Unemployment and Labour Market Policies

Lukas Lehner¹, Dennis Tamesberger²

This chapter provides a conceptual overview of social infrastructure targeted at unemployment and labour markets. Its main purpose is to categorise existing pillars of labour market policy and to illustrate them with cross-national comparisons across a representative sample of advanced economies. The first section classifies the pillars of social infrastructure for labour markets embedded in macro and structural policy areas. The section further distinguishes between passive and active elements of unemployment support as well as institutions regulating labour markets, in particular employment protection legislation and wage-setting. The second section illustrates the conceptual pillars of social infrastructure with cross-national comparisons. It introduces the reader to a comprehensive set of harmonised data for advanced economies. The final section outlines challenges ahead to show the potential of evolving social infrastructure: strengthening inclusion, maintaining incomes, promoting health, improving working conditions, and actively supporting structural change especially in light of pressing climate change challenges.

Keywords: Unemployment, unemployment benefits, active labour market policy, employment protection, wage setting, trade unions

¹ PhD Candidate, Department of Social Policy and Intervention, University of Oxford, UK and Research Associate, Research institute Economics of Inequality, Vienna University of Economics and Business, AT, https://lukaslehner.github.io/.

² Head of Team Social Policy, Chamber of Labour, Linz, Tamesberger.d@akooe.at

1) Theory of Pillars of Labour Market Policy

The purpose of social infrastructure is to protect and insure against individual risks and support social integration (Barlösius 2019, Böhme and Brigge 2015). With regard to labour markets, social infrastructure aims at insuring workers against the risk of unemployment and improve working conditions for those in employment. Analogous to welfare states, social infrastructure plays an important role in de-commodification and the provision of equal opportunities and equitable economic outcomes with regard to social classes, or place (Barlösius 2019). Böhme and Brigge (2015), for instance, have embedded social infrastructure in the capability approach of Sen (2000). Accordingly, social infrastructure includes all facilities and services, which support participation and realisation opportunities for people. With regard to labour markets training institutions and a social labour market are commonly referred to as key elements of social infrastructure with skills and participation in working life as outcomes.

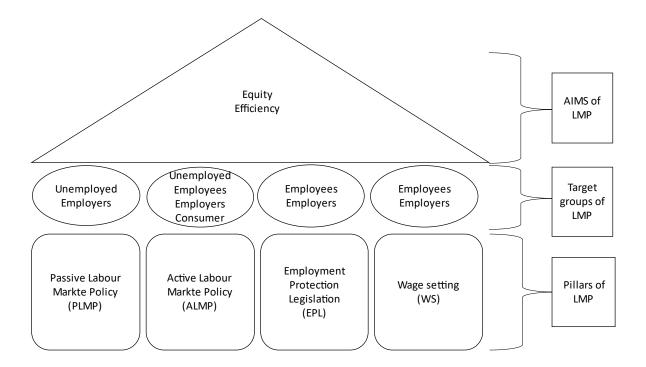
This chapter extends beyond these definitions of social infrastructure for labour markets by incorporating additional relevant policy areas. Core areas of employment policy can be divided into macroeconomic and structural policy. Macro policy is demand-oriented and focused primarily on the short and medium term. It includes fiscal and monetary policy. Structural policy is supply-oriented and focused primarily on the long term. It includes for example industrial and competition policy, education and qualification, care policy as well as physical infrastructure. Depending on the question whether unemployment is seen as private or public responsibility, different models of the welfare state and social infrastructure are shaped by governments and other social actors (Böhme and Brigge 2015; Esping-Andersen 2012; Unger et al. 2017) resulting in substantial cross-national variation. Anglophone countries and their liberal welfare states (Esping-Andersen 2012) are the archetype for the former: the risk of unemployment is largely conceived as a private responsibility. Labour markets have a high degree of external flexibility (Eichhorst et al. 2010) characterised by a hire and fire approach of employers with little state intervention. Social security is limited to a certain minimum income (low unemployment replacement rates) aiming at sufficient work incentives for the unemployed.

A contrasting view is to see the risk of unemployment as a structural failure and therefore collective problem. This implies political responsibility to avoid unemployment with two implications: It follows that labour market policy is embedded in a fullemployment-oriented fiscal policy meaning that governments are willing to invest in economic stimulus packages and to accept public deficits for reducing unemployment. This leads to tensions between different aims of economic policy which can be illustrated by the so called "magic hexagon" of economic policy (Rothschild 2010; Marterbauer 2014). Passive labour market policy aims to preserve the standard of living of the workforce even for those that are without jobs. The underlying concept of this aim is "de-commodification" (section 1.1). In contrast, active labour market policy focuses more on compensating for market failure to cope with structural changes in the economy (section 1.2). In a broader context labour market policy can shape existing employment conditions concerning the degree of security or precariousness of contracts (section 1.3) or wage-setting (section 1.4). At the centre of employment and work regulation is the question whether "decent work" (ILO 1999) is created by the welfare state or by market forces. Most of the time it is a shared responsibility with different characteristic forms depending on power relations (Wright 2000) and country specific institutional traditions (Hall and Soskice 2001). The structuring principle for the chapter draws on Boeri and van Ours (2013) but focuses on the policy areas most commonly analysed by the OECD (2021) with data for comparative analysis. The four main pillars analysed in this section are synthesised in figure 1.

Since its inception in the 19th century, labour market policy has been considered both, a social policy and an economic policy, thereby, aiming at ensuring equity while raising efficiency. While equity concerns have primarily centred around alleviating poverty, insuring against social risks and reducing inequalities, efficiency concerns have primarily centred around raising employment, improving job-employee matching and increasing skills. Labour market policy continues to face the challenge of balancing this two-fold objective. Equity concerns have frequently been attributed to passive labour market policies and wage setting, while efficiency considerations have been linked to active labour market policy and (reducing) employment protection legislation. However, this view falls short of recognising interdependencies between policies and its objectives. Each of the policies can have consequences for equity and efficiency. Best practice

policies manage to overcome the trade-off and turn it into a trade-in, where equity and efficiency objectives complement each other.

Figure 1: Pillars of labour market policy



The pillars of labour market policy explained in this section influence each other, and so do other areas of social infrastructure: paying social security contributions typically results in the entitlement of benefits claims against social risks such as unemployment. With the rise of the welfare state after WWI and WWII, virtually all advanced economies have established analogous systems for pensions and health care that complement social infrastructure for unemployed. Over the last decades, countries have expanded social infrastructure, in particular in the area of family policy, and created related bodies to insure against "new" social risks such as the "risk" of requiring care in old-age. It should be noted that there are important interactions between different areas of social infrastructure (Böhme and Brigge 2015)).

Income taxes and social security contributions finance the costs of social infrastructure for unemployed. While taxes go directly to the government's budget, social security contributions are earmarked for social security spending or go directly to self-governed social insurance bodies that provide labour market infrastructure. Social partners

comprising of trade unions and employer associations are sometimes included in the governance of such bodies.

Areas of social infrastructure for labour markets not covered in this chapter are working time regulation, occupational safety and health provisions. Working time regulation (WTR) determines the normal hours worked for a full-time job over a specific period, such as per day, per week, per month or per year, as well as the maximum time allowed to work during peak times. They also specify overtime remuneration for workers and penalties for employers violating the regulations. WTR have experienced a massive expansion with the rise of the welfare state over the past century, although the reductions in maximum hours worked have stalled during the past decades. Today, only 5 percent of countries worldwide do not regulate hours worked (Rasmussen 2021). By contrast, age-related working time regulations are covered in the retirement legalisation and provisions. Occupational safety and health provisions regulate security arrangements at the workplace. These reach from immediate risks such as reducing the risk of accidents and fire safety regulation to limiting negative long-term consequences of the work, such as from inhaling toxics and lacking equipment for a comfortable position in front of the computer screen.

1.1) Passive Labour Market Policy

Passive Labour Market Policy (PLMP) aims to provide social security in the case of unemployment and is therefore a central part of the social infrastructure. The main instruments of PLMP are unemployment benefits and unemployment assistance. Unemployment benefits and unemployment assistance provide income replacement payments during a certain time of unemployment. Some authors add also social assistance or means-tested minimum benefit systems to the PLMP (Franz 2013). On the one hand, this make sense because a lot of unemployed persons get both unemployment benefits and social assistance. On the other hand, unemployment benefits and social assistance rely on quite different approaches. In this chapter, we take a narrower view and focus on unemployment benefits. These are part of the unemployment insurance system and linked to rights of insured workers. Unemployment benefits are the core

instrument of PLMP, whereas social assistance is a means-tested welfare benefit typically financed via taxes and can be seen as extended part of PLMP.

Unemployment insurance systems constitute a central part of the welfare state and of social infrastructure. Some countries have also introduced unemployment assistance for people without jobs who have exhausted the entitlement to unemployment benefits if they are still in a situation of need (European Commission 2022). Unemployment benefits smooth consumption in an economy when people are faced with job losses, thereby acting as an automatic stabiliser over the business cycle (Langenbucher 2015).

Following industrialisation, the first unemployment insurance systems were established from the second half of the 19th century and massively scaled up after WWI and WWII. Historically, the unemployment insurance was an answer – next to an occupational accident-, and health-insurance – to capitalist conflicts over the "social question" and equity concerns. In contrast to the UK, the unemployment insurance in Germany was introduced only in 1927 as last pillar of the social security system. For a long time, employers were reluctant due to a fear of losing bargaining power by providing benefits to unemployed (Bothfeld 2018). Indeed, the aim of unemployment benefits is "decommodification" of labour. It means "the degree to which individuals, or families, can uphold a socially acceptable standard of living independently of market participation" (Esping-Andersen 2012, 37). And if people are more independent of market participation then the bargaining power for wages and working conditions is expected to improve. A more contemporary translation of the aim would be 'decent living'.

Three theoretical mechanisms are at play: First, unemployment benefits serve as financial protection, which can improve the job matching but also prolongate the unemployment duration. Second, higher unemployment replacement rates can increase wages and reduce hiring. In this context, some economists have blamed PLMP for institutional rigidities and for structural unemployment. It is assumed that generous benefits can create disincentives for the unemployed, which can lead to longer unemployment durations and to a higher level of unemployment (Biegert 2017; Nickel 1997; Eichhorst et al. 2010). Third, it is assumed that strict conditionality has an activating effect on the unemployed (Knotz 2020).

Many researchers have tried to empirically identify a relationship between single labour market institutions and unemployment (Muffels et al. 2014; Bassanini and Duval 2006; Baccaro and Rei 2007; Scarpetta 1996; Baker et al. 2003). Bassanini and Duval (2006) show that high and long-lasting unemployment benefits increase aggregate unemployment in OECD-Countries. Opposite findings are presented by Baccaro and Rei (2007) and by Howell and Rehm (2009). Muffels et al. (2014) argue that unemployment benefit replacement rates are positively associated with changes from temporary to permanent employment but also with high involuntary dismissals of workers causing an overall unclear effect on unemployment. One reason for this ambiguous empirical picture is that the level of unemployment depends more on labour market or welfare regimes than on single institutions such as unemployment benefits (Sturn 2013). In a similar vein, Biegert (2017) argues that effects of benefits on unemployment differs by institutional context.

Another aspect is the strictness of conditionality for receiving unemployment benefits and unemployment assistance. Unemployment benefit recipients have to be available for suitable jobs and have to be seeking for work. If they fail to comply with these conditions, they can get sanctioned, which implies a loss of benefits temporarily or in repeated cases even permanently. Theoretically, it is assumed that the strictness and conditions for receiving unemployment benefits counteract possible disincentives to work resulting from out-of-work benefits. This could happen if unemployed start quicker to search for work (Immervoll and Knotz 2018). Sanctions are intended to promote compliance on job search and speed up the return to work (Bonoli 2010). However, there is also no consistent evidence that countries with strict eligibility criteria are able to achieve lower unemployment rates (Immervoll and Knotz 2018; Langenbucher 2015). A scoping review (Pattaro et al. 2022) shows that labour market studies can identify positive effects of sanctions on employment outcomes but there is also evidence that sanctions have adverse impacts on job quality and employment stability. The review provides evidence that sanctions increase the share of inactive people implying that unemployed stop receiving benefits and actively searching jobs, thus moving from the pool of officially counted unemployed to the out-of-labour-force population. This makes it even more difficult to re-integrate them into the labour market. Further, a longitudinal study for the UK (Williams 2021) shows that sanctions are associated with negative mental health impacts and higher public expenditure in health care. Knots (2020)

concludes that for increasing employment, the treatment of unemployed should not be punitive and unemployed should receive comprehensive supportive.

1.2) Active Labour Market Policy

Active labour market policy (ALMP) focuses on the re-integration of unemployed into employment, which is a connection to the capability approach of social infrastructure Since its inception, the aims of ALMP have been developed and have been varied in many countries. ALMP aims to increase equal opportunities between employees, to improve matching between jobs and jobseekers, to reduce drop-out in labour market participation, to counteract negative social consequences of unemployment, to reduce barriers in hiring and to improve productivity (Figerl et al. 2016; Nordlund 2009).

Historically, ALMP goes back to the early 1950s and Sweden's Rehn-Meidner plan: a comprehensive economic policy complementing tight fiscal policy, solidaric wage policy with newly created ALMPs (Erixon 2014). It aimed on equal income development, full employment and a modernisation of the industry. While the Rehn-Meidner plan was steered by trade union economists, the eventual design of ALMPs were the result of a compromise between employers and trade-unions (Bonoli 2010). ALMPs were intended to support both labour and industry in light of rapid structural change. Labour's interest was to improve the situation of workers with poor employment prospects or in unemployment by receiving training for new jobs in expanding economic sectors, to eventually reach full employment. Employers were interested in enhancing workers human capital in light of structural change and increasing the size of the workforce. Since the 1990s, where the controversy about the "activation turn" started, ALMP has become more important in many countries and the spending on ALMP has increased significantly (Bonoli 2010).

Modern ALMP can be classified in four overall categories: job-search assistance, training, wage subsidies, and direct job creation. A widely spread instrument is job search assistance. Here, Public Employment Services (PES) offer counselling and job search programmes for unemployed people to facilitate (re-)entry into the labour market.

Another main instrument of ALMP is training consisting of qualification and skills programmes. ALMP aims to improve the employment opportunities of jobseekers by increasing their skills. PES offer basic education, vocational trainings or reorientations programmes. Unemployed people get a second chance if their education is too low or ill fitting with labour demand. Thereby, it can help to tackle structural change and counteract mismatch issues in the labour market. Further, there is evidence that training works especially well for disadvantaged groups such as woman, which can improve equal opportunities in the labour market. A less recognised effect of training is it can emulate paid employment and thereby counteract some of the negative effects of unemployment itself by providing daily time structure and social contacts (Bonoli 2010; Figerl et al. 2016), or even improving mental health (Wang et al. 2021). Recent experimentation has found positive effects of increasing jobseekers autonomy towards job counsellors and presenting choice in programme selection on training (Lehner and Schwarz 2021).

To remove obstacles to labour market participation, wage subsidies should lower employers labour costs for certain disadvantaged groups like long term unemployed, elderly or for jobseekers with disabilities. Wage subsidies should give employers an incentive to hire new workers of a disadvantaged group who they would not usually hire. On the one hand, wage subsidies can help to overcome prejudice or discrimination by employers. On the other hand, wage subsidies can also be stigmatising. If wage subsidies are temporary, they can have a "revolving door" effect, meaning that the employed person gets fired when the wage subsidy runs out (Figerl et al. 2016). A specific type of wage subsidies is short-time work. There are mainly two use cases. The first one is a wage subsidy to gain more jobs by providing incentives for companies to reduce working time within the current work force and to hire unemployed persons at the same time (Figerl et al. 2021). The other case is during crisis. Short-time work (STW) as a crisis instrument was in practise during the financial crisis 2008 and since the COVID-19 pandemic STW has become the most important labour market policy in an unprecedented scale (Ebbinghaus and Lehner 2022; Müller et al. 2022). The idea behind it is that during economic shocks companies get subsidies to adjust the number of hours worked per employee instead of laying off staff. Thereby, STW is able to avoid mass layoffs and limit the increase of unemployment during recessions (Tamesberger and Theurl 2021).

Direct job creation provides work experience mainly in the public or non-profit sector. The main idea is that LMP could offer a job and pay for work instead of paying unemployment benefits. Direct job creation programmes were established in many continental European countries in the 1980s and 1990s (Bonoli 2010). The aims were to reintegrate people who were not able to find a job on the regular labour market, to counteract the negative effects of unemployment, to prevent the depletion of human capital, to produce socially desirable services and products as well as to experiment with new forms of economic activities. Often, the primary goal was supporting transition into the first labour market, while sometimes rather permanent employment possibilities within programmes were created in the so-called "second" labour market (Lechner et al. 2016). Faced with growing long-term unemployment as a lasting consequence of the 2008 Great Recession, the concept of a job guarantee has received increased attention (Tcherneva 2020) with ongoing in experimentation in several countries, such as France (TZCLD) and Austria (Kasy and Lehner 2021). The state acts as employer of last resort implying that anyone willing and able to work receives a job offer paid at the minimum wage. Besides the general aims of direct job creation, some proponents argue that a job guarantee pushes back low-paid jobs and can improve the social infrastructure based on the understanding that unemployment is political and not a private issue (Theurl and Tamesberger 2021).

There are many microeconometric evaluations of active labour market policies concerning the impact on labour market participation. A meta-analysis of 97 studies conducted between 1995 and 2007 (Card et al. 2010) demonstrates that job search assistance has a strong impact, whereas public sector employment programmes are less effective in re-employment in regular jobs. Training or qualification programmes do have a positive impact in the medium run. There is quite some consensus in the literature, that most of instruments of ALMP work better for women than for men (Bergemann and van den Berg 2006; Schweighofer 2013). Boone and van Ours (2004) take a macro perspective and come to the following findings. Public expenditures on labour market training have a strong impact. They can reduce the unemployment rate and can increase the employment-rate. Investments for the public employment service (PES) can only reduce the unemployment rate but has no positive effect on employment rate. A possible interpretation is that more contacts with PES consultants lead to more sanctions for

unemployed which can mean that the unemployed reduce their searching activities and move from unemployment to the out-of-labour-force status.

Some labour market policies consider elements of both, passive and active labour market policy, such as employment subsidies and job creation, which help jobseekers find employment while also result directly in an increase of labour income. For a comprehensive understanding of labour market policy it is necessary to consider besides PLMP and ALMP also the regulation of the labour market itself (see next section).

1.3) Employment Protection Legislation

Employment protection legislation (EPL) regulates the procedures and costs required for employers to dismiss workers, as well as it restricts the use cases of temporary contracts by employers. For regular workers, dismissals and its regulation can be divided in individual and collective dismissals. Whereas employers can dismiss individuals due to economic reasons or employee misconduct, collective dismissal is always a consequence of economic reasons of the firm, be it a result of pressure to restructure or strategic business decisions. The use of temporary contracts is typically restricted to a limited amount of time, or specific cases with the aim that every worker should be able to get a regular contract, defined as without limit of time (= "permanent") sooner or later. While employment protection is usually referred to as employment protection legislation, it is important to note that aspects of employment protection reach beyond legislative specifications and include provisions agreed to in collective agreements and in individual employment contracts. Collective dismissals require employers usually to consult or notify worker representatives or government authorities in advance about their plans. Legislative provisions often differ depending on business characteristics, such as firm size and type of industry, as well as the worker characteristics, such as the duration of employment with the firm at the time of dismissal.

The consequences of EPL for productivity can be twofold. On the one hand, more stringent EPL makes hiring and firing most costly to firms, thereby reducing turnover of workers with potential negative implications for efficient allocation of workers in the labour market. On the other hand, the exact same mechanism gives firms and workers increased security of longer-lasting employment relationships. This makes investment in training their workers more cost-efficient for firms, while at the same time it pays off for workers to acquire firm-specific skills and build relationships at work that make workers more efficient in a specific firm but are relatively worthless at another employer. A typical argument against stringent EPL is that it would reduce hiring of new workers by firms since a new hire would be harder to lay off in the event of economic pressure or an inefficient recruitment decision. This makes firms less flexible to adjust against negative economic shocks in times of cyclical downturns or structural adjustment processes. On the positive side, EPL increases employment security of workers, thereby raising their bargaining power and wellbeing. Boeri and van Ours (2013, 275) view EPL from an economic perspective as consisting of a transfer and a tax element. The transfer component is a monetary transfer from the employer to the worker, while the tax component is a payment to the state. In practice, the transfer component of EPL consists of severance payments and the mandatory advance notice period, which benefit the worker monetarily, while the tax component consists of the costs for labour disputes and trials and administrative costs for formal procedures.

Stringent EPL for regular workers combined with non-stringent EPL for temporary contracts can easily result in two-tier labour markets. This describes a situation, where stringent EPL for regular workers incentivises firms to hire more temporary workers. Would EPL for temporary workers be more stringent, firms would be prevented from hiring any type workers at all resulting in higher levels of unemployment – so the classical economic argument. Academics have discussed for a long time whether temporary contracts are a stepping-stone into permanent employment or a dead-end for a lower tier of workers. Latner and Saks' (2022) survey of the literature provides some insights rejecting the common notion of 'mixed results' but instead underscores that the consequences of temporary contracts are context-specific: they vary by geographic region and demographic group. Moreover, a meta-analysis (Heimberger 2020) of 881 observations on the effect of EPL on unemployment from 75 studies shows that the choice of the EPL variable matters (survey-based EPL versus OECD's methodology). The meta-analysis found no robust evidence that EPL leads to higher unemployment. The effect of employment protection on unemployment is, on average, zero.

Stringent EPL for regular workers prevents firms from adjusting their fluctuating labor demand via laying off and hiring workers. Instead, firms adjust at their margins meaning that they hire and lay off workers only via temporary contracts. This results in less job stability for temporary workers (Gebel and Giesecke 2011). Such firm behaviour results in dualised labour markets, where one set of workers on regular contracts enjoys insider benefits insulated from economic pressures, while another set of workers, outsiders on temporary contracts, is used to cushion the economic fluctuations resulting in instable employment trajectories. The theoretical conceptualisation is provided by the classic economic insider-outsider model (Lindbeck and Snower 1988) even though the classic model referred to the unemployed as outsiders. However, this view has been challenged by industrial relations and political economy scholars (Houseman et al. 2003; Bellani and Bosio 2019), who find that temporary workers are used by employers to weaken bargaining power and wages of regular workers. Reductions in employment protection legislation for temporary workers have reduced overall wages (Damiani et al. 2018). Involuntary temporary workers can indeed affect permanent workers by raising their job insecurity through competitive pressures and thereby dampen wage growth of all workers (Lehner et al 2022).

1.4) Wage Setting

Wage setting describes the process of how minimum wages are defined. This happens either by the government, which can impose a statutory minimum wage, typically as a universal wage-floor for workers of all sectors and occupations, or via a bargaining process between employers and workers, which typically results in collectively bargained agreements at the national, sectoral, or firm level. Further details of pay and the employment relationship are then specified in the individual employment contract between a worker and her employer. Collective bargaining (CB) determines minimum wages, working conditions and terms of employment, regulates the relations between employers and workers, or their organisations (OECD 2022). The result of the bargaining process normally is a written document that is mutually binding for a stipulated time, which is referred to as the collective agreement or collective bargaining agreement. These agreements typically include provisions not only for minimum wages

but also other employment provisions, such as working hours, overtime pay, fringe benefits, employment security, and health and safety standards.

Wage setting differs by its level, centralisation, and coordination. The most centralised approaches include national level agreements³ that typically provide the framework for working conditions that are then more defined at lower levels. A medium level of centralisation exists in countries where bargaining takes primarily place at the sectoral level, such as the metal sector, chemical sector, etc. In such cases, coordination of bargaining across sectors is particularly important to achieve better economic outcomes. Such systems of - often informal but firmly established - coordination are called pattern bargaining: bargaining outcomes in one sector provide guidance for negotiations in other sectors. In more decentralised systems, bargaining takes place at the firm level, where more specialised agreements can be reached between the works council or shop steward representing her co-workers and the management. In some, primarily Anglophone, countries this is the main level of wage bargaining with large firms often further broken down to reach varying agreements at each establishment or plant of a firm. In firm-level collective bargaining, trade unions may be powerful within specific firms but workers outside these firms have substantially less bargaining power, which results in higher levels of wage inequality. If no agreement is reached on any of those levels, wages are set solely at the individual level, where workers often have the least power opposite of their employers.

In some countries, collective agreements do not only apply to union members but to a wider set of workers via automatic extension to all workers in the firm, sector, or occupation, or to every worker (= "erga omnes"). Automatic extension has the advantage of limiting labour market segmentation, i.e., the emergence of inequalities between workers. However, trade unions may struggle to convince workers to join as paying

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³ In some countries, trade unions and employers also bargain minimum wages at the national level. Trade unions have attempted to coordinate even beyond the national level, though with limited success. Effective cross-national campaigns have resulted in global framework agreements that set minimum standards for multi-national enterprises (MNEs) across countries.

members if workers are covered regardless of their membership and have no clear economic incentive to join a union. Atypical workers are often not covered by collective agreements, which weakens their bargaining position. This includes in particular disguised self-employed people, which are workers that are remunerated as self-employed, while they actually work in a dependent employment relationship. In reverse, employers have frequently pushed for opening clauses, which allow to set lower standards that are less favourable to workers. In some countries, opt-out clauses allow the suspension or renegotiation of collective agreements if the firm suffers from financial difficulties (OECD 2022a). Peace clauses are usually granted by unions to employers for concessions as unions sign an agreement that they cannot strike on issues settled in the agreement for a limited amount of time.

The actors involved in collective bargaining are trade unions and employer association. The first modern trade unions emerged in the eighteenth-century United Kingdom and the United States as craft unions organised along occupations as pre-cursors of social insurance systems. They provided mutual insurance to their members against social risks, such as unemployment, death, and old age (Boeri and van Ours 2013, 63). The nineteenth century witnessed the rise of industrial trade unions, which at first represented primarily semi-skilled factory workers but towards the end of the century expanded to represent all workers often incorporating broader political goals for decent work and social justice. While manufacturing workers used to be the backbone of trade unions, the 20th century saw a shift towards workers in the public sector, which represents the sector with the highest unionisation in many countries today. Employer associations have traditionally received less attention from research (Paster 2015) but have often been detrimental in ensuring wide coverage of collective bargaining agreements.

2) Empirical Evidence on Pillars of Labour Market Policy

This section provides an empirical analysis of labour market policy guided by the conceptual pillars presented in the previous section. The section provides cross-national comparisons relying on harmonised data for a selected set of advanced economies that

represents diversity of path-dependent welfare state models (Esping Andersen 2012; Ebbinghaus 2005). Aggregating data for cross-national comparisons is a difficult process that involves a set of normative decisions that affect its outcomes. It becomes even more complicated if qualitative information needs to be codified to operationalise information and establish indicators useful for country comparisons and quantitative analysis. Transparent documentation of the data generating process is important to reveal these decisions. Therefore, each sub-section starts with a discussion of the data before discussing the results in context of the theoretical aspects from the previous section.

While the OECD does not provide data on further areas including working time regulation and occupational safety and health, comparative data is available by other providers: Working time regulation is documented and operationalised the CBR Leximetric dataset (Armour et al. 2016) since 2005 and extending back from today to 1789 by Rasmussen (2021). On occupational injuries and labour inspectors from the International Labor Organization's (ILO) occupational safety and health indicators (ILO 2022).

2.1) Passive Labour Market Policy

Passive labour market policy is primarily focused on avoiding social hardship and limiting poverty among workers who have lost their job. It includes benefits for jobseekers that are linked to eligibility and activation requirements. The level of benefits is typically measured by the **net replacement rate (NRR)** presented in table 1, which is defined as the ratio of net household income during unemployment compared to before the job loss. To make meaningful comparisons of the NRR possible across countries, benefit supplements related to the duration of the unemployment spell, family status, age, employment record and previous wage earned need to be taken into account. The figures in table 1 refer to calculations for the NRR for a jobseeker aged 40 with an uninterrupted employment record since the age of 19 who earned 67% of the country's average wage before the job loss. If benefit receipt is subject to conditionality or activity tests, it is assumed that these requirements are met. The measures by months of spell present the NRR for a respective month of the unemployment spell, whereas those by family type present the NRR at the 7th month of the unemployment

spell for a jobseeker. For the dual family model, it is assumed that the second earner receives the country's average wage.

Table 1 shows the variation in unemployment benefits measured by the net replacement rates. Benefits vary considerably between countries as well as within countries, such as by unemployment duration and family type. Nordic and Mediterranean welfare states have comparatively more generous benefits than those in Anglophone and Central Eastern European countries. Continental models are characterized by substantial within-variation: while Belgium and the Netherlands have comparatively generous benefits, they are generally low in Germany and Austria. Many countries have a degressive unemployment benefits, meaning that the net replacement rate declines over time of the unemployment duration. Unemployed with children receive a substantial top-up in most countries that increases the NRR up to 26 per centage points in the case of Germany. Belgium and Spain are outliers that provide comparatively higher base net replacement rates but no additions for singles with children. Most countries provide additional complements for unemployed with partners who are out of employment.

Conditionality complements benefits by imposing behavioral eligibility requirements with respect to labour market activation. The measure in table 1 refers to indices for the strictness of activity-related benefit eligibility criteria for unemployment and related benefits. They can be broken down into three overall categories: Job-search requirements refer to the strictness of job-search and monitoring procedures. Availability requirements refer to work-availability requirements and suitable job criteria. Sanctions refer to sanctions for benefit claimants if they fail to meet job-search or availability requirements.

Conditionality for unemployment benefits is generally strictest in Central-Eastern European countries and the United Kingdom. Though, this masks underlying variation of the types of activation requirements: Besides the CEE countries, availability requirements are strictest in Germany and Denmark requiring jobseekers to accept job offers distant to their permanent resident, in different occupations, or with lower wages than previously earned. Job-search requirements are strictest in the United Kingdom followed by Austria, Estonia, Japan and Sweden. By contrast, Poland's passive labour market policies with strict availability requirements and tough sanctions, place little

emphasis on active job-search. Central-Eastern European, Mediterranean and Anglophone welfare states are the most punitive ones characterized by the strictest sanctions for jobseekers who fail to meet availability or job-search requirements. By contrast Nordic and Continental passive labour market policies are less punitive to jobseekers. Comparing net replacement rates with conditionality presents no clear correlation, which underlines the large variation in how different welfare states combine benefit generosity with activation requirements.

Table 1: Passive labour market policies

Net replacement rate					Conditionality			
By								
mo	onths	By family type						
of	spell							
				One	Dual			
			Single	earner	earner	Availability	Job-search	
1	1325	Single	ewith 2	family	family	requirements requirements		Sanctions
			children	with 2	with 2			
				children	children			
AUT 59	5757	59	77	92	81	1.0	1.3	0.6
BEL 87	8064	87	85	78	87	0.8	1.0	1.2
DEU59	4848	59	85	95	89	1.3	1.2	0.7
DNK81	8181	81	86	90	92	1.4	1.0	0.7
ESP 78	7838	78	71	70	91	0.8	0.5	1.3
EST 65	3434	45	58	72	77	1.3	1.3	1.6
FRA 65	6546	65	71	64	86	0.8	1.2	0.9
GBR54	5454	54	66	68	59	1.1	1.5	1.0
ITA 74	6153	68	74	72	86	1.2	0.7	1.4
JPN 77	5858	77	87	86	92	1.2	1.3	0.6
NLD 73	7171	71	74	78	82	1.2	1.0	0.9
POL 67	3131	62	77	69	75	1.4	0.3	1.3
SWE73	6460	73	83	86	89	1.3	1.3	0.8
USA 57	1313	54	67	69	81	0.9	0.8	1.0

Net repla	acement rate		Conditionality		
By months of spell	By family type				
1 1325	Single Singlewith 2 children		Dual earner family with 2 children	Availability Job-search Sanctions requirements requirements	

Note: Data on net replacement rates refer to 2021 and data on conditionality on 2020 as the latest available years. Higher values denote to stricter conditionality.

Source: OECD tax-benefit indicators. OECD Strictness of activation requirements.

2.2) Active Labour Market Policy

Active labour market policy is primarily focused on employment re-integration of jobseekers and preservation of jobs for workers at risk of unemployment. It complements the social policy objective of passive labour market policy on avoiding social hardship and limiting poverty. ALMP measures are typically separated into four overall categories: job-search assistance, training, employment subsidies and direct job creation. While the job-search assistance and training are aimed at supporting unemployment to find jobs and enhance their skills, employment subsidies and direct job creation contribute to financing temporary employment opportunities for jobseekers. Training and employment subsidies both have in common that they aim at making job seekers more employable, though with different means: training aims at raising jobseekers' qualification level, while employment subsidies lower their labour costs for employers by subsidising part of them for a limit amount of time.

Table 2 shows a breakdown of expenditure and participation by the four ALMP categories. The data is harmonized by the OECD to make national data comparable across countries. When comparing policies across countries, it is not obvious which measures to look at. While expenditure and participation both show the magnitude of each policy area for countries, they do not reveal information on the quality or effectiveness of policies in the respective country. The numbers themselves are not self-explanatory as idiosyncratic factors can explain why expenditure or participation

appears relatively low or high in a specific country. This makes it necessary to add contextual information on the specific institutional background in country comparisons. However, the aggregate numbers are useful to indicate overall patterns across countries and groupings of similar welfare states.

Active labour market policies vary considerably between countries in their overall usage as well as their elements prioritised by different countries. ALMPs are most heavily used in Nordic and Continental European countries. Denmark is the archetype of flexicurity defined as flexible labour markets with little employment protection but strong passive and active labour market policies to support jobseekers. By contrast, the United States and Canada make overall very little use of ALMPs, while CEE and East Asian welfare states invest only moderately more in ALMPs. Continental and Nordic countries place heavy emphasis on job-search assistance and training. Australia and Spain tend to divert more resources towards employment subsidies, while Nordics and the Benelux countries additionally invest in direct job creation, usually targeted at disadvantaged groups in the labour market.

Table 2: Active labour market policies

	Expenditure					Participation			
	Job-search	Training	Employment	Direct job	Training	Employment	Direct job		
	assistance	Trailing	subsidies	creation		subsidies	creation		
AUS	0.07	0.01	1.55	0.06	0.09	6.75	2.25		
AUT	0.11	0.40	0.06	0.06	2.45	0.56	0.54		
BEL	0.23	0.17	0.23	0.18	1.91	5.17	1.42		
CAN	0.03	0.06	0 01	0.02	0.36	0.07	0.02		
DEU	0.19	0.18	0.03	0.04	1.27	0.28	0.29		
DNK	0.04	0.35	0.17	0.97	1.87	1.69	3.99		
ESP	0.05	0.11	0.22	0.24	1.35	9.86	1.60		
EST	0.10	0.12	0.05	0.20	1.06	0.46	4.01		
FRA	0.04	0.26	0.06	0.15	1.71	1.97	1.07		
ITA	0.00	0.13	0.07	0.01	2.88	1.70	0.13		
JPN	0.01	0.01	0.06	0.01					
KOR	0.04	0.07	0.14	0.13					

	Expenditure					Participation		
	Job-search	Training	Employment	Direct job	Training	Employment	Direct job	
	assistance	Hanning	subsidies	creation		subsidies	creation	
NLD	0.07	0.06	0.02	0.31	1.26	0.99	1.62	
POL	0.03	0.00	0.09	0.16	0.02	0.94	2.27	
SWE	0.17	0.06	0.46	0.23	0.33	2.48	1.06	
USA	0.01	0.03	0.01	0.03				

Note: Expenditure refers to the public expenditure as a percentage of GDP.

Participation refers to the number of participants as a percentage of the labour force. Data refer to 2019 as the latest available year. Figures for employment subsidies exclude job retention.

Source: OECD Employment database.

2.3) Employment Protection Legislation

Employment protection legislation refers to the security of workers from dismissals, which is usually defined by the labour law. While employers are allowed to decide when and who to dismiss among their staff in most cases, employment protection legislation regulates the procedures and obligations employers need to follow and compensation for workers affected. While more stringent employment protection legislation is typically seen as a rigidity preventing markets from efficient allocation of labour, it also decommodifies labour based on a rights-based perspective on employment.

The OECD indicators for Employment protection legislation (EPL) presented in table 3 differ for regular- and temporary workers: while the focus for regular workers (i.e. with permanent contracts) is on the stringency of dismissal, the focus for temporary workers is under which conditions employers are allowed to use temporary contracts. The indicator for regular workers can further be separated in stringency for individual and collective dismissals, each aggregated from four categories and several sub-categories: procedural requirements, notice and severance pay, the regulatory framework for unfair dismissals, and enforcement of unfair dismissal regulation. Alternative measures for employment protection legislation are provided by the ILO, and Cambridge Leximetric. The indicator for temporary workers refers to an index on the stringency of hiring

temporary workers. The aggregate index includes two categories of workers with several sub-categories: fixed-term contracts, and temporary work agency contracts.

Mediterranean countries are notoriously known for strict employment protection legislation as a form of social protection for workers to counter-balance limited spending on passive and active labour market policies. By contrast, Anglophone welfare states that place even less emphasis on passive and active labour market policies have also weak employment protection legislation, which results in flexible labour markets without much social protection or support for workers. Countries with strict protection of regular workers from individual dismissals, tend to also have strict protection from collective dismissal, and vice versa. Notable exceptions include France followed by the United Kingdom, Italy, Denmark, Germany and Austria, which provide comparatively stricter employment protection from collective dismissal than from individual dismissal. The rise of temporary contracts resulted in dualised labour markets in several countries, in particular facilitated by a weak regulation for the use of temporary contracts in Anglophone countries followed by some Continental and Nordic welfare states. The use of temporary contracts is in particular incentivized in labour markets with stringent employment protection for permanent workers and easy use of temporary contracts.

Table 3: Employment protection legislation

	Regular work	ers	Temporary workers
	Individual	Collective	Use of contract
	dismissal	dismissal	Ose of contract
AUS	1.7	1.8	0.9
AUT	1.7	2.1	1.5
BEL	2.7	2.7	1.9
CAN	1.6	1.8	0.4
DEU	2.2	2.6	1.7
DNK	1.8	2.2	1.6
ESP	2.4	2.4	2.5
EST	1.9	2.0	2.5
FRA	2.4	3.3	2.6
GBR	1.7	2.3	0.4

	Regular work	ters	Temporary workers
	Individual	Collective	Use of contract
	dismissal	dismissal	Ose of contract
ITA	2.7	3.2	2.8
JPN	2.1	2.0	1.3
KOR	2.4	2.3	2.2
NLD	2.8	3.0	1.5
POL	2.4	2.4	1.8
SWE	2.5	2.7	1.5
USA	1.3	1.3	0.3

Note: Employment protection legislation refers to indicators of the strictness of regulation on dismissals and the use of temporary contracts. Data refer to 2019 as the last year available and are based on version 4 as the most recent version of the indicators. Higher values imply more stringent employment protection legislation.

Source: OECD Employment database.

2.4) Wage Setting

Wage-setting typically involves complex bargaining processes between employers and employees, or their representatives, sometimes with considerable state-involvement. However, government involvement in wage-setting varies strongly across countries: most advanced economies have statutory minimum wages mandated by the government. Others rely on bipartite collective agreements between trade unions and employer association without direct state involvement, while another set of countries determines wages by tripartite negotiations that additionally include the government.

Collective bargaining agreements often include provisions beyond the minimum wage but also regulate the conditions of employment, such as working time limits or occupational health and safety standards. These are negotiated between trade unions and employer associations. A trade union is an organisation that represents workers via negotiation of rates of pay and conditions of employment, while an employer association

does so for employers. The freedom of association for workers and employers is enshrined in the ILO core labour standards and the organizations govern themselves through their members. If these conditions are violated and union leadership is corrupted by the state or employers, unions are called "yellow unions" describing their lack of independence and disingenuous representation of members' interest.

Table 4 includes a diverse set of measures to compare wage-setting across countries. Collective bargaining coverage represents the share of workers covered by valid collective agreements in force, while centralisation and coordination describe how bargaining takes place. Centralisation categorises the level at which unions and employers bargain, varying between the national, sectoral or firm level, or combinations thereof. Coordination characterises the degree of coordination versus fragmentation that guides the wage bargaining process. It ranges from binding norms regarding minimum wages to fragmented bargaining, where wage-setting is largely confined to individual firms without coordination of wage agreements among them. In between the two poles of coordination, collective bargaining in many countries is guided by non-binding wage demand formulas relating to productivity or inflation or patterns in wage setting where most agreements follow specific sector such as manufacturing or the public sector, or even those by major companies. The data is published in the OECD/AIAS database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (ICTWSS), which includes a wide set of indicators on a more granular basis.

The trade union density is defined as the number of union members as a proportion of the number of employees. The measure excludes union members who are not in the labour force, unemployed and self-employed, for instance due to inactivity or retirement. Data combine estimates based either on administrative sources or labour force surveys or both. Employer density refers to the measure of employees in firms organised in employer organisations as a proportion of all employees. The minimum wage ratio is an outcome measure and refers to the ratio of minimum wages relative to median wages of full-time workers.

Wage-setting differs in multiple dimensions between countries as shown in table 4. While collective bargaining agreements in some countries cover essentially the entire population of employed workers via automatic extension to non-union members,

Central-Eastern European, East Asian and most Anglophone countries cover only a fraction of their workers. Continental European, Nordic and Mediterranean countries are characterised by more centralised and/or coordinated systems of collective bargaining, while bargaining in Central-Eastern European, East Asian and Anglophone countries is predominantly decentralised at the firm or plant level with little coordination between different unions and employers.

Bargaining coverage depends on the institutional features of industrial relations in a country, and does not necessarily correlate with the encompassignness of trade unions or employer associations (Bamber et al. 2021). While trade union membership has been in a decline over decades in virtually all advanced economies, unions have been most successful in organising members in countries with so-called Ghent systems: unemployment insurances are owned or administered by trade unions and benefit eligibility is linked to union membership (Ebbinghaus et al. 2011). This is the case in the Nordics and Belgium. Employer associations have been examined less often than unions despite their importance for wage setting and social policy (Paster 2015). Under national or sectoral collective bargaining, the agreements often extend to those firms that are members of the employer association negotiating on their behalf. Austria, for instance, has a collective bargaining coverage of close to 100 per cent due to mandatory membership of employers in their association (WKÖ) (Paster 2014; Lehner 2017; Lehner and List 2024). Trade union strength, thus, not only depends on their success in organising members but also on the institutional features of wage-setting (Ebbinghaus & Visser 2000) and government strength (Rathgeb 2018). For instance, in France only 10 per cent of workers are unionised but unions are still relatively powerful due to automatic extension of collective bargaining coverage to nearly all workers besides strong mobilization capacity. By contrast, in Denmark around 2/3 of workers are unionized placing the country at the top of union membership density. However, due to political constellations of parties in government, organized labour was prevented from exercising political influence (Rathgeb 2019).

The differences in wage setting systems and strength of trade unions and employers result in surprisingly little variation in the ratio of minimum to median wages: most countries have minimum wages in place at around the level of the median wages. A

notable exception are the United States with a lower minimum wage at only around a third of the median wages.

Table 4: Wage setting

	Collective barg		Density			
	Coverage	Centralisati	Coordina	Trade	Employe	Minimum
	Coverage	on	tion	unions	rs	wage ratio
AUS	61.2	2.0	2.0	13.7	54.5	0.5
AUT	98.0	2.0	4.0	26.3	100.0	
BEL	96.0	5.0	5.0	49.1		0.4
CAN	31.3	1.0	1.0	27.2	24.7	0.5
DEU	54.0	2.0	4.0	16.3	67.9	0.5
DNK	82.0	2.0	4.0	67.0	68.3	
ESP	80.1	3.0	3.0	12.5	77.0	0.5
EST	6.1	1.0	2.0	6.0	50.5	0.5
FRA	98.0	2.0	2.0	10.8		0.6
GBR	26.9	2.0	2.0	23.5		0.6
ITA	100.0	2.0	3.0	32.5	78.3	
JPN	16.8	1.0	4.0	16.8		0.5
KOR	14.8	1.0	2.0	11.6		0.6
NLD	75.6	2.0	4.0	15.4	85.0	0.5
POL	13.4	1.0	1.0	13.4	55.6	0.6
SWE	88.0	2.0	4.0	65.2	88.0	
USA	12.1	1.0	1.0	10.3		0.3

Note: Indices for centralization and coordination of collective bargaining refer to 2019, collective bargaining coverage and trade union density to the latest available year for the respective country (2015-2020), employer density to 2018, and the minimum wage ratio to 2020. Higher values for centralisation and coordination indicate more centralised or coordinated collective bargaining.

Source: OECD Employment database and OECD/AIAS database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (ICTWSS).

3) Looking ahead: Future Challenges to advance Labour Market Infrastructure

This chapter has provided a conceptual overview of social infrastructure targeted at unemployment and labour markets. We have discussed four main pillars of labour market policy: passive labour market policy, active labour market policy, employment protection legislation and wage setting. The pillars differ in their mechanisms and goals, but also vary by their design and national context. Each pillar targets specific groups while facing the challenge to balance interests and needs of employers and employees (Rothschild 1990).

Labor market policy has long been considered both a social policy and an economic policy. On one hand, labor market policy aims to ensure equity by alleviating poverty, reducing inequalities, and insuring against social risks. On the other hand, labor market policy aims to raise efficiency by improving job-employee matching, increasing skills, and raising employment. Social infrastructure for the labour market provides the framework for these objectives to be achieved. Each of the pillar presented, however, is interdependent with the others, as well as with other policy areas. First, labour market policy may be embedded in a full-employment-oriented fiscal policy, meaning that governments must be willing to invest in economic stimulus packages and accept temporary public deficits for reducing unemployment. Second, passive and active labour market policies must work together to shape existing employment conditions, including the degree of security or precariousness of contracts and wage-setting. This approach seeks to balance equity and efficiency objectives, recognizing that each policy can have consequences for both. Ultimately, the goal of labour market policy is to create "decent work" for everybody by balancing these objectives.

In light of current and future challenges, especially pressing inequality, demographic change and climate change, social infrastructure faces the pressure to evolve. For the field of unemployment and labour markets, we identify five areas: 'full employment', 'labour supply', 'decent work', 'adequate qualification', 'decent living' and stabilising consumption / demand,

First, as long as employment is a defining characteristic of people's lives and thus, one of the main keys to social inclusion (Jahoda 1983), LMP has to guarantee full employment and labour market integration also for disadvantaged people. Facing the growing number of long-term unemployed innovative concepts such as a job guarantee can provide a universal right to employment (Kasy and Lehner 2023). The idea of a job guarantee is not only about re-integration in the first or second labour market. It is more about taking a collective responsibility for those people who are not able to find a job and to provide a security net of jobs which are oriented on the needs of long-term unemployed as well as of the whole society.

Second, according to the evidence that unemployment increases the risk of poverty (Saunders 2002) PLMP needs to be reinforced to ensure adequate standard of living and on prevent poverty in the case of unemployment. Especially for people with low incomes, a universal social security system with adequate benefits is necessary to avoid poverty. Higher net replacement rates are an important strategy but not sufficient. Additionally, unemployment benefits need to reach a minimum amount above the poverty threshold to protect low-wage earners. Unemployment benefits that avoid poverty are not only beneficial for their recipients, but they also stabilize consumer spending and aggregate demand thereby preserving jobs during recessions.

Third, unemployment is often associated with poor health, which can result in a vicious cycle where job-lessens and health issues reinforce each other. The aim of preserving health should be established as an objective of LMP. It is well known that people with health problems have a higher unemployment risk and periods of unemployment are associated with a deterioration of health (Hollederer 2011). LMP should cross this vicious cycle and be considered an important domain of public health. LMP Instruments with unintended negative effects on the health status of unemployed like sanctions (Williams 2021) should be reconsidered and at best avoided.

Fourth, structural chance driven by automation, globalization and climate change among others, require ongoing adaption of labour market policy. A well-established aim of LMP is to mitigate adverse effects of the structural change. However, LMP can also help shape structural change in the first place. The green transition affords comprehensive and rapid adaption. Therefore, LMP should shape the adaption

processes proactively balancing equity and efficiency concerns. Furthermore, it is necessary to evaluate LMP instruments concerning their environmental consequences.

Fifth, 'decent work' should not only be confined as an aim of EPL and WS but also addressed by PLMP. Poor working conditions can lead to unstable employment and high employment insecurity with high unemployment risks of vulnerable groups in the labour market. Conditionality for unemployment benefits should take into account 'decent work' standards. Availability requirements should not force unemployed to accept any type of job at any wage. A way forward could be to internalize the termination behaviour of firms and temporary layoffs by introducing an experience rating in the unemployment insurance system (Feldstein 1978).

Finally, labour market policy should be embedded in a full-employment-oriented economic policy, and in a social policy that provides high-quality social infrastructure not only for the labour market but also for other policy domains. Eventually, the aim of social infrastructure for unemployed is to allow every person to participate self-determined in the labour market.

Note on supplementary material

Reproduction files for this article is stored at the Open Science Framework (DOI 10.17605/OSF.IO/NCUQT) and can be accessed online at https://osf.io/ncuqt/?view_only=a4bdc63f77f34c0180ceac1c66c284a8. It includes R and R Markdown code for automated data download, processing, and formatting of the tables presented in the chapter, the original data files used, and a Dockerfile to execute the code in a reproducible environment.

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This is a draft chapter. The final version is available in the Handbook of Social Infrastructure edited by Anna-Theresa Renner , Leonhard Plank , and Michael Getzner published in 2024, Edward Elgar Publishing Ltd https://doi.org/10.4337/9781800883130.00016.

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