

Entry

# Labor Market Institutions and Employment

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**Definition:** The role of labor market institutions and policies has received great attention throughout the history of labor economics. Labor market institutions are responsible for a wide range of policies, regulations, and organizations that affect the labor market, though their impact on employment can vary depending on the specific institutions and the economic context across countries. This entry attempts to provide an overview of five main labor market institutions and policies, i.e., the minimum wage, employment protection, the power of unions, active labor market policies, and unemployment insurance/unemployment benefits. It also presents theoretical expectations of their effects on employment outcomes and collates relevant results from the related literature, focusing mainly on the most recent empirical evidence. Finally, this entry provides insights regarding labor market institutions and offers proposals for shaping the labor market landscape.

**Keywords:** minimum wage; employment protection; active labor market policies; unions; unemployment insurance/unemployment benefits; employment

## 1. Introduction

Throughout the history of labor economics, in almost all nations, labor market institutions and policies have crucially impacted the changing pattern of unemployment [1]. In general, labor market institutions and policies are essential for shaping the employment realm globally. However, their effects can be complex and country-specific, and empirical research studies are constantly investigating their impacts on employment outcomes in order to determine whether they are benefitting (or how they could benefit) labor market dynamics and policymaking [2,3].

Notably, there are differences in the labor market's features and unemployment rates between the European Union and the United States, as well as within the European Union [4]. Many economists, including Nickel (1997) [5] and Blanchard and Wolfers (2000) [6], suggest that differences in employment levels and unemployment rates between nations can be attributed to differences in the role of labor market institutions and regulations, a role that is designed with the intention of supporting the effective labor market policy to be formed. More specifically, the minimum wage, the influence of unions, employment protection regulations, active labor market policies, the amount and duration of unemployment benefits, and several other factors such as passive labor market policies, social welfare programs, and anti-discrimination laws might explain differences among major developed countries [7].

Moreover, institutions appear to be heterogeneous across countries, and the same institutional design may have diversified effects in different countries [8]. This work attempts to investigate the impacts of five important labor market institutions and policies on employment outcomes. These institutions are the minimum wage, employment protection regulation, the role of the unions, active labor market policies, and unemployment benefits/unemployment insurance.

This analysis initially explains the meanings and several aspects of each of these institutions and policies, and then it presents the theoretical expectations of their impacts on employment. Thereafter, it offers a review of the literature on their effects on the total employment level, followed by meta-studies and the most recent empirical evidence



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covering the period 2022–23 on this issue. At the end of this entry, concluding remarks and policy implications are given.

## 2. Explanation of Labor Market Institutions and Policies

Labor market institutions and policies refer to the various rules, organizations, and structures that regulate the labor market and aim to improve its efficiency. These institutions play a crucial role in shaping the dynamics of employment, wages, and worker rights [9]. This section explains, in simple terms, five basic labor market institutions and policies that have been formed to facilitate the functioning of the labor market while protecting workers as well.

### 2.1. Minimum Wage

Minimum wages are the lowest hourly, daily, or monthly wages that employers are legally required to pay to their employees. They represent the established, via legislation, expectations of wages, ensuring that workers are paid at least a certain amount for their labor [10]. Minimum wage laws vary widely from country to country, even within regions or states of a single country. These differences are often shaped by several factors, including mainly the cost of living, the economic conditions of a specific region, and the industry in which the minimum wage is paid [11]. However, the general procedure is that governments conduct thorough research and analysis to determine an appropriate minimum wage that balances the needs of workers with the economic circumstances of the country or region.

In more than two-thirds of OECD nations, there is a minimum wage set by statute, and 92% of the International Labor Organisation's member states have introduced one [12]. Most emerging non-OECD economies have minimum wages as well. However, the methodology employed by nations to determine the minimum wage exhibits notable variations. Furthermore, while in some nations, all or most employees are covered, in other countries, only some industries, jobs, or geographical areas are covered [13]. In addition, the measurements of minimum wages can either offer a nominal or real level of the minimum wage. In that context, to facilitate cross-country comparisons, the Kaitz index is commonly used, which is calculated as the ratio of minimum to average wages; this mitigates potential biases arising from a correlation between the minimum wage and economic events that affect wage levels [14,15].

### 2.2. Employment Protection

Employment protection defines the laws and conditions under which workers can be hired, fired, or have their contracts terminated by employers, affecting job security. More specifically, it refers to the legal and regulatory measures in place to safeguard workers from unfair dismissal, arbitrary treatment, or unjust labor practices by employers [16]. The level of employment protection provided to workers is often determined by a combination of factors, including (i) labor laws and regulations, which outline the rights and responsibilities of both employers and employees and provide guidelines for fair treatment, contracts, and working conditions; (ii) the judicial system and enforcement, concerning the effectiveness of the legal system to resolve disputes between employers and employees; (iii) collective bargaining agreements between employers and labor unions; and (iv) the social and political context, which can shape the extent of employment protection provided to workers [17].

The calculation of employment protection itself is not typically based on a numerical formula. Instead, it is often measured qualitatively, based on the strength and enforceability of labor laws, the existence of mechanisms for resolving disputes, and the overall level of job security and stability for workers within a given country or region [18]. Different countries may have varying degrees of employment protection, with some emphasizing strong job security measures while others prioritize labor market flexibility to promote economic growth and competitiveness. In the empirical literature, the employment protection legislation indicators set by the OECD are widely used. These are synthetic indicators of

the strictness of regulation of dismissal and the use of temporary contracts, and they can cover both individual and collective dismissal [19].

### 2.3. Unions

Labor unions are organizations formed by workers to collectively bargain with employers for employment stability, better wages, and suitable working conditions. Their task is to act as intermediaries between employers and employees for the benefit of their members [20]. They play a crucial role in shaping labor relations and advocating for the rights and well-being of workers in many countries worldwide. While some unions are highly influential and active across various industries, others may have a more limited scope and focus on specific sectors or professions. Additionally, the extent of the union's influence and the legal framework surrounding labor unions can differ from one country to another [21].

The two main variables used in the literature to measure the power of the unions are the "trade union density" and the "collective bargaining coverage". Trade union density is defined as the number of net union members (i.e., excluding those who are not in the labor force, unemployed, and self-employed) as a proportion of the number of employees [22]. The adjusted collective bargaining coverage rate is defined as the number of employees covered by a collective agreement in force and a proportion of the number of eligible employees equipped to bargain (i.e., the total number of employees minus the number of employees legally excluded from the right to bargain) [23].

### 2.4. Active Labor Market Policies

Active labor market policies, often called ALMPs, refer to the government policies intended to "activate" the unemployed, with measures such as retraining and vocational training, job search assistance, incentivizing businesses to create new jobs for the unemployed, etc. [24]. They also include government-funded training and education programs aiming to improve the skills and employability of the workforce [25]. Different countries may have a different mix and design of ALMPs, and elements that constitute the ALMPs may change over time in response to shifting governmental goals and the labor market. Their objective is to develop a flexible and efficient set of policies that can address the labor market and unemployment issues as they arise.

The most commonly used indicator for ALMPs in the empirical literature is that from the OECD database, which classifies ALMPs into the following categories: (10) PES and Administration, which includes placement and related services, benefit administration, and other related services, (20) Training, which involves institutional training, workplace training, integrated training, and special support for apprenticeship, (40) Employment Incentives, which refer to recruitment incentives, employment maintenance incentives, job rotation, and job sharing (replacing the former category (30) titled "Job rotation"), (50) Sheltered and Supported Employment and Rehabilitation, which contains sheltered and supported employment, and rehabilitation, (60) Direct Job Creation, referring to programs that offer new jobs for the long-term unemployed or other difficult-to-place individuals, typically of community benefit or social value and usually in the public or nonprofit sector, though equivalent projects in the private sector may also be eligible, (70) Start-up Incentives, which incorporate programs that encourage unemployed people and other target groups to start their own businesses or work for themselves [26].

### 2.5. Unemployment Benefits—Unemployment Insurance

Unemployment benefits and unemployment insurance are social safety nets, as well as several other welfare programs, which are designed to provide economic support to workers who lose their jobs or face other economic hardships and are actively seeking employment [27]. Unemployment insurance typically refers to the broader system that is funded through payroll taxes, which is often administered by government agencies and may vary in terms of criteria, benefit amounts, and the duration of coverage across

different countries and regions [28]. Unemployment benefits, on the other hand, are the specific monetary payments that eligible individuals receive as a part of the unemployment insurance program. These benefits are intended to partially replace the lost wages of unemployed workers for a limited period, typically until they find new employment or reach the maximum duration allowed under the program. The amount and duration of unemployment benefits can vary based on factors such as the length of employment or an individual's previous earnings, along with the specific regulations of the country in question [29]. Unemployment insurance and benefits not only help individuals maintain a certain standard of living but also contribute to the overall well-being of the labor force and the economy as a whole.

The calculation of unemployment insurance and unemployment benefits typically involves several key factors, including the individual's prior earnings, the specific rules and regulations of the unemployment insurance program, and the duration of the unemployment period [30]. The calculation methods can vary between countries and regions, but some common elements that are considered include the earnings received in the previous period, as unemployment benefits often depend on the individual's earnings during a specified base period, which is typically the period leading up to the unemployment claim; the benefit duration, which is usually limited; and eligibility requirements, for instance, if the individual worked a minimum number of hours or weeks, became unemployed through no fault of their own, and if they are actively seeking new employment [31]. In short, the specific calculations and formulas for determining unemployment insurance and benefits can be complex and may involve various factors and parameters. Therefore, it is necessary to refer to official government resources, labor department guidelines, and related legislative documents according to the country or region.

The main labor market institutions and policies that have been explained in this section interact with each other and have a profound impact on labor market dynamics and outcomes, including employment [32]. In what follows, this paper discusses related theoretical considerations and offers thoughts on their impacts on employment outcomes.

### **3. Theoretical Expectations of Labor Market Institutions' Impact on Employment**

#### *3.1. Minimum Wage*

The employment effect of minimum wages is a subject of ongoing debate among economists. The expected relationship between minimum wages and employment has been extensively researched, and findings often vary depending on the studies' characteristics related to the data, the model specifications, and the group concerned [33]. While some studies suggest a negative relationship between minimum wages and employment, others indicate more nuanced or mixed effects. There are also studies by Card and Krueger in the early 1990s that found evidence that increases in the minimum wage can have a positive impact on employment [10,34].

In the minimum wage literature, until 2009, the dominant theory on the employment effect of minimum wages was the neoclassical competitive labor market model, according to which an increase in the minimum wage can lead to a decrease in the demand for labor, especially for low-skilled workers [35]. This perspective suggests that higher minimum wages, and consequently, higher labor costs, may prompt firms to reduce their employees or curb their hiring, ultimately leading to a decline in overall employment levels [36].

Taking the opposing view, other economists claim that an increase in the minimum wage can increase labor productivity and reduce turnover costs, which may offset the negative impact on employment, leading to more nuanced and mixed outcomes [37]. Moreover, an increase in the minimum wage can stimulate consumer spending [38] or even improve the living standards of those who belong to the lowest income distribution by raising the income of the family, leading to a positive impact on consumption and the employment of the firms providing the products [39].

For further reading on the theoretical expectation concerning the employment effect of minimum wages, there are several highly informative papers [40–42]. Overall, while the

majority of the empirical literature points to a negative effect, there is also evidence that indicates the positive or mixed direction of the impact. Understanding these complexities is crucial for policymakers when formulating and evaluating minimum wage policies.

### 3.2. *Employment Protection (EPL)*

The employment effect of EPL is shaped by several factors, such as economic growth and development, the specific labor market dynamics, the levels of enforcement and compliance, and the nature of the regulatory framework in place. Thus, while workers may benefit from some degree of employment protection in terms of stability and security, a labor market that is too restrictive may impede the development of jobs and overall economic dynamism.

Some views that are in favor of the benefit of employment protection regulations suggest that increased job security might encourage workers to invest more in their skills in relation to the job's tasks, leading to a more skilled and productive workforce [43]. Moreover, reduced fear of job loss creates a "happy" worker who might have greater job satisfaction, improved employee morale, and potentially increased productivity and innovation [44]. In addition, increased job security could motivate people to join the workforce since they know that they are protected from arbitrary terminations [45].

On the other hand, excessive employment protection might create rigidity in the labor market, making it more difficult for firms to adjust their workforce in response to changing market conditions. This could lead to reduced hiring and potential negative impacts on employment levels [46]. In addition, firms might be more cautious about hiring new employees or, even worse, if they anticipate challenges in dismissing underperforming or surplus workers, firms might be reluctant to create new jobs [47].

As such, the impact of employment protection on employment outcomes is not a priori known and is subject to ongoing investigation. Many recent studies go as far as to suggest that there is no clear evidence of the impact of employment protection on employment outcomes [48–50]. Certainly, empirical research on the relationship between employment protection and employment has yielded mixed results, likely reflecting the complexities and nuances of this relationship, which seems to require further research.

### 3.3. *Unions*

The impact of unions on employment is debated in the literature. Certainly, their relationship is not straightforward, as depicted by the empirical results, in which there are mixed outcomes across studies.

Those who support the positive role of unions for employment suggest that unions can lower turnover, increase training investment, and enhance total worker productivity [51]. Moreover, the greater job satisfaction and stability brought about by union activities may contribute to a more stable and productive workforce [52]. Other positive effects on employment may also be attributed to unions' bargaining strength in obtaining better working conditions for workers [53].

Meanwhile, other studies highlight the potential negative impacts of unions on employment, particularly in regard to managerial turnover, implying that more unionization can result in short-term managerial employment due to disagreements or limits in decision-making processes [54]. In addition, unions may have a negative influence on wider employment, particularly in industries with high levels of unionization [55]. The suggestion here is that unions might cause wage pressures that contribute to unemployment, particularly among lower-skilled workers. Considering both sides of the coin, Freeman (1980) [56] recognized the potential trade-offs and mixed outcomes of unions. He observed that while unions may win greater wages and better working conditions for their members, they may also produce inefficiencies that may harm employment in some circumstances. Likewise, there is empirical evidence that the relationship between unions and employment varies and that the results depend on several factors across different firms and industries [57].

### 3.4. Active Labor Market Policies (ALMPs)

Theoretically, ALMPs include a variety of interventions targeted at improving employment outcomes, such as job training programs, hiring subsidies, and job search aid. These policies are formed to improve the employment landscape in the labor market and enhance individuals' employability and job matching [58,59] and, therefore, have received considerable attention in the economic literature.

However, the impact of ALMPs on employment is not always as positive as expected, as indicated by Card et al. (2010) [60], who conducted a meta-analysis on this issue, finding mixed effects on employment. Their meta-study revealed that, while some ALMPs, such as subsidized employment programs, showed positive impacts on employment, others like training programs had more varied effects across studies. Heckman and Urzúa (2010) [61] found that the effectiveness of these policies might vary depending on individual characteristics, local labor market conditions, and the design of the programs.

In general, the scientific literature has produced various conclusions, as well as highlighting the complications involved in assessing the impact of ALMPs on employment. While some studies show favorable results, others underline the importance of considering numerous contextual elements as well as the variety of program designs when evaluating the overall efficiency of ALMPs at enhancing employment outcomes.

### 3.5. Unemployment Benefits (UBs)—Unemployment Insurance (UI)

The potential impact of unemployment insurance or unemployment benefits on employment has been extensively researched in the economic literature, with various outcomes and findings.

One side supports these policies, implying that while there might be some lengthening of unemployment spells, the effects are relatively modest and temporary [62]. Other empirical evidence suggests a complex interaction where increased UI benefits might have varied effects on employment due to changes in labor force participation and disability program enrollment [63]. There is also the view that generous unemployment insurance benefits may lessen the incentive for unemployed people to actively seek work or take lower-wage positions [64].

These scholarly publications demonstrate the various findings of the impact of unemployment insurance or benefits on employment. While some research implies negative consequences, other research emphasizes the relationship's complexities, indicating the nuanced results that can be found.

## 4. Meta-Analysis on the Employment Effect of Labor Market Institutions and Policies

The employment effect of labor market institutions is a dynamic field of research in labor economics and several scientific papers have focused on this issue applying various techniques to investigate their relationship. Before presenting the results of the most recent literature, it is useful to present the meta-analysis that have been published on the impact of labor market institutions and policies on employment using the outcomes of the studies which were conducted in the previous years as meta-samples.

Firstly, regarding the effect of minimum wages on overall employment, the study by Card and Krueger (1995) [65] suggested that there is publication bias in favor of studies which generate negative effects of minimum wages on employment. Within this framework, the other influential paper by Doucouliagos and Stanley (2009) [40], using a meta-sample of 64 U.S. studies, found that the above claim of publication bias is correct and once this bias is corrected, little or no evidence of a negative association between minimum wages and employment remains. De Linde Leonard et al. (2013) [66] using a meta-regression analysis of 16 UK studies found the insignificant adverse employment effect of minimum wages. Nataraj et al. (2014) [67], using a sample of 17 studies regarding 15 low-income countries, found an ambiguous effect of minimum wages on total employment. Another two meta-analyses by Giotis and Chletsos in 2015 [33,68] pointed to no effect and to only a small negative effect of minimum wages on employment, respectively. Moreover, the

meta-study by Hafner et al. (2017) [69] indicated no statistically significant aggregate adverse employment effect based on the UK's minimum wage. Closing this meta-analysis review, the studies by Broecke et al. (2017) [70] and Gautié and Laroche (2018) [71] pointed to small negative effects, while the negative relationship between minimum wages and employment is more evident in the study by Martínez and Martínez (2021) [72].

Secondly, concerning the effect of employment protection on employment or unemployment, one journal article was found. The study was conducted by Heimberger (2021) [50] and suggested that EPL did not have a statistically significant effect on unemployment. However, this study indicated that the EPL measurement could differentiate the results and the EPL variables constructed by the authors of the study revealed a stronger unemployment impact in comparison to studies using OECD's EPL measures which are mainly used in the empirical literature.

Thirdly, with respect to the employment effect of ALMPs, three studies were found to investigate this issue. Initially, Kluve (2010) [24] using 137 program evaluations from 19 countries found that while direct employment programs in the public sector are generally seen negatively, wage subsidies and "Services and Sanctions" can be helpful in enhancing participants' employment prospects. On the other hand, training programs, as the most prevalent sort of active policy, produce somewhat beneficial results. In the same year, Card et al. (2010) [60] used as a sample 199 program impacts from 97 studies and found that job search assistance programs had a positive impact, while public sector employment programs were less effective. In addition, training programs were associated with positive impacts in the medium-run period, whereas in the short-run they often appeared to be ineffective. The authors also found that the outcome variable used to measure program impact matters. The third study, by Vooren et al. (2019) [73], used a meta-sample of 57 studies and found that subsidized labor and public employment initiatives had unfavorable short-term effects that progressively turned positive in the long run. Moreover, job-search assistance and training programs had no negative short-term consequences and remained beneficial for 6 to 36 months after the program began. This study used several fluctuations of employment measures, i.e., the probability of being employed, the probability of not being unemployed, the probability of unemployment, the duration of employment, and duration of unemployment.

Regarding the employment effect of unions or unemployment benefits, such as unemployment insurance, to the best of my knowledge, no meta-analysis has been published, revealing a potential research gap and issues which are very interesting for future investigation.

## **5. Most Recent Empirical Evidence on the Employment Effect of Labor Market Institutions**

This section provides the most recent empirical evidence on the employment outcomes of the five labor market institutions and policies covered in this analysis. It considers studies that have been published during the last two years, i.e., 2022 and 2023, in a bid to present the most recent findings from the empirical literature on topics that have been subject to controversy and have seen conflicting results for decades.

As new empirical results constantly arise, and several literature reviews have been conducted to investigate their relationship, the aim of this section is to add to the existing literature by offering a comprehensive analysis of the extant literature on the employment effects of labor market institutions over the last two-year period, identifying the empirical approaches and presenting the most recent results from related research. The search process was conducted during the period September–October 2023. The following electronic databases and search engines were used: RePec/Ideas, Web of Science, and Google Scholar. The keywords applied were combined: "employment", "labor market institutions", "labor market policies", "minimum wage", "employment protection", "active labor market policies", "unions", "unemployment insurance", and "unemployment".

Table 1 presents the most recent studies on the effect of the minimum wage on employment or unemployment, consisting of studies published in 2023. For a list of empirical

studies published in 2022 and 2021 on this issue, see the work by Giotis and Mylonas (2002; specifically, Table 1 in that study lists the results and main characteristics of each study published in 2021 and 2022) [41]. The review by Giotis and Mylonas (2022) [41] did not provide clear evidence of a positive or a negative direction of the impact of minimum wages on employment measures, and the authors reported that the related literature of 2021 and 2022 on this issue produced contradictory empirical results.

**Table 1.** The most recent empirical evidence on the employment effect of minimum wages.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector/Industry Related	Employment Effect of Minimum Wages
Abbate and Jiménez [74]	2023	Argentina	2003–2011	234,423 individuals in 921,066 employment relationships	Minimum wages did not have a significant effect on job separation. Moreover, the minimum wage increase in 2008 did not necessarily lead to job losses.
Bossler and Schank [75]	2023	Germany	2000–2017	Random 2% sample of the individuals in the IEB (Integrated Employment Biographies)	Negligible impact of minimum wages on employment.
Burkhauser et al. [76]	2023	USA	1983–2019	Outgoing rotation group of the Current Population Survey	Negative effect on the employment of those aged 16–24 with $\leq$ HS degree, a positive but not statistically significant impact on the employment of single mothers aged 16–55 with $<$ HS degree, and a negative but not statistically significant employment effect on those aged over 30 with $\geq$ HS degree and of Black individuals or Hispanics aged 16–64.
Choi et al. [77]	2023	Ecuador	May 2007–April 2008	Ecuadorian Monthly Administrative Data	The study finds that the minimum wage hike resulted in a 2.2% decline in the probability of remaining employed after one month and 3.9% after four months.
Demir [78]	2023	Germany	1975–2018	Integrated Employer–Employee Data (SIEED)	The first sectoral minimum wage in Germany led to job-to-job transitions and reallocation from low-paying to high-paying establishments in sectors outside the minimum wage.
Forsythe [79]	2023	USA	2014–2015	Occupational Employment and Wage Statistics program	The minimum wage caused enterprises to reduce employment in the lowest wage bin while increasing employment in the second wage bin.
Hälbig et al. [80]	2023	Germany	2012–2016	Administrative firm data	At the firm level, this study finds negative employment effects but no effects at the aggregate industry $\times$ region level.

Table 1. Cont.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector/Industry Related	Employment Effect of Minimum Wages
Khurana et al. [81]	2023	India	1999–2018	Administrative nominal minimum wages (MW) for agricultural workers from the Labor Bureau for 19 states in India	This study finds no effect on the employment of low- and medium-educated workers, a slight negative effect on the employment of the highest-educated workers, and an insignificant effect for all workers across the education spectrum in rural areas.
Marchingiglio and Poyker [82]	2023	USA	1880–1930	Full-Count Census data for female employees (12 U.S. States)	This study finds that, on average, female employment decreased by around 3.1% at the county–industry level.
Meer and Tajali [83]	2023	USA	2011–2017	Bureau of Labor Statistics and the Internal Revenue Service (for Nonprofit sector)	The study finds a negative effect on employment for states with large statutory minimum wage increases.
Nguyen [84]	2023	Vietnam	2012–2020	Annual Labor Force Surveys	Minimum wages did not appear to have a significant effect on employment, but there is a considerable negative impact on workers' total working hours.
Redmond and McGuinness [85]	2023	Ireland	2012–2018	Administrative Data Sources (EAADS)	A 10% increase in the minimum wage resulted in an hourly elasticity of around $-0.3$ . The elasticity, however, was $-0.8$ for industry workers as well as those in the hotel and food sectors.
Taylor and West [86]	2023	USA	2019	Monthly data from major U.S. metropolitan areas	This analysis indicates strong negative employment elasticities of minimum wages in urban border county pairings within six-digit industries that are predicted to employ a large number of minimum wage workers.

Table 2 presents the latest studies investigating the effect of employment protection on employment outcomes. Then, Table 3 shows the most recent findings on the effect of active labor market policies on employment, while Table 4 sets out the influence of trade unions on employment measures, and, finally, Table 5 presents the latest findings on how employment insurance and unemployment benefits affect employment or unemployment.

**Table 2.** The most recent empirical evidence on the employment effect of employment protection legislation (EPL).

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of EPL
Daruich et al. [87]	2023	Italy	2001	Employer–employee data with firms’ financial records	The 2001 Italian reform, which removed restrictions on the employment of temporary contract workers while keeping strict EPL for employees hired on permanent contracts, resulted in a growth in the share of temporary contracts but did not increase employment.
Di Novi et al. [88]	2022	19 European Countries	June to September 2020	Survey of Health, Ageing and Retirement in Europe (SHARE) and the SHARE Corona Survey—Workers (aged 50 and over)	This study finds possible mitigating measures for older individuals unemployed in European countries with higher EPL.
Hou et al. [89]	2022	43 OECD countries	2000–2002	OECD EPL database on the employment protection legislation in 43 countries.	The positive employment effect of capital account liberalization is significantly weaker in countries with a more stringent EPL compared to countries with less stringent EPL.
Inanc and Kalleberg [90]	2022	17 European countries	2004–2010	European Social Surveys (ESS)	EPL among temporary employees has a negative effect on an individual’s level of job insecurity. EPL among permanent employees has a positive effect on an individual’s level of job insecurity.
Jiménez and Rendon [91]	2022	Peru	2004–2015 and 1998–2001	Data from Household Surveys from 2004 to 2015, and the Specialized Employment Survey 1998–2001	This study finds that reinstatement rights are associated with increases in the hiring of temporary workers. This study’s findings place into doubt the usefulness of abolishing reinstatement regulations as a policy to boost permanent hiring.
Liotti [92]	2022	28 European countries	2000–2018	Data on youth unemployment and the labor market regulation index (LMRI)	There is little or no support in favor of the view that higher labor market flexibility is able to reduce youth unemployment.
Sahnoun and Abdennadher [93]	2022	16 OECD countries	2000–2015	Panel data for 16 OECD countries	EPL had a positive effect on unemployment.

Table 2. Cont.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of EPL
Ulcelse and Kahanec [94]	2022	EU countries	2004–2019	Pooled cross section data from the EU Labor Force Survey	This study finds that removing transitional arrangements has a negative effect on the self-employment rates of EU2 (Bulgaria and Romania) nationals but seemingly no effect on the self-employment rates of EU8 nationals.
Van Doorn and Van Vliet [95]	2022	16 European countries	1999–2010	Involuntary part-time employment	Statistically insignificant effect of EPL on involuntary part-time employment.
Yan and Xu [96]	2022	China	2006, 2008, 2010, 2012 and 2014.	Chinese Private Enterprise Survey	According to this study, having a Communist Party branch is considerably positively associated with employment protection, and enterprises with Communist Party branches are more likely to sign labor contracts and provide stable positions for their employees.

Table 3. The most recent empirical evidence on the employment effect of trade unions.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of Unions
Braakmann and Hirsch [97]	2023	UK	2018–2021	Data from Understanding Society and from the Understanding Society COVID-19 surveys	Unionized workers were far more likely to stay with their pre-COVID company and be employed.
Chadi and Goerke [98]	2023	Germany	1993, 1998, 2001, 2003, 2007, 2011, and 2015	German Socio-Economic Panel (SOEP) SOEP version 33	This study found that perceived job insecurity increases the likelihood of individual union membership.
Guschanski and Onaran [99]	2023	7 emerging economies (Brazil, China, India, Indonesia, Mexico, South Korea and Turkey)	1995–2014	Industry-level data from global input-output tables	Higher union density has positive effects on labor sharing.
Haapanala and Marx [100]	2023	27 European countries and the United States	1998–2019	Micro-data from the EU Labor Force Survey (EU-LFS) and the US Current Population Survey (US-CPS)	When robot exposure grows, more union density is linked to a bigger decline in industry-sector employment for younger workers and those with less secondary education.

Table 3. Cont.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of Unions
Inanc and Kalleberg [90]	2022	17 European countries	2004–2010	European Social Surveys (ESS)	Collective bargaining coverage has a negative effect on an individual's level of job insecurity.
Kim [101]	2022	Korea	2018–2020	Korean Labor and Income Panel Study (KLIPS)	Union members are 1.9 times more likely to keep their jobs than non-union members during the COVID-19 pandemic.
Liotti [92]	2022	28 European countries	2000–2018	Data on youth unemployment and labor market regulation index (LMRI)	Centralized collective bargaining is negatively associated with youth unemployment.
Parolin and Vanheuverlen [102]	2022	USA	1969–2019	A sample of men from the Panel Study of Income Dynamics	The association of lifetime union membership with years of total employment and the mean hours worked per year is substantively small, negative, and statistically insignificant.
Pineda-Hernández et al. [103]	2022	24 developed countries	1990–2015	OECD, ILO, LIS, Eurostat and OECD/AIAS ICTWSS databases.	This study concludes that trade union density has a positive and statistically significant impact on unemployment.
Sahnoun and Abdennadher [93]	2022	16 OECD countries	2000–2015	Panel data for 16 OECD countries	Union density had a positive effect on unemployment.
Van Doorn and Van Vliet [95]	2022	16 European countries	1999–2010	Involuntary part-time employment	“Trade Union Density” had a negative effect on involuntary part-time employment.
Rotar [104]	2022	EU-26 Member States	2008–2018	Aggregate data for young unemployed people	Trade union density had a negative and statistically significant effect on the unemployment of young people.

Table 4. The most recent empirical evidence on the employment effect of active labor market policies (ALMP).

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of ALMP
Cockx et al. [105]	2023	Belgium	December 2014–June 2016	Administrative data on the unemployed (Flemish PES data based on a population of about 60,000 individuals aged between 21 and 55)	All three training programs had positive effects after the lock-in period, but there was substantial heterogeneity in the effectiveness of these programs.

Table 4. Cont.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of ALMP
Theodoropoulos and Voucharas [106]	2023	24 countries	1985–2017	Longitudinal data from the Survey of Health, Ageing and Retirement in Europe and OECD data	The study finds that investing in ALMPs increases the re-employment probability and the re-employment duration and reduces the risk of staying unemployed.
Desiere and Cockx [107]	2022	Belgium	2012–2018	Jobseekers who registered at the VDAB (the Flemish PES).	Hiring subsidies have been demonstrated to enhance job-finding rates by 13%.
Filippucci [108]	2022	France	2013–2018	Data from two administrative sources, (a) The administrative system of YECs, called I-Milo and (b) an extraction of French social security records.	The study finds a strong positive joint effect of active and passive policies (+21% on employment, +63% with respect to control) after youths exit the program.
Foged et al. [109]	2022	Denmark	1986–2008	Data for Refugees. Datasources which are described in detail in the specific study are the following: Admission Register (OPHG), migration register (VNDS), database for labor market research (IDA) and the data on earnings are from the income register (IND), information about education and demographic data on the individuals (BEF, UDDA, FAM).	ALMPs focused on matching refugees with simple jobs in high-demand occupations could have positive short-run effects, but the study does not yet assess their long-run effects.
Inanc and Kalleberg [90]	2022	17 European countries	2004–2010	European Social Surveys (ESS)	ALMPs have a negative effect on an individual's level of job insecurity.
Liotti [92]	2022	28 European countries	2000–2018	Data on youth unemployment and labor market regulation index (LMRI)	ALMRs are negatively associated with youth unemployment.
Mühlböck et al. [110]	2022	Austria	Summer 2014	Panel survey data sample of 18–28-year-old individuals who just became unemployed	This study found that if a person participated in an ALM program, his/her confidence to find suitable employment increased.
Nieuwenhuis [111]	2022	30 OECD countries	1985–2018	Macro-level data for women	ALMPs are beneficial for women's employment rates.

Table 4. Cont.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of ALMP
Rotar [104]	2022	EU-26 Member States	2008–2018	Aggregate data for young unemployed people	ALMPs do not support a reduction in youth unemployment.
Sahnoun and Abdennadher [93]	2022	16 OECD countries	2000–2015	Panel data for 16 OECD countries	ALMPs appear to be efficient in reducing the unemployment rate.
Schlosser and Shanan [112]	2022	Israel	March 2014 to December 2018	6151 individuals (administrative datasets from the Israeli Employment Service and Social Security records)	The ALM program focused on enhancing the soft skills of welfare recipients using a large-scale RCT (randomized control trial), increasing participants' employment rates.
Ulku and Georgieva [113]	2022	191 countries	2019–2020	Global data from the World Bank	This study demonstrates a continuous negative correlation between active labor market policies and the rate of self-employment in all income levels, as well as a negative association with the rate of employment in upper-middle-income nations.
Van Doorn and Van Vliet [95]	2022	16 European countries	1999–2010	Involuntary part-time employment	The negative effect of "Training" on involuntary part-time employment and the positive effect of "Employment incentives" on involuntary part-time employment.

Table 5. The most recent empirical evidence on the employment effect of unemployment benefits (UB)—unemployment insurance (UI).

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of Minimum Wages
Arbogast and Dupor [114]	2023	USA	2021	EUB recipient data are from monthly state reports of Bureau of Labor Statistics and include PUA (Pandemic Unemployment Assistance), PEUC (Pandemic Emergency Unemployment Compensation) and regular claimants.	In the first three months following a state's program termination, for every 100 people removed from beneficiaries, state employment climbed by around 35.

Table 5. Cont.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of Minimum Wages
Bhalotra et al. [115]	2023	Brazil	2009–2018	The authors merged employer–employee and social welfare registers with administrative data on domestic violence cases	Although unemployment benefits partially offset the income drop following job loss, they reinforce exposure shock as they increase unemployment duration.
Gaillard and Kankanamge [116]	2023	USA	1994–2015	CPS micro-data and variations in regular and extended UI benefits across US states and over time	The study establishes a negative and significant relationship between UI generosity and the propensity for eligible unemployed individuals to select self-employment. Additionally, reallocations from self-employment to employment are a key factor in generating a stable to slightly increasing employment rate as UI generosity increases.
Domènech-Arumí and Vannutelli [117]	2023	Spain	2004–2017	Administrative data on individual work histories drawn from the Muestra Continua de Vidas Laborales (MCVL) (Sample size = 245,000 individuals)	Shorter benefits resulted in shorter non-employment duration, particularly among younger workers, increased labor force exit and other program participation, particularly among older workers, and lower re-employment pay.
Guo et al. [118]	2023	USA	1984–2022	Data from the Displaced Worker Survey (DWS) supplementary to the Current Population Survey (CPS), which was produced by the Bureau of Labor Statistics (BLS)	Receiving UI benefits did not affect the post-displacement hours worked by displaced workers, but its impact was negative on post-displacement employment outcomes of displaced workers.
Petrosky-Nadeau and Valletta [119]	2023	USA	Early-to mid-2020	Monthly CPS data	According to this study, just a small percentage of recipients of expanded UI benefits were likely to turn down job offers.
Raza et al. [120]	2023	21 OECD countries	1995–2014	Cross-country OECD data	The generosity of unemployment benefits can weakly raise unemployment rates in some cases.
Salvatori [121]	2023	Belgium	2011–2014	Administrative data from Crossroads Bank for Social Security provided by the Datawarehouse Labor Market & Social Protection of Belgium	The analysis found no indication that the Belgian UB system reform acted positively towards employment.

Table 5. Cont.

Author(s)	Year of Publication	Country(ies) Related	Data Period	Data or Group Concerned or Sector-Industry Related	Employment Effect of Minimum Wages
D'Ambrosio and Scrutinio [122]	2022	Italy	2012	Italian population-level administrative data on unemployment benefits and individual workers' histories.	Higher benefits increased the time spent on benefits and in non-employment, with no impact on new job quality. In addition, this study found that the long-term unemployed face higher uncertainty in their employment prospects.
Duggan et al. [123]	2022	USA	1983, 2000 and 2019	37 years of data for all 50 States, including Washington D.C., from the IPUMS-harmonized monthly Current Population Survey	The low UI tax base that exists in California and many other states had a negative impact on part-time and other low-earning workers.
Hartung et al. [124]	2022	Germany	1975–2014	Micro-data on individual employment histories from the Sample of Integrated Labor Market Biographies (SIAB) provided by the Institute for Employment Research (IAB)	This study suggests that the separation rate changes in the decade after the UI reform were a major macroeconomic adjustment channel for bringing down German unemployment rates. A decrease in separation rates after the UI reform accounted for 76% of declining unemployment.
Huang [125]	2022	USA	1970–2014	Current Population Survey	A 10% nominal increase in the base increases the teen employment rate by 1.2%. It increases employment for teenagers, adults, and recent high school or college graduates. Indexing the tax base boosts teenage employment by 6%. The degradation of the UI tax base has diminished the employment of low-wage workers.
Inanc and Kalleberg [90]	2022	17 European countries	2004–2010	European Social Surveys (ESS)	NRR has a negative effect on an individual's level of job insecurity.
Liotti [92]	2022	28 European countries	2000–2018	Data on youth unemployment and labor market regulation index (LMRI)	UBs are positively associated with youth unemployment
Ulku and Georgieva [113]	2022	191 countries	2019–2020	Global data from the World Bank	UB are more likely to have a positive than negative relationship with labor market outcomes in that they are strongly linked to higher industrial employment and productivity growth and negatively linked only to aggregate employment.

In general, when exploring the most recent empirical results, it seems that, in cases where the minimum wage was raised, the studies point to a neutral or negative effect on employment. Meanwhile, concerning employment protection and the role of the unions, recent studies have generated mixed results. Clearer findings have been offered on ALMPs, which appear to be efficient means of reducing unemployment. On the contrary, with respect to unemployment insurance and unemployment benefits, most studies have suggested that they do not improve employment conditions.

This entry aims to fill in a gap in the literature by providing a comprehensive analysis of the existing literature, which is not only large but is also growing in its understanding of the role and impact of labor market institutions and policies on employment measures. Regarding minimum wages, their effect on employment is an issue of ongoing debate, and the results in the recent literature point to the diversification of the results relying mainly on the country concerned, the data period, the group related, and the employment measure used in the studies. Therefore, the need for meta-analysis regarding possibly a specific category is needed, especially for the most vulnerable groups, i.e., youth, unskilled, etc. Discussing employment protection, the recent literature generated mixed results, and the sign of the impact is affected by the employment contract, the status of employment (permanent vs. temporary), and the EPL measurement used. Consequently, recent meta-analysis probably sheds light on this issue. With respect to the active labor market policies, they seem to be beneficial for employment prospects, but the magnitude of their effect depends on the type of the program. Finally, unions seem to play an ambiguous role in employment, and unemployment insurance/unemployment benefits have a negative role in employment. However, no meta-analysis has been published yet, to the best of my knowledge, on the employment effect of these two institutions, and such a study could provide additional evidence on this issue.

## 6. Conclusions

The purpose of this entry was to provide an overview of the most important institutions and policies in the labor market, to explain their main characteristics, to present the theoretical expectations of their effect on employment, and to depict the most recent empirical results from studies published in the last two years.

This analysis hopefully clarifies how we can understand the five main labor market institutions and policies, as well as both their potential beneficial and harmful effects on employment, according to the views and evidence in the related scientific literature.

The general picture is that the employment effect of labor market institutions and policies is subject to ongoing debate among economists, with empirical results often being contradictory. In the most recent empirical evidence, studies point to the neutral or negative effect on employment that occurs when raising the minimum wage. Concerning EPL and the role of unions, recent studies have generated mixed results. However, ALMPs appear to be an efficient means of reducing unemployment, while it seems that unemployment insurance and unemployment benefits do not improve employment conditions.

Finally, a key takeaway from this work should be that labor market institutions and policies are clearly of great importance for regulating the labor market and improving its efficiency. Therefore, continuing our efforts to better understand the complexity of each institution is crucial, with the potential for future research findings to hold great value in guiding policymakers' work to formulate and evaluate labor market policies.

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