



# **Master thesis**

Digitalisation, automation and labour market insecurity  
in Norway and the Netherlands

*The role of the social partners in shaping policy responses*

**Student: Esli Soetens**

**Supervisors: Rune Halvorsen and Mi Ah Schøyen**

# Abstract

In this thesis, I seek to investigate how public authorities and social partners in Norway and the Netherlands frame and respond to challenges associated with digitalisation and Artificial Intelligence driven automation of the labour market. In doing so, I also consider the role of institutions and industrial relations of these two countries in their development of policy responses. I start the thesis by investigating current technology-related labour market trends, after which I assess the case for Norway and the Netherlands more closely. Then I elucidate several theoretical perspectives from the world of social policy that could be helpful when comparing the Dutch and Norwegian social partners. The comparison between these two countries is based on a policy review and on interviews conducted with representatives from public authorities and social partners, and follows the methodology of a comparative case study. In the results, I find that the Dutch and Norwegian social partners put most emphasis on lifelong learning in their policy responses. I also comment on the ways in which Norway is different from the Netherlands in terms of their industrial relations, and the importance of institutionalised tripartite cooperation on a central level becomes evident.

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# Abbreviations

- **ABU** - Dutch Federation of Private Employment Agencies (Dutch: *Algemene Bond Uitzendondernemingen*)
- **AI** - Artificial Intelligence
- **CBS** - Dutch Central Bureau of Statistics in the Netherlands (Dutch: *Centraal Bureau voor de Statistiek*)
- **DESI** - Digital Economy and Society Index
- **EEA** - European Economic Area
- **FNV** - Federation of Dutch Trade Unions (Dutch: *Federatie Nederlandse Vakbeweging*)
- **ICT** - Information and Communication Technology
- **ILO** - International Labour Organization
- **JRC** - European Joint Research Centre
- **LO** - Norwegian Confederation of Trade Unions (Norwegian: *Landsorganisasjonen i Norge*)
- **NHO** - Confederation of Norwegian Enterprise (Norwegian: *Næringslivets Hovedorganisasjon*)
- **NSD** (Norwegian Centre for Research Data (Norwegian: *Norsk Senter for forskningsdata*)
- **OECD** - Organisation for Economic Co-operation and Development
- **SER** - Economic and Social Council of the Netherlands (Dutch: *Sociaal-Economische Raad*)
- **VNO-NCW** - Confederation of Netherlands Industry and Employers
- **WDR** - World Development Report

# Table of contents

<b><u>Chapter 1: Introduction</u></b>	<b>6</b>
Trends in technology, digitalisation and automation	6
Organised labour, industrial relations and labour market institutions	12
Characteristics of Norway and the Netherlands	13
Concluding remarks	19
<b><u>Chapter 2: Theoretical perspectives</u></b>	<b>20</b>
Institutions	20
Welfare regimes and industrial relations typologies	22
Path dependence – understanding institutional stability	23
Understanding policy change	24
Concluding remarks	25
<b><u>Chapter 3: Methods</u></b>	<b>26</b>
Choice of research strategy	26
Interviews – recruitment	27
Interviews – conducting and transcribing the interviews	30
Interviews – analysis	32
Ethical considerations	33
COVID-19	33
Concluding reflections	34
<b><u>Chapter 4: Policy review</u></b>	<b>35</b>
Norway	35
The Netherlands	36
Concluding remarks	37
<b><u>Chapter 5: Findings from the interviews</u></b>	<b>38</b>
Theme 1: The digital transformation of the labour market	38
Theme 2: Social security	41
Theme 3: Policy responses	44
Theme 4: Industrial relations and politics	47
<b><u>Chapter 6: Discussion and conclusion</u></b>	<b>51</b>
Recommendations	52
<b><u>References</u></b>	<b>54</b>

# Chapter 1: Introduction

This thesis seeks to investigate the differences and similarities between Norway and the Netherlands in the views of their social partners on the *digitalisation* and *automation* of their labour markets. In this thesis, *digitalisation* of the labour market refers to the increasing share of work enabled and shaped by information and communications technology (ICT). The *automation* aspect of this thesis will focus on the work-displacing effects of technologies such as Artificial Intelligence (AI) and robotics. These technology-related trends will be looked at in the context of the social security of citizens. I will also focus on differences in institutions and industrial relations when comparing Norway and the Netherlands.

In this introduction, I will first discuss some of the technological trends related to digitalisation, automation and Artificial Intelligence, and illustrate them in relation to social security and the labour market. Next, I will briefly discuss how industrial relations and organised labour fit into this, and then I will introduce the case for Norway and the Netherlands. Finally, I will return to the research questions I have pursued in the research project I report on in this thesis.

## Trends in technology, digitalisation and automation

As this thesis examines how the public authorities and social partners in Norway and the Netherlands frame and respond to the ongoing structural changes associated with digitalisation and Artificial Intelligence driven automation affecting labour market insecurity, I will start by briefly reviewing the current technology-related trends that are happening in the world of labour in this section.

The notion that innovation will have negative consequences for labour has long been contested. For example, the 2019 World Development Report (WDR) suggests that, although workers are getting displaced, this will likely be balanced out by innovation creating new industries and jobs (World Bank, 2019). Pettersen (2018) asserts that the nature of machines is fundamentally incompatible with the nature of complex human work, and certain kinds of jobs will therefore never be automated with technology. Vermeulen et al. (2018) analysed different literature on this topic and argues:

*“[...] the ‘end of work’ literature and notably the articles in popular media may be focused too much on loss of jobs in sectors of application and thus overlook the*

*generation of jobs in the developing and producing (e.g., robotics technology) and supplying and supporting sectors” (p. 17).*

On the other hand, there have been news reports in the past decade suggesting that automation-related unemployment may be rising around the world (Thompson, 2015; Miller, 2016). The 2019 OECD Employment Outlook predicts that 14% of all jobs are at high risk of being completely automated (OECD, 2019), while Oxford professors Frey and Osborne conclude that 47% of US jobs are susceptible to computerisation (Frey & Osborne, 2017). Either way, predicting this unpredictable future is difficult. The 2019 WDR summarises:

*“These disparate effects of technology render the economic predictions of technology-induced job losses basically useless. Predictions sensationalise the impact of technology and stir fears, especially among middle-skill workers in routine jobs” (p. 11).*

For this reason, I will continue to focus in this thesis on what we do know, what is already happening and what can already be measured. For this, I return to the 2019 OECD Employment Outlook. It states that nearly half of all jobs will be transformed by automation, with 32% likely to be radically transformed. At the same time, the report points out that 6 out of 10 workers lack basic computer skills and people who actually need training are often less likely to receive it. It also draws attention to the fact that 1 in 7 workers are self-employed and 1 in 9 employees do not have permanent contracts, both of which are in a state of reduced social protection (OECD, 2019). With such findings, we can expect that our labour market will change significantly, even if technology cannot entirely displace labour, which warrants research into appropriate policy responses.

## **Job and wage polarisation**

Occupations and job profiles can differ widely in terms of the amount of required skill and how “routine-intensive” the occupations are. When placing jobs on a spectrum from low-skilled to high-skilled, the middle of this spectrum is where the most routine-intensive jobs are (Acemoglu & Autor, 2011). To illustrate, I created the following table:

Skill	Routine level	Examples
Low skill	Low routine	Retail worker, waiter, cleaning
Medium skill	High routine	Manufacturing, administration
High skill	Low routine	Doctor, manager, lawyer

*Table 1: Skill and routine levels of jobs*

Because the jobs in the middle of the skill-spectrum (as well as the earnings-spectrum) are most routine-intensive, these jobs are also most susceptible to automation. For this reason, due to increasing automation, the share of jobs in the middle of this spectrum has been decreasing while the share of non-routine jobs has been growing. This is usually referred to as job polarisation or labour market polarisation (Kind, 2020).

Goos et al. (2014, p. 2515) documented the level of job polarisation in 16 European countries between 1993 and 2010. They show, as can be seen in figure 1, that the share of low- and high-paying jobs increased during this time, while the share of jobs in the middle of the spectrum decreased:

	Four lowest-paying occupations		Nine middling occupations		Eight highest-paying occupations	
	Employment share in 1993 (in percent)	Percentage point change 1993–2010	Employment share in 1993 (in percent)	Percentage point change 1993–2010	Employment share in 1993 (in percent)	Percentage point change 1993–2010
Austria	21.82	6.36	51.61	−10.44	26.57	4.08
Belgium	17.49	3.00	48.50	−12.07	34.01	9.08
Denmark	24.09	1.73	39.70	−10.30	36.21	8.56
Finland	20.24	−1.50	39.69	−10.60	40.06	12.10
France	19.92	4.19	46.69	−8.60	33.39	4.41
Germany	20.71	2.37	48.03	−6.74	31.26	4.37
Greece	21.66	4.81	47.81	−10.65	30.54	5.84
Ireland	21.13	3.68	48.21	−14.85	30.66	11.17
Italy	27.01	6.06	51.04	−10.59	21.94	4.53
Luxembourg	21.70	−2.38	49.91	−10.76	28.40	13.15
Netherlands	16.78	1.99	37.90	−7.56	45.33	5.57
Norway	22.85	4.73	38.82	−8.47	38.34	3.74
Portugal	25.75	0.73	47.46	−4.86	26.78	4.13
Spain	28.02	1.01	48.67	−11.95	23.30	10.93
Sweden	21.82	1.52	41.98	−9.55	36.20	8.03
United Kingdom	16.88	4.17	43.64	−10.94	39.49	6.77

Figure 1: Initial shares of hours worked and percentage changes over 1993–2010 (by country) – taken from Goos et al. (2014, p. 2515, table 2)

It is important to note that the export of jobs to low-wage countries (offshoring) also contributes to this trend. However, this only has a marginal impact on unemployment (Eurofound, 2016, p. 1), appears to be declining (p. 23), and seems to be secondary to the influence of technological displacement. Autor and Dorn (2013) performed similar analyses in the US and also evaluated other factors such as offshoring, immigration and deindustrialisation, and found that “none of these alternatives appears central to [their] findings” (p. 1560).

## **Need for new skills**

Because of the digitalisation of the labour market, new skills will be needed. The OECD (2016) emphasises the importance of improving ICT skills, as well as socio-emotional skills, in order to reduce the risk of growing unemployment and inequality.

Danuser and Kendzia (2019) also highlight the increasing need for soft skills, and they suggest 4 clusters of soft skills best suited for the changing labour market: Change handling skills (e.g. adaptability and openness to change); Skills for continuous improvement (e.g. lifelong learning); Interaction skills (e.g. communication and empathy); Out-of-the-box thinking skills (e.g. critical thinking and creativity). This seems to suggest that, rather than teaching skills for a somewhat unpredictable future, it would be wiser to focus on skills which make employees flexible and adaptable to this future.

Due to these needs for new skills, the 2019 WDR suggests that “investing in human capital is the priority to make the most of this evolving economic opportunity” (World Bank, 2019, p. 3). They advise this to be done through investment in childhood development, tertiary education and adult learning (p. 10).

## **Political consequences**

It is important to include the ways in which these trends can affect the political environment, as this could indirectly lead to further social consequences for citizens in the form of changes in regulations.

Kurer and Palier (2019) assessed the political and electoral consequences of job polarisation. They point out that the disadvantages are mostly concentrated among middle-class workers, who make up a large group of voters. They suggest that “socially conservative and right-wing populist political parties have recognised the electoral potential of disaffected routine workers and skilfully address their anxieties.”

Kurer and Gallego (2019) look more closely at the distribution of benefits from technological change by looking at wage increases and job satisfaction. They find that there is a “digital Matthew effect”, which means that those most positively affected by technological change (i.e. the ‘winners’ of automation) are clearly the workers with non-routine jobs, especially those with high skilled non-routine jobs. Im et al. (2019) have also found that risk of automation by itself does not increase the likelihood for certain groups of people to vote for radical right parties. Instead, they conclude that it is the risk of automation among those who are ‘barely managing’ economically (i.e. the ‘losers’ of automation).

Gingrich (2019) assesses whether different policy responses from the state made a difference for these voters. She finds that differences in how people have been compensated (through which policies) does not have much effect on their voting preferences. This does not mean that compensation policies do not matter, but Gingrich suggests:

*“[...] compensating the ‘losers’ of change may not be enough to prevent the far-reaching political consequences of automation, instead we need to consider policies that make more people ‘winners’ in the new economic environment.”*

## **Platform workers**

New organisational business models are contributing to the emergence of new forms of work (OECD, 2019). One example would be the emergence of the platform economy and platform work, in which workers are hired for on-demand short-term jobs and freelancing rather than permanent jobs. Although this sort of work provides higher levels of flexibility and autonomy, social security and workplace protections are often in question for these workers (Wood et al., 2018).

For an estimate on how many workers are in the platform economy, we can turn to the European Joint Research Centre (JRC), which conducted two surveys, one in 2017 among 14 EU members states and one in 2018 among 16 EU member states. The second survey was adjusted based on the results of the first, but by “retaining a core of comparable questions”, they were also able to analyse trends (Urzi Brancati et al., 2020, p. 14). Their definition of platform workers is as follows:

*“The broadest definition of platform workers includes those who have ever gained income from providing services via online platforms, where the match between provider and client is made digitally, payment is conducted digitally via the platform, and work is performed either (location-independent) web-based or on-location” (p. 14).*

Under this broad definition, they found a small increase in platform work in nearly every country investigated. However, it would make sense to exclude those who, for example, only provided services in this manner once in the entire year. Frequency, hours and income are used to create categories of platform workers under the narrower definition. Under this definition, only around 1.4% of the working-age population performs platform work as their main form of employment. The share of workers who do platform work as a main form of employment

slightly decreased between 2017 and 2018. However, the share of workers who do platform work likely as a secondary form of employment increased steadily in this period (pp. 3-4).

Other interesting findings from these surveys include the fact that more than half (58.6%) of platform workers surveyed in 2017 had stopped doing platform work in 2018, especially in platforms related to transportation services, which suggests the work might not be very rewarding. They also found that the typical platform worker is young, educated and has children. Foreign-born workers are also more prevalent among platform workers than native workers (p. 4). The report also brings up the possible issues related to the social security of workers in the platform economy. Traditionally, employees have limited autonomy but receive social security benefits in return, while self-employed have full autonomy but without these social security benefits (p. 6). The question of where platform workers stand in this remains a pressing policy concern, as is the more general trend of “non-standard” forms of work (p. 5). Urzi Brancati et al. (2020) note:

*“[...] the policy challenge is to find a balance between protecting platform workers from exploitation while fostering the innovative potential of the platform economy.” (p. 5)*

The 2019 OECD Employment Outlook states that “labour market disparities could increase further unless determined policy action is taken to ensure a more equal sharing of the costs of structural adjustment in the world of work.” Their report has a particular focus on rights and protections for the increasing portion of the labour market involved with non-standard forms of work, stating that current work regulations are mostly designed for permanent employees who work for a single employer. Platform workers should have access to collective bargaining, social security and lifelong learning. Policy suggestions include changing regulations to include people with non-standard work and ensuring that the companies respecting these regulations are not disadvantaged. Lifelong learning can be encouraged by funding training quality, removing time- and money-related obstacles to training participation, and building a learning culture among platform workers and freelancers (OECD, 2019). Additionally, Stewart and Stanford (2017) recommend that regulators clarify or expand the definitions of terms such as ‘employment’, ‘workers’ and ‘employers’.

# Organised labour, industrial relations and labour market institutions

In a report for the ILO<sup>1</sup>, Ghellab and Vaughan-Whitehead (2020) point out the importance of social dialogue and the participation of social partners in policymaking in the face of these technological labour trends. In this section I will review the importance of organised labour in the form of labour unions, as well as the importance of cooperation between the social partners in tripartite industrial relations: trade unions, employers' associations and government. Understanding this is an important step in understanding their responses to the technological changes in the labour market.

Eurofound<sup>2</sup> defines a trade union as an organisation of workers with a common interest, such as collectively negotiating working conditions with employers in a certain sector, or advocating for social policies that are favourable to them (Eurofound, 2009b). Typically the government, as well as employers' associations, are also at the bargaining table. Employers' associations are organisations that aim to further the collective interests of employers.

In the context of technological change, Parolin (2020) highlights the importance of organised labour in the form of trade unions (Parolin, 2020), specifically in terms of protecting workers with jobs that are more susceptible to automation. Parolin finds that “occupations at greater risk of automation experience more favourable earnings growth where unions are more resilient” (p. 1). It is often believed that job polarisation leads to earnings polarisation, but Parolin also points out that this is not necessarily true. In many advanced economies, this has happened, but there are many countries where job polarisation happens without earnings polarisation as a consequence. He then continues to assess under which conditions these occur together, and he finds that this can be largely attributed to the strength of organised labour movements in certain countries, and the role of labour market institutions. Perhaps somewhat counterintuitively, he finds that higher union coverage seems to decrease earnings polarisation but also increase job polarisation. He concludes that “the social consequences of automation are conditional on the strength of organised labour.”

Peugny (2019) looks more closely at polarisation patterns in different countries and finds that they vary a lot. She then argues that this shows that technological change is not the only factor in changing social structures, emphasising the importance of looking at institutions,

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<sup>1</sup> The International Labour Organisation is a UN agency that sets international labour standards

<sup>2</sup> European Foundation for the Improvement of Living and Working Conditions  
(<https://www.eurofound.europa.eu>)

public policy and power relations between social actors as well as welfare regime types. Guschanski and Onaran (2021) analysed data from 14 OECD countries and take this argument even further, suggesting that a decline in labour’s bargaining power and changes in labour market institutions had a much more considerable influence on the declining wage share than technological change. The relationship between collective bargaining coverage through trade unions and technological change is further examined by Meyer and Biegert (2019). They find that labour market polarisation, caused by technological change, increases the distance between different occupations in terms of unionisation preferences and collective agreement participation. However, this is only observed in countries where ‘extension procedures<sup>3</sup>’ are weak. The authors then emphasise the importance of institutional factors, such as wage redistribution or the degree to which governments extend collective agreements, in understanding the strength of unions.

## Characteristics of Norway and the Netherlands

In this section, I will describe Norway and the Netherlands in terms of their labour markets and digitalisation trends, with the purpose of providing context for analysis of these two countries in chapter 4 (policy review) and chapter 5 (interviews with social partners). My motivations for choosing Norway and the Netherlands will be provided in chapter 3 on methodology.

### The labour market and union density

The composition of the Norwegian and the Dutch labour markets is very similar, as I will show in figure 2:

The Netherlands	Persons aged 15-74	100%	Persons outside the labour force	29%	Persons unemployed	4%	Employees	83%
			Persons in the labour force	71%	Persons employed	96%	Self-employed	17%
							Family workers	0.4%
Norway	Persons aged 15-74	100%	Persons in the labour force	70%	Persons employed	96%	Employees	94%
					Persons unemployed	4%	Self-employed	6%
			Persons outside the labour force	30%			Family workers	0%

Figure 2: Dutch and Norwegian labour market compositions<sup>4</sup>

The only significant difference between the two countries is in their share of self-employed people, with the share of self-employed people being nearly three times higher in the

<sup>3</sup> Laws that automatically extend collective agreements to non-participating firms.

<sup>4</sup> Data source: [Eurostat 2020](#)

Netherlands than in Norway. This carries much significance for social security, which will be further discussed in chapter 4.

I have summarised some other statistics that might help provide context for illustrating the two labour markets in table 2:

	Norway	Netherlands
% of the working-age population with legal social security coverage for unemployment <sup>5</sup>	62%	51%
% of the labour force with legal social security coverage for unemployment <sup>2</sup>	97%	80%
Share of employment in the Agricultural sector, as % of total employment <sup>6</sup>	2%	2%
Share of employment in the Industrial sector, as % of total employment <sup>3</sup>	19%	16%
Share of employment in the Service sector, as % of total employment <sup>3</sup>	79%	82%

Table 2: Dutch and Norwegian labour market statistics

As can be seen in this table, a larger share of the *total* workforce is legally covered by social protection from unemployment in Norway than in the Netherlands. However, interestingly, the share of *unemployed* persons receiving unemployment benefits is higher in the Netherlands than in Norway. Another notable difference is that the share of people working in the industrial sector is larger in Norway, while the share of people working in the service sector is larger in the Netherlands.

Next, I will compare union density and collective bargaining coverage between Norway and the Netherlands in table 3. Union density can be defined as the percentage of workers with a union membership, and collective bargaining coverage can be defined as the percentage of workers covered by a collective bargaining agreement.

	Norway	Netherlands
Union density	50.4% (2019)	15.4% (2019)
Collective bargaining coverage	69.0% (2017)	75.6% (2019)

Table 3: Union density and collective bargaining coverage in Norway and the Netherlands<sup>7</sup>

<sup>5</sup> Data source: [ILOSTAT 2020](#)

<sup>6</sup> Data source: [The World Bank Data 2019](#)

<sup>7</sup> Data source: [OECD.Stat](#)

This table shows that, while union density is much lower in the Netherlands than in Norway, the share of workers covered by a collective bargaining agreement is still around the same level as in Norway. The Dutch Social and Economic Council (SER)<sup>8</sup> explains that this is because the individual benefits of union membership are not apparent in the Netherlands, as compared to the Scandinavian countries where union membership typically comes with increased social security, such as supplementary unemployment insurance. Although research shows that Dutch workers consider the work of labour unions to be important, there are many “free-riders” who benefit from the work of unions without having a membership in the same way as those with a membership (SER, 2018, p. 9).

### Technological trends

The European DESI<sup>9</sup> report evaluates countries’ digital performance and development each year. It is a good measure of how countries and their economies are adapting to the digital transition. Overall, Norway and the Netherlands consistently find themselves amongst the most digitally advanced countries in Europe each year (DESI Norway, 2020).

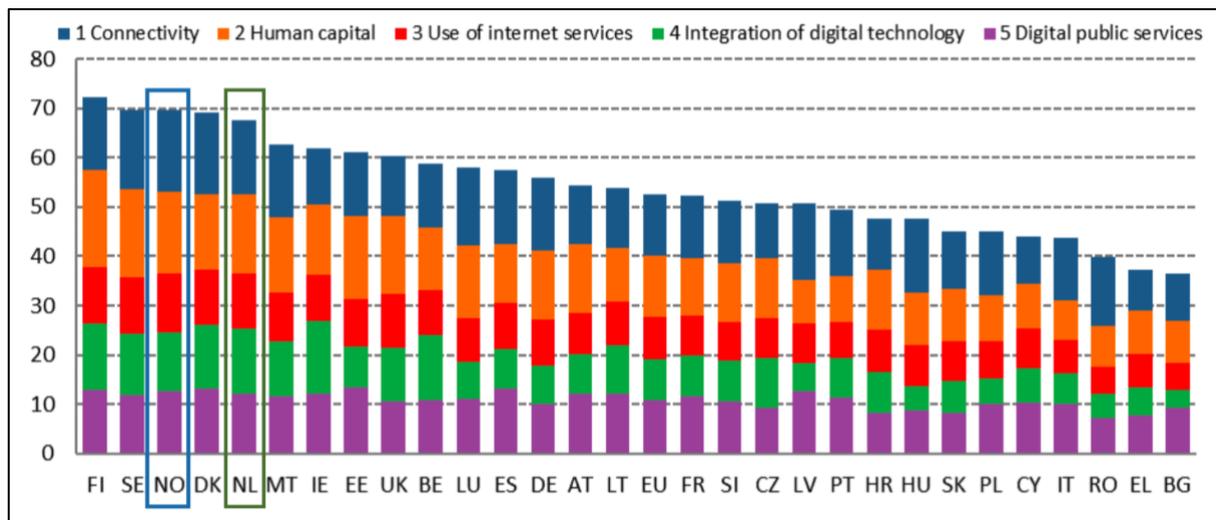


Figure 3: Digital Economy and Society Index (DESI) 2020 ranking – taken from DESI Norway (2020, p. 3)

In terms of the overall score, Norway scores a little higher than the Netherlands, but it is worth noting that the difference is small, and both countries score relatively high. In terms of the individual components of the DESI score, the differences are also marginal. Norway scores slightly better on “connectivity” (which relates mostly to connectivity infrastructure), whereas

<sup>8</sup> Dutch: *Sociaal-Economische Raad (SER)*  
<https://knowledge4policy.ec.europa.eu/organisation/ser-social-economic-council-netherlands/en>  
<sup>9</sup> Digital Economy and Society Index

the Netherlands scores a little better on “integration of digital technology”. There is also a DESI report for each country, which usually provides interesting analysis and context for each component of the score. However, this context is missing in Norway’s country report (presumably due to its EEA status), making it less usable for a comparison with the Netherlands.

### ***Digital skills***

In most countries, more than half of all adults have little to no skills for problem-solving in technology-rich environments (OECD, 2013). The level of digital skills in Norway and the Netherlands is much higher than this, as shown in table 4. Both countries score considerably higher than the EU average in terms of digital skills among their citizens, while the differences between Norway and the Netherlands are small.

	Norway <sup>10</sup>	Netherlands <sup>11</sup>	EU <sup>7</sup>
At least basic digital skills (% of individuals) (2019)	83%	79%	58%
Above basic digital skills (% of individuals) (2019)	51%	50%	33%
ICT specialists (% of total employment) (2018)	4.6%	5.4%	3.9%
ICT graduates (% of graduates) (2017)	3.7%	2.5%	3.6%

*Table 4: Share of digital skills, specialists and graduates in Norway and the Netherlands*

The table also shows the share of graduates and workers that are in the ICT sector. In this, both countries are not as far from the EU average, with the percentage of ICT graduates in the Netherlands even being below the EU average. When comparing the two countries, Norway scores better in terms of ICT graduates while the Netherlands scores better in terms of ICT specialists in their labour market.

Even though the number of ICT specialists in the Netherlands is high, the Netherlands is currently seeing a rise in labour shortages, especially in the ICT sector due to rising demand (CBS, 2019b; DESI The Netherlands, 2020, p. 7). The 2018 Dutch Digitalisation Strategy, which is revised and updated every year, has a strong focus on human capital, emphasising the importance of making sure people have the skills and competencies needed for the digital transformation that is happening (DESI The Netherlands, 2020, pp. 7–9; Rijksoverheid, 2018, Chapter 5). A more specific focus on skills related to Artificial Intelligence (AI) was added in

<sup>10</sup> Data source: DESI The Netherlands (2020)

<sup>11</sup> Data source: DESI Norway (2020)

2019 when the government published its AI Strategy (DESI The Netherlands, 2020, pp. 7-9). This was probably done because the government expects that, out of all emerging new technologies, Artificial Intelligence will have the biggest impact on society (CBS, 2020, p. 16).

The Norwegian government has a somewhat similar digitalisation strategy document, although it seems to be much narrower (Kommunal- og moderniseringsdepartementet, 2016). Their strategy is mainly focused on the digitalisation of the public sector and public services, and there is virtually no emphasis on improving citizens' digital skills. Norway does also have a national strategy for Artificial Intelligence development, in which there is a chapter dedicated to increasing digital skills at a younger age, as well as increasing focus on Artificial Intelligence in higher education (Kommunal- og moderniseringsdepartementet, 2020).

### ***Platform economy***

In 2016 the Norwegian government appointed a committee tasked with, among other things, assessing how these new forms of work in the digital economy fit into current regulations. It concluded that some areas of regulation, such as taxation and labour market regulations, were more suited towards traditional forms of employment. However, it also suggests waiting with reforms due to the still marginal size of the platform economy, and “a majority [of the committee] concluded that the sharing economy does not challenge the term ‘employee’ in a manner that cannot be dealt with by the current Working Environment Act” (regjeringen.no, 2017). However, the Norwegian Confederation of Trade Unions LO, which is also represented in this committee, expressed their concerns related to the social security of workers in the platform economy, suggesting new regulation for this sector (NRK, 2016).

A report by Fafo<sup>12</sup> further investigates platform work in Norway (Alsos et al., 2017). Their main finding is that the platform economy in Norway is still marginal, with only 1 percent of the population between the ages of 18 and 65 have used work platforms to find paid work, but only 30 percent of these have used it more than once per week. The report does point out that its sample is small, and its margins of error are large (p. 54). The same report also discusses how few of the platforms are making efforts to improve the working conditions for the workers. They conclude with the notion that the rise of the platform economy could be indicative of bigger trends in the Norwegian labour market, such as digitalisation and outsourcing. Lastly, they make an interesting prediction that traditional companies will likely adopt platform-based

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<sup>12</sup> Fafo is a Norwegian research foundation focused on labour.

solutions, which could ultimately lead to less distinction between the two in the future (Alsos et al., 2017).

In the Netherlands, people working under more traditional forms of flexible employment (e.g. through recruitment agencies) are usually represented by labour unions and collective bargaining agreements. However, ABU<sup>13</sup> points out that new forms of flexible employment (e.g. platform work) are often not included, which can lead to working conditions that would not pass under collective bargaining agreements (ABU, 2020, pp. 12-14). The government-appointed *Commission on Labour Regulation* (Dutch: “Commissie Reguleren van Werk” (2020)<sup>14</sup>) was tasked with investigating current labour regulations and their suitability for the future, and placed a strong emphasis on reducing flexible forms of labour (Pelgrim, 2020). The government, not committing to any specific policy proposals yet (Rijksoverheid, 2018, Chapter 5.5), seems to favour self-regulation rather than legislation for the platform work sector (Rijksoverheid, 2018, p. 34; ABU, 2020, p. 18). They have, however, followed the commission’s advice to make unemployment insurance mandatory for self-employed individuals (Pelgrim, 2020), and are currently working to implement this new regulation together with the social partners (rijksoverheid.nl, n.d.).

Interestingly, a government-commissioned study found that most platform workers are not actually bothered by the social security issues associated with platform work. This is likely because platform work is not the primary job for most of them, and they have the needed social protection from their primary profession (ter Weel et al., 2018, Chapter 5.3).

Even though platform work still only makes up for a small segment of the labour market in the Netherlands (similar to Norway), demand is slowly but steadily rising. The Dutch Central Bureau for Statistics<sup>15</sup> (CBS, 2019a, p. 195) notes that those with permanent contracts are more likely to seek additional education, whereas those that are self-employed or in the platform economy are least likely to do so, which is problematic considering the increasing need for new skills in order to remain relevant in the labour market, as previously discussed in this chapter.

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<sup>13</sup> ABU is the Dutch Federation of Private Employment Agencies (Dutch: “*Algemene Bond Uitzendondernemingen*”)

<sup>14</sup> Colloquially more often referred to as “*Commissie Borstlap*”, named after its chairman Hans Borstlap.

<sup>15</sup> Dutch: “*Centraal Bureau voor de Statistiek (CBS)*”

## Concluding remarks

In this chapter, I have discussed how technology is increasingly influencing the world of labour. This can be in the form of digitalisation, which refers to the increasing use of ICT technology in jobs, and in the form of automation, the displacement of workers enabled by technologies such as Artificial Intelligence. Although it is difficult to make exact predictions on the future of labour with much certainty, I think we can safely assume that technology will cause big changes and will likely impact the social security of workers. When these changes occur, countries will have to respond in terms of social policy to safeguard the social security of their citizens.

### Research objectives

As I became more familiar with the literature and relevant theoretical perspectives, the research questions for this thesis developed further and became more detailed and precise. The content and formulation of these questions was an iterative process. The main research question I have pursued is:

**How do public authorities and social partners in Norway and the Netherlands frame the challenges associated with digitalisation and Artificial Intelligence driven automation affecting labour market insecurity, and how do they respond?**

In addition, during my work with the thesis, I have identified a secondary research question:

**What is the role of industrial relations in Norway and the Netherlands in addressing digitalisation and automation-related labour market insecurity?**

# Chapter 2: Theoretical perspectives

This chapter presents some theoretical perspectives that have served as an inspiration in this study and shows how these perspectives can be used to clarify and elaborate the research questions. Part of my main research questions is how public authorities and social partners respond to the ongoing digitalisation and Artificial Intelligence driven automation of the labour market. To answer this question, I will draw on analytic perspectives that aim to theorise how governments and social partners respond to structural changes, why we sometimes find national differences in policy responses, and why we at other times find similar policy responses despite differences in policy traditions and industrial relations between the countries. In the following, I organise the presentation around five key analytical concepts and the relationship between them: *institutions*, *welfare regimes*, *industrial relations*, *path dependence* and *policy change*.

## Institutions

In comparative social policy, institutional theory is a predominant perspective. As this thesis will compare the policy responses in two countries, Norway and the Netherlands, it will take institutional factors and differences between these countries into account. This is relevant because, as described in chapter 1, institutional factors are important factors in the context of technological change and labour (Meyer and Biegert, 2019).

A key contribution in the field of institutional theory is North (1990), who puts forth a theory of institutions in which he defines institutions very broadly as any form of constraint that shapes human interaction. As such, they are referred to as “the rules of the game” (p. 4). Following this analogy, the functioning of institutions is also dependent on the effectiveness of their enforcement. Institutions can exist in the form of formal rules, or laws, as well as informal constraints, social norms. Hall and Taylor (1996) define social institutions as the formal and informal procedures, norms and values in a society that structure and constrain the choices of different policy actors.

According to North (1990), institutions determine the political and economic opportunities in a society, and organisations are created to take advantage of those opportunities. The incentives provided by institutions are not always inducing positive effects

for the economy and society. North uses this perspective to explain why some countries go through economic development and some, like many third-world countries today, do not (North, 1990).

Some organisations operate within the existing rules, others try to alter the rules. A good example is that of industry influencing policy, in which enterprises attempt to change social institutions for their own benefit. This happens when the payoff of this approach exceeds the payoff of the alternative (i.e. trying to win within the existing rules). By pursuing these “maximising activities”, they are inducing changes in the institutional framework, which makes these organisations agents of institutional change (North, 1990).

By looking at the different incentives of different large stakeholders in society, and the effects of these different stakeholders’ actions on society, institutional theory is an important and effective perspective in comparing labour market policy in the countries I focus on in this thesis.

Hall and Taylor (1996) identify three distinct approaches to analysing social institutions: *historical institutionalism*, *rational choice institutionalism* and *sociological institutionalism*. These provide contrasting ways of investigating the creation and change of institutions, as well as examining the relationship between institutions and the behaviour of actors (Hall & Taylor, 1996).

Historical institutionalism attempts to explain the interactions of policy actors in the context of time and culture by looking at the historical development of institutions. This approach describes policy traditions as assumptions that structure the choices of the different actors (Hall & Taylor, 1996, p. 940). Historical institutionalism has been used in research to understand the long-term different national political outcomes in different countries (Hall & Taylor, 1996). In contrast, rational choice institutionalism attempts to explain policy outcomes by looking at policy actors as decision-makers guided by ‘rational choice’, which refers to strategic, analytical, logical and typically self-interested decision-making. In this approach, institutions structure interactions between these actors by constraining their choices and responses. Lastly, sociological institutionalism emphasises shared attitudes and values of what is culturally appropriate to pursue and achieve goals. These attitudes and values act as constraints not to what policy actors can do, but to what they can *imagine* doing (Hall & Taylor, 1996). In this approach, institutions are essentially social conventions that limit the range of possible options for actors.

While research has traditionally used these institutionalist approaches separately, Hall (1993) suggests that utilising the commonalities between the different approaches can lead to

better analysis. This thesis combines elements of each approach to examine the social institutions of policy development and implementation. I am interested in how the historical development of the industrial relations in the Netherlands and Norway influence how the governments and social partners work with the consequences of digitalisation in the labour market and how the stakeholders navigate to maximise their own influence on the policy development.

## **Welfare regimes and industrial relations typologies**

When classifying different types of welfare regimes, Esping-Andersen's 1990 political work "*The Three Worlds of Welfare Capitalism*" is commonly used. In his works, Esping-Andersen identifies three types of welfare states (Goodin, 2001, pp. 13-14): *Liberal* regimes, in which the labour market is the primary welfare provider, and public social welfare programs merely serve as a fall-back for those unable to contribute on the labour market; *Corporatist* regimes, sometimes termed conservative, in which the family is the primary welfare provider, and public welfare entitlements are based on the family's contributions to the labour market; *Social-democratic* regimes, in which the state is the primary welfare provider, and public welfare benefits are treated more as citizens' rights. In these regimes, the government typically helps citizens make productive contributions where they can through active labour market policies. Esping-Andersen's typology has since been criticised by many, for example, in the notion that "real welfare states are hardly ever pure types and are usually hybrid cases" (Arts & Gelissen, 2002, p. 137). However, for this thesis, I believe it still could serve as a helpful tool in looking at some of the broader characteristics of the Dutch and Norwegian welfare states.

Regarding industrial relations, Ghellab and Vaughan-Whitehead (2020) point out the importance of social dialogue and the participation of social partners in policymaking. More specifically in terms of labour market policy, tripartism is a relevant term that comes to mind. It refers to the collaboration between government, trade unions and employers' associations, which are the key social partners in labour market policy. The ways in which these partners might collaborate, or not collaborate, can be illustrated through a classification of different kinds of industrial relations systems. Crouch (2001) offers such a classification, in which he identifies three main types of industrial relations systems. In *contestative systems* there is at least one social partner which rejects the legitimacy of another. In contrast, *pluralist systems* are characterised by mutual acceptance of the legitimacy of the other parties or stakeholders. Each social partner can be considered a competing organisation in pluralist systems, each with

their own interests and objectives. Lastly, *neo-corporatist systems* are similar to pluralist systems in that they also entail mutual acceptance, but between certain hegemonic organisations more central to the system. The institutionalised cooperation between social partners allows them to be better at pursuing collective advantages and public goods. Neo-corporatist systems can be further divided between systems in which labour movements are particularly strong and those with weaker labour movements but stronger organised employers.

How and to what extent the Netherlands and Norway fit into these typologies is something I will return to in chapter 4 of this thesis, where I assess the social policy development and industrial relations in the two countries.

## **Path dependence – understanding institutional stability**

Path dependence refers to self-reinforcing processes which lead to institutional stability. Paul Pierson (2000) reviews research on path dependency and increasing returns in the context of economics and applies it to the world of public policy. He describes path dependence as a social process that is grounded in *increasing returns*, which refers to the probability that “preceding steps in a particular direction induce further movement in the same direction” (p. 252). This happens because “the relative benefits of the current activity compared with other possible options increase over time” (p. 252). At the same time, the costs of switching to another strategy increase over time, which leads to self-reinforcing or positive feedback processes (p. 252). Because of this, the probability of continuing down your current path increases with each step. This means that relatively small decisions can result in large consequences (Pierson, 2000).

Increasing returns processes are commonly observed in technological development. These processes can often be unpredictable, inflexible and path inefficient, which demonstrates why path dependency is also relevant and important in the world of public policymaking (Pierson, 2000).

In relation to path dependency, North (1990) highlights the importance of adaptive efficiency and the ability to learn from mistakes:

*“In a world of uncertainty, no one knows the correct answer to the problems we confront. [...] The society that permits the maximum generation of trials will be most likely to solve problems through time.”*

Pierson (2000) points out that new institutions “often entail high fixed or start-up costs, and they involve considerable learning effects.” Because of this, established institutions tend to reinforce their own further development (Pierson, 2000). Additionally, the path dependence found in institutions is also caused by the imperfect ways in which actors interpret their environment and decisions (North, 1990).

Research on institutions has also focused on the mechanisms for institutional change (Hall, 1993; Hall & Thelen, 2008; Mahoney & Thelen, 2009; Streeck & Thelen, 2005). Previous research has argued that institutions tend to change incrementally rather than discontinuously. Institutional change inhabits characteristics of path dependence and increasing returns, similar to those of technological change.

In our context, it is an unanswered question how and to what extent the established working relations between the social partners and the governments influence the policy responses and ways of working with the consequences of digitalisation of working life. When collecting data from these actors in the Netherlands and Norway, I examined the continuities and changes in their working relations. It is a question whether we find path dependencies in how the stakeholders respond and relate to the structural changes in the labour market following from increasing digitalisation.

## **Understanding policy change**

Hall (1993) offers a valuable theoretical perspective on policy change. When describing the process of policy change through social learning, Hall (1993) differentiates between three types, or rather levels, of policy change: *first-order changes*, *second-order changes* and *third-order changes*. These different levels of policy change refer to the three components of policy (p. 279) that can be changed: the settings of policy instruments, the policy instruments themselves, and the broader goals behind policies.

First-order change refers to changes in the settings of specific policy instruments, while the instruments themselves and the policy goals remain the same. These are routinised alternations which occur in response to the consequences and results of previous changes (Hall, 1993, p. 281). Second-order change describes the larger scale adjustments of the policy instruments themselves, typically in response to dissatisfaction with past experience, while the broader goals are still unaffected (pp. 282-283). Third-order change refers to even larger scale changes in the hierarchy of goals behind the policies (p. 279). This does not happen often, but

could be the result of broader social, political and economic interests that extend “beyond the boundaries of the state” (p. 288).

This thesis examines second-order changes by looking at labour market policies in Norway and the Netherlands while keeping an eye on third-order changes in the comparison between these two countries. First-order changes are less relevant because of the long-term perspective of this thesis.

Another relevant theoretical perspective on policy change is the concept of policy diffusion, which can be used to explain policy reforms. Policy diffusion refers to the interconnectedness of policy decisions across countries (Gilardi & Wasserfallen, 2019, pp. 1246-1247). According to Dobbin et al. (2007), there are four main mechanisms to explain policy diffusion: *Learning*, *competition*, *coercion* and *emulation*. The learning mechanism describes the idea that policymakers base decisions on the analysis of policy outcomes in other countries. The competition mechanism describes the making of policy in order to compete internationally, for example to attract investors. Coercion theory refers to the introduction of policies because it is coerced by international organisations or more powerful countries, for example, by changing financial incentives. Lastly, emulation describes social construction, which occurs when policymaking is influenced by the setting of international social norms and conventions (Gilardi & Wasserfallen, 2019, pp. 1247-1248; Dobbin et al., 2007).

The concept of sociological institutionalism, as described earlier in this chapter, might also provide useful insight when considering the effects of policy diffusion. Sociological institutionalism describes how shared cultural values and attitudes might influence the expectations of policymakers. In the context of policy diffusion, the spread of ideas could legitimise certain policy approaches and thus act as a catalyst for institutional change.

## **Concluding remarks**

A recurrent theme in this and the previous chapter has been our conceptualisation of policy responses to the digitalisation in the labour market and how institutional factors and industrial relations between social partners are important factors in this. In the following chapters I will present my methods and findings from looking at Norway and the Netherlands.

# Chapter 3: Methods

This chapter is dedicated to the question of how I looked for answers to the chosen research questions. I aim to present a transparent recollection of what I have done. I will also include reflections on the difficulties I encountered while conducting my research.

## Choice of research strategy

The research strategy for this thesis is a qualitative, comparative case study of Norway and the Netherlands. In this section, I will explain my reasoning for choosing such a research design to answer my research questions.

There are a few reasons why I decided to approach this topic with a qualitative research design instead of a quantitative one. At least to some degree, the future of work is speculative, which warrants a more explorative research design. The qualitative methods are better suited for such studies. Additionally, while quantitative methods are better when dealing with factual data, the qualitative methods are better able to answer questions about incalculable things such as meaning and perspective, especially from the participant's point of view (Hammarberg et al., 2016, pp. 498-499). Considering this thesis looks at how social partners in Norway and the Netherlands *frame* the technological changes in the labour market, a qualitative design seemed more appropriate.

My decision to go for a case study can be explained with the notion that case studies are especially useful when trying to deeply understand a phenomenon to which there are important contextual factors (Yin, 2009, p. 18). In these cases, explanations are often too complex for the more experimental strategies such as surveys. Bennett (2007) also adds that case studies are helpful in identifying new variables and hypotheses while also taking complex relationships (such as path dependency) into consideration (p. 19). Especially the *comparative* case study is suitable for my research objectives, as Bartlett and Vavrus (2016) explain:

*“Comparative case studies are an effective qualitative tool for researching the impact of policy and practice in various fields of social research, including education. Developed in response to the inadequacy of traditional case study approaches, comparative case studies are highly effective because of their ability to synthesize information across time and space”.*

Lastly, as a student from the Netherlands living in Norway, I decided to pick Norway and the Netherlands as cases for the comparative case study. The two countries seem rather similar from a global perspective, but having spent a lot of time in both countries, I have started to notice many interesting cultural and political differences. Instead of inspecting two very different countries with much more substantial differences, I thought it would be interesting to look at two rather similar countries and the more nuanced differences between them.

## **Interviews – recruitment**

The recruitment of participants for the interviews happened mostly by directly contacting the relevant organisation or government. Recruitment was an ongoing process, as some of the participants were able to recommend other participants during their interview and helped putting me in touch with them afterwards. In a few specific cases, the personal network of my supervisors also helped in reaching the right person and arranging an interview. One of the greatest pitfalls in successfully conducting qualitative interviews is the inability to obtain access to the research field. It is also a time-consuming activity to negotiate access to data, especially when the individuals needed for interviews are important people with busy careers. As Mikecz (2012) points out, “gaining access to elites has to be carefully negotiated, which can take much longer time and higher costs than nonelite studies” (p. 483). This was especially noticeable and troublesome in the case of the Dutch government. After attempting through a general inquiry, I was informed that their ministries do not participate in any research. It was only after attempting several other routes that I finally (through the personal network of my supervisor) got in touch with an employee who could represent the Dutch ministry in my study. Ironically, it was an employee whom I had already contacted several weeks earlier but who ignored my request when it was not delivered through the personal networks.

## **Participants**

All of the participants work with policies at different social partners in Norway and the Netherlands. Below is an overview of all the participants for this thesis and the topics they primarily work with. To preserve anonymity, I will focus the descriptions as much as possible on the organisations rather than the participant representing the organisation. The more detailed descriptions of the organisations will be provided further below.

Although their specific job descriptions were not all the same, it is important to mention that each representative was involved with and had relevant experience with the topic of digitalisation and/or competence and labour market policies.

	Country	Works at	Focus/expertise area(s)
#1	Norway	LO (department of economic and social affairs)	Labour markets, education and competence policy.
#2	Norway	NHO (department of labour markets and social affairs)	Labour markets, social affairs, the future of work.
#3	Norway	Fellesforbundet (central administration)	Education and competence.
#4	Norway	Ministry of Labour and Social Affairs (in the Future of Work Commission)	Labour law, work-related crime, the future of work.
#5	The Netherlands	FNV (central unit)	Mergers and acquisitions, technology, digitalisation, social innovation, EU-level union work.
#6	The Netherlands	VNO-NCW (central unit)	International social affairs, labour law, labour migration. Also works with technology and the platform economy.
#7	The Netherlands	Ministry of Social Affairs and Employment (representative + trainee)	Lifelong learning, the future of work, digitalisation.

Table 5: Interview participants from Dutch and Norwegian social partners

Next, I will introduce each of the organisations that the participants represented during the interviews. In the Netherlands, I conducted interviews with the following social partners:

- **FNV** (Dutch: *Federatie Nederlandse Vakbeweging*; English: *Federation of Dutch Trade Unions*): The FNV is the largest labour union in the Netherlands, covering most employees in both public and private sectors<sup>16</sup>. It also serves as an umbrella organisation for more specific member unions covering sectors such as military, education, police, hospitality, journalism and sports. These member unions can receive support from the central unit, but it is important to emphasise that the central unit effectively also functions as a labour union in itself. All workers not active in any of these specific sectors can become a member of the central FNV.

<sup>16</sup> [https://www.socialezekerheidsstelsel.nl/id/vgv9ib4xf7r3/federatie\\\_nederlandse\\\_vakbeweging\\\_fnv](https://www.socialezekerheidsstelsel.nl/id/vgv9ib4xf7r3/federatie\_nederlandse\_vakbeweging\_fnv)

- **VNO-NCW** (English: *Confederation of Netherlands Industry and Employers*): VNO-NCW is the largest employers' association in the Netherlands. It represents the interests of Dutch businesses and corporations on a national and international level. Its members consist of companies of all sizes, although small- to medium-sized companies are also represented by *MKB-Nederland*. However, VNO-NCW has strong ties and close collaboration with *MKB-Nederland*<sup>17</sup>.
- **Ministry of Labour** (Dutch: *Ministerie van Sociale Zaken en Werkgelegenheid*; English: *Ministry of Social Affairs and Employment*): The Dutch Ministry of Social Affairs and Employment is responsible for policies relating to fields such as social security, social insurances, occupational health and safety, labour market policy and industrial relations<sup>18</sup>.

In Norway, I conducted interviews with these social partners:

- **LO** (Norwegian: *Landsorganisasjonen I Norge*; English: *LO The Norwegian Confederation of Trade Unions*): LO is the largest labour union centre in Norway, serving as the umbrella organisation for member unions<sup>19</sup>. The employees they represent consist mainly of blue-collar workers (both skilled and unskilled). Unlike the Dutch FNV, individuals cannot be a member of the central LO, but instead must be a member of one of the many member unions. Although an independent organisation, LO has historically strong ties with the Norwegian Labour Party (Norwegian: *Arbeiderpartiet*).
- **Fellesforbundet** (English: *United Federation of Trade Unions*): Fellesforbundet is the largest individual labour union for the private sector in Norway and is the second-largest member union of the LO (after the *Fagforbundet*, which covers both public and private sectors). They also represent mostly blue-collar workers, with some of the represented industries being engineering, automotive, transport, hospitality, textile, metal, construction, fishing, and agriculture<sup>20</sup>.
- **NHO** (Norwegian: *Næringslivets Hovedorganisasjon*; English: *Confederation of Norwegian Enterprise*): The NHO is the largest employers' association in Norway, representing the interests of privately-owned companies of all sizes<sup>21</sup>. Unlike the Dutch VNO-NCW, which emphasises equity in economic growth, the NHO explicitly describes its role as a lobbyist organisation aimed at contributing to the profitability of its member companies.

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<sup>17</sup> <https://www.vno-ncw.nl/over-vno-ncw/wat-doet-vno-ncw>

<sup>18</sup> <https://www.rijksoverheid.nl/ministeries/ministerie-van-sociale-zaken-en-werkgelegenheid/organisatie>

<sup>19</sup> <https://www.lo.no/hvem-vi-er/>

<sup>20</sup> <https://www.fellesforbundet.no/om-fellesforbundet/>

<sup>21</sup> <https://www.nho.no/om-nho/>

- **Ministry of Labour** (Norwegian: *Arbeids- og sosialdepartementet*; English: *Ministry of Labour and Social Affairs*): The Norwegian Ministry of Labour and Social Affairs is responsible for policies in areas such as welfare, work environment, labour market, income policy and pensions<sup>22</sup>.

## **Interviews – conducting and transcribing the interviews**

Paulus et al. (2014) provide a useful overview of different audio- and video-transcription methods. The transcription method I used, according to their typology, is *condensed transcription*, which is a subtype of a ‘gisted transcription’ (pp. 7-8). A condensed transcription is essentially a type of transcription where nothing is excluded or summarised (everything that was said is transcribed), but sentences can be paraphrased for the purpose of readability (Mondada, 2007, p. 810).

After transcribing the interviews, I employed a validation method called *member checking*. Member checking is a technique in which the interview contents are sent to the participant for a check on validity and accuracy to make sure nothing has been misunderstood or misinterpreted. It can also provoke participants into further reflection on the topic, through which they might come up with additional insights (Koelsch, 2013, pp. 170-172). I also sent the participants a brief overview of the most important highlights from the interview, to make it easier for those with little time and to increase the chances of them checking. One issue with the member checks was that transcription took much longer than I had anticipated, and most of the interviews were conducted very close to each other, increasing the workload of transcription even more. This meant that some participants received the member checks weeks a few months after their interview, at which point it was probably difficult for them to remember what they said. In retrospect, it would have been better to space out the interviews more, giving me time to transcribe and member check before moving on to the next interview.

### **Limitations**

The time scheduled for most interviews was 1 hour, which was usually not long enough considering the scope and complexity of the topics discussed. Due to the time limit, I often found myself having to sacrifice depth or substance in order to be able to cover all the questions.

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<sup>22</sup> <https://www.regjeringen.no/no/dep/asd/dep/id170/>

Perhaps choosing to go deep instead of going broad would have been a better approach, although this is easier to say in hindsight.

The member checks allowed participants to rectify any mistakes or inaccurate interpretations I may have made, and it also gave them the opportunity to elaborate on certain topics after reflecting on the interview. However, it also meant that some participants ended up requesting the removal of certain parts of their interview, or changing the substance of their answers, often with the goal of increasing nuance in their statements. This was most noticeably the case with the representatives from the Dutch government. This could also be seen in the fact that several participants requested anonymity, presumably to be able to speak more freely. Although these post-interview edits were entirely within their right, they did sometimes lead to loss of valuable insight or opinion. While I avoided quoting the sections they requested to remove, I did incorporate the insights from these sections of the conversations in more general terms.

Additionally, the somewhat speculative nature of this topic and these questions also made the interviews somewhat difficult at times. I believe this contributed to the fact that most participants were rather abstract in some of their answers, focusing more on the ‘bigger picture’ than on specific policy measures. It also made participants invoke personal opinions from time to time, as the entity they represent did not always have a formed position on each of these topics. This made it difficult during analysis to distinguish between personal opinions and positions of the organisation they represent.

Lastly, it is worth mentioning the difficulties that arise from conducting interviews in two different languages. The interviews with representatives from Norway were conducted in English, while the interviews with Dutch representatives were conducted in Dutch. I did not have time to translate all of the Dutch transcripts to English, which made thematic coding a bit confusing at times, since the codes were entirely in English. Also, because I have personally only been in international surroundings for the past seven years, my Dutch language proficiency has deteriorated a lot. I am also more familiar with the professional terminology (of social policy) in English since the Master’s degree is taught in English. Luckily the Dutch participants were very able to understand me when I needed to express something in English.

## Interviews – analysis

In this section, I will explain how I approached the analysis – i.e., interpreting the meaning of what was said during the interviews. I will describe the analytical methods I have employed before I discuss how I interpreted the findings.

Once the transcripts were confirmed with the member checks, the chosen method for analysis was a *thematic analysis*, in which different patterns of recurring topics (‘themes’) are identified and coded throughout the transcripts. Methodology for thematic analysis varies in the literature, but Braun and Clarke (2008) provide a detailed description and methodology. They describe a theme as follows: “A theme captures something important about the data in relation to the research question” (p. 82). They distinguish between *inductive* and *theoretical* thematic analyses; the method I used was mostly theoretical, as I was often searching for specific themes related to my research questions. They also differentiate between analysing on a *semantic* or *latent* level. I analysed the themes on a latent level, since I included possible meanings underlying what was explicitly stated. Furthermore, I followed their six-step method: initial familiarising by re-reading the data; writing down initial codes; searching for themes in these codes; reviewing; defining themes; producing the analysis (pp. 86-93).

### Limitations

After conducting the interviews, I realised that it is very challenging to make properly structured comparisons between social partners and countries when I have only spoken with one representative from each social partner. I believe there are several reasons for this. First, it was sometimes difficult to differentiate between the personal opinions of the participant and the official positions of the organisation they represent. Second, each representative only works with certain topics, while others in the same organisation have other expertise. Because I am covering a rather wide range of topics in this thesis, it is not realistic to expect each participant to be able to cover every topic. Some participants had a lot more to say about one topic than about other topics. Third, my time with each participant was also limited, and just because one participant did not say the same thing as another participant does not mean that this participant disagrees. They might agree, and maybe would have said the same if there simply had been more time during the interview.

## Ethical considerations

Throughout my work for this thesis, I have sought to uphold the general norms of research ethics, such as to comply with the standards for the use of references. After a review of the methodology for this study by the Norwegian Centre for Research Data (NSD), I received ethical clearance to proceed. Another key element in research ethics when working with participants is informed consent. The requirement of consent is to secure participants' autonomy and to avoid violations of personal integrity. Before their interview, each participant was asked to read and sign the NSD-approved information and consent form (Appendix A). Additionally, the previously described method of member checking ensures that participants are not misunderstood or misinterpreted. To protect my participants, I anonymised all data after the transcription of their interviews, and I secured all data on a private, encrypted hard drive. Participants also had the option of retreating from participation at any point, as mentioned in the informed consent form.

## COVID-19

Some of the difficulties encountered while conducting this thesis were related to the COVID-19 pandemic. As a Dutch national living in Norway, I initially planned to conduct the interviews in both countries in person. However, due to COVID-19, all the interviews were conducted through Microsoft Teams. Lo Iacono et al. (2016) provide a rich overview of studies investigating the advantages and limitations of online interviews. Although there are indeed advantages such as easily accessing people from great distances, there are some issues too, which I could notice every so often. The main limitations that Lo Iacono et al. (2016) discuss are related to *rappport* and *non-verbal cues*. For example, the quality of communication sometimes noticeably suffered when the internet connection was poor. The participant may have been in a certain train of thought, which may be hard to reproduce upon finding out part of it was not received by me. Also, due to the same connectivity problem, some parts were hard to understand while transcribing at a later point. This was another reason for sending the transcript and summary to the participants to ensure there were no inaccuracies.

I also think it is important to mention that I made a conscious decision to not include the influence of the COVID-19 pandemic on labour market policies and digitalisation of the labour market. At the time of writing this thesis, the pandemic had caused most science to be dominated by COVID-related research. Although it was tempting to change the course of this

thesis to fit the most relevant and popular issue at the time, I thoroughly believe it is important to assess technology-related labour changes in a larger historical context. This is in line with the French Annales school of thought called “longue durée”, which emphasises long-term historical context over short-term causal factors such as specific events (Grote, 2015, pp. 5-6). This approach is also why I decided to focus on institutions, industrial relations and welfare regime typologies, and an additional focus on the COVID-19 pandemic does not fit into this.

## **Concluding reflections**

I would say that the biggest struggle of this thesis was with its scope. There is a seemingly never-ending amount of literature on the topics I covered, and in order to realistically keep this report within the scope of a Master’s thesis, I was forced to exclude certain sources. The thesis is also constrained to a set word limit which, in my opinion, is too small. I tried to prioritise the most relevant and reliable information and data, but there was always a doubt in my head that I may be accidentally skipping over something of great importance. Especially in chapters 1, 2 and 4, I believe that I could not go into the level of detail that I felt was necessary, as there is a lot of literature I was not able to include, mainly due to the word limit. For example, I think there is a lot more to be said about topics such as sociological institutionalism (chapter 2), the historical context of the Dutch and Norwegian institutions (chapter 4), the limitations of the Nordic model (chapter 4), and many more. This inability to create substance within the given limits was made even more challenging considering the explorative nature of this project, which led me to cover a rather wide range of topics.

Another difficult aspect at times was that my personal background is in the health sciences, while this Master’s programme and thesis are within the social sciences. The writing style and structure of the report are completely different from what I have experience with, and it took me quite some time to get used to this.

The methodology of this thesis was an iterative process, as I had to keep making adjustments throughout. However, looking back, I am overall satisfied with the process that led to this final report. Of course, there are always things that are easy to say I would do differently in retrospect (i.e. all of the limitations described in this chapter), but I believe these hurdles have been part of a valuable learning experience.

# Chapter 4: Policy review

In this chapter, I will attempt to provide a general overview of labour market policy in Norway and the Netherlands, with a focus on social security. Because of the long-term perspective of this thesis, as discussed in chapter 3, I will focus on the institutions and underlying characteristics of Dutch and Norwegian policies rather than specific social security programmes, which tend to be subject to change and revision in a shorter time scale. Some of the theoretical perspectives from chapter 2 will be used for this assessment of the Dutch and Norwegian policy environments. The purpose of this chapter is to better understand the context in which the social partners, who participated in the interviews, work on labour market policy. I will conclude the chapter with some brief remarks on how Norway and the Netherlands compare to each other.

## Norway

In Esping-Andersen's welfare state typology (1990), Norway can easily be classified as social-democratic. This is, among other reasons, due to the state's central role in welfare provision and the country's high degree of decommodification.

Regarding the typology of different industrial relations systems, Norway fits into the neo-corporatist industrial relations system. As discussed in chapter 2, this system is characterised by the mutual acceptance of legitimacy between social partners and the more central, institutionalised position of certain organisations, which allows for a more successful pursuit of collective advantages and public goods. This kind of cooperation between Norwegian social partners can perhaps be best characterised by their use of the "Nordic model". The Nordic model is not exactly the same in all Nordic countries, but can be defined by the similarities between them. The Nordic model is typically characterised as having three main pillars, as Andersen et al. (2007, pp. 13-14) describes:

1. Strong labour market institutions, especially in the tripartite cooperation and collective bargaining between labour unions, employers' associations and the government.
2. A comprehensive welfare state providing strong social security for citizens, funded by relatively high taxes on wages and consumption.
3. A set of macroeconomic policies with a focus on high investment in human capital, including childcare and education.

However, Andersen et al. (2007, p. 14) continue to suggest that the essence of the Nordic model is not in these pillars, but in more “intangible and systemic features”, such as collective risk-sharing. Another one of these less tangible features may be *trust*, both trust between social partners as well as trust from citizens in the system. This feature is perhaps not inherent to the Nordic model, but does often coincide with it for other reasons, as Gustavsen (2011) explains:

*“The pattern of co-operation and trust generally associated with the Nordic model is often linked to such aspects of the Nordic societies as the limited size of their populations, their location in the European periphery, their ethnic homogeneity, and the like. These societies should, so to say, harbor an inherent peacefulness and cooperative orientation”* (p. 465).

Another noticeable model by which Norwegian collective wage formations occur is the *frontfagsmodellen*. The simplest explanation of this model is that wage negotiations between the Norwegian labour unions and employers’ associations always start with the internationally competitive industries, which will then serve as a framework for the wage settlements in other sectors (fo.no, n.d.). The reason for the *frontfagsmodellen* is that Norway is rather dependent on selling goods and services abroad, which makes it important that Norway remains internationally competitive. If the wages in these industries are too high, their companies might not be able to compete with foreign companies in countries where wages are lower. It also functions to prevent economic inflation caused by higher wages (fo.no, n.d.). The *frontfagsmodellen* is a good example of the competition mechanism of policy diffusion, as discussed in chapter 2.

## **The Netherlands**

In Esping-Andersen’s welfare state typology, the Netherlands was originally characterised as conservative (corporatist). However, in his later works, Esping-Andersen (1999, pp. 87-88) revisits his original classification of the Dutch system and suggests that it is perhaps more of a hybrid between corporatist and social-democratic. It is social-democratic in the sense that it has “strong universalism, comprehensive coverage, and generous 'de-commodifying' benefits” (p. 87), but when considering social service delivery and the role of the family, it is more conservative (corporatist). In 2011, van Berkel and de Graaf (2011) added:

*“Esping-Andersen’s characterization of the Dutch welfare state as hybrid is still valid, but [...] the mix of welfare state regime characteristics looks different today than, say, 20 years ago” (p. 133).*

Their main argument for this is that new policies, especially those related to the areas of protection and activation of the unemployed, have shifted the Netherlands into the liberal direction (pp. 150-151).

In terms of the typology of industrial relations systems, the Netherlands also fits in the neo-corporatist category. The central, institutionalised cooperation between certain organisations can be seen in the Netherlands in the formation of the Social and Economic Council<sup>23</sup>, in which labour unions, employers’ associations and independent experts such as academic professors work together on social and economic policies. The industrial relations in the Netherlands are often also recognised by their use of the “*poldermodel*”. The poldermodel is similar to one of the three pillars of the previously mentioned Nordic model, as it describes the institutionalised cooperation between social partners on a central level in the Netherlands and the importance of consensus in their cooperation (Kuipers, 2015, pp, 2-3).

Another noticeable feature of Dutch labour market policy is *flexicurity*, a model that combines flexibility for employers with security for employees. There does not seem to be one universally accepted definition of the flexicurity model, but in practice it could mean, for example, that employers have flexibility in terms of hiring and firing workers while there is also strong security for unemployed workers. This would allow for fast labour market adjustments to changing conditions without risking workers’ social security (Eurofound, 2013). In the Netherlands, flexicurity is perhaps most noticeable in their acceptance and protection of flexworkers<sup>24</sup> and the flexibilisation of dismissal law (Eurofound, 2009a).

## **Concluding remarks**

This analysis of the Dutch and Norwegian policy environments sets the stage for the next chapter, which describes the interviews with the social partners in Norway and the Netherlands. While there are some distinctive differences between Norway and the Netherlands in terms of their policy environments, there are also a few noticeable similarities, for example, between the Nordic model and the ‘poldermodel’. It indicates that both countries seem to have institutionalised their industrial relations on a central level, although the poldermodel only covers one of three pillars in the Nordic model. This may reflect in the way the social partners describe their industrial relations in the following chapter.

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<sup>23</sup> Dutch: *Sociaal-Economische Raad (SER)*

<sup>24</sup> Workers with temporary contracts and/or a flexible number of working hours (cbs.nl, n.d.)

# Chapter 5: Findings from the interviews

For the purpose of this thesis, I have interviewed representatives from social partners in both Norway and the Netherlands. In this chapter, I will describe the data I received from conducting these interviews. Based on the coding of the transcripts, which has been described in chapter 3, I found four main themes which I have used to structure this chapter. The first theme is related to *the digital transformation of the labour market*, including descriptions of what the participants are currently seeing in terms of technology-induced changes, and what they think can be expected in the future. The second theme is related to *social security*, mainly describing how the participants think these technological changes will impact workers' social security. The third theme is a collection of the *policy responses* that participants believe are most essential in dealing with digitalisation and automation, and the fourth and final theme describes the data related to the *industrial relations and politics* in both countries and how this sometimes influences their abilities to deal with these technological changes.

## Theme 1: The digital transformation of the labour market

### New skills

One topic that was frequently brought up was the need for new skills due to the digital transition of the labour market. Based on the literature described in chapter 1, it was one of the questions I asked my participants. Although it was not my primary focus, it ended up being an important subject and an answer to many other questions. This might also be explained by the fact that three out of my seven participants were experts on the topic of competence policy or lifelong learning, which most likely shaped their reference frame in their answers to the other questions.

One of the most noticeable observations I made on this topic throughout the interviews is that *lifelong learning*<sup>25</sup> was commonly brought up as a policy solution to many of the problems arising from digitalisation of the labour market. The representatives from the Dutch government also noted this, with some frustration, as they felt that this is sometimes brought

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<sup>25</sup> Lifelong learning has been defined by the Commission of the European Communities (2006, p. 2) as “all forms of learning undertaken by adults after having left initial education and training”.

up as a solution too easily without looking further at the complexity of the specific problems. Most of the representatives did not go into much detail on the specifics of lifelong learning policies, perhaps also due to time constraints. Some of the participants did, however, provide some interesting insights on the topic. The representative from the Dutch labour union centre FNV pointed out that policymakers sometimes forget that 80% of learning happens in the workplace and that this notion should be used better in the form of on-the-job training and providing employees with the resources and autonomy to organise this. The representative from the Norwegian labour union Fellesforbundet spoke along the same lines, pointing out that a classroom is outside the comfort zone of many workers and that we should make the barriers as low as possible for them by connecting the education and the learning environment to their work environment. The representatives from the Dutch government also point out that workers with a high risk of automation tend to be people with lower education who have had the same job for a long time. They find that these people are hard to stimulate for re-education.

I also asked the participants what kinds of skills they believe will be most important in the future labour market. Every participant seems to agree that technical skills, especially ICT skills, will be most important. However, the Norwegian labour union centre LO points out that there is a large-scale transformation of the labour market to the service sector, where soft skills<sup>26</sup> are more important. This is supported by statements from the representatives from the Dutch government, who believe that soft skills cannot be automated and will therefore be very important in the future labour market. This would imply, as pointed out by the LO, that there is not necessarily a need for up-skilling or higher education, but perhaps it is more about re-skilling and re-education.

## **Technological unemployment and Artificial Intelligence**

None of the social partners brought up the potential risk of increased levels of unemployment due to technological automation. When I brought it up, there was a general agreement among the participants in both countries that the current digital revolution will also create many new jobs, compensating for the job displacing effects of these technologies. The participants also seem to agree that jobs are transforming, especially towards the service sector, rather than disappearing. Several participants also used the analogy of the previous Industrial Revolution, where the total amount of jobs increased even though many jobs disappeared.

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<sup>26</sup> In this context: social and (inter)personal skills.

The representative from the Norwegian labour union Fellesforbundet did point out that there has been increasing job displacement among industrial workers for decades, but proceeded to say that they are more worried about union density than unemployment. This is contrasted by the statements from the Norwegian government and employers' association NHO that job losses are actually very low in Norway. The representative from the Dutch labour union centre FNV stated that the Netherlands invests a lot of money in streamlining business processes, which especially puts middle management jobs at risk of automation. However, their primary concern is with quality of work rather than unemployment, as they believe the digital transformation often leads to reduced autonomy for workers. Later this representative also observed that there is a common bias among workers that their own jobs are less susceptible to automation than the jobs of others. The representatives from the employers' associations in both countries pointed out the importance of using the opportunities these technologies offer to remain internationally competitive, even if it carries social risks.

Technological unemployment does not seem to be perceived much as a threat, neither in the Netherlands nor in Norway. Each of the Dutch participants also pointed out that the future is unpredictable, and proceeded to use this as an argument for optimism. It is not clear to me why they choose to assume a better outcome if the future is indeed unpredictable. Also, I think it is important to point out that most of the participants in both countries were only speaking with short- to medium-term perspectives, while long-term perspectives and plans were often lacking.

The participants had not much to say about the topic of Artificial Intelligence. Although it is hard to make reliable predictions, the ability of intelligent technologies to automate *non-routine work* is historically unprecedented. For this reason, I asked every participant about their views on the influence of Artificial Intelligence technology on the automation of labour. The representative from the Norwegian labour union Fellesforbundet pointed out that Artificial Intelligence technology plays a big part in the development of "Industry 4.0", the new automation of manufacturing and industries with the use of smart technology (Moore, 2019). Apart from this, none of the participants had much to say about it. Perhaps this is also because my participants were not working with this topic specifically.

## **Theme 2: Social security**

### **Collective bargaining agreements and social security**

The importance of productive and successful collective bargaining in dealing with technological changes was consistently brought up by each Norwegian social partner, whereas in the Netherlands, only the labour union centre FNV brought up a similar point. The representative from FNV points out that education policies are a commonly proposed solution to many problems by Dutch social partners, but FNV believes this is not enough and that regulation and collective agreements are needed to warrant the social security of workers and to prevent the quality of work from declining. This representative repeated the importance of collective agreements several times in later answers. This is somewhat contrasted by the representative from the Dutch employers' association VNO-NCW, who asserts that, in order to increase resilience and flexibility in the labour market, collective agreements will need to change in the sense that they must be less uniform and based on solidarity, and instead be more focused on the individual. According to this representative, even the way we look at jobs, with every worker having one single defined function, needs to become more flexible.

The representatives from the Norwegian government, labour union Fellesforbundet and employers' association NHO all stressed the importance of a continued focus on coordinated collective wage bargaining, as their Nordic model very much depends on it. These same representatives also believe it is important that organisation rates among workers but also among employers are high, as it has been declining in certain sectors.

The representative from the Norwegian labour union centre LO provided some interesting insights into the effects of the collective bargaining and other features of the Nordic model, as described in chapter 1, on the social security of workers in Norway and how it relates to technological change. The representative notes that the coordinated wage bargaining in Norway, as opposed to wages being a result of market forces, has resulted in a compressed wage distribution (i.e. relatively smaller wage differentials than in other countries), which in itself is a driving force for digitalisation. Low skilled work being relatively expensive and high skilled work being relatively cheap gives the firms incentives to invest in new technology. This, in turn, pushes firms to invest in skills to match the high productivity level from high investment in technology. The LO representative said that the collective bargaining system is also a reason for why the gains and burdens of new technologies are more fairly distributed than in many other countries and that the Norwegian labour market has a relatively high restructuring capacity due to the tripartite cooperation and high coordination in wage

bargaining. For these reasons, the representative concludes, technological developments are reason to strengthen the special features of the Nordic model, not to change it.

## **Flexible forms of labour**

Participants in both countries expressed that flexible forms of labour is an area in which technological changes are starting to cause some issues. The Dutch government and labour union centre FNV both brought up the fact that there is a large share of flexible workers in the Netherlands, whereas the representative from the Norwegian government claimed that the share of fixed workers in Norway is high and has been stable. The representative from the Dutch labour union centre FNV points out that the problems are not with flexible forms of labour itself, but that we should instead “combat the *exploitation* of flexible forms of labour”, adding that the need for flexibility can also be met with other methods (naming the example of “flex-time” work schedules). The representatives from the Dutch government explain that the government’s strategy is to make flexible forms of labour less flexible while making fixed forms of labour less fixed, leading to less difference between the two. They experience this as challenging, since the permanent contract is a sensitive subject for social partners which has made it difficult to change. They also believe that it is important to further investigate why workers choose flexible labour, as there might be solutions in the incentive system. The Dutch social partners collectively agree that the *Commission on Labour Regulation*<sup>27</sup>, as described in chapter 1, falls short in its problem analysis and proposed solutions.

I also asked every participant about their views on the platform economy. Every participant agrees that the platform economy is politically viewed as something bigger than it currently is, which conforms with the data from chapter 1 indicating that only a marginal percentage of the working population is active in it. The representative from the Dutch labour union believes that problems with the platform economy are more about the broader lack of regulations regarding social security than it is about abuse arising from technologies. The representative from the Dutch employers’ association VNO-NCW predicts that the platforms will also become relevant internally for larger companies, which can use the platforms to organise tasks among employees. This is in line with their above-mentioned belief that the way we look at defining jobs needs to become more flexible.

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<sup>27</sup> An independent commission appointed by the government (Dutch: ‘*Commissie Regulering van Werk*’), which was tasked with investigating current labour regulations and their suitability for the future, advocates for increasing fixed forms of employment.

## **Labour market polarisation**

The literature described in chapter 1 led me to include labour market polarisation in the list of interview topics. However, most participants did not have much to say about it. The only two participants who had some things to say about it were the representatives from the Norwegian labour union Fellesforbundet and labour union centre LO. The representative from LO pointed out that the combination of new technology, high levels of immigration and low organisation rates in some parts of the labour market has led to increased labour market polarisation and stagnating wage growth in the low-skill parts of the labour market. However, this participant was not too worried about it as the polarisation in Norway is still relatively much lower than in many other countries. The representative from Fellesforbundet made a similar observation regarding the combination of technology and immigration of labour, since it is often more attractive for employers to get cheap labour from abroad rather than further educating their core staff. According to the Fellesforbundet representative, this could lead to workers becoming outdated, which further increases the dependency on skilled labour from other countries. The immigration of skilled labour has not been a focus of this thesis, as I only focused on the offshoring of certain business processes in chapter 1. This is a valuable insight, but the fact that only Norwegian representatives brought this up suggests that it is more of a factor in Norway than in the Netherlands.

## **Quality of work**

Although it was not initially one of my interview questions, the quality of work is a topic brought up regularly by participants and was later consequently adapted into the interview guide. The representatives from the Norwegian labour union Fellesforbundet and the Dutch labour union centre FNV agreed that the technological changes in the labour market often have positive effects on the quality of work. They state that it is often the jobs with poor working conditions (for example, physically demanding, dirty, uninteresting or unsafe jobs) that are more susceptible to automation. However, the representative from the FNV was not entirely positive and pointed out that there is also a more complicated aspect to it since some of these displaced workers cannot be retrained, which is a difficult problem to solve. The representatives from the Dutch government agreed that the quality of work can be impacted in both positive and negative ways, such as reduced autonomy for workers.

The equal distribution of benefits from new technologies is another topic that was brought up by each of the social partners in the Netherlands. It is termed “*broad welfare*”<sup>28</sup> and seems to be a more recent development that the Dutch social partners are working on. Even the representative from the Dutch employers’ association VNO-NCW noted that their organisation changed course earlier this year by making broad welfare their new priority for the first time<sup>29</sup>. One explanation for this trend can be found in the interview with the representative from the Norwegian labour union centre LO, who pointed out that the Nordic model makes for a system where the gains and burdens of new technologies are divided more evenly. Meanwhile, a sentiment I noticed with all of the Dutch interview participants is that the current centre-right conservative liberal government (which has been governing since 2010) generally favours corporations in their policies and that there is growing dissatisfaction among citizens towards this. The Dutch labour union centre FNV also confirmed this with surveys among their members, who ranked fair distribution of productivity gains as one of their highest priorities. This public dissatisfaction would explain why the Dutch social partners have made broad welfare a new focus for future policy.

### **Theme 3: Policy responses**

In this section, I will describe some of the policy responses to the transformation of the labour market as brought up by the participants during the interviews. I will mainly focus on the more general policy concepts and directions, as the more specific policies have been reviewed in chapter 4.

While the governments and labour unions in both countries believe carefulness is warranted, both employers’ associations prioritised the opportunities coming from technological changes, seemingly regardless of the social risks, due to the importance of remaining internationally competitive. As the representative from the Norwegian employers’ association puts it:

*“Our answer would be that there is not really an alternative to being part of the innovation and starting to use new technologies. Not only that, but also to try to have as an ambition that Norway should have a leading role in some of these areas, and try to use the new business opportunities that arise in the digitalised economy. [...] You can’t*

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<sup>28</sup> Dutch: “*Brede welvaart*”

<sup>29</sup> <https://www.vno-ncw.nl/onze-nieuwe-koers>

*really stop those developments, so Norway and Norwegian enterprises should definitely be a part of it in order to be able to compete [internationally].”*

*- Representative from the Norwegian employers' association NHO*

The representatives from the Dutch and Norwegian governments also brought up the importance of looking at technological change and automation in relation to other trends, such as ageing, globalisation, immigration and labour offshoring. This point was not brought up by any of the labour unions or employers' associations in either country. The Dutch government argues that this is reason to be careful with developing specific policies for specific sectors, since these trends make the future hard to predict. Instead, they favour an approach of providing more 'generic' measures to facilitate lifelong learning.

Regarding flexible forms of labour, the Dutch government and labour union centre FNV expressed concerns and suggested it is best to be careful, which is contrasted by the Dutch employers' association VNO-NCW, which promotes increased flexibility and individuality over solidarity in terms of labour.

## **Education and competence policies**

Every participant in both Norway and the Netherlands agreed that the focus of future labour market policy should be on resilience as well as adaptability and flexibility of the labour market. All of them also agreed that education and competence policies play a key part in doing so. However, the specifics in terms of implementation were not the same across participants. The labour unions emphasise the importance of companies investing in their workers' skills while warranting the wages and autonomy of workers facing an education process, and the governments in both countries agree that companies should have some degree of responsibility in keeping their workers' competencies relevant. The representative from the Norwegian labour union Fellesforbundet believes the scope of lifelong learning policies must be on blue-collar workers<sup>30</sup> in order to have reform that includes as many workers as possible, but adds that Fellesforbundet believes lifelong learning should be a universal right:

*“We want the right to further to education to be a right by law, so that every worker, no matter how old they are, no matter what kind of skills they have from before, would have a right to get further education to be more competitive, and they should have the right to do that without losing wages. Maybe they will have to invest some spare time, but they*

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<sup>30</sup> Workers performing manual labour, both skilled and unskilled.

*should not lose wages. This is a very important issue, also in collective bargaining, and it's very hard, because employers want to have full control of who they give the possibility for further education, but also because of our members, they are sometimes afraid of taking further education."*

*- Representative from the Norwegian labour union Fellesforbundet*

The representative from Fellesforbundet also thinks that Norway should make the technical VET education more attractive for workers, for example by reducing barriers and giving certification a broader platform so that it is easier for workers to transition to other sectors. This representative also mentioned that the policymakers working on a national level in Norway often do not have knowledge or interest in how the vocation education system works. In the interviews, only the representatives from the Dutch labour union centre FNV and Norwegian labour union Fellesforbundet argued for implementation of education on the work-floor rather than in a classroom. The representative from FNV also believes that the Netherlands needs more regulation (besides education) as well as more dialogue between employers and employees on the subject of education, and thinks that collective bargaining is often more focused on solving consequences of digitalisation rather than addressing the root of the problem. Lastly, I found it noticeable that the participants, with the exception of the representative from the Norwegian labour union Fellesforbundet, had not very little to say about changes in education policy for children, as compared to adult education policy.

### **The Nordic model**

A common element in the responses of the Norwegian participants involved reinforcing the special features of the Norwegian labour market and the Nordic model, especially focusing on high organisation rates and coordinated collective bargaining. In contrast, this was only emphasised in the Netherlands by the representative from the labour union centre FNV, who believes that the Netherlands could benefit from a system more similar to the Nordic model. This will be elaborated on further in the next section. The most noticeable common element among the responses of the Dutch participants was their new focus on 'broad welfare' and quality of work, as described in the previous section.

## Theme 4: Industrial relations and politics

### The roles of each social partner

The technological changes in the labour market come with new problems and responsibilities, which is why it may be good to revisit the roles of the social partners and take a look at which partners is best equipped for which responsibility. For this reason, I asked every participant what they think each social partner's role should be in dealing with technological changes in the labour market. Most of the participants had no trouble describing their own role in this but found it harder to say something about what the other social partners' roles should be.

The representative from the Norwegian labour union Fellesforbundet believes that while employers need to provide workers with the opportunity for education, the labour unions are essential in motivating their members to use these opportunities. The Dutch labour union centre FNV said something along the same lines, adding that labour unions should raise awareness among workers on the importance of education, especially since workers tend to believe that their own work cannot change or be automated. The representative from Fellesforbundet also argues that employers' associations should increase companies' understanding of how investing in further education of employees is in their own benefit, as many companies are too focused on short-term economics. In Norway, the representatives from the government and the labour union centre LO agree that the Norwegian government has a large fiscal responsibility in labour market policies. As the representative from LO puts it:

*“Here the firms are responsible for equipping the workers with the needed competence to meet these challenges. The branches discuss the needs of competencies, and then get money from the government to equip the workers with the skills that are needed. So the driving force for up-skilling the workers is in the labour market, but the government is contributing financially.”*

*- Representative from the Norwegian labour union centre LO*

The representatives from the Dutch government also believe that lifelong learning should be the responsibility of companies, as they better understand what companies need than the other social partners.

The Dutch employers' association VNO-NCW believes that employers' associations can increase the often lacking understanding of social partners about the internal workings and needs of companies, as well as how these technological developments will positively impact the 'broad welfare'. The Dutch government pointed out that they depend on employers'

associations to receive signals from companies, while labour unions can help them understand the needs of workers. The representative from the Dutch employers' association VNO-NCW agrees but thinks that unions need to become more involved with their members in the form of hands-on career support. The representative from the Dutch labour union centre FNV, who was interviewed at a later point, disagrees with that statement, saying that they have high involvement with their members, and their approval ratings have been stable for a long time. The representative thinks that the ageing of their member population is a more significant issue, with not enough influx of new members to compensate for this.

### **Changes and path dependence**

After asking the participants about their thoughts on the industrial relations in their country, I asked them whether they think this has been changing and why, aiming to find out more about changes and possibly whether there is a factor of path dependence. The Dutch government and employers association VNO-NCW did not point out any major changes, but the representative from the labour union centre FNV did point out that things have changed significantly. The representative notes that there was more productive collaboration and inclusion of the labour unions during the previous government cabinet led by the Dutch Labour Party, which ended in 2010. Since then, the representative claims that the employers' associations have had the strategic advantage due to the current centre-right conservative liberal government, but did also note that the situation has recently started to improve again with the introduction of the European Pillar of Social Rights<sup>31</sup> as well as new management in their own organisation and the employers' association VNO-NCW.

On the Norwegian side, the representative from the government said that the Norwegian government carries a lot of the economic risks and responsibilities concerning the labour market and social security and often 'pays for solutions'. The representative says that changing this and placing more responsibilities on the companies will be challenging because of political traditions regarding the Norwegian welfare state, as well as the presence of oil revenues. The representative from the Norwegian labour union centre LO stated that the tripartite cooperation has always been good but has recently been changing in a few ways. For example, there is more need for cooperative committees to help interpretations of an increasing flow of information and informal cooperation has been improving, especially with the need for daily cooperation during the COVID-19 pandemic. The representative from the Norwegian employers'

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<sup>31</sup> A plan initiated by the European Commission in 2017 to promote social rights on a European level (<https://www.epr.eu/what-we-do/policy-analysis/european-pillar-of-social-rights/>)

association NHO has not noted any changes to their collaboration with social partners and feels it has always been good. The representative from the Norwegian labour union Fellesforbundet pointed out that education and competence reform policies have been challenging because labour unions traditionally work for better working conditions, but there are no traditions to work on upgrading skills and dealing with new technology.

### **The Nordic model**

A consistent subject in the answers from social partners in Norway was the references to the Nordic model, as described in chapter 1, which participants generally perceived as a very positive aspect of the Norwegian system. Every participant agreed that the Norwegian system is very much built on trust and mutual respect between social partners. The Norwegian participants attributed many of the positive results in their country to the Nordic model. Even the representative from the Norwegian employers' association NHO stated that the Nordic model works well for Norwegian enterprises, even though the corporate interests of their members are often not aligned with what the other partners want and what is best for society. The only participant who spoke critically about the Nordic model at all was the representative from Fellesforbundet, who stated that there is a lot of pride in the Nordic model (which I indeed noticed in my interviews with the other Norwegian participants) and claimed that the Norwegian partners sometimes think that Norway is doing much better than they actually are.

On the Dutch side, the representative from the labour union centre FNV expressed that the organisation rates would have been higher if the unions had a role in the provision of social security, like in some Scandinavian countries. The representative also thinks that the Dutch social partners would have been able to focus on more productive things if their system had been closer to the Nordic model. The representatives from the Dutch government indirectly agreed, noting that the Dutch system can be frustrating as it is based on compromise between conflicting interests, which often leads to policy issues not progressing or policy solutions having to drastically change in order to pass. The only sentiment similar to this on the Norwegian side was expressed by the representative of the employers' association NHO, who pointed out that the Nordic model is overall very positive but can be slow due to the need for consensus. Every other answer from Norwegian participants regarding the Nordic model was positive.

## Politics

Changes in the political ecosystem are another important factor brought up regularly by participants in both Norway and the Netherlands. Overall, all of the participants seem to agree that labour unions have a strategic advantage with left-wing governments, and employers' associations have a strategic advantage with right-wing governments. Furthermore, the representative from the Norwegian labour union centre LO expressed that the periodic change of government through elections also affects cooperation between social partners, and the representative from the Norwegian labour union Fellesforbundet also adds:

*“When it comes to politics, they are changing all the time, as politicians do. In all these years I have worked with education and skills, I think I have worked with six or seven different ministers of education, so it is not really easy to build something in the long-term, it's more short-term. [...] Of course we have, at least on a national level, the tripartite cooperation, but it's not so systematic and visionary, it's more from day to day, and I think that is a challenge.”*

*- Representative from the Norwegian labour union Fellesforbundet*

The representative from LO pointed out that this is another reason to ensure a fair distribution of productivity gains, because inequality, especially combined with social media echo chambers<sup>32</sup>, tends to fuel populist politics, which can be dangerous.

In the Netherlands, the representatives from the government and the employers' association feel that inclusion of and collaboration between social partners is good. Interestingly, the representative from the labour union centre FNV actually feels that, more or less since the current conservative government started in 2010, they are often not included in policy processes unless they formally have to be included.

Lastly, the representative from the Dutch labour union centre FNV observes that regulation in the Netherlands is rather fragmented by sector, and the representative from the Norwegian labour union Fellesforbundet makes a similar observation in Norway. This representative thinks this is positive in the sense that different sectors have different needs, but adds that the municipalities and branches often do not work together very well in Norway. This representative also noted that conflicts are more common on a local level than the central, national level where cooperation is good and without many conflicts.

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<sup>32</sup> In this context: beliefs of voters being amplified in a digital environment where there is little exposure to other beliefs.

# Chapter 6: Discussion and conclusion

I started this thesis with the goal of looking into how social partners in Norway and the Netherlands frame technology-related challenges in the labour market and how they think we should respond. I also aimed to take differences in institutions and industrial relations into account. Based on the results from the policy review (chapter 4) and interviews (chapter 5), I would say that I have developed some interesting insights into these research questions.

First, I think it is important to note that there is much overall agreement between different social partners as well as between the two countries on just about every subject. The rough lines are mostly similar for every stakeholder, and the differences can mostly be found in more minor aspects such as policy implementation.

Another interesting way in which participants sometimes differed was in their interpretations of data and predictions for the future. This not only shows the uncertainty within the statistics surrounding this topic, especially in the extrapolation of these numbers when making predictions, but it also shows the ability of different stakeholders to cherry-pick data to support their own interests. This is not to say that this happens through a conscious decision to do so, it can perhaps be explained with a normal degree of confirmation bias. However, it does show the sometimes divergent motives of different stakeholders, who seem to act as strategic actors in these situations. This aligns with the concept of rational choice institutionalism, as discussed in chapter 2.

Regarding the technological changes in labour, the social partners in both countries seem to be aware of the potential social security risks and are involved with the development of policy solutions. They seem to be more concerned with the *changing* of jobs, specifically in terms of new skills and flexible forms of labour, than the *disappearance* of jobs. This explains their primary focus on education and competence in terms of their policy responses. Especially the topic of lifelong learning and adult education is perceived as an important solution in both countries.

A closer look into differences in institutions and industrial relations between the two countries revealed that Norwegian social partners are more able to cooperate effectively on an institutional level than the social partners in the Netherlands, which they typically attribute to their use of the Nordic model. Regarding the Nordic model, and especially the role of *trust* in

the Norwegian system, I believe there are some interesting conclusions to be made. Although the Dutch social partners also have relatively strong tripartite cooperation, there is a noticeable difference in the general attitude towards it. When comparing the interview participants from Norway and the Netherlands, it becomes clear that the combination of strong tripartite cooperation with mutual trust and respect allows for a country to work towards the greater good of its society more effectively. When asked how they deal with conflicts of interest, even the Norwegian employers' association NHO said that they believe the Nordic model works for everyone (including the enterprises) because of the mutual trust and respect in the system. Although trust would be helpful, it seems to me that the Dutch system is made to be able to work without it, whereas the Norwegian system very much depends on it. When asked, the interview participants agreed with this observation. For example, when I asked the representative from the NHO if this does not pose any risks, the response was that these risks are not large because of the mutual understanding in Norway that the system does not work if anyone abuses that trust.

When making negative statements about the Dutch system of “compromises”, the representatives from the Dutch government used the term *poldermodel*. As described in chapter 4, the poldermodel is the Dutch consensus model for tripartite cooperation, which bears some strong similarities with the Nordic model. This more negative perception of the Dutch poldermodel, which the other Dutch participants also conveyed at times, suggests that the poldermodel is, in practice, more associated with compromise than consensus, and is often perceived as very slow and time-consuming. This definitely contrasts with the Norwegian participants' overtly positive and often proud perceptions of the Nordic, even though the two models are not that different on paper. I have not been able to find an explanation for this in the literature or the interview data, but I would assume the negative perception of the Dutch has been shaped by negative experiences accumulated over time. It is interesting though, to see this contrast between one of my policy findings in chapter 4 and the real-life perception of it by participants in chapter 5.

## **Recommendations**

My recommendations based on this thesis will first and foremost stem from the noticeable lack of long-term perspectives among the policymakers I interviewed. Due to the exponential nature of the development of these technologies, bigger advancements can be expected every year,

and the more extreme outcomes which we think to be in the far future are likely closer than we intuitively predict.

As such, I also recommend future research to look into the *long-term* probability of automation of jobs requiring social, personal, and creative skills. Many of the policymakers' arguments in this thesis depend on the assumption that these jobs can simply *never* be automated, so if that assumption is wrong, or even uncertain, I believe it warrants further research and thinking about policies to prepare for a different possible outcome. I think it may be interesting to compare the predictions of politicians and policymakers in terms of what will be possible (and when) with the same predictions from the engineers and programmers developing the technologies such as Artificial Intelligence and robotics. Artificial Intelligence did not seem to be a serious topic of concern during the interviews, even though the development and impact of this technology is growing exponentially. I find it really concerning that politicians and policymakers do not seem to have much understanding of these incredibly impactful technologies, not even on a conceptual level.

Additionally, I suggest further research to investigate the gender perspective, as I did not have the time to include this in my thesis. As the gender perspective becomes more valued around the world, inequalities between genders are becoming more evident. As such, it would not surprise me if digitalisation and automation do not affect different genders in the labour market in the same way or with the same magnitude. Further research into this is important so that social policy solutions can be adjusted to reduce inequality even better.

Lastly, and more generally, I hope that policymakers, not just in Norway and the Netherlands, can learn from some of the conclusions of this thesis. I believe that the main lessons in terms of preparing for the digitalisation and automation of jobs are to develop *adequate education and competence policies*, especially focusing on lifelong learning and adult education, and to *reinforce effective cooperation between social partners*.

# References

- ABU. (2020). *Whitepaper Platformwerk in 2020: De tussenstand*. Lijnden: Algemene Bond Uitzendondernemingen (ABU). Retrieved from <https://www.abu.nl/app/uploads/2020/03/Whitepaper-Platformwerk-in-2020-de-tussenstand.pdf>
- Acemoglu, D., & Autor, D. (2011). Skills, Tasks and Technologies: Implications for Employment and Earnings. In O. Ashenfelter & D. Card, *Handbook of Labor Economics, Volume 4B*. Elsevier B.V.
- Alsos, K., Jesnes, K., Øistad, B., & Nesheim, T. (2017). *Når sjefen er en app*. Fafo. Retrieved from <https://www.fafo.no/images/pub/2017/20649.pdf>
- Andersen, T., Holmström, B., Honkapohja, S., Korkman, S., Söderström, H., & Vartiainen, J. (2007). *The Nordic model: Embracing globalization and sharing risks*. Taloustieto Oy.
- Arts, W., & Gelissen, J. (2002). Three worlds of welfare capitalism or more? A state-of-the-art report. *Journal Of European Social Policy*, 12(2), 137-158. <https://doi.org/10.1177/0952872002012002114>
- Autor, D., & Dorn, D. (2013). The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market. *American Economic Review*, 103(5), 1553-1597. <https://doi.org/10.1257/aer.103.5.1553>
- Bartlett, L., & Vavrus, F. (2016). *Rethinking case study research: A comparative approach* (1st ed.). Routledge, Taylor & Francis Group.
- Bennett, A. (2007). Case Study Methods: Design, Use and Comparative Advantages. In D. Sprinz & Y. Nahmias-Wolinsky, *Models, Numbers, and Cases: Methods for Studying International Relations*. The University of Michigan Press.
- Braun, V., & Clarke, V. (2008). Using thematic analysis in psychology. *Qualitative Research In Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- CBS. (2019a). *ICT, kennis en economie 2019*. Centraal Bureau voor de Statistiek (CBS). Retrieved from <https://www.cbs.nl/nl-nl/publicatie/2019/42/ict-kennis-en-economie-2019>
- CBS. (2019b). *Kwart bedrijven ervaart personeelstekort*. CBS. Retrieved 10 August 2021, from <https://www.cbs.nl/nl-nl/nieuws/2019/33/kwart-bedrijven-ervaart-personeelstekort>.

- CBS. (2020). *ICT, kennis en economie 2020*. Centraal Bureau voor de Statistiek (CBS). Retrieved from <https://www.cbs.nl/nl-nl/publicatie/2020/42/ict-kennis-en-economie-2020>
- cbs.nl. *Wat zijn flexwerkers?*. CBS. Retrieved 10 August 2021, from <https://www.cbs.nl/nl-nl/dossier/dossier-flexwerk/hoofdcategorieen/wat-zijn-flexwerkers->.
- Commission of the European Communities. (2006). *Adult learning: It is never too late to learn*. Brussels. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52006DC0614&from=EN>
- Crouch, C. (2001). Welfare state regimes and industrial relations systems: the questionable role of path dependency theory. In B. Ebbinghaus & P. Manow, *Comparing Welfare Capitalism: Social policy and political economy in Europe, Japan and the USA*. Routledge.
- Danuser, Y., & Kendzia, M. (2019). Technological Advances and the Changing Nature of Work: Deriving a Future Skills Set. *Advances In Applied Sociology*, 09(10), 463-477. <https://doi.org/10.4236/aasoci.2019.910034>
- DESI Norway. (2020). *Digital Economy and Society Index (DESI) 2020 Norway*. European Commission. Retrieved from <https://digital-strategy.ec.europa.eu/en/policies/desi-norway>
- DESI The Netherlands. (2020). *Digital Economy and Society Index (DESI) 2020 The Netherlands*. European Commission. Retrieved from <https://digital-strategy.ec.europa.eu/en/policies/desi-netherlands>
- Dobbin, F., Simmons, B., & Garrett, G. (2007). The Global Diffusion of Public Policies: Social Construction, Coercion, Competition, or Learning?. *Annual Review Of Sociology*, 33(1), 449-472. <https://doi.org/10.1146/annurev.soc.33.090106.142507>
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Princeton University Press.
- Esping-Andersen, G. (1999). *Social Foundations of Postindustrial Economies*. Oxford University Press.
- Eurofound. (2009a). *The Netherlands: Flexicurity and industrial relations*. EurWORK. Retrieved 10 August 2021, from <https://www.eurofound.europa.eu/publications/report/2009/the-netherlands-flexicurity-and-industrial-relations>.
- Eurofound. (2009b). *Trade unions*. EurWORK. Retrieved 10 August 2021, from <https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/trade-unions>.

- Eurofound. (2013). *Flexicurity*. EurWORK. Retrieved 10 August 2021, from <https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/flexicurity>.
- Eurofound. (2016). *ERM annual report 2016: Globalisation slowdown? Recent evidence of offshoring and reshoring in Europe*. Luxembourg: Publications Office of the European Union. Retrieved from [http://publications.europa.eu/resource/cellar/ecc4031a-e921-11e6-ad7c-01aa75ed71a1.0001.02/DOC\\_2](http://publications.europa.eu/resource/cellar/ecc4031a-e921-11e6-ad7c-01aa75ed71a1.0001.02/DOC_2)
- fo.no. *Hva er frontfagsmodellen og hva betyr den for min lønn?*. fo.no. Retrieved 10 August 2021, from <https://www.fo.no/lonn-faq-liste/hva-er-frontfagsmodellen-og-hva-betyr-den-for-min-lonn-article7210-1262.html>.
- Frey, C., & Osborne, M. (2017). The future of employment: How susceptible are jobs to computerisation?. *Technological Forecasting And Social Change*, *114*, 254-280. <https://doi.org/10.1016/j.techfore.2016.08.019>
- Ghellab, Y., & Vaughan-Whitehead, D. (2020). *Enhancing social partners' and social dialogue's roles and capacity in the new world of work*. International Labour Organisation (ILO). Retrieved from [https://www.ilo.org/travail/eventsandmeetings/WCMS\\_738470/lang--en/index.htm](https://www.ilo.org/travail/eventsandmeetings/WCMS_738470/lang--en/index.htm)
- Gilardi, F., & Wasserfallen, F. (2019). The politics of policy diffusion. *European Journal Of Political Research*, *58*(4), 1245-1256. <https://doi.org/10.1111/1475-6765.12326>
- Gingrich, J. (2019). Did State Responses to Automation Matter for Voters?. *Research & Politics*, *6*(1), 205316801983274. <https://doi.org/10.1177/2053168019832745>
- Goodin, R. (2001). Work and Welfare: Towards a Post-productivist Welfare Regime. *British Journal Of Political Science*, *31*(01), 13-39. <https://doi.org/10.1017/s0007123401000023>
- Goos, M., Manning, A., & Salomons, A. (2014). Explaining Job Polarization: Routine-Biased Technological Change and Offshoring. *American Economic Review*, *104*(8), 2509-2526. <https://doi.org/10.1257/aer.104.8.2509>
- Grote, M. (2015). What could the 'longue durée' mean for the history of modern sciences?. <https://halshs.archives-ouvertes.fr/halshs-01171257>.
- Guschanski, A., & Onaran, Ö. (2021). The decline in the wage share: falling bargaining power of labour or technological progress? Industry-level evidence from the OECD. *Socio-Economic Review*. <https://doi.org/10.1093/ser/mwaa031>
- Gustavsen, B. (2011). The Nordic Model of Work Organization. *Journal Of The Knowledge Economy*, *2*(4), 463-480. <https://doi.org/10.1007/s13132-011-0064-5>

- Hall, P. (1993). Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain. *Comparative Politics*, 25(3), 275.  
<https://doi.org/10.2307/422246>
- Hall, P., & Taylor, R. (1996). Political Science and the Three New Institutionalisms. *Political Studies*, 44(5), 936-957. <https://doi.org/10.1111/j.1467-9248.1996.tb00343.x>
- Hall, P., & Thelen, K. (2008). Institutional change in varieties of capitalism. *Socio-Economic Review*, 7(1), 7-34. <https://doi.org/10.1093/ser/mwn020>
- Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). Qualitative research methods: when to use them and how to judge them. *Human Reproduction*, 31(3), 498-501.  
<https://doi.org/10.1093/humrep/dev334>
- Im, Z., Mayer, N., Palier, B., & Rovny, J. (2019). The “losers of automation”: A reservoir of votes for the radical right?. *Research & Politics*, 6(1), 205316801882239.  
<https://doi.org/10.1177/2053168018822395>
- Kind, M. (2020). *Polarization of the labour market: are middle-skill jobs disappearing?*. Division for Inclusive Social Development (DISD) of the United Nations Department of Economic and Social Affairs (DESA). Retrieved from  
<https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/03/SDBrief10-Polarization-of-the-Labour-Market.pdf>
- Koelsch, L. (2013). Reconceptualizing the Member Check Interview. *International Journal Of Qualitative Methods*, 12(1), 168-179. <https://doi.org/10.1177/160940691301200105>
- Kommunal- og moderniseringsdepartementet. (2016). *Digital agenda for Norge: IKT for en enklere hverdag og økt produktivitet*. Kommunal- og moderniseringsdepartementet. Retrieved from  
<https://www.regjeringen.no/contentassets/fe3e34b866034b82b9c623c5cec39823/no/pdfs/stm201520160027000dddpdfs.pdf>
- Kommunal- og moderniseringsdepartementet. (2020). *Nasjonal strategi for kunstig intelligens*. Kommunal- og moderniseringsdepartementet. Retrieved from  
<https://www.regjeringen.no/contentassets/1febbbb2c4fd4b7d92c67ddd353b6ae8/no/pdfs/ki-strategi.pdf>
- Kuipers, S. (2015). *Het begin van het moderne Nederlandse poldermodel: De Hoge Raad van Arbeid van 1920 als eerste manifestatie van het Nederlandse tripartiete sociaaleconomische overlegmodel?*. Nijmegen: Radboud Universiteit Nijmegen. Retrieved from  
[https://www.academia.edu/11843938/Het\\_begin\\_van\\_het\\_moderne\\_Nederlandse\\_poldermodel](https://www.academia.edu/11843938/Het_begin_van_het_moderne_Nederlandse_poldermodel)

- Kurer, T., & Gallego, A. (2019). Distributional consequences of technological change: Worker-level evidence. *Research & Politics*, 6(1), 205316801882214. <https://doi.org/10.1177/2053168018822142>
- Kurer, T., & Palier, B. (2019). Shrinking and shouting: the political revolt of the declining middle in times of employment polarization. *Research & Politics*, 6(1), 205316801983116. <https://doi.org/10.1177/2053168019831164>
- Lo Iacono, V., Symonds, P., & Brown, D. (2016). Skype as a Tool for Qualitative Research Interviews. *Sociological Research Online*, 21(2), 103-117. <https://doi.org/10.5153/sro.3952>
- Mahoney, J., & Thelen, K. (2009). A Theory of Gradual Institutional Change. In J. Mahoney & K. Thelen, *Explaining Institutional Change: Ambiguity, Agency, and Power*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511806414.003>.
- Meyer, B., & Biegert, T. (2019). The conditional effect of technological change on collective bargaining coverage. *Research & Politics*, 6(1), 205316801882395. <https://doi.org/10.1177/2053168018823957>
- Mikecz, R. (2012). Interviewing Elites: Addressing Methodological Issues. *Qualitative Inquiry*, 18(6), 482-493. <https://doi.org/10.1177/1077800412442818>
- Miller, C. (2016). The Long-Term Jobs Killer Is Not China. It's Automation. *The New York Times*. Retrieved 10 August 2021, from <https://www.nytimes.com/2016/12/21/upshot/the-long-term-jobs-killer-is-not-china-its-automation.html>.
- Mondada, L. (2007). Commentary: transcript variations and the indexicality of transcribing practices. *Discourse Studies*, 9(6), 809-821. <https://doi.org/10.1177/1461445607082581>
- Moore, M. (2019). *What is Industry 4.0? Everything you need to know*. TechRadar. Retrieved 10 August 2021, from <https://www.techradar.com/news/what-is-industry-40-everything-you-need-to-know>.
- North, D. (1990). *Institutions, institutional change, and economic performance*. Cambridge University Press.
- NRK. (2016). LO urolig for delingsøkonomi. Retrieved 10 August 2021, from <https://www.nrk.no/osloogviken/lo--urolig-for-delingsokonomi-1.12837083>.
- OECD. (2013). *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*. Paris: OECD Publishing. Retrieved from <https://doi.org/10.1787/9789264204256-en>
- OECD. (2016). *"Skills for a Digital World", Policy Brief on The Future of Work*. Paris: OECD Publishing. Retrieved from <https://www.oecd.org/els/emp/Skills-for-a-Digital-World.pdf>

- OECD. (2019). *OECD Employment Outlook 2019: The Future of Work*. Paris: OECD Publishing. Retrieved from <https://doi.org/10.1787/9ee00155-en>
- Parolin, Z. (2020). Automation, Occupational Earnings Trends, and the Moderating Role of Organized Labor. *Social Forces*, 99(3). <https://doi.org/10.1093/sf/soaa032>
- Paulus, T., Lester, J., & Dempster, P. (2014). Transcribing Audio and Video Data. *Digital Tools For Qualitative Research*, 93-113. <https://doi.org/10.4135/9781473957671.n6>
- Pelgrim, C. (2020). Advies: het vaste contract moet weer de norm worden in Nederland. *NRC Handelsblad*. Retrieved 10 August 2021, from <https://www.nrc.nl/nieuws/2020/01/22/vast-contract-moet-weer-norm-woorden-a3987871>.
- Pettersen, L. (2018). Why Artificial Intelligence Will Not Outsmart Complex Knowledge Work. *Work, Employment And Society*, 33(6), 1058-1067. <https://doi.org/10.1177/0950017018817489>
- Peugny, C. (2019). The decline in middle-skilled employment in 12 European countries: New evidence for job polarisation. *Research & Politics*, 6(1), 205316801882313. <https://doi.org/10.1177/2053168018823131>
- Pierson, P. (2000). Increasing Returns, Path Dependence, and the Study of Politics. *American Political Science Review*, 94(2), 251-267. <https://doi.org/10.2307/2586011>
- regjeringen.no. (2017). *Factsheet Sharing Economy Committee*. regjeringen.no. Retrieved 10 August 2021, from <https://www.regjeringen.no/en/historical-archive/solbergs-government/Ministries/fin/press-releases/2017/delingsokonomien-gir-muligheter-og-utfordringer/nou-20174-delingsokonomien--muligheter-og-utfordringer/factsheet/id2537776/>.
- Rijksoverheid. (2018). *Nederlandse Digitaliseringsstrategie*. Ministerie van Economische Zaken en Klimaat. Retrieved from <https://www.rijksoverheid.nl/documenten/rapporten/2018/06/01/nederlandse-digitaliseringsstrategie>
- rijksoverheid.nl. *Verplichte arbeidsongeschiktheidsverzekering voor zelfstandigen*. Rijksoverheid.nl. Retrieved 10 August 2021, from <https://www.rijksoverheid.nl/onderwerpen/pensioen/toekomst-pensioenstelsel/verplichte-arbeidsongeschiktheidsverzekering-voor-zelfstandigen>.
- SER. (2018). *De kracht van het overleg: Uitleg over de Nederlandse overleconomie*. The Hague: Sociaal-Economische Raad (SER). Retrieved from <https://www.ser.nl/nl/ser/over-ser-/media/B874B855102749C4B5775ABC70EE4F69.ashx>

- Stewart, A., & Stanford, J. (2017). Regulating work in the gig economy: What are the options?. *The Economic And Labour Relations Review*, 28(3), 420-437.  
<https://doi.org/10.1177/1035304617722461>
- Streeck, W., & Thelen, K. (2005). Introduction: institutional change in advanced political economies. In W. Streeck & K. Thelen, *Beyond continuity: institutional change in advanced political economies*. Oxford University Press (OUP).
- ter Weel, B., van der Werff, S., Bennaars, H., Scholte, R., Fijnje, J., Westerveld, M., & Mertens, T. (2018). *De opkomst en groei van de kluseconomie in Nederland*. Amsterdam: SEO Economisch Onderzoek. Retrieved from  
<https://www.seo.nl/publicaties/de-opkomst-en-groei-van-de-kluseconomie-in-nederland/>
- Thompson, D. (2015). A World Without Work. *The Atlantic*, (July/August 2015 Issue). Retrieved 10 August 2021, from  
<https://www.theatlantic.com/magazine/archive/2015/07/world-without-work/395294/>.
- Urzi Brancati, M., Pesole, A., & Fernández-Macías, E. (2020). *New evidence on platform workers in Europe*. Publications Office of the European Union.
- van Berkel, R., & de Graaf, W. (2011). The Liberal Governance of a Non-Liberal Welfare State? The Case of the Netherlands. In R. van Berkel, W. de Graaf & T. Sirovátka, *The Governance of Active Welfare States in Europe. Work and Welfare in Europe*. Palgrave Macmillan. [https://doi.org/10.1057/9780230306714\\_7](https://doi.org/10.1057/9780230306714_7).
- Vermeulen, B., Kesselhut, J., Pyka, A., & Saviotti, P. (2018). The Impact of Automation on Employment: Just the Usual Structural Change?. *Sustainability*, 10(5), 1661.  
<https://doi.org/10.3390/su10051661>
- Wood, A., Graham, M., Lehdonvirta, V., & Hjorth, I. (2018). Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy. *Work, Employment And Society*, 33(1), 56-75. <https://doi.org/10.1177/0950017018785616>
- World Bank. (2019). *World Development Report 2019: The Changing Nature of Work*. Washington, DC: World Bank. Retrieved from <https://www.doi.org/10.1596/978-1-4648-1328-3>
- Yin, R. (2009). *Case study research: Design and Methods* (4th ed.). SAGE Publishing.