



Trajectories of Platform-mediated Gig Work in Nordic Taxi and Food Delivery Industries¹

■ **Sigurd M. N. Oppegaard²**

*Doctoral Research Fellow, University of Oslo, Department of Sociology and Human Geography, Norway
Researcher, Fafo Institute for Labour and Social Research, Norway*

■ **Johan Alfonsso**

*Associate Senior Lecturer, University of Halmstad, Department of Humanities and Social Sciences, Sweden
Affiliated Researcher, University of Gothenburg, Department of Sociology and Work Science, Sweden*

■ **Stine Rasmussen**

Associate Professor, Aalborg University, Center for Labour Market Research (CARMA), Denmark

■ **Jere Immonen**

*Researcher, Finnish Institute of Occupational Health, Finland
Doctoral Student, University of Eastern Finland, Finland*

ABSTRACT

While the Nordic labor market model is renowned for providing 'good' jobs, we have over the last decade nonetheless seen the rise of platform-mediated gig work, associated with relatively precarious working conditions, in the Nordic countries. Analyzing the emergence and development of platform-mediated gig work in the taxi and food delivery industries in Denmark, Finland, Norway, and Sweden, this article identifies four trajectories: Evasion, disruption, adaption, and market exit. It shows that gig platforms established themselves in the 'fringes' of the Nordic labor market model, evaded regulations by classifying workers as self-employed contractors, recruited workers from marginalized segments of the labor force, and provoked regulatory responses that deregulated markets to facilitate their business model. The analysis thus highlights the importance of product market regulations in shaping the development of platform-mediated gig work and emphasizes the segmented nature of the Nordic labor market model.

KEYWORDS

comparative analysis / Nordic labor market model / policy and regulation / platform work / precarious work / work and technology

Introduction

Over the last decade, a new type of precarious work has emerged in labor markets across the world. Platform-mediated gig work promises worker freedom and flexibility but offers little security and stability (Vallas & Schor 2020). Platform workers are usually classified as self-employed contractors, earn a low and unpredictable

¹ You can find this text and its DOI at <https://tidsskrift.dk/njwls/index>.

² Corresponding author: Sigurd M. N. Oppegaard. E-mail: smo@fafo.no.

income, and work long and unsocial hours (ILO 2021; Piasna et al. 2022). While substantial attention has been given to the working conditions of gig and platform workers, comparatively little scholarship exists on how these forms of work emerge and develop in different labor markets. In this article, we use the taxi and food delivery industries in Denmark, Finland, Norway, and Sweden as cases to explore the rise of platform-mediated gig work in the Nordic labor markets.¹

The Nordic labor markets are often conceptualized through the notion of the *Nordic labor market model*. This refers to distinct institutional arrangements organizing and regulating Nordic working lives. The Nordic labor market model is based on strong social partners – labor unions and employers’ organizations – regulating wages and working conditions through collective agreements and multilevel bargaining systems. Statutory labor law plays a secondary role, chiefly securing individual protections and representation, and state authorities rarely intervene directly in labor markets, providing instead settlement mechanisms, as well as a wide array of relatively universalized public and de-commodified welfare services (Andersen et al. 2014; Esping-Andersen 1990). The Nordic model is therefore often referred to as a ‘voluntarist’ industrial relations system (Rasmussen et al. 2019).

The Nordic model can, on the one hand, be seen as an institutional framework aimed at protecting workers from having to accept low wages and poor working conditions, by either regulating these directly in collective agreements or increasing workers’ reservation wages through access to welfare services and a labor market generally providing well-paid and regulated jobs (Valestrand & Oppegaard 2022). The research literature on platform-mediated gig work therefore hypothesizes that gig platforms would *struggle* to emerge within institutional arrangements such as the Nordic model (see Beckmann & Hoose 2022; Funke & Picot 2021; Thelen 2018). On the other hand, the voluntaristic aspects of the Nordic labor market regulations highlight how these potentially protective arrangements remain dependent on social partners and collective agreements. As such, one could expect the lack of statutory labor market regulation to *facilitate* the rise of platform-mediated gig work in certain susceptible industries in the Nordic countries. Thus, how the Nordic labor market model shapes the rise of gig platforms remains an open question.

Previous Nordic research has mainly focused on either platform workers’ poor and unpredictable working conditions (Newlands 2024; Oppegaard 2024), or the collective agreements signed by certain companies (Ilsøe & Söderqvist 2023; Jesnes et al. 2021). Less is known about the processes through which platform-mediated gig work emerged in the Nordic countries, and how these business models have interacted with the regulation of Nordic product and labor markets. Surveys find that platform-mediated gig work remains a marginal phenomenon in the Nordic countries (Jesnes & Oppegaard 2020; Kristiansen et al. 2023), but gig platforms have still become prominent actors in certain service industries, particularly the taxi and food delivery industries (Alasoini et al. 2023; Jesnes & Oppegaard 2023). This article maps the rise of platform-mediated gig work in these industries in Denmark, Finland, Norway, and Sweden, exploring the following research question: How has platform-mediated gig work emerged and developed in the taxi and food delivery industries in the Nordic countries, and what factors have enabled and shaped the development of these forms of work? We follow the rise of platform-mediated gig work from 2013 to 2023 and analyze the ‘trajectories’ of these forms of work. With the notion of trajectories, we refer to the processes through which these forms of work have emerged

and developed, capturing both how platform companies have navigated local institutional arrangements and regulations, and how key actors have responded to these forms of work. This approach allows us to identify the factors that shaped platform-mediated gig work in the Nordic countries, and the analysis pays particular attention to legal and collective agreement regulations, industry-specific work arrangements, and responses from workers, unions, public opinion, and legislators, as well as how these aspects of the Nordic labor markets have been navigated by the gig platforms.

Our analysis shows that the rise of platform-mediated gig work in the Nordic taxi and food delivery industry can be conceptualized through four trajectories, *evasion*, *disruption*, *adaption*, and *market exit*. As the trajectories vary in relation to different types of regulations and over time, each case is characterized by multiple trajectories. While we find important differences between how these forms of work have developed in the different industries and countries, the general tendency across our cases is that gig platforms have succeeded in establishing their operations in the Nordic countries. The article makes three key contributions. First, we analyze the advent of platform-mediated gig work in the Nordic countries, a region characterized by particular regulatory arrangements and where these forms of work are less studied compared to the Anglo-American and Continental-European markets. Second, based on our empirical analysis, we identify four trajectories describing the emergence and development of these forms of work in the Nordic countries, drawing on previous theorizations of the rise of platform-mediated gig work. Our approach, exploring the rise of platform-mediated gig work in two industries in four countries and paying attention to both the product and labor market regulations, provides a nuanced conceptualization of how platform-mediated gig work emerges and develops in different regulatory regimes. Third, we contribute to the scholarship on the Nordic labor market model by highlighting its segmented nature. We show how gig platforms bypassed these regulatory arrangements by establishing their operations in the ‘fringes’ of the Nordic labor market model, classifying workers as self-employed contractors, and recruiting workers from already marginalized segments of the labor force.

In the next section, we give a brief literature review, focusing on how the emergence and development of platform-mediated gig work has been theorized in previous research. We then describe our methodological and analytical strategies, before presenting our findings and analysis. Finally, we discuss the four key factors that have enabled and shaped the emergence and development of platform-mediated gig work in the Nordic countries.

Theorizing platform-mediated gig work in the Nordics and beyond

Platform-mediated gig work refers to forms of work where the labor process is organized through digital platforms, often mobile applications connecting workers to customers. Workers are allocated tasks, receive instructions, and are evaluated – and sanctioned – through rating systems (Oppegaard 2024). Workers are usually classified as self-employed independent contractors rather than employees (Piasna et al. 2022), and thereby excluded from the social protections and rights associated with employment (Hotvedt 2020). Platform companies legitimize their employment model by arguing that

they are technology companies, merely providing a neutral platform and market where workers can sell their services (Rahman & Thelen 2019). Platform workers, furthermore, are usually paid per task that they complete, through a piece-rate model, and receive no remuneration for the time they spend waiting for ‘gigs’. While the formal work arrangements tend to provide them with substantial flexibility in terms of scheduling and working time, workers often work very long hours to maintain a living wage (Jesnes & Oppegaard 2023).

These forms of work emerged in the aftermath of the 2008 financial crisis. This period saw the proliferation of digital technologies on which the platform model depends, the normalization of fragmented employment models, and high unemployment rates that made platform-mediated gig work relatively more attractive for workers with few other labor market opportunities (Rahman & Thelen 2019), particularly migrant workers, on whom gig platforms have come to depend (van Doorn *et al.* 2023). Platform-mediated gig work has, however, followed different paths in different institutional regimes (Haidar & Keune 2021). In the research literature, we find three theorizations of the rise of these forms of work.

First, some emphasize how certain regulatory arrangements provide platforms with particularly favorable conditions. Rahman and Thelen (2019), for example, argue that in the United States, a permissive political-economic landscape, with decentralized regulations and weak labor unions, in addition to a supportive legal regime that values competition, facilitated the rise of platform-mediated gig work. Similarly, others highlight how these forms of work are enabled by ‘institutional voids’, referring to the absence or shortcomings of regulations (Heeks *et al.* 2021).

Second, others argue that gig platforms tend to ‘evade’ and ‘disrupt’ existing regulations and structures when entering new markets. When establishing their operations in new markets, research finds, gig platforms challenge existing regulations to promote favorable conditions (Collier *et al.* 2018). Claiming to be ‘technology companies’, gig platforms evade employer responsibilities, working environment legislation, minimum wage stipulations, and market regulations (Wolf 2022). In the Nordic countries, some gig platforms have been found to deploy ‘evasive’ strategies in relation to the Nordic industrial relations system (Ilsøe & Söderqvist 2023; Oppegaard *et al.* 2020). Such practices have been conceptualized as ‘regulatory entrepreneurship’ (Pollman & Barry 2017), strategies wherein the changing of laws and regulations constitute a significant aspect of a company’s business models. These companies initiate their operations in legal gray areas, amass a large user base and grow ‘too big to ban’, taking advantage of their support from customers to gain political influence (Thelen 2018). Regulatory responses, however, remain a key component in whether the ‘disruptive’ strategies succeed (Wolf 2022). Based on an analysis of Uber in the United States, Occhiuto (2022) finds both ‘incorporating’ responses, that is, adjusting the regulations to the gig platforms’ business model to enable market disruption, or ‘blocking’ responses that maintain existing regulations.

Finally, a third theorization emphasizes that these companies adapt to institutional contexts and regulatory regimes. While gig platforms tend to evade regulations and responsibilities, some platform companies in the Nordic countries have employed their workers and even signed collective agreements (Jesnes & Oppegaard 2020). Ilsøe and Söderqvist (2023) term this ‘integrative’ strategies that illustrate how these business models can adapt to different industrial relations systems. Adaptions are also exemplified by how cleaning platforms have continued to classify cleaners as independent

contractors while adjusting their model institutional constraints in different countries (Koutsimpogiorgos et al. 2023). Muszyński et al. (2022), furthermore, explore the role of product markets in shaping food delivery platforms' operations, finding different approaches among international and regional platforms.

This review highlights how the rise of platform-mediated gig work takes different forms depending on institutional contexts. Gig platforms might, in some cases, take advantage of favorable institutional conditions. In other contexts, they *evade* regulations that constrain their operations. Such evasions may be part of a strategy to '*disrupt*' specific industries, advocating deregulations that favor their business model. However, gig platforms are also shown to be *adaptive*, adjusting to local conditions.

As noted in the Introduction, there is an assumption in the literature on platform-mediated gig work that the institutional arrangements of coordinated market economies such as the Nordic labor market models, with developed social protections and security schemes, strong unions, and active regulatory agencies, will impede the growth of these forms of work (Beckmann & Hoose 2022; Funke & Picot 2021). The Nordic labor markets tend to provide workers well-regulated working conditions and decent wages (Andersen et al., 2014), and Thelen (2018) argues that the availability of good jobs in a local labor market reduces the relative attractiveness and growth potential of platform-mediated gig work. This tendency might be strengthened through access to de-commodified welfare services, increasing workers' reservation wages (Esping-Andersen 1990). On the other hand, one could hypothesize that the voluntaristic Nordic labor market regulations, with their limited statutory legislation and dependence on strong unions and collective agreements (Andersen et al. 2014; Rasmussen et al. 2019), could provide the gig platforms with relatively favorable institutional conditions, particularly in industries where union density and collective agreement coverage is low. Furthermore, the low demand for their skills that migrant workers with few formal qualifications experience in the Nordic labor markets, which are generally characterized by high wages and labor costs (Andersen et al. 2014), may make these segments of the labor force more susceptible to taking up platform work.

There is thus a tension in how platform-mediated gig work could be expected to develop in the Nordic countries. In the analysis, we explore this tension empirically through an analysis of gig platforms in the taxi and food delivery industries in Denmark, Finland, Norway, and Sweden. We draw on the previous theorizations of how these forms of work emerge and develop to conceptualize the trajectories we find in our empirical analysis and contribute to the literature by providing a nuanced typology emphasizing how the interaction between platform-mediated gig work and regulatory contexts varies between industries and different types of regulations while also evolving over time.

Methodology

Our analysis started by exploring when the gig platforms emerged in the Danish, Finnish, Norwegian, and Swedish taxi and food delivery industries. These industries were chosen as they are the industries where platform-mediated gig work has become most prominent in the Nordic countries (Alasoini et al. 2023; Ilsøe & Söderqvist 2023; Jesnes & Oppegaard 2020). This gave us eight different cases. We investigated the issues

incited by the platforms and identified three main challenges to their business models: Legal challenges, opposition from labor union, and public opinion. Analyzing these areas enabled us to capture how the gig platforms aimed to navigate the challenges they faced and institutional responses to their emergence. We traced the developments until 2023 – while noting certain more recent developments – but also looked backwards to capture the market dynamics and regulatory frameworks of the industries the platforms intervened in.

This approach, following the issues provoked by the platforms, guided our sampling strategy, and the analysis is based on different types of documents.² To gain an understanding of the business model and effects of the platforms in the two industries, as well as working conditions, we examined previous research, articles, and reports, on platform-mediated gig work in the taxi and food delivery industries in the Nordic countries (41 documents and seven surveys). We analyzed the platforms' websites and blog posts (28 documents) to investigate the way they present themselves in each country and consulted news reports for descriptions of key events and junctures (66 documents). To capture how the governments, ministries, and state agencies understood and responded to these forms of work, we furthermore investigated white papers, consultations, court cases, legislative propositions, and parliamentary debates (34 documents). We also analyzed labor unions' perception and strategies through – in addition to general news articles – reports, collective agreements, and op-eds (11 documents).

Based on this empirical material, we compiled detailed timelines of the emergence and development of the gig platforms in both industries in each country. These historical sketches were descriptive analyses of the country- and industry-specific processes, centered around the challenges facing the gig platforms. As such, they capture both the gig platforms' strategies and responses to these business models, describing the processes through which platform-mediated gig work developed in the Nordic taxi and food delivery industries (Appendix 1).

The second step in the analysis was to compare the different processes in the different countries and industries. In the comparative analysis, we searched for empirically grounded explanations of the different outcomes and developed a case-property matrix that identified specific factors that enabled and shaped the emergence of platform-mediated gig work (Appendix 2). Like Muszyński et al. (2022), we found that that product market regulations were a key factor shaping the outcomes. The analysis therefore explored the distinction between industry-specific work arrangements and labor regulations, such as the dominant employment models, collective agreement regulations, and union density; and product market regulations, such as quality regulations, licensing requirements, and regulatory barriers to market entry. In addition, we also found that governments' responses were important in shaping the rise of platform-mediated gig work in the Nordic countries.

In dialogue with previous theorizations of the rise of platform-mediated gig work, we conceptualized the different paths platform-mediated gig work took in each country and industry as four trajectories: *Evasion*, *adaption*, *disruption*, and *market exit*. We used the distinction between product and labor market regulations to analyze the relation between platform-mediated gig work and different types of regulatory institutions. The identification of trajectories, furthermore, drew on conceptualizations such as gig platforms' 'evasive' and 'integrative' strategies in relation to Nordic industrial relations systems (Ilsøe & Söderqvist 2023), 'blocking' and 'incorporating' regulatory

responses (Occhiuto 2022), and the notions of ‘regulatory entrepreneurship’ (Pollman & Barry 2017) and ‘disruptive regulation’ (Collier et al. 2018). The trajectories describe how platform-mediated gig work emerged and developed in the Nordic taxi and food delivery industries and capture how the companies have navigated the Nordic regulatory landscapes, the specific conditions in each market, and institutional responses. The categories of *evasion*, *adaption*, and *disruption* were drawn from previous research, and we added the category of *market exit* to describe processes through which gig platforms leave a market. While previous theorizations largely have focused on one or two such trajectories, our analysis illustrates that individual industries can be characterized by multiple trajectories (see Table 1): First, specific industries can exhibit different trajectories in relation to existing work arrangements and labor regulations, and product market regulations. Second, they also evolve over time. This differentiation allowed us to develop a nuanced theorization capturing the complexity of our empirical cases and sorting out potentially conflicting interpretations.

Our case selection is aimed at analyzing the rise platform-mediated gig work in the Nordic countries. However, it is important to note the specificity of taxi and food delivery platforms and the limitations of our analytical approach. First, these are industries that long have been characterized by low pay, low unionization rates, and low formal qualification requirements. Second, these are location-bound forms of platform-mediated gig work. Third, as the most prevalent industries, the case selection might lead to a neglect of unsuccessful initiatives. Including other types of platform-mediated gig work, such as remote platform work and a larger sample of platforms that failed in establishing their operations in the Nordic countries could have resulted in a different overall analysis and the identification of different trajectories. Furthermore, we do not have first-hand data on how representatives of the gig platforms, labor unions, and state agencies perceived the emergence of platform-mediated gig work in the Nordic countries. Such data could have enabled a more detailed analysis of different actors’ strategies and considerations.

Platform-mediated gig work in the Nordic taxi and food delivery industries

Our analysis is divided into two sections. We first describe how gig platforms have emerged and developed in the taxi and food delivery industries in Denmark, Finland, Norway, and Sweden. Here, we analyze how the industries have been regulated, how gig platforms have navigated the institutional landscape, and how different actors have responded to the development of these forms of work. Second, we present the four trajectories we have identified in the empirical material.

Taxi industry

When taxi platforms arrived in the Nordic countries in 2013 and 2014, the national taxi industries were organized through self-employed taxi owners who drove their own car and employed other drivers to cover additional shifts. As in most taxi markets (Occhiuto 2022), the taxi owners had to obtain a taxi license, a permit enabling them to operate a taxi business. To work as a taxi driver, drivers had to acquire a taxi driver’s license,

which required good health and a record of good conduct. The Nordic taxi industries have long been characterized by low wages and long working hours, and over the last decades become industries employing largely workers with migrant backgrounds (Oppegaard *et al.* 2023; Slavnic & Urban 2018).

When Uber, as the first taxi platform, entered the Nordic markets, it was faced with different product market regulations in the different countries. The Swedish taxi industry had been deregulated in the early 1990s (Thelen 2018), when numerical restrictions on taxi licenses, price regulations, the requirement to be affiliated with a dispatching center (also referred to as a radio-dispatch service or taxi center) were removed. To obtain a taxi license, applicants still needed to prove that they possessed the necessary skills, document appropriate financial standing, and get a police certificate of conduct. The requirement to use taximeters was also maintained (Gärbling *et al.* 1995). In Sweden, Uber therefore encountered few legal obstacles to its business model. Uber first launched Uber Black in Stockholm in 2013, operating in the high-end, ‘black car’, transportation market. Uber X, a cheaper service, was introduced in 2014. The same year, Uber also launched Uber Pop, a pilot service branded as ‘carpooling’. Uber Pop can be seen as a ‘disruptive’ strategy since Uber did not require these drivers to obtain the legally prescribed licenses. As a result, 60 drivers were sentenced for illegally providing taxi services. Many were immigrants with limited knowledge of the Swedish legal system who had believed that driving Uber Pop was legal and felt betrayed by Uber when they were sentenced (The Local 2016). Uber suspended Uber Pop but continued to operate the other services. While these operated legally in Sweden’s deregulated taxi market, the emergence of Uber nonetheless gave rise to a public debate wherein unions and the government raised concerns regarding unfair competition, license requirements, and tax evasion (Oppegaard *et al.* 2020). In 2019, the Estonian platform company Bolt also launched in Sweden, and as of 2024, Bolt and Uber operate in the largest Swedish cities, but it is unknown how many active drivers use their platforms. In late 2022, drivers organized a new union and held multiple protests in late 2022 and early 2023, calling for better pay, lower service fees, and algorithmic transparency (Brave New Europe 2023).

In the other Nordic countries, the taxi markets were still regulated by numerical restrictions on taxi licenses – in addition to qualitative regulations such as qualification requirements for taxi owners and drivers. Danish, Finnish, and Norwegian taxi owners were also required to be affiliated with dispatching centers. This made the entry barriers higher than in Sweden. In 2014, Uber launched Uber Pop as a pilot project in these markets, allowing unlicensed drivers to use their personal car to find customers through Uber’s platform.³ In Finland, Bolt (then named Taxify) was also launched in 2014, operating on a similar model as Uber Pop. As in Sweden, this ‘disruptive’ strategy led to the sentencing of many drivers for providing unlicensed taxi services. It also caused heated debate on the taxi market regulation. In 2017 and 2018, the governments in Denmark, Finland, and Norway, all center-right administrations, responded by proposing to deregulate the taxi markets by lifting numerical restrictions on licenses and easing qualitative regulations, aimed at facilitating new technologies and business models, and increasing competition (Oppegaard *et al.* 2020).

In Denmark, the government did not have a parliamentary majority and was unable to pass a full deregulation. In the parliamentary negotiations, other political parties were determined to prevent a legalization of Uber in Denmark. While numerical restrictions on taxi licenses were removed, the deregulation maintained the requirement to be

connected to a dispatching center and equip the cars with taximeter, seat sensor, and video surveillance. Uber argued that these regulations made it impossible for the company to operate in Denmark and discontinued its Danish operations in April 2017, after the new regulations were presented (Soested & Munkholm 2018).

In Finland, the deregulation was implemented in July 2018, enabling all applicants without a criminal record who passed a language and qualification test to obtain a taxi license. Uber and Bolt had left the Finnish market in 2017, but re-launched after the new regulations took effect, followed by Yango, owned by the Russian technology company Yandex. There was a large increase in the number of issued taxi licenses in Finland in 2019, primarily in the large cities, and the already low unionization rate among drivers declined further. The new regulations were publicly criticized both by drivers and customers, as they resulted in both a significant increase in competition in the industry and increased average prices (Finnish Competition and Consumer Authority 2022). During the Covid-19 pandemic, demand for taxi services plummeted, and many licenses were retired. Under a Social Democratic government elected in 2019, a 'taxi repair kit' was implemented, aimed at preventing tax evasion, guaranteeing availability of taxis, and improving safety and quality. This re-regulation reintroduced the requirement to use taximeters – although platforms' applications were viewed as equivalent – and a test of license holders' knowledge of the relevant taxi and business regulations from 2021. The requirement to be affiliated with a dispatching center, however, was not reintroduced.

The deregulation of the Norwegian taxi market was driven not only by the goal of facilitating taxi platforms' operations, but also a reasoned opinion from the European Free Trade Association Surveillance Authority (ESA) arguing that numerical restrictions on taxi licenses conflicted with the EEA agreement. Despite criticism from labor unions and the taxi owners' association, a deregulation of the taxi market was implemented 1 November 2020. Uber immediately re-launched in Oslo, followed by Bolt and Yango throughout 2021. The taxi platforms later expanded to all the major Norwegian cities. In the deregulated market, drivers can work for multiple platforms simultaneously and find passengers at taxi ranks and through street hailing. Although the drivers work long hours to make a living and often complain about low earnings, they, primarily migrants, see working for the platforms as one of very few labor market opportunities (Valestrand & Oppegaard 2022). Following the deregulation of the Norwegian taxi market, the number of issued taxi licenses increased from approximately 8,000 to 18,000 three years later while the number of registered taxis increased by almost 50%. In 2021, however, a newly elected Social Democratic government promised to 'reverse' the previous government's deregulation of the industry, and some new requirements for taxi owners were implemented in 2023 (Oppegaard et al. 2023) and 2024 (Ministry of Transport of Norway 2024).

Food delivery

The Nordic food delivery markets, previously dominated by restaurants delivering orders directly to customers, were transformed by the arrival of platform companies. From 2015, the market grew significantly following the emergence of international food delivery platforms. The German platform Foodora, owned by Delivery Hero, launched in Finland, Norway, and Sweden in 2015. In Denmark, the local food delivery platform

Just Eat, founded in 2001, was the major actor until Hungry, later bought by Foodora, initiated its operations in 2013.⁴ In Finland, the Finnish delivery platform Wolt launched its services in Helsinki in 2015 and has since expanded to many European and Asian countries, such as Sweden in 2016, Denmark in 2017, and Norway in 2018.⁵ Sweden also saw the arrival of Uber Eats in 2016 and Bolt Food in 2020.

In contrast to in the taxi industry, where the taxi platforms encountered significant obstacles from the taxi market regulations, there were no specific market regulations in the Nordic food delivery industries. The food delivery platforms were therefore able to implement their business model without resistance from product market regulations. They also tend to classify the couriers as self-employed independent contractors and pay them per delivery (Jesnes & Oppegaard 2020). The food delivery platforms brand themselves as providing couriers with flexibility and have recruited students and other groups looking for a flexible source of income. Over the last few years, however, migrants have come to constitute the food delivery platforms' core workforce in the Nordic countries (Alasoini *et al.* 2023; Hau & Savage 2023; Jesnes & Oppegaard 2023; Newlands 2024).

The rise of food delivery platforms in the Nordic countries led to a public debate on the couriers' working conditions. The platforms' use of self-employed couriers, leaving them without access to the social benefits and protections that characterize employment relationships, as well as the couriers' low earnings, long hours, and safety concerns, has been problematized in all the Nordic countries (Jesnes & Oppegaard 2020). In Finland, labor unions, the Finnish Labour Council, and Regional State Administrative Agency (AVI) have argued that food couriers should be classified as employees, but the question remains unresolved (AVI 2024). In Sweden, the government reviewed the work environment of food delivery platforms in 2017, finding significant health and safety risks but did not reach a conclusion on whether the platforms were legally responsible. In 2021, the Swedish Work Environment Agency investigated the food delivery platforms, also highlighting substantial occupational hazards, and argued that the platforms should be regarded as employers. Wolt and Bolt appealed the decision to the administrative court. The first two levels of court ruled in Wolt and Bolt's favor, deciding that they were not to be seen as employers. However, as of May 2024, the Work Environment Agency has appealed the decision regarding Bolt to the highest legal instance. Bolt Food left Sweden in June 2023, stating 'business reasons' as the cause of the departure (Breakit 2023), and the implication of a potential verdict remains unclear.

Some of the food delivery platforms in Nordics did, however, choose to employ their couriers (Ilsøe & Söderqvist 2023), enabling the couriers to unionize and bargain collectively. In Denmark, Just Eat is organized in the employers' organization Dansk Erhverv and signed a collective agreement with the union 3F for the couriers in January 2021. The agreement set a minimum of guaranteed weekly hours and hourly wages (Scheele 2022). Foodora, too, employed the couriers on marginal part-time contracts when entering the Finnish, Norwegian, and Swedish markets. While Foodora discontinued the practice in Finland, it made it possible for couriers in Norway to organize in the Transport Workers' Union and demand better pay and a collective agreement. The couriers went on strike in August 2019, during which the unionization rate doubled. After five weeks, a collective agreement was signed, providing couriers with increased wages, reimbursement for equipment, extra pay during winter, and a collectively agreed early retirement pension (Jesnes & Oppegaard 2020). Foodora later joined the employers' organization Virke and has used the collective agreement to promote itself as a

‘defender’ of the Nordic model (Jesnes & Oppegaard 2023). In Sweden, a similar collective agreement was signed between Foodora and the union Transport in February 2021 (Selberg 2023).

While the collective agreements illustrate that food delivery platforms can adjust to Nordic industrial relations system (Ilsøe & Söderqvist 2023), they have not succeeded in regulating the food delivery industries more broadly. In both Norway and Sweden, Foodora started to hire an increasing proportion of couriers as freelancers, self-employed contractors, or through third parties, excluding them from the collective agreement (Oppegaard & Jesnes 2024). In Sweden, this caused a legal battle over whether Foodora should be considered the employer for couriers working through third parties. The Labour Court ruled in favor of Foodora, arguing that the self-employment company Pay Salary was to be regarded as a temporary work agency and thus held the employer’s responsibilities. Therefore, the worker was seen as an employee, but not of Foodora, and thus evading Foodora’s collective agreement. In Denmark, the agreement only covers Just Eat’s couriers, who in the Copenhagen region number less than half of Wolt’s (Jesnes & Rasmussen 2024; Scheele 2022). In Norway and Sweden too, the Foodora agreements have not had significant effects on the other platforms operating in the food delivery industries, nor prevented Foodora from hiring couriers as self-employed contractors (Jesnes & Oppegaard 2023).

In Denmark and Finland, there has, however, been an increased grassroots mobilization among self-employed Wolt couriers, demanding better pay, employment status, and more transparency. Wolt Workers Group in Denmark, supported by 3F, has organized multiple protest ‘log offs’ over the last years (Hau & Savage 2023), while Wolt couriers in Finland went on strikes in late 2022 and early 2023, sparked by new terms and conditions being implemented without consultation with the couriers (Yle 2023). The Finnish Service Union United (PAM) created a new branch for couriers in 2023 and, enabled by recent legal developments on collective bargaining for self-employed workers (Hotvedt 2020), has since been negotiating with Wolt for a collective agreement (PAM 2024).

The Nordic governments have also highlighted the potential misclassification of couriers as an important issue. In late 2022, the Ministry of Labour and Social Inclusion of Norway proposed amendments to the concept of an employee to hinder false self-employment. After the revisions were effective from 1 January 2024, United Federation of Trade Unions sued Wolt for misclassifying the couriers (Oppegaard & Jesnes 2024). No verdict has yet been reached. In Finland too, the Social Democratic government provided in 2022 a guide to the interpretations of existing legal principles for assessing workers’ form of employment, to hinder misclassification. The Finnish government did not propose any significant legal changes, awaiting the outcome of the EU directive on platform work (Ministry of Economic Affairs and Employment of Finland 2023).

Four trajectories: Evasion, disruption, adaption, and market exit

Based on our analysis of platform-mediated gig work in the Danish, Finnish, Norwegian, and Swedish taxi and food delivery industries and these companies’ interactions with regulatory frameworks, we conceptualize the trajectories through which these forms of

work have emerged and developed. We differentiate between product market regulations and labor market regulations, to capture how platform-mediated gig work interact differently with different types of regulations (see Muszyński et al. 2022), and also show how the trajectories evolve over time. Drawing on the theorizations of the rise of platform-mediated gig work discussed above, we find four trajectories: *Evasive trajectories*, *disruptive trajectories*, *adaptive trajectories*, and *market exit*.

1. Evasive trajectories refer to processes where platform-based companies evade established regulations. These can be instances where companies either disregard regulations that in principle should apply to them or organize their operations in a manner making it unclear whether they are bound by the regulations in question. In the case of gig platforms' circumventing of labor market regulations and institutions, Ilsøe and Söderqvist (2023) use the notion of 'evasive' strategies.
2. Disruptive trajectories are based on evasive trajectories but depart from them in that their result is not merely avoiding regulations, but regulatory changes. In our cases, disruptive trajectories highlight how platform-based business models provoked new regulations aimed at facilitating the new business models, what Occhiuto (2022) calls an 'incorporating' regulatory response and Collier et al. (2018) refer to as 'disruptive regulation'. We do not have the necessary data to determine whether the gig platforms actively sought to change the regulations they challenged, what Pollman and Barry (2017) term 'regulatory entrepreneurship', and use the notion of 'disruptive trajectories' to describe outcomes where the emergence of platform-mediated gig work resulted in regulatory changes that accommodated gig platforms' business models.
3. Adaptive trajectories highlight how platform companies adapt to regulations and institutional arrangements, either by being forced to or by adjusting their business model to ease their integration. Ilsøe and Söderqvist (2023) describe the way in which gig platforms adapt to the Nordic labor market model as 'industrial relations system integration', while our conceptualization of adaptive trajectories refers to the interaction between platform-mediated gig work and both product market and labor market regulations.
4. Market exit refers to trajectories wherein companies leave the local markets. Market exit can have multiple causes, such as unfavorable market conditions, or regulatory measures aimed at curbing companies' operations, what Occhiuto (2022) terms a 'blocking' response.

We find multiple trajectories within each case (Table 1). In the Danish taxi market, Uber's first launch in the taxi market can be classified as an *evasive trajectory*, as the company initially operated with unlicensed drivers, evading the taxi market regulation. Responding to the launch of Uber, the Danish center-right government initiated a process toward deregulation of the taxi market, aimed at facilitating Uber's business model. Thus, the *evasive trajectory* of taxi platforms in Denmark developed into a *disruptive trajectory*. Without parliamentary majority for the proposed deregulation, however, Uber argued it could not adapt to the new regulations and left the Danish market, resulting in *market exit*.

In the taxi industries in the other Nordic countries, we find a mix of *evasive*, *disruptive*, and *adaptive trajectories*. As in Denmark, Uber first launched Uber Pop in Finland,

Norway, and Sweden, allowing unlicensed drivers to operate in the taxi market. These *evasive trajectories* were followed by public and political debates, resulting in *disruptive trajectories*, that is, the deregulation of the taxi markets in Finland and Norway, disruptive regulations and incorporating regulatory responses aimed at facilitating the taxi platforms' operations (Collier et al. 2018; Occhiuto 2022). In Sweden, the taxi market was already deregulated when Uber entered, but the platform still tried to *evade* the license requirement for drivers, discontinuing Uber Pop and *adapting* to the (comparatively liberal) product market regulations after several drivers were sentenced for providing illegal taxi services. When taxi platforms established their operations in the deregulated taxi markets in Finland, Norway, and Sweden, they were able to avoid employer responsibilities, operating through the same work arrangements as those that have characterized the Nordic taxi industries for decades. Thus, while we find *evasive*, *adaptive*, and *disruptive trajectories* in the taxi platforms' navigation of the taxi market regulations, we find *adaptive trajectories* in their interactions with the work arrangement and employment models dominating the traditional taxi industries. Comparing the Danish case to the taxi market deregulations in the other countries indicates that the maintenance of dispatching center requirements was crucial for hindering the development of taxi platforms in Denmark (Oppegaard et al. 2023), as the deregulations in Finland, Norway, and Sweden all retained certain qualitative market regulations (standards taxi owners, drivers, and vehicles must satisfy), but removed taxi owners' obligations to be affiliated with a dispatcher.

In the food delivery industries, we find a combination of *evasive* and *adaptive trajectories*. These industries were not characterized by specific product market regulations, allowing the food delivery platforms to operate their preferred business models without having to evade or disrupt regulatory frameworks. Regarding the labor market regulations, we see examples of *adaptive trajectories* when certain platforms employed couriers upon entering the Danish, Norwegian, and Swedish markets. This enabled the couriers to unionize, bargain collectively, and ultimately sign collective agreements, which can be seen as an integration of platform-mediated gig work into the Nordic labor market model (Ilssøe & Söderqvist 2023; Jesnes & Oppegaard 2020; Jesnes et al. 2021). However, these *adaptive trajectories* are combined with *evasive trajectories*.

In Finland, food delivery platforms classify their couriers as self-employed contractors, *evading* labor market regulations, working environment legislation, and employer responsibilities. Finland remains the only Nordic country where no collective agreement yet has been signed in the food delivery industry. This can be explained by the dominant position of the local platform Wolt, which argues strongly that the couriers should be classified as self-employed contractors rather than employees, leaving other platforms with limited incentives to employ their couriers and negotiate with unions. While self-employed workers tend to be excluded from the legal rights to organize and negotiate collectively (Hotvedt 2020), the Finnish union PAM has recently entered negotiations with Wolt, aiming to sign a collective agreement that also covers self-employed couriers (PAM 2024). If these negotiations are successful, the result could be conceptualized as a hybrid trajectory: On the one hand, the gig platform still avoids employer responsibilities and the couriers remain excluded from the labor rights following an employment relationship, indicating an *evasive* employment model, but the organization of the coordination between the social partners, on the other hand, nonetheless *adapts* to the institutional arrangements of the Nordic labor market model.



We also find *evasive trajectories* in the other Nordic countries, where the food delivery industries, despite a minority of employed couriers being covered by collective agreements, remain largely based on self-employed couriers. Furthermore, the company-level agreements signed in Denmark, Norway, and Sweden have not had significant effects on other food delivery platforms and not succeeded in regulating food delivery at the industry-level. Our analysis shows that while Foodora in Norway and Sweden employ some of their couriers, others are classified as self-employed contractors and are thereby excluded from the collective agreement covering their colleagues. This points toward an internal dualization of the courier workforce. While previous research has highlighted the *adaptive trajectory* of food delivery platforms in the Nordic model (Ilsøe & Söderqvist 2023; Jesnes et al. 2021), our analysis indicates that the *evasive trajectory* is equally prevalent.

Table 1 Trajectories of platform-mediated gig work in the Nordic taxi and food delivery industries

Country	Industry	Product market regulations	Labor market regulations/ work arrangement
Denmark	Taxi	Evasion → disruption → market exit	Evasion → market exit
	Food delivery	Adjustment	Evasion + adjustment
Finland	Taxi	Evasion → disruption	Evasion + adjustment
	Food delivery	Adjustment	Evasion
Norway	Taxi	Evasion → disruption	Evasion + adjustment
	Food delivery	Adjustment	Evasion + adjustment
Sweden	Taxi	Evasion → adjustment	Evasion + adjustment
	Food delivery	Adjustment	Evasion + adjustment

Concluding discussion

In the previous section, we show that the emergence and development of platform-mediated gig work in the Nordic countries is the result of the interaction between the platforms’ business models and strategies, existing regulations and market structures, and institutional responses to these business models. In the following, we discuss what our analysis can tell us about the relationship between the Nordic labor market model and platform-mediated gig work. Based on the identification of the four trajectories through which platform-mediated gig work has emerged in the Nordic taxi and food delivery industries, this section seeks to explain the rise of these forms of work within the Nordic labor market model by emphasizing the factors that have enabled and shaped their developments.

As highlighted in the Introduction, two hypotheses about the rise of platform-mediated gig work in the Nordic labor market model can be established. On the one hand, one could hypothesize that these forms of work would *struggle* to establish their operations in the Nordic countries. The institutional arrangements that characterize the Nordic labor markets can be seen as aimed at protecting workers from the same kinds of precarious conditions as the gig platforms provide through two mechanisms: Either regulating these directly through collective agreements or by increasing workers reservation

wages through access to de-commodified welfare services as well as potentially better-paying jobs in other segments of the labor market (Valestrand & Oppegaard 2022). On the other hand, the voluntarist nature of Nordic industrial relations renders protective regulations dependent on strong labor unions and collective agreements (Andersen et al. 2014). It is therefore also possible to hypothesize that the lack of statutory labor regulations in the Nordic countries could *facilitate* the emergence of platform-mediated gig work in certain industries.

While the relative marginality of platform-mediated gig work as aggregate phenomena in the Nordic labor markets (Jesnes & Oppegaard 2020; Kristiansen et al. 2023) strengthens the first hypothesis, our analysis shows that gig platforms have, apart from in the Danish taxi market, succeeded in establishing their operations in the Nordic taxi and food delivery industries. This strengthens the second hypothesis and suggests that the Nordic labor market model does not necessarily inhibit the growth of these forms of work. Our analysis indicates that the emergence and development of platform-mediated gig work in the Nordic taxi and food delivery industries have been shaped by four key factors: the work arrangements and labor regulations in the industries in which the gig platforms have emerged, the classification of workers as self-employed contractors, recruitment of marginalized segments of the labor force, and the political will to adjust product market regulations to accommodate the platforms' business models.

First, neither the taxi nor food delivery platforms encountered significant obstacles from sectoral regulations of working conditions when implementing their business model in the Nordic countries. In the food delivery industry, there were no industry-specific regulations on work arrangements, and the platforms could freely operate their preferred employment models, while the taxi platforms were able to adapt to the work arrangements and employment models that long have characterized the taxi industry, without sacrificing their business models. Both industries can be seen as examples of what has been termed the 'fringes' of the Nordic labor market model (Valestrand & Oppegaard 2022), that is, industries wherein the institutional arrangements that generally are described as characteristic of the Nordic labor markets never have been particularly prominent. As such, these industries were particularly susceptible to platformization. Both have long been characterized by precarious working conditions, low pay, nonstandard forms of employment, limited social dialogue, and low union density. In context of the voluntarist Nordic industrial relations system, where labor regulations are based primarily on collective agreements and the social partners' self-regulations (Andersen et al. 2014), adapting to the dominant work arrangements in these already 'gigified' industries allowed the gig platforms to evade the Nordic industrial relations systems while maintaining their preferred business and employment models.

Second, classifying workers as self-employed contractors enabled the gig platforms to bypass the regulatory mechanisms on which the Nordic labor market model relies and avoid employer responsibilities. Nordic labor law enables employees to unionize and bargain collectively, while self-employed contractors tend generally to be excluded from these rights and are therefore to some extent legally outside the institutional framework of the Nordic labor market model (Rasmussen et al. 2019), allowing gig platforms to limit potential worker and union resistance. As we saw in the analysis, the gig platforms' employment model has been challenged and described as a potential misclassification by Nordic unions and state agencies. In Nordic labor law, cases of worker misclassification are assessed based on a broad assessment of the actual work arrangements and

relations between the parties, usually through court interpretations of individual cases (Hotvedt 2020). Within this legal framework, it was possible for the platform companies to enter the Nordic markets by classifying their workers as self-employed contractors without any automatic institutional response. Importantly, our analysis also shows that certain food delivery platforms have employed their couriers and even signed collective agreements. These, however, have had marginal effects on the industry-level, since food delivery platforms – some while having signed collective agreements covering some workers – continue to classify couriers as self-employed contractors, reducing workers' and unions' bargaining power.

Third, previous research has argued that gig platforms might struggle in markets where workers are able to find better and more stable jobs (Thelen 2018). The Nordic labor markets tend to provide workers with stable jobs and decent working conditions and wages, which might reduce the relatively attractiveness of platform-mediated gig work. However, we find that gig platforms in the Nordic taxi and food delivery industries, as in most other labor markets (see van Doorn et al. 2023), primarily recruit workers from already marginalized segments of the labor force, primarily migrants. The workers have often experienced difficulties with finding employment in other industries and perceive platform-mediated gig work as one of very few opportunities in the labor market (Hua & Savage 2023; Jesnes & Oppegaard 2023).

Finally, our analysis shows that political will and regulatory responses have been important in shaping platform-mediated gig work in the Nordic countries. While taxi platforms initially were faced with product market regulations impeding their business models in Denmark, Finland, and Norway, these countries' center-right governments all proposed deregulations aimed at facilitating the taxi platforms' business models. New social-democratic governments across the Nordics have since taken steps toward regulating platform-mediated gig work. We have, on the one hand, seen the re-introduction of certain qualitative taxi market regulations in Finland and Norway, aimed at remedying some of the consequences of deregulation. These measures primarily target taxi owners, increasing the entry barriers to the taxi industry (Oppegaard et al. 2023), and do not challenge the taxi platforms directly. On the other hand, we have also seen governments initiate processes to prevent the misclassification of workers as self-employed contractors. These initiatives are in their early phases and potential consequences remain unknown. They nonetheless indicate a shift in perspective on platform-mediated gig work compared to the Nordic governments' previous 'wait and see' approach (Jesnes & Oppegaard 2020).

A key takeaway from our analysis is that the notion of the Nordic labor market model requires closer examination. We find that gig platforms have emerged in the Nordic taxi and food delivery industries not only by *evading* employer responsibilities and *disrupting* regulations, but also by *adapting* to established work arrangements in these industries and successfully attracting workers to the flexible yet precarious conditions they offer. While the Nordic labor market model often is perceived as unitary, this highlights its segmented nature. Resting on strong social partners and collective agreements, the Nordic labor market model is a regulatory framework that does not necessarily encompass the labor markets as a whole but remains dependent on unionization and collective agreement formation at the industry-level. The taxi and food delivery industries, together with other transportation and distribution industries more broadly (Valestrand & Oppegaard 2022), are industries in the 'fringes' of the Nordic labor

market model. As such, our analysis shows that they were particularly susceptible to the platforms' business model. We also find that this segmentation pertains to the labor force, wherein certain segments remain excluded from the well-regulated and stable jobs that tend to characterize Nordic labor markets at the aggregate. For these groups, platform-mediated gig work might appear as one of few opportunities.

Our analysis also highlights the importance of product market regulations for understanding the rise of platform-mediated gig work. We find that product market regulations played a key role in shaping the developments in the Nordic taxi industries, and that the liberalization of entry regulations constituted a necessary precondition for the taxi platforms. This indicates that product market regulations can play an essential role in labor market outcomes, which has implications for industrial relations scholarship and labor market policy. Further research should explore the interplay between product and labor market regulations in the emerging attempts at regulating platform-mediated gig work in the Nordic countries and beyond, comparing outcomes in differently regulated industries and between labor market models. Given the specificity of the taxi and food delivery industry, further research should also examine platform-mediated gig work in a broader sample of industries, both where gig platforms have succeeded and where they have failed.

References

- Alasoini, T., Immonen, J., Seppänen, L. & Käsälä, M. (2023). Platform workers and digital agency: Making out on three types of labor platforms. *Frontiers in Sociology* 8: 1063613. doi: <https://doi.org/10.3389/fsoc.2023.1063613>
- Andersen, S.K., Dølvik, J.E. & Ibsen, C.L. (2014). *Nordic Labour Market Models in Open Markets*. ETUI Report 132. Brussels: European Trade Union Institute.
- AVI. (2024). Työsuojeleviranomainen hakee valituslupaa korkeimmalta hallinto-oikeudelta ruokalahettejä koskevaan päätökseen [The occupational health and safety authority is applying for an appeal permit from the Supreme Administrative Court against the decision regarding food couriers]. <https://avi.fi/tiedote/-/tiedote/70107516#> [Accessed 4 December 2024].
- Beckmann, F. & Hoose, F. (2022). From loopholes to deinstitutionalization: The platform economy and the undermining of labor and social security institutions. *Partecipazione e Conflitto* 15(3): 800–826. doi: <https://doi.org/10.1285/i20356609v15i3p800>
- Brave New Europe. (2023). Gig Economy Project – ‘Game over Uber’: Stockholm Uber and Bolt drivers in first-ever strike. <https://braveneweuropa.com/game-over-uber-stockholm-uber-and-bolt-drivers-in-first-ever-strike> [Accessed 4 December 2024].
- Breakit. (2023). Slut på matbud från Bolt – stänger ner i Sverige redan nästa månad [The end for food delivery from Bolt – closing down in Sweden already next month]. <https://www.breakit.se/artikel/36857/slut-pa-matbud-fran-bolt-stanger-ner-i-sverige-redan-nasta-manad> [Accessed 4 December 2024].
- Collier, R., Dubal, V. & Carter, C. (2018). Disrupting regulation, regulating disruption: The politics of Uber in the United States. *Perspectives on Politics* 16(4): 919–937. doi: <https://doi.org/10.1017/S1537592718001093>
- Ecommerce News. (2023). Wolt expands further in Europe. <https://ecommercenews.eu/wolt-expands-further-in-europe/> [Accessed 4 December 2024].
- Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.

- Finnish Competition and Consumer Authority. (2022). Taxi services reform brought higher average fares while making cheaper rides available. <https://www.kkv.fi/en/current/press-releases/taxi-services-reform-brought-higher-average-fares-while-making-cheaper-rides-available/> [Accessed 4 December 2024].
- Funke, C. & Picot, G. (2021). Platform work in a coordinated market economy. *Industrial Relation Journal* 52: 348–363. doi: <https://doi.org/10.1111/irj.12339>
- Gärling, T., Laitila, T., Marell, A. & Westin, K. (1995). A note on the short-term effects of deregulation of the Swedish Taxi-Cab Industry. *Journal of Transport Economics and Policy* 29(2): 209–214.
- Haidar, J. & Kuene, M. (eds.) (2021). *Work and Labour Relations in Global Platform Capitalism*. Cheltenham: Edward Elgar.
- Heeks, R., Gomez-Morantes, J.E., Graham, M., et al. (2021). Digital platforms and institutional voids in developing countries: The case of ride-hailing markets. *World Development* 145: 105528. doi: <https://doi.org/10.1016/j.worlddev.2021.105528>
- Hau, M.F. & Savage, O.G. (2023). Building coalitions on Facebook: ‘social media unionism’ among Danish bike couriers. *New Technology, Work and Employment* 38(3): 529–547. doi: <https://doi.org/10.1111/ntwe.12261>
- Hotvedt, M.J. (2020). Kollektive forhandlinger for oppdragstakere? Rekkevidden av adgangen til å forhandle tariffavtaler i lys av internasjonal rettsutvikling [Collective bargaining for contractors? The scope of access to negotiate collective agreements in international legal development]. *Arbeidsrett* 17(1): 1–44. doi: <https://doi.org/10.18261/issn.1504-3088-2020-01-01>
- ILO. (2021). *World Employment and Social Outlook 2021: The Role of Digital Labour Platforms in Transforming the World of Work*. Geneva: International Labour Organization.
- Ilse, A. & Söderqvist, C.F. (2023). Will there be a Nordic model in the platform economy? Evasive and integrative platform strategies in Denmark and Sweden. *Regulation & Governance* 17(3): 608–626. doi: <https://doi.org/10.1111/regg.12465>
- Jesnes, K. & Oppegaard, S.M.N. (eds.) (2020). *Platform work in the Nordic models: Issues, cases and responses*. TemaNord: 513. Copenhagen: Nordic Council of Ministers. doi: <http://dx.doi.org/10.6027/temanord2020-513>
- Jesnes, K. & Oppegaard S.M.N. (2023). Plattformmediert gigarbeid i Norge. Fleksibilitet, uforutsigbarhet og ulikhet [Platform-mediated gig work in Norway. Flexibility, unpredictability, and inequality], In Fløtten, T., Kavli, H.C. & Trygstad, S. (eds.) *Ulikhetens drivere og dilemmaer*, Oslo: Universitetsforlaget, pp. 137–153. doi: <https://doi.org/10.18261/9788215065403-23-08>
- Jesnes, K. & Rasmussen, S. (2024). The bitter aftertaste of app-based food delivery, In Oppegaard, S.M.N. (ed.) *The Working Environment of the Future Digitalization and OSH Challenges in the Nordics*. TemaNord 2024:531. Copenhagen: Nordic Council of Ministers, pp. 74–95. doi: <http://dx.doi.org/10.6027/temanord2024-531>
- Jesnes, K., Neumann, D., Trappmann, V. & de Becdelièvre, P. (2021). The role of worker collectives among app-based food delivery couriers in France, Germany and Norway: All the same or different?, In Drahokoupil, J. & Vandaele, K. (eds.) *A Modern Guide to Labour and the Platform Economy*, Cheltenham: Edward Elgar, pp. 258–273.
- Kristiansen, J.H., Larsen, T.P. & Ilse, A. (2023). Hybrid work patterns: A latent class analysis of platform workers in Denmark. *Nordic Journal of Working Life Studies* 13(S10): 55–76. doi: <https://doi.org/10.18291/njwls.133721>
- Koutsimpogiorgos, N., Frenken, K. & Herrmann, A.M. (2023). Platform adaptation to regulation: The case of domestic cleaning in Europe. *Journal of Industrial Relations* 65(2): 156–184. doi: <https://doi.org/10.1177/00221856221146833>
- Ministry of Economic Affairs and Employment of Finland. (2023). EU ministers to seek agreement on platform work and discuss the pharmaceutical ecosystem. <https://tem.fi/>

- [en/-eu-ministers-to-seek-agreement-on-platform-work-and-discuss-the-pharmaceutical-ecosystem](#) [Accessed 4 December 2024].
- Ministry of Transport of Norway. (2024). Endringer i yrkestransportforskriften: Overgangsordninger og dispensasjon [Changes to the regulation of the professional transportation act: Temporary measures and dispensations]. <https://www.regjeringen.no/no/aktuelt/endringer-i-yrkestransportforskriften-overgangsordninger-og-dispensasjon/id3048170/> [Accessed 4 December 2024].
- Muszyński, K., Pulignano, V. & Mara, C. (2022). Product markets and working conditions on international and regional food delivery platforms: A study in Poland and Italy. *European Journal of Industrial relations*. 28(3): 295–316 doi: <https://doi.org/10.1177/09596801211070802>
- Newlands, G. (2024). ‘This isn’t forever for me’: Perceived employability and migrant gig work in Norway and Sweden. *Environment and Planning A: Economy and Space*, 56(4): 1262–1279. doi: <https://doi.org/10.1177/0308518X221083021>
- Occhiuto, N. (2022). Enabling disruptive innovations: A comparative case study of Uber in New York City, Chicago and San Francisco. *Socio-Economic Review* 20(4): 1881–1903. doi: <https://doi.org/10.1093/ser/mwab056>
- Oppegaard, S.M.N. (2024). Platformization as subsumption? A case study of taxi platforms in Oslo, Norway. *Capital & Class* 48(3): 419–437. doi: <https://doi.org/10.1177/03098168231179974>
- Oppegaard, S.M.N. & Jesnes, K. (2024). Plattformbasert kontroll. Nye styringsteknikker i drosjenæringen og matleveringsbransjen [Platform-based control. New managerial techniques in the taxi and food delivery industries], In Alsos, K., Oppegaard, S.M.N., Trygstad, S.C. (eds.), *Den norske arbeidslivsmodellen. Status og utfordringer i en brytningstid* [The Norwegian Labor Market Model. Status and Challenges in Turbulent Times]. Oslo: Gyldendal Akademisk, pp. 277–296.
- Oppegaard, S.M.N., Saloniemä, A. & Saari, T. (2020). Uber’s trajectories in the Nordic countries, In Jesnes, K. & Oppegaard, S.M.N. (eds.) *Platform Work in the Nordic Models: Issues, Cases and Responses*. TemaNord: 513. Copenhagen: Nordic Council of Ministers, pp. 25–46. doi: <http://dx.doi.org/10.6027/temanord2020-513>
- Oppegaard, S.M.N., Aarhaug, J., Hartveit, K.J.L. & Strømstad, H. (2023). *Utvikling i drosjemarkedet 2020 til 2023 – omregulering og korona* [Development in the Taxi Market 2020 to 2023 – Reregulation and Covid]. Fafo report 2023:1/TØI report 1954/2023. Oslo: Fafo/TØI.
- PAM. (2024). PAM-Wolt negotiations. <https://www.pam.fi/en/wolt-couriers-negotiations/> [Accessed 4 December 2024].
- Piasna, A., Zwysen, W. & Drahokoupil, J. (2022). *The Platform Economy in Europe. Results from the Second ETUI Internet and Platform Work Survey*. European Trade Union Institute, Working Paper 2022.05. Brussels: ETUI.
- Pollman, E. & Barry, J. (2017). Regulatory entrepreneurship. *Southern California Law Review* 90(3): 383–448. doi: <https://dx.doi.org/10.2139/ssrn.2741987>
- Rahman, K.S. & Thelen, K. (2019). The rise of the platform business model and the transformation of twenty-first-century capitalism. *Politics & Society* 47(2): 177–204. doi: <https://doi.org/10.1177/0032329219838932>
- Rasmussen, S., Nätti, J., Larsen, T.P., Ilsøe, A. & Garde, A.H. (2019). Nonstandard employment in the Nordics – Toward precarious work?. *Nordic Journal of Working Life Studies* 9(S6): 1–26. doi: <https://doi.org/10.18291/njwls.v9iS6.114689>
- Scheele, L. (2022). ‘The Danish model’ meets food delivery platforms. *Nordic Info*. <https://nordics.info/show/artikel/the-danish-model-vs-food-delivery-platforms> [Accessed 4 December 2024].
- Selberg, N. (2023). Autonomous regulation of work in the Gig economy: The first collective bargaining agreement for riders in Sweden. *European Labour Law Journal* 00: 1–19. doi: <https://doi.org/10.1177/20319525231178980>

- Slavnic, Z. & Urban, S. (2018). Meandering rides of the Swedish taxi industry: Flourishing entrepreneurship or ethnic segmentation? *International Journal of Sociology and Social Policy* 38(5–6): 444–458. doi: <https://doi.org/10.1108/IJSSP-09-2017-0113>
- Soested, M. & Munkholm, N.V. (2018). Uber and taxis in Denmark, In Noguele, R. & Renders, D. (eds.) *Uber & Taxis*. Brussels: Bruylant, pp. 141–162.
- The Local. (2016). 60 Former UberPOP Drivers Convicted in Sweden. <https://www.thelocal.se/20161010/60-former-uberpop-drivers-convicted-in-sweden> [Accessed 4 December 2024].
- Thelen, K. (2018). Regulating Uber: The politics of the platform economy in Europe and the United States. *Perspectives on Politics* 16(4): 938–953. doi: <https://doi.org/10.1017/S1537592718001081>
- Valestrand, E.T. & Oppegaard, S.M.N. (2022). Framveksten av plattformmediert gigarbeid i Norge og den «norske arbeidslivsmodellen». En analyse av drosjenæringen og renholdsbransjen [The emergence of platform mediated gig work in Norway and the «Norwegian labor market model». An analysis of the taxi industry and the cleaning industry]. *Norsk sosiologisk tidsskrift* 6(5): 25–43. doi: <https://doi.org/10.18261/nost.6.5.3>
- Vallas, S. & Schor, J.B. (2020). What do platforms do? Understanding the Gig economy. *Annual Review of Sociology* 46(1): 273–294. doi: <https://doi.org/10.1146/annurev-soc-121919-054857>
- van Doorn, N., Ferrari, F. & Graham, M. (2023). Migration and migrant labour in the Gig economy: An intervention. *Work, Employment & Society* 37(4): 1099–1111. doi: <https://doi.org/10.1177/09500170221096581>
- Wolf, A. (2022). City power in the age of Silicon Valley: Evaluating response to the entry of Uber to the American City. *City & Community* 21(4): 290–313. doi: <https://doi.org/10.1177/1535684121110669>
- Yle. (2023). Wolt-kuskit nousivat vastarintaan Jyväskylässä [Wolt Drivers rose in Resistance in Jyväskylä]. <https://yle.fi/a/74-20015005> [Accessed 4 December 2024].

Notes

- ¹ Platform-mediated gig work remains a very marginal phenomenon in Iceland (Jesnes & Oppegaard 2020). The Icelandic taxi market was deregulated in 2023 following a reasoned opinion from the EFTA Surveillance Authority, but no taxi platforms have yet emerged (Ministry of Transport and Infrastructure, Iceland, personal communication, 12 August 2023). Similarly, food delivery platforms first entered the island in May 2023 with the launch of Wolt (Ecommerce News 2023). We therefore exclude Iceland from our Nordic comparative analysis.
- ² The Danish and Norwegian cases also draw interviews with workers from ongoing research projects (Jesnes & Rasmussen 2024; Oppegaard 2024). In the Finnish case, representatives from two unions and two state agencies were interviewed over email or telephone.
- ³ In Finland and Norway, Uber simultaneously launched Uber Black organized through established and licensed limousine companies to gain access to the high-end transportation market (Oppegaard et al. 2020).
- ⁴ In May 2024, Foodora announced that it would leave the Danish market (Jesnes & Rasmussen 2024).
- ⁵ Wolt was acquired by Doordash in 2021.

Appendix I How platform-mediated gig work has emerged and developed in the taxi and food delivery industries in Denmark, Finland, Norway, and Sweden

	Denmark	Finland	Norway	Sweden
Taxi	Uber entered in 2014, launching Uber Pop, but withdrew in 2017 after the deregulation upheld requirement for taxis to be connected to dispatching center and vehicle requirement. The center-right government coalition was unable to pass a full deregulation of the taxi market.	Uber provoked a taxi market deregulation, facilitating platforms' business models (remove limitation on licenses and requirement to be connected to dispatching center). Some qualitative regulations were reintroduced in 2020. Taxi platforms have nonetheless emerged within the work arrangements that traditionally characterized the taxi industry (self-employed owners) and have become important actors in the taxi market.	Uber succeeded in provoking a taxi market deregulation facilitating platforms, supported by the center-right government coalition. The platforms have emerged within the traditional work arrangements characterizing the industry (self-employed owners). There has been no collective mobilization among drivers. The platforms have, similarly to the traditional taxi industry, primarily recruited drivers from already marginalized segments of the labor force.	Although the Swedish taxi market had few regulations, Uber tried to 'disrupt' the license requirement with Uber Pop, allowing non-licensed drivers to sign up. Many drivers were sentenced. Uber adjusted to the license requirement, discontinuing Uber Pop, gaining foothold within the traditional organization of the industry (self-employed owners). In 2022, platform drivers protested for better pay and working conditions.
Food delivery	Food delivery platforms have become a significant industry. Most couriers are classified as self-employed contractors, but Just Eat has a CA with 3F. While the aim was to make it an industry-wide agreement, it covers few couriers.	Food delivery platforms classify couriers as self-employed contractors, avoiding employer responsibilities. This has been contested by unions and the labor council, but no reclassifications have been made. The case is going to court. Couriers protest and mobilize for better pay and transparency.	Foodora employed its couriers when first launching, enabling them to organize and demand a CA (signed after a strike). Foodora and Wolt have since increasingly hired couriers as self-employed contractors. This practice has been challenged, and the government has amended the definition of 'employees' to combat misclassification.	Most of Foodora's couriers are classified as employees, enabling them to sign a collective agreement. Other companies do not employ the workers. The government has reviewed working environment risks in food delivery, but no legal amendments to prevent misclassification have been made.



Appendix 2 Case-property matrix identifying and specifying factors that have enabled and shaped the trajectories of platform-mediated gig work in Denmark, Finland, Norway, and Sweden

Taxi industry				
Factors/ countries	Denmark	Finland	Norway	Sweden
Numerical restrictions on licenses	Repealed in 2018	Repealed in 2018	Repealed in 2020	Repealed in 1990
Vehicle requirements	Taximeter; seat sensor; video surveillance	Taximeter or equivalent (app)	Taximeter; roof light, marking	Taximeter
Requirement to be affiliated with dispatching center	Maintained though the deregulation in 2018	Removed in 2018	Removed in 2020	Removed in 1990
Sector-wide regulations of working conditions	No	No	No	No
Traditional work arrangement	Self-employed owners (with employed additional drivers)	Self-employed owners (with employed additional drivers)	Self-employed owners (with employed additional drivers)	Self-employed owners (with employed additional drivers)
Segments of labor force recruited by platforms	N/A	Marginalized segments of the labor force	Marginalized segments of the labor force	Marginalized segments of the labor force
Union responses to emergence of platforms	Critical	Critical	Critical	Critical
Unions able to organize platform workers	N/A	No	No	Mostly no, but new grassroots union emerged in 2022
Government responses to the emergence of platforms	Facilitate platforms' business model: Partial deregulation (minority government, unable to pass full deregulation)	Facilitate platforms' business model: Deregulation of taxi market (2018)	Facilitate platforms' business model: Deregulation of taxi market (2020)	Not hinder platforms, but ensure taxation
Type of government when platforms emerged	Center-right coalition (minority government)	Center-right coalition (majority government)	Center-right coalition (majority government)	Center-right coalition (minority government)



Government responses to platforms gaining foothold	N/A	Re-introduction of certain qualitative regulations: competence requirements for taxi owners (2021). By Social-Democratic government	Re-introduction of certain qualitative regulations: competence requirements for taxi owners (2023 and 2024). By Social-Democratic government	N/A
Grassroot mobilization by platform workers	N/A	No	No	Yes. New union formed in 2022

Food delivery industry

Factors/ countries	Denmark	Finland	Norway	Sweden
Product and service market regulations of food delivery industry	No	No	No	No
Sector-wide regulations of working conditions	No	No	No	No
Emergence of food delivery platforms	2001: Local company, Just Eat 2015: International company, Hungry/ Foodora 2017: Wolt	2015: Local company, Wolt 2015: International company, Foodora	2015: International company, Foodora 2018: Wolt	2015: International companies: Foodora, Uber Eats 2016: Wolt 2020: Bolt Food
Platforms' forms of employment	Just Eat: employed couriers Foodora/Wolt: Self-employed	Wolt: Self-employed contractors Foodora: Briefly classified certain couriers as employees, but practice discontinued	Foodora: both employed and self-employed courier Wolt: Self-employed contractors	Foodora: both employed and self-employed couriers Uber Eats: Self-employed Wolt: Self-employed contractors Bolt Foods: Self-employed contractors



Public-political response to platforms	Public criticism of working conditions and forms of employment – Tax Authority arguing couriers should be employed	Public criticism of working conditions and forms of employment – Unions and government agencies argue that couriers are misclassified – Tax authorities argue couriers are self-employed	Public criticism of the working conditions and forms of employment the platforms offer	Public criticism of working conditions and forms of employment – Swedish Work Environment Authority arguing couriers should be employed
Court cases clarifying forms of employment	No	No	No	Ongoing
Union responses	Unions signed CA for employed Just Eat couriers (2021)	Unions unable to organize self-employed couriers. PAM has sued Volt for misclassifying couriers	TWU organized Foodora couriers, went on strike and signed CA (2019)	Transport organized Foodora couriers, signed CA (2020)
Grassroot mobilization among couriers	Yes	Yes	No	No
Government responses to food delivery platforms	Awaiting EU directive	Awaiting EU directive	Labor law revised to hinder misclassification, from 2024	Awaiting EU directive