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SKILLS IN TRANSITION

A qualitative content analysis of how Swedish and Danish employer organisations work to tackle skills shortages

Sofia Abrahamsson

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Abstract

Europe faces considerable challenges in obtaining a labour force with an educational profile that meets the demands, where scholars argue that the world is currently experiencing a fourth industrial revolution, characterised by rapid technological advancements. Simultaneously, skills development has become an important priority for the EU, with substantial resources directed towards policies in the area. This thesis constitutes a comparative case study between Sweden and Denmark. In these two countries, unemployment levels have increased in recent years, while the average unemployment level in the EU has decreased. Despite rising unemployment levels in Sweden and Denmark, employer organisations address challenges for employers to find workers with the right skills. This thesis aims to investigate how Swedish and Danish employer organisations work with skills development, and how this aligns with goals at the EU and national level. The empirical data is gathered through interviews with representatives from employer organisations, complemented with written sources. The analysis employs the theory of development blocks, exploring areas of institutional coordination, opportunities or necessities to adjust, and structural transformation, and contributes to the larger research field of skills development and labour market policies. The study finds that EU-policies are mainly viewed as complements, rather than drivers of structural transformation. Denmark demonstrates a more domestically and inward-focused approach, with little to no engagement with the EU-level, and is characterised by sector-specific negotiation and triparty-agreements. Sweden focuses more on the importance of systemic reforms and long-term strategic alignment with institutional actors, and demonstrates more engagement with the EU-level.

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List of abbreviations

AI = Artificial intelligence

CEDEFOP = European Centre for the Development of Vocational Training

DI = Danish Industry

EQF = European Qualifications Framework

ERDF = European Regional Development Fund

ESF+ = European Social Fund Plus

EU = European Union

ISCED = International Standard Classification of Education

IT = Information technology

KL = Local Government Denmark

OECD = The Organisation for Economic Co-operation and Development

RH = Capital Region of Copenhagen

SALAR = The Swedish Association of Local Authorities and Regions

SME = Small and medium-sized enterprises

SN = The Confederation of Swedish Enterprise

STEM = Science, technology, engineering, and mathematics

US = United States

VET = Vocational education and training

1. Introduction

"We will establish a Union of Skills – focusing on investment, adult and lifelong learning, skill retention and the recognition of different types of training to enable people to work across our Union."

- Ursula von der Leyen, 2024.

Europe faces considerable challenges for the future in obtaining a labour force with an educational profile that meets the demands. As the need for new skills are emerging, other, more traditional skills are becoming more outdated (Feyer, 2024, p.135). Scholars have argued that the world is currently experiencing a fourth industrial revolution, which is characterised by automation and technological advancements in fields such as artificial intelligence (AI), unfolding in a rapid pace and affecting professions and the skills required across sectors. As production systems are reorganised and skills requirements changes, these developments also place significant pressure on educational providers and vocational training systems to equip workers with the skills needed to use the full potential of emerging technologies, which also plays a key role for different actors to strengthen their competitiveness (Schäfer, 2018, p.6; Bikse et al., 2022, p.1-2; Stopochkin et al., 2022, p.2). Research estimates that the trend of automation replacing much of the tasks that have been conducted manually will not slow down. In 2019, the OECD predicted that, on a global scale, around 32 % of jobs already existing will change profoundly in the next ten years, while 14 % of the jobs on the labour market will become obsolete due to automation (Bühler, Jelinek, & Nübel, 2022, p.6). As a result of these changes, skills shortages are expected to increase across all sectors, as employers struggle to find workers with the necessary skills and competencies (Brunello & Wruuck, 2021, p.1146-1148).

The challenges with skills shortages in times of rapid technological changes have also been addressed by the EU, where efforts in areas of skills development and lifelong learning were particularly intensified with the Lisbon Strategy in the year 2000, which aimed at making the European economy more competitive, and that laid out initiatives in fields of education and training. (Brandi et al., 2023, p.225; Brockman, Clarke & Winch, 2011, p.1, 6). Lifelong learning encompasses several diverse aspects of individual education, available at different times and phases throughout peoples' lives, and has been described as a vital tool to cope with rapid transformations (Eurofound, 2017). Over the years, the EU:s efforts within these areas have increased, and skills development has become a particularly prioritised policy field. This was recently communicated through the launch of The Union of Skills in 2025, where the EU argues for a European strategy for skills development and the adaptability of the European labour force in light of the green- and digital transition (COM, 2025c).

The strategy focuses on Europe's global competitiveness and draws on the recent Draghi, Letta and Niinistö reports which attributed skills shortages, inefficient governance and an inadequate transformation speed as obstacles towards strengthening the EU:s competitiveness. Harmonisation of policies in the field of skills development and improvement of the educational systems also plays a key role in this strategy (COM, 2025c, p.1, 4-5).

The area of skills development is however a complex area as access and infrastructure to develop skills vary between the member states, where the national competence is strong. Furthermore, participation in lifelong learning-activities varies between member states, which can be explained by a range of different factors, from demographic to socioeconomic ones (Brandi et al., 2023, p.226; Barbier-Gauchard, et al., 2021, p.338; Boeren & Whittaker, 2018, p.4). Additionally, it has been argued that the polices within the field of education that the EU promotes, especially in vocational education and training (VET), closely resembles systems of cooperative governance that can be found in the Nordic EU-countries (Martínez-Izquierdo & Torres Sánchez, 2022, p.1, 16).

The Nordic EU-countries demonstrate high levels of participation in lifelong learning-activities and adult education, where particularly Sweden and Denmark display high levels of participation and low levels of inequality in terms of equal access to these types of activities, in comparison to other European countries. However, even though participation levels are high in the Nordic countries, some differences can be distinguished, where the level of participation among for example younger well-educated adults is higher in Denmark than in Sweden (Tikkanen and Nissinen, 2016, p.216, 229-230). Additionally, in a report published in 2023 by the Centre for Global Human Resource Management at the University of Gothenburg, Tengblad (2023, p.1) argues that there is a relatively large difference in development and recruitment measures in Sweden compared to other Nordic countries, where Sweden is not as active in addressing issues related to skills shortages. Moreover, in terms of levels of unemployment, Sweden performs significantly worse than Denmark (Appendix 8).

Challenges with skills shortages and unemployment have been raised by employer organisations in both these Nordic EU-countries. These organisations actively work with areas of skills development and have a central role in the labour market models in the respective countries. As technological shifts changes employment patterns and structures, the involvement of employer organisations is essential in supporting companies and organisations to adjust to these changes (Scott, 2021, p.302, 306, 308; Bühler, Jelinek, & Nübel, 2022, p.4-6). In Sweden, the current challenges with skills shortages has been described as urgent by employer organisations. The Swedish Association of Local Authorities and Regions (SKR, 2024) recently addressed the issue of skills shortage in the public welfare sector in Sweden, and underlined the urgent need for increased efforts in the area. Skills shortages in the private sector has also been addressed by The Confederation of Swedish Enterprise (Svenskt Näringsliv, 2024, p.4-5) who stresses that the matching on the Swedish labour market is insufficient and underlines the subsequent consequences skills shortages have for society at large. The Danish employer organisation Danish Industry have also addressed these challenges in Denmark, arguing that despite high levels of growth in the last years, many Danish companies state that the greatest barrier for future growth is the lack of employees with the right skills (Dansk Industri, 2023).

Hence, despite EU-initiatives and strategies in the field of skills development, a gap persists between what the labour market needs and the skills available in both public and private sectors. Moreover, little is known regarding how employer organisations interact with EU-level tools, and how they perceive EU-initiatives in the field of skills development. It is also worth mentioning that while the average unemployment level in the EU has decreased in recent years, it has increased in the Nordic EU countries (Eurostat, 2025b). However, although unemployment levels have been increasing, a structural problem seems to exist as employer organisations in both the public and the private sector still address problems with challenges for companies and organisations to find workers with the right set of skills.

1.1. Aim

Against this background, the aim of this thesis is to investigate how two Nordic EU-countries, namely Sweden and Denmark, address the area of skills shortages and how they interact with EU-tools and initiatives in the field of skills development. This will be done by focusing on the employer-perspective, where this thesis will investigate the work of employer organisations in Sweden and Denmark. This will be done by conducting a comparative analysis between the two countries, where the ways in which different employer organisations addresses skills shortages and mismatches will be investigated. Additionally, the employer organisations' engagement with EU programs, tools and strategies will be analysed, where the perceptions of strategies amongst the respective countries' organisations will be explored. The perceptions of policies on the national level will also be investigated. This will be done by answering the research question below.

How do Swedish and Danish employer organisations work to address challenges regarding skills development, and how does this connect to goals at the EU and national levels?

2. Previous research

To get a deeper understanding of how changing demand of skills affect labour markets, it is necessary to provide research on the changes Europe, and the world, is facing. Secondly, to understand the interplay between supranational and national polices in the field of skills development, it is essential to explore what competencies the EU encompasses in this field, and to provide information regarding policies and initiatives. Additionally, in order to conduct a comprehensive analysis of how employer organisations in Sweden and Denmark work to address challenges regarding skills development, it is necessary to provide information on educational levels and employment levels in the two countries, and to examine their national labour market models. This will be followed by a discussion on research gaps. After that, the theoretical framework for this study will be presented.

2.1. Scholarly debate: A fourth industrial revolution?

Industrial revolutions can be explained as developments of new technologies that leads to intense and substantial changes in societal structures, production processes and economic systems. During the first industrial revolution, innovations such as the steam engine radically changed production patterns and strongly enhanced the physical productivity among industry workers. Electricity triggered the second revolution, which further enhanced levels of productivity as well as consumption. Seventy years after this, along with the introduction of information technology (IT) and the development of computers, the usage of computing systems within industry sectors started the third revolution (Bühler, Jelinek, & Nübel, 2022, p.4; Schäfer, 2018, p.1-2). It has been discussed that the world is now experiencing the fourth industrial revolution. It is further argued that what sets it apart from the earlier ones is that the technological innovations and advancements of this one are occurring in shorter cycles and are spreading in a substantially faster pace than the previous industrial revolutions, which fundamentally changes working tasks and skills demands in many sectors (Bikse et al., 2022, p.19; Bühler, Jelinek, & Nübel, 2022, p.5).

Although these advancements enhances productivity as a result from automation processes, it also changes the role of humans in the labour market, as these developments include reorganisations of both production- and human resources, where it has been argued that this will change the relationship between humans and machines (Schäfer, 2018, p.6; Bikse et al., 2022, p.1; Stopochkin et al., 2022, p.2). According to Bühler, Jelinek and Nübel (2022, p.4), along with the developments of new technologies and innovations during industrial revolutions, the education systems must undergo transformative changes as well to accommodate to the new needs at the labour market and in the different industries. This includes the evolution of specialised trade schools, technical universities as well as vocational training, where globalisation has led to a new form of mobility in the educational sphere. The authors (Bühler, Jelinek, & Nübel, 2022, p.5) do however underline that during the fourth industrial revolution, skills shortages will increase in all industries and sectors. Skills shortages occur when companies and employers cannot find workers in their respective labour markets with the right skills (Brunello & Wruuck, 2021, p.1146-1148). Some of the skills for which the demand will continue to grow in the future are digital skills and technical expertise, such as programming. However, as more and more aspects of labour are becoming automated, along with developments in AI, scholars estimate that the demand for skills that computers and digital systems do not seem to be able to master as well as humans will grow. Those are soft skills, such as creativity and negotiation skills (Bühler, Jelinek, & Nübel, 2022, p.5-6).

Subsequently, it can be argued that technological and digital developments can both lead to opportunities and obstacles on the labour market. New work opportunities can have the possibility to arise, especially in specific industries such as those within the field of IT, but it can also lead to shifts where professions in more traditional industries, such as fields of manufacturing, become obsolete and to workers being displaced. As new technological advancements can increase productivity and growth and also tackle many of the challenges Europe and the world is facing, such as green solutions and enhanced competitiveness, scholars have argued that these developments can lead to inequalities at both global and national levels, with potential increases in social inequality regarding the upholding of fair working conditions and rising levels of unemployment. Some scholars do however argue that the opportunities that can arise from these technological changes eventually will have the power to reduce the negative effects that these changes caused in the short term (Crisan et al., 2023, p.2; Ivaldi, Scaratti, Fregnan, 2022, p.3, 5).

It is also important to note that, in addition to technological advancements and digitalisation, many of the challenges the labour market is experiencing are also triggered by structural factors such as societal and political changes, which includes changes within labour market institutions, the wide reaching consequences of globalisation, demographic changes, and most recently, the COVID 19-pandemic (Schäfer, 2018, p.10; Antoons & Ghimis, 2020, p.264). To tackle the skill shortages that becomes a product of demographic changes, where the need for replacements are high, Backman, Lopez and Rowe (2021, p.963) discuss how immigration is a key component. Barbier-Gauchard et al. (2021, p.339-340) too, discuss how immigration of people from third countries can help create a larger variety of skills and help tackle skills mismatches that affect many European companies. However, scholars also argue that in the light of COVID-19 and EU:s Pact on Migration and Asylum, which both contributes to the strengthening of EU:s external borders, the management of labour migration from outside the EU will prove more challenging than before for many countries (Samuk, Ince-Beqo, & Hennebry, 2024, p.6; Barbier-Gauchard et al., 2021, p.339-340).

These structural changes has resulted in what Brunello and Wruuck (2021, p.1145-1146) describes as a cyclical downturn. When dissecting how skills shortages and skills mismatches varies with business cycles, it is explained that geographical mobility and wages directs how the supply of labour responds to quick and substantial changes in skills demands. During times of economic development and expansion, when companies need to recruit skills from other countries to meet the demands and fill new job positions, skills shortages tend to increase. During economic recessions, the opposite tend to happen, where skills shortages tend to decrease (Brunello & Wruuck, 2021, p.1151).

Subsequently, skills mismatches increases when the part of the workforce who have lost their jobs due to changes on the labour market do not have the skills that are needed for new existing positions. Skills mismatches, which from a macrolevel perspective refers to a gap between the demand and supply for skills and, if looking at it a micro level, takes place when workers have a certain level of skills that differs from the requirements for the job they have. Skills mismatches can increase in times when there are not many available openings on the labour market and when people agree to apply for positions for which they otherwise probably would not apply. In Europe, a clear example of this was after the financial crisis in 2008 where, as the economy recovered, average labour shortages in Europe increased. These effects do however vary depending on strategies by labour market institutions (Brunello & Wruuck, 2021, p.1146, 1152).

2.2. The EU and the field of Skills Development

The EU has been involved in policies in fields of skills development and lifelong learning since the end of 1990's. However, after a decade marked by a widespread unemployment crisis in Europe, efforts were intensified along with the Lisbon Strategy in the year 2000, which marked a shift for the EU in the field of social policy. The strategy presented initiatives in fields of education and training to create a knowledge-based economy that would strengthen Europe's economic competitiveness and raise employment levels, which had become a strong priority for the EU (Brandi et al., 2023, p.225; Brockman, Clarke & Winch, 2011, p.1, 6; Jones, 2005, p.247). The new goals also introduced a so called "open method of coordination" where initiatives like the Copenhagen Process and later the European Qualifications Framework (EQF) would combine areas of mobility- and upskilling strategies (Ertl, 2006, p.14-17; Telling & Serapioni, 2019, p.393).

Policies directed at skills development have since evolved further. One of the six priorities for the previous von der Leyen Commission of 2019-2024 encompassed the European Skills Agenda, a five year-plan where the EU introduced policies to ensure equal access to lifelong learning (COM, 2020). Subsequently, the year of 2023 was referred to as The European Year of Skills, with new initiatives to address skills shortages by collaborating with companies, social partners and educational providers (COM, 2023). This was further accentuated in March 2025 when the new von der Leyen Commission (2024-2029) launched The Union of Skills, a plan inspired by the recent Draghi, Letta, and Niinistö -reports, which stressed the need to strengthen Europe's competitiveness. The plan addresses skills- and labour shortages where the Commission aims to improve up- and reskilling practices, recruitment-procedures and making Europe more attractive for international talent (COM, 2025c).

An area that has received considerable attention in the field of re- and upskilling policies in recent years is the area of digitalisation, to strengthen the EU:s competitiveness across different industries internationally, and to reach the United Nations Sustainable Development Goals (SDGs). This is often described by the EU as the green- and digital transition, or the twin transitions, and has resulted in a substantial policy-framework that promotes innovation, reskilling and digital education (Gao, 2024, p.1, 7-9; Crisan et al., 2023, p.1-2; Brandi et al., 2023, p.225-226). The needs for new technological skills and a transformation of European educational systems are also key parts of the EU:s Horizon Europe programme, which focuses on research and innovation and has a budget of approximately €95 billion, while the European Social Fund Plus (ESF+), the primary tool of the European Pillar of Social Rights, with a budget of €142.7 billion for the time period of 2021-2027, focuses on general matters in policies of skills, education and employment (Bühler, Jelinek, & Nübel, 2022, p.5-6; COM, 2025b).

Scholars have argued that the EU through crises have taken steps that have led to EU policies extending to more areas, deepening European integration. For example, the unemployment crisis in the 1990s contributed to intensified efforts by the EU in the field of Social Policy. Furthermore, the euro crisis and its aftermath led to enhanced social investment policies, and most recently, the COVID-19 pandemic strongly contributed to the acceleration of digitalisation processes and demonstrated the importance of digital skills (Umbach & Tkalec, 2021, p.403; Jones, Kelemen & Meunier, 2016, p.1010; Brooks & Geyer, 2020, p.1057). During the COVID-19 pandemic, technology became a crucial part in many peoples' lives, where many were forced to work from home, and where communication became increasingly digitalised (Garcia et al., 2021, p.196, 198). This was addressed by the EU in 2021 with the launch of the Digital Europe Program 2021-2027. This funding program, with a budget of over €8.1 billion, aims to enhance digital skills in member states (COM, 2025a).

However, even though skills development in digital skills is expanding, tech industries in the EU are failing to compete with big technological companies outside Europe, most significantly from the US.

Furthermore, the growth of labour productivity fails to keep up the same pace as digital advancements, which leads to shortages, where people are not able to harness the full potential that modern technology presents (Stopochkin et al., 2022, p.16; Schäfer, 2018, p.6). Thus, there is still a palpable systemic gap between the skills available and the demands. According to Eurostat (2023a), in 2023, 56% of people in the EU aged 16 to 74 had at least basic overall digital skills, which is described by the EU as competencies of "information and data literacy, communication and collaboration, digital content creation, safety, and problem-solving" (Eurostat, 2025b).

Additionally, policy makers in the EU have been struggling to adjust already existing education systems, which Bikse et al. (2022, p.2, 17) argued to be a potential result from difficulties to predict how certain changes will affect labour markets. Hence, difficulties by member states to implement these strategies undermines EU ambitions, which can become particularly noticeable in less developed regions (Jones, 2005, p.253, 258-259). The EU:s polices of lifelong learning have also received criticism concerning inclusivity. Tuparevska, Santibáñez and Solabarrieta (2020, p.182, 187) argue that the policies fail to address marginalised groups in Europe, and that they are too narrowly focused on labour market goals, which leads to risks of neglecting broader social outcomes.

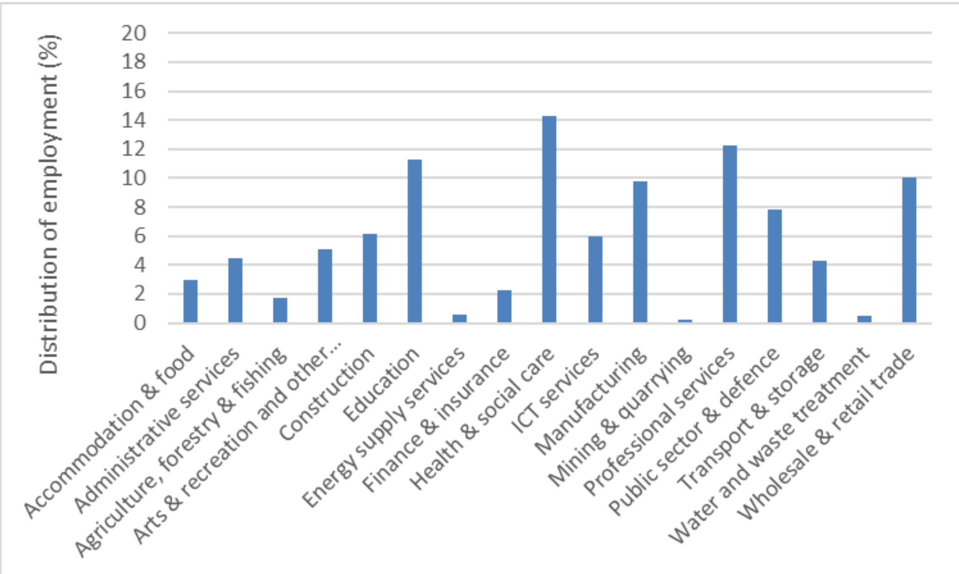
Regarding competencies in the area, policies related to skills development is not an exclusive EU-competence. Even though coordination exists between member states and the EU, the EU mainly puts forward policy recommendations and strategies to support and influence national governments. Those are often encompassed of so called labour activation-policies and policies that support job-searching mechanisms, which have been described by scholars as a top-down approach by the EU to promote a European knowledge-based, competitive economy (Barbier-Gauchard, et al., 2021, p.338; Umbach & Tkalec, 2021, p.403, 409-410). These initiatives, however, do not have a legislative impact, and their open-ended structure leaves the final formation to the national level. It has been discussed how tensions between supranational ambitions and national autonomy have been apparent in this field, where the EU has promoted more harmonisation for education systems, while member states insists on maintaining their own systems (Ertl, 2006, p.13-14; Telling & Serapioni, 2019, p.389, 394).

2.3. National approaches and labour market models

The Swedish and the Danish labour markets, along with labour markets in the other Nordic countries, share several similarities that differ from other countries in the EU. One important aspect that is a fundamental part of the Nordic approach in general, and that both the labour market models in Sweden and Denmark are characterised by, are high levels of employment- and income security. This is crucial to the field of skills development as this system makes it easier for workers who have lost their jobs to participate in adult education or VET programs. In times where the needs for skills changes quickly due to technological innovation, aspects of collective bargaining and support from social partners play a crucial role to help workers and companies to adapt to these changes. It also makes it easier for those who want to change career paths, where this system can make these changes more of an opportunity rather than a risk (Scott, 2021, p.302, 306-308; Bühler, Jelinek, & Nübel, 2022, p.4-6).

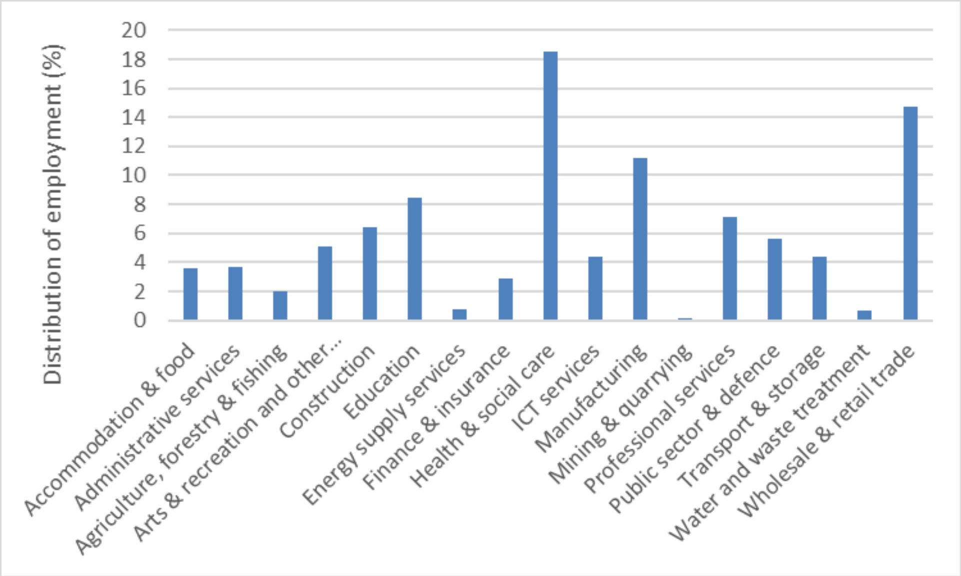
Regarding sectoral employment, in 2024 in Sweden, 32 % of the population worked in the public sector and 66 % in the private sector (SCB, 2025). In statistics from February 2025 in Denmark, 29 % of the labour force were found in the public sector, while 70 % were found in the private sector (DST, 2025). The distribution of employment amongst people across sectors in 2023 in Sweden and Denmark are presented in Figure 1 and Figure 2. In both Sweden and Denmark, the sector with most employees can be found in Health Care and Social Care, with an employment rate of 14,2 % in Sweden and 18,6 % in Denmark. Another sector with a large percentage of employment in Sweden is the sector of Professional Services with a percentage of 12,2 %, including jobs that requires high education or training such as law, accounting and engineering (CEDEFOP, 2025c). The sectors with the lowest percentage are Mining and Quarrying with 0,2 %. In Denmark, the distribution looks slightly different, with another sector with a high percentage level being Wholesale and Trade, with 14,7 %. Like Sweden, the sector with the lowest percentage level is Mining and Quarrying with 0,1 %.

Figure 1. Distribution of employment (%) across sectors in Sweden in 2023.



Note: Age class: 15 +. For full information on percentage levels, see Appendix 2. Source: (CEDEFOP, 2025b)

Figure 2. Distribution of employment (%) across sectors in Denmark in 2023.



Note: Age class: 15 +. For full information on percentage levels, see Appendix 3. Source: (CEDEFOP, 2025a)

Moving on to labour market models, starting with the Swedish labour market model. This model can be described as being based on three different pillars, the first one being based on a combination of proactive labour market policies, wage formation and unemployment insurance, which aims to provide a secure foreground that can facilitate structural transitions. The other two pillars are encompassed of the Swedish welfare policy that provides welfare services such as income security, where the distribution of wealth is strongly combined with independence for the Swedish citizens, and an economic policy that promotes a general openness and stability (The Government of Sweden, 2017, p.1-2, 7). In Sweden, the main characteristic of its labour market model that sets it apart from other countries in the EU can be argued to be the strong and well established position of trade unions and employer organisations. The labour market is built on legislation as well as collective agreements with these different organisations, which encompasses laws on workers' rights, work environment and wages, connected to the aspect of high employment- and income security, where around 90 % of employees work for companies and organisations that are connected to an employer organisation, and where nearly 70 % of Swedish employees are members of employee organisations (Backman, Lopez & Rowe, 2021, p.967).

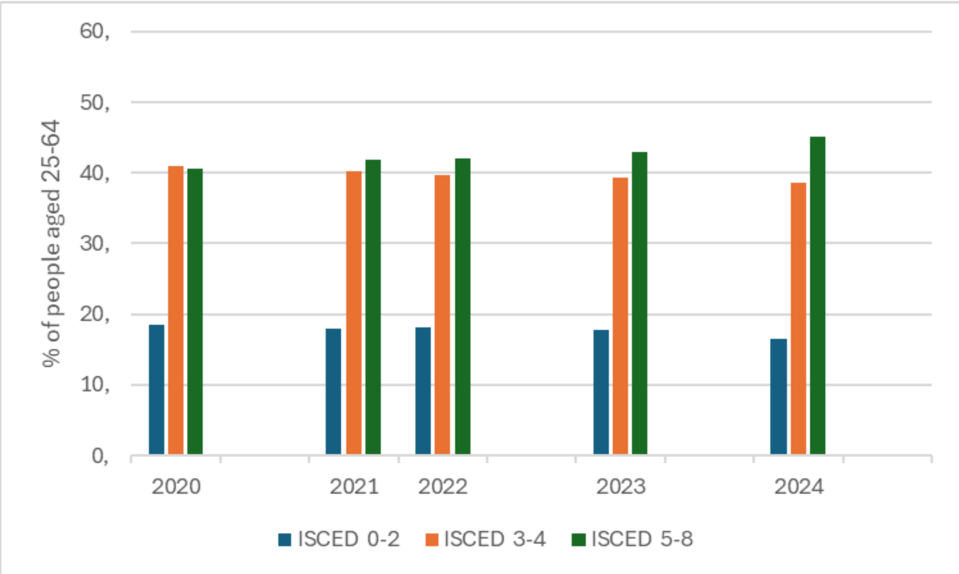
In Denmark, collective negotiations also play a key role, where decisions on labour market- and education policies result from agreements between the government, the unions and the employer organisations, also known as "triparty-agreements". These triparty-agreements have their foundation in the Danish tax-based welfare system that aims to uphold high levels of employment through active labour market policies, by also providing universal benefits to Danish citizens such as employment security-measures, child care guarantees and financial aid. The parliament and the government aims to keep their intervention to a minimum, thereby handing those negotiations to the social partners (BM, FH & DA, 2021, p.3-5). Like Sweden, Denmark also has a high density of trade unions, where approximately 66 % of Danish employees are union-members. Another important part of the Danish labour market is the aspect of so called “Flexicurity”, which refers to the combination of flexible rules regarding hiring and firing employees. Although it is relatively easy for Danish companies to hire and fire workers, this is not met with much resistance from employees and unions because of the robust system of income security, where replacement levels for people affected by temporary unemployment are high (Kreiner & Svarer, 2022, p.83-84).

Sweden and Denmark also share many structural similarities regarding education. In Sweden, education is characterised by widespread equality due to absence of tuition fees, and opportunities for higher education regardless of economic background, with a generous system for student-loans. In Denmark, education is also funded by the public sector and provided free of charge at all study levels (Persson, 2024, p.70; Rodriguez-Pose & Wang, 2025, p.3; Kreiner & Svarer, 2022, p.86). Below follows statistics over the educational levels in Sweden and Denmark between 2020-2024 amongst people aged 25-64. The educational levels are based on the International Standard Classification of Education (ISCED) where ISCED 0-2 refers to a low educational level, including less than primary education, primary education and lower secondary education, while ISCED 3-4 refers to a medium level of education including upper secondary education and post-secondary non-tertiary education, and lastly, ISCED 5-8 refers to a high level of education including short-cycle tertiary education, Bachelor’s, Master’s and Doctoral levels (Eurostat, 2025e). In Sweden, we can see that a big part of the population have a high level of education, which has increased over the last five years, as the amount of people with at least a medium and low level of education has slightly decreased. In 2024, 50,5 % of the population had a high educational level, 38,2 % had a medium level of education and 11,3 % had a low level of education. In Denmark, the trend looks similar with rising levels of high education and decreasing levels of low education, apart from a break in 2022 with the level of low education rising slightly. The level of medium education is similar between Sweden and Denmark, but in Denmark the level of high education is slightly lower and the lower educational level slightly higher. In 2024, 45,1 % of the population in Denmark had a high educational level, 38, 6 % had a medium educational level, and 16,4 % had a low educational level.

Figure 3. Educational levels in Sweden 2020–2024.

Note: Age class: 25-64. For full information on percentage levels, see Appendix 4. Source: (Eurostat, 2025a)[1]

Figure 4. Educational levels in Denmark 2020–2024.

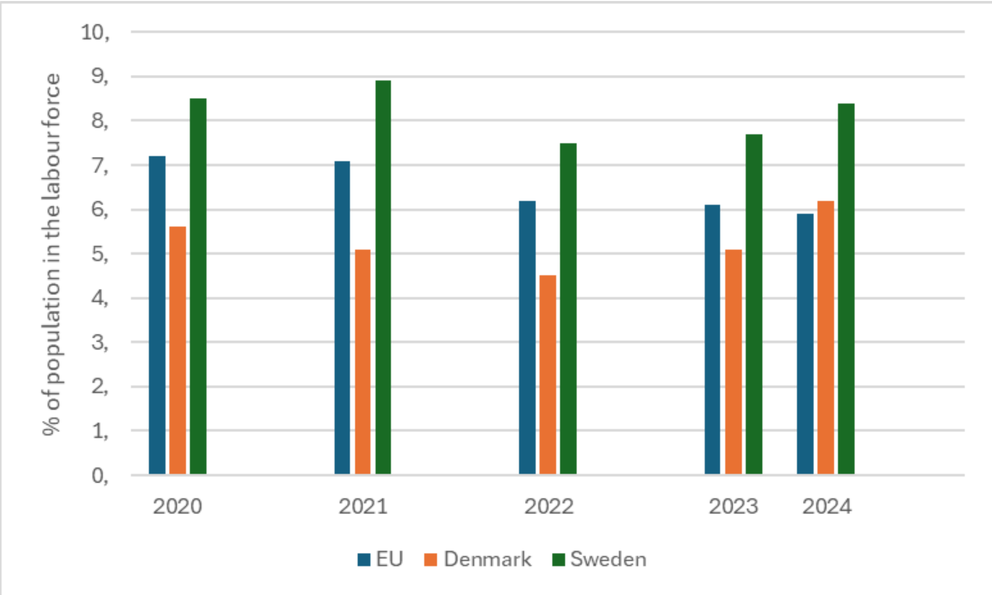


Note: Age class: 25-64. For full information on percentage levels, see Appendix 5. Source: (Eurostat, 2025a)[1]

[1] The data regarding educational levels in 2021 has to be handled with caution as a break in the time series was indicated by Eurostat. This does however not interfere with the analysis of this study. The general accuracy of the data derived from the EU-LFS is additionally regarded as high (Eurostat, 2025c).

Furthermore, Lindberg (2017, p.24-25) stresses the importance of the connection between education and the labour market, and argues that an educational system that fails to withhold relevance eventually will fail to produce sufficient skills that the labour market needs. This can lead to mismatches and shortages, which in the Swedish case has contributed to persisting high levels of youth unemployment. In this category, Sweden has been performing worse than its neighbouring Nordic countries, including Denmark (Lindberg, 2017, p.12, 24-25). In 2024, Sweden had an unemployment level of 8,4 percent, while Denmark had an unemployment level of 6,2 percent, with the average EU level being 5,9 percent (Figure 5). Furthermore, in 2024, the youth unemployment in Sweden was at 24 percent, while in Denmark, it was at 16 percent (Figure 6). We can also see that the levels of unemployment as shown in Figure 5 in Sweden and Denmark dropped in 2022, but rose again in 2023, while on the EU average level, it has continued to drop.

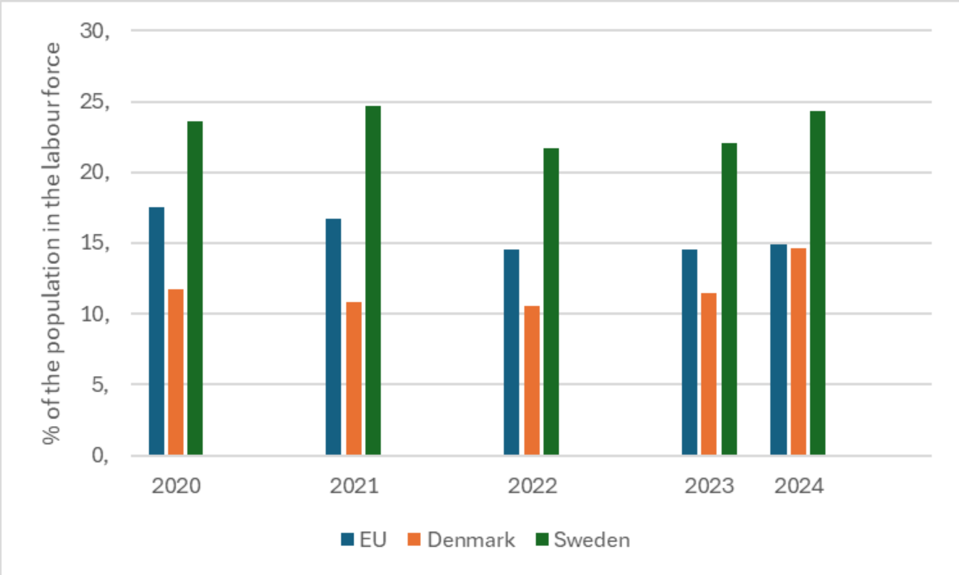
Figure 5. Unemployment levels in Sweden, Denmark and the EU 2020-2024.



Note: Age class: 15-74. For full information on percentage levels, see Appendix 6.
Source: (Eurostat, 2025b)[2]

[2] The data regarding unemployment levels in Denmark in 2023 has to be handled with caution as there was a break in the time series indicated by Eurostat. This does however not interfere with the analysis of this study. The general accuracy of the data derived from the EU-LFS is additionally regarded as high (Eurostat, 2025d).

Figure 6. Youth unemployment levels in Sweden, Denmark and the EU 2020–2024.



Note: Age class: 15-24. For full information on percentage levels, see Appendix 7.
Source: (Eurostat, 2025b)[2]

2.4. Research Gap

This study will address several research gaps when investigating how Swedish and Danish employer organisations work to address challenges regarding skills development, and how this connect to goals at the EU and national levels. Firstly, when conducting research for this thesis, it became palpable that there was an apparent lack of studies that analysed the aspect of the changing skills needs on the labour market from the perspective of employer organisations. Guardiancich, Terlizzi, and Natali (2023, p.243-244) argue that little is known regarding the preferences of EU employer organisations when it comes to social policy. Furthermore, Brunello and Wruuck (2021, p.1147) state that it is probable that employers can provide more accurate insights and information about skills requirements on the labour market than employees can. Additionally, although scholars have conducted studies that have compared the Nordic countries in terms of labour market- and social policies, there was a lack of in depth studies comparing Denmark and Sweden in this specific field. The third gap addresses the lack of studies that look at how EU-member states engage with EU-tools in the field of social policy, and how these align with their goals and perceived challenges. Finally, the fourth gap addresses the need for an analysis that examines structural changes from the theoretical perspective of development blocks, which is a useful tool when investigating how rapid changes, digital developments and technological shifts can change societal structures.

3. Theoretical framework

Before presenting the theoretical framework, it is necessary to discuss the aspect of structural transformation in relation to education and knowledge as this plays an essential role both as a product and as a driver of technological shifts, and is essential for long-term growth. Throughout industrial revolutions, which Lennart Schön (2013, p.47) described as a form of "accelerated structural transformations", production processes have become more technologically complex and educational systems have been forced to adapt to demands for more specialisation and advanced technical skills (Schön, 2013, p.41-43; Schön, 2014, p.19-20). In an initial phase of structural transformation, specialised skills are in high demand, often requiring workers to take part in upskilling activities at the workplace. As the technology becomes standardised and competence- and knowledge levels rise, the workforce grows more interchangeable. In order for technological advancements to be utilised in the best possible way, investments in higher education are crucial. However, acquiring new skills for the labour market takes time, where demographical aspects such as the age and competence levels of the work force are important factors to consider. This makes the educational systems' ability to adjust and adapt ever more important (Schön, 2013, p.49-50, 99, 102-104; Schön, 2014, p.20).

Schön (2014, p.72) describes these periods of transformation throughout history as technological shifts taking place, where so called development blocks are formed and where new forces for growth have been created. This brings us to the aspect of development blocks, which will be the theoretical framework for this thesis. The concept of development blocks is centred around a set of aspects in the field of industrial development that are interconnected. The theory states that developments in technology in a particular area of the economy cannot be profitably employed until developments in other areas have been implemented. The emphasis is on transformation, such as appearance of new products and services, disappearance of old products and services as well as decline of old markets. Here, if a transition in one area is not timed in relation to developments in other areas, structural tensions can arise. During transformation processes, new development blocks arise, but the different aspects involved in the processes are not balanced, as structural tensions can arise, which will demand investments to develop new skills, competences and regulations (Henriksson, Carlsson & Dahmén, 1991, p.63, 136-137; Schön, 2014, p.24-25). Uncompleted development blocks can generate both difficulties and opportunities for different companies, where difficulties can be the necessity to adjust and adapt, which can be dependent on institutional circumstances, where the actors who are not able to do this, will be affected negatively. Transformations can also mean opportunities as it can help reconstruct industries, simplify processes, as well as generate new profitable activities (Henriksson, Carlsson & Dahmén, 1991, p.136-138).

An example of how transformations and shifts have affected industries and skills demands is the shift from so called Fordism-production to new ways of organising production processes. From the 1980's, increased automation and more efficient information management made work more knowledge-intensive, reduced the need for routine-based tasks and strengthened the demand for skilled workers. This led to traditional hierarchical structures being replaced by more flexible team-based organisational structures, exemplified by Japanese car manufacturers. These production systems required a broader professional set of skills and higher levels of education. Simultaneously, the need for workers with more routine-based tasks decreased, leading to rising levels of unemployment (Schön, 2014, p.389). Another example of how technological advancements can create development blocks that requires new types of production systems and a labour force with new skills-sets was palpable in the textile industry during the 19th century. Mechanisation of textile production marked a technological shift where local craftsmanship, often based in cottage industries, shifted to factory-based mass production. This led to manufacturing moving to urban factories, where work became more regulated and the need for workers who could operate the machines in the industrial factories were required, replacing the demand for traditional artisanal skills (Schön, 2014, p.159, 164-165).

Applying this theoretical framework to the study will enable an analysis that will investigate different components, difficulties and opportunities that arise from changing labour market needs in Sweden and Denmark, which can be helpful to structure comparisons between the two countries regarding how employer organisations work to address challenges regarding skills development. It will also be useful to investigate how this connects to goals at the EU and national levels, and if these are seen as difficulties or opportunities for skills development policies amongst the employer organisations.

Incorporating this theoretical framework is also suitable because of its relevance in studying technological and industrial shifts, or industrial revolutions, which has a substantial effect on the demand of skills, which was covered in the literature review. Using this enables an analysis of aspects that can hinder economic growth and innovation, which causes so called structural tensions (Henriksson, Carlsson & Dahmén, 1991, p.137-139). This can be applied to the aspect of skills shortages in advanced technologies, which has proven to hinder companies and organisations in their adoption and implementation of certain technological advancements. This theoretical framework also allows for an analysis of structural transformations, which can be described as long-term shifts where industrial revolutions also can be described as accelerated structural change, or in other words a shift between different forces of growth in society that drives economic shifts (Schön, 2013, p.42, 47-48). The green- and digital transitions, which leads to certain technologies and industries being replaced by others, is a clear example. It can also be used to direct a focus towards sectoral shifts, shaping new development blocks, and workforce strategies aligned with evolving sectoral needs. Finally, it is also suitable to study institutional coordination and how different stakeholders collaborate to resolve hinders to growth. Throughout the evolution of industrial revolutions and technological shifts, institutions have had to change and adapt to the different needs, which, according to Schön (2013, p.49-50; 2014, p.19-22) is particularly evident at the international level, as new conditions for different forms of integration are being created. Here, the changing approach by the EU is an interesting example to study, as well as potential differences in institutional coordination between Sweden and Denmark, and how this might affect how employer organisations work with skills development.

This theoretical framework will constitute the foundation for the analytical framework that will be used to analyse the chosen material. This analytical framework will present questions to the chosen material, and will be divided into categories of institutional coordination, opportunities or necessities to adjust, and structural transformation. This will enable an in depth analysis of how employer organisations perceive structural transformation and the effects this has on skills requirements, what opportunities and challenges that arises from these, and their perceptions on institutional coordination on both the national and supranational level, and how this affects them in their work. The analytical framework will be presented towards the end of the next chapter.

4. Method and material

This chapter will present the methodological approach of this thesis. Firstly, the following sections provides elaborations on the case selection, the research design, the method for collecting the data, a discussion of additional material, and information on how the data will be processed and presented. The chosen research design for this thesis is a comparative case study-design, where employer organisations within the private and the public sector in Sweden and Denmark will be compared. The primary method for collecting the data will be semi-structured elite interviews. This will be complemented with additional material consisting of written sources. The data will be processed using a qualitative content analysis. Lastly, a discussion of critiques and limitations, ethical concerns, and the validity and reliability of the chosen method will be presented.

4.1. Case Selection

As discussed previously, the Swedish and the Danish labour markets share many similarities that differ from other countries in the EU (Scott, 2021, p.306, 308). They are both small countries with similar labour market models, languages and educational systems. Those similarities lay the foundation for a theory-testing study based on the *Most Similar Systems Design* (MSSD) where cases that are similar across a range of contextual factors are chosen early in the process (Esaiasson et al. 2024, p.292, 296-297). The control variables are encompassed of factors that are similar between the two cases, which would be the structural similarities discussed previously in this paragraph, which are constant in order to isolate the explanatory factors. Subsequently, the goal of the study is to determine the value of the dependent variable, which would be how Swedish and Danish employer organisations work to address challenges regarding skills development, which can be attributed to variations in the independent variable, such as institutional structures or the level of cooperation between employer organisations and governments or educational providers (Esaiasson et al. 2024, p.297-298). If the value of the dependent variable differs between the cases, there is reason to believe that this is because of the independent variable.

Focusing on employer organisations can be motivated by the fact that these organisations can provide valuable information of the needs on the labour market and profound insights of the strategies that are being used in order to tackle different challenges. Moreover, this thesis does not focus on specific jobs or industries, but the aim is rather to get a broad and comprehensive picture to identify potential differences between the two countries, both in terms of approaches to tackle skills shortages but also to see if the alignment with the national level and EU level varies. To enable a broad analysis of the various aspects of skills development, employer organisations from both the private and public sector are included, where the choice of organisations will be motivated later in this chapter.

4.2. Research Design

A comparative case study usually deals with a small number of cases, where comparing two cases against each other is the most common one. This enables an in depth investigation and is useful when the researcher wants to get insights into why somethings occurs (Gerring, 2009, p.94-95; Esaiasson et al., 2024, p.292). Even though the number of cases are usually small, comparing how Swedish and Danish employer organisations work to address challenges regarding skills development, and how this connects to goals at the EU and national levels, the result could tell us something about structural transformation and how changing labour market needs affect the demand of skills and institutional coordination. It could also tell us something about how EU initiatives in the field of social policy are perceived by these types of organisations, which might contribute to a wider understanding of supranational policy processes (Gerring, 2009, p.96-97). Furthermore, scholars underline that the core purpose of this type of comparative case study is not to enable greater generalisations of a wider population, but that they have the possibility to contribute to a larger field of research within a similar context. Hence, this comparative case study of employer organisations in Sweden and Denmark can contribute to the research field of skills development and labour market policy, and provide a deeper understanding of similarities and differences between these types of actors in Nordic EU-countries, and also help filling the research gaps addressed earlier in this thesis. It alone can however not create a reliable basis for wider generalisations (Kuckartz, 2014, p.10-11; Esaiasson et al., 2024, p.58-60, 68).

When conducting a comparative case study, interviews are a suitable tool to gather qualitative data, especially interviews of the informant type. In these types of interviews, the interviewee has the role of providing facts of a certain course of events or how a particular organisation works and operates. Here, the researcher aims to locate important actors that constitutes a so called *central source* within the field of study. When interviewing elites, it is however sometimes appropriate to treat the interviewee as both a respondent and an informant. Hence, the elite interviews used in this thesis consists to a large extent of elements of a respondent character, where the researcher is interested in the interviewee's thoughts and perceptions. (Esaiasson et al. 2024, p.292, 305, 363).

4.3. Elite Interviews

The qualitative method for gathering the data for this thesis will be elite interviews. These will be semi-structured and organised in a conversational manner (Magnusson & Marecek, 2015, p.46). Hence, the questions and categories created by the interviewer should not hinder the respondents to speak freely and elaborate on certain topics, but the conversation should run smoothly between different categories. The questions should be short and also phrased in an open-ended way, which encourages the interviewee to build on their arguments and to speak in their own way. Additionally, although an interview guide (Appendix 1) is prepared beforehand, it is also acceptable for the interviewer to divert from the order of the questions and to also ask follow-up questions, if the conversation is taking a path that requires this (Magnusson & Marecek, 2015, p.47-48; Kvale & Brinkmann, 2014, p.173-176).

As the aim of this thesis is to investigate how Swedish and Danish employer organisations work to address challenges regarding skills development, and how this connects to goals at the EU and national levels, it will be valuable to gain insights into the inner workings from professionals within these fields. Hence, the methodological framework of semi-structured elite interviews is a suitable choice for gathering the data. This is because interviews is an appropriate method when the researcher aims to get deeper knowledge of a certain topic that could be difficult to retrieve otherwise (Magnusson & Marecek, 2015, p.5-7). Interviewing elites can provide the researcher with details of the inner workings of the chosen organisation. Elites can be defined as individuals who possess formal or informal power positions and who have a "close proximity to power or policymaking" (Lilleker, 2003, p.207). They are experts in their fields and apart from being able to provide the researcher with information that might not be available by other means, elites can also provide the researcher with new perspectives of how they perceive societal problems and challenges. Those individuals can have positions such as civil servants, senior state employees, or high ranking company officials (Kvale & Brinkmann, 2014, p.187; Esaiasson et al. 2024, p.362-365; Lilleker, 2003, p.207-208).

4.3.1. Participants, feasibility and preliminary decisions

To secure empirical relevance, it was important to include big organisations that represent a big part of the employers in the respective country. This is because within those organisations it would be more likely to find interviewees who are experts in their fields and who have a greater closeness to power or policy making (Esaiasson et al. 2024, p.368; Lilleker, 2003, p.207). The aim was to interview representatives with vast experience or a senior position within their respective organisations, and to interview at least one respondent from each country who represents the private sector, and at least one respondent from each country who represents the public sector.

All interviewees were contacted through e-mail in February, and the interviews were later scheduled to take place in March or April at a time that suited the different interviewees. In the e-mail requests, I stated the academic purpose of the interviews and ensured the potential respondents that the information would be treated confidentially. After agreeing to the interviews, forms for consent were sent out to all interviewees, which informed them on how the information from the interviews would be treated, where the thesis will be published and also ensured that their identities would not be disclosed if they wished to stay anonymous (Magnusson & Marecek, 2015, p.31, 44, 175; Kvale & Brinkmann, 2014, p.323). All interviews took place digitally using Teams as the digital communication tool. The interviews with the representatives from the Swedish organisations were conducted in Swedish and later translated to English. The interviews with the Danish representatives were conducted in English except one as the interviewee spoke Swedish.

Before the interviews took place, an interview guide was created (Appendix 1), where the questions were developed with the assistance of the thesis supervisor, ensuring that they would be connected to the aim of the thesis and cover necessary topics (Magnusson & Marecek, 2015, p.46). The interview guide begins with so called 'warm up-questions' regarding the respondent's professional background and more general questions on the organisation's work with skills development and strategies to tackle skills shortages. Using an interview guide will also make it easier to compare the results from the interviews during the analysis (Kvale & Brinkmann, 2014, p.173-176). The theoretical framework of development blocks is incorporated in the interview guide, where questions related to institutional coordination, structural transformations and changing needs are included. Aspects of opportunities and challenges with these developments are also addressed. Lastly, the respondents were given the possibility to add something if needed.

4.3.2. Representation

As mentioned previously, to secure empirical relevance it was important to include big employer organisations that represent a large part of the employers in the two countries. The representatives from the private sector in Sweden work at the Confederation of Swedish Enterprise (SN), which represents over 60 000 enterprises and thereby makes it the biggest employer organisation within the Swedish private sector. Here, there were two respondents, as the first respondent I contacted asked to bring a colleague to the interview. The representative from the public sector in Sweden works at the Swedish Association of Local Authorities and Regions (SALAR), which represents the 21 regions and

290 municipalities in Sweden and that is the biggest employer organisation within the public sector, and also the biggest employer organisation in Sweden overall (Ljunglöf, Fransson, & Kjellberg, 2024, p.24, 28). The representative from the private sector in Denmark works at the Confederation of Danish Industry (DI), which is the biggest employer- and business organisation within the private sector, and which represents 20 000 Danish enterprises (Dansk Industri, 2025). For the public sector, the initial goal was to interview a representative from Danske Regioner, one of the main employer organisations that represent all the Danish regions (Danske Regioner, 2025a). However, after a conversation with one of their representatives, I was connected with a colleague who had more expertise in the field, and who works at the Capital Region in Denmark, which is the region that represents the most people (Danske Regioner, 2025b). The second respondent from the public sector works at Local Government Denmark, which is the employer organisation that represents the 98 Danish municipalities (KL, 2025).

I argue that having two representatives from the public sector in Denmark and one from the public sector in Sweden will not have any negative effects on the empirical balance of data, as SALAR in Sweden represents both regions and municipalities. In Denmark, there is no equivalent employer organisation within the public sector that represents both regions and municipalities. If this thesis would only include one of these organisations, it would risk missing important information regarding different types of professions, as the main responsibility of the regions in Denmark are areas of health care, while the municipalities are responsible for education, similar to Sweden. This would make the results from the interviews with the representatives from the public sector difficult to compare as there would be an apparent gap of information (KL, 2025; Danske Regioner, 2025). The interviews are listed in Table 1 below, where *abbreviations* relate to how they will be referred to in the analysis.

Table 1. List of interviews.

	Organisation	Sector	Country	Abbreviation
Interview 1	The Swedish Association of Local Authorities and Regions (SALAR)	Public	Sweden	R-SALAR
Interview 2	The Capital Region of Denmark (RH)	Public	Denmark	R-RH
Interview 3	The Confederation of Danish Industri (DI)	Private	Denmark	R-DI
Interview 4	The Confederation of Swedish Enterprise (SN)	Private	Sweden	R1-SN & R2-SN
Interview 5	Local Government Denmark (KL)	Public	Denmark	R-KL

4.4. Additional Material

Although interviews will be used as the main method for gathering the data, this will be complemented with data from additional sources consisting of reports and policy documents, as elite interviews as the only form of methodology has some limits to it, partly due to the risk of exaggerative narratives or recollections (Lilleker, 2003, p.208, 212-214). The most common approach is that these types of interviews are combined with analyses of written sources. These can be reports and documents that specifically relate to the processes that are at the centre of the study. Hence, using several types of sources will increase the reliability and validity of the study. Additionally, combining the interviews with data from different documents will also provide a deeper understanding of the research problem (Esaiasson at al. 2024, p.372; Magnusson & Marecek, 2015, p.6).

The analysis will also be completed with this material to address the second part of the research question, regarding how the work of employer organisations connect to goals at the EU and national levels. The additional material will be encompassed of strategies and information from the national governments in Sweden and Denmark in order to get an understanding of the national ambitions in the field. The most recent strategy from the EU in the field of skills development will also be used to investigate whether the goals and addressed challenges at the supranational level aligns with the strategies on the national level and later, from the employer organisations. Parts of the material was collected early in the research process before the interviews took place, to get a deeper understanding of the research problem, while some of the material was collected while conducting the interviews, based on recommendations from some of the respondents.

4.5. Qualitative Content Analysis

The material will be analysed using a qualitative content analysis. This type of analysis is suitable when analysing bigger amounts of material where the aim is to compare different sets of texts, and is particularly suitable for transcriptions from interviews and when conducting a qualitative, in-depth analysis (Boréus & Bergström, 2018, p.50-52, 55). The transcriptions were systematically categorised in order to answer the research question where a coding frame was used (Table 2). This was created by the researcher before the data was analysed, and the material was coded manually, as this enables more complex interpretations of the material (Boréus & Bergström, 2018, p.58-59). This type of analysis is also appropriate due to its flexibility regarding operationalisation, as it allows the researcher to construct the analysis against a theoretical framework. The categories in the coding frame operationalises the theoretical framework of development blocks, discussed in chapter 3, as it on the horizontal axis includes categories of *institutional coordination, opportunities or necessities to adjust* and *structural transformation*, which are all essential parts of the theory. It also incorporates the same themes as the interview guide on the vertical axis, which creates a systematic and organised structure when analysing the transcriptions. This type of structure enables the researcher to extract and categorise parts of the material in a comprehensive way (Magnusson & Marecek, 2015, p.28-29; Boréus & Bergström, 2018, p.55, 58). Subsequently, this type of analysis will be useful to investigate how Swedish and Danish employer organisations work to address challenges regarding skills development, and how this connects to goals at the EU and national levels.

Table 2. Analytical framework Coding frame.

Main category	Institutional coordination	Opportunities or necessities to adjust	Structural transformation
The role of EU initiatives	How do different actors collaborate in implementing EU initiatives?	Are there barriers to utilising EU tools? What opportunities do these tools offer?	How do EU instruments contribute to long-term labour market transformations?
The role of national policies	How do different actors collaborate in implementing national strategies?	Are national policies perceived as opportunities or obstacles?	How do national strategies contribute to long-term labour market transformations?
Approaches in the field of skills development	How do labour market actors collaborate with other stakeholders to tackle skills shortages?	Which professions and competencies are the hardest to find? What opportunities and obstacles exist?	Which professions are changing? Are new professions emerging and other disappearing?
Changing needs on the labour market	How do labour market actors collaborate with other stakeholders to support labour market transitions?	What challenges arise from technological and structural shifts? What opportunities do these changes create?	Which sectors are expanding, and which are declining? How do these shifts affect skill requirements?

4.6. Critiques, limitations and ethical discussion

4.6.1. Critiques and limitations

One potential critique of this study regards the decision of not including workers unions in the case selection. These organisations play a crucial role in labour market policies in both countries and could provide valuable insights on the topic of skills development. Not including unions in this study can however be motivated by the fact that this thesis focuses on the perspectives of employers rather than employees. Furthermore, to be able to conduct an in depth comparative analysis between two countries, including more cases would not only hinder the possibility to conduct a detailed investigation, but also prove challenging both within the scope and time frame of this thesis.

Another potential critique of this study could be inclusion of influence from the EU in the field of skills development, as this is not an exclusive EU-competence. I would however argue that it is because of this that it is necessary to study this topic. If the EU would have legislative power in this field, this would directly affect national legislation in Sweden and Denmark. In this case however, little is known of the experiences of these initiatives. As discussed in the chapter of previous research, the area of skills development has become a strong priority for the EU in recent years and a large amount of its resources are allocated to this policy field (COM, 2019; COM, 2025c). This adds to the scientific relevance in studying how these efforts are perceived in tackling skills shortages.

4.6.2. Validity and reliability

One of the most essential parts of enabling trustworthy results and to achieve good validity in academic research is to make sure that you as a researcher investigate what you intend and claim to investigate (Esaiasson at al. 2024, p.106, 125). In the case of this study, as the organisations and interviewees have been carefully selected, which was motivated earlier in this chapter, this strengthens the validity of the study. All organisations are amongst the biggest employer organisations in the respective countries, where the interviewees are experts with extensive experience within the organisations, which make them clear representatives of the different organisations.

To uphold good reliability, there must be a clear absence of errors that can occur from not being thorough enough when collecting the data. When conducting interviews, this could be the case if the interviewer would mishear or misunderstand the interviewee, or if errors occurred when the material was transcribed. To avoid this, if something was unclear, the interviewee was asked to elaborate on the topic. The recordings were transcribed directly after the interviews took place while the information was still fresh, as the more time there is between the occurrence and reporting of an interview, the greater the risk becomes of memory errors (Esaiasson at al. 2024, p.131-132).

One of the most common ways to assess the reliability is to repeat the investigation later on in an independent study, to see if the results would be consistent (Esaiasson at al. 2024, p.68, 141). As discussed previously, the fast and constantly evolving changes on the labour market affect the demands of skills, which could mean that depending on when the investigation would be repeated, some interview-responses might have changed. Also, as the focus on skills is a relatively new territory for the EU that might change in the future, this can also affect the responses. Nevertheless, as the interviewees represent some of the major employer organisations in their countries, it can be argued that they will provide reliable and valid information, regardless of when the study would take place.

4.6.3. Ethical discussion

When conducting interviews, there are some ethical considerations to keep in mind. This concerns matters of consent, confidentiality and anonymity. As a researcher, it is important to consider effects the study might have for the participants if it is published, and make sure that the interviewees are not exposed to any risks, especially if they represent large and influential organisations. As discussed earlier in this thesis, before the interviews were conducted, a form for consent were sent out to all participants, where they were informed of the academic purpose of the interview and that they could withdraw their involvement at any time. The interviewees were also informed of their right to anonymity (Magnusson & Marecek, 2015, p.31, 44, 175; Roth & von Unger, 2018, p.8). As the interviewees works as representatives of the different organisations, which are the main focus of this study, a decision to keep all the participants anonymous was taken early in the process. When meeting digitally with the participants, they were also asked to give their consent to be recorded before the interviews started. The recordings and transcriptions were treated with utmost confidentiality and solemnly viewed and read by the researcher.

5. Results

In this chapter, the findings from the additional material and the interviews will be presented. The analysis of the written material, which complements the material from the interviews, will be presented before the findings from the interviews, as it will provide insights into how challenges with skills development and skills shortages are communicated at the supranational level and at national levels, and to investigate whether the goals and problematisations align or differ between the EU and Sweden and Denmark. As this thesis is based on the theoretical framework of development blocks, where institutional coordination plays a key role, and as this thesis aims to investigate how Swedish and Danish employer organisations work to address challenges regarding skills development, and how this connect to goals at the EU and national levels, it is important to provide a comparative analysis of these matters to fully answer the research question. The results from the interviews will incorporate the theoretical framework, where the four chapters will include the categories of *institutional coordination*, *opportunities or necessities to adjust*, and *structural transformation*. A more in depth discussion of the results connected to the theoretical framework will later be presented in chapter six.

5.1. Analysis of the additional material

As discussed previously in this thesis, in recent years skills development has become a bigger priority for the EU. The Commission recently stated that the challenges that the EU is facing in this area are too vast and urgent for the member states to tackle on their own, and that common initiatives at the EU level can speed up the work to tackle skills shortages (COM, 2025c, p.1, 4). With The Union of Skills, the EU aims to ensure widespread access to up- and reskilling activities, support for companies in becoming more competitive and enabling them to fill skills gaps, and to improve the systems for recognition of qualifications as well as acknowledgment of skills obtained through non-formal education all over Europe, to also allow for more free movement and recruitment between member states (COM, 2025c, p.1, 4-5).

When problematising the challenges in the field of skills development in Europe, the EU addresses the struggles to attract talent from outside the EU, where countries such as the US and Canada remains more attractive destinations for third country nationals, and where people who have migrated to Europe frequently face barriers in developing their skills. These challenges are more severe in rural and less developed areas (COM, 2025c, p.1, 3). It is also mentioned that Europe is falling behind in the field of basic skills, where the performances in subjects such as reading and mathematics amongst 15-year olds have been dropping gradually, and where one in five adults struggle with reading and writing. The fact that almost half of the European adults lack basic digital skills is also expressed as a pressing concern, due to the fact that the usage of digital tools are becoming more and more incorporated in many sectors, where over 90 percent of the different jobs on the labour market require basic digital skills. Moreover, skills shortages and high levels of demand are found both in advanced technological sectors and more traditional craft sectors. The demand for people with vocational qualifications are at the moment particularly high, especially green skills, where two thirds of the most common skills shortages are found in craft-occupations. Additionally, within strategic sectors in the area of STEM, such as digital technologies, defence and clean and circular technologies, almost four out of five SME's reportedly struggle to find people with the right skills and competences (COM, 2025c, p.1-3). The strategy finally underscores the importance of collaboration between member states, companies, educational providers and social partners (COM, 2025c, p.20-21).

The Swedish government addresses the area of skills development from a perspective based on improving national education policies such as validation processes and more flexible educational pathways for people both to enter the labour market, and transition during their working life. The student finance for transition and retraining from CSN has been described as an important reform to facilitate this, as it provides student funding that then allows people to change careers or obtain necessary additional skills later in life (Government Offices of Sweden, 2024). In a recent government proposition, the government underlined the need to improve systems for validating and recognising different forms of education, especially non-formal education and municipal adult education. A structural transformation due to the green- and digital transition and widespread automation was highlighted, along with the challenges of high unemployment, despite strong demands in many sectors (Prop. 2021/22:123, p.1, 7). Like the EU, the Swedish government describes how digitalisation has increased the need for digital skills within sectors of digital technologies and that there is also a high demand for skilled workers within heavy industries that have to switch to greener production. Skills shortages within health care and education are also addressed, where the government calls for more flexibility, individualised education and validation of former learning, which can lead to a better matching of certain skills to different professions. It is further described how this form of validation is not utilised enough in Sweden, whereas in the other Nordic countries, like Denmark, it is used within the field of VET to a much greater extent as it, in contrast to Sweden, is a required procedure (Prop. 2021/22:123, p.7-9). Moreover, in a Swedish Government Official Report, the need for a stronger connection between education and the labour market is underlined, witch a specific focus on strengthening VET programs at the upper secondary level, and for more vocational and individualised pathways in Swedish upper secondary schools that takes the needs of the labour market into account in order to meet demands (SOU 2024:74, p.25-27).

The Danish government puts forth a long term approach where collaboration with other stakeholders in the area of skills development plays a central role. Reforms in the field of higher education was recently introduced, which aimed to increase the flexibility and quality of VET programs (Uddannelses- og Forskningsministeriet, 2025). In a recent report, the government states that many Danish students who have recently graduated from higher education are unprepared for the labour market (Uddannelses- og Forskningsministeriet, 2024, p.4). To tackle this, it is argued that more practical elements needs to be integrated, where more flexible initiatives within VET and higher education programs will strengthen the connection with labour market needs. Similar to Sweden, the Danish government mentioned the importance of providing people with the right skills for industries such as IT, technologies, production and industry, which will be of great importance regarding the green transition. Shortages in the welfare sector are also mentioned, where educational programs are described as not being attractive enough. The government also proposes initiatives to attract international students and more study places in the field of STEM, where the demand is steadily increasing (Uddannelses- og Forskningsministeriet, 2024, p.5,7, 9-10). In a recent triparty-agreement, the government together with the Danish social partners, discusses the strengthening of resources allocated to VET, where there is a focus on improving levels of basic skills for adults and also widen the access for higher education for those already working. Although the Danish government is generally positive regarding already existing possibilities for up- and reskilling in Denmark, in comparison to the Swedish government, challenges that creates new skills demands are more accentuated. These are composed of digitalisation, the green transition, demographic factors such as an ageing population and the pressure this has on the welfare sector (Børne- og Undervisningsministeriet, 2023, p.1-3).

In conclusion, the EU:s approach can be described as strategic and visionary, with a certain emphasis on collaboration between the member states, harmonisation of policies in the field of skills development, free movement, the potential of single market, and above all; strengthening global competition and more digital and green solutions to tackle the twin transitions. Sweden and Denmark focus more on implementation and improving the national systems of education. The Swedish government particularly focuses on improved validation and recognition, where Denmark is described as a good example, and more flexible ways of VET, where the student finance for transition and retraining from CSN is described as a valuable tool to achieve this. The Danish government stands out regarding its focus on triparty-agreements and stronger focus on collaboration between the social partners. They also stress the purposes with their reforms in enhancing the quality in the field of lifelong learning and attracting international talent.

5.2. Analysis of the interviews

In this part of the analysis, the findings from the interviews will be presented. The chapters will incorporate the theoretical framework of development blocks, where the responses connected to *institutional coordination*, *opportunities or necessities to adjust*, and *structural transformation* will be discussed, based on the questions in the coding frame (Table 2). This will help answering the research question regarding how Swedish and Danish employer organisations work to address challenges regarding skills development, and how this connects to goals at the EU and national levels. Each of these parts will first analyse the responses from the Swedish interviewees, then followed by the responses from the Danish interviewees.

5.2.1. The role of EU initiatives

Institutional coordination

When asked how the different organisations engage with the EU-level, many of them described their approaches as advocacy work and lobbying. The respondent from the Swedish employer organisation in the public sector, R-SALAR, talked about how in addition to being involved in several partner organisations on the European level, that the organisation's Brussels office plays a crucial role in the engagement with the EU. Together with their colleagues at the Brussels office, they try to be involved in political processes in an early stage by meeting with representatives from the European Commission and members of the European Parliament, which was something that the respondents from the Swedish employer organisation in the private sector, R1-SN and R2-SN, also highlighted. Regarding EU-funds, R-SALAR described how they primarily are involved with the European Regional Development Fund (ERDF) and the European Social Fund (ESF+), where SALAR also have members in different committees who work as representatives for employer organisations. To voice the organisation's standpoints in areas that affects their members in Swedish regions and municipalities, building coalitions with European partners is also described as something important to strengthen their influence in EU-processes. When asked about the engagement with the EU, R1-SN underscored the importance of joint forces, clarity and speaking with one voice in order "to steer policy decisions in the, according to us, desired direction".

Amongst the Danish respondents, the engagement with the EU differed from the Swedish respondents. According to R-DI, the respondent from the Danish employer organisation in the private sector, in the field of higher education, the organisation rarely works with the EU, as this is a strong national competence. However, something that was a high priority for the organisation was the Erasmus+

programme, as it enables Denmark to attract international students and talent. The EU was described as "something we are paying more and more attention to", along with DI's expansion to include members from more industries and sectors. EU-programmes were described as being primarily of interest to those within the organisation responsible for areas such as IT, research and science. R-DI further explained how colleagues at the organisation's Brussels Office monitor EU-processes in these areas, where the EU budget and funding through the Horizon Europe programme are of particular interest. Amongst the interviewees from the Danish organisations in the public sector, there was little to no engagement with EU-level tools. Both organisations have offices in Brussels, where KL have their own office and where RH is represented by the Greater Copenhagen EU-Office. R-KL mentioned that they get recommendations from the EU, where the Union of Skills was stated as an example. In the field of skills however, they do not engage with initiatives or funding programs as "this is very regulated by the social partners". But according to R-RH, "it is something that we might consider".

Opportunities or necessities to adjust

According to R1-SN, EU-policies in the field of skills development rarely poses as obstacles in their work, as the tools available "are not that sharp" and because national competencies in this field are strong. R2-SN also mentioned that the "EU sometimes tries to interfere with social models a bit more than we would like", with the Traineeships directive as an example, which they are currently working to prevent as they believe it could prevent companies from being able to accept trainees. R1-SN did however underline that there is a substantial amount of financial gain that organisations can benefit from, particularly in areas of science and research, where projects are usually very costly. In these areas, and the area of competitiveness which is closely linked to skills development and a prioritised area for SN, R1-SN argued that the EU can do a great deal.

R-SALAR added to this by explaining how the ESF+ has been very helpful for the organisation's members, which has resulted in several successful projects, especially those with a focus on people outside the labour market. R-SALAR further explained that "one of the big challenges here is if you have a successful project, how are you then going to get it into the regular operations when the project funds run out?" Additionally, the administrative work connected to this is perceived as rather complicated, where R1-SN explained how they sometimes finds it "surprising that people even bother to apply for funds from ESF+" and where R-SALAR stated that "there has been a market for many consultants to help municipalities in guiding them through projects and application processes". However, R-SALAR explained that these systems need to be in place to prevent cheating and R1-SN also described how the EU has a great responsibility making sure that this is used in the right way, and stated that “the question is how to do this in the best way going forward and what the EU:s role in these matters should be. We are probably not at the optimal stage yet.”

When asked if initiatives from the EU aligns with the organisation’s needs and goals, R1-SN stated that the EU often talk about the same things that they talk about at SN, with a specific refence to the focus on basic skills and STEM. R2-SN explained that the EU has been directing its focus more towards these areas during the last years, and that the work that is being done in providing examples on how other EU-countries tackle challenges related to skills, as well as creating forums for exchanges between employer organisations and unions, can be helpful. R-SALAR too explained that the EU:s goals now align more with their goals. The Union of Skills was brough up as an example, where R-SALAR argued that the reason for it being more in line with current developments might be because it is based on the Letta and Draghi reports. However, R-SALAR wonders “how are they going to translate this into something practical, especially concerning education- and labour market policy?”, where the aspect of national competencies comes into play.

Amongst the Danish respondents, when talking about the Union of Skills, R-KL expressed scepticism regarding the relevance for Denmark, as it aims to “regulate things that are already regulated in Denmark”, and argued that “of course the initiatives from EU have to include all the [EU-]countries, and that makes it a bit difficult sometimes when we are at very different levels”. When asked if the EU addresses the same challenges as they experience, R-KL agreed with the EU:s problem formulations, but described EU initiatives as something that could lead to “possibilities for a lot of countries that are different from Denmark and that have different systems”.

For DI, EU-tools that enables students from other EU countries to move to Denmark, such as Erasmus+ was regarded as a possibility, as workforce from outside of Denmark is something that is important to meet the demands among the different companies that the organisation represents. According to R-DI, “That is one of the things we are the most concerned about these days, how to attract and retain international workforce and international students”. To recruit skills and competences from other EU-countries to meet the demands on the Danish labour market was also something that R-RH underlined as important to meet the different needs, where the processes in place were described as good and simple.

Structural transformation

Regarding EU tools in the area of skills development, all respondents, to a varying degree, questioned the actual effects these could have on the national level, due the strong national competences. When interviewing the Swedish respondents, R1-SN stated that “the EU cannot solve the challenges Sweden faces with its education system" and that "it is not another EU initiative that will solve our recruitment challenges". However, as problems with skills development and skills shortages are apparent in many member states, it would according to R1-SN be "odd if the EU did not direct the spotlight towards this problem in whatever way they can". Furthermore, R1-SN argued that "the EU can contribute with good examples or create an increased focus on measurability and outcome and efficiency". This is partly enabled by regular publications of statistics and reports by the EU-body CEDEFOP, which according to R2-SN is useful in order to learn from other good European examples. When discussing this with R-SALAR, matters of demographical changes affecting labour markets and the EU:s focus on structural changes, skills development and adult education were palpable themes. R-SALAR argued that in order to strengthen the EU:s competitiveness, "we above all need skills development initiatives for everyone, both at the educational level, but also for the adult working population. Both for those who work, but also for those who end up outside."

Amongst the Danish respondents, although R-RH did not engage with tools and funding programs directly connected to skills development, the aspect of free movement within the EU was described as an important factor in responding to challenges on the Danish labour market. The same was stated by R-DI, who underlined the importance of student mobility programmes within the EU. This can be argued to be something that can contribute to long-term transformations at the labour markets.

5.2.2. The role of national policies

Institutional coordination

All organisations underlined the collaboration with several actors on the national level when it comes to implementing skills development-policies. This includes dialogues with national governments, unions, regions and municipalities, governmental agencies, and educational providers. R1-SN explained that the biggest part of their collaborations are between SN and their member organisations, such as other industry- and employer organisations. Regarding the collaboration with politicians and authorities, their work was described by R1-SN as "classical lobbying", where they communicate the challenges the companies are experiencing. It was underlined that they "want to influence authorities and politicians to make decisions that makes things easier, whether it is about the adaptation of the education system to the needs of the labour market, or about the involvement and influence of the industries over the education system". R2-SN also underlined the collaboration with regions and municipalities and the aspect of legislative processes where SN often send "responses to referrals for consultation on how we want to design education- and labour market policy". R-SALAR too accentuated the importance of working closely with government offices and ministries, as they are the ones responsible for policy creation and finance, and mentioned the financing principle which indicates that “if the state decides on something for municipalities and regions, it has to be accompanied with funding”.

Collaboration with the national government and other actors were underscored by all the interviewees from the Danish employer organisations. The aspect of the triparty-system was particularly highlighted by R-KL who explained that they have many projects together with both unions and employer organisations regarding education. Dialogues with the different municipalities in Denmark is a crucial part of the job that takes place on a daily basis. Close connections to the government, ministries of education, schools and providers of adult education was also described as important.

R-DI talked about collaboration with stakeholders such as unions and other employer organisations, which, similar to SN, is largely characterised by advocacy work and lobbying. Having a close and good connection to the parliament and the ministries was described as something important in order “to get your interests through”. R-DI also emphasised the significance of good connections to educational institutions such as universities, and to be observant of their interests. R-RH similarly stressed the importance of the connection to Danish universities, but also hospitals, the health ministries and the government as they regulate the size and content of the different education programs within medicine and medical training. According to R-RH, this communication usually takes place “after having been in dialogue with the regions about what we think the need is”, where the dialogue with the national level is similar to the one the other employer organisations described as advocacy work.

Opportunities or necessities to adjust

When asked if policies on the national level were perceived as opportunities or obstacles, most of the respondents viewed the collaboration with the national level as important but varying as their goals sometimes align, and sometimes not. Amongst the Swedish respondents, the student finance for transition and retraining, was described as a strong example of an opportunity by all the respondents. There were however some aspects regarding national policies both the Swedish and Danish respondents did not agree with, and where a recurring theme amongst many of the respondents were that the governments are not doing enough to tackle the problems with skills development.

For SN, a big concern was the high levels of unemployment and youth unemployment, where R2-SN stressed that, at the moment, their goals differ from the national level, mostly regarding “aspects of youth policy, education policy and labour market policy, which is also part of the work with skills development”, where they would like to see more measures being taken at the national level. The recent regulations from the Swedish government regarding the wage requirements for third-country nationals is something that SN strongly opposes, where R2-SN explained that “we [Sweden] also stand out quite a lot right now compared to other countries that have really opened up to labour immigration from third countries, where we are making it much more difficult even though we know that we have these big needs for skills”. R-SALAR also argued that the state can do more in order to contribute to developments in these policy fields, and gave the example of recent industrial establishments in the North of Sweden, where there has been a lack in funding initiatives from the state regarding necessary infrastructure to facilitate developments.

When interviewing the Danish respondents, R-DI explained that they and the national level “have a good understanding of the challenges” in the field of skills development, but that some initiatives can sometimes be misdirected. One example was recent cut backs on education spots at universities in bigger cities, due to national investments in education facilities in rural areas. According to R-DI, these schools and universities, as well as companies, in rural areas struggle to attract people, where investments could have been utilised in bigger cities instead, which also has a closer proximity to well-established research facilities. Like R2-SN, R-DI also discussed national policies that hinder labour from other countries. One was a cap on expenses for grants to international students, which resulted in a reduction of programs and courses in English. According to R-DI, this has led to frustration among companies who seek to recruit international talents.

When asked if national policies and goals aligns with the perceived challenges and goals of the organisation, the responses from the Danish public sector varied. R-KL stated that the goals and problem formulation of challenges at the national level are similar to theirs, especially the need for basic skills like reading and writing, as this is essential for taking part in any level of education and re- or upskilling. R-KL noted that national polices can constitute both opportunities and challenges, but that many recent reforms in the Danish education system provides new opportunities for KL. R-RH argued that the goals at the national level do not align with their goals. According to R-RH, the national policies regarding health care are a bit misdirected, focusing on matters of specialised health care that is not as critical as the needs for skills and work-competences in the general health care sector in the municipalities, and advocated for more attention to be redirected towards that level.

Structural transformation

During many of the interviews, it was apparent that national policies certainly have a long-term effect on labour market transformations, as policy makers are the ones responsible for policy creation and financing projects that affect all levels of society, which was emphasised by R-SALAR.

Demographical aspects, with an ageing population and the effects this has on the labour market and on the demands for skills were also recurring themes during many of the interviews. R-SALAR explained how they, through collaborations with different stakeholders such as the government, educational providers and unions aim to work proactively in order to try to prolong the retirement age. They are also involved in projects to try to make more people work full-time, as there has been an increase in the public sector with people rather choosing to work part-time. The student finance for transition and retraining from CSN is another clear example of a national strategy that contributes to long-term labour market transformations in the field of skills development, which R2-SN also underlined as important. According to R-SALAR, there is a great resistance within many groups towards taking student loans, but this initiative expands the possibilities to more people, who later in life "can go in for a year or two and get an education without it having too big of a financial impact".

The involvement by the employer organisations in shaping the content within different study programs was also stressed by the Danish respondents, particularly R-RH. R-DI also mentioned the importance of the connection with educational systems, especially as it takes time to change the structures in different study programs, and because the fast changes regarding needs at the labour market are happening in a rapid pace. As mentioned earlier, the example of the establishment of universities and study programs in rural areas, as a response to the needs of companies in these areas, and to people moving away to bigger cities for career purposes can be described as a clear example of a national strategy that aimed to contribute to labour market transformations, but according to R-DI, proved challenging and not in line with the goals and ambitions of the employer organisation.

5.2.3. Approaches in the field of skills development

Institutional coordination

A recurring theme during all the interviews was the involvement of employers and their perspectives when policies to tackle skill shortages are being discussed, which is done by close contact with the different members. R1-SN stressed their work with surveys and visits to their members, where they discuss what competences they are looking for. This helps them to better identify the needs on the Swedish labour market, which they then can communicate to the national level. According to R2-SN, skills development is one of their top priorities. R-SALAR described the collaboration with other stakeholders and partners as important in order to strengthen the attractiveness in the sectors where skills shortages are identified. Here, much of the work consists of actions and strategies to improve working environments. Agreements with the unions were also described as an important aspect regarding influencing the content of different educational programs, particularly in the health care sector where they work together with the regions to ensure that the content aligns with labour market-needs, with free education within specialised areas as an example.

Amongst the Danish respondents, R-DI also underlined the importance of close contact with the organisation’s member and described the organisation as very “data and analysis-based”, where they use their research platform to work with statistics. R-RH also underlined the close connection the educational institutions, where they meet stakeholders involved in matters of higher education annually to discuss the dimensioning within the different medical programs, based on the needs that is communicated by Danish hospitals. Like SALAR and RH, R-KL also stressed the collaboration with unions and the contact with schools in the different municipalities, where they try to work actively to better adjust the content to labour market needs.

Opportunities or necessities to adjust

When asked about what type of skills employers are looking for, all the respondents in both the public and the private sector said that they experience an increasing demand in digital skills, which is becoming more and more crucial in all professions and sectors.

R2-SN explained that “in every sector, we can see that people are looking for a certain type of skills. We need technical skills and digital skills right now. There is also a lot of pressure on electricity and energy, regarding improvements we are making in the field of energy-efficiency”. As a result, many employers are looking for electricians in transport, construction and trade-sectors. When asked about what skills that are the most sought after by employers right now, R-SALAR said that they experience all kinds of skills shortages in all sectors, especially the health sector, where there is a need for nurses with skills in both specific areas and more general fields. The same was discussed regarding teachers in certain topics such as math, although the needs within this profession varies locally. An increasing need of soft skills was also addressed by R2-SN, who pointed out that in recent years, aspects such as attitudes and social abilities have become more important for many companies, where employers are looking for people who want to learn and who want to work. Abilities such as being able to take responsibility, adapt and be able to work independently are also becoming more sought after.

An obstacle that was raised by both R1-SN, R2-SN and R-SALAR was that not enough young people graduate from upper secondary school, which is crucial to take part in any kind of higher education and to get access to the labour market. When discussing what skills that are the most sought after, R2-SN argued that these are upper secondary vocational skills as “50% of our companies are looking for these skills”. Some professions that were mentioned were more traditional ones, such as electricians, bus drivers, chefs and mechanics. R1-SN further argued that the Swedish education system constitutes a challenge to tackle skills shortages: “the quality and relevance of the programmes must be improved, which to a large extent comes down to the involvement and influence of the industries”. R-SALAR agreed with this and argued that this alone could solve parts of the skills shortage-problems. Another obstacle that R-SALAR mentioned was that many of those who work in heavy industry sectors where workers are generally less educated are the ones who have the greatest need to adapt to the technological changes, but are often the ones who are least likely to do so. These obstacles are usually found in smaller regions where the labour market is limited. Another obstacle in tackling the demands of skills in certain sectors with a smaller number of employees, such water and sewage services, is the competition from the private sector, particularly regarding wages.

The Danish respondents also addressed the need for technical and digital skills. R-RH explained that the technology that companies need are usually available, but that they lack people who can handle it. R-KL shared this view and explained that these developments affect workers in all types of professions in the public sector, whether they are talking to teachers, care takers or gardeners. R-DI explained that the demand for people with digital skills and knowledge of AI is apparent everywhere. Additionally, R-DI argued that they experience that aspects such as good core skills and work life experience are becoming more important to companies.

An obstacle in terms of educational systems in providing the skills that are needed was raised by R-DI, who stated that there is a cultural barrier between universities and formers graduates and argued for the use of alumni networks in order to get a clear overview of what the industries need and what reskilling initiatives that are needed. R-KL discussed that it can be difficult to motivate people who have been at the labour market for some time to go back to studying, and that these processes usually take a long time. However, it was also discussed how offering upskilling possibilities to workers can help with employee retention as it will provide opportunities to develop in the current workplace.

Another obstacle regarding skills and tackling skills shortages that was addressed by the Danish respondents from the public sector were language barriers. As discussed earlier, respondents have pointed to the importance of labour from outside their own countries, both from other EU-countries and third countries, in order to address the challenges with skills shortages. In those cases, workers must learn the language in order to be able to fill these positions, where R-KL raised an initiative as part of the triparty-agreements in Denmark which “focuses on screening for workers with insufficient Danish skills”.

R-RH also brought in the cultural aspect in the field of more digitalised care, such as online meetings with doctors, which brings positive effects in terms of efficiency as it liberates time for medical professionals. However, many people feel uncomfortable with this development as they are used to medical appointments in person, and that an effect of this has been an increased demand for human connection and social skills, such as good communication skills and being good at collaborating with others. According to R-RH, skills shortages are apparent in all fields, particularly in more general health care and in the municipalities. This was also raised by R-KL who especially underlined the urgent need of staff in elder care.

Structural transformation

When talking about what skills that are the most sought after, and what skills that are becoming less sought after, all respondents argued that the problems they are facing are not so much about new professions emerging and others disappearing, but that existing professions are changing.

According to R2-SN, it is rarely the case that new professions "just pop up" but that "it is often within existing professions that the content changes and moves towards a more technical development. It is rarely completely new things, but it is more a continuous development". R1-SN continued by discussing long term changes in demands by giving an example from the electricity sector: "if we look at the electricians, the profession looks completely different today than it did 20 years ago. But electricians are still needed. And all of this is continuously evolving, so you have to stay close to what is needed today if you are to succeed with what will change tomorrow". This is something R-SALAR agreed with, who explained how professions are not disappearing but rather that "we can find things that can be replaced by technology in existing work, but that does not mean that we have to lay people off, but that we are just liberating time for employees who are working so that they can do other things that are also needed". However, in order to facilitate these changes that meets the demand, workers need be upskilled in order to benefit from these technical and digital advancements. R-SALAR also highlighted the effects of demographical changes regarding long-term skills demands, and explained that aspects such as an ageing population and reduced levels of children being born can have an effect on the demand for certain professions in the health care sector.

The Danish respondents also explained that even though there has been an increasing demand for digital and technical skills, this dot not mean that certain professions will disappear. R-KL argued that there is an assumption that AI and technology can help with many of the administrative jobs in the public sector, but according to R-KL, "the personal interaction is very important, maybe more important than ever". R-DI too argued that professions will not disappear, but that they experience changes in all kinds of professions due to AI and digital advancements, including office workers, doctors and lawyers. R-DI did however underline that Denmark, compared to other countries, are flexible and able to adjust to the changing demands: “I think it is not threatening us; it is just something we need to be paying attention to”.

5.2.4. Changing needs on the labour market

Institutional coordination

When asked about how the different organisations work with other stakeholders to address the changing needs on the labour market, most of the respondents emphasised the importance of labour market actors’ involvement and influence regarding education.

R1-SN stated that when addressing the issue of skills shortages and changing needs in the labour market, “the best way to do this is through a form of proximity between the labour market, the educational system and labour market policy. Because you cannot guess what will be needed in the future if you do not know what needs to be done today”. Both R1-SN and R2-SN argued for strengthened involvement from labour market actors within all educational levels. An educational program that R-SALAR emphasised was the Swedish adult education programs called YH-educations. These were described as supporting labour market transitions as they are direct results of the demands, where “generally speaking, 90% go straight into a job after completing a programme”. R-SALAR also argued for an expansion of alternatives to the regular education system: “We see that we would probably need to expand this labour market-training programs, especially with regards to this group who do not want to take student loans or enter the regular education system […] But there is not one solution, this requires a palette of different solutions”.

The Danish respondents also underlined the importance of good collaboration with other stakeholders, particularly educational providers and the ministries for education. R-DI especially underscored the importance of dialogue between them, the different companies and the educational institutions, which becomes even more important in time periods of economic recession when companies have many other urgent needs to handle, which can lead to up- and reskilling becoming a lower priority. Business academies and professional bachelor programs are two forms of education that are highlighted as particularly suitable to tackle the changing needs at the labour market, when the traditional educational systems for higher education does not manage to meet the needs. R-RH emphasised the importance of a systematic dialogue with ministries and universities in order to influence the dimensioning of the study programs. R-KL again underlined collaborations through the triparty agreements.

Opportunities or necessities to adjust

When asked about the challenges and opportunities created by the changing needs at the labour market, most of the respondents were optimistic, where many discussed that both Sweden and Denmark are well prepared. Many argued that there is, however, important work to be done.

R1-SN argued that “there is nothing that indicates that we are any less equipped for this technological shift than we have been in the past”. An opportunity that these changes can create was argued to be enhanced global competitiveness. R2-SN explained that there are also several challenges with these changes, but was generally optimistic and discussed that research indicates that technological shifts have proven to be positive in the long term, even though it can lead to rising levels of unemployment and businesses having to close down in the short term: “But in general, major shifts have led to better and more qualitative jobs, where some tasks have been eliminated, and this has led to strengthened priorities and higher GDP”. R2-SN described Sweden as a knowledge-driven country, a competitive advantage that lays a good foundation for future opportunities for companies.

R-SALAR agreed with R2-SN in terms of these changes leading to positive outcomes in the long term, where automation creates possibilities to focus more on aspects that cannot be automated, which can lead to higher quality. These changes do however come with challenges as well. Another argument by R-SALAR, regarding workers in heavy industries who tend to oppose re- or upskilling, that was touched upon earlier, can also have other consequences: “There are labour market and economic consequences, but we can also see that there are political consequences with the emergence of right-wing conservative parties and that type of views that are becoming more and more dominant in the world”. R-SALAR also discussed the development of so called super-regions as a challenge, where prominent universities are usually situated and that attracts students and researchers. On the one hand, this “generates the development of new businesses and ideas, which attracts investment capital”. On the other hand, “this drains neighbouring regions of necessary skills and capital”. It is further described how many successful companies in these areas can compete with salaries in a way smaller companies cannot, which “leads to increased disparities and polarisation”.

The Danish respondents were also generally positive when asked about the challenges and opportunities created by the changing needs at the labour market. According to R-DI, the biggest challenge is the speed of the current changes, that it is difficult to predict what they will need in the future, and that it also takes time to adjust the educational systems: “It takes a couple of years before the educational system has adapted to this, because they first need to develop the study programmes and then students should find out the programme exists and apply. It is always a 20 year-perspective”. An opportunity that was raised by R-DI was that the sense of urgency regarding technological advancements and changes at the labour market will lead to more work being done in the area of lifelong learning, where a higher retirement age is an aspect that is very much discussed at the moment. R-DI also argued that people in the Danish workforce is good at adjusting and does not perceive these changing needs as much of a threat.

The respondents in the Danish public sector also underlined the challenges with the speed of the changes, the time it takes to adjust educational systems, and to increase participation in re- or upskilling. R-KL highlighted the generational gap, where they experience that it is harder for older adults to adapt to the current changes. R-RH explained how "we cannot adapt quickly in our industry", as medical training takes a long time, but that they can try to stay ahead: "On the one hand, we know that education takes many years, and at the same time, we have to constantly adapt the workforce to meet these needs". Another obstacle that was raised by R-RH, like R-SALAR, was the difficulty to compete in the field of salaries with the private sector. According to R-RH, as mentioned earlier, time efficiency is a clear opportunity, which can also create opportunities to reduce inequalities in medical treatments by moving towards a more personalised care system.

Structural transformation

When asked if the respondents experienced different needs in different sectors, the answers varied, although most respondents underlined that the changing needs in the labour market affect all sectors to a certain extent.

R2-SN said that there are structural problems at the labour market that they do not seem to solve, and underscored the problems with mismatches: "We have a lot of job vacancies at the same time, but also a lot of people who are unemployed and who are looking for work". R2-SN further explained that despite the current recession, "over the last eight years, 7 out of 10 companies have expressed that it is difficult to recruit. So it does not really matter what economic time-period we are in". It was further explained how "there has not been enough reforms in this area, which is why we have ended up here". R2-SN further discussed how many university programs lead to high levels of so called "academic-unemployment": "That is why we want to see different forms of education-dimensioning, that takes more into account what employers are looking for". According to R1-SN, more programs at the university level within STEM, science and engineering are needed. R2-SN also described an increasing demand in the defence industry and within transport. It was also explained how the construction sector is struggling to recruit, and that huge investments are being made in infrastructure, due to widespread housing deficits in Sweden.

R-SALAR stated that “we are facing major structural changes in the future, which will mean that certain groups and certain regions will have to transition”. One consequence is that the minimum educational level has risen, which particularly affect sectors where the need for transition is high. Additionally, according to R-SALAR, “this makes it more difficult for those who are outside [of the labour market] as they cannot meet the skills requirements”. Another aspect that affects the possibility to recruit is the relocation of labour, which has changed over the years along with changing family structures, where usually two people in a household have full time-jobs and careers that affects decisions on where to live. The geographical aspect with people having to move is mentioned when talking about the defence sector, where R-SALAR did not express any concerns regarding the ability to meet the demands, but that the geographical aspect will become a challenge, as factories and facilities are not in the same place as the expertise.

The Danish respondents explained that they experience skills shortages and lack of staff in almost all sectors. R-DI stated that even though up- and reskilling is taking place, they do not manage to keep up with the pace of the developments. R-DI believed that one effect these changes can have on skills requirements is that companies and employers are becoming more selective in the recruitment processes, as a result from the rise of more specialised professions, where many companies struggle to find the right candidates. R-DI also explained that even though they experience problems with skills shortages in many sectors, a particularly high demand is palpable within sectors such as IT, STEM, bio-tech and medicine, but also companies that work with consulting and accountancy. The growth of bigger cities and regions was also addressed, which, as discussed previously, was described as something that attracts talent, which also results in companies in rural areas struggling to recruit.

In the Danish public sector, when asked whether the respondents experienced different needs in different sectors, the respondents said that the changing needs affect all sectors and jobs to a certain degree. According to R-RH, everything is moving in the same direction due to the digital and technological advancements, and there is not a particular sector where these changing needs are more palpable than in others. One sector that however seems to be expanding according to R-KL is the elder care, due to people getting older. Additionally, R-RH discussed that even though they experience skills shortages in all areas within the health care sector, as the need for specialised medical treatment to treat serious illnesses and conditions increases, this will also affect skill requirements.

5.3. Summary of the results

In this part of the chapter, a summary of the results from the interviews (Table 3) will be presented, which is based on the analytical framework (Table 2) where the structure have been edited to illustrate comparisons between Sweden and Denmark. This will better visualise how Swedish and Danish employer organisations work to address challenges regarding skills development, and how this connect to goals at the EU and national levels. These results will be discussed more in relation to the theoretical framework and previous research in the next chapter.

Table 3. Summary of the results from the interviews.

Country	Main category	Institutional coordination	Opportunities or necessities to adapt	Structural transformation
Sweden	**The role of EU initiatives**	• Advocacy through Brussels office • Building alliances with European partners are important. • Widespread usage of funds (ESF+ and ERDF)	• EU-goals often align with national goals, more than before • Financial EU-support is valuable, but hard integrating long-term • Bureaucracy is seen as a barrier • Resistance towards the EU interfering too much	• Limited direct impact • EU contributes through forums for measurability, statistics, learning from others • Skills development should remain a national responsibility
Denmark	**The role of EU initiatives**	• Low direct involvement in the public sector • The private sector is active in mobility and research programs (Erasmus+ and Horizon Europe) • The private sector highlights advocacy through its Brussels office	• EU-goals generally align with national goals • Sceptical view of the relevance of EU initiatives in the field of skills development due to strong national competences • Erasmus+ is seen as valuable to attract international talent and workers.	• EU instruments seen as less relevant for national policy impact • Free movement and student mobility are important to addressing long-term labour market challenges
Sweden	**The role of national policies**	• Close collaboration with government, municipalities, regions and educational providers. • Strong focus on lobbying and policy influence.	• National policies can be obstacles (wage directives for migrants) and opportunities (funding for re-skilling) • Call for stronger government action on skills provision.	• Focus on long-term systemic reforms (retirement, full-time employment, and VET) • Strategic alignment between education and labour market needs is crucial.
Denmark	**The role of national policies**	• Strong tripartry collaboration with unions, employers and the government.	• Educational reforms bring both opportunities and difficulties. • Criticism of misdirected policy	• Sector-specific initiatives and negotiations • Engagement in shaping study programs is

		• Dialogue with members (municipalities, organisations or companies) • Communication with ministries and educational providers	(such as investment in rural areas instead of demands in urban cities) • Public sector argues for better focus on municipal-level healthcare needs	important to enable structural transformation through education policy. • Need for improved education-labour market contact and alignment
Sweden	**Approaches in the field of skills development**	• Close contact with members to identify skills needs. Cooperation with unions and regions to influence educational content. • Projects to improve attractiveness in shortage occupations	• Demand for digital, technical and soft skills. • Lack of upper secondary degree is a big barrier. • Specific shortages (like electricians and healthcare staff) • Industry involvement in VET is crucial. • Hard to reach heavy-industry workers	• Occupations are changing rather than disappearing. • Continuous upskilling needed. • Digitalisation frees up time, does not replace jobs. • Demographics shape long-term skills demand, especially in healthcare.
Denmark	**Approaches in the field of skills development**	• Strong cooperation with schools, unions, and education providers. • Meetings with universities and regions to align content with labour market needs	• Demand for digital and technical skills. • Language barriers and low motivation for upskilling is challenging • Reskilling takes time, which is a barrier. • Perceived gap between academia and industry	• Existing occupations are evolving due to AI and digitalisation. • All sector are affected, especially healthcare and educational professions • Strong belief in adaptability
Sweden	**Changing needs on the labour market**	• Close connection between education and labour market policy is important • YH-programmes seen as effective. • Collaboration with companies and unions on educational content. • Calls for more labour market training options	• Changes can boost competitiveness and quality of work. • Risks include regional inequality and political polarisation. • Barriers to reskilling in certain groups. • "Super-regions" attracts talent but drains small regions • Public sector raised wage competition	• Skills mismatch - unemployment and vacancies at once • Academic unemployment is an issue. • Need for more places in key education fields • Social constraints hinder mobility. • Defence and infrastructure are expanding
Denmark	**Changing needs on the labour market**	• Triparty partnerships with educational providers, unions and employers. • Focus on bridging the gap between education and work. • Business academies and the importance of professional degrees highlighted.	• Generally positive as change drives lifelong learning. • Workforce seen as flexible and adaptable. • Challenges include long adjustment time for education systems • Public sector highlights wage competition • Difficulty motivating older adults.	• Skills shortages in almost all sectors. • Specialisation makes recruitment harder. • Growth in cities pulls talent from rural areas. • Health- and eldercare face rising demands. • Social skills and human contact vital due to digital advancements

6. Discussion and conclusion

6.1. Discussion

Scholars have argued that Europe, and the world, is currently experiencing a fourth industrial revolution, characterised by rapid digital and technological advancements that spreads in a significantly faster pace than in previous industrial revolutions, and which has considerable effects on production procedures, financial- and social structures, and the demands for skills. As argued by Schön (2013) extensive technological shifts of this sort puts an immense transformative pressure on institutions that are forced to accommodate to the changing needs at the labour market. When analysing the material, it becomes evident that a substantial shift is indeed taking place. When interviewing representatives from employer organisations both in the private and public sector, it was clear that skills development is becoming an increasingly more important area for employers in all sectors, and that every area of society will be affected by this to a certain degree. None of the representatives did however believe that professions would necessarily disappear in the near future, as suggested by previous research. Rather, what is happening, and what will continue to happen, is that the way people work will change significantly.

According to the theoretical framework of development blocks, during transformative processes when new development blocks are created, uncompleted development blocks can generate difficulties and opportunities, where difficulties are usually centred around necessities to adjust to the current changes, where the ones who do not manage to do this will be affected negatively. A recurring theme amongst the representatives from the employer organisations was that the unprecedented speed of the changes that are taking place makes it difficult for institutions and societal actors to keep up, which was identified as an overreaching difficulty. It was argued by many interviewees in this study that it takes time to change educational structures, especially within higher education programs that is directed to advanced areas such as medicine, technology and STEM. In order for the educational institutions to maintain relevance and produce the skills that the labour market needs, the employer organisations advocated for more involvement and influence from labour market actors regarding dimensioning of study places and the content within study programs. Many representatives also argued for more flexibility and alternative educational pathways to the linear educational system. Another difficulty that was raised by several representatives in both Sweden and Denmark was the difficulty in strengthening participation among people to take part in re- or upskilling activities to require new skills that the labour market needs. The representatives from the Danish employer organisations discussed cultural barriers and generational gaps as hinders, where they experienced difficulties for people who have already spent time on the labour market to return to studying. Enhanced awareness of working situations for former graduates through enhanced dialogues and the development of better networks between educational providers and employers was raised as a potential tool to tackle these challenges. Another aspect that was raised by a Swedish employer organisation was that workers in heavy, emission-oriented industries, where the need to transition is the greatest, both due to technological developments and for sustainable reasons, are the ones who tend to oppose it the most. These obstacles are usually occurring in rural areas, characterised by these types of industries where the labour markets are usually limited. Additionally, the development of bigger regions which attract skilled workers and investment capital, which leads to an opportunity of enhanced innovation, also drains surrounding regions of skilled labour force. A new higher lowest level of educational and skills requirement also complicates the situation for those outside the labour market, again enhancing the pressure on institutions in society. These are trends that, according to one of the interviewees, can lead to rising levels of unemployment, regional inequality and polarisation.

However, although uncompleted development blocks can lead to difficulties, structural transformations can also lead to opportunities. Most of the representatives from the different employer organisations expressed optimism regarding the challenges these changes bring and stressed that in the long run, the effects will be positive. Hence, even though unemployment levels will rise in an initial stage and skills shortages will increase, the long term effects have throughout history pointed to the development of better jobs and enhanced quality of services and products, where tasks that are being automated will liberate time for workers and allow them to focus on other matters that cannot be automated. This can also strengthen global competitiveness and promote innovations within research and technology, aspects particularly accentuated by representatives within the private sector. It was however underscored as essential to pay attention to today's changes on the labour market in order to be better prepared for the challenges for the future.

Skills development is explained as a crucial tool to handle challenges with skills shortages and to limit mismatches, a problem which was underlined more heavily among the Swedish employer organisations, where one representative stressed the problems with so called academic unemployment, which again points to the aspect of institutional coordination and the pressure these transformations puts on institutions such as those within education. Additionally, the structural problem with mismatches – where levels of unemployment are high, but where there simultaneously is a high demand for workers with certain skills, where employers struggle to find the employees they need, was particularly accentuated by one of the Swedish employer organisations and described as a long-standing problem, regardless of economic periods. This can contrasted to statements in previous research which stated that during economic recessions, skills shortages tend to decrease.

The skills that are the most sought after at the moment are digital and technological skills. However, with this technological development, another set of skills that are becoming more important to employers are soft and social skills, such as a good attitude and will to learn and work, along with abilities to take responsibility and collaborate with others. As suggested by previous research, this can be a product of automation as these types of skills cannot be automated. Some representatives even suggested that the fast-paced digitalisation have increased the need for human connection and social contact, which again underlines the importance of good social skills.

When talking about skills development and structural transformation, it is also important to mention external factors such as demographical aspects, which was a recurring theme among all employer organisations. Within structural transformations, this has been described by scholars as a factor that affects the labour market in terms of skills supplies and demands. All employer organisations raised the issue with ageing populations, which both makes it harder to find the people with right set of skills in the country, and which enhances the need for workers from other countries. Additionally, as people get older, this puts more pressure on medical institutions, where employer organisations in both Sweden and Denmark underlined the urgent need for skilled workers in the field of health care.

Coming back to the aspect of institutional coordination. The representatives from the employer organisations described the collaboration with the national level as important, but varying as their goals do not always align. Many of the representatives highlighted that not enough measures are being taken to tackle the issue with skills shortages, where policies sometimes can tend to be misdirected or insufficient and that it in some ways has led to problems with mismatches. With structural transformation, a transformative pressure is particularly evident on the international level, where new conditions for integration are being created. It has been discussed by scholars that the area of skills development has become an increasingly important priority for the EU in recent years, where substantial resources are directed towards this area which has resulted in a vast framework of strategies and funding programmes. When analysing the written material, it became palpable that the general similarities regarding goals and challenges were very similar when comparing the EU level with the national levels in Sweden and Denmark, where the EU focused more on competitiveness and cross country collaborations, and Sweden and Denmark focused more on national implementation- and educational systems. According to the interviewees, the EU has been moving more in the same direction as them regarding the formulation of goals and challenges. There were however some clear differences between the countries in terms of how they utilised EU-level tools to work with skills development, where the engagement was stronger in Sweden than in Denmark. The Swedish representatives utilised funds such as ERDF and ESF+ to a much greater extent than their Danish counterparts, where the focus on programmes such as Erasmus +, that promotes mobility between EU countries was highlighted. The aspect of free movement of workers was also underlined, as all the representatives underscored the importance of attracting skills and talent from both other EU countries and third-country nationals as an important tool to tackle problems with skills shortages.

The representatives from all the employer organizations did however express high levels of scepticism regarding what EU strategies in the field of skills development actually can result in practically, as they are mainly recommendations. Even though the goals align more than they previously did, the national competences in the area of skills development, labour market policies and education are very strong at the national levels. While the Swedish representatives highlighted the positive aspects with the EU creating forums for collaboration and learning from good examples, the Danish representatives questioned the relevance this might have for Denmark. The aspect of advocacy and lobbying was underlined as an important part of the work within the employer organisations to tackle skills shortages, both regarding influencing the national level and the supranational level, where the importance of lifting the employer perspective regarding what skills that are needed was particularly highlighted.

Finally, Denmark and Sweden are two EU-countries that share many similar societal structures, characterised by strong welfare states with labour markets models where collective bargaining and a strong position of social partners such as employer organisations and unions play a key role. Still, Sweden has a higher rate of unemployment than Denmark and even though they experience much of the same challenges – employer organisations differ in their approaches. Compared to Sweden, Denmark demonstrates a more domestically and inward-focused approach, characterised by sector-specific negotiation and triparty-agreements, with little to no engagement with the EU-level. Sweden focuses more on the importance of systemic reforms and long-term strategic alignment with institutional actors, and demonstrates more engagement with the EU-level.

In line with the research design of Most Similar Systems Design (MSSD), when analysing how Swedish and Danish employer organisations work to address challenges regarding skills development, the organisations in the two countries show different results, as they address the issue of skills development a bit differently. It is reasonable to believe that this is due to variations in the independent variable, such as institutional structures or the level of cooperation between employer organisations and other actors such as governments and educational providers. It is however important to note that this could be one explanatory factor, but it is however not possible to draw too far-reaching conclusions, as this is wide and complex area. This could however tell us something about the relationship between employer organisations and the national and supranational level, and why similar organisations engage differently with EU-level tools.

6.2. Conclusion

This thesis has addressed the aspect of skills development in times of transition and structural transformation. The aim of this study was to investigate how employer organisations in two Nordic EU countries, namely Sweden and Denmark, address the issue of skills shortages and how they interact with EU-tools and initiatives in the field of skills development. This was done by answering the research question: "*How do Swedish and Danish employer organisations work to address challenges regarding workforce competence and skills development, and how does this connect to goals at the EU and national levels?*" This was contextualised to a field of previous research that delved into topics of industrial revolutions, EU-level initiatives and national labour market situations and policies, to provide a better understanding of the corner stones of the theory of development blocks, namely institutional coordination, opportunities or necessities to adjust, and structural transformation. The methodological framework of elite interviews where representatives from some of biggest employer organisations in Sweden and Denmark proved to be suitable to conduct a comparative study between these actors, and to answer the research question, and particularly to get information on how these actors engage with EU-level tools, information which would be difficult to retrieve otherwise.

Both similarities and differences were identified. Both countries underlined the importance of the collaboration with the national levels, but stated that the goals and policies did not always align with theirs, where examples of misdirected policies were given by many of the respondents. Regarding the alignment with EU goals, most respondents stated that the goals generally align. Sweden engaged more with EU-level tools such as funds, and showed a more positive approach towards EU engagement, even though scepticism of the relevance in the field of skills development and education was palpable. Sweden also showed stronger concern over systemic mismatches, regional inequalities and people not graduating from upper secondary educations. Denmark did not show any engagement with EU funds apart from programmes directed to research and innovation, but emphasised the importance of free movement and EU-mobility programs to attract international talent. On the national level, they emphasised institutional dialogue, mostly encompassed of the triparty agreements, adaptability, and practical responses to rapid change in different sectors. Similar for the employer organisations in both countries, which were recurrently described as the single most important factor in managing skills transitions in a changing labour market, where the need for coordination between employers, educational providers, and policymakers, where there was a particular emphasis on adjusting educational programs to labour market needs. The employer organisations in both countries were sceptical towards the EU having too much power in the field of education and labour market policy, and explained that the area of skills shortages, mismatches and insufficient education possibilities in the respective countries cannot be solved by the EU, but has to remain a national competence.

This result servers as an addition to the field of research, as it has provided more information on the perceptions on EU-level tools in the field of skills development, an area where not much was previously known. It has also contributed with an in-depth comparison between Sweden and Denmark in the field of skills development. The result proves that the theoretical framework of development blocks can explain the current phenomenon of skills shortages due technological advancements and structural transformation. The idea that developments in technology in a particular area of the economy cannot be profitably employed until developments in other areas have been implemented, has been evident through the material where it has been palpable that the technology that is needed is usually in place, but what is lacking is people with the right skills to harness its full potential.

It is however important to note that this is an in depth comparative study of a selected number of employer organisations, all of them among the biggest in their respective countries. If the study would include more interviewees and more organisations of different sizes, this could alter the result. It is important to bear in mind that too far-reaching conclusions cannot be drawn, and a more detailed investigation of the structural and institutional factors and the effect that has on skills development would be needed. For further research, a valuable contribution would be to combine the result from the elite interviews with surveys and a larger number of respondents. Additionally, as initiatives in the field of education was something that was raised by most of the representatives, further research on the effects of different educational strategies, such as Erasmus+, would add to the research field. Finally, as Sweden and Demark share many structural similarities, to compare Sweden or Denmark with another EU-country, in a different region with a different labour market model, could also provide interesting results, as challenges regarding skills development has been described as something that affects sectors all over Europe.

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Appendices

Appendix 1: Interview guide

Theme	Questions
Introduction	• Can you describe your role and responsibilities at [organisation name]? • Can you tell me more about your professional background? • How long have you been working with skills development?
Skills- and competence development	• Can you tell me about your organisation's work to identify and address skills shortages within the public/private sector? • How do you collaborate with other stakeholders (e.g. education providers, government, unions) to enhance workforce competence? • How do you assess the effectiveness of your skills development initiatives?

Changing needs on the labour market	• How do you work to meet rapidly changing labour market needs?
	  o In your opinion, what are the challenges and opportunities created by these changing needs?
	• In your experience, what are the skills that are most sought after by employers right now?
	  o What skills/professions are becoming less sought after?
	• Do you experience different needs in different sectors?
	  o (public sector: e.g. teachers, health care professionals)
	  o (private sector: e.g. modern digitalised professions, traditional professions)
	• Can you tell me more about how your organisation work with policymakers or other stakeholders to address these developments?

The role of EU initiatives and national policies	• How does your organisation engage with EU-level tools, such as initiatives or funding programs? • Do you perceive EU tools as effective in addressing skills shortages? • How well do national and EU initiatives align with your organisation's needs and goals? • Do you view these tools and policies as either opportunities or obstacles in your work?
Other	• Is there anything you would like to add?

Appendix 2. Distribution of employment (%) across sectors in Sweden in 2023.

Sectors	Value
Accommodation & food	2,99
Administrative services	4,44
Agriculture, forestry & fishing	1,75
Arts & recreation and other services	5,05
Construction	6,13
Education	11,31
Energy supply services	0,6
Finance & insurance	2,24
Health & social care	14,25
ICT services	6,01
Manufacturing	9,8
Mining & quarrying	0,21
Professional services	12,21
Public sector & defence	7,84
Transport & storage	4,3
Water and waste treatment	0,47
Wholesale & retail trade	10,02
Dataset:	
European Union Labour Force Survey (EU LFS 2023)	
Indicator:	
Employed population aged 15 and over	
Country:	
Sweden	

Appendix 3. Distribution of employment (%) across sectors in Denmark in 2023. .

Sectors	Value
Accommodation & food	3,61
Administrative services	3,64
Agriculture, forestry & fishing	2
Arts & recreation and other services	5,09
Construction	6,42
Education	8,48
Energy supply services	0,79
Finance & insurance	2,88
Health & social care	18,56
ICT services	4,42
Manufacturing	11,18
Mining & quarrying	0,14
Professional services	7,09
Public sector & defence	5,59
Transport & storage	4,36
Water and waste treatment	0,66
Wholesale & retail trade	14,72
Dataset:	
European Union Labour Force Survey (EU LFS 2023)	
Indicator:	
Employed population aged 15 and over	
Country:	
Denmark	

Appendix 4. Educational levels in Sweden 2020-2024

Data extracted on 06/05/2025 15:05:54 from [ESTAT]									
Dataset:									
Population by educational attainment level, sex and age (%) - main indicators [edat_lfse_03__custom_16535381]									
Last updated: 14/04/2025 23:00									
Time frequency		Annual							
Sex		Total							
Age class		From 25 to 64 years							
Unit of measure		Percentage							
GEO (Labels)	**Sweden**								
TIME	**2020**		**2021**		**2022**		**2023**		**2024**
ISCED 0-2	13,5		12,5	b	11,7		11,6		11,3
ISCED 3-4	41,8		40,9	b	39,7		38,9		38,2
ISCED 5-8	44,6		46,6	b	48,5		49,4		50,5
Special value									
:	not available								
Observation flags:									
b	break in time series								

Appendix 5. Educational levels in Denmark 2020-2024.

Data extracted on 06/05/2025 16:07:55 from [ESTAT]
Dataset:
Population by educational attainment level, sex and age (%) - main indicators [edat_lfse_03__custom_16537227]
Last updated: 14/04/2025 23:00

Time frequency	Annual
Sex	Total
Age class	From 25 to 64 years
Unit of measure	Percentage

GEO (Labels)	Denmark						
TIME	2020	2021		2022	2023		2024
ISCED 0-2	18,5	17,9	b	18,2	17,8		16,4
ISCED 3-4	40,9	40,2	b	39,7	39,3		38,6
ISCED 5-8	40,6	41,9	b	42,1	42,9		45,1

Special value	
:	not available
Observation flags:	
b	break in time series

Appendix 6. Unemployment levels in Sweden, Denmark and the EU 2020-2024.

Data extracted on 12/05/2025 17:56:09 from [ESTAT]	
Dataset:	**Total unemployment rate [tps00203__custom_16668431]**
Last updated:	14/04/2025 23:00
Time frequency	Annual
Age class	From 15 to 74 years
Unit of measure	Percentage of population in the labour force
Sex	Total

TIME	2020	2021	2022	2023		2024
EU	7,2	7,1	6,2	6,1		5,9
Denmark	5,6	5,1	4,5	5,1	b	6,2
Sweden	8,5	8,9	7,5	7,7		8,4

Special value	
:	not available
Observation flags:	
b	break in time series

Appendix 7. Youth unemployment levels in Sweden, Denmark and the EU 2020-2024.

Data extracted on 12/05/2025 18:09:35 from [ESTAT]	
Dataset:	**Unemployment by sex and age - annual data [une_rt_a__custom_16668647]**
Last updated:	14/04/2025 23:00
Time frequency	Annual
Age class	From 15 to 24 years
Unit of measure	Percentage of population in the labour force
Sex	Total

TIME	2020	2021	2022	2023		2024
EU	17,5	16,7	14,5	14,5		14,9
Denmark	11,7	10,8	10,6	11,5	b	14,6
Sweden	23,6	24,7	21,7	22,1		24,3

Special value	
:	not available
Observation flags:	
b	break in time series

Appendix 8. Unemployment levels European Union (EU 27) 2024.

Data extracted on 13/05/2025 00:11:58 from [ESTAT]		
Dataset:	**Total unemployment rate [tps00203__custom_16668191]**	
Last updated:	14/04/2025 23:00	
Time frequency		Annual
Age class		From 15 to 74 years
Unit of measure		Percentage of population in the labour force
Sex		Total
TIME	**2024**	
GEO (Labels)		
Spain	11,4	
Greece	10,1	
Finland	8,4	
Sweden	8,4	
Estonia	7,6	
France	7,4	
Lithuania	7,1	
Latvia	6,9	
Italy	6,5	
Portugal	6,5	
Luxembourg	6,4	
Denmark	6,2	
European Union - 27 countries	5,9	
Belgium	5,7	
Romania	5,4	
Slovakia	5,3	
Austria	5,2	
Croatia	5,0	
Cyprus	4,9	
Hungary	4,5	
Ireland	4,3	
Bulgaria	4,2	
Netherlands	3,7	
Slovenia	3,7	
Germany	3,4	
Malta	3,1	
Poland	2,9	
Czechia	2,6	