69.4	4.7
2016	45.4	48.1	5.7	68.6	71.3	3.9
2017	48.3	51.3	5.9	70.1	72.6	3.4
2018	50.3	52.6	4.3	71.4	73.6	2.9
2019	52.1	54.3	4.1	72.7	74.7	2.7
2020	53.3	55.6	4.2

Source: own creation, Data extracted from OECD.Stat (Dataset: LFS by sex and age - indicators)

3.2.2.6 Financial incentives

Belgium

Financial incentives play an important role to bring job seekers back into employment. On the one hand, financial incentives target employers and on the other hand, they seek to activate the unemployed in their job search. The financial incentives presented below refer to Wallonia.²⁵

New financial incentives have been implemented for the so-called “formations en alternance.”²⁶ This programme includes four financial incentives. The first two of them target the firms, respectively the independents. In both cases, they receive €750 if they supervise their trainees well enough, such that they pass their first year. Then, the trainee also gets €750 if he or she finishes the total training period with success. This should incentivise him or her to go until the completion of the programme. A last financial incentive is granted to the sectorial training fund for employing coaches (Beauvois, 2016).

Another important financial incentive programme is the so-called “Incitant+.” This one is special because it only targets jobs that are in shortage and that have difficulties with skills mismatches. Implemented since the 1st of September 2018, this programme grants job seekers €350 when they successfully finish a training programme leading to a job considered in shortage or to suffer mismatches in the skills required and offered. Such a formation needs to last for at least four weeks and account for a minimum of 35 hours of work per week. Each individual is allowed to participate only once in his or her lifetime in this programme (Le Forem, 2021).

Germany

A financial incentive in Germany offers the employers the possibility to recruit underqualified job seekers without having to pay them the entire wage. The employer gets periodic payments by the government for compensating the under-qualification of the recruited job seeker (Krug, 2010). The aim is to incentivise the employers to recruit underqualified job seekers and to give them a chance. Furthermore, this should incentivise them to accept these jobs, since they are paid a higher wage than without this financial incentive. However, these periodic payments to the employer only take place at the beginning of a contract, which gives him time to provide the newly hired worker with the necessary training to acquire the required skills and qualifications. After some time, the employer has to pay the entire wage of the workers (Krug, 2010).

Another example of a financial incentive in Germany, which is addressed to the job seekers, is called “Abschlussorientierte Qualifizierung mit Anreizsystem für bis 35-Jährige.” Introduced in 2016, this programme targets the job seekers aged 25 to 35 if they have no diploma yet. Those who are covered by an unemployment insurance (individuals being part of the SGB III in the legal system) have the right to receive €1,000 if they pass with success the intermediary exam and to get between €1,000 and €1,500 if they successfully pass the final exam. Furthermore, they receive €100 per month on top of their unemployment benefits. The participants covered by a minimum income (individuals being part of the SGB II in the legal system) benefit of €1,500 if they pass the intermediary exam and between €1,500 and €2,000 if they successfully finish the training programme. The final amount that the participants can obtain is determined by the grade that they obtain in their exams. However, some differences exist between the two groups of participants. They cannot follow the same formations. The participants covered by an unemployment insurance have to follow a training programme of two years and those of the SGB II can participate in a formation of up to three years (Lang & Osiander, 2017). The authors mention, though, that they are not able to do an evaluation of this reform because most of the participants had not finished their training programme at the time when they collected the data.

²⁵This list is not exhaustive. Including each single financial incentive programme would exceed the framework of this work.

²⁶Work-linked training, i.e. a combination of work and training.

Comparison

A comparison of Belgium and Germany shows that both countries introduce financial incentives in order to incentivise the unemployed to search harder for a job and the employers to be less picky during the recruitment process. Slight similarities can be seen between the “Incitant+” and the financial incentive in Germany targeting the job seekers below the age of 35, but some differences exist: on the one hand, in the amounts granted, on the other hand, on the types and participants allowed.

3.2.3 Unemployment compensation

Belgium

As soon as an individual is considered as unemployed, he or she will receive unemployment benefits (Schmieder & von Wachter, 2016). The coverage ratio, which is the rate of job seekers eligible and receiving unemployment benefits, is higher than 60% in Belgium (McGowan et al., 2020). Taking the coverage ratio among the long-term unemployed, the authors state that they account for around 55% of all the unemployment benefit recipients. This might be explained by the unlimited unemployment benefits in time in Belgium. This share is close to the one of Germany, which is at 47%. In both cases, the coverage ratio is far above the EU average.

McGowan et al. (2020) suggest that, instead of having unlimited unemployment benefits in time, Belgium should introduce a system like in most countries, i.e., the unemployment benefits have a definite time period and have a specified exhaustion date. Afterwards, social assistance systems with means-tested payments should be implemented. Like this, even though most of the long-term unemployed still would get the necessary income support, the system would ensure that they keep being incentivised to look for a job. If a long-term unemployed has other sources of income, like for example the income of the partner, they would get lower or no payments under this system.

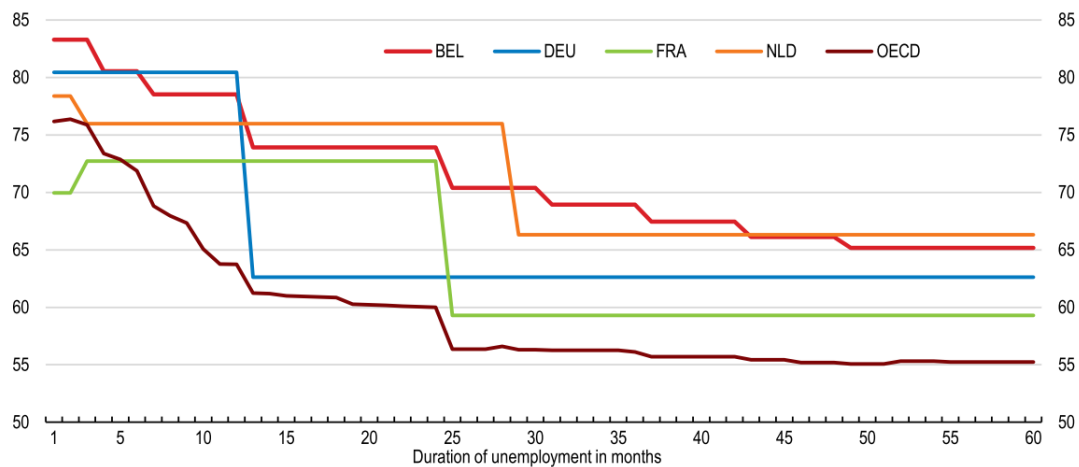
Even though Belgium has a higher net replacement rate for low-paid workers than the average of the OECD countries, it stands out to be not very generous if it is compared to other countries with long-lasting unemployment benefits. Figure 17 illustrates that Belgium is one of the only countries having many reductions in the net replacement rate of the unemployment benefits over the unemployment spell, i.e., it decreases gradually. If, however, an unemployed person had previously a high wage, the benefit payments will be calculated on the basis of a fixed ceiling.²⁷ McGowan et al. (2020) explain that declining unemployment benefits are most of the time not sufficient to incentivize long-term unemployed to go back into employment. It is thus important to introduce strong work incentives. For instance, Belgium has implemented in 2019 a “tax shift” to incentivize low-earners to participate in jobs.

It is striking that around 11% of the inactive and more than 4% of the employed receive unemployment benefits. The former include those who are not immediately available to work and the latter include those working in part-time jobs and getting partial unemployment benefits, such that their income is at least as high as full unemployment benefits (Hijzen & Salvatori, 2020).

If however, job seekers refuse a job offer or a training programme, they will be sanctioned. Refusing to participate in a training programme can lead to a more severe sanction than refusing a job offer in the case of Belgium. The first sanction can result in a suspension of the benefits lasting between 4 to 52 weeks, but in most cases, the length of a benefit sanction is between 10 to 14 weeks and it is decided on a case-by-case basis. Furthermore, if the individuals have refused any kind of offer a second time within 12 months following the first sanction, they might be excluded from the unemployment benefits and only regain access to them after they have worked a certain amount of time. Nevertheless, it has to be specified that if a job seeker refuses for the first time to participate in an ALMP programme, the benefits will immediately be suspended for that individual (Langenbucher, 2015).

²⁷Further information can be found under <https://www.onem.be/fr/documentation/feuille-info/t67>

Figure 17: Comparison of the net replacement rates of unemployment benefits
Proportion of previous in-work household income maintained after a certain period of unemployment¹, 2018



1. Net replacement rates refer to the net household income during unemployment as a fraction of total net household income before unemployment. Household income during unemployment includes unemployment insurance, unemployment assistance, family benefits, social assistance and housing benefits. The net replacement rates are computed for households where one adult aged 41 and with full working history becomes unemployed and their previous earnings equal 67% of the average wage. They are an average across six family types: single, single earner couple and dual earner couple (all with and without children).

Source: Hijzen and Salvatori (2020), OECD calculations based on the OECD's TaxBEN model.

Source: McGowan et al. (2020, Figure 23)

Germany

During the presentation of the financial incentives, the legislation systems SGB II and SGB III have been mentioned. This also plays an important role when considering the unemployment compensation. The individuals under the SGB II are those benefiting from unemployment benefits, which depend on the previous wage and are limited in time (with a maximum of 24 months, depending on how many months you have previously worked).²⁸ These recipients are also considered as being closer to the labour market because their unemployment spells are of shorter duration. However, only around one third of the unemployed are benefiting from these payments. Conversely, individuals belonging to the SGB III are those benefiting from the unemployment benefits II, also called “Hartz 4.” They represent two third of the job seekers and their chances to find a job are smaller. After the Hartz reforms, the number of persons in the SGB III legislation system has decreased significantly (Sell et al., 2020).

Exactly as in the case of Belgium, the coverage ratio is also at around 70% or higher in Germany (Langenbucher, 2015) and the unemployed immediately get unemployment benefits (Schmieder & von Wachter, 2016). Eligible job seekers must “have contributed to the social insurance scheme for at least twelve months within the last two years preceding their job loss” (Lichter & Schiprowski, 2021, p. 3). They receive monthly benefits amounting to 60% of their previous wage, respectively 67% if the recipient has children. It must be mentioned, though, that the maximum is “capped at the ceiling of the social contributions” (Lichter & Schiprowski, 2021, p. 3). As soon as the unemployment benefits are exhausted, the job seekers can claim means-tested welfare benefits. These benefits are the so-called “Hartz 4” or “Arbeitslosengeld II” benefits.²⁹ Their payments are infinite in time and they are a guarantee for the job seekers to have a minimum disposable income. If the unemployed are not capable of work and in financial distress, they can obtain social benefits (Bundesagentur für Arbeit, n.d.-b; Goebel & Richter, 2007). Moreover, Goebel and Richter explain that, in order to be eligible for receiving social benefits, they are not allowed to live with someone who is already benefiting from unemployment benefits II.

²⁸Information extracted from the following link: <https://www.hartz4.org/hoehhe-arbeitslosengeld-1/>

²⁹Unemployment benefits II

When having again a look at Figure 17, it can be seen that in the case for Germany, individuals who earned 67% of the average wage before becoming unemployed, the replacement rate was in 2018 at the beginning of the unemployment spell at a similar level as in Belgium. After 12 months, however, the replacement rate decreases drastically to approximately 63% and stays at that level. Unemployment benefits I also have a ceiling when calculated with respect to the previous wage. Depending on whether the state is a new state (East Germany) or an old state (West Germany), the ceiling is different. In 2018, this ceiling was at €6,500 in West Germany and €5,800 in the eastern states of the country. After some long calculation, the maximum unemployment benefit payment is €2,031.56 in West Germany and €1,875.53 for East Germany.³⁰ In 2021, the ceiling has been increased and reaches €7,100 in West and €6,700 in East Germany.³¹ Here again, long calculations have to be done in order to get the exact benefit payments in both regions.

In Germany, sanctions are also applied if the unemployed refuse job offers. Their aim is to ensure that the job seekers meet their obligations to be eligible for unemployment benefits (Wolff, 2014). The first sanction leads to a benefit suspension during 3 weeks and the total unemployment benefit period is shortened by the length of the sanction. When an individual is sanctioned for a second time, he or she will be suspended from the benefits for 6 weeks. In the case of subsequent refusals, the individual will get a sanction lasting 12 weeks. Here again, the entitlement period for benefits will be cut by the length of the duration of the sanction (Langenbucher, 2015).

Comparison

Comparing Belgium and Germany, one could initially think that Belgium is more generous because the payments are unlimited in time and when looking at Figure 17, it can be seen that the net replacement rate is higher in Belgium than in Germany. However, it is computed with respect to 67% of the average wage. The important element to bear in mind is the ceiling of the payments. In Belgium, this reaches a maximum of €1,810.38 in 2021³², whereas in Germany the maximum payments lied in 2018 at €2,031.56, respectively €1,875.53, depending on whether it is an old or new state. In 2021, these amounts have been even further increased. So, the unemployment benefit payments are more generous in Germany than in Belgium.

A huge difference between the two countries is that Belgium has unemployment benefits that are unlimited in time, whereas Germany has first of all unemployment benefits I, which are paid during a maximum of 24 months, depending on how long the unemployed was previously employed. When these benefit payments come to exhaustion, the job seeker will receive unemployment benefits II (Hartz 4), which are social benefits. They are means-tested and unlimited in time, provided that the unemployed keeps being available for the labour market.

³⁰Further specifications can be found under the following link: <https://www.hartz4.de/hoechstsatzz-alg1/>

³¹Information extracted from <https://brutto-netto-rechner.info/arbeitslosengeld-I-rechner.php>

³²Information extracted from <https://www.onem.be/fr/documentation/barèmes/chomage-complet>

Table 8: Summary table: Labour market description of Belgium and Germany

Belgium (Wallonia)	Germany
<i>Unemployment situation</i>	
Employment rate of 64.7% in 2020	Employment rate of approx. 77% in 2020
Hit by financial crisis in 2008, but managed it relatively well	Hit by financial crisis in 2008, but managed it relatively well
Only small increase in unemployment rate due to Covid-19 pandemic	Only small increase in unemployment rate due to Covid-19 pandemic
Unemployment rate of between 6.5% and 8.5% until 2015, then sharp decline	Increasing unemployment rate until 2005, then strong decreasing trend
Increasing trend of the vacancies	Increasing trend of the vacancies
28% of field-of-study mismatches; 34.5% of qualification mismatches	20.1% of field-of-study mismatches; 37.2% of qualification mismatches
High amount of long-term unemployed	High amount of long-term unemployed
<i>Labour market policies</i>	
Federal government creates legislation	Federal Ministry of Labour and Social Affairs creates legislation
Wallonia: FOREM in charge of regional employment and training services	Federal Employment Agencies are in charge for job search guidance, organising training programmes and providing unemployment benefits
Reforms under “Gouvernement Michel”: reduction in labour costs, decrease in unemployment, job creation, shift in the legal retirement age, change in unemployment benefit payments	Hartz reforms between 2003 and 2005: decrease in unemployment benefits for long-term unemployment, introduction of atypical jobs, improving the matching of skills between unemployed and jobs
Lack of reforms in educational system, but improvement of training and formation programmes by FOREM	Education and training systems are relatively well structured
Interregional agreement for facilitating labour mobility	Financial aid to incentivise labour mobility
Atypical jobs used especially during periods of recessions; works relatively well to avoid a dramatic increase in unemployment	Atypical jobs used especially during periods of recessions; works relatively well to avoid a dramatic increase in unemployment
Legal retirement age will be raised to 67 by 2030	Legal retirement age will be raised to 67 by 2030; also financial incentive for old workers to not retire (combination of retirement payments and wage)
Financial incentives for employers and workers (Formations en alternance, Incitant+...)	Financial incentives for employers and workers (“Abschlussorientierte Qualifizierung mit Anreizsystem für bis 35-Jährige”, labour mobility, retirement...)
<i>Unemployment compensation</i>	
Unlimited in time since 2004	Limited to a maximum of 24 months, depending on how long the individual was previously employed
Gradually declining over time	One single decrease when becoming long-term unemployed
Ceiling of €1,810.38 in 2021	In 2018, ceiling of €2,031.56, respectively €1,875,53 depending on whether it is a Western or Eastern state; ceiling increased in 2021

Source: own creation

3.3 Job search behaviour

Belgium

Since the implementation of the ACR procedure, the number of sanctions has increased in Belgium and the biggest increase could be noticed in Wallonia (Cockx et al., 2011). Job search activities by all job seekers under the age of 55 may be monitored. After 12 months of unemployment spell (or 9 months for those younger than 25), an interview about the job search efforts is organised. If the employment agency assumes that the unemployed looked hard enough for a job, an other interview will be held 9 months later. If, however, the job search efforts are considered to be not sufficient, an action plan will be organised and a new interview will be held four months later in order to verify the search efforts. Younger individuals eventually have earlier and more frequent interventions. On average, a job seeker needs to send around five applications per month to be considered as looking hard enough for a job (Langenbucher, 2015).

Cockx et al. (2011) estimate the effect of a warning letter approximately eight months before an interview with the National Employment Office (NEO)³³ on the job finding rate for those younger than 30. This procedure foresees, in the case of Wallonia, a tight support for the job seekers by the FOREM as soon as they got a warning. They find for 2004 in Wallonia that those aged 30 have a 6.2 percentage point higher probability of employment if they get a warning letter for an upcoming interview in eight months. It must be specified, though, that this effect is mostly true for those highly educated and living in regions with low levels of unemployment. Conversely, the effect of a warning letter on job seekers living in regions with high unemployment rates and low levels of education seems to be very small. The ACR procedure seems to have an ambiguous effect on the job quality in Wallonia. Since the ACR does not only monitor and warn job seekers in the Walloon region, but the FOREM also accompanies and supports them in the job search, some of them will accept a job of lower quality, but others will manage to be employed in a higher-quality job. Moreover, the participation rate in training programmes is increased by around 8 percentage points in Wallonia thanks to the ACR procedure.

Cockx, Dejemeppe, Launov, and Van Der Linden (2018) argue that reducing unemployment benefits with the length of unemployment spells does not lead to the wished effects. Since job seekers are heterogeneous, their reaction will be heterogeneous as well and thus, the behaviour depends on their personal traits and their individual situation. Furthermore, even if a reduction in unemployment benefits might lead to a higher incentive to look for a job, it does not mean that this job seeker will be hired. Employers will recruit most often those individuals, who have shorter unemployment spells, first. Thus, a decrease in the unemployment benefits might have a negative impact on job search and increase the ratio of long-term unemployed. Therefore, the authors suggest to decrease unemployment benefits at the beginning of the unemployment spells, but to increase them later on. Long-term unemployed value unemployment benefits the most because they have a lower income and thus difficulties to smooth their consumption (Hijzen & Salvatori, 2020).

In order to analyse the effect of benefit exhaustion in Belgium, we need to go back before 2004. Since then, benefits are unlimited in time for every group of individuals. Cockx and Ries (2004) analysed the behaviour of women because the ratio of women being unemployed and having a partner being employed was considerably higher than the opposite situation. They find that as soon as the female job seeker is notified that her unemployment benefits will exhaust, the unemployment hazard increases. Employment probabilities are very high especially during the month before the unemployment benefit exhaustion and reemployment stays at a high level after the exhaustion date. Thus, the authors are not sure whether these results will also be true for other groups of unemployed, as for example male job seekers, youngsters, etc.

³³In French: Office National de l'Emploi (ONEM)

Germany

Integration agreements have to be reviewed after 6 months of unemployment. This will already happen after 3 months for young individuals. These integration agreements are based on the individual situation of the job seekers because they include their individual qualifications. Consequently, “the number, frequency and acknowledgment of the individuals’ applications that are set forth in an integration agreement” have to differ between the different job seekers, since they depend on their personality traits. No minimum amount of applications is specified for the case of Germany to be considered as looking hard enough for a job (Langenbucher, 2015, p. 49).

Germany has known a cut in the duration of the unemployment benefits in February 2006. The benefit payments for the older job seekers have been reduced from initially 32 months to 18 months. Before the reform, relatively many elderlies became unemployed, whereas after that reform, a decline of the entries into unemployment by the older workers can be seen. This modification of the legislation impacted especially those who are aged 52 to 54 and 57 to 64. Dlugosz, Stephan, and Wilke (2009) find that, shortly before the introduction of the reform in February 2006, the flow of the elderlies into unemployment increases drastically and afterwards, it declines below the pre-reform level of unemployment entries. Thus, they explain that the anticipation effect is relatively important. In January 2008, however, the coalition of CDU³⁴ and SPD³⁵ has increased the unemployment benefits period from 18 months to 24 months for this group of individuals. Since the reform of 2006 was only of short duration, before being modified again in 2008, it is not clear whether the decline of the unemployment entries of older workers is only of short duration and mainly caused by the anticipation effect, or if it would also have held in the long-run. Nevertheless, it is clearly noticeable that, in the short-run, the reform of 2006 managed to considerably reduce the unemployment entries of the elderlies.

The Hartz IV reform, introduced in 2005, decreased significantly the level of the unemployment benefits for the long-term unemployed. Krebs and Scheffel (2013) find that the cut in the generosity did not only affect the long-term unemployed, but it also had a positive effect, even if it was smaller, on job search behaviour of the short-term unemployed. The Hartz reforms in general contributed to a better matching between the job seekers and the vacancies because more job opportunities were available and the decrease in the generosity of the unemployment benefits for the long-term unemployed incentivised them to increase their job search efforts. The authors conclude that around half of the decrease in the unemployment rate during the period 2005 to 2012 can be explained by the Hartz reforms, which is relatively considerable because the decrease in the unemployment rate was very significant.

The Hartz reforms implemented also a system including vouchers, with which the job seekers can choose their own private intermediary to help in the job search process. Heyer et al. (2012) find that this system seems to have a positive effect on job search and job finding, but these contracts are estimated to be of shorter duration. So, the outcome of the matching between the job and the unemployed indicates to be of low quality.

As discussed in the literature review, it is also true for Germany that not only sanctions affect the job search behaviour, but also the warning of a sanction. After having presented several studies about Germany, Wolff (2014) comes to the conclusion that the threat of a sanction has most of the time the wished effects: job seekers meet the obligations to keep being eligible for the benefits and they cooperate with the agents of the employment agency. The author explains that too strict sanctions might be counterproductive because the job seekers eventually end up being in financial distress, not having enough money to live or even becoming homeless. He suggests that, instead of for example excluding a job seeker entirely of the benefits, the payments should be decreased up to the amount such that at least the rent and some food can be paid or to implement longer sanctions instead of ceasing the benefit

³⁴Christian Democratic Union of Germany (Christlich Demokratische Union Deutschlands)

³⁵Social Democratic Party of Germany (Sozialdemokratische Partei Deutschlands)

payments entirely. Goebel and Richter (2007) also state that after the introduction of the Hartz reforms, the number of job seekers concerned by these reforms and who are considered as poor has increased from one half to two thirds. In contrast to the statements by Wolff (2014) and Goebel and Richter (2007), Boockmann, Thomsen, and Walter (2009) find that a more intense usage of sanctions enhance reemployment and reduce the dependency on the welfare system. Their results indicate that 8 months after a benefit cut induced by the sanction, job seekers would have up to 70 percentage points higher chances of leaving unemployment. Furthermore, “the probability of taking up a job subject to social insurance contribution rises by more than 50 percentage points” (Boockmann et al., 2009, p. 21).

Comparison

The ACR procedure in Wallonia, as well as the Hartz reforms in Germany, have the effects as expected by the literature. Reducing the duration of unemployment benefits leads to shorter unemployment spells, but this can have detrimental effects on the job quality. When the generosity of the unemployment benefits is reduced, the expected effects from theory also can be noticed, i.e. job search efforts go up. The warning of a sanction and the sanctions themselves impact the job search behaviour in a similar way in both countries as well. The unemployed increase the job search behaviour in order to avoid them and in both cases, too strict sanctions show negative effects: job quality and employment duration might suffer.

As explained by Cockx et al. (2011), the effect of the ACR procedure is heterogeneous. It does not only depend on the personal traits of the job seekers, but also on the labour market situation. If the unemployment rate is high and the demand for employment by employers is low, the chances of finding a job are smaller, which will lead to higher and longer unemployment spells. Therefore, job seekers might have a lower incentive to (intensively) look for a job. Furthermore, as these elements are considered when taking into account the severity of the sanctions, job seekers eventually estimate that the sanction will not be that intense if the labour market circumstances are “bad.” Heyer et al. (2012) show that the labour market policies in Germany can have a positive effect on the job search behaviour and on reemployment. The authors notify, however, that the effects are heterogeneous within the different groups of individuals and the various labour market policies.

Table 9 presents a summary of the results of the effects of labour market policies on job search behaviour that have been presented.

Table 9: Summary table: Effects on job search behaviour in Belgium and in Germany

Author	Policy/Element	Effect: case of Belgium (Wallonia)
Cockx and Ries (2004)	Exhaustion of UB	Positive effect on the employment probabilities of women; increase in employment hazard as soon as she gets the warning of the exhaustion; continuous increase until the date of exhaustion; huge jump in employment hazard the month before the exhaustion date (+16p.p.); continuously high employment probability after exhaustion (+25p.p.) (Belgium)
Cockx et al. (2011)	Warning letter	Positive effect on employment (especially when highly educated and living in a region with low unemployment) (Wallonia)
	Warning letter	Positive effect on participation in training programmes (Wallonia)
	Warning letter	Ambiguous effect on job quality (Wallonia)
Cockx et al. (2018)	Reduction in UB	Ambiguous effect; heterogeneity of individuals leads to various behaviours (Belgium)
Hijzen and Salvatori (2020)	Declining UB	Need more studies to evaluate this programme correctly in Belgium
Author	Policy/Element	Effect: case of Germany
Boockmann et al. (2009)	Intensive use of sanctions	Increase in reemployment and decrease in the dependency on the welfare system; 8 months after sanction: 70p.p. higher chances of leaving unemployment; 50p.p. higher probability of being employment in a job with social insurance contributions
Dlugosz et al. (2009)	Reduction of the duration	Significant effect on those aged 52 to 54 and 57 to 64; increase in unemployment entries shortly before the reform (anticipation effect); strong decrease after the reform; effects only of short duration, because of a modification of the reform in 2008
Heyer et al. (2012)	Vouchers	Positive effect on job finding, but contract duration seems to be reduced
Krebs and Scheffel (2013)	Declining UB	Hartz 4 has very strong positive effect on long-term unemployed
	Hartz reforms	General positive effect of Hartz reforms on job search behaviour; stronger effect on search effort of long-term unemployed compared to short-term unemployed
Schmieder et al. (2010)	Reduction of UI duration	Unlikely to reduce unemployment
Wolff (2014)	Warning for a sanction	Induce the job seekers to meet the obligations to keep being eligible for unemployment benefits
	Sanction	Low/moderate sanction can have positive effects on job search behaviour in order to not be sanctioned again; too strict sanctions seem to be counterproductive (financial distress, not enough money for food, risk of becoming homeless)

Source: own creation

4 Discussion and Policy recommendations

A suggestion, in order to avoid a big increase in the unemployment rate, would be to focus first of all on the education system. As presented earlier, skills have a primary role in the creation of unemployment. Kettner (2011) states for the case of Germany, that the recruiters are becoming more and more demanding and strict. They request experience and job specific skills, that cannot be acquired during the studies. Thus, youngsters often have difficulties to find a job and employers limit their choices too much, which leads to recruitment difficulties and thus to higher unemployment rates. This is probably not only true for Germany, but also for Belgium. It is therefore important to start at the core of the problem. Education and training must be correctly organised such that individuals can get the required skills for the labour market. The government should intervene with policies after having analysed what jobs might be considered in shortage and what jobs might suffer from skills mismatches in the near future (Cedefop, 2015).

The analysis of both countries shows that Germany manages this part relatively well with the dual apprenticeship system, which provides the acquisition of some job-specific skills, while also having classroom training for the theoretical parts, to the students. Belgium, however, should definitely work on its education system and put some importance on the introduction of more apprenticeships during the studies. This would, as in the case of Germany, give the students the opportunity to acquire job specific skills, which are required more often by employers nowadays. Consequently, unemployment could decline because skills mismatches would become less prevalent. Furthermore, technological progress would also represent less an issue for the labour market. If the individuals are initiated to technology, they can adapt easier to the technological progress, since they have the necessary know-how. Thus, unemployment due to sectorial changes should decline.

The question whether unemployment benefits should be increased or lowered, either in their duration or generosity, is very complex and difficult to answer. The efficiency of the unemployment compensation scheme in Belgium to bring job seekers back into employment is questionable, since it is unlimited in time. Even though it is less generous than in Germany, the probability to constitute a disincentive to look hard for a job seems to be high, as can be shown by the high long-term unemployment rate. It might be better to limit the unemployment benefits and to switch afterwards to an unemployment assistance scheme, which would only pay as much that the unemployed have enough for the rent and the food. However, the payments should not be too low, because the aim is to provide financial help to the unemployed. If the benefits are too low, individuals might fall into poverty. This can have negative effects on their motivation and mental, as well as physical, health, if the situation would become so bad that they even cannot afford enough food to support the family. In that case, unemployment compensation could have the adverse effect of what is wished to achieve.

5 Conclusion

Several labour market policies have been presented throughout this work. In the *Literature review*, a distinction between active and passive labour market policies has been done in order to present them with more ease. In the *Empirical part*, the focus was set on the policies presenting the strongest links between each other or representing an important reason for unemployment. Both countries face similar issues and try to handle them with relatively identical systems. For instance, both of them shift the legal retirement age backwards, work more frequently with training programmes and formations in order to fight the skills mismatches. They try to incentivise and facilitate labour mobility, make use of immigration in order to occupy hard-to-fill vacancies and they introduce financial incentives to attract job seekers back into employment. Of course, even if these systems are similar in both countries, it does not mean that the mechanisms introduced as such are exactly the same. They have to be adjusted to fit to the local situation and the effects of these programmes might slightly differ.

Next to the labour market policies, unemployment benefits have been discussed in deeper details. According to the literature, an increase in the duration and generosity of unemployment benefits should have a negative effect on job search efforts. Thus, this might have a positive effect on job quality and employment duration. Conversely, a shortening of the duration and generosity of benefit payments would have a positive effect on job search behaviour. The unemployment hazard would shift to the new exhaustion date and the lower generosity could incentivise job seekers to look harder for a job because they might be financially constrained. In this case, it is expected that job quality and employment duration would suffer.

Furthermore, it is not clear whether it is better to increase the unemployment benefits at the beginning of the unemployment spell and then to have a declining trend in the payments, or whether lower benefits at the beginning and higher payments in the long-run would be more efficient. As suggested by several authors (i.e., Cockx et al., 2018; Hijzen & Salvatori, 2020), further studies are necessary to get a clearer picture of this topic.

As a concluding remark, it can be said that even though several studies exist, it is important to continue to evaluate the policies regularly in order to be aware of the short-term, medium-run and long-run effects. Only then, precise decisions on policies can be taken in order to improve the labour market situation. It is therefore essential that more studies and evaluations on these topics are done.

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Appendix

List of job search activities

Figure 18: Job search activities

Definition and examples of job search activities in ATUS 2006.

Job search activities (050401), e.g.:
Contacting employer
Making phone calls to prospective employer
Sending out resumes
Asking former employers to provide references
Auditioning for acting role (non-volunteer)
Auditioning for band/symphony (non-volunteer)
Placing/answering ads
Researching details about a job
Filling out job application
Asking about job openings
Reading ads in paper/on Internet
Checking vacancies
Researching an employer
Submitting applications
Writing/updating resume
Meeting with headhunter/temp agency
Picking up job application
Interviewing (050403), e.g.:
Interviewing by phone or in person
Scheduling/canceling interview (for self)
Preparing for interview
Other activities related to job search, e.g.:
Waiting associated with job search interview (050404)
Security procedures rel. to job search/interviewing (050405)
Travel related to job search (180504)
Job search activities, not elsewhere specified (050499)

Source: Krueger and Mueller (2010, Table 1).