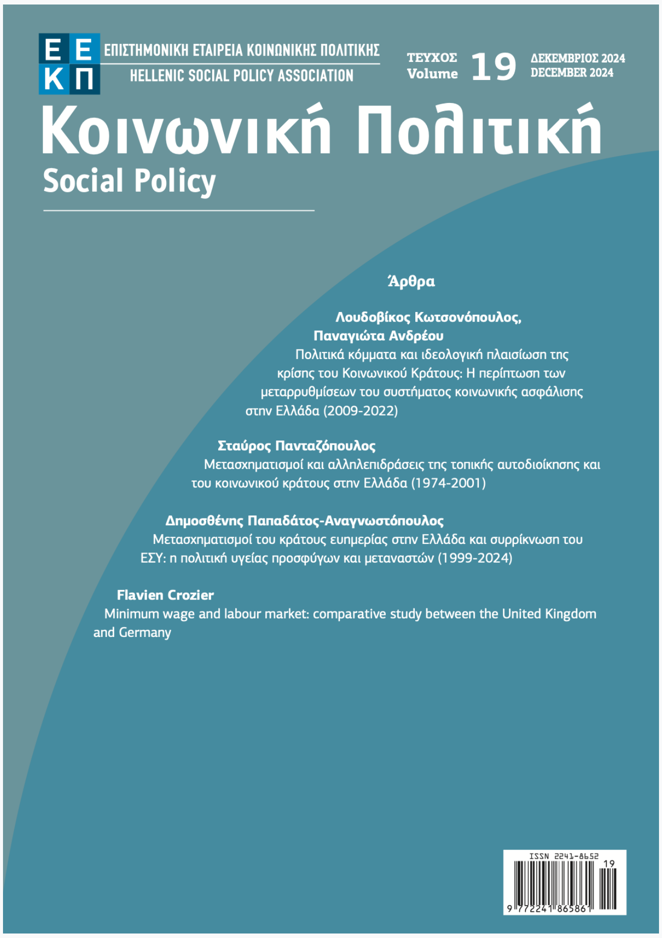
Κοινωνική Πολιτική

Τόμ. 19 (2024)



Minimum wage and labour market: comparative study between the United Kingdom and Germany

Flavien Crozier

doi: [10.12681/sp.37379](https://doi.org/10.12681/sp.37379)

Βιβλιογραφική αναφορά:

Crozier, F. (2025). Minimum wage and labour market: comparative study between the United Kingdom and Germany. *Κοινωνική Πολιτική*, *19*, 81–98. https://doi.org/10.12681/sp.37379

ΕΠΙΣΤΗΜΟΝΙΚΗ ΕΤΑΙΡΕΙΑ ΚΟΙΝΩΝΙΚΗΣ ΠΟΛΙΤΙΚΗΣ
HELLENIC SOCIAL POLICY ASSOCIATION

ΤΕΥΧΟΣ Volume 19 ΔΕΚΕΜΒΡΙΟΣ 2024 DECEMBER 2024

Κοινωνική Πολιτική

Social Policy

ISSN 2241-8652
19
9 772241 865861

Minimum wage and labour market: comparative study between the United Kingdom and Germany

Flavien Crozier
Master Degree of Social Sciences in Sciences Po Lille, France

Abstract

This article is a literature review that explores the economic, political, and social implications of minimum wage policies in Germany and the United Kingdom, focusing on the impact on the labour market. Starting with theoretical and empirical intricacies regarding minimum wage concept, then tracing the historical evolution and key developments in 2015, the study analyses short-term effects and challenges in assessing the policy's true impact. The findings suggest positive outcomes in increasing incomes for low-wage workers with minimal disruptions to employment. However, concerns persist about potential drawbacks, such as wage disparity and challenges to collective bargaining, emphasising the need for a comprehensive approach. Despite achieving some objectives, the reforms often fall short of expectations, with limited success in combating poverty.

Keywords: Minimum wage; collective bargaining; low-paid workers; labour market; living wage; economic evaluation; welfare state

Περίληψη

Αυτό το άρθρο είναι μια ανασκόπηση της βιβλιογραφίας που διερευνά τις οικονομικές, πολιτικές και κοινωνικές επιπτώσεις των πολιτικών κατώτατου μισθού στη Γερμανία και το Ηνωμένο Βασίλειο, εστιάζοντας στον αντίκτυπο στην αγορά εργασίας. Εκκινώντας από τις θεωρητικές και εμπειρικές επιπλοκές σχετικά με την έννοια του κατώτατου μισθού, και στη συνέχεια ανιχνεύοντας την ιστορική εξέλιξη και τις βασικές εξελίξεις το 2015, η μελέτη αναλύει τις βραχυπρόθεσμες επιπτώσεις και τις προκλήσεις στην αξιολόγηση του πραγματικού αντίκτυπου της πολιτικής. Τα ευρήματα υποδεικνύουν θετικά αποτελέσματα στην αύξηση των εισοδημάτων για τους εργαζόμενους με χαμηλούς μισθούς με ελάχιστες διαταραχές στην απασχόληση. Ωστόσο, παραμένουν ανησυχίες για πιθανά μειονεκτήματα, όπως η μισθολογική ανισότητα και οι προκλήσεις στη συλλογική διαπραγμάτευση, υπογραμμίζοντας την ανάγκη για μια ολοκληρωμένη προσέγγιση. Παρά

την επίτευξη ορισμένων στόχων, οι μεταρρυθμίσεις συχνά δεν ανταποκρίνονται στις προσδοκίες, με περιορισμένη επιτυχία στην καταπολέμηση της φτώχειας.

Λέξεις-κλειδιά: Κατώτατος μισθός; συλλογικές διαπραγματεύσεις; χαμηλόμισθοι εργαζόμενοι; αγορά εργασίας; μισθός διαβίωσης; οικονομική αξιολόγηση; κράτος πρόνοιας

Introduction

The minimum wage is a concept that can be defined as “a labour market institution that sets a wage floor, that is, a lower bound to the wage paid to individual workers” (Boeri and van Ours, 2013). It is a concept which has known a renewed interest in the “New Minimum Wage Research”, i.e. studies focused on understanding the broader impacts of minimum wage policies using more sophisticated econometric techniques. Led in the 1990s and 2000s, especially on the American labour market, they used new methodological tools as natural experiments to compare regions with different minimum wage laws or as difference-in-differences estimators (DiD), employed to isolate the causal effects of minimum wage changes (Card and Krueger, 1994; Draca and al., 2011). These empirical studies have relaunched debates on the minimum wage policies, challenging neoclassical models that predict a major loss of competitiveness for companies and a significant rise in unemployment, although negative effects may occur, with the emphasis instead on spillover effects on youth employment or employee productivity.

The minimum wage, as a political instrument, has emerged as a central spearhead of union demands. Since its establishment, it has been a crucial point of discussion, symbolising the struggle for fair working conditions. It has become a key tool to ensure a decent level of compensation for workers, reflecting the unions’ commitment to protecting the rights and interests of employees. The minimum wage issue should not be oversimplified into a cliché of unions always seeking increases and employers always pushing for decreases. Recognising the nuanced nature of minimum wage discussions, as highlighted by Grimshaw’s book (2017), is essential for moving beyond stereotypical viewpoints. Negotiations go beyond a binary opposition between unions and employers, encompassing a variety of economic, social, and political factors.

Starting from these general statements, the aim of this article is to compare the evolution of the minimum wage in two European countries, Germany and the United Kingdom, and the impact of these on the labour market. The minimum wage effects can be analysed from many aspects. In this literature review, the focus will be, though not exclusively, on examining the impact of minimum wage on employment rates, working hours, and the relationship with collective bargaining after 2015 laws in Germany and the United Kingdom. We will try to analyse the implementation of a statutory minimum wage in these two countries, each with distinct contextual backgrounds, and place them within the theoretical frameworks prevalent in the academic discourse on minimum wage. Additionally, we will assess the effects of this policy on their labour markets. The guiding question that we will try to answer is therefore: what were the key factors influencing the establishment of national minimum wages in Germany and the United Kingdom, and how can we interpret the first assessments and results?

First, we will place both countries in a long-term historical analysis of regulation and struggle on wages (1). Then, the year 2015 will be highlighted because it is a crucial time for the minimum wage in these countries (2). Finally, according to the existing literature, we will proceed to the analysis of effects according to the intentions and the limits of these (3).[1]

1. Minimum wages and collective bargaining

The establishment of minimum wages serves different social goals and labour market functions (combating poverty, reducing pay inequality, promoting productivity, etc.)., and are theoretically analysed through models as monopsony, neoclassical frameworks and efficiency wage theories. With few exceptions (Sweden, Denmark, Italy, Finland and Cyprus), EU countries have national minimum wages set by the state after consultation with social partners. The relationship between collective bargaining and the minimum wage takes different forms that shape overall pay inequality in the labour market, but setting the legal minimum wage is increasingly becoming the responsibility of the state (Karamessini and Grimshaw, 2017).

1.1 Theoretical and empirical perspectives on minimum wages

The theoretical understanding of minimum wages involves several economic models, including neoclassical, monopsony, and efficiency wage models. In a perfectly competitive labour market, setting a minimum wage above the market-clearing level can lead to increased unemployment due to displacement of workers and reduced labour demand (Boeri and Van Ours, 2013). Necessarily an obstacle in the neoclassical model to the optimal setting of prices by the market, it is different in an imperfect labour market. Yet, in a monopsony model, a search model incorporating endogenous contact rates, a circular matching model, or a two-sided labour market flow model, positive employment effects may arise. These conceptions consider the distortions of the labour market by some imperfections. For example, the monopsony has been "a change in the economists" main view on the wages (Manning, 2003; Deakin and Green, 2009). Characterised by a single demander facing many suppliers, on the labour market, it introduced a substantial element of ambiguity, even suggesting that moderate rises in minimum wages would increase employment, because of their positive effects on labour supply. Introducing a minimum wage by the public authorities reduces the gap between the cost and the contribution of an employee to his company. This forces employers to pay employees closer to their marginal productivity, without encouraging them to make employees redundant, as each employee continues to be profitable, even having an incentive to hire more workers. In addition, the increase in the minimum wage encourages some workers to consider opportunities they had previously ignored because of the higher pay on offer.

The change of perspective from the standard neoclassical to the monopsony model emphasises

1. I would express my sincere gratitude to Professor Ms. Karamessini, distinguished expert in Labour and Welfare State Economics, for her invaluable guidance and support throughout the entire process of developing this article.

that the minimum wage is not necessarily an impediment to employment, but its direct impact depends on the degree of competition on the labour market in each sector, as well as the relationship between the minimum wage and productivity in these sectors. This is why it is complex to anticipate the effects of introducing a uniform minimum wage for the economy at a general level (Bachmann & Frings 2017). Moreover, the impact of minimum wages on employment is contingent upon the particular conditions and institutional framework within each labour market, as regulation theory frameworks put forward (Boyer, 2004; Holtemöller and Pohle, 2020).

At an empirical level, studies are mainly based on firm-level data, estimating the impact of minimum wage on labour demand, and are clearly dependant of the bottom end of the wage distribution as well as the actual enforcement. (Boeri and Van Ours, 2013). Meta-studies show that effects of minimum wages on employment are often small or insignificant, and sometimes a bit positive (ILO, 2016). For example, Neumark and Wascher (2007) found negative employment effects of minimum wages in only two-thirds of the studies reviewed, not always statistically significant, affecting particularly the young workers – what can be overcome by a particular level for the young workers as done in the United Kingdom. Aside from natural experiments, other empirical evidence, based on workers histories show that if it can affect the hiring, but it has a positive effect for those who kept their jobs, retaining employees and increasing their satisfaction (Zavodny, 2000; Gautié, 2020).

1.2 The different goals and functions of minimum wages

The minimum wage can be considered as an economic tool used to regulate the labour market, and concurrently as a marker of social advancement. With a history that varies through times and contexts, it is now overspread, notably with national regulations, despite the revival of neoclassical economic policies since the 1980s.

Among arguments that proclaim the need for a minimum wage, prior are those placing it as a protection against over-exploitation, allowing greater social justice and human dignity. Usually, the outcome of social revendication and collective bargaining is the establishment of worker rights to ensure protection and support a dignified standard of living (ILO, 1970). Some economists, such as Webbs, put forward a “social cost” argument in favour of a national minimum. By underpaying workers, particularly to the detriment of their health, employers do not cover the full, true cost of work, or its “social cost”.

The monopsony adds a theoretical revolution implying that a small raise of the minimum wage can be beneficial for employment, provided that the level of the minimum wage does not exceed the productivity of employees (Cotelette, 2018; Aftalion, 2017). Then, institutions such as the state or international organisations can support its implementation for other purposes. The amount of low-paid workers, typically defined as earning less than two-thirds of the median wage, can significantly decrease with a minimum wage set at approximately 60% of the median, as observed in France (Caroli and Gautié, 2008). Meanwhile addressing the needs of low-paid workers, gender pay equity is a focal point on minimum wage policy because of women’s overrepresentation in low-wage jobs, making them more likely to benefit from minimum wage protection. A higher minimum wage is expected to narrow the gender pay gap and reduce the risk of low pay for female workers compared to their male counterparts. Then, unions could use collective bargaining to restore pay differentials eroded by a minimum wage increase, potentially uplifting some workers above the low-wage threshold (Grimshaw and Rubery, 2013).

As an economic tool, the minimum wage can enhance labour productivity at both the firm and macroeconomic levels. On a firm level, the Akerlof hypothesis (1982) supports the idea that higher wages lead to increased employee motivation and effort, positively influencing efficiency wage effects. While this hypothesis is compelling for higher wage earners, it also has positive efficiency wage effects on lower salaries, as Georgiadis (2013) demonstrated in a natural experiment on the care homes sector in the UK after the introduction of the National Minimum Wage. A generous minimum wage contributes to productivity by reducing turnover, allowing employers to keep trained staff and improve efficiency over time. Moreover, firms benefit from higher productivity because of both increased individual employee productivity and the cultivation of long-term expertise within the workforce.

On a macroeconomic scale, the influence of minimum wages extends to fostering a more competitive market. Firms adept at adapting to minimum wage regulations tend to expand, while low-productivity enterprises may exit the market. Long-term effects also include a potential increase in innovation, capital-labour substitution with more efficient and capital-intensive production technologies, as suggested by the article of Noah Smith in Bloomberg View (2015). It is noteworthy that while productivity may rise, it could cause negative employment effects because of a shift in company strategies towards capital-labour substitution, employing more efficient and capital-intensive production technologies, albeit at a higher cost (ILO, 2016). Other countries favour the pay equity effects, the redistributive role of the minimum wage in sharing the gains from growth, as France did with the Interprofessional Minimum Wage of Growth (SMIC) (Cotelette, 2018; Grimshaw and al., 2014). As analysed further with the case of the United Kingdom, the minimum wage may be used as a means to reduce public spending, in making savings on other benefits that low-paid workers are entitled to.

1.3 The State taking charge of the minimum wage issue

The UK or Germany are not the only countries with a historical precedent of wages being indexed according to agreements among professional stakeholders. Finland, Denmark or Italy still function by sectorial agreements (Karamessini and Grimshaw, 2017). This led Aghion, Algan and Cahuc (2011) to define two types of situation of minimum wage-labour relations dynamics towards which each country tends to gravitate. With a modelling of the interplay between state regulation - minimum wage, and the state of labour relationships, they have found two equilibria. The first one, the “Scandinavian” model, corresponds to countries with highly cooperative labour relations and low minimum wage regulations. In such countries, a robust legal minimum wage is deemed unnecessary, since wage negotiations are conducted directly by social partners. Conversely, nations characterised by stringent state control over minimum wage, limited motivation for social dialogue, and low union participation, experience a bad steady-state equilibrium. In such settings, named the “French” model, excessive state regulation crowds out social experimentation and the acquisition of cooperative knowledge. This crowding-out gradually erodes cooperation, pushing economies towards stable states marked by unfavourable labour relations and high minimum wage regulations. Consequently, it implies that state intervention in minimum wage regulation has long-term costs that may result in long-term effects on labour relationships.

National debates have increasingly shifted towards favouring a legally mandated statutory minimum wage set by the state, inspired by what other countries such as France have been able to put in place. Some reasons are invoked to understand the arising of national regulation on minimum wage to the foreground. We can quote the long-standing erosion of bargaining coverage, well before the economic crisis of 2008, even if it has come under pressure in many countries since this moment, and the expansion of low-wage sectors in most economies (ILO, 2015). To analyse this expansion of the state control, Karamessini and Grimshaw (2017) have developed a typology of state intervention upon minimum wage, in leaning on 5 different models, and classifying them according to their effect on collective bargaining (dismantle-neutral-supportive) and the strategy adopted on minimum wage (cut-raise-neutral). The first frame, and the one that will be discussed further, is the "crowding-out effect" (Aghion, 2011), where the government raise minimum wages in response to a breakdown in trust between workers and employers, which creates a self-perpetuating circle. On one hand, it hinders the development of trust by constraining opportunities for workers and employers to gain experience in cooperating during wage negotiations. On the other hand, prolonged exposure to non-cooperation prompts citizens to advocate for more robust state involvement in establishing minimum wage standards. Therefore, it crowds out collective forms of wage. The third frame emphasises "participative distribution" (Sen, 1999) whose Germany is close to, advocating for a state with a complementary institutional setting, involving tripartite considerations, strong union roles, engaged employers, and an egalitarian approach to pay equity. The fifth frame, "collective self-regulation" (Kahn-Freund, 1959), refers to systems like post-war UK, where social partners have full authority for wage-fixing, supported by state backing for participative, collectively negotiated standards. These frames offer diverse perspectives on the dynamics and consequences of minimum wage regulation and are useful in the understanding of policy variations of the UK and Germany regarding the minimum wage.

1.4 Minimum wages and collective bargaining in the UK and Germany

Regulating the minimum wage means either through the state or through the civil society. In both Germany and the UK, minimum wages were set at industry level, and then at regional level in Germany, which highlights the balance of power between unions and employers. This section provides an overview of the historical development of minimum wages in the two countries.

In the UK, the regulation first begins through the Trade Boards Act of 1909. Some "boards", negotiation areas for discussing about wages and other economic matters with representatives of workers, have been opened in four industries in which the wages were low comparing to other industries. The aim was to raise living standards and reduce poverty. It worked, so these boards have been progressively extended in many industries and turned into "Wages Councils" after WW2. In the 1960s and 1970s, several wages councils have been abolished, with less power granted to those remaining, until almost all disappearing in 1993, as part of a wider deregulatory labour market policy approach (Deakin and Green, 2009).

When the National Minimum Wage (NMW) is implemented by the Labour Party in 1998, it is welcomed by workers who experienced a period of limited collective representation and deserved protection from wage exploitation. Economic contributions play a role in the Labour Party's support for the National Minimum Wage, such as Alan Manning's work, demonstrating that the weakening of wage councils under Thatcherism, and their subsequent abolition, only exacerbated wage inequalities without having a positive impact on employment. This perspective is further supported by theoretical work on monopsony, which suggests that there are no negative effects on employment (Manning, 2003; Gautié, 2020). However, this new policy has not been accompanied by a support to collective bargaining despite how unions and employers have been involved in the implementation of the new law and the operation of the Low Pay Commission responsible for making recommendations each year on the level of the minimum wage, which includes employer and trade union representatives among its nine members. The 1998 Act is no longer limited by the willing of preserving the voluntary collective bargaining system but the perceived need to minimise what are seen as potentially negative economic effects (Karamessini and Grimshaw, 2017; Aftalion, 2017). So, the decline in collective bargaining coverage persisted throughout the 2000s, reaching an estimated 16 percent in the private sector by 2015, which was already low, with 23 percent in 1996 (Annual Survey of Hours and Earnings for low-wage incidence, private sector collective bargaining data from BIS, 2016).

In Germany, after the fall of the wall, the adoption of alternative pay bargaining strategies in Germany has been driven by the lack of a robust statutory wage floor and its limited positive impact on wage structures. This approach stems from 1990s agreements between the German government and Central and Eastern European countries, setting quotas for posted workers, particularly in construction. Initially, employment conditions were determined by the EU country of origin principle. However, social dumping in construction, due to non-binding wage clauses in the collective agreement, prompted the employers' association and trade union to establish legally binding minimum wages in the Posted Workers Act 1996 -*Arbeitnehmerentsendegesetz* (Bosh and Weinkopf, 2011a).

Despite opposition from the employer's confederation, a political compromise allowed eleven other sectors to adopt similar measures from 2007 to 2012. The absence of a legal mechanism for setting minimum wages in Germany leads to the use of the Posted Workers Act for internal wage regulation. Unions have succeeded in setting high standards, such as the commercial cleaning minimum wage in 2010, reaching 59% and 66.6% of median German earnings in western and eastern Germany, respectively (Bosh and Weinkopf, 2011b).

However, the collective bargaining coverage in the country has fallen from 75 percent in the late 1980s to less than two-thirds coverage in the 2010's (Grimshaw and al, 2014). Germany has encountered significant difficulties arising from the liberalisation of the European services industry and the heightened mobility of labour. European Court of Justice rulings on the Laval, Viking, and Rüffert cases imposed that a minimum rate set through collective bargaining, unless nationally extended, does not qualify as a minimum pay standard for posted workers. With a rising influx of posted workers, these rulings have presented a substantial challenge for labour relations and collective bargaining in Germany. Consequently, this situation has spurred the establishment of new legally binding national agreements in various sectors, as noted by Woolfson and al. (2010).

2. 2015: the same economic tool for different objectives

2015 is an important year for both Germany and the UK on the path of strict national minimum wage regulation. The introduction of a national statutory minimum wage (SMW) in Germany aimed to address job insecurity and poverty alleviation, while in the United Kingdom, although New Labour's National Minimum Wage was close to the German objectives, the Tories' National Living Wage does not follow the same track, concentrating on making budget savings on social benefits by transferring to companies the responsibility for making work pay.

2.1 The introduction of a federal minimum wage in Germany: combating inequality and job insecurity

The 1996 Posted Workers Act had limits. The coverage is limited, as many low-wage workers are employed in sectors without binding standards or in workplaces where weak or absent unions hinder effective enforcement. A survey of Bosh and Weinkopf (2011b) indicates compliance issues are also evident because the minimum wage for unskilled workers has become the norm for three in four employees in eastern Germany, even skilled workers entitled to higher wages, while in western Germany, only one in three receive the minimum wage.

For a long-time, most of the social partners (unions, employer's association, political parties) agreed on the uselessness of a federal minimum wage. But some sectors as industry or export were confronted with the loss of competitive advantage due to innovation and lower costs in other countries. Firms negotiated cost-cutting measures with their core workforce, which included outsourcing peripheral services and leading to wage reductions in those areas. Disparities among employers regarding wage bargaining policies became evident, particularly between large firms and their smaller suppliers in the export sector. Large firms were better positioned to absorb wage increases due to their greater ability to reorganize production for productivity gains and shift adjustment costs onto the social insurance system, notably through early retirement. Consequently, smaller firms often opted out of collective agreements. This was a failure for the sectoral nature of bargaining, inherently constraining the level of 'solidarity' seen in the Scandinavian model where wage agreements were made for less powerful workers, adjusted to align with those of better-organized leaders. While demand conditions were favourable and unemployment was low, wages in less organized sectors of the service industry remained relatively stable. However, German trade unions were neither strong nor centralized enough to implement a solidaristic wage with these unprecedented pay disparities. The erosion of the proportion of employees covered by collective agreements has contributed to a sharp increase in the proportion of low-paid workers, and has eventually participated to the shift of the common opinion about a federal minimum wage, and especially the trade union movement, in which sectors that were less able to negotiate an appropriate minimum began to ask a national rule, mobilising themselves in 2006 through the German Trade Union Confederation (DGB) to make a joint demand for a statutory minimum wage, recommended in 2010 at 8.50€ per hour (Mabbett, 2016, Matsaganis, 2020).

Meanwhile, during the 2005 campaign, the social-democrat political party SPD expressed themselves in favour of a national statutory if the trade unions and employers could not agree minima for all sectors, while the CDU/CSU expressed their will to secure minimum conditions sector by sector through collective bargaining supplemented by universal application, thereby achieving the same effect, a federal standardization. But the Great Coalition (2005-2009) failed, because of different positions of the SPD and CDU, the two ruling parties (Mabbett, 2016; Bosch and Weinkopf, 2011b). Finally, in 2013, when the Great Coalition came back, an agreement was reached for the implementation of a nationwide fixed minimum wage, driven above all by the growing demand from trade unions and public opinion for a statutory minimum wage.

When the SMW comes into effect the 1st of January 2015, the amount is 8,50€ per hour, as demanded. The main economic aims were to reduce job insecurity and alleviate poverty, particularly in the former East Germany (Mabbett, 2016). The second goal concerned the distributive effects of minimum wage, i.e. reduce the wage inequalities as stressed in some studies (Caliendo and al., 2019; Grimshaw, 2013). The general idea behind the SMW was to make sure that if someone worked full-time, they would earn enough to not need extra help from social assistance. The SMW had implicitly a third role of controlling the government's support for low-paying jobs, carrying this idea of savings while redistributing. This aspect has been an important focus of criticism regarding its introduction because numerous low-income households received substantial in-work benefits, coupled with high withdrawal rates of earned income, ranging from 80 to 100 percent, which significantly reduced the net benefit from additional work. Consequently, these households would see little advantage from any increase, as it would only heighten the risk of job loss resulting from a significant surge in employers' labour costs (Knabe and al., 2014), and triggering a crowding out effect, could make workers more vulnerable in the long-term.

2.2 The National Living Wage: State savings in making work pay

The objective of the 1909 boards is to enhance living standards and alleviate poverty. When the National Minimum Wage has been introduced in 1999, the aim of the Low Pay Commission in charge is to "recommend levels for the minimum wage rates that help as many low-paid workers as possible without any significant adverse impact on employment or the economy" (LPC, 1998). As in Germany in 2015, the NMW was supposed to be a main political tool against the "working poor" while not upsetting market forces too much. But with the 2015 National Living Wage (NLW), objectives are different.

Historically, in order to promote business competitiveness and job creation concurrently, both Labour and Conservative governments tolerated a vast sector of low-paid, insecure jobs to develop. At the same time, under the slogan of "making work pay", they sought to stimulate the labour supply by granting social benefits or in-work tax credits. These conditional benefits or tax credits linked to employment face three major criticisms: an increase in the budgetary cost deemed unsustainable in a context where the priority is to reduce the deficit; comment suggesting that companies use them to keep wages very low with the support of the State; and studies showing that, contrary to the idea of stimulating labour supply, high marginal effective tax rates, i.e. how much of an increase in earnings results in a change in net family income, can discourage work in many households, because if a large portion of additional earnings is taxed away or results in lost benefits, they may find it less worthwhile to increase their work effort (Brewer and al. 2009).

Persistent inequality and in-work poverty, employer non-compliance with the NMW and the rising cost of in-work benefits have led the Conservatives to seek changes to the legislation. David Cameron's Conservative government set forth its goal of reaching 60% of the UK median wage by 2020, provided there is sustained economic growth – what happened. The British government has even reached two-thirds of the median wage up to April 2024. There are two main objectives in this changeover of Conservatives formerly opposed to a policy of high wages. Firstly, they aim to move away from a model characterised by low productivity and low wages, accompanied by a high level of social protection, to achieve the opposite characteristics of its main competitors. This implies a reduction in taxation and social spending. Secondly, they criticise the social protection system, accusing it of keeping individuals dependent on benefits. Rather than subsidising low wages through tax credits, the government is advocating that companies pay higher wages, while reducing the taxes they pay. This approach, combined with budget cuts in the area of welfare, is designed to reduce the overall cost of the social protection system. At the same time, the government is seeking to weaken campaigns for a living wage by trade unions and civil society by introducing a NLW that is lower than the concept of a "living wage" (Karamessini and Grimshaw, 2017; Freyssinet, 2020). In brief, raising the minimum wage in 2015 followed two main objectives. The long-term aim is to break the vicious circle of low pay, low skills and low productivity in which the UK has long been caught up in. The immediate objective is to make massive budget savings on social benefits by transferring to companies the responsibility for making work pay.

3. Balancing benefits and impacts: a global positive assessment with reservations on long-term effects

If a positive outcome of the 2015 laws has been seen on average wage, benefiting low-wage workers, effects on employment have varied, suggesting minimal to insignificant negative impacts, but limited to address poverty issues (Hafner and al., 2017; Caliendo and al. 2018; Bossler and Möller, 2018). Additionally, these policies have led to a crowding out effect on collective bargaining, weakening the balance of power in future developments. Clearly, the short-term assessment due to the recency of reforms and non-compliance issues present limitations that are discussed. Finally, are presented potential counter-productive effects that may arise, such as price increases and reductions in working hours. It highlights the complexity of minimum wage policies and the need for nuanced approaches considering various economic and institutional factors.

3.1 The effects on incomes and wages are rather positive without being very significant to alleviate poverty

In both countries, Germany and the UK, the minimum wage has regularly increased. Between the period of 2008-2015, the UK has known a stagnation of its minimum wages, when Germany's SMW rose to become in 2015 the higher real (effects of inflation considered) annual minimum wage (Karamessini and Grimshaw, 2017). Bossler and Gerner (2020) have found an increasing in average wages between 3,8% and 6,3%, to reach 10,42£ in April 2023 for those aged 23 and over in the UK (UK Government, 2023) and 10,45€ in Germany in July 2023.

The focus of laws is rather on the low-wage workers, aiming the potential redistributive effect of the minimum wage. In the UK, during the first 15 years of its implementation, the NMW had a positive effect on low wages, with a limited upward diffusion effect which led to a reduction in inequalities at the bottom of the wage hierarchy. Overall, workers earning low wages have experienced positive outcomes due to a relatively dependable statutory minimum wage mechanism. This system produced substantial benefits during periods of economic prosperity, exhibited measured responses during crises and has progressively elevated the wage floor to the midpoint of the wage distribution (Karamessini and Grimshaw, 2017; Freyssinet, 2020). Thus, there has been a reduction of the low-paid workers rate, reaching the lowest rate since 1982 with 17% of salaries low-paid in 2018 (Freyssinet, 2020). In Germany as well, there was a rise in gross wages, particularly for those with lower incomes. Due to the minimal legal exemptions, this substantial impact affected a significant percentage of eligible employees, with approximately 10 to 14 percent (depending on the data source) earning less than 8.50€ per hour in 2014 (Caliendo and al., 2018). In general, the available evidence in Germany indicate rise in gross wages for low-wage workers, with no substantial support for spillover effects on higher wage segments. The German Minimum Wage Commission (Mindeslohnkommission, 2016) picks up noticeable wage increases, particularly in East Germany.

However, effects on decreasing of in-work benefits - the Conservatives aim that Germany pursued more indirectly, are mixed. In both countries, the minimum wage has been effective to reduce welfare dependency. Also, it keeps the promise of protecting workers from very low wages, and German individuals affected by these wage changes even reported an increase in both life and job satisfaction (Caliendo and al., 2019). But the intended goal of poverty reduction was not achieved in the short run and the amount of in-work benefit recipients decreased only slightly in Germany, while in the UK, in line with forecasts and given the simultaneous cuts in in-work benefits, the situation of low-income households, which are often out of work, benefits little from these cuts (Freyssinet, 2020). This is, inter alia, because the reform caused a sizeable reduction in working hours such that monthly earnings for low-wage workers nearly stagnated (Caliendo and al., 2019) - as discussed further in the article. Moreover, the introduction of the minimum wage has by far failed to eradicate the issue of low pay in mini-jobs in Germany: this points to the circumvention strategies which are difficult to combat in sectors dominated by small companies, not covered by collective agreements and in establishments without works councils (Chagny and Le Bayon, 2020).

3.2 There has been no negative shock on employment as predicted by orthodox economists

In Germany, prior to the introduction of the minimum wage, studies based on the cost elasticity of labour demand predicted significant negative effects on employment, with estimates ranging from 60,000 to 850,000 job losses – even to 1M according to forecasts by Deutsche Bank and the IFO economic research institute (0.2 to 2.2% of paid employment) (Aftalion, 2017; Knabe and al., 2014; Freyssinet, 2020). Some studies indicate limited negative effects, especially in the short term. Bossler and Gerner (2020), among the first to have assessed via difference-in-differences methodology the introduction of SMW in Germany, indicate a decrease in employment of around 1.7% in affected companies, mainly due to employers being more cautious about hiring rather than firing. According to the Mindestlohnkommission (2016), the overall findings indicate no statistically significant negative employment effects in most sectors - negative employment effects were observed in certain sectors, as electrical trade. Moreover, employment contributing to social security rose from 30.4 million in June 2014 to 32.5 million in June 2017. This suggests that the mandatory wage floor did not hinder the substantial increase in regular employment (Bossler and Möller, 2018). Nevertheless, a clarification regarding *mini-jobs* is necessary. These jobs, enjoying a very favourable taxation for employers, concerned 5.2 million out of 30.4M workers. As pointed out by Henzel and Engelhardt (2014), although designed to be an additional benefit for individuals, 40% of all mini-jobbers (i.e. more than 2 million employees) work more than 53h per month, and hence, received less than 8.50€ per hour in 2014 for an activity generating a significant proportion of monthly income. Holtemöller and Pohle (2020) indicate a negative effect of the minimum wage on marginal employment and a positive effect on regular employment. Furthermore, they highlight variations specific to industries in the effects and demonstrate that the positive impact on regular employment has been less pronounced, while the negative impact on marginal employment has been more significant in East Germany compared to West Germany. The lack of consensus on the actual influence of the minimum wage on regular employment implies that the predominantly observed overall negative effects may be attributed to the decline in marginal employment – although it is difficult to isolate only the minimum wage for this effect (Caliendo and al. 2018).

In the UK, a meta-analysis including all studies up to 2015 shows robust results, indicating that, whatever the period, variables or econometric methods used, the overall negative effects on employment are either econometrically insignificant or quantitatively negligible (Hafner and al., 2017), as in Germany. As far as employment and working hours are concerned, the negative effects are null or negligible overall. Although job creation has slowed since the end of 2015, the slowdown has been more moderate in job categories with a high proportion of low-paid workers. The negative effects are localised, mainly affecting women working part-time in certain sectors or regions. There has been no significant increase in the use of precarious forms of employment, and the job retention rate has returned to stability after successive increases in the NLW (Aitken and al., 2018). Some specific studies, focusing on sub-populations or particular sectors such as part-time jobs for women or accommodation for the elderly, show partially negative results. For example, a study by Dickens and al. (2015) found a significantly lower impact on job retention for women working part-time affected by the NMW compared to a control group. Although the overall effect on employment is considered to be neutral, it is possible that there may be a negative impact in certain categories or sectors where there is a greater concentration of low-paid workers.

So, the results suggest that initial fears about employment were largely unfounded, attributed in part to inadequate neoclassical models. The low-price elasticity, combined with an increase in consumption by low-wage employees, would have limited the impact of the minimum wage on employment (Chagny and Le Bayon, 2020; Freyssinet, 2020).

3.3 The shift in collective bargaining power: the crowding out effect

A fundamental flaw in the minimum wage policy approaches of both countries lies in their separation from potentially complementary wage-setting institutions, such as collective bargaining. The limited presence of collective bargaining in the private sector workplaces highlights the crucial role of social partners in the minimum wage-fixing process. Consequently, this statutory intervention tends to "crowd out" participative decision-making in wage matters (Karamessini and Grimshaw, 2017).

In Germany, paradoxically, the SMW law was named "Law to strengthen collective bargaining". While the aim was indeed to have the social partners co-construct the setting of the minimum wage within a commission independent of the government, the fact remains that trade unionism has weakened, and so has collective bargaining as a result, accompanied by the "crowding out effect" (Chagny and Le Bayon, 2020). One interpretation is that the SMW might rejuvenate social partnership by bringing together the involved parties in the Minimum Wage Commission (Mindestlohnkommission), potentially overcoming barriers to sector-level agreements. Conversely, it is also argued that employers might have intentionally undermined corporatist consultation, perceiving that unilateral government action could ultimately benefit their interests more effectively. If the CDU/CSU and the SPD ensure that the commission maintains a focus on negotiations among professional parties, concerns remain that this institution could weaken the power of trade unions. This weakening may result in reduced worker motivation to join unions, thereby leading to negotiations that could disproportionately favour employers (Mabbett, 2016).

3.4 Short-term assessments and compliance issues

The first limitation on the positive impact observed in both countries is the prevalence of widespread non-compliance. For example, around 20% of companies did not comply with the NLW legislation in 2018 (Freyssinet, 2020) and 23% of employees entitled to in 2018 did not receive it (Gautié, 2020). In Germany, the level is lower, but still assessed between 5 and 12% (depending on methodology and with substantial variation across different groups of employees and over time) of in question employee in the three years following the implementation (Goerke and Pannenberg, 2023).

Then, these reforms have been implemented for less than a decade, meaning only short-term analysis is feasible. The concurrent effects of significant events—such as Brexit, which was voted on in 2016 and fully implemented by 2020; the Hartz reforms in Germany and various EU policy decisions—are intertwined with the introduction of the NLW and the SMW. This overlap makes it challenging to disentangle these influences, complicating the assessment and limiting the clarity of the outcomes.

3.5 Medium-term forecasts: the fear of counter-productive effects

This section examines the potential limitations of minimum wage policies, focusing on key counterproductive effects highlighted usually, but not limited to, in neoclassical theory. There are 3 major effects: rising prices; the minimum wage acting as an 'external key rate' compressing wages at the bottom of the wage pyramid; and the reduction in actual working hours.

One problem is that employers facing higher labour costs will pass them on to consumers first. The rise in nominal wages would therefore be offset by a rise in prices, maintaining equivalent real wages This intuition has been partially confirmed in the United Kingdom (Wadsworth 2010), where it was found that prices in sectors employing a large proportion of employees paid the legal minimum tended to rise significantly faster than in other sectors in the four years following the introduction of the NMW. For both countries, employers' short-term reactions remain unclear because economic uncertainty seems to be holding back investment, particularly in automation and relocation, but they have absorbed the initial shock by reducing margins and, in some cases, raising prices (Draca and al., 2011; Freyssinet, 2020).

Subsequently, as collective bargaining declined in both countries, the minimum wage policy approach posed a distinct risk from the beginning, as it could lead to wages concentrating around a solitary regulated wage standard at the lowest end of the wage distribution (Grimshaw, 2010). Therefore, the minimum wage could be an impediment to the general wage growth, even if in Germany has been observed a global rise of wages, which could be partly explained by low wage growth in the years preceding the introduction of the SMW and an unemployment rate of less than 5% at that time (Aftalion, 2017). In the UK, it remains a high proportion of low-wage employment. Increasing the minimum wage did not have a strong enough knock-on effect on the lower end of the wage scale, those below two-thirds of the median wage – where a significant proportion of women are employed, stressing a gender inequality (Karamessini and Grimshaw, 2017). On the contrary, in the context of weak trade union relations and industrial conditions, the minimum wage acts as an "external key rate", i.e. more than a regulation, a reference for wage management – which is less the case in Germany where wages has broadly progressed. For the two researchers (*ibid*), more than long-term factors such as low productivity growth, low capital investment and poor innovation performance, which are characteristic of the British private sector, it is the weakness of collective bargaining which deprives workers and employers of a "beneficial constraint", as the concept defined by Streeck (1997) for institutions (such as unions) which constrain employer behaviour, but generate beneficial consequences for business in the longer term. Thus, several low-wage employers use the minimum wage more as a standard rate rather than a means of protecting low wages. Moreover, these low-wage workers have a cost for the welfare state because of in-work benefits allowed, as the "tax credit" in the UK. The NLW mainly benefit households in the middle of the net income distribution after redistribution. It is part of a "higher wage, lower welfare" policy which, overall, contributes significantly to widening net income inequalities at the expense of low-income households (Freyssinet, 2020).

A third main effect can arise observed by Pusch and Rehm (2017) in Germany: the reduction in actual working hours, which would be proportional to wage increases for low-paid employees, potentially neutralizing the expected redistributive effects of the policy (Caliendo and al., 2017). Although gross hourly wages increased, this did not necessarily lead to higher monthly or annual earnings due to reduced working hours (Caliendo et al., 2018). In the UK as well, the resurgence in the use of 'zero hour contracts'—which do not guarantee minimum working hours—has exacerbated this issue (Gautié, 2020). Employers have also resorted to other strategies, such as increasing prices and intensifying work demands. Additionally, the lack of legal regulation on working hours has led to unpaid overtime and strategic adjustments by companies (Chagny and Le Bayon, 2020).

Additionally, the current literature primarily addresses gross hourly wages, and potential variations in effects on net hourly wages could arise due to individual tax rates. Therefore, measurement of the impact on income is difficult in German and British situations, so much impact of household earnings is determining (Chagny and Le Bayon, 2020; Caliendo and al., 2019; Freyssinet, 2020).

All these factors can collectively undermine the intended benefits of German and British minimum wage policies.

Conclusion

The minimum wage is a multifaceted tool with economic, political, and social implications, addresses workers rights and social equity. Rooted in historical and economic contexts, it counters neoclassical critiques and presents potential positive effects on employment. Institutions support its implementation for diverse purposes, such as reducing low-paid workers and protecting them. Economic benefits, including enhanced productivity, are observed, but considerations for potential employment effects and market dynamics exist. As countries experience diverse wage histories influenced by sectorial agreements, Aghion-Algan-Cahuc's model identifies "Scandinavian" and "French" situations, revealing the impact of labour relations and minimum wage regulations. Karamessini and Grimshaw's (2017) typology classifies state intervention, offering insights into policy variations in the UK and Germany, that tend towards the French model with a crowding out effect.

In the UK, minimum wage regulation began in 1909, evolving into the National Minimum Wage in 1998, leading to a decline in union coverage, as in Germany where the absence of a statutory wage floor led to minimum wages through the Posted Workers Act in 1996, decreasing collective bargaining coverage. When the nationwide statutory minimum wage (SMW) was implemented in 2015 in Germany, its economic aims included reducing job insecurity and alleviating poverty, particularly in East Germany. In the UK, the Conservatives, seeking to reduce inequality and in-work poverty, introduced the NLW with the goal of achieving higher wages and reducing reliance on in-work benefits, thereby reducing the overall cost of the social protection system. The NLW also aims to break the cycle of low pay, low skills, and low productivity in the UK.

The assessment of minimum wage reforms in Germany and the UK reveals a generally positive impact with notable nuances. The reforms have effectively increased wages for low-paid workers, contributing to reduced income inequality and improved job satisfaction. Despite fears of negative employment effects, both countries experienced stable or even rising employment levels, challenging orthodox economic predictions.

However, concerns remain about the reforms' long-term implications. The "crowding out" effect on collective bargaining suggests a shift in wage-setting dynamics, potentially weakening union influence. Compliance issues persist, with significant numbers of workers not receiving the mandated wages. Additionally, the entanglement of minimum wage policies with broader economic events, like Brexit, complicates the analysis of their isolated impact.

Finally, potential counterproductive effects, such as rising in prices, reduced working hours and increased reliance on precarious contracts with the minimum wage acting as an 'external key rate', warrant ongoing scrutiny. The aim of reducing in-work benefits allowed is partly succeeded, but clearly the policies of 2015 are not sufficient to alleviate poverty. These factors underscore the importance of sustained evaluation to ensure the intended benefits of minimum wage policies are fully realized without unintended negative consequences.

Bibliography

Aftalion, Florin. *Le salaire minimum.* Libréchange éditions, Habeas corpus, Paris, 2017, pp. 9-17, 36-43, 87-100.

Aghion, Philippe; Cahuc, Pierre; and Algan, Yann. "Civil society and the state: the interplay between cooperation and minimum wage regulation". *Journal of the European Economic Association* 9, no. 1, 2011, pp. 3–42.

Aitken, A.; Dolton, P.; Riley, R. "The Impact of the Introduction of the National Living Wage on Employment, Hours and Wages". *National Institute of Economic and Social Research*, November 2018.

Akerlof, G. "Labor contracts as partial gift exchange", *Quarterly Journal of Economics*, 97, 1982, pp. 543-569.

Belman, D.; Wolfson, P. "What does the minimum wage do?", W.E. *Upjohn Institute for Employment Research*, Kalamazoo, Michigan, 2014, pp. 19-21.

Boeri, Tito, and van Ours, Jan. *The Economics of Imperfect Labor Markets: Second Edition*. REV-Revised, 2, Princeton University Press, 2013, pp. 35-94.

Bosch, Gerhard and Weinkopf, Claudia. "Industry-wide minimum wages in Germany: uncertain progress along a bumpy road." Paper prepared for the ILO Regulating for Decent Work conference, 2011a.

Bosch, Gerhard and Weinkopf, Claudia. "Minimum Wage Systems and Changing Industrial Relations in Europe." *National Report Germany*, 2011b.

Bossler, M.; Gerner, H.-D. "Employment Effects of the New German Minimum Wage: Evidence from Establishment-Level Microdata". *ILR Review*, 73(5), 2020, pp. 1070-1094.

Bossler, M.; and Möller, J. "The Effects of the Compulsory Minimum Wage in Germany", in *DICE Report* 4, 16, December 2018, pp. 14-18.

Boyer, Robert. "Introduction". In *Théorie de la régulation. 1. Les fondamentaux*. La Découverte, 2004, pp. 3-8.

Brewer, M.; May, R.; Phillips, D. "Taxes, Benefits and the National Minimum Wage", Report to the Low Pay Commission, Institute for Fiscal Studies, October 2009.

Caliendo, M.; Fedorets, A.; Preuss, M.; Schröder, C; and Wittbrodt, L. "The Short-Run Employment Effects of the German Minimum Wage Reform". *Labour Economics*, 53, 2018.

Caliendo, Marco; Schröder, Carsten; Wittbrodt Linda. "The Causal Effects of the Minimum Wage Introduction in Germany: An Overview". *German Economic Review*, 20(3), 2019, pp. 257-292.

Card, David and Krueger, Alan B. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *American Economic Review*, September 1994, 84(4), pp. 772-93.

Card, David, and Alan B. Krueger. *Myth and Measurement: The New Economics of the Minimum Wage - Twentieth-Anniversary Edition*. REV-Revised. Princeton University Press, 1995.

Caroli, Ève, and Gautié, Jérôme. “Low-Wage Work: The Political Debate and Research Agenda in France.” *Low-Wage Work in France*, edited by Ève Caroli and Jérôme Gautié, Russell Sage Foundation, 2008, pp. 16–27.

Chagny, Odile and Sabine Le Bayon. “The minimum wage law in Germany: A generally positive outlook, but some major issues of application”, *La Revue de l’Ires*, vol. 100, no. 1, 2020, pp. 103-143.

Cotelette, Patrick. *Economie du travail et des politiques d’emploi.* Ellipses, 2018, pp. 127-136.

Deakin, Simon and Green, Francis. “A century of minimum wages in Britain.” In *Centre for Economic Performance*, Volume 14-2, 2009, pp. 8-11.

Dickens, Richard; Rebecca, Riley; and David, Wilkinson. “A Re-Examination of the Impact of the UK National Minimum Wage on Employment.” *Economica* 82, no. 328, 2015, pp. 841–864.

Draca, Mirko, Stephen Machin, and John Van Reenen. “Minimum Wages and Firm Profitability.” *American Economic Journal: Applied Economics*, 3 (1), 2011, pp. 129–51.

Freyssinet, Jacques. « Au Royaume-Uni, du National Minimum Wage au National Living Wage », *La Revue de l’Ires*, vol. 100, no. 1, 2020, pp. 67-101.

Gautié, Jérôme. *Le salaire minimum et l’emploi*. Presses de Sciences Po, 2020

Georgiadis, A. “Efficiency Wages and the Economic Effects of the Minimum Wage: Evidence from a Low-Wage Labour Market”. *Oxford Bulletin of Economics and Statistics*, 75, 6, 2013.

Goerke, Laszlo and Pannenberg, Markus. “Minimum Wage Non-Compliance: The Role of Co-Determination”. *CESifo Working Paper No. 10797*, 2023.

Grimshaw, D. “The UK: Developing a progressive minimum wage in a liberal market economy”, in D. Vaughan-Whitehead (ed.), *The Minimum Wage Revisited in the Enlarged EU*, Cheltenham: Edward Elgar and Geneva: International Labour Organisation, 2010.

Grimshaw, D.; Rubery, J. “The distributive functions of a minimum wage: First and Second-Order pay equity effects”. In *Minimum Wages, Pay Equity and Comparative Industrial Relations*, 1st ed. London: Routledge, 2013, pp. 81-111.

Grimshaw, D.; Bosch, G. and Rubery, J. “Minimum Wages and Collective Bargaining: What Types of Pay Bargaining Can Foster Positive Pay Equity Outcomes?”. *British Journal of Industrial Relations*, 52, 2014, pp. 470-498.

Hafner, M.; Taylor, J; Pankowska, P.; Stepanek, M. Nataraj S., Van Stolk C. “The Impact of the National Minimum Wage on Employment: A Meta-analysis”. Rand Europe, 2017.

Holtemöller, Oliver; Pohle, Felix. “Employment effects of introducing a minimum wage: The case of Germany”. *Economic Modelling*, Volume 89, 2020, pp. 108-121.

ILO (International Labour Organization). *General Survey concerning the Minimum Wage Fixing Convention*, No. 131, 1970, pp. 19-30.

ILO. *Trends in Collective Bargaining Coverage: Stability, Erosion or Decline?*, Policy Brief No. 1: Labour Relations and Collective Bargaining, ILO, 2015.

ILO. “Minimum wages and productivity: a brief review of the literature”, *ilo.org*, 2016, pp 1-4.

Kahn-Freund, O. “Labour law“. In Ginsberg, M. (ed.) *Law and Opinion in England in the 20th Century,* Devon: Stevens, 1959.

Karamessini, Maria, and Grimshaw, Damian. “Minimum wages and the remaking of the wage-setting systems in Greece and the UK”. In *Making work more equal*, Manchester, England: Manchester University Press, 2017.

Knabe, Andreas; Schöb, Ronnie; and Thum, Marcel. ”Der flächendeckende Mindestlohn”, No 2014/4, Discussion Papers, Free University Berlin, School of Business & Economics, 2014.

LPC (Low Pay Commission). “The National Minimum Wage”, First Report of the Low Pay Commission, June 1998.

Mabbett, Deborah. “The minimum wage in Germany: what brought the state in?”. In *Journal of European Public Policy*, 23:8, 2016, pp. 1240-1258.

Manning, Alan. *Monopsony in Motion: Imperfect Competition in Labor Markets*. Princeton University Press, 2003.

Matsaganis, M. “History and politics of the minimum wage”. In DAStU Working Paper Series, (LPS.09) February 2020.

McConnell, Campbell R.; Brue, Stanley L.; Macpherson, David A. *Contemporary labor economics,* 7th edition, Boston: McGraw, Hill, 2006, pp. 399-403.

Mindestlohnkommission. “Erster Bericht zu den Auswirkungen des gesetzlichen Mindestlohns“. *Bericht der Mindestlohnkommission an die Bundesregierung nach § 9 Abs. 4 Mindestlohngesetz*, 2016.

Pusch, T and Rehm, M. “Positive Effekte des Mindestlohns auf Arbeitsplatzqualität und Arbeitszufriedenheit“. *Wirtschaftsdienst*, 97 (6), 2017, pp. 409–414.

Sen, A. *Development as Freedom*, Oxford: Oxford University Press, 1999.

Smith, Noah. “Want Innovation? Try Raising Minimum Wages”. *Bloomberg*, November 23, 2015, consulted for the last time the January 22nd, 2024.

Streeck, W. “Beneficial constraints: on the economic limits of rational voluntarism”, in Rogers Hollingsworth, J. and Boyer R. (eds), *Contemporary Capitalism: The Embeddedness of Institutions*, Cambridge: Cambridge University Press, 1997, pp. 197–219.

UK Government. “National Minimum Wage and National Living Wage rates”. www.gov.uk.com, modified for the last time in April 2024, consulted for the last time the 25/09/2024.

Wadsworth, J. “ Did the National Minimum Wage Affect UK Prices? “. *Fiscal Studies*, vol. 31, n°1, 2010, pp. 81-120.

Woolfson, C.; Thörnqvist, C; and Sommers, J. “The Swedish model and the future of labour standards after Laval”. *Industrial Relations Journal*, 41, 2010, pp. 333-350.