

### RESEARCH REPORT SERIES

IZA Research Report No. 137

## Minimum Income Support Systems as Elements of Crisis Resilience in Europe

Final Report

Werner Eichhorst (IZA)
Holger Bonin (IZA)
Annabelle Krause-Pilatus (IZA)
Paul Marx (IZA)
Mathias Dolls (ifo)
Max Lay (ifo)

JANUARY 2023



RESEARCH REPORT

# Minimum income support systems as elements of crisis resilience in Europe

615

**Final Report** 

January 2023

ISSN 0174-4992

# Minimum income support systems as elements of crisis resilience in Europe – Final Report



IZA Institute of Labor Economics Schaumburg-Lippe-Straße 5-9 53113 Bonn



ifo Institut - Leibniz-Institut für Wirtschaftsforschung an der Universität München e.V. Poschingerstraße 5 81679 München

Werner Eichhorst (coordinator)

Holger Bonin

Annabelle Krause-Pilatus

Paul Marx

Mathias Dolls

Max Lay<sup>1</sup>

December 2022

<sup>&</sup>lt;sup>1</sup> We are grateful to Johannes Brunner, Kaelan Hale, Charlotte Nenzel, Alina Sowa and Matthias Stadler for excellent research assistance.

Prepared on behalf of the Federal Ministry of Labour and Social Affairs.

In terms of scholarship, responsibility for the research conducted and the conclusions drawn from that research lies with the contractors. In particular, the Federal Ministry of Labour and Social Affairs makes no guarantees concerning the correctness, accuracy or completeness of the research.

# Content

Tables		8
Figures	<b>3</b>	10
Abbrev	riations	13
Abstra	ct	15
Execut	ive summary	16
1.	Introduction	18
2.	Welfare states as mechanisms of crisis resilience	19
2.1	Aims and tasks of social minimum income schemes	19
2.2	Interactions with upstream systems	20
2.3	Crisis response and resilience	21
2.4	Typologies of welfare states and minimum income support schemes	23
3.	Research design and methods	28
3.1	Contribution of this study	28
3.2	Main research questions and hypotheses	28
3.3 3.3.1 3.3.2 3.3.3 3.3.4 3.3.5	A mixed-method research design Descriptive analysis Multivariate analysis Simulation studies In-depth case studies Case selection for case studies	30 30 30 32 32 33
4.	Descriptive analysis of socio-economic outcomes	35
4.1	Main socio-economic outcomes	35
4.2	Correlations between poverty risk and economic indicators	43
5.	Multivariate regression analysis	50
5.1	Methodological aspects	50
5.2	Baseline regression analysis	52

5.3	Regression analysis including interaction terms	56
5.4	Conclusion	62
6.	Simulation results	64
6.1	Model and data	64
6.2	Shock scenarios and assumptions	65
6.3 6.3.1 6.3.2 6.3.3 6.3.4	Dimensions of social resilience Effect on the at-risk-of-poverty rate Income stabilisation Effect on inequality Effect on labour market integration	68 72 74 79
6.4	Conclusion	83
7.	Country case studies	85
7.1	Implementing the case studies	86
7.2	Structuring the case studies	87
7.3 7.3.1 7.3.2 7.3.3 7.3.4 7.3.5	France Phase 1 (pre-2008) Phase 2 (2008/09) Phase 3 (2010–2019) Phase 4 (2020/21) Main insights from the French case	89 89 91 95 98 101
7.4 7.4.1 7.4.2 7.4.3 7.4.4 7.4.5	Spain Phase 1 (pre-2008) Phase 2 (2008/09) Phase 3 (2010 – 2019) Phase 4 (2020/21) Main insights from the Spanish case	103 103 106 108 112 115
7.5 7.5.1 7.5.2 7.5.3 7.5.4 7.5.5	Denmark Phase 1 (pre-2008) Phase 2 (2008/09) Phase 3 (2010 – 2019) Phase 4 (2020/21) Main insights from the Danish case	117 117 119 120 124 125
7.6 7.6.1 7.6.2 7.6.3 7.6.4 7.6.5	Poland Phase 1 (pre-2008) Phase 2 (2008/09) Phase 3 (2010 – 2019) Phase 4 (2020/21) Main insights from the Polish case	127 127 131 132 134 135

10.	Appendix	183
9.	References	173
8.3	Policy issues	171
8.2	Reform trajectories	170
8.1	Upstream systems, minimum income support and crisis resilience across welfare states	167
8.	Conclusion	165
7.8	Comparative assessment	151
7.7.5	Main insights from the Irish case	148
7.7.4	Phase 4 (2020/21)	146
7.7.3	Phase 3 (2010 – 2019)	143
7.7.2	Phase 2 (2008/09)	142
7.7.1	Phase 1 (pre-2008)	138
7.7	Ireland	138

## **Tables**

Table 2.1	Classification of countries by welfare state cluster in the EU-27 and the UK	26
Table 5.1	Baseline Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable and GDP growth rate as business cycle measure	l 53
Table 5.2	Baseline Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable and different variants of the business cycle measure	l 54
Table 5.3	Baseline Arellano-Bond regression results with different dependent variables and depression as business cycle measure	55
Table 5.4	Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with welfare state type	57
Table 5.5	Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with institutional variables	58
Table 5.6	Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with the net replacement rate two months in unemployment	59
Table 5.7	Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with the net replacement rate 60 months in unemployment	61
Table 6.1	Comparison of shock scenarios	65
Table 6.2	At-risk-of-poverty rates with 60 percent at-risk-of-poverty threshold	71
Table 6.3	Effect of MIS on AROP's differences ( <i>AAROP</i> )	72
Table 6.4	Income stabilisation coefficients for small and large shock scenario	75
Table 6.5	Gini coefficients across EU Member States	78
Table 6.6	Long-term participation tax rates across EU Member States in %	81
Table 7.1	Beneficiaries of main minimum income support schemes in France (individual beneficiaries, and including household members)	94
Table 7.2	Revenues and expenditures of unemployment insurance in France (in bn EUR)	96
Table 7.3	Main developments in France, 2005-2021	102
Table 7.4	Typology of regional programmes of minimum income of insertion	105
Table 7.5	Minimum Income of Autonomous Communities in 2007	106
Table 7.6	Regional MIS amounts in relation to national median equivalised income by household type (2014)	110
Table 7.7	Coverage rates and recipients of regional Minimum Income Schemes (2013)	111
Table 7.8	Main developments in Spain, 2005-2021	116

Table 7.9 Minimum income benefit levels and ceiling in EUR (2015) by type of ben age, and family situation, Denmark		t, 123
Table 7.10	Main developments in Denmark, 2005-2021	126
Table 7.11	Main developments in Poland, 2005-2021	137
Table 7.12	Main developments in Ireland, 2005-2021	150
Table 7.13	Main patterns of crisis responses in five selected welfare states	155
Table 8.1	Research questions and major findings	167
Table 10.1	Arellano-Bond regression results with different dependent variables, unemployment rate and interaction terms with welfare state type	196
Table 10.2	Robustness Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable and different variants of the busines cycle measure	s 197
Table 10.3	Robustness Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable, depression as business cycle measure and interaction terms with welfare state type	198
Table 10.4	At-risk-of-poverty rates with 50% at-risk-of-poverty threshold	199
Table 10.5	At-risk-of-poverty rates with 70% at-risk-of-poverty threshold	200
Table 10.6	Decomposition of income stabilisation coefficient in the small shock scenario (variant 1)	201
Table 10.7	Decomposition of income stabilisation coefficient in the small shock scenario (variant 2)	202
Table 10.8	Decomposition of income stabilisation coefficient in the large shock scenario (variant 1)	203
Table 10.9	Decomposition of income stabilisation coefficient in the large shock scenario (variant 2)	204

# **Figures**

Figure 4.1	GDP growth, 2005-2021	36
Figure 4.2	Unemployment rates, 2005-2021	37
Figure 4.3	Long-term unemployment	37
Figure 4.4	People at risk of poverty or social exclusion, age 16-64, 2005-2020	38
Figure 4.5	People at risk of poverty, age 16-64, 2005-2021	40
Figure 4.6	Relative at risk of poverty gap, age 16-64, 2005-2021	40
Figure 4.7	Severe material deprivation, age 16-64, 2005-2020	41
Figure 4.8	People living in households with very low work intensity, percentage of total population aged less than 60, 2005-2021	41
Figure 4.9	In-work at-risk-of-poverty rate, age 18-64, 2005-2021	42
Figure 4.10	Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Liberal welfare state types	44
Figure 4.11	Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Continental European welfare state types	45
Figure 4.12	Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Nordic welfare state types	46
Figure 4.13	Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Mediterranean welfare state types	47
Figure 4.14	Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Post-Socialist welfare state types	48
Figure 6.1	Coverage rates of unemployment insurance benefits and minimum income support schemes for unemployed individuals (Baseline (pre-shock) simulation)	68
Figure 6.2	Decomposition of income stabilisation coefficient in small shock scenario (variant $1$ )	76
Figure 6.3	Decomposition of income stabilisation coefficient in small shock scenario (variant 2)	76
Figure 6.4	Decomposition of income stabilisation coefficient in large shock scenario (variant $1$ )	77
Figure 6.5	Decomposition of income stabilisation coefficient in large shock scenario (variant 2)	77
Figure 6.6	Decomposition of long-term participation tax rates across EU Member States	82
Figure 6.7	Correlation between a) total coverage rates and AROP rates and b) total coverage rates and income stabilisation coefficients	84
Figure 7.1	Strictness of employment protection legislation for regular workers, 2005-2019	157

Figure 7.2	Strictness of employment protection legislation for temporary workers, 2005-2019	157
Figure 7.3	Share of workers with temporary contracts, 2005-2021	158
Figure 7.4	Take-up of job retention schemes (in % of labour force), comparison between financial crisis (2008-2010) and COVID-19 crisis (2020)	158
Figure 7.5	Net replacement rate, two months in unemployment, single, 100% average wage, 2005-2021	159
Figure 7.6	Net replacement rate, two months in unemployment, single, 67% average wage, 2005-2021	159
Figure 7.7	Net replacement rate, 60 months of unemployment, single, 67% average wage, 2005-2021	160
Figure 7.8	Net replacement rate, 60 months of unemployment, couple with two children, 100% average wage, 2005-2021	160
Figure 7.9	Net replacement rate, 60 months of unemployment, couple with two children, 67% average wage, 2005-2021	161
Figure 7.10	Public expenditure on ALMP (in % of GDP), 2005-2019	161
Figure 7.11	Participant stocks of LMP as a percentage of the labour force (categories 20-70), 2005-2019	162
Figure 7.12	Adequacy of guaranteed minimum income benefits, jobless person without children (% of at-risk of poverty threshold (60% of median equivalised income)), 2005-2021	162
Figure 7.13	Adequacy of guaranteed minimum income benefits, jobless couple with tw children (% of at-risk of poverty threshold (60% of median equivalised income)), 2005-2021	o 163
Figure 7.14	Expenditure on guaranteed income support (means-tested benefits, in % of GDP, categories: unemployment, social exclusion, housing, family/children	
Figure 7.15	Recipients of unemployment insurance (pseudo-shares, in % of unemployment), 2007-2018	164
Figure 10.1	People at risk of poverty or social exclusion, single-person households	183
Figure 10.2	People at risk of poverty or social exclusion, single-person households with dependent children	183
Figure 10.3	People at risk of poverty or social exclusion, households without dependen children	t 184
Figure 10.4	People at risk of poverty or social exclusion, households with dependent children	184
Figure 10.5	At-risk-of-poverty rate after social transfers, single-person households	185
Figure 10.6	At-risk-of-poverty rate after social transfers, single-person households wit dependent children	h 185
Figure 10.7	At-risk-of-poverty rate after social transfers, households without dependent children	186

Figure 10.8 At-risk-of-poverty rate after social transfers, households with depende children		186
Figure 10.9	Severe material deprivation, single-person households	187
Figure 10.10	Severe material deprivation, single-person households with dependent children	187
Figure 10.11	Severe material deprivation, households without dependent children	188
Figure 10.12	Severe material deprivation, households with dependent children	188
Figure 10.13	People living in households with very low work intensity, single-person households (% of total population aged less than 60)	189
Figure 10.14	People living in households with very low work intensity, single-person households with dependent children (% of total population aged less than 60)	189
Figure 10.15	People living in households with very low work intensity, households without dependent children (% of total population aged less than 60)	190
Figure 10.16	People living in households with very low work intensity, households with dependent children (% of total population aged less than 60)	190
Figure 10.17	Adequacy of guaranteed minimum income benefits, jobless person withou children (% of median disposable income), 2005-2021	t 191
Figure 10.18	Adequacy of guaranteed minimum income benefits, jobless person with two children (% of median disposable income), 2005-2021	/o 191
Figure 10.19	Adequacy of guaranteed minimum income benefits, jobless couple without children (% of median disposable income), 2005-2021	t 192
Figure 10.20	Adequacy of guaranteed minimum income benefits, jobless couple with two children (% of median disposable income), 2005-2021	/o 192
Figure 10.21	Net replacement rate, 60 months of unemployment, single, 100% average wage, 2005-2021	193
Figure 10.22	Net replacement rate, two months of unemployment, couple with two children, 100% average wage, 2005-2021	193
Figure 10.23	Net replacement rate, two months of unemployment, couple with two children, 67% average wage, 2005-2021	194
Figure 10.24	Transitions from unemployment to employment, 2011-2020	194
Figure 10.25	Expenditure on guaranteed income support (total expenditure in % of GDP categories: unemployment, social exclusion, housing, family/children)	), 195

### **Abbreviations**

ALMP Active labour market policy

ANPE Agence nationale pour l'emploi (France)

AROP At-risk-of-poverty

AROPE At-risk-of-poverty or social exclusion

ASS Allocation de solidarité spécifique (France)

CSG Contribution sociale généralisée (France)

DK Denmark

ECB European Central Bank

ERTE Expediente de Regulación Temporal de Empleo (Spain)

ES Spain

ESM European Stability Mechanism

EU European Union

EU-SILC European Union Statistics on Income and Living Conditions

FAS An Foras Áiseanna Saothair - Training and Employment Authority (Ireland)

FR France

GDP Gross Domestic Product

IE Ireland

IMF International Monetary Fund
IMV Ingreso Minimo Vital (Spain)

IPREM Public Income Rate of Multiple Effects (Spain)

JI Job Initiative (Ireland)
JRC Joint Research Centre

JSA Jobseeker's Allowance (Ireland)

JSB Jobseeker's Benefit (Ireland)

JSBE Jobseeker's Benefit Self-Employed (Ireland)

MIS Minimum income support

MISSOC Mutual Information System on Social Protection

OECD Organisation for Economic Co-operation and Development

PL Poland

PTR Participation Tax Rate

PUP Pandemic Unemployment Payment (Ireland)

RMA Revenu minimum d'activité (France)

RMI Revenu minimum d'insertion (France)

RSA Revenu de solidarité active (France)

SE Social Economy (Ireland)

SMI National Minimum Wage (Spain)

SWA Social Welfare Allowance (Ireland, Poland)

TWSS Temporary Wage Subsidy Scheme (Ireland)

UA Unemployment assistance

UI Unemployment insurance

UNEDIC Union nationale interprofessionnelle pour l'emploi dans l'industrie et le

Commerce (France)

### **Abstract**

The aim of this study is to analyse the role of social policies in different European welfare states regarding minimum income protection and active inclusion. The core focus lies on crisis resilience, i.e. the capacity of social policy arrangements to contain poverty and inequality and avoid exclusion before, during and after periods of economic shocks. To achieve this goal, the study expands its analytical focus to include other tiers of social protection, in particular upstream systems such as unemployment insurance, job retention and employment protection, as they play an additional and potentially prominent role in providing income and job protection in situations of crisis. A mixed-method approach is used that combines quantitative and qualitative research, such as descriptive and multivariate quantitative analyses, microsimulation methods and in-depth case studies. The study finds consistent differences in terms of crisis resilience across countries and welfare state types. In general, Nordic and Continental European welfare states with strong upstream systems and minimum income support (MIS) show better outcomes in core socio-economic outcomes such as poverty and exclusion risks. However, labour market integration shows some dualisms in Continental Europe. The study shows that MIS holds particular importance if there are gaps in upstream systems or cases of severe and lasting crises.

### **Executive summary**

Minimum income support (MIS) systems serve as a safety net of last resort in most developed welfare states. Over recent decades, MIS has gained in importance for several reasons, not only due to the occurrence of massive economic shocks such as the Great Recession of 2008 and 2009 or the COVID-19 crisis, but also due to changes in labour markets, e.g. the growing role of non-standard work arrangements, or family structures that tend to lead to greater reliance on benefit systems outside social insurance. At the same time, welfare states have – at least to some extent – started to fill gaps in protection in contribution-financed social insurance schemes or devoted more attention to reliable downstream social protection systems, as there is now a reform trend towards consolidating differentiated or previously incomplete systems into an integrated and universal MIS model in many European countries. During the COVID-19 pandemic, the relevance of MIS and related ad-hoc measures for atypical workers and the self-employed has become even more obvious, while at the same time revealing weaknesses of social protection in terms of accessibility and generosity for occupational groups particularly affected by the pandemic without access to contributory benefits. To improve the effectiveness of MIS schemes and active inclusion, the European Commission has recently launched a Proposal for a Council Recommendation on adequate minimum income ensuring active inclusion.

Against this backdrop, this study contributes to the existing research on crisis resilience of welfare states and labour markets in several respects. First, it is based on the joint analysis of upstream systems such as unemployment insurance, job retention, employment protection and the core MIS schemes in 'normal' and crisis times. This offers a more complete picture of the national policy arrangements and their relative strengths and weaknesses when faced with economic shocks. Second, the study locates itself in the comparative welfare state literature, with a particular focus on established typologies of minimum incomes support schemes. For a selected sample of countries, changes within the system will be observed in detail. Third, given this complex research objective, the study adopts a mixed-method approach that combines quantitative and qualitative research, such as descriptive and multivariate quantitative analyses, microsimulation methods and in-depth case studies, all with a strong focus on institutions and change. Fourth, the study adopts a longitudinal perspective, in particular to interpret quantitative findings and understand policy responses and reform trajectories over a longer period from the mid-2000s to the present situation. In this respect, the study also updates existing research with the latest observations.

Combining the different pieces of evidence, the study finds consistent differences in terms of crisis resilience across countries and welfare state types. In general, Nordic and Continental European welfare states with strong upstream systems and MIS show better outcomes in core socio-economic outcomes such as poverty and exclusion risks. However, labour market integration shows some dualisms in Continental Europe. MIS schemes are also quite strong in Liberal welfare states. The study shows that such schemes hold particular importance if there are gaps in upstream systems or cases of severe and lasting crises. In Continental Europe and Nordic countries, MIS schemes play an important role in terms of stabilisation of income and inclusion, although they are rather secondary to UI in particular. MIS schemes are the crucial stabilisation mechanism in the Liberal setting, while they are less strong in the Southern European and Post-Socialist models.

The in-depth case studies show that over time, UI and MIS underwent a phase of austerity in all countries hit by the 2008/09 crisis, but were reformed and expanded later on. The Mediterranean MIS in Spain is now becoming more integrated, departing from its long-standing legacy. The role of activation – with both demanding and enabling elements – has become more prominent over time in all countries. Despite some convergence in this respect, cross-country differences in the performance of social policies – including upstream systems and MIS – remain quite significant and relate broadly to the legacies of the respective welfare state type.

Remaining policy issues concern three main design challenges:

First, a better design of upstream systems to ease pressure on jobs, individual income and eventually MIS remains a pending issue. In particular, UI coverage is crucial in this respect.

Second, the adequacy of MIS benefits does not always suffice to overcome poverty in the household and meet the threshold targets. Fixing an appropriate level of support and adjusting and uprating it appropriately over time would be important. Another issue concerning MIS relates to formal and de facto access to benefits, i.e. ensuring that benefit coverage is sufficient both formally and in practice.

Third, the governance of activation seems to pose particular challenges in many countries. This is related to the dualism between unemployment insurance and MIS on the one hand and the frequent involvement of partly autonomous lower levels of regional government in combination with the public employment service or national-level entities on the other hand.

### 1. Introduction

Minimum income support (MIS) systems serve as a safety net of last resort in most developed welfare states. Over recent decades, MIS has gained in importance for several reasons, not only due to the occurrence of massive economic shocks such as the Great Recession of 2008 and 2009 or the COVID-19 crisis, but also due to changes in labour markets, e.g. the growing role of non-standard work arrangements, or family structures that tend to lead to greater reliance on benefit systems outside social insurance. At the same time, welfare states have – at least to some extent – started to fill gaps in protection in contribution-financed social insurance schemes or devoted more attention to reliable downstream social protection systems, as there is now a reform trend towards consolidating differentiated or previously incomplete systems to an integrated and universal MIS model in many European countries. During the COVID-19 pandemic, the relevance of MIS and related ad-hoc measures for atypical workers and the self-employed has become even more obvious, while at the same time revealing weaknesses of social protection in terms of accessibility and generosity for occupational groups particularly affected by the pandemic without access to contributory benefits.

Accompanied by activation and empowerment services for working-age people, MIS therefore plays an important role in reducing the risks of poverty and social exclusion, supporting the most disadvantaged people in European welfare states. In interaction with other components of the welfare state such as progressive tax systems, other transfer systems, short-time work schemes and unemployment insurance, MIS acts as an economic and social stabiliser in times of crisis.

However, the question of what contribution MIS makes to social resilience – especially in times of crisis – has not yet been answered systematically, given the experience of the 2008/09 Great Recession and the COVID-19 crisis in particular. This study therefore addresses the issue of the contribution of MIS to crisis resilience in European welfare states since the mid-2000s. It not only takes into account the design of MIS schemes themselves, but also addresses interactions with upstream systems such as unemployment insurance, job retention and employment protection. The study therefore goes beyond existing research by looking into the interaction of upstream systems and MIS schemes over time and across countries that belong to different welfare state types. Given its complex aims, the study relies on a mixed-method, multi-disciplinary design that brings together quantitative and qualitative analysis in order to better understand the role of specific welfare state and labour market institutions as well as reform trajectories.

The report is structured as follows. Section 2 provides a conceptual discussion of potential linkages between the different elements of welfare states in a variety of welfare state types when facing economic shocks. The subsequent section 3 explains the research design. Section 4 then presents descriptive, and section 5 provides multivariate quantitative analysis on crisis impacts and socioeconomic performance based on comparable data for all European countries. This is complemented by simulations of hypothetical economic shocks shown in section 6. To track the functioning of welfare state arrangements in further detail and explore reforms and adjustments in more depth, section 7 provides case studies of five selected countries representing different welfare state types. Finally, section 8 concludes.

### 2. Welfare states as mechanisms of crisis resilience

The main aim of this study is to analyse the role of social policies in different welfare states regarding minimum income protection and active inclusion. The core focus lies on crisis resilience, i.e. the capacity of social policy arrangements to contain poverty and inequality and avoid exclusion before, during and after periods of economic shocks. To achieve this goal, the study expands its analytical focus to include other tiers of social protection, in particular upstream systems such as unemployment insurance, job retention and employment protection, as they play an additional and potentially prominent role in providing income and job protection in situations of crisis.

Hence, to understand the contribution of social policy to social resilience in crisis, it is necessary to take into account different elements of welfare state arrangements. To study this, the research presented here adopts a comparative focus on protective arrangements in different types of welfare states. It therefore integrates different policy areas and rather distinct strands of literature such as research into unemployment insurance, job retention and labour market regulation more widely, as well as comparative work into MIS. This section provides an overview of the main strands of research relevant for this study.

### 2.1 Aims and tasks of social minimum income schemes

In European welfare states, MIS systems primarily have the important function of a basic and final safety net to prevent and reduce poverty and social exclusion (Nelson, 2014; Nolan, 2017; Bahle, 2019). The basic function of social minimum income is to guarantee a social and therefore sociopolitically defined minimum income in the case of insufficient individual resources – i.e. after a means test – to secure existence and reduce or avoid poverty. Moreover, goals of societal and labour market inclusion should also be fulfilled, especially through increased earning capacity by taking up gainful employment to overcome and end the receipt of minimum income benefits.

The goals of MIS schemes are thus – in the sense of the principle of "active inclusion" adopted in the EU – to guarantee a social minimum and reduce the (relative and absolute) risk of poverty and social exclusion, as well as ending the receipt of benefits (of persons capable of working) through incentives and adequate support measures enabling them to participate in working life. In this context, conflicts of objectives may arise between income security and (rapid) labour market integration.

Both dimensions can be defined as avoiding economic and social exclusion and promoting inclusion and participation. In addition to the individual dimension of securing livelihoods, income and employability, social minimum income schemes also exhibit an important macroeconomic and sociopolitical dimension in the sense that they have a stabilising effect – especially in times of crisis – and contribute to the crisis resilience of the social and economic models in Europe. These goals have recently been reaffirmed at the EU level and are supposed to lead to a recommendation on minimum social protection systems in the EU (Council of the EU, 2020; European Commission, 2021a; Bontout and Szatmari, 2020). A proposal for a "Council Recommendation on minimum income ensuring active inclusion" was released by the European Commission in September 2022 (European Commission, 2022).

Principle 14 of the European Pillar of Social Rights states, for example:

"Everyone lacking sufficient resources has the right to adequate minimum income benefits ensuring a life in dignity at all stages of life, and effective access to enabling goods and services. For those who can work, minimum income benefits should be combined with incentives to (re)integrate into the labour market."

#### Crisis resilience as a core concept

In this context, and for the purpose of this study, we define crisis resilience as the capacity of the welfare state with its upstream protection schemes (e.g. unemployment insurance) and MIS to achieve and sustain a low level of income poverty, material deprivation, inequality and exclusion from society and the labour market. We define resilient welfare states as those that perform well with respect to these objectives in 'normal' times but are also able to hold these outcomes (rather) stable during and after economic shocks. We see the main mechanism of crisis resilience in the ability of the welfare state to stabilise income over crisis periods and provide access to work.

### 2.2 Interactions with upstream systems

Social minimum income schemes are embedded in a broader institutional arrangement of the labour market and the welfare state, which both are affected by and influential on the minimum income schemes. The respective role of minimum income schemes can only be interpreted properly in relation to upstream schemes, especially unemployment insurance (UI), which is itself subject to change. According to Bahle (2019), minimum income protection and upstream protection systems are to be understood as "communicating pipelines."

In addition to the pension system (pension insurance and basic pensions), upstream protection concerns labour market regulations, in particular regulations on protection against dismissal and the design of various forms of atypical employment such as fixed-term employment contracts, temporary agency work, self-employment or platform work. These regulations influence the structure of the labour market and the spread of certain forms of employment. The use of different types of atypical employment has a direct impact on social security systems and their crisis reactions (Eichhorst, Marx and Wehner, 2017; Eichhorst and Marx, 2021).

On the other hand, it is necessary to address income replacement in the event of unemployment. This concerns unemployment insurance with its contribution-financed, income-related and temporary income replacement payments in most countries. In the case of long-term dependent employment, there is usually a full entitlement to unemployment insurance benefits, which is not the case – or only to a limited extent – after short-term dependent employment spells or self-employment, whereby the individuals concerned are referred to means-tested and non-contributory MIS schemes as a means of protection if they lack their own or familial resources. In a situation where atypical employment is more widespread and when there are gaps in the coverage of unemployment insurance, MIS tends to be even further challenged.

Finally, it is necessary to consider mechanisms to secure jobs through short-time work or similar programmes such as crisis-related wage subsidies granted to firms facing a significant loss in turnover. Short-time work can be described as the first safeguard mechanism to prevent job loss.

Typically, short-time work and unemployment insurance provide a higher degree of job and income security for workers with permanent employment relationships, who are also protected by labour law, while other groups – such as new entrants to the labour market, temporary workers or the self-employed – have only limited access if they cannot prove sufficient periods of insured employment within a certain period (OECD, 2020b). Despite all of the differences in the respective national design, in case of doubt these groups are particularly dependent on the benefits of the minimum income scheme.

In view of the growing importance of non-standard dependent employment relationships and selfemployment that are not accompanied by (sufficient) entitlements to unemployment benefits (see, e.g. Spasova et al., 2017), MIS has a central and growing role within the European welfare states. There is a clear need to provide income security and poverty relief for all of those who are not adequately included by the upstream systems, but at the same time – as in the area of unemployment insurance – there have been widespread efforts to shorten benefit receipt through appropriate activation policies by taking up gainful employment. This development has triggered changes in unemployment insurance, which in many - but not all - countries has become more inclusive over recent years, at least in certain respects; for example, regarding the self-employed or persons with short-term employment relationships. These are by no means clear and uniform trends, as opposite reforms have also been observed, i.e. a stronger focus and restriction of unemployment insurance to the core group of long-term dependent employees. Activation measures for the group of jobseekers in unemployment insurance have also taken different forms in different national and temporal contexts, with the respective role of more supportive and demanding interventions being central. The role and importance of minimum income thus not only depends on the design of these systems themselves but also on how efficient and inclusive these upstream systems are.

Overall, it can be argued that a greater prevalence of atypical employment with incomplete or no inclusion in unemployment insurance increases the importance of MIS as a system of income security, poverty prevention and inclusion. This is the context in which reforms expanding general and activating minimum income schemes in many European countries in recent decades can be interpreted (Lødemel and Trickey, 2001; Eichhorst, Kaufmann and Konle-Seidl, 2008; Marchal and Van Mechelen, 2017; Natili, 2019).

### 2.3 Crisis response and resilience

The crisis response and resilience of national labour markets and welfare states is determined by various interacting buffers. The upstream systems of labour market regulation and unemployment insurance – including short-time work – constitute essential contextual conditions for the classification and analysis of minimum income schemes in the context of economic crises and influence societal and economic resilience. They are subjected to a stress test in times of crisis (Bonin et al., 2021a).

Short-time work – which can be understood as a labour market policy instrument between unemployment insurance and active labour market policy – already played a special role in the Financial Crisis of 2008/09 and is intended to avoid job loss in an acute crisis situation. However, as has been shown (cf. e.g. Hijzen and Venn, 2011), short-time work in the late-2000s tended to focus on permanent employees in qualified core workforces (who would also be entitled to unemployment benefits) and provided additional support to this group in particular, while other groups – such as younger workers – had less access and were more likely to become unemployed. Most recently, a historically strong use of short-time work during the COVID-19 pandemic can be observed in different forms, as either a benefit to employers in the case of reduced working hours or turnover

slumps or a partial unemployment benefit. In this context, regular systems of short-time work were opened up and expanded in response to the crisis or ad-hoc regulations were introduced for the crisis period (OECD, 2020a, 2021; Bonin et al., 2021b; Eichhorst, Marx and Rinne, 2021; Ebbinghaus and Lehner, 2022). While this can effectively reduce the risk of unemployment for many employees, compared to earlier phases it is not only the important role of short-time work in almost all countries that has recently been striking. This also concerns the frequently observed attempt to further extend it to atypically employed persons such as fixed-term employees, temporary workers or (some) self-employed persons, despite the fact that the unemployment and income risks for these groups remain particularly high.

Since not all employed persons benefit equally from short-time work and are protected from unemployment, the initial focus of crisis responses in social protection also lies on the unemployment insurance systems. Unemployment insurance – along with basic benefits and the tax system - is an essential automatic stabiliser, although there are differences across countries and due to discretionary interventions (Dolls, Fuest and Peichl, 2012; Dolls et al., 2022). In this context, the gaps in protection also become apparent in the unemployment insurance system, especially when atypically employed people enter the system. Typically, in crisis periods, ad-hoc benefits are granted in the short term or existing systems are made more generous and inclusive, but this is also not completely and equally the case in all countries, whereby differences in the coverage of individual groups persist. At the same time, due to a lack of resources and administrative capacity (or - as in the pandemic – a lack of digitalisation), active labour market policy benefits are often unable to support a rapidly growing group of jobseekers in times of crisis, even though certain labour market policy interventions such as training schemes would be effective in particular during times of crisis to prepare workers for finding new jobs in the recovery phase (see Card, Kluve and Weber, 2018). For example, this can also be seen in the first years of the European Youth Guarantee, which could provide effective support for young labour market entrants but depended on an appropriate implementation and governance (Escudero and Mourelo, 2015). Activation services that aim at immediate job placements tend to be less appropriate in crises as the number of vacancies is limited.

As a fundamental downstream security system, social MIS is also under particular stress in times of crisis. It also has an automatic stabilising effect, which is particularly true for granting transfers to those households and individuals who do not have sufficient and stable income from other sources, such as unemployment insurance. If there is no minimum income or if it is only accessible to certain groups, a final catch-all system in the welfare state is missing and thus an important component of automatic stabilisation. Moreover, strict means tests and application procedures in times of crisis can cause existential problems for those who depend on minimum income. In order to facilitate access to minimum income benefits, access barriers have therefore been removed – at least temporarily – in various countries; for example, during the COVID-19 pandemic. This has made it easier for otherwise unprotected groups such as the self-employed to receive benefits. Steps have also been taken to expand reliable and universal minimum income schemes, for example in Spain. However, at the same time, in the wake of crises the stock of long-term unemployed also grows with a certain delay, which then poses additional challenges for activation policies for this group of people (on the COVID-19 situation, cf. for example Eichhorst, Marx and Rinne, 2021; OECD, 2021).

Thus, crises themselves can also initiate and trigger changes in institutions. In addition to the typically expansionary discretionary measures during an acute crisis, countervailing developments can also occur in later phases, such as in phases of social policy austerity in the further course of a crisis, as was observed – for example – in the aftermath of the Financial Crisis in severely affected countries (Theodoropoulou, 2018; Marchal, Marx and Van Mechelen, 2016). This also means intervening in automatic stabilisers (Dolls et al., 2022) and could tend to weaken them. However, it is also

conceivable and observable that even after crises more 'progressive' social policy reforms are introduced and pursued, such as efforts to reduce divisions on the labour markets, more inclusive unemployment insurance or regular systems of short-time work or more universal MIS systems. In the medium term, this can also be associated with greater crisis resilience.

### 2.4 Typologies of welfare states and minimum income support schemes

Comparative welfare state research has long been concerned with describing and explaining differences in the design of social policy in European countries. For many years, attempts to group countries with similar social policy arrangements have played a central role. Thus, general typologies of welfare states can be found in the literature, as well as attempts to condense the systems of MIS in particular into typologies and highlight essential features that characterise individual groups of countries. The currently most frequently used typologies (cf. for example Bahle, Hubl and Pfeifer, 2011; Natili 2019, for discussion also Bahle, 2019; Konle-Seidl, 2021) thus aim to work out certain similarities in MIS that exist in countries with similar structures of the welfare state, mostly also characterised by strong historical ties and geographical proximity. This is associated with typical features of performance capacity, crisis resilience and institutional development. Typologies thus simplify and stylise the empirically observable complexities.

In essence, the attempts to typologise minimum social protection over the last twenty years (cf. for example Gough et al., 1997; Gough, 2001; Bahle, Hubl and Pfeifer, 2011; Frazer and Marlier, 2016; Natili, 2019) deal with the design of minimum social protection in the context of the respective welfare state arrangements, especially in relation to other welfare state protection systems. Despite the fundamental observation that MIS systems now exist in all EU Member States, in the individual minimum income schemes the security and inclusion goals of the minimum income (and the upstream schemes) are achieved in different ways and to different degrees. Certain institutional arrangements produce certain typical patterns of (non-)protection in the respective welfare states and more or less large differences in the protection of individual groups. At the same time, MIS systems are in a state of constant change. However, the existing institutions of the welfare state create medium- and long-term path dependencies, which suggest certain reforms or discretionary interventions - for example, in times of crisis - while making others more difficult. Moreover, as research has emphasised, MIS schemes traditionally exist as a downstream, residual system less in the direct focus of central political actors and the social partners than other social policy areas such as social insurance, even though - as the lower limit of income security - it influences other areas such as the labour market and its wage structure. In addition, the design of MIS is politically more controversial than social insurance in terms of its appropriate design, and more confronted with questions of an adequate benefit level of the subsistence minimum that can be considered socially just and appropriate (Bahle, 2019).

In recent years, in addition to activation research in the field of unemployment insurance, the role of MIS schemes has increasingly moved into the focus of comparative social policy research, especially regarding their generosity, the requirements for labour market integration and their political acceptance. The goal of active inclusion through an activation orientation is also changing the way in which traditional MIS systems function and are understood (Natili, 2019; Marchal and Van Mechelen, 2014). Here, political changes of direction as well as economic framework conditions play an important role, such as the transition to austerity policies in many European countries at the beginning of the 2010s in the period after the Financial Crisis with its initially socio-politically expansive reforms. Therefore, when comparing different types of minimum income schemes, empirical research on minimum income schemes has increasingly focused on analysing changes over time, in terms of both institutional reforms and changes in function and performance; for example, in response to specific national problems, the Financial Crisis of 2008/09 or the COVID-19 pandemic.

Notwithstanding these considerations, the usefulness of typologies thus lies in enabling a basic sorting of welfare states and MIS systems, which is particularly useful for selecting samples of cases for in-depth research. However, in general, typologies of minimum income systems are subject to the caveat that there is no consensus on stable and consistent types of MIS systems. Welfare states differ to a greater or lesser extent within the types or country clusters discussed. Furthermore, welfare states that can actually be observed are also constantly changing, whereby even path-dependent development patterns can be abandoned in response to certain problem situations, crises and political upheavals. This has raised some debate around traditional typologies; for example, under the impression of the activation strategies of recent years.

Looking closer into welfare state clustering undertaken with a specific focus on MIS schemes, we can identify the following typologies from the last three decades. It should be stressed that all of these attempts were based on selected indicators as they could be measured and interpreted at the time when these typologies were set up. The weighting of the different dimensions clearly varies, likewise the country coverage.

In an early attempt, Lødemel and Schulte (1992) classified countries and their MIS systems along the dimensions of centralisation, discretion of case workers, institutionalised rights and income security vs. treatment. They referred to the situation in the late-1980s and the early-1990s and identified an institutionalised poverty regime in the United Kingdom, a differentiated regime in Germany, a residual poverty regime in Norway and an incomplete differentiated regime in Southern Europe.

The study by Eardley et al. (1996) referred to the extent, structure and generosity of MIS in the early-1990s in a more global sample. Regarding European cases, they clustered the UK, Ireland and notably Germany as integrated safety nets, and France, Belgium, the Netherlands and Luxembourg as dual assistance systems (a 1997 version by Gough et al. also moved Germany into the latter cluster). Rudimentary social assistance was found in Southern Europe, whereas the Nordic countries were classified as residual assistance (in Gough et al. 1997, the UK was moved to that cluster). Finally, Switzerland, Austria and Norway were classified as highly decentralised schemes with local discretion.

A later revision by Gough in 2001 clustered Ireland and the UK together as extensive, inclusive systems with above-average benefits and saw Austria as a country with below-average extent of MIS, average inclusion/exclusion and average benefits. Belgium, France, Germany, Spain and Italy were classified as below-average regarding the extent of MIS, average inclusion/exclusion and average benefits. Greece and Portugal were seen as MIS of minimum extent and very low benefits, while Denmark, Sweden, Finland and the Netherland were seen as MIS of average extent, average inclusion/exclusion, but with generous benefits at that time.

Hölsch and Kraus undertook their clustering exercise in 2006. Contrary to an earlier study by these authors (Hölsch and Kraus, 2004), their 2006 study focused less on the governance and more on the expenditure, generosity of benefits, the degree of targeting and the duration of MIS. Here, Greece and Portugal were classified as countries lacking a MIS. Spain, France and Italy were seen as regionally fragmented benefit systems, whereas Belgium, the Netherlands, Austria and Ireland were classified as nationwide schemes with indefinite duration and few beneficiaries, while Sweden, Denmark, Finland and Germany exhibited similar rules but more recipients.

Frazer and Marlier (2009) classified countries along two dimensions, namely the extent of the role that MIS played in protection against poverty and the extensiveness and degree of development of social protection systems. They saw a key role of MIS in extensive and well-developed social

protection systems in Denmark, the Netherlands and the UK, while they saw extensive MIS but medium social protection in Cyprus and Spain. A more average role of MIS combined with highly developed social protection was detected in Belgium, Germany and Finland, while in Czechia, Hungary, Ireland, Romania and the Slovak Republic this was combined with medium social protection. Finally, a minor or residual role of MIS was combined with well-developed social protection in Austria, Luxembourg and Malta, with medium social protection in countries such as Bulgaria, Estonia, Greece, Italy, Latvia, Poland, Portugal and Slovenia and weak social protection in Lithuania.

A 2016 study by Frazer and Marlier came up with a revised multi-dimensional clustering along different dimensions and assessed changes over time. The authors identified five types of MIS: first, countries with simple and comprehensive schemes that are open to all with insufficient means to support themselves (Belgium, Switzerland, Cyprus, Czechia, Denmark, Estonia, the Basque Country in Spain, Finland, Iceland, some regions in Italy, Liechtenstein, Luxembourg, the Netherlands, Norway, Sweden, Slovenia and the Slovak Republic); second, simple and non-categorical systems with rather restricted eligibility and coverage (Austria, Greece, some regions in Spain, Croatia, Hungary, Lithuania, Portugal and Serbia); third, general schemes of last resort with additional categorical benefits that cover most people in need of support (Germany, Additional Social Assistance in Finland, some regions in Italy, Latvia, Northern Macedonia, Poland and the UK); fourth, countries with complex networks of different, often categorical and sometimes overlapping schemes that cover most people in need of support (France, Ireland, Malta and Romania); and fifth, countries with very limited, partial or piecemeal schemes that are restricted to narrow categories of people and fail to cover many of those in need of support (Bulgaria).

Bahle et al. (2011) presented a broad and comprehensive typology related to the situation in the late-2000s, focused on generosity, expenditure, scope and differentiation. They see the Continental European countries of Austria, Belgium, the Netherlands, France and Germany as differentiated MIS systems with residual last safety nets. Patchy safety nets in rudimentary MIS systems were found in Czechia, Poland, Hungary and the Slovak Republic. Residual citizen-based MIS were located in the Nordic countries (Denmark, Sweden and Finland). Extensively differentiated MIS that also act as social insurance substitutes were identified in Spain, Portugal and the UK. Finally, Ireland did not join the UK in this classification but was seen as a highly institutionalised extensive MIS with categorical differentiation functions.

One of most recent attempts at a typology aiming to capture the changed structures and functioning of minimum income systems was proposed by Natili in 2019. This contribution is based on a rather complex multi-dimensional assessment of recent information and data. It combines the institutional role of MIS with generosity and coverage data, beneficiary shares, expenditure and activation/inclusion as well as a territorial dimension. Based on this, Natili suggests four types of MIS systems: inadequate MIS in Bulgaria, Croatia, Czechia, Latvia and Italy (in 2018); sanctionary MIS in Portugal, Spain, the UK, Estonia and Lithuania; protective MIS in Germany, Greece (in 2017), Luxembourg, the Netherlands and Ireland; and enabling MIS in Austria, Belgium, Denmark, Finland, France and Sweden.

Overall, there has been no consensus on the significance of different dimensions and the clustering of individual welfare states, particularly if we take the time dimension into account, given that some typologies refer to earlier information than others. Some countries are notoriously difficult to allocate to a specific welfare state type, although in many cases – notwithstanding changes over time – rather consistent clusters of countries characterised by geographical and historical proximity can (more or less) be identified across the different typologies. Nonetheless, the viability of typologies of MIS schemes in the light of changes in welfare states needs to be regularly reviewed, to which this report

can partly contribute in the light of currently available data and with a particular focus on crisis episodes.

Hence, despite these limitations and significant differences in the assessment of individual dimensions, recent international comparative welfare state research still often distinguishes between five types of European welfare states and their respective minimum income systems (cf. for example Bahle, Hubl and Pfeifer 2011 and restated recently in Bahle 2019; see also Konle-Seidl 2021).

This mostly relates to Bahle et al.'s (2011) typology, which refers to the early years of our study and can thus be taken as a useful starting point. It combines core indicators of scope, generosity and governance so that a broader classification of countries and their MIS can be ensured. The advantage of this influential clustering also lies in the fact that it is compatible with typologies of broader welfare states and economic systems. The latter is particularly helpful for the context of this study as we also study the economic environment and the labour market. This can be shown in Schröder's (2009) attempt to combine varieties of capitalism with welfare state types or with respect to the recent typology of economic growth regimes suggested by Hassel and Palier (2021).

While being aware of intra-cluster differences and changes over time, we therefore start from the following five types:

- Nordic type
- Anglo-Saxon (Liberal) type
- Southern European (Mediterranean) type
- Post-Socialist type
- Continental European type

Table 2.1 Classification of countries by welfare state cluster in the EU-27 and the UK

Nordic type	Liberal type	Mediterranean type	Post-Socialist type	Continental European type
Denmark Sweden Finland	Ireland United Kingdom	Italy Spain Portugal Greece Malta Cyprus	Poland Czechia Hungary Slovenia Slovakia Croatia Romania Bulgaria Estonia Lithuania Latvia	France Belgium Netherlands Austria Luxemburg Germany

In the Nordic type, the upstream unemployment insurance systems are considered comparatively generous and inclusive, so that the non-centrally administered MIS scheme does not have to play an essential role in income security, as long as a high level of employment can be ensured, which is also associated with extensive coverage of the unemployed. MIS has a residual role here. However, a comparatively high level of benefits also tends to be provided in the MIS system, which is geared towards poverty prevention.

On the other hand, the Anglo-Saxobn type is based much more on an integrated and centralised minimum income scheme as an important element of social protection in the case of unemployment,

since upstream, contribution-financed unemployment insurance schemes are less relevant and have tended to erode over time. Therefore, the social minimum income and the associated activation policy play a central role in income security and integration for much larger groups than in the Nordic type.

In the Southern European type, there has traditionally only been limited protection in the form of unemployment insurance, and for a long time, MIS systems were only rudimentary – if they existed at all – and categorically differentiated; for example, regarding older people. However, strict employment protection ensured job and income security for a core group of workers, at the price of high risks of exclusion faced by younger workers. However, this model has been subject to considerable reform pressure in recent years in the sense of loosening employment protection on the one hand, and more inclusive unemployment insurance and minimum benefits on the other. In this way, existing gaps in the lack of national MIS systems have been closed or at least reduced.

Although the Post-Socialist group of countries is quite large and heterogeneous in itself, it can be seen as a cluster of welfare states that have rudimentary but little categorically differentiated minimum security systems. Despite all of the differences in this cluster regarding the structures and regulatory arrangements of its national labour markets, with reasonable simplification it can be said that rather low benefits are granted in the case of prolonged inactivity, but also in first-tier systems such as unemployment insurance.

The fifth type is the model of conservative Continental European minimum income systems. For historical reasons, this type is strongly characterised by internal, categorical differentiations in protection; for example, between the elderly, families with children and the unemployed. It also often has elements of unemployment assistance above the level of MIS by way of social assistance. Thus, some groups are more strongly referred to the general MIS scheme than others.

Overall, the coverage of different types in the project offers a high degree of differences and can thus show the range of European minimum income models theoretically and empirically through their concrete design. There are also major differences within the groups of countries or types in cross-section, as well as regarding the development over time. Hence, the allocation to certain types as developed in the literature should be seen as an important orientation of this study but must not obscure the complexity in the development and performance of the respective minimum income systems.

### 3. Research design and methods

### 3.1 Contribution of this study

This study contributes to the existing research in several respects. First, it is based on the joint analysis of upstream systems such as unemployment insurance, job retention, employment protection and the core MIS schemes in 'normal' and crisis times. This offers a more complete picture of the national policy arrangements and their relative strengths and weaknesses when faced with economic shocks. Second, the study locates itself in the comparative welfare state literature, with a particular focus on established typologies. For a selected sample of countries, changes within the system are observed in detail. Third, given this complex research objective, the study adopts a mixed-method, multi-disciplinary approach that combines quantitative and qualitative research, all with a strong focus on institutions and change. Fourth, the study adopts a longitudinal perspective, in particular to interpret quantitative findings and understand policy responses and reform trajectories over a longer period from the mid-2000s to the present situation. In this respect, the study also updates existing research to the latest observations.

### 3.2 Main research questions and hypotheses

Against the backdrop of the outline above, and with reference to existing research and current views on the role of different tiers of social protection systems in crisis, this study tries to answer the three research-guiding questions with the following hypotheses:

1. How successful are national social policy arrangements in ensuring adequate minimum income protection and the empowerment and (re-)integration of recipients into the labour market (i.e. implementing active inclusion concept)?

Regarding the institutional setting, in line with the arguments from the research reviewed above, we expect superior performance in terms of income stabilisation, poverty prevention and inclusion if there are strong protective and integrative arrangements. In more concrete terms, our hypothesis related to this question is to expect a stronger cushioning effect and lower poverty and exclusion risks in more encompassing and generous welfare states with highly developed different tiers of social protection, i.e. in terms of upstream schemes and MIS. Hence, the Nordic or Continental European types should be distinctly different from other welfare state types that are expected to show larger protection gaps and/or less generous benefit systems. We also expect that the Nordic and Continental European welfare states have better capacities to effectively pursue an activation strategy in both 'normal' and crisis times given their large active labour market policy (ALMP) systems. Relative to the Continental European countries, the Nordic countries are presumably in a better situation regarding active inclusion given their less segmented welfare state and labour market arrangements and stronger active labour market policies.

2. What is the contribution of MIS to social resilience during times of crisis? What differences and similarities can be identified between the countries studied and to what extent can these be attributed to the different role and importance of the MIS schemes?

While we expect to find that social protection arrangements in general play a major role in mitigating the increase in poverty and exclusion risks during crisis periods, we formulate the hypothesis that buffering via MIS becomes decisive if a) the protection capacities of upstream systems such as unemployment insurance and job retention do not provide sufficient support, and/or b) when the recession effectively leads to an increase in long-term unemployment (labour market exclusion).

Hence, in line with our hypothesis, the role of MIS schemes should be particularly visible in Liberal welfare states during crisis periods as upstream systems are less pronounced, e.g. due to less generous unemployment insurance and low employment protection. MIS schemes are also expected to play a certain role in the other welfare states to the extent that there are protection gaps in upstream systems, e.g. for temporary workers in segmented labour markets. Consequently, we expect significant differences in the social protection across socio-economic groups (for example with temporary workers or self-employed people), including access to the labour market by way of (re)entry into employment. We expect a more unequal access to benefits or (sustainable) employment in more segmented or dualised labour markets, e.g. in particular in the Continental and Southern European setting, relative to the Nordic or Liberal model.

We also expect the role of MIS to grow with the increasing depth and length of crises. Under such circumstances, the income stabilisation and active inclusion via MIS schemes tends to become increasingly crucial, even in otherwise highly developed and encompassing welfare states. Nonetheless, the capacity of MIS systems to meet this demand by otherwise non-protected groups or during and after a massive economic shock is expected to vary between countries and welfare states as well as over time. As a consequence, MIS could be under strong fiscal and political pressure during and in the aftermath of severe crises.

3. How have MIS systems developed since the Financial Crisis of 2008/09 in the respective socio-economic and political context? What adjustments and reforms have taken place? Which development/reform paths can be discerned? In particular, to what extent were MIS schemes adapted during the Financial Crisis or COVID-19?

Regarding welfare state and labour market reforms, and based on the existing research, we expect generally strong path dependency driven by long-lasting institutional arrangements in most country cases and in most years. Hence, our research hypothesis is that we observe a large degree of institutional stability and rather limited reforms of certain aspects of protective arrangements. Path breaking reforms are more likely to counter the consequences of a massive shock that is related to a significant increase in unemployment or benefit dependency. We expect fiscal deficits (or even external pressure from financial markets or supranational actors) to be the main drivers of austerity-related and other structural reforms. Path breaking reforms that alter welfare state arrangement do not have to be implemented as one large reform, but can also be a consequence of a sequence of smaller reforms. It will therefore be important to track reform paths over time.

### 3.3 A mixed-method research design

This study addresses the role of social protection, in particular MIS and upstream systems to poverty prevention and active inclusion. It extends beyond existing research by focusing in particular on the role that these systems played during crises periods and how they were adapted in response to crises. Further, the study expands research into social protection to cover the latest COVID-19 pandemic responses.

To study the complex interactions between shocks, institutions and outcomes, it makes sense to employ a mixed-methods research design. By combining different approaches of quantitative analysis with qualitative research, it is possible to detect a) general patterns and statistically significant relations between variables and b) better understand the function and development of specific institutional arrangements in diverse welfare states over time, in particular when it comes to including information on reforms, the actual interrelations of welfare state institutions and social policies and the implementation of activation approaches in practice.

#### 3.3.1 Descriptive analysis

In a first step, we undertake a preliminary check of country performance belonging to the different welfare state clusters discussed above based on a set of comparable and standardised outcome indicators that use a common definition. This initial step allows us to check for similarities and differences between and within clusters and with respect to the different subperiods concerned. In particular, we expect first hints at answering the question concerning the extent to which countries belonging to the same welfare state cluster performed similarly or if there has been considerable variation even within groups of countries. In this context, indicators on economic shocks and unemployment provide important pieces of information on crisis periods that trigger reactions of socio-economic outcome indicators.

### 3.3.2 Multivariate analysis

Multivariate analysis aims at detecting general patterns between economic shocks and core outcome variables. To achieve this, in addition to the descriptive evidence, regression analyses based on the consistent, cross-national time series of target variables or indicators of the effectiveness of social minimum income protection (obtained from EU-SILC) for the 27 EU Member States and the UK can provide empirical evidence on statistically significant correlations between growth/recession periods and unemployment shocks on the one hand and socio-economic outcomes on the other. The regression part primarily addresses the key questions of whether the role of social protection – not least MIS regarding social resilience – is systematically related to the economic cycle depending on the type of welfare state to which a country belongs, or certain design elements of social protection.

#### EU-SILC as a data source for income data

To be able to compare country performance in descriptive and multivariate analyses regarding the main outcome variables, the European Union Statistics on Income and Living Conditions (EU-SILC) is the reference source on income distribution and social inclusion in the European Union. EU-SILC was first carried out in six Member States in 2003 based on a voluntary agreement with Eurostat. From 2005 onwards, all Member States of the then EU-25 are covered. For the later accession countries Bulgaria, Romania and Croatia, EU-SILC data are only available since 2006, 2007 and 2010. The currently available data extend to 2020.

EU-SILC is based on the idea of a common framework rather than using a uniform survey instrument. This framework comprises a harmonised list of primary (annual) and secondary (collected every four years or more) target variables to be transmitted to Eurostat, as well as common guidelines and procedures, common concepts (such as household and income), and classifications designed to maximise the comparability of the information transmitted. In spite of these binding minimum standards, there are considerable differences in the implementation of EU-SILC at the country level. These differences concern, e.g., the underlying data sources (surveys, administrative data), which can lead to problems for cross-country comparisons. To address these problems, it is advisable to consider *changes* in the level variables at the country level over time, as in the panel analyses applied in this study (see section 5), rather than comparing pure level variables.

Another serious difficulty in using EU-SILC for the purposes of this study is that monetary transfers attributable to MIS are not specifically recorded as a source of income; rather, the recipients of minimum income benefits must be identified by making assumptions (see Raitano et al. 2021, who also present some exemplary analyses). The existing imprecision in the data necessitates sensitivity checks by calculating target figures based on the use of minimum income benefits using alternative plausible allocations of transfer benefits recorded in EU-SILC.

Eurostat also reports several breaks in time series regarding EU-SILC. In many instances, these breaks still seem to be largely in line with the trends and levels of national time series indicators reported. However, in some cases, there are substantial changes in levels from one year to the next in the data that are potentially unrelated to changes in socio-economic outcomes and therefore not to be interpreted in substantial terms but could rather be related to methodological changes. To be transparent on this, we have highlighted data points with bold markers in the graphs shown below. Furthermore, we have executed robustness checks in the regression analysis removing countries or years affected by breaks in time series.

Further, EU-SILC data collected in one specific year refer to income information for the previous year (for most variables and countries). This needs to be borne in mind when interpreting the information gathered from EU-SILC. Given that micro data from EU-SILC is currently available until 2020, with the latest income reported for 2019 in most cases, we are unable to identify any impact of the COVID-19 crisis on income-related outcomes – including poverty – given this data restriction. Some indicators have been made available for 2021 (with some variables referring to 2020), although there are some significant breaks in time series.

Despite all of these restrictions, EU-SILC is the main source for comparative European indicators on socio-economic outcomes in many studies by the EU and is therefore also the backbone of our analysis. Complementing EU-SILC based indicators, to understand the main developments in the country studies, additional indicators from Eurostat were gathered, in particular gross domestic product (GDP) and unemployment.

#### 3.3.3 Simulation studies

In order to test the crisis resistance of the social protection arrangements – in particular, MIS systems of the European countries selected for the study – different types of stress tests can be implemented within the framework of the EUROMOD microsimulation model. With the help of EUROMOD, real and hypothetical changes in the tax and transfer system and their effects on disposable household incomes can be calculated for the 27 Member States of the European Union and the United Kingdom. As a gross-net calculator, EUROMOD enables analysing the distributional, stabilisation and revenue effects of the tax and transfer systems. Compared to national microsimulation models, EUROMOD guarantees consistency in cross-country comparisons through a harmonised modelling of the respective tax and transfer systems as well as a uniform database. In the context of this study, EUROMOD enables assessing the impact of identical shock scenarios on outcomes in different welfare state settings, which can be interpreted as a direct estimate of the potential resilience of national systems when exposed to an assumed unemployment shock. In this sense, the EUROMOD work is complementary to the regression analysis as it provides the unique opportunity to estimate the stabilisation effect of the welfare system when confronted with identical shocks (i.e. not the diverse shocks observed in real data).

#### 3.3.4 In-depth case studies

While quantitative analysis based on descriptive studies, regression analysis or simulation can provide a general understanding of relations between variables, the complex interrelations between policies of different kinds, reforms and outcomes typically cannot be fully uncovered using quantitative data alone. Hence, understanding and explaining concrete developments at the country level requires a more in-depth understanding of the respective institutional arrangement, its changes and practical implementation. In our context here, it is particularly important to shed light on the activation side of social protection as it has developed over time or better understand the motivation behind certain reforms. Here, quantitative indicators are typically much less commonly available and helpful than regarding the monetary aspects of the national benefit systems. Therefore, in-depth case studies encompassing different pieces of information are important complementary elements of our empirical part as they can shed light on internal complexities and changes over time hidden behind aggregate figures. Taking the conceptual framework above into account, the minimum income schemes naturally have to be examined in the overall context of national social policy arrangements, whereby in particular the benefit systems upstream of the minimum income scheme are to be evaluated for the period in connection with the Great Recession in the course of the global debt and Financial Crisis of 2008/09, the subsequent austerity phase and the most recent economic upheavals in connection with the COVID-19 pandemic.

Building on the individual country case studies, a cross-country comparative analysis can be carried out to understand the performance of overall arrangements and their different elements that show a larger degree of social resilience in times of economic crisis and afterwards. For this purpose, the findings from the quantitative analyses are systematically integrated into the interpretation of the country cases. The comparison of countries is also intended to provide assessments of whether the social systems – and in particular the minimum income system – have tended to converge or diverge against the background or as a result of the crisis experiences of the last decade-and-a-half.

#### 3.3.5 Case selection for case studies

While the quantitative analysis requires full country coverage to ensure statistical meaningfulness, it is necessary to systematically select in-depth case studies in light of the theoretical framework and the research questions stated. Hence, from the five welfare state types described above, we chose those five countries that:

- clearly represent the main features of the respective type;
- have experienced relevant crises responses and reform episodes;
- are well documented in the literature; and
- are sufficiently accessible via country experts.

Based on these criteria, we take France, Spain, Denmark, Poland and Ireland as suitable representatives of the respective MIS types for our in-depth case studies.

France is a continental European and corporatist welfare state characterised by a strong role of social insurance and income protection in general, plus a strong tradition of employment protection associated with a dual labour market. France can be further understood as fitting into the Continental European type of welfare state, in which benefits are typically quite generous but often sharply differentiated between groups. From the crisis of 2008 until well into the 2010s, France experienced a period of economic malaise that seemed difficult to improve, with the governmental response focusing on increasing benefits coverage and activation for the unemployed. Historically, France relied on a dualised system, favouring "insiders" – or core workers – at the expense of "outsiders," or workers in atypical arrangements or belonging to specific groups (in particular younger and temporary workers).

In many ways, Spain has long been a typical example of the Southern European or Mediterranean welfare model. For most of the period under scrutiny here, it has shared the group's lack of an encompassing social assistance programme providing a general social safety net coupled with strong familiarisation. This was complemented by a highly dualised labour market with strong employment protection for permanent workers on the one hand and a heavy reliance on flexible temporary contracts on the other. Spain was strongly affected by the Great Recession and the Euro crisis but has also undergone significant institutional reforms over recent years.

Denmark represents the Nordic style of minimum income schemes in our sample. It can be considered a classic representative of a symbiosis of a flexible labour market and effective, comprehensive and quite generous social security through unemployment insurance benefits and an enabling labour market policy. The Danish case is also informative regarding the changes compared to the flexicurity model widely received at the beginning of the 2000s in the wake of the Great Recession. Restrictions in the benefits of the upstream systems and more demanding approaches to activation can be observed here. So far, the role of MIS has rarely been studied in the Danish case as unemployment insurance achieves a high level of coverage, even in the case of self-employment or hybrid employment, for example. However, in the Nordic design it is comparatively generous and poverty-proof.

Poland is an example of the Post-Socialist type. In line with this typology, Poland has rather non-generous social benefits and coverage that is comparatively low but largely non-differentiated across groups. MIS is rather limited in Poland relative to other countries, which is particularly important given the segmentation of the Polish labour market. Nonetheless, the economic development of

#### Research design and methods

Poland differs from the other countries to some extent, in the sense that the crisis periods have been rather mild.

Within the EU, the Anglo-Saxon type can only be observed in Ireland, where MIS plays a central role in the overall social policy arrangement, and this is also strongly developed and efficient in an international comparison. Ireland was also a country to be strongly affected by the financial and the Euro crisis, with corresponding effects on social policy. Relative to the other countries in the sample, the Irish social policy and labour market institutions can be described as more liberal and less dualistic. While social insurance is relatively weakly developed, there is a strong emphasis on meanstested income support in different, rather complex schemes.

### 4. Descriptive analysis of socio-economic outcomes

### Main findings:

Descriptive analysis for five countries exemplifying the different welfare state types show different patterns of crisis impact after the Great Recession of 2008/09. While the crisis hit all countries significantly (with the exception of a mild impact on Poland) in terms of GDP loss, unemployment and long-term unemployment increased in the short- and medium run in Ireland and Spain, i.e. a Liberal and a Mediterranean setting.

The translation of the crisis into shares of the population at risk of poverty or social exclusion (AROPE) shows remarkable stability at low levels in the Continental European welfare state of France and Nordic welfare state of Denmark, but the situation was more severe in Spain and Ireland. While Ireland exhibited a phase of low work intensity, Spain was characterised by a larger extent of poverty in general as well as in-work poverty.

Taking the full sample of European countries, bivariate correlations between poverty and growth as well as poverty and unemployment are graphically shown and discussed. These findings show that poverty risks are more directly related to unemployment than to growth, i.e. the recession as such.

Despite differences between individual countries belonging to the diverse welfare state clusters, there are cluster-specific features. The main finding is that unemployment seems to translate more directly into poverty in the Mediterranean and Liberal welfare state regimes with their apparently more limited buffering capacities, whereas this relation is weaker in Continental Europe and the Nordic countries with their 'stronger' welfare states. The heterogeneous group of Post-Socialist countries adopts an intermediate position in this respect.

### 4.1 Main socio-economic outcomes

In order to gain a first impression of the role of crisis periods and major socio-economic outcomes, this section provides descriptive time series graphs for the countries taken as examples for the five welfare state types. This step allows us to preliminarily assess the crisis impact on GDP and unemployment on the one hand and resulting variations in levels and changes of core indicators on poverty and social exclusion. These indicators will then also be used for bivariate and multivariate analysis (see sections 4.2, 5 and 6 below).

Regarding real GDP, used as the main indicator for economic shocks, we can see a massive decline in all countries in 2009, but a particular severe crisis in Ireland and a protracted period of low and negative growth in Spain, with the notable exception of Poland that was less affected (see Figure 4.1). The situation turned negative again with the COVID-19 pandemic in 2020, with a rather favourable situation in Ireland, Poland and Denmark in the first phase of the pandemic, and all countries recovering in 2021. A severe decline was once more observed in Spain.

GDP variation does not translate directly and uniformly into unemployment, as employment protection, wage and working time flexibility – including publicly supported job retention schemes (i.e. short-time work or wage subsidies to employers) – can moderate this. From the perspective of MIS, the main challenge clearly emerges when unemployment rises steeply and stays at a high level

for some time so that increasingly more working-age people fall into unemployment or from unemployment insurance (or job retention) into long-term unemployment.

Regarding the general unemployment rate over the period from 2005 to 2021 (see Figure 4.2), some countries saw massive increases during and after the Great Recession. Most notable is the massive short- or medium-term increase in unemployment in countries heavily hit by the crisis such as Spain or Ireland. However, Denmark also experienced a substantial and long-lasting deterioration of the unemployment rate from 2009 onwards. In the other two countries, the unemployment shocks were more moderate. Unemployment was quite stable (at a relatively high level) in France, despite the economic shock. In the second half of the 2010s, most countries saw a return to unemployment at about the pre-2009 level. Poland performed somewhat differently, exhibiting a more long-lasting decline in unemployment in the 2010s. The COVID-19 crisis did not affect unemployment as much during 2020 and 2021 in Europe, potentially due to the massive use of job retention schemes.

Long-term unemployment (Figure 4.3) evolved in a similar fashion to unemployment, albeit with lower overall shares of long-term unemployed in the labour force. As expected, the peaks in long-term unemployment manifested themselves somewhat later than overall unemployment. Massive problems with long-term unemployment – which placed particular pressure on minimum income protection – arose in crisis-stricken Ireland and Spain. Meanwhile Poland also exhibited some lasting difficulties in labour market re-integration in the 2010s despite the overall favourable economic development.

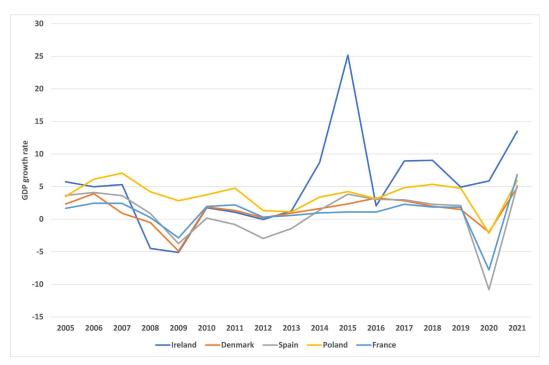


Figure 4.1 GDP growth, 2005-2021

Source: OECD statistics, gross domestic product (expenditure approach), annual growth rates in percentage.

Note: 2015 Irish GDP was affected by an extraordinary transfer of intellectual property rights to Ireland (OECD, 2016).

25
20
20
20
20
20
20
20
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

— Ireland — Denmark — Spain — Poland — France

Figure 4.2 Unemployment rates, 2005-2021

Source: OECD statistics, annual unemployment rates.

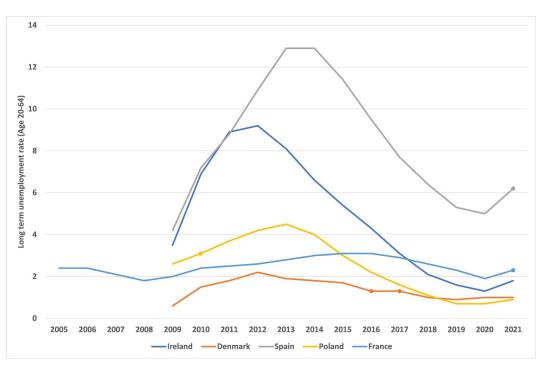


Figure 4.3 Long-term unemployment

Source: Eurostat (<u>UNE LTU A</u>).

As discussed in section 2, unemployment does not develop in parallel to poverty and exclusion risks, as redistribution via social policies helps to stabilise household income in the case of job losses. This holds for both unemployment insurance and MIS.

One core indicator measuring socio-economic outcomes relevant to this study is the share of working-age people at risk of poverty or social exclusion (AROPE). This is an overarching and encompassing indicator regarding poverty risks, material deprivation and exclusion from work (see Figure 4.4). Relative to the volatility of GDP and unemployment, AROPE shows more stability, which points at the buffering effect of European welfare states. However, there are notable cross-country differences. Stability at moderate or low levels of AROPE was strongest in Continental European countries such as France and in Nordic countries like Denmark, although some small increase in AROPE also occurred there. More substantial increases in the poverty and exclusion risk happened in Ireland (rather quickly after 2008) and Spain (more in the medium run), i.e. in those countries from the Southern European and the Anglo-Saxon cluster that were in deep and long-lasting economic difficulties after the Great Recession. Rather long-standing declines in the AROPE share could be observed in Poland. Overall, with the exception of Spain, there was remarkable convergence towards a 20 percent level of working-age AROPE in the late-2010s.

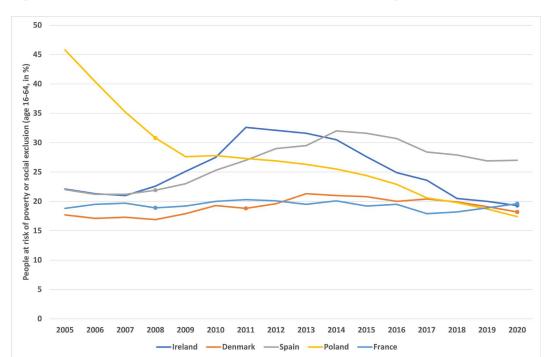


Figure 4.4 People at risk of poverty or social exclusion, age 16-64, 2005-2020

Source: Eurostat (ilc peps01).

AROPE comprises several specific components,<sup>2</sup> with the first main one being the risk of monetary poverty relative to the 60 percent threshold of national median equivalised disposable income after social transfers (see Figure 4.5). The general picture shows rather long-standing cross-country differences (which also drive AROPE differences to some extent). Denmark exhibits moderate initial poverty rates, with some upward trend later on. Continental Europe – represented by France – shows moderate poverty risks with some increase in the share of people at risk of poverty over the period. Ireland locates itself in the medium area, with a more volatile and quite favourable recent development of monetary poverty. Poland again shows a rather smooth development. Finally, the poverty risk was quite pronounced and increased in the 2010s up to the latest years in crisis-stricken Spain, also pointing at a structural weakness of poverty prevention in Southern Europe. The 'depth' of poverty in terms of the distance of actual income from the poverty threshold – the so-called poverty gap (Figure 4.6) – shows remarkable differences across countries. In line with the general pattern, the poverty gap was persistently high in Spain, Denmark and Poland fluctuated around medium values, while poverty gaps were small in Ireland and France.

The second main pillar of AROPE is severe material deprivation as an absolute rather than relative measure of poverty (Figure 4.7). Overall, figures are relatively low by now and converged at around five percent of the target population until the late-2010s, albeit with hikes in severe material deprivation in Ireland in the early-2010s. Overall, this dimension shows more positive convergence across countries and over time than AROP and low work intensity, which is the third main dimension of AROPE.

Low work intensity can be interpreted as a household- and individual-level approximation to being largely excluded from paid work. Figure 4.8 shows the consistent improvement of Poland and stable and low levels of low work intensity in France and Denmark, pointing at the inclusion-oriented regimes in both countries. However, Denmark faced some challenges – albeit at a moderate level – in the early-2010s. The situation was clearly worse in Spain as well as Ireland, with its massive hike in low work intensity, which also drove overall Irish AROPE share in the aftermath of the Great Recession of 2008/09. Overall, in this indicator the differences across most countries are relatively small (with the exception of Spain and Ireland) and rather converged towards the end of the period. Less convergence could clearly be observed in the share of those affected by in-work poverty (Figure 4.9). While in-work poverty has been very high over the whole period in Spain, the situation in Poland is less positive compared to the performance of this country in other indicators, and there has not been a clear improvement, pointing at more long-lasting issues with low income from work. Most other countries from diverse welfare state traditions hover around an in-work poverty share of five to eight percent. Exposure to in-work poverty is less of an issue in Denmark and Ireland.

Hence, the different dimensions of AROPE and supplementary indicators show that overall AROPE can conceal diverse developments. The temporary massive increase in AROPE in Ireland was not so much an issue of monetary poverty, but rather mostly driven by a phase of high shares of persons with low work intensity. This observation requires further analysis of the functioning of the Irish MIS system, which seems to be stronger in providing income support than inclusion. By contrast, persistently high AROPE in Spain rather mirrors a larger monetary poverty risk (AROP), a deep

in many countries. Country differences are quite persistent, with strong poverty prevention in France and Denmark, typically, with Poland catching up, in particular with households with children. Ireland exhibits rather persistently high AROPE shares with lone parents over the whole period as well as high AROPE during the first part of the 2010s with households with children. Spain shows very high levels of AROPE with households with children (above Ireland recently) and issues with the AROPE mitigation

in case of lone parents.

Data on AROPE and its components by household type are shown in the appendix (see Figure 10.1 to Figure 10.16). The disaggregated figures confirm the general trends by countries and welfare state types. Regarding AROPE, above-average risks are found with lone parents and single people, while couple households with dependent children on average exhibit lower AROPE risks, similar to couple households without children. This shows specific attention to income support to households with children

poverty gap and high in-work poverty, which also calls for a deeper understanding of the Spanish MIS as well as the institutional setup of the labour market.

Figure 4.5 People at risk of poverty, age 16-64, 2005-2021

Source: Eurostat (<u>ilc li02</u>).

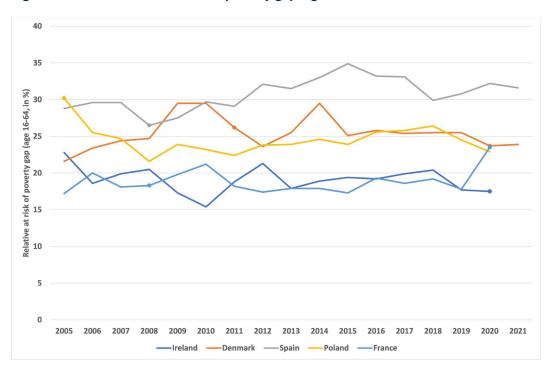


Figure 4.6 Relative at risk of poverty gap, age 16-64, 2005-2021

Source: Eurostat (ilc li11).

Figure 4.7 Severe material deprivation, age 16-64, 2005-2020

Source: Eurostat (<u>ilc mddd11</u>).

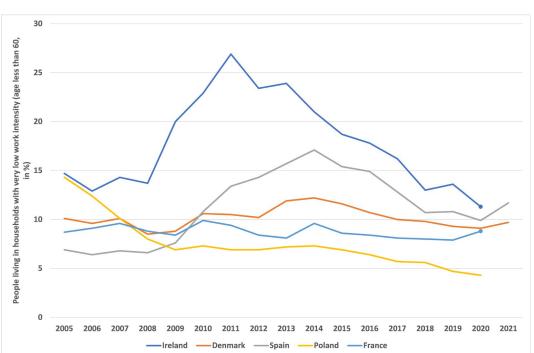
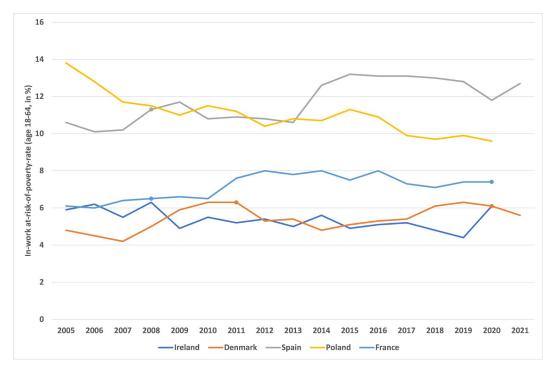


Figure 4.8 People living in households with very low work intensity, percentage of total population aged less than 60, 2005-2021

Source: Eurostat (ilc lvhl11).

Figure 4.9 In-work at-risk-of-poverty rate, age 18-64, 2005-2021



Source: Eurostat (ilc iw01).

# 4.2 Correlations between poverty risk and economic indicators

In this chapter, the interconnectedness between a main poverty indicator (namely AROPE) and the GDP growth rate as well as the unemployment rate is graphically shown and discussed.<sup>3</sup> We expect to find a positive relationship between the unemployment rate and poverty risk, i.e. a higher unemployment rate being related to a greater poverty risk. The relationship between the GDP growth rate and the poverty risk is assumed to be in the opposite direction (a larger GDP growth rate reducing the poverty risk). However, as mentioned in the description of the general hypotheses in chapter 3.2, we assume a weaker correlation between these economic variables and the poverty risk in countries belonging to Continental and Nordic welfare state types due to greater buffering effects of the social protection systems.

Besides the correlations between the levels of the variables, the correlations between the changes from one period to the next are also displayed to show values that are more comparable to the regression results in chapter 5, which also refer to changes in the explanatory variables from one period to the next. These changes in variables provide a clearer indication of a crisis or shock than only comparing levels. The correlation coefficient ranges between -1 and 1, whereby the closer the correlation coefficient is to 1 (or -1), the stronger the correlation between the variables. This can also be seen by the data values being closer to the regression line plotted in the figures. The closer the correlation coefficient is to zero, the weaker the relationship between the variables. In this case, the data points would be scattered around much more and found further away from the plotted regression line. Moreover, as motivated above, these scatterplots are separated by types of welfare states to detect possible differences between these country groups (see Table 2.1 for a classification of these groups). All available data for 2005 to 2020 are used. Especially for two welfare state types – the Liberal and Nordic ones - there are relatively low numbers of observation since these welfare state types comprise fewer countries (only two countries in the Liberal and three in the Nordic case). With fewer numbers of observation, it can be more difficult to detect systematic patterns. However, the figures should still give a meaningful impression, especially when comparing the results between welfare state types. Moreover, it should be noted that these figures do not display a causal relationship between the variables in such a way that, i.e. a high unemployment rate causes a high poverty risk. There might be a causal relationship behind it, although this cannot be drawn from these figures.

Figure 4.10 displays the scatterplots for the two Liberal welfare states, namely Ireland and the UK. Four scatterplots are shown, with two displaying the correlation between the levels of the poverty indicator and the growth rate or the unemployment rate. The other two show the correlation between the change in the poverty indicator and the change in the growth rate or the unemployment rate. It becomes evident that the correlation between (the change in) the growth rate and (the change in) the risk of poverty is rather low, with a correlation coefficient of 0.1 or smaller. The correlation between (the change in) the unemployment rate and (the change in) the risk of poverty is much stronger, with correlation coefficients of 0.89 and 0.6 respectively. It seems that in these countries a relationship between the economic situation and the poverty risk arises mainly through unemployment, less through a higher or lower GDP growth rate, even though both economic indicators are probably also correlated with each other. The variation in both the growth and the unemployment rate seems to be higher in Ireland than in the UK.

The focus here lies on the poverty indicators for the labor force, referring to individuals between 16 and 64 years old. However, the graphs look similar when using all age groups.

16-64) exclusion (in %, age '30 (age •: Change in risk of poverty or social excl. social 25 Risk of poverty or so -10 30 -20 -10 0 Change in GDP growth rate 20 20 10 10 GDP growth rate • UK Ireland Ireland UK Linear regression Linear regression Correlation coefficient: 0.10 Correlation coefficient: 0.01 social exclusion (in %, age 16-64) 25 30 35 Risk of poverty or 20 10 Unemployment rate 15 6 2 Change in unemployment rate

Figure 4.10 Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Liberal welfare state types

Ireland

Correlation coefficient: 0.89

• UK

Notes: The change in the variables displays the change from one period to the next or calculating variable, – variable, – variable, – the correlation coefficient can take on values between -1 and 1 and displays how strong the variable on the x axis and on the y axis are correlated. The closer the value is to -1 or 1, the stronger the correlation between the variables. The regression line displays the linear prediction values from a regression of the (change in) poverty risk on the (change in) growth rate/unemployment rate.

Ireland Linear regression

Correlation coefficient: 0.60

16-64) 16-64 age (age (in %, excl. social exclu 20 of poverty or 18 risk poverty Change 10 15 -10 -10 10 5 in GDP growth rate GDP growth rate Other Countries (Continental) Other Countries (Continental) France France Linear regression Linear regression Correlation coefficient: 0.01 Correlation coefficient: -0.03 age 16-64) 24 16-64) (age (in %, a excl. social 3xclu 20 of poverty or : 9 6 risk povert Change in 12 6 o Unemployment rate 10 Change in unemployment rate France Other Countries (Continental) France Other Countries (Continental) Linear regression Linear regression Correlation coefficient: 0.44 Correlation coefficient: 0.17

Figure 4.11 Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Continental European welfare state types

Notes: The change in the variables displays the change from one period to the next or calculating variable<sub>t</sub> – variable<sub>t-1</sub>. Other countries that are counted as Continental welfare states are the Netherlands, Belgium, Austria, Germany and Luxembourg. The correlation coefficient can take on values between -1 and 1 and displays how strong the variable on the x axis and on the y axis are correlated. The closer the value is to -1 or 1, the stronger the correlation between the variables. The regression line displays the linear prediction values from a regression of the (change in) poverty risk on the (change in) growth rate/unemployment rate.

Figure 4.11 displays the equivalent scatterplots for the Continental European or Conservative welfare state type, where we highlight France. The general pattern is similar to that of the liberal welfare states in that the correlation between poverty risk and the unemployment rate is apparently stronger than between poverty risk and GDP growth. However, both correlations are weaker for this welfare state type compared to the Liberal welfare state type, where the correlation with (the change in) the GDP growth rate is essentially equal to zero and the correlation with (the change in) the unemployment rate is equal to 0.4 (level) and 0.17 (change). In this welfare state type the poverty risk does not seem to rise in an adverse economic situation, and the impact of rising unemployment is weaker than in the liberal countries. These weaker correlations are likely related to the stronger cushioning effect of the social protection systems in Continental European countries.

16-64) 16-64) age (age (in %, 20 exclusion 18 social risk of poverty or Risk of poverty or 14 16 Change in -10 10 -10 -5 Change in GDP growth rate GDP growth rate Other Countries (Nordic) Other Countries (Nordic) Denmark Denmark Linear regression Linear regression Correlation coefficient: 0.11 Correlation coefficient: 0.16 i (in %, age 16-64) 20 22 16-64) (age) exclusion ( social risk of poverty or Risk of poverty or 14 16 Change in 10 8 Unemployment rate Change in unemployment rate Other Countries (Nordic) Denmark Other Countries (Nordic) Denmark Linear regression Linear regression Correlation coefficient: -0.03 Correlation coefficient: 0.24

Figure 4.12 Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Nordic welfare state types

Notes: The change in the variables displays the change from one period to the next or calculating variable, – variable, – variable, other countries that are counted as Nordic welfare states are Sweden and Finland. The correlation coefficient can take on values between -1 and 1 and displays how strong the variable on the x axis and on the y axis are correlated. The closer the value is to -1 or 1, the stronger the correlation between the variables. The regression line displays the linear prediction values from a regression of the (change in) poverty risk on the (change in) growth rate/unemployment rate.

The equivalent scatterplots for the countries belonging to the Nordic welfare state type are displayed in Figure 4.12. The correlations between the poverty indicators and the economic situation in these countries is rather weak, which could be related to the comparatively generous benefit system, as it was assumed a priori. The strongest correlation can actually be seen for the change in the unemployment rate and the change in the poverty risk, with a correlation coefficient of 0.24. In other words, when observing an increase in the unemployment rate from one period to the next one also observes a slight increase in the poverty risk. However, the corresponding value for the liberal welfare states amounts to 0.6, thus, displaying a much stronger correlation.

16-64) age (age 35 excl. E exclusion ( social of poverty or social 25 Risk of poverty risk Change in -10 20 10 -20 -5 -10 GDP growth rate Change in GDP growth rate Other Countries (Mediterranean) Other Countries (Mediterranean) Spain Spain Linear regression Linear regression Correlation coefficient: -0.30 Correlation coefficient: 0.18 16-64) 16-64) age (age 35, excl. exclusion 30 social of poverty or social 25 Risk of poverty risk Change in 30 10 25 15 20 Unemployment rate Change in unemployment rate Other Countries (Mediterranean) Other Countries (Mediterranean) Spain Spain Linear regression Linear regression Correlation coefficient: 0.82 Correlation coefficient: 0.62

Figure 4.13 Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Mediterranean welfare state types

Notes: The change in the variables displays the change from one period to the next or calculating variable<sub>t</sub> – variable<sub>t-1</sub>. Other countries that are counted as Mediterranean are Italy, Portugal, Greece, Malta and Cyprus. The correlation coefficient can take on values between -1 and 1 and displays how strong the variable on the x axis and on the y axis are correlated. The closer the value is to -1 or 1, the stronger the correlation between the variables. The regression line displays the linear prediction values from a regression of the (change in) poverty risk on the (change in) growth rate/unemployment rate.

The scatterplots of the Mediterranean or Southern European welfare states in Figure 4.13 display a rather clear distinction between the different patterns of growth and unemployment. The correlation between (the change in) unemployment and (the change in) the poverty risk is rather strong. A higher unemployment rate is correlated with a higher poverty risk in these countries, and a rise in the unemployment rate from one year to the next is accompanied by increasing poverty risks. The corresponding correlation coefficients are 0.8 and 0.6 and therefore comparable to the magnitude of these effects found in the Anglo-Saxon countries. The correlation between the level of the GDP growth rate and the poverty risk is the strongest of all welfare state types discussed so far and clearly negative: a lower growth rate level is correlated with a higher risk of poverty. However, the correlation coefficient of -0.3 is still not very strong. According to these graphs, the poverty risk in these countries seems to be relatively strongly connected to the countries' unemployment rate.

16-64) 16-64) age (age 20% excl. exclusion 40 social Change in risk of poverty or : -20 social 30 poverty 20 Risk 10 -15 10 -20 20 -10 -10 GDP growth rate Change in GDP growth rate Poland Other Countries (East) Poland Other Countries (East) . Linear regression Linear regression Correlation coefficient: 0.06 Correlation coefficient: 0.12 16-64) 16-64) age Change in risk of poverty or social excl. (age ' -20 -10 20% exclusion 40 social 30 poverty 20 20 15 10 10 0 5 Change in unemployment rate Unemployment rate Poland Other Countries (East) Other Countries (East) Poland Linear regression Linear regression Correlation coefficient: 0.35 Correlation coefficient: 0.44

Figure 4.14 Scatterplots of risk of poverty or social exclusion and GDP growth and unemployment rate for Post-Socialist welfare state types

Notes: The change in the variables displays the change from one period to the next or calculating variable<sub>t</sub> – variable<sub>t-1</sub>. Other countries that are counted as Eastern European are Czech Republic, Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Romania, Slovakia and Slovenia. The correlation coefficient can take on values between -1 and 1 and displays how strong the variable on the x axis and on the y axis are correlated. The closer the value is to -1 or 1, the stronger the correlation between the variables. The regression line displays the linear prediction values from a regression of the (change in) poverty risk on the (change in) growth rate/unemployment rate.

Finally, in Figure 4.14, the corresponding scatterplots for the fifth welfare state type, namely the (rather large) group of Post-Socialist or Eastern European countries, are shown. The already established typical pattern of a stronger correlation between the unemployment rate and the risk of poverty compared to the GDP growth rate and the risk of poverty also becomes evident from these graphs. The correlation between growth and poverty risk with correlation coefficients of around 0.1 or lower is essentially non-existent, whereas the correlation coefficients for the unemployment rate (level) amounts to 0.35 and for the change in the unemployment rate to 0.44. Thus, it appears that the relationship between the unemployment rate and the risk of poverty lies somewhere in the middle between the other welfare state types, with Southern European and Liberal state types exhibiting a stronger relationship and Nordic and Continental European countries showing a similar or weaker relationship. This finding might also be related to the fact that this group of Post-Socialist countries is larger and more heterogeneous than the other groups of welfare state types.

Summarising the bivariate relations between growth, unemployment and poverty (and their changes), it becomes clear that poverty is more directly related to unemployment than to growth.<sup>4</sup> This is highly plausible given the crucial role (in)adequate social protection plays in stabilising income once people become unemployed. Further, despite some observable differences between individual countries belonging to the diverse welfare state clusters, there are some cluster-specific features. The main finding is that unemployment seems to translate more directly into poverty in the Mediterranean and Liberal welfare state regimes with their apparently more limited buffering capacities whereas this relation is weaker in Continental Europe and the Nordic countries with their 'stronger' welfare states. The large group of Central and Eastern European countries take an intermediate position in this respect. In this sense, this piece of evidence tends to support our hypotheses about distinct welfare state types and their performance profiles.

-

We also plotted the figures with current poverty risk and lagged unemployment and lagged GDP growth rate. The results and interpretations in these figures are qualitatively similar to the ones presented above. Results are available upon request.

# 5. Multivariate regression analysis

#### Main findings:

In this chapter, multivariate regressions are used to analyse the relationship between a country's economic situation (in particular having experienced an economic depression, but also a rising unemployment rate) and the poverty risk.

Findings show that the relationship between unemployment rates and poverty risks seems to be equally strong or even stronger than between an economic depression and the poverty risk.

However, differences in this relationship between welfare state types are not strongly prevalent. Institutions such as stronger employment protection legislation, a higher net replacement rate and a higher share of social benefit expenditure are able to alleviate the negative relation between the economic situation and the poverty risk.

# 5.1 Methodological aspects

This chapter presents the results of regression analyses determining the relation between economic shocks and core outcome variables. These analyses primarily address the key questions of a systematic correlation between the economic cycle and the poverty risk and how different welfare state types might be able to moderate this potential relationship. Given that the variation contained in the time series data for only five case study countries is not sufficient for any statistically meaningful longitudinal analyses or panel estimates, we include all EU countries (and the United Kingdom), as in chapter 4.2.

In the panel regressions, the variables derived from EU-SILC are used as the dependent variables. In a first step, the central independent variables are measures of the economic situation.

The benchmark model estimated in a first step is defined as follows:

Poverty measure  $_{c,t}$  =  $\beta$  business cycle measure  $_{c,t}$  + time fixed effect t + poverty measure  $_{c,t-1}$  +  $a_c$  + error term  $_{c,t}$ 

The variables are measured for a country c at a time t. The time constant t ensures that factors that affect the dependent variables at a specific point in time independently of country-specific conditions, such as a global change in the economic climate, are controlled for. The parameter of interest is  $\beta$ , which measures the strength of the relationship between the current country-specific economic situation and the dependent variable.  $A_c$  is a time-invariant unobservable component that is removed when first differencing the model (country-specific fixed effect).

<sup>&</sup>lt;sup>5</sup> It is not possible to include a country constant because time-invariant factors, i.e. factors that do not change over time such as the country identifier, are dropped from the regression.

#### Some general notes about regression analyses

The general idea of a regression analysis is to determine the relationship between a dependent variable (here, e.g. poverty risk) and one or more independent variables (here, e.g. a business cycle measure or other variables such as the unemployment rate) to detect how the dependent variable varies with changes in the independent variables. By including more than one independent variable, one is able to control for other factors that also affect the dependent variable. Holding all factors that are important constant, makes it possible to focus on the relationship of interest, such as - in this case - between poverty and a business cycle measure and detect the (almost) true relationship between these variables. Not controlling for other factors would most likely give biased results of this relationship because the coefficient of the business cycle measure could include potential effects of other factors that are also related to poverty (such as the unemployment rate) and could therefore be overestimated. The sign of the coefficient of the independent variable indicates the direction of the relationship (e.g. a negative sign would suggest that, e.g. the poverty risk decreases when the growth rate increases) and the significance level shows how certain this relationship is (a stronger statistical significance refers to a relationship that is not just due to chance, but rather systematic). The interpretation of the coefficient depends on how the dependent and independent variables are measured. If the variables are percentages in levels (as it is the case in this chapter), the coefficient displays the percentage point change in the dependent variable when the independent variable increases by one percentage point or, in the case of a binary independent variable, when comparing one category with another, such as a negative growth rate with a non-negative growth rate.

The estimation approach thus provides insights regarding the question: How strong are the systematic correlations between the business cycle and the poverty measures? Moreover, since the relationship between the business cycle and the poverty measures might not take place simultaneously, i.e. in the same time period (only), but rather with a certain delay, the regressions will also be estimated with one as well as two time lags of the business cycle measure (in other words time periods t-1 and t-2). In addition, the lagged dependent variable displays an important control variable as there probably prevails a certain path dependency (poverty measure c,t-1). For this reason – and to make the best use of the panel dimension of the data – the Arellano-Bond estimator is used to estimate a dynamic panel model, since coefficients will be inconsistent when using panel fixed effects regressions including a lagged dependent variable (Arellano and Bond, 1991; Angrist and Pischke, 2009).<sup>6</sup>

The implementation of the benchmark model will focus on various indicators of the business cycle, in particular: 1) the growth rate of real GDP to test the extent to which the individual dependent variables are at all cyclical, 2) a set of indicator variables showing (i) whether a country is in a cyclical downswing, (ii) whether a country's economy is contracting, and (iii) whether a country is in a recession.<sup>7</sup>

When first differencing the equation above, the demeaned lagged dependent variable would be correlated with the demeaned error term, which would lead to inconsistent estimators in a static panel fixed effects regression. The Arellano-Bond estimator circumvents this problem by using instrumental variables for the demeaned lagged dependent variable, namely the dependent variable lagged by two and more periods. Since there are more instruments than parameters, the GMM (general methods of moments) framework is commonly used for the estimation.

It was also planned to use the magnitude of a negative growth rate and the magnitude of this growth rate squared, to test whether the target variables respond differently as the severity of an economic recession increases. However, since there were too few observations, it was not reasonable to conduct this kind of analysis.

The benchmark model is additionally estimated including (lagged values of) the unemployment rate as well as further control variables such as the labour force participation rate and the share of self-employed to be able to control for other economic factors that might influence the poverty risk.

In a second part of the analysis, the potential influence of the system of MIS is also examined. An extended statistical model is defined as follows:

Poverty measure  $_{c,t}$  =  $\beta_1$  business cycle measure  $_{c,t}$  + $\mu_1$  business cycle measure  $_{c,t}$  x welfare state indicator  $_c$  +  $\beta_2$  business cycle measure  $_{c,t-1}$  + $\mu_2$  business cycle measure  $_{c,t-1}$  x welfare state indicator  $_c$  + time fixed effect t + poverty measure  $_{c,t-1}$  +  $a_c$  + error term  $_{c,t}$ 

The inclusion of an interaction term, which interacts the business cycle measure with measures used to characterise a country's welfare state as an additional explanatory variable allows statistically testing whether the correlations between the economic development and the dependent variables analysed in the first step of the analysis differ systematically according to how a country's social policy arrangement is currently structured.

The estimation parameters of interest are  $\mu_1$  and  $\mu_2$ . If they are significantly different from zero, the design of the welfare state has a systematic influence on the extent to which economic development affects a target dimension of social security. This could be interpreted as a moderating effect of the MIS system if  $\mu_1$  and  $\mu_2$  have an opposite sign of  $\beta_1$  and  $\beta_2$ , respectively. The characterisation of the social policy arrangement is proxied by assigning a country to one of the five welfare state types. This makes it possible to test whether the dependent variables behave systematically differently in certain cyclical situations— especially in times of economic crisis— depending on which type of welfare state a country belongs to. As above in the benchmark model, this extended statistical model is also additionally estimated including (lagged values of) the unemployment rate as well as the labour force participation rate and the share of self-employed.

## 5.2 Baseline regression analysis

In the next step, regression results from the baseline model (without interaction terms with welfare state type) are shown and discussed.<sup>8</sup> Table 5.1 shows the results of different specifications where a number of control variables are added to the regression model in a step-wise manner. In order to see what happens after each step, the results are shown for only one dependent variable in such detail as an example.<sup>9</sup> In this table all coefficient parameters except the year dummy variables are shown.<sup>10</sup> The dependent variable is the risk of poverty or social exclusion for those between 16 and 64 years old, which is the same variable used in the scatterplots discussed above. In column (1) only the lag of the dependent variable and the GDP growth rate are included. As expected, the lagged dependent variable has a very strong positive correlation to the current value of the dependent variable, the poverty risk. The coefficient of the growth rate has a negative sign and is highly significant which shows that an increase in the GDP growth rate from one period to the next is related to a decrease in the risk of poverty.

The regression results shown here are all based on Arellano-Bond estimations, which are used due to the inclusion of the lagged dependent variable and the with other models potentially biased results. However, the results of a "standard" fixed effects estimation with or without including a lagged dependent variable produce very similar results.

<sup>9</sup> Results for this step-by-step analysis are similar for the other dependent variables and are therefore not shown. For the other dependent variables only results from the main specification are shown (see Table 5.3).

It is common to cluster the standard errors in panel analyses to account for within-group correlation of clusters (such as individuals or in this case countries). However, since there are only 28 countries in the data set and the lowest number of clusters is commonly considered at around 40, no clustered standard errors are reported (e.g., Angrist and Pischke, 2009). Therefore, the reported standard errors might be underestimated and significance levels overestimated, so that more weight should be given to results with higher significance levels with at least two or even stronger results with three stars (when the p-value is smaller than 0.05 or 0.01).

Including one lag of the growth rate in column (2) does not change the first impression – also a lagged increase is negatively related to poverty risk, so the effect of the economic situation seems to persist somehow over time. When including the current unemployment rate and the lagged unemployment rate in column (3), the relationship between the growth rate and the risk of poverty becomes much weaker and only the lagged value is still statistically significant. The same is true when also adding two further control variables (labour force participation rate and the share of self-employed) in column (4).<sup>11</sup> The last three columns show the equivalent results when adding two lags of the dependent variable, the growth rate and the unemployment rate. The results are relatively similar in that especially when adding the unemployment rate to the regression, the coefficients of the growth rate decrease to about half its magnitude and become less or not statistically significant. In general, it seems that the effect of the growth rate rather works with a certain timely delay whereas the effect of the unemployment rate is rather simultaneous since the lagged coefficients of the unemployment rate are not statistically significant. However, the non-lagged value of the unemployment rate is rather robust throughout specifications.

Table 5.1 Baseline Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable and GDP growth rate as business cycle measure

	Dependent variable: Risk of poverty or social exclusion (age 16-64)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)			
ndependent variables										
GDP growth rate	-0.141***	-0.122***	-0.069*	-0.064	-0.153***	-0.070**	-0.061*			
obi grommato	(0.039)	(0.039)	(0.041)	(0.040)	(0.034)	(0.035)	(0.034)			
GDP growth rate (1 lag)	(3.335)	-0.213***	-0.098**	-0.086**	-0.197***	-0.079**	-0.065*			
		(0.037)	(0.042)	(0.041)	(0.033)	(0.035)	(0.035)			
GDP growth rate (2 lags)		, ,	, ,	,	-0.127***	-0.043	-0.044			
3 ( 3 /					(0.033)	(0.035)	(0.035)			
Unemployment rate			0.361***	0.335***	, ,	0.377***	0.360**			
			(0.099)	(0.096)		(0.090)	(0.088)			
Jnemployment rate (1 lag)			-0.024	0.014		0.086	0.082			
			(0.089)	(0.089)		(0.129)	(0.126)			
Jnemployment rate (2 lags)						-0.078	-0.056			
						(0.086)	(0.085)			
_abour force participation rate				-0.362***			-0.437**			
				(0.114)			(0.097)			
Share of self-employed				24.509**			19.405			
				(12.007)			(10.550			
Risk of poverty or social exclusion (1 lag)	0.795***	0.807***	0.740***	0.677***	0.644***	0.542***	0.498**			
	(0.032)	(0.032)	(0.034)	(0.038)	(0.051)	(0.050)	(0.050)			
Risk of poverty or social exclusion (2 lags)					0.084*	0.102**	0.072*			
					(0.045)	(0.043)	(0.043)			
Observations	382	382	382	382	354	354	354			

Source: Eurostat (risk of poverty or social exclusion (in %, age 16-64)) and OECD statistics (GDP growth rate, unemployment and labour force participation rate) for all EU countries and the UK, 2005-2020.

Notes: Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column represents a different regression. Year dummy variables are included in all regressions.

Table 5.2 shows the same types of specification in the seven columns, but with different kinds of business cycle measures. Only the coefficients of interest for the business cycle measure are shown. In the first panel, a binary variable that indicates whether the growth rate is negative is used (101 such negative growth rates are identified in the data). This variable provides one way of approximating a contracting economic situation. The variable "downturn" is equal to 1 if the growth

Only the current values of these variables are included as they are not the main focus and to not add too many variables in a regression of this sample size.

rates of three consecutive years are decreasing or in other words, the growth rate of the current period is lower than the former one for three years in a row (120 downturns are identified). A depression is defined as the growth rates of two consecutive periods being below a quarter of a standard deviation of the average growth rate of this country (54 such depressions are identified).<sup>12</sup>

Table 5.2 Baseline Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable and different variants of the business cycle measure

	Dependent variable: Risk of poverty or social exclusion (age 16-64)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)			
Independent variables										
Negative GDP growth rate (binary)	0.324	0.416	-0.176	-0.148	0.354	-0.420	-0.327			
	(0.354)	(0.342)	(0.342)	(0.342)	(0.306)	(0.281)	(0.282)			
Negative GDP growth rate (binary) (1 lag)		1.362***	0.448	0.381	1.038***	0.054	0.041			
		(0.340)	(0.347)	(0.349)	(0.290)	(0.269)	(0.269)			
Negative GDP growth rate (binary) (2 lags)					0.500	-0.187	-0.248			
					(0.308)	(0.279)	(0.277)			
Downturn	-0.508**	-0.435*	-0.301	-0.219	-0.632***	-0.516**	-0.420**			
	(0.251)	(0.247)	(0.239)	(0.231)	(0.235)	(0.201)	(0.198)			
Downturn (1 lag)	(5.25.)	-0.013	0.018	0.086	-0.043	-0.160	-0.119			
Domitain (Tidg)		(0.249)	(0.240)	(0.232)	(0.219)	(0.189)	(0.185)			
Downturn (2 lags)		, ,	,	,	-0.245	-0.171	-0.193			
					(0.247)	(0.212)	(0.207)			
Depression	1.303***	1.159***	0.461	0.363	1.210***	0.396	0.368			
Depression	(0.329)	(0.324)	(0.335)	(0.332)	(0.278)	(0.274)	(0.273)			
Depression (1 lag)	(0.329)	1.060***	0.335	0.209	0.977***	0.286	0.203			
Depression (Tlag)		(0.317)	(0.320)	(0.320)	(0.266)	(0.255)	(0.254)			
Depression (O logs)		(0.317)	(0.320)	(0.320)	1.061***	0.607**	0.583**			
Depression (2 lags)										
Observations	382	382	382	382	(0.274)	(0.254)	(0.255)			
	J0Z ✓				√	√	√			
Dependent variable (1 lag)	•	•	•	•	<b>√</b>	<b>∨</b>	<b>∨</b>			
Dependent variable (2 lags)			,	,	<b>v</b>	<b>√</b>				
Unemployment rate			<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>			
Unemployment rate (1 lag)			v	•		<b>v</b>	<b>∨</b>			
Unemployment rate (2 lags)				✓		•	<b>√</b>			
Further controls				✓			✓			

Source: Eurostat (risk of poverty or social exclusion (in %, age 16-64)) and OECD statistics (GDP growth rate, unemployment and labour force participation rate) for all EU countries and the UK, 2005-2020.

Notes: Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column in each panel represents a different regression. The binary negative GDP growth rate variable is equal to 1 if the growth rate is negative in the country in the respective year and zero otherwise. The variable "downturn" is equal to 1 if the GDP growth rate of the current period is lower than the former one for three years in a row (growth rate, < growth rate of a standard deviation of the average growth rate of the country. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed.

Note that the signs of the coefficients have to be interpreted the opposite way now since higher values of the growth rate in levels refers to a better economy whereas the variants in Table 5.2 refer to negative growth developments. The binary indicator of a negative growth rate (see the first panel in Table 5.2) only shows a positive relation to the poverty risk via the lagged value and without including other control variables. However, the downturn variable identifies a different direction of the relationship as the (not always statistically significant) coefficients have a negative sign. After three years of consecutively lower growth rates, the risk of poverty appears to decrease. A possible

Other definitions of a depression such as using half of a standard deviation or three consecutive years below a quarter of a standard deviation either leads to qualitatively very similar results or identifies too few depressions, respectively.

explanation for this finding is that with the downturn variable actually indicating a time after a boom or a boom-like period (growth rates are falling for three consecutive periods), poverty risks following this better economic situation might still be reduced. The coefficients of the unemployment rate (not shown here) are positive as in Table 5.1. The results for the depression variable are similar to those in Table 5.1. For simplicity, in further analysis, the business cycle measure of a depression is used as this measure approximates actual crisis periods the closest.

Table 5.3 Baseline Arellano-Bond regression results with different dependent variables and depression as business cycle measure

Dependent variable:	before soci	overty rate ial transfers 16-64)	At risk of poverty rate after social transfers (age 16-64)		depriva	material tion rate 16-64)	In-work at-risk-of-poverty- rate employed (age 18-64)		
,	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Depression	0.987***	0.541**	0.541***	0.141	0.643**	-0.164	0.243	0.117	
	(0.218)	(0.231)	(0.154)	(0.165)	(0.316)	(0.317)	(0.156)	(0.166)	
Depression (1 lag)	0.581***	0.286	0.432***	0.107	1.003***	0.238	-0.053	-0.091	
	(0.220)	(0.218)	(0.144)	(0.151)	(0.292)	(0.295)	(0.146)	(0.155)	
Depression (2 lags)	0.084	-0.002	0.151	-0.038	0.871***	0.500*	0.026	0.023	
	(0.225)	(0.237)	(0.150)	(0.151)	(0.307)	(0.298)	(0.153)	(0.157)	
Observations	363	363	363	363	354	354	363	363	
			Risk of pove	rty threshold	Households	with very lov	v		
	Relative p	overty gap	(couple with	two children,	work inte	nsity, % of	Transition u	nemployment	
Dependent variable:	(age	16-64)	PPS)		population	population less than 60		loyment	
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
Depression	-0.307	-0.566	-255.649**	-115.750	0.815***	0.383**	-1.937	-0.847	
	(0.366)	(0.409)	(123.844)	(121.720)	(0.190)	(0.177)	(1.281)	(1.485)	
Depression (1 lag)	0.675**	0.344	-425.492***	-227.529**	0.802***	0.362**	-1.499	-1.145	
	(0.342)	(0.380)	(114.755)	(112.871)	(0.183)	(0.166)	(0.950)	(1.033)	
Depression (2 lags)	0.208	0.052	-272.392**	-127.742	0.416**	0.158	-2.100**	-1.987*	
	(0.362)	(0.387)	(119.892)	(114.388)	(0.191)	(0.168)	(1.026)	(1.032)	
Observations	363	363	363	363	363	363	171	171	
Dependent variable (1 lag)	✓	✓	✓	✓	✓	✓	✓	✓	
Dependent variable (2 lags)	✓	✓	✓	✓	✓	✓	✓	✓	
Unemployment rate		✓		✓		✓		✓	
Unemployment rate (1 lag)		✓		✓		✓		✓	
Unemployment rate (2 lags)		✓		✓		✓		✓	
Further controls		✓		✓		✓		✓	

Source: Eurostat (all dependent variables and share of self-employed) and OECD statistics (GDP growth rate, unemployment and labour force participation rate) for all EU countries and the UK, all years available from 2005-2021.

Notes: Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column in each panel represents a different regression. The variable "depression" is equal to 1 if the growth rates of two consecutive periods are below a quarter of a standard deviation of the average growth rate of the country. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed.

Table 5.3 displays the results of two types of specifications (one with two lags and no further controls and one with two lags and all other controls) for the other eight available poverty indicators (with a sufficient number of years available) that have been described and discussed in chapter 4.1 and in Figure 10.24 based on the descriptive time series graphs. Analysing these other poverty indicators next to the indicator of the risk of poverty or social exclusion, provides a more complete picture of

the relationship of the economic situation and the poverty risk by considering varying dimensions of the poverty risk.<sup>13</sup>

In general, the results are similar to the ones of the dependent variable used so far (risk of poverty or social exclusion) with positive and statistically significant effects of a depression on the risk of poverty indicators without controlling for other variables and much lower or non-existent results after including the unemployment rate in the regressions. It is important to note that the poverty threshold (columns (11) and (12)) as well as the transition of unemployment to employment (columns (15) and (16)) are "positive" outcomes in the sense that if they grow the poverty risk decreases or in other words the economic situation of the individuals improves. For one outcome, an economic crisis does not seem to play a large role, namely the in-work at-risk-of-poverty rate (columns (7) and (8)).

# 5.3 Regression analysis including interaction terms

Table 5.4 displays the results of the second part of the regression analysis that includes additional interaction terms of the depression variables and the welfare state types to judge whether certain types of welfare systems have had a moderating role during times of crisis. However, since the business cycle measures are mostly no longer statistically significant when including further control variables, the interaction terms are ex ante not assumed to have a strong influence, although they would still be able to detect any differences between countries. The Eastern European countries are used as a reference group in the estimations. Moreover, the estimations with the dependent variables "risk of poverty rate after social transfers" and "transition unemployment to employment" did not reveal any statistically significant results, whereby they are omitted to avoid overcrowding Table 5.4, although they are available upon request.

The results of these regressions show that only a few coefficients are statistically significant. In general, we do not find clear and robust results; rather, some tendencies can be seen.<sup>15</sup> For a better understanding of the interaction term, we first provide a reading example as follows: the positive and significant coefficient in the second line in column (2) in Table 5.4 (Depression\*Welfare state type Liberal) means that in Liberal welfare state types experiencing a depression the risk of poverty is significantly higher compared to Post-Socialist welfare state types experiencing a depression, which also have a positive but non-significant coefficient (coefficient "Depression" in the first line in column (2)).

Turning to the discussion of the results, we find that the non-lagged coefficient of a depression shows some opposite tendencies in Liberal welfare states compared to Post-Socialist welfare states (first two rows in column (3) and (4)) where Liberal welfare states tend to actually reduce the poverty risk compared to an increased poverty risk in the Post-Socialist model. However, in columns (2) and (6), the poverty risk before social transfers and the poverty threshold, directions for Liberal and Eastern European welfare states are the same, but significantly increased in Liberal welfare states. The first two lines in column (7) show a higher risk for low work intensity in Liberal countries than in Central and Eastern European countries, whose coefficient is even negative, but not significant. These results comparing Liberal to Post-Socialist welfare state types are therefore rather mixed. Results in columns (1), (3) and (5) for the two-lagged depression variable show that Continental and Nordic

Regressions with the dependent variable of minimum income coverage based on EU SILC microdata were also performed, but are not shown due to a rather low reliability relating to a shorter time series available (the longest available time series spans the years 2014-2020) and a relatively large number of missing data.

There is usually no clear 'right' or 'wrong' in what reference group should be used. In the end, only the comparisons would change. We decided to use a large reference group to avoid any identification problems of the regression model and a group that is supposedly "in between" the other welfare state types regarding the relationship between the economic situation and the poverty risk (see chapter 0).

<sup>15</sup> Estimations including only one lag instead of two reveal just as much or even less statistically significant coefficients.

welfare states have a lower poverty risk after a depression compared to Post-Socialist welfare states. Mediterranean welfare state types have a lower poverty risk when experiencing a depression regarding the AROPE outcome (column (1)) and the severe material deprivation rate (column (3)), but a higher in-work-at-poverty-risk after a depression long ago (last line in column (4)) compared to Post-Socialist countries.

Table 5.4 Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with welfare state type

		Dependent variable:							
	Risk of poverty or social exclusion (age 16-64)	At risk of poverty rate before social transfers (age 16-64)	Severe material deprivation rate (age 16- 64) (3)	In-work at- risk-of- poverty-rate employed (age 18-64) (4)	Relative poverty gap (age 16-64)	Poverty threshold (couple with two children, PPS) (6)	Households with very low work intensity, % of population less than 60 (7)		
Depression	0.743*	0.382	0.506	0.446**	-0.741	-85.404	-0.208		
Boprossion	(0.379)	(0.307)	(0.434)	(0.225)	(0.562)	(171.785)	(0.224)		
Depression*	-1.106	2.174***	-3.235***	-1.334**	-1.356	-797.513**	3.325***		
Welfare state type Liberal	(0.886)	(0.699)	(1.022)	(0.528)	(1.292)	(391.002)	(0.475)		
Depression*	-0.321	0.371	-1.100	-0.272	1.159	-44.600	0.633		
Welfare state type Continental	(0.701)	(0.574)	(0.802)	(0.409)	(1.005)	(299.027)	(0.407)		
Depression*	-0.668	0.175	-0.477	-0.301	-0.138	498.028	0.714		
Welfare state type Nordic	(0.773)	(0.618)	(0.887)	(0.449)	(1.130)	(340.499)	(0.452)		
Depression*	-1.246**	-0.536	-1.392**	-0.646*	0.476	-277.970	0.071		
Welfare state type Mediterranean	(0.581)	(0.469)	(0.671)	(0.345)	(0.854)	(264.223)	(0.339)		
Depression (1 lag)	-0.014	0.090	0.516	-0.458**	-0.288	-29.198	0.106		
Depression (1 lag)	(0.365)	(0.295)	(0.416)	(0.216)	(0.534)	(160.412)	(0.214)		
Depression (1 lag)*	0.695	0.236	-0.514	0.926*	0.072	-161.463	0.649		
Welfare state type Liberal	(0.848)	(0.698)	(0.978)	(0.506)	(1.233)	(372.239)	(0.522)		
Depression (1 lag)*	0.239	1.039*	-0.600	0.890**	1.272	-308.992	0.330		
	(0.680)		(0.777)						
Welfare state type Continental		(0.550)		(0.398)	(0.977)	(289.380)	(0.393)		
Depression (1 lag)*	-0.010	-0.142	-1.045	0.573	0.860	-233.537	0.115		
Welfare state type Nordic	(0.707)	(0.566)	(0.807)	(0.413)	(1.030)	(309.325)	(0.413)		
Depression (1 lag)*	0.196	0.018	-0.510	0.217	0.977	-353.312	0.278		
Welfare state type Mediterranean	(0.564)	(0.455)	(0.643)	(0.334)	(0.816)	(246.492)	(0.328)		
Depression (2 lags)	1.071***	-0.323	1.094***	-0.037	0.366	-87.279	0.090		
	(0.345)	(0.287)	(0.399)	(0.215)	(0.527)	(160.104)	(0.212)		
Depression (2 lags)*	-0.397	0.221	-0.305	0.046	0.520	-201.383	-0.503		
Welfare state type Liberal	(0.862)	(0.685)	(0.999)	(0.519)	(1.252)	(370.149)	(0.497)		
Depression (2 lags)*	-1.275*	0.545	-1.650**	-0.321	-1.125	-168.935	0.223		
Welfare state type Continental	(0.683)	(0.554)	(0.778)	(0.411)	(0.995)	(293.691)	(0.395)		
Depression (2 lags)*	-1.557**	0.497	-1.692*	-0.070	-2.214**	426.181	0.253		
Welfare state type Nordic	(0.756)	(0.606)	(0.871)	(0.445)	(1.109)	(329.853)	(0.443)		
Depression (2 lags)*	-0.204	0.676	-0.457	0.725**	0.789	-54.259	-0.254		
Welfare state type Mediterranean	(0.547)	(0.451)	(0.640)	(0.338)	(0.841)	(246.368)	(0.323)		
Observations	354	363	354	363	363	363	363		
Dependent variable (1 lag)	✓,	<b>√</b>	✓,	✓.	<b>√</b>	<b>√</b>	<b>√</b>		
Dependent variable (2 lags)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
Unemployment rate	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>		
Unemployment rate (1 lag)	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
Unemployment rate (2 lags)									
Further controls	✓	✓	✓	✓	✓	✓	✓		

Source: Eurostat (all dependent variables and share of self-employed) and OECD statistics (GDP growth rate, unemployment and labour force participation rate) for all EU countries and the UK, all years available from 2005-2021

Notes: Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column represents a different regression. The variable "depression" is equal to 1 if the growth rates of two consecutive periods are below a quarter of a standard deviation of the average growth rate of the country. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed.

Table 5.5 Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with institutional variables

	Dependent variable:						
	At risk of poverty rate before social transfers (age 16-64) (1)	Households with very low work intensity, % of population less than 60 (2)	Risk of poverty or social exclusion (age 16-64) (3)	Severe material deprivation rate (age 16- 64) (4)			
Depression	3.350***	4.511***					
•	(1.118)	(0.914)					
Depression*EPL regular workers	-1.052**	-1.574***					
	(0.431)	(0.354)					
Depression (1 lag)	0.115	0.996					
(3/	(1.163)	(0.957)					
Depression (1 lag)*EPL regular workers	0.058	-0.341					
	(0.447)	(0.371)					
Depression (2 lags)	-0.375	-0.180					
	(1.107)	(0.952)					
Depression (2 lags)*EPL regular workers	0.252	0.096					
(= .a.g, =. = .a.g	(0.432)	(0.370)					
Observations	260	260					
Depression			3.098***	3.430***			
•			(1.077)	(1.258)			
Depression*Social benefits expenditure			-0.119***	-0.157***			
			(0.045)	(0.052)			
Depression (1 lag)			0.563	2.598**			
			(0.986)	(1.145)			
Depression (1 lag)*Social benefits expenditure			-0.019	-0.106**			
			(0.041)	(0.048)			
Depression (2 lags)			3.224***	4.138***			
			(0.919)	(1.075)			
Depression (2 lags)*Social benefits expenditure			-0.118* <sup>*</sup> *	-0.163***			
			(0.039)	(0.046)			
Observations			327	327			
Dependent variable (1 lag)	✓	✓	✓	✓			
Dependent variable (2 lags)	✓	✓	✓	✓			
Unemployment rate	✓	✓	✓	✓			
Unemployment rate (1 lag)	✓	✓	✓	✓			
Unemployment rate (2 lags)	✓	✓	✓	✓			
Further controls	✓	✓	✓	✓			

Source: Eurostat (all dependent variables, social benefits expenditure and share of self-employed) and OECD

statistics (GDP growth rate, unemployeen, labour force participation rate and EPL) for all EU countries and

the UK, all years available from 2005-2021.

Notes: Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Each column represents a different regression. Strictness of employment protection (regular workers). Social benefits expenditure in % of GDP. Year dummy variables are included in all regressions. Further control

variables include the labour force participation rate and the share of self-employed.

Whereas these results do confirm general assumptions about how certain welfare states perform regarding their welfare systems also during a crisis, i.e. suggesting that the Continental and Nordic countries do rather well, the results do not seem robust across different outcomes. They should therefore be handled with strong caution and not be interpreted as systematic relationships. Since the results in the first part of this chapter suggest that the unemployment rate is more relevant in the current context than the cyclical GDP measure, a further analysis interacting the unemployment rate

with the welfare state type was conducted. However, the interaction terms in this analysis are mostly not statistically significant (see Table 10.1 in the appendix). An insufficient number of observations and therefore a lack of statistical power can be a more technical reason for low statistical significance.

Table 5.6 Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with the net replacement rate two months in unemployment

	Dependent variable:							
	At risk of poverty rate before social transfers (age 16-64) (1)	Households with very low work intensity, % of population less than 60 (2)	In-work at- risk-of- poverty-rate employed (age 18-64) (3)	Risk of poverty threshold Single (PPS) (4)	Risk of poverty threshold (couple with two children, PPS) (5)	At risk of poverty rate after social transfers (age 16-64) (6)		
Depression	2.151***	1.824***	0.655	-342.499**	-720.313**			
Боргозолоп	(0.628)	(0.442)	(0.441)	(150.764)	(316.622)			
Depression*	-0.027***	-0.026***	-0.009	5.422**	11.401**			
Net replacement rate 2 months single no children	(0.010)	(0.007)	(0.007)	(2.439)	(5.121)			
Depression (1 lag)	-0.152	0.653	-0.133	-370.713***	-779.221***			
F ( · · · · · · · · · · · · · ·	(0.593)	(0.431)	(0.416)	(139.441)	(292.838)			
Depression (1 lag)*	0.006	-0.007	-0.001	5.522**	11.610**			
Net replacement rate 2 months single no children	(0.010)	(0.007)	(0.007)	(2.249)	(4.723)			
Depression (2 lags)	0.229	-0.170	1.074***	-91.644	-193.108			
	(0.577)	(0.413)	(0.411)	(136.785)	(287.259)			
Depression (2 lags)*	-0.004	0.004	-0.019***	1.578	3.326			
Net replacement rate 2 months single no children	(0.009)	(0.007)	(0.007)	(2.233)	(4.689)			
Observations	352	352	352	352	352			
Depression			1.677***	-321.860	-676.991	1.677***		
			(0.626)	(220.480)	(463.037)	(0.613)		
Depression*			-0.025**	4.464	9.389	-0.023**		
Net replacement rate 2 months couple with children			(0.010)	(3.339)	(7.013)	(0.009)		
Depression (1 lag)			-0.136	-628.059***	-1,320.323***	-0.118		
			(0.589)	(202.172)	(424.573)	(0.570)		
Depression (1 lag)*			-0.001	8.888***	18.687***	0.002		
Net replacement rate 2 months couple with children			(0.009)	(3.079)	(6.467)	(0.009)		
Depression (2 lags)			1.779***	-171.937	-361.346	0.939		
			(0.586)	(203.928)	(428.258)	(0.574)		
Depression (2 lags)*			-0.029***	2.574	5.410	-0.016*		
Net replacement rate 2 months couple with children			(0.009)	(3.146)	(6.606)	(0.009)		
Observations			352	352	352	352		
Dependent variable (1 lag)	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
Dependent variable (2 lags)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
Unemployment rate	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		
Unemployment rate (1 lag) Unemployment rate (2 lags)	<b>~</b>	<b>~</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		
OHEMPROVINERICIALE (Z 1805)	¥	¥	v	Y	¥	¥		

Source:

Eurostat (all dependent variables and share of self-employed) and OECD statistics (GDP growth rate, unemployment, labour force participation rate and net replacement rate) for all EU countries and the UK, all years available from 2005-2021.

Notes:

Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column represents a different regression. Net replacement rate for two months in unemployment for a single without children and a couple with children at 100% of average wage excluding social assistance and housing benefits. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed.

Additional analyses interacting the incidence of a depression with important variables regarding the institutional framework were conducted to complement the welfare state type analysis. These analyses can add insights regarding the buffering effect of specific institutions during or after a crisis period. Table 5.5 shows the results of interacting the incidence of a depression with the strictness of employer protection legislation and social benefits expenditure in percent of GDP, whereas Table 5.6

and Table 5.7 show the results of interaction terms with the net replacement at two or 60 months into unemployment. Only statistically significant results are shown in the tables, so for most or many outcomes no significant interaction term was found. All of these results indicate that a stronger employment protection legislation, a higher net replacement rate and a higher share of social benefit expenditure tend to buffer the effect of a depression, since the interaction terms have a negative sign (therefore decreasing the poverty risk) while the depression coefficient has a positive sign (with reversed signs for the risk of poverty thresholds as shown in columns (4) and (5) in Table 5.6). These findings show that core welfare state and labour market institutions are able to alleviate some of the poverty risk stemming from a bad economic situation.

Moreover, Table 5.7 shows that the net replacement rate at 60 months into unemployment is able to mainly buffer economic crisis periods from the past as mostly the interactions with the two-lagged depression variable are statistically significant. The net replacement rate at two months into unemployment (excluding other types of benefits) rather representing unemployment insurance also has more short-term effects after a depression since also the non-lagged and the one-lagged values are statistically significant (see Table 5.6).

Table 5.7 Arellano-Bond regression results with different dependent variables, depression as business cycle measure and interaction terms with the net replacement rate 60 months in unemployment

	Dependent variable:								
	Risk of poverty or social exclusion	At risk of poverty rate after social transfers	Severe material deprivation rate (age 16-	In-work at- risk-of- poverty-rate employed	Relative poverty gap				
	(age 16-64) (1)	(age 16-64) (2)	(3)	(age 18-64) (4)	(age 16-64) (5)				
	(1)	(2)	(0)	(4)	(0)				
Depression	0.430	0.265	0.280	0.534*	-0.221				
	(0.476)	(0.274)	(0.558)	(0.282)	(0.702)				
Depression*	-0.000	-0.001	-0.013	-0.012	-0.009				
Net replacement rate 60 months single no children	(0.014)	(800.0)	(0.017)	(800.0)	(0.020)				
Depression (1 lag)	-0.477	-0.023	-0.131	-0.667**	0.476				
	(0.449)	(0.259)	(0.522)	(0.267)	(0.667)				
Depression (1 lag)*	0.021	0.001	0.012	0.017**	-0.009				
Net replacement rate 60 months single no children	(0.013)	(0.008)	(0.015)	(800.0)	(0.019)				
Depression (2 lags)	1.424***	0.598**	1.436***	0.668**	1.476**				
(9-/	(0.444)	(0.255)	(0.517)	(0.264)	(0.663)				
Depression (2 lags)*	-0.030**	-0.023***	-0.034**	-0.024***	-0.052***				
Net replacement rate 60 months single no children	(0.014)	(0.008)	(0.016)	(800.0)	(0.020)				
Observations	343	352	343	352	352				
Depression		0.284		0.326	0.161				
		(0.315)		(0.322)	(0.796)				
Depression*		-0.000		-0.003	-0.013				
Net replacement rate 60 months couple with children		(0.005)		(0.005)	(0.013)				
Depression (1 lag)		0.264		-0.486	0.888				
2 op. 000.00. (1. 12g)		(0.300)		(0.305)	(0.758)				
Depression (1 lag)*		-0.004		0.006	-0.012				
Net replacement rate 60 months couple with children		(0.005)		(0.005)	(0.013)				
Depression (2 lags)		0.827***		0.846***	1.625**				
Doprossion (2 lags)		(0.298)		(0.305)	(0.764)				
Depression (2 lags)*		-0.017***		-0.017***	-0.032**				
Net replacement rate 60 months couple with children		(0.005)		(0.005)	(0.013)				
Observations		352		352	352				
Dependent variable (1 lag)	✓	<u>√</u>	✓		<u>√</u>				
Dependent variable (1 lags)	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>				
Unemployment rate	✓	✓	✓	✓	✓				
Unemployment rate (1 lag)	✓	✓	✓	✓	✓				
Unemployment rate (2 lags)	✓	✓	✓	✓	✓				
Further controls	✓	✓	✓	✓	✓				

Source:

Eurostat (all dependent variables and share of self-employed) and OECD statistics (GDP growth rate, unemployment, labour force participation rate and net replacement rate) for all EU countries and the UK, all years available from 2005-2021.

Notes:

Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column represents a different regression. Net replacement rate for 60 months in unemployment for a single without children and a couple with children at 100% of average wage including social assistance and housing benefits. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed.

Several sensitivity checks were performed to check the robustness of the results. We approached the issues regarding the breaks in time series by first omitting 2020 and 2021, when – at least for Germany – there is a critical time series break due to the inclusion of the EU-SILC survey into the Microcensus. Moreover, other countries such as Denmark and Ireland also reported a break in time series, although they seem less relevant in quantitative terms. Second, especially the breaks in time series of the AROPE indicator reported by Bulgaria seem to be quantitatively relatively important in 2008 and 2014 (with year-to-year-changes between 17 to 32 percent compared to equivalent values

from other years commonly below 10 percent). Moreover, since Bulgaria as well as Romania, Croatia and the UK all have a lower number of observations, the estimations were repeated without these countries. Furthermore, the exceptionally high growth rate in Ireland in 2015 is coded as missing in another robustness check.

Table 10.2 and Table 10.3 in the appendix show the results of the robustness checks. In sum, the results shown above are generally robust to the sensitivity checks, although some details slightly changed. For example, the effect of the downturn variable shown in Table 5.2 seems to be driven by one of the Eastern countries (either Bulgaria, Croatia or Romania) since this effect disappeared in the first robustness check (see column (1) and (2)). Moreover, column (2) in Table 10.2 shows that the lags of the binary variable of negative GDP growth remain statistically significant when including the unemployment rate in the estimation, indicating that this type of business cycle measure still identifies some relationship with the poverty risk when controlling for unemployment even in case the three Eastern countries are removed.

Table 10.3 shows the results of the robustness checks of the second part of the analysis, namely including interaction terms with the welfare state types. These results also appear to be robust in general. Only the results of the twice lagged depression variable in the lowest part of the table inhibit a lower statistical significance than in the main results shown in Table 5.4, especially in column (1) when omitting three Post-Socialist countries. This is most likely due to an even lower number of observations since already the main results are based on a rather low number of observations regarding the differentiation by welfare state types and Bulgaria, Croatia and Romania belonging to the reference group and so changing all comparisons of the interaction terms. The fact that these results are not robust according to their statistical significance is not unexpected since small changes in the data might have rather strong effects on the coefficients and/or the standard errors.

#### 5.4 Conclusion

Both the descriptive graphic analysis in section 4.2 above and the descriptive regression analyses in this chapter revealed that there seems to be some relationship between the business cycle and the poverty risk in that a worse economic situation in a country is related to an increased poverty risk. This is robust across different outcome indicators. However, the results also show that the relationship between the unemployment rate and the poverty risk seems to be equally strong or even stronger. The descriptive graphic analysis shows particularly strong relationships between the unemployment rate and poverty risk in Liberal and Southern European welfare states, a medium strong relationship in Central and Eastern European Post-Socialist welfare states and Continental welfare states and a rather weak relationship in Nordic welfare states.

Further regression analyses related to differences between welfare state types show some, but no clear or robust patterns between welfare state types. Exceptions are a few statistically significant coefficients showing that Nordic and Continental welfare state types have a lower poverty risk after a depression than Post-Socialist welfare state types. One reason for these rather mixed results could be (overly) heterogeneous country groups within the clusters. However, additional results indicate an alleviating effect of stronger or more generous protective institutions such as stricter employment protection legislation, a higher net replacement rate and a higher share of social benefit expenditure on the poverty risk. These findings corroborate the assumption that the design of the welfare state plays a role regarding the risk of poverty. Overall, the results from our multivariate analyses are in line with the hypotheses discussed in chapter 3.2. However, given that all results presented here are

based on a relatively low number of observations and a more descriptive rather than causal analysis, the results should be interpreted as tendencies rather than quantifiable effects.<sup>16</sup>

In line with the main finding of this chapter that unemployment shocks are related to an increase in poverty and exclusion risks, and that this relation is mediated by the setup of a) upstream systems such as employment protection and unemployment insurance, and b) MIS and resources mobilised for these systems, the following chapter simulates different unemployment shock scenarios. This allows for the assessment of national welfare states' buffering capacities when confronted with hypothetical, but identical shocks.

Even though we get slightly closer to a causal effect when integrating the lagged values into the regression model, we do not have the possibility to analyze a controlled experiment or the effect of an instrumental variable. Therefore, the effects should <u>not</u> be interpreted in a numerical sense, i.e. we are not able to state that when the unemployment rate rises by 1 percentage point, the poverty risk will increase by, e.g., 0.4 percentage points.

# 6. Simulation results

#### Main findings:

Micro simulations based on EUROMOD are conducted to gain insights into how tax transfer systems in Europe in general and MIS systems in particular perform under comparable shock scenarios.

Nordic and Continental European welfare states provide higher overall social resilience in periods of crisis compared to Post-Socialist, Southern European and to some extent Liberal welfare states.

MIS schemes play an important role in reducing poverty in general. However, their contribution in mitigating increases in poverty and inequality in times of crisis is rather small on average, due to low benefit adequacy.

MIS systems contribute to household income stabilisation in periods of crisis, especially when the effect of macroeconomic shocks lasts longer and leads to more and sudden job losses.

#### 6.1 Model and data

To complement the analysis of the contribution of MIS schemes to social resilience across Europe, we investigate their role in smoothing disposable incomes in two crisis scenarios (see section 6.2). We use the EU-wide tax-benefit model EUROMOD to calculate household disposable incomes (see Sutherland and Figari, 2013; Sutherland, 2018).

EUROMOD is the official microsimulation model of the European Commission and is developed and maintained by the Joint Research Centre (JRC) of the European Commission and the respective national teams. EUROMOD contains the tax and benefit rules present in the EU-27 for different years and takes EU-SILC data as input.

The main stages of the simulations are the following. First, EU-SILC data are read into the model. Subsequently, for each tax and benefit instrument, the model constructs corresponding assessment units, ascertains which are eligible for that instrument and determines the amount of benefit or tax liability for each member of the unit. Finally, after all taxes, social insurance contributions and benefits in question are simulated, disposable income is calculated.<sup>17</sup> As mentioned above (see p. 28), EU-SILC is a harmonised, cross-sectional household micro dataset for the EU Member States provided by Eurostat (2012). It contains rich information about the different income sources (e.g. employment income, capital income, income from self-employment) and household demographics that may influence tax and transfer policies (for, instance marital status, number of children or age).

We make use of the most recent EUROMOD version (I4.0+) and simulate the tax-benefit systems of the year 2020. The simulations are performed using the most recent input data, based on the 2019 EU-SILC wave (income reference year 2018). <sup>18</sup> We apply EUROMOD's add-on to simulate labour market transitions (see section 6.2).

<sup>&</sup>lt;sup>17</sup> EUROMOD simulation results are validated extensively against administrative sources.

<sup>&</sup>lt;sup>18</sup> Since the UK is not included in version I4.0+, we use model version I3.86+ based on 2018 input data for the UK. Comparability to other countries is given as EUROMOD uprates monetary values to fit to the policy year of interest.

## 6.2 Shock scenarios and assumptions

We model two stylised macroeconomic shock scenarios to investigate to what extent MIS systems contribute to social resilience in times of crises. The simulated shocks differ in size, duration and in the socio-demographic structure of the newly unemployed (see the overview in Table 6.1).

First, the small shock scenario is defined as follows: In each country, the unemployment rate increases by one percentage point within one year. The socio-demographic characteristics of the individuals losing their jobs correspond to those that were already unemployed before the shock. This setting can be interpreted as a normal business cycle fluctuation.

Second, in case of the large shock, unemployment rates increase by five percentage points within two years, respectively, and the socio-demographic characteristics of the individuals losing their jobs correspond to those of the working population. This setting represents a deep economic crisis where unemployment hits broad sections of the (working) population.

Importantly – and in contrast to the regression analysis in section 5 – both shocks are comparable across countries, so that differences across countries in terms of crisis resilience can be attributed to differences in the effectiveness of their unemployment insurance systems and their MIS models, rather than differences in the severity of the simulated shock. A comparison of the two shock scenarios allows identifying non-linearities in the cushioning effects of tax-benefit systems. For example, it can be expected that in case of the large shock a larger number of people will receive support from minimum income schemes, not only due to the larger increase in the unemployment rate but also due to the longer duration of the shock implying a higher probability that unemployment insurance benefits will be exhausted over time. The simulation of different sociodemographic structures of the newly unemployed in the two shock scenarios will shed light on the strictness of the eligibility criteria of unemployment insurance systems, with broader coverage implying less pressure on the MIS.

Table 6.1 Comparison of shock scenarios

	Small shock	Large shock
Increase in unemployment rate	One percentage point	Five percentage points
Duration	One year	Two years
Socio-demographic structure of people losing their job	Corresponds to the socio- demographic structure of those already in unemployment	Corresponds to the socio- demographic structure of those in employment

Note that for the analysis of the stabilising effects of MIS systems and the tax-benefit system as a whole, we simulate two variants of the two shocks, respectively (see section 6.3 for details). In variant 1, there is a steady inflow into unemployment over the duration of the shock. In variant 2, the inflow into unemployment occurs in the first month of the shock. The total size of the shock is the same in both variants (one percentage point increase in the unemployment rate in the small shock scenario and five percentage points increase in the large shock scenario). The comparison of the two variants serves to illustrate how the timing of the shock (sustained vs immediate inflow into unemployment) affects the cushioning effect of the tax-benefit system. Importantly, the comparison of these two variants is only relevant in the analysis of the stabilising effects of the tax-benefit system. In all other simulation analyses, we only compare our outcome variables (AROP rate, Gini) pre- and post-shock, i.e. before the shock has hit and after it has materialised.

We control for the duration of the respective shock and thus consider the effect of expiring entitlements to benefits from the unemployment insurance system. Maximum duration of benefit receipt differs substantially across countries from three months in Hungary to a potentially indefinite period in Belgium. In addition, also within countries the maximum duration of unemployment benefit receipt can differ depending on the time in employment or the contribution period (total or within a specific time period before job loss), age and in a few cases reasons for unemployment, residency or previous unemployment benefit receipt. We simulate unemployment benefit duration in each country according to the country-specific rules implemented in EUROMOD which we complement with information from the "Mutual Information System on Social Protection" (MISSOC).

To implement the shock scenarios in EUROMOD we make use of the *Labour Market Adjustment* (LMA) add-on, which offers a framework to model different labour market transitions. Our simulations take into account transitions from employment into unemployment insurance, from employment into MIS systems and from unemployment insurance into MIS systems if unemployment benefits expire.<sup>19</sup> We model the transitions either as a constant inflow over time or as an immediate inflow in the first month of the shock. See explanation in the first paragraph Table **5.1** after Table **6.1**.

In terms of simulated policies, we exclude all measures that were temporarily introduced during the COVID-19 pandemic, regardless whether transfers were paid as governmental support or payments by employers. In other words, our approach ensures that the results presented in this study are free from discretionary fiscal policy measures temporarily implemented in previous crises. This is done on purpose as this study aims at identifying structural strengths and weaknesses of MIS schemes. In addition, temporary compensation schemes, e.g. short-time work allowances, are not taken into account in the simulations as employees receiving temporary compensation are usually not considered as unemployed. By default, EUROMOD offers different aggregates of income concepts that we use to identify benefits that are classified as MIS schemes and as unemployment insurance. We modify these such that non-contributory benefits like unemployment assistance are considered as MIS schemes. At the same time, in a few countries unemployment insurance schemes share some characteristics with minimum income schemes. For instance, in Belgium unemployment insurance benefits in general do not expire but fall to a minimum benefit amount after three years of receipt. However, such benefits are considered as unemployment insurance benefits as it is difficult to disentangle the MIS-like characteristics from the standard unemployment insurance scheme.

The analysis in section 6.3 will focus on different dimensions of social resilience in times of crisis. Before we turn to the simulation of the shock scenarios (c.f. Table 6.1), it is worth shedding light on the question concerning the extent to which the unemployed are covered by unemployment insurance or MIS systems in the status quo, i.e., *before* any (simulated) shock hits the economy. Such analysis may help to rationalize the findings presented in section 6.3, where most analyses focus on the cushioning effects of unemployment insurance and MIS schemes *after* the stylized macroeconomic shocks have materialized.

The coverage rate is a widely used indicator to measure the strictness of eligibility criteria in practice. It measures the effective reach of unemployment insurance and MIS systems, respectively. Figure 6.1 presents the share of unemployed individuals being covered by unemployment insurance (blue bar) or MIS systems (red bar), respectively, in EU Member States and the UK in the baseline simulation without any shock. Note that these simulated coverage rates can slightly differ from coverage rates

Note that we do not simulate transitions from unemployment into employment as for the sake of simplicity we focus on the net inflow into unemployment. First, in a recession labor market flows from employment into unemployment dominate those from unemployment into employment. Second, in case transitions from unemployment into employment were considered, model complexity would increase due to additional assumptions, e.g. on working hours, and because of the need to impute wages for newly or re-employed individuals. This simplification does not distort any of our results.

that are directly calculated with survey data like EU-SILC.<sup>20</sup> For the sake of consistency and comparability with the findings presented in the next section – which are based on simulated shocks (i.e., unemployment benefits and MIS benefits are simulated and not taken from the data) – we focus on these simulated coverage rates.

Figure 6.1 shows that total coverage rates for the unemployed widely differ both across and within the welfare state clusters introduced in chapter 2.4. Overall, the combined coverage rate of unemployment insurance and MIS schemes ranges from roughly 10 percent in Poland to nearly 90 percent in Belgium and Finland. Countries belonging to the Nordic, Continental European and (to a smaller extent) the Liberal cluster have substantially higher total coverage rates than Post-Socialist or Southern European countries.

This general pattern also mostly applies when looking at the coverage rates of MIS systems alone. One exception is Belgium, which has the highest unemployment insurance coverage rate across countries, whereas the MIS coverage rate is relatively small. In the Liberal welfare states of Ireland and the UK, a relatively large share of unemployed individuals is covered by MIS schemes, whereas unemployment insurance systems cover only a small share of the unemployed. This is line with our hypothesis in section 3.2, as upstream systems are less pronounced in these two countries. By contrast, there is roughly an equal share of unemployed individuals being covered by unemployment insurance and MIS schemes in the Nordic welfare states of Denmark and Finland, but also in Continental European countries such as France.

These examples illustrate that analysing MIS schemes in isolation without accounting for upstream systems may yield an incomplete picture of the social resilience provided in the different welfare state clusters. In section 6.4, which draws conclusions from the simulation analysis, we will investigate whether higher coverage rates go hand in hand with various dimensions of social resilience presented in the next sub-section.

<sup>&</sup>lt;sup>20</sup> Reasons for differences are amongst others (non-) take-up issues and data limitations especially in case of simulating unemployment insurance benefits.

100 90 80 70 Coverage Rate in % 60 50 40 30 20 10 DK SF FI CZ SK SI HUHR BG RO PL FF LT LV FR DF NI AT LU BF PT ES IT MT CY EL Coverage Rate UI Coverage Rate MIS

Figure 6.1 Coverage rates of unemployment insurance benefits and minimum income support schemes for unemployed individuals (Baseline (pre-shock) simulation)

Source: Own calculations on basis of EUROMOD simulations

#### 6.3 Dimensions of social resilience

We focus on four dimensions of social resilience: reduction of poverty and social exclusion, income stabilisation, inequality and labour market integration.

#### 6.3.1 Effect on the at-risk-of-poverty rate

First, we analyse how the tax-transfer-systems in general and MIS systems in particular contribute to reducing poverty by calculating at-risk-of-poverty rates in the different scenarios. The at-risk-of-poverty (AROP) rate is defined as the share of individuals that have an equivalised disposable income below the at-risk-of-poverty threshold. This threshold is usually set to 60 percent of the national median household equivalised disposable income. As a sensitivity check, we calculate additional thresholds at 50 and 70 percent of the national median household equivalised disposable income (Kneeshaw et al., 2021). The latter is sometimes referred to as 'precarious wealth' (BMAS, 2021). We calculate the income threshold defining the poverty line before the shock and hold the poverty line constant in the shock scenario to enable a comparison to the status quo.

Table 6.2 shows the standard AROP rate with the 60 percent threshold for both shock scenarios.<sup>21</sup> Before analysing any changes in AROP rates, we note that there is a substantial variation in baseline

Table 6.2 with those reported in external sources like EUROSTAT shows that the AROP rates in

<sup>&</sup>lt;sup>21</sup> A comparison of the AROP rates presented in

(i.e., pre-shock) AROP rates across countries, as shown in column 1 of Table 6.2 and already identified for our smaller sample in section 4.1. Comparing the welfare state clusters, we find lowest (highest) AROP rates in Nordic (Southern European) countries (mean values of 10.3 and 16.5). The ranking of the welfare state clusters mirrors closely the ranking by coverage rates shown in Figure 6.1. A more formal correlation analysis will be presented in section 6.4.

Next, we study how the AROP rates *change* in the simulated shock scenarios. Across all countries, AROP rates increase in both shock scenarios, with increases ranging from 0.05 percentage points in Denmark in the small shock scenario to 5.43 in Lithuania in the large shock scenario (see columns 3 and 5). In a counterfactual scenario without minimum income schemes, AROP rates are substantially higher in the baseline (column 6) as well as in the shock scenarios (columns 7 and 9). This confirms once again the poverty-reducing effect of MIS in both regular periods and periods of crisis.<sup>22</sup>

The AROP rate response to the unemployment shock scenarios is relatively moderate in Continental European, and to some extent in Southern European and Nordic countries, especially Denmark. This is line with findings in chapter 5 and the descriptive part in chapter 4. There are stronger consequences of the shocks in Post-Socialist countries and Anglo-Saxon welfare states, especially in the large shock scenario. Overall, the initial understanding of the crisis resilience of different welfare state types from the sections above still seems largely valid. However, there is some heterogeneity between countries belonging to the same cluster even when hypothetically similar shocks are modelled, e.g. the cushioning effect is much stronger in Denmark than in Sweden or Finland, and larger in Belgium, France and Germany than in Austria or the Netherlands.

To identify the contribution of MIS in reducing increases in AROP rates in the two shock scenarios, we compare the differences between the baseline (pre-shock) and the shock scenario (post-shock), with and without MIS. We calculate the following difference in differences for each country:

$$\Delta_{AROP} = (AROP_{SHOCK}^{a} - AROP_{BASE}^{a}) - (AROP_{SHOCK} - AROP_{BASE})$$

The superscript a represents the counterfactual scenario without MIS. We can interpret the resulting difference  $\Delta_{AROP}$  as indicating by how much more the AROP rates would have increased in a given shock scenario in the absence of any MIS. First, we calculate  $\Delta_{AROP}$  for each country separately and then provide the mean and median values for both shock scenarios and varying at-risk-of-poverty thresholds as described above.

Table **6.3** shows the results of these calculations. Our results suggest that MIS systems prevent a further increase in AROP rates especially during deeper crisis. In other words, AROP rates would have increased more in the absence of MIS in the large shock scenario. For an at-risk-of-poverty threshold of 60 percent, the counterfactual average AROP rate without MIS would not have increased more as compared to the scenario with MIS in the small shock scenario. However, the additional increase in the average AROP rate in the counterfactual scenario without MIS would have amounted to 0.04 percentage points in the large shock scenario.

The average cushioning effect of MIS ( $\Delta_{AROP}$ ) is larger for the lower poverty threshold of 50 percent of median household equivalised disposable income. It amounts to 0.04 percentage points in the small shock scenario and 0.15 percentage points in the large shock scenario. With a lower poverty threshold, more households are below the poverty line in the counterfactual situation without any MIS once the shock has materialised. Symmetrically, the average cushioning effect of MIS is zero at an at-risk-of-poverty threshold of 70 percent. Our result of diminishing effects of MIS systems – the higher the poverty line, the lower the effect of MIS systems in preventing increases in AROP rates –

Table 6.2 are smaller. This is in line with the macro validation conducted by the national teams of EUROMOD suggesting that the model reports smaller AROP rates as well as inequality measures like the GINI. This is possibly due to differences in aggregation methods of income concepts.

Results for the alternative at-risk-of-poverty thresholds can be found in the appendix (section 10 below).

reveals that the benefit generosity of the average MIS system in our sample only suffices to substantially lower the risk of poverty and social exclusion in times of crises if a 50 percent poverty threshold is used.

Why do we observe a larger cushioning effect of MIS in the large shock scenario? There are two countervailing effects at play. On the one hand, the overall inflow into unemployment is larger in the large shock scenario than in the small shock scenario. All else being equal, a larger inflow into unemployment leads to a larger increase in the AROP rate because with a fixed poverty line, a higher share of people will be below the poverty line. On the other hand, in the large shock scenario, the socio-demographic characteristics of the people losing their job correspond to the cross-sectional characteristics of those in employment before the shock materialises. By contrast, in case of the small shock the socio-demographic characteristics of the newly unemployed are similar to the crosssectional characteristics of people already in unemployment before the shock hits. This implies that the share of people losing their job who are covered by the unemployment insurance system is expected to be higher in the large shock scenario. These individuals are less likely to fall below the poverty line compared to individuals who are not covered by the unemployment insurance system. All else being equal, this effect results in a smaller increase in the AROP rate in the large shock scenario. Depending on which of the two factors dominates, the increase in the AROP rate is higher or smaller in the large shock scenario. The results reported in Table 6.3 reveal that the effect of the larger inflow in the large shock scenario is stronger than the effect of the different sociodemographic structure of the people losing their job.

Table 6.2 At-risk-of-poverty rates with 60 percent at-risk-of-poverty threshold

Country	Baseline	Small Shoo	, and the second		Baseline without MIS	Baseline Small Shock without MIS without MIS			Large Shock withou		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	$AROP_B$	$AROP_S$	Δ	$AROP_L$	Δ	$AROP_{R}^{a}$	$AROP_S^a$		AROP <sub>L</sub> a	Δ	
	- 5	· .		- 2		ordic	,				
DK	7.14	7.19	0.05	8.26	1.12	9.84	9.89	0.05	11.45	1.61	
SE	13.16	14.15	0.99	15.68	2.52	13.64	14.68	1.04	16.28	2.64	
FI	10.5	12.67	2.17	13.78	3.28	11.99	13.59	1.6	14.67	2.68	
Mean	10.27	11.34	1.07	12.57	2.31	11.82	12.72	0.9	14.13	2.31	
			_		Post-S	Socialist					
CZ	5.89	6.55	0.66	8.38	2.49	6	6.66	0.66	8.53	2.53	
SK	10.42	10.91	0.49	13.26	2.84	10.63	11.16	0.53	13.62	2.99	
SI	10.21	11.03	0.82	12.5	2.29	11.3	12.14	0.84	13.57	2.27	
HU	24.12	24.5	0.38	26.4	2.28	24.4	24.78	0.38	26.73	2.33	
HR	19.24	19.64	0.4	20.59	1.35	19.36	19.77	0.41	20.71	1.35	
BG	20.03	20.42	0.39	21.76	1.73	21.45	21.85	0.4	23.19	1.74	
RO	21.52	21.81	0.29	22.96	1.44	21.66	21.96	0.3	23.09	1.43	
PL	13.6	14.07	0.47	15.91	2.31	13.78	14.25	0.47	16.09	2.31	
EE	12.78	13.68	0.9	15.14	2.36	13.22	14.11	0.89	15.59	2.37	
LT	16.09	18.29	2.2	21.52	5.43	16.44	18.64	2.2	21.82	5.38	
LV	19.64	20.66	1.02	22.34	2.7	19.82	20.84	1.02	22.53	2.71	
Mean	15.78	16.51	0.73	18.25	2.47	16.19	16.92	0.74	18.68	2.49	
				'	Cont	inental					
FR	12.52	12.74	0.22	14.72	2.2	14.63	14.84	0.21	16.8	2.17	
DE	11.59	11.83	0.24	13.21	1.62	12.21	12.47	0.26	13.89	1.68	
NL	9.15	9.62	0.47	11.18	2.03	11.08	11.58	0.5	13.26	2.18	
AT	12.42	14.2	1.78	15.61	3.19	13.33	15.13	1.8	16.55	3.22	
BE	10.93	11	0.07	11.57	0.64	11.88	11.95	0.07	12.55	0.67	
LU	12.49	13.03	0.54	14.61	2.12	14.39	14.98	0.59	16.54	2.15	
Mean	11.52	12.07	0.55	13.48	1.97	12.92	13.49	0.57	14.93	2.01	
					Sou	thern					
PT	16.66	17.1	0.44	18.97	2.31	17.82	18.28	0.46	20.12	2.3	
ES	20.48	20.64	0.16	23.09	2.61	21.97	22.13	0.16	24.51	2.54	
П	18.55	18.87	0.32	20.16	1.61	19.28	19.6	0.32	20.85	1.57	
MT	13.26	13.82	0.56	15.2	1.94	15.45	16.03	0.58	17.44	1.99	
CY	13.82	14.81	0.99	16.85	3.03	19.22	20.25	1.03	22.44	3.22	
EL	16.14	16.87	0.73	18.58	2.44	17.5	18.27	0.77	19.99	2.49	
Mean	16.49	17.02	0.53	18.81	2.32	18.54	19.09	0.55	20.89	2.35	
					Lit	peral					
IE	11.46	12.52	1.06	13.87	2.41	14.5	15.54	1.04	17.11	2.61	
UK	14.71	15.12	0.41	16.74	2.03	23.36	23.89	0.53	25.67	2.31	
Mean	13.09	13.82	0.74	15.31	2.22	18.93	19.72	0.79	21.39	2.46	
Mean	14.23	14.92	0.69	16.53	2.3	15.72	16.4	0.68	18.06	2.34	
Median	13.21	14.11	0.48	15.645	2.3	14.565	15.33	0.53	16.955	2.31	

Source: Own calculations on basis of EUROMOD simulations

Notes: AROPs are calculated as the percentage of individuals with income under the at-risk-of-poverty threshold. In this table the threshold is defined as 60 percent of the national median household equivalised disposable income. The  $\Delta$  columns show the change in percentage points compared to the respective baseline.

Table 6.3 Effect of MIS on AROP's differences ( $\Delta_{AROP}$ )

	Me	ean	Med	dian
Threshold	Small shock	Large shock	Small shock	Large shock
50%	0.04	0.15	0.02	0.08
60%	0.00	0.04	0.01	0.03
70%	0.00	0.00	0.00	0.01

Source: Own calculations on basis of EUROMOD simulations

Notes: The table reports mean and median values of the additional change in the AROP rate in the counterfactual scenario without any MIS compared to the scenario with MIS:  $\Delta_{AROP} = (AROP_{SHOCK}^a - AROP_{BASE}^a) - (AROP_{SHOCK} - AROP_{BASE}^a)$ , where values with superscript  $\alpha$  represent the counterfactual scenario without MIS. The mean and median values indicate by how much more the AROP rates would have increased in a given shock scenario in the absence of any MIS. Thresholds are 50/60/70% of national median household equivalised disposable income.

#### 6.3.2 Income stabilisation

To analyse the stabilising effect of MIS on incomes, we follow Dolls et al. (2012) and Dolls et al. (2022) and calculate an income stabilisation coefficient for each country. The coefficient specifies to what extent the two simulated shocks are absorbed by tax-transfer systems. The higher the coefficient, the larger is the shock-absorption capacity of the tax-benefit system. Assume market incomes decline by 100 EUR. A coefficient of 0.4 would indicate that disposable incomes only decline by 60 EUR and that 40 percent of the loss in market income is absorbed by the tax-transfer system. The income stabilisation coefficient  $\tau^I$  is formally defined as follows:

$$\tau^{I} = 1 - \frac{\sum_{i} \Delta Y_{i}^{D}}{\sum_{i} \Delta Y_{i}^{M}} = \frac{\sum_{i} (\Delta Y_{i}^{M} - \Delta Y_{i}^{D})}{\sum_{i} \Delta Y_{i}^{M}} = \frac{\sum_{i} \Delta G_{i}}{\sum_{i} \Delta Y_{i}^{M}} = \frac{\sum_{i} (\Delta T_{i} + \Delta S_{i} - \Delta B_{i})}{\sum_{i} \Delta Y_{i}^{M}}$$

, where  $Y_i^D$  is the disposable income of individual i,  $Y_i^M$  her market income and  $G_i$  depicts net governmental intervention.  $G_i$  here comprises direct taxes  $T_i$ , social insurance contributions  $S_i$  and benefits  $B_i$ .

In our study we add a further decomposition of  $B_i$  to separate the effects of minimum income schemes  $MIS_i$  from unemployment insurance schemes  $UI_i$ . The income stabilisation coefficient can then be decomposed as follows:

$$\tau^{I} = \frac{\sum_{i} (\Delta T_{i} + \Delta S_{i} - \Delta U I_{i} - \Delta M I S_{i})}{\sum_{i} \Delta Y_{i}^{M}}$$

 $\tau_{TAX}$ ,  $\tau_{SIC}$ ,  $\tau_{UI}$ ,  $\tau_{MIS}$  and  $\tau_{ResB}$  represent the stabilisation effects stemming from the different components of the tax-transfer system.

In both scenarios, we consider two variants, respectively. In variant 1, there is a steady inflow into unemployment over the duration of the shock (one year in case of the small shock and two years in case of the large shock, see Table 6.1). In variant 2, there is a sudden increase in the unemployment rate as all new unemployed individuals lose their job already in the first month of the shock. These two variants thus differ in the timing of the shock, while the total increase in the unemployment rate is the same in the two variants (one percentage point in case of the small shock and five percentage points in case of the large shock, see Table 6.1). In both variants, we account for the maximum duration of unemployment benefits. These two variants are meant to illustrate the sensitivity of our results with respect to the timing of the shock. In variant 2, more people lose their eligibility for

unemployment benefits in the course of the shock as the maximum duration has been reached. This effect is more prevalent for the large shock with the longer duration compared to the small shock.

The results are presented in Table 6.4,<sup>23</sup> and Figure **6.2** to Figure **6.5** show the decomposition of the income stabilisation coefficients into its components. The corresponding tables can be found in the appendix. Several findings stand out. First, on average income stabilisation coefficients are larger in case of the small shock as compared to the large shock and in variant 2 (immediate inflow into unemployment) as compared to variant 1 (steady inflow into unemployment). The larger cushioning effect of the tax-benefit system in case of the small shock can be explained by the fact that more people lose their unemployment benefits in a prolonged recession. This is exactly what is observed in the large shock scenario, confirming the hypothesis stated in chapter 3.2.

Conversely, for both shock scenarios we find a larger cushioning effect of the tax-benefit system in variant 2 even though the share of people who lose their unemployment benefits is larger in this variant due to the immediate inflow into unemployment. We observe that in variant 1 on average roughly 41 percent of the decline in market income is absorbed by tax-benefit systems in the small shock scenario and roughly 36 percent in the large shock scenario. For variant 2 we observe a cushioning effect of 52 percent in the small shock and 43 percent in the large shock. The reason for the larger stabilisation effect in variant 2 is due to the fact that unemployment benefits are paid longer on average compared to variant 1 with its constant inflow into unemployment during the shock. In other words, unemployment benefits play a larger role in cushioning the shock in variant 2 than in variant 1.

Second, we find considerable heterogeneity in the cushioning effect of the tax-benefit system across countries. Coefficients range from 0.241 for Malta in variant 1 of the large shock scenario to 0.799 in variant 2 of the small shock scenario for Sweden. Again, the stabilisation capacities show some pattern across welfare state types, with more pronounced income stabilisation in Nordic (mean of 0.57 in variant 2 of the large shock) and Continental European countries (mean of 0.56 in variant 2 of the large shock), where longer unemployment insurance benefits absorb a substantial part of the income loss, while these capacities are less developed in Post-Socialist (mean of 0.36 in variant 2 of the large shock) and Liberal welfare states (mean of 0.35 in variant 2 of the large shock). In the latter group, our analysis suggests that MIS play a more central role in the tax-benefit system of the UK as a "safety net of last resort". Mediterranean countries could be divided up again with Portugal, Spain and Italy as 'Southwestern' welfare type on the one hand, where long unemployment benefit duration drives the stabilisation coefficient, and Greece, Cyprus and Malta on the other hand, where MIS tend to play a more pronounced role.

Third, MIS only play a small role in stabilising incomes, while unemployment insurance benefits are the most important income stabiliser in most countries. There are two main reasons for the relatively small stabilising effect of MIS. First, total amounts paid by MIS are substantially lower than benefits from unemployment insurance schemes that are typically calculated as a fraction of previous labour earnings. Second, the fact that entitlements to unemployment insurance benefits expire over time does not necessarily lead to the receipt of benefits from MIS in most EU countries. Most schemes assess eligibility based on total household income or similar aggregate income concepts. Even if one household member loses her labour income, total household income may still be too high for the receipt of MIS.<sup>24</sup> This is emphasized by the fact that in countries where MIS coverage rates for the unemployed are high (see Figure 6.1), the stabilising effects are also relatively low, especially compared to the unemployment insurance benefits. At the same time, section 6.4 will document a

<sup>&</sup>lt;sup>23</sup> Lithuania is excluded from the analysis of the income stabilization coefficient as the stabilizing effects of direct taxes and social insurance contributions could not be simulated.

<sup>&</sup>lt;sup>24</sup> In Germany, for example, only about 30 percent of those unemployed for which entitlement to unemployment insurance benefits expires in the large shock scenario receive MIS afterwards.

positive correlation between total coverage rates of unemployment insurance and MIS schemes on the one hand and income stabilization coefficients on the other hand (c.f. Figure 6.4).

However, we can see various effects of the different shocks on the stabilising effect of MIS systems. As expected, the stabilising effect of MIS is larger in the large shock scenarios due to expiring unemployment insurance benefits. In variant 1 the stabilising effect of MIS amounts to an average of 1.4 percent across all countries in the small shock and roughly 2 percent in the large shock. For variant 2 this effect is more pronounced as with individuals becoming unemployed at the beginning of the shock more people will end up in MIS at the end of the shock. In variant 2 MIS cushions roughly 1.7 percent of the income loss due to unemployment in the small shock and 3 percent in the large shock.

## 6.3.3 Effect on inequality

We also analyse the contribution of minimum income schemes to cushion the increase in inequality in the two shock scenarios. We consider the most common inequality measure, the Gini coefficient. Table 6.5 shows the results. We observe small increases in inequality across all countries in both shock scenarios. For the small shock scenario, we observe an average increase of 0.29 points, while in case of the large shock a minimal higher average increase of 0.91 is found, both in the setting without any MIS. These increases are quite small, even compared to regular year-over-year fluctuations. The contribution of MIS in cushioning increases in the Gini coefficient thus seems to be relatively modest which can be explained by the fact that the Gini places the highest weight on the middle of the income distribution, while MIS play a more important role at the bottom of the income distribution as shown before for their effect on AROP rates (see Table 6.2). An exception are the Liberal welfare states Ireland and UK, where inequality is considerably higher in a setting without MIS, both in the baseline and the shock scenarios. This is in line with MIS systems playing an important role in these countries as compared to unemployment insurance systems, as expressed by much higher MIS coverage rates (see Figure 6.1).

Table 6.4 Income stabilisation coefficients for small and large shock scenario

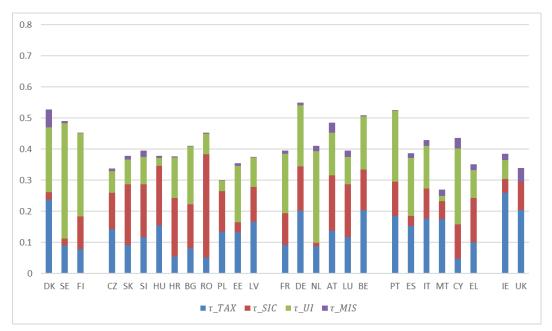
FI         0.453         0.654         0.38         0.437           Post-socialist           CZ         0.337         0.373         0.32         0.338           SK         0.379         0.411         0.333         0.348           SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           Mean         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63	Country		τ <sub>SMALL</sub>		$ au_{LARGE}$		
DK         0.527         0.743         0.517         0.692           SE         0.49         0.799         0.292         0.594           FI         0.453         0.654         0.38         0.437           Post-socialist           CZ         0.337         0.373         0.32         0.338           SK         0.379         0.411         0.333         0.348           SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.336           Mean         0.37         0.45         0.33         0.36           Mean         0.37         0.45         0.33         0.33           Mean         0.37         0.45         0.33         0.34           Mean </th <th></th> <th>Variant 1</th> <th>Variant 2</th> <th>Variant 1</th> <th>Variant 2</th>		Variant 1	Variant 2	Variant 1	Variant 2		
SE         0.49         0.799         0.292         0.594           FI         0.453         0.654         0.38         0.437           Post-socialist           CZ         0.337         0.373         0.32         0.338           SK         0.379         0.411         0.333         0.348           SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.396           LV         0.375         0.413         0.327         0.33         0.36           Mean         0.37         0.45         0.33         0.36           Mean         0.548         0.726         0.531         0.63			Nordic				
FI         0.453         0.654         0.38         0.437           Mean         0.49         0.73         0.4         0.57           Post-socialist           CZ         0.337         0.373         0.32         0.338           SK         0.379         0.411         0.333         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           BG         0.41         0.53         0.303         0.339           BC         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           NL         0.412         0.573         0.341         0.308           <	DK	0.527	0.743	0.517	0.692		
Mean         0.49         0.73         0.4         0.57           Post-socialist           CZ         0.337         0.373         0.32         0.338           SK         0.379         0.411         0.333         0.348           SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.286         0.33           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           NL         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308 <t< td=""><td>SE</td><td>0.49</td><td>0.799</td><td>0.292</td><td>0.594</td></t<>	SE	0.49	0.799	0.292	0.594		
Post-socialist           CZ         0.337         0.373         0.32         0.338           SK         0.379         0.411         0.333         0.348           SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.73           DE         0.548         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.41         0.30           AT	FI	0.453	0.654	0.38	0.437		
CZ         0.337         0.373         0.32         0.338           SK         0.379         0.411         0.333         0.348           SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           Continental           FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467	Mean	0.49	0.73	0.4	0.57		
SK         0.379         0.411         0.333         0.348           SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           BG         0.41         0.53         0.303         0.339           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.4			Post-socia	ılist			
SI         0.396         0.468         0.378         0.403           HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.339           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           Mean         0.37         0.45         0.33         0.36           PE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           U         0.44         0.662         0.431         0.551           Mean         0.47         0.64         0.44	CZ	0.337	0.373	0.32	0.338		
HU         0.376         0.498         0.351         0.393           HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           Continental           FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.431         0.521           Mean         0.47         0.64         0.44         0.56           ES	SK	0.379	0.411	0.333	0.348		
HR         0.376         0.498         0.351         0.393           BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Mean         0.37         0.45         0.33         0.36           Continental           FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.431         0.521           Mean         0.47         0.64         0.44         0.56           ES         0.338         0.582         0.347         0.561 <t< td=""><td>SI</td><td>0.396</td><td>0.468</td><td>0.378</td><td>0.403</td></t<>	SI	0.396	0.468	0.378	0.403		
BG         0.41         0.53         0.303         0.339           RO         0.436         0.454         0.286         0.33           PL         0.302         0.325         0.285         0.29           EE         0.355         0.506         0.323         0.399           LV         0.375         0.413         0.32         0.336           Continental           FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.431         0.521           Mean         0.47         0.64         0.44         0.56           ES         0.388         0.582         0.347         0.512           ES         0.338         0.585         0.43         0.437           MT         0.271         0.283         0.41         0.255 <tr< td=""><td>HU</td><td>0.376</td><td>0.498</td><td>0.351</td><td>0.393</td></tr<>	HU	0.376	0.498	0.351	0.393		
RO       0.436       0.454       0.286       0.33         PL       0.302       0.325       0.285       0.29         EE       0.355       0.506       0.323       0.399         LV       0.375       0.413       0.32       0.336         Continental         FR       0.396       0.721       0.377       0.73         DE       0.548       0.726       0.531       0.63         NL       0.412       0.573       0.341       0.308         AT       0.487       0.537       0.462       0.467         BE       0.508       0.637       0.519       0.727         LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         ES       0.388       0.582       0.347       0.542         ES       0.388       0.582       0.479       0.542         ES       0.388       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL	HR	0.376	0.498	0.351	0.393		
PL       0.302       0.325       0.285       0.29         EE       0.355       0.506       0.323       0.399         LV       0.375       0.413       0.32       0.336         Mean       0.37       0.45       0.33       0.36         Continental         FR       0.396       0.721       0.377       0.73         DE       0.548       0.726       0.531       0.63         NL       0.412       0.573       0.341       0.308         AT       0.487       0.537       0.462       0.467         BE       0.508       0.637       0.519       0.727         LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         Southern         PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33 <td>BG</td> <td>0.41</td> <td>0.53</td> <td>0.303</td> <td>0.339</td>	BG	0.41	0.53	0.303	0.339		
EE       0.355       0.506       0.323       0.399         LV       0.375       0.413       0.32       0.336         Mean       0.37       0.45       0.33       0.36         Continental         FR       0.396       0.721       0.377       0.73         DE       0.548       0.726       0.531       0.63         NL       0.412       0.573       0.341       0.308         AT       0.487       0.537       0.462       0.467         BE       0.508       0.637       0.519       0.727         LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         Southern         PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358	RO	0.436	0.454	0.286	0.33		
LV       0.375       0.413       0.32       0.336         Mean       0.37       0.45       0.33       0.36         Continental         FR       0.396       0.721       0.377       0.73         DE       0.548       0.726       0.531       0.63         NL       0.412       0.573       0.341       0.308         AT       0.487       0.537       0.462       0.467         BE       0.508       0.637       0.519       0.727         LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         Southern         PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         Liberal <td>PL</td> <td>0.302</td> <td>0.325</td> <td>0.285</td> <td>0.29</td>	PL	0.302	0.325	0.285	0.29		
Mean         0.37         0.45         0.33         0.36           Continental           FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.431         0.521           Mean         0.47         0.64         0.44         0.56           Southern           Southern           PT         0.526         0.742         0.479         0.542           ES         0.388         0.582         0.437         0.561           IT         0.43         0.585         0.43         0.437           MT         0.271         0.283         0.241         0.255           CY         0.436         0.454         0.322         0.358           Mean         0.4         0.52         0.35         0.41 <th col<="" td=""><td>EE</td><td>0.355</td><td>0.506</td><td>0.323</td><td>0.399</td></th>	<td>EE</td> <td>0.355</td> <td>0.506</td> <td>0.323</td> <td>0.399</td>	EE	0.355	0.506	0.323	0.399	
Continental           FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.431         0.521           Mean         0.47         0.64         0.44         0.56           Southern           PT         0.526         0.742         0.479         0.542           ES         0.388         0.582         0.347         0.561           IT         0.43         0.585         0.43         0.437           MT         0.271         0.283         0.241         0.255           CY         0.436         0.454         0.286         0.33           EL         0.351         0.445         0.322         0.358           Mean         0.4         0.52         0.35         0.41           Liberal           IE         0.385 </td <td>LV</td> <td>0.375</td> <td>0.413</td> <td>0.32</td> <td>0.336</td>	LV	0.375	0.413	0.32	0.336		
FR         0.396         0.721         0.377         0.73           DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.431         0.521           Mean         0.47         0.64         0.44         0.56           Southern           PT         0.526         0.742         0.479         0.542           ES         0.388         0.582         0.347         0.561           IT         0.43         0.585         0.43         0.437           MT         0.271         0.283         0.241         0.255           CY         0.436         0.454         0.286         0.33           EL         0.351         0.445         0.322         0.358           Mean         0.4         0.52         0.35         0.41           Liberal           IE         0.385         0.421         0.362 <t< td=""><td>Mean</td><td>0.37</td><td>0.45</td><td>0.33</td><td>0.36</td></t<>	Mean	0.37	0.45	0.33	0.36		
DE         0.548         0.726         0.531         0.63           NL         0.412         0.573         0.341         0.308           AT         0.487         0.537         0.462         0.467           BE         0.508         0.637         0.519         0.727           LU         0.48         0.662         0.431         0.521           Mean         0.47         0.64         0.44         0.56           Southern           PT         0.526         0.742         0.479         0.542           ES         0.388         0.582         0.347         0.561           IT         0.43         0.585         0.43         0.437           MT         0.271         0.283         0.241         0.255           CY         0.436         0.454         0.286         0.33           EL         0.351         0.445         0.322         0.358           Mean         0.4         0.52         0.35         0.41           Liberal         Liberal           IE         0.385         0.421         0.362         0.369           UK         0.339         0.331         0.304 </td <td></td> <td></td> <td>Continen</td> <td>tal</td> <td></td>			Continen	tal			
NL       0.412       0.573       0.341       0.308         AT       0.487       0.537       0.462       0.467         BE       0.508       0.637       0.519       0.727         LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         Southern         PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393 </td <td>FR</td> <td>0.396</td> <td>0.721</td> <td>0.377</td> <td>0.73</td>	FR	0.396	0.721	0.377	0.73		
AT       0.487       0.537       0.462       0.467         BE       0.508       0.637       0.519       0.727         LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         Southern         PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393	DE	0.548	0.726	0.531	0.63		
BE       0.508       0.637       0.519       0.727         LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         Southern         PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393	NL	0.412	0.573	0.341	0.308		
LU       0.48       0.662       0.431       0.521         Mean       0.47       0.64       0.44       0.56         Southern         PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393	AT	0.487	0.537	0.462	0.467		
Mean         0.47         0.64         0.44         0.56           Southern           PT         0.526         0.742         0.479         0.542           ES         0.388         0.582         0.347         0.561           IT         0.43         0.585         0.43         0.437           MT         0.271         0.283         0.241         0.255           CY         0.436         0.454         0.286         0.33           EL         0.351         0.445         0.322         0.358           Mean         0.4         0.52         0.35         0.41           Liberal           IE         0.385         0.421         0.362         0.369           UK         0.339         0.331         0.304         0.324           Mean         0.36         0.38         0.33         0.35           Median         0.396         0.502         0.344         0.393	BE	0.508	0.637	0.519	0.727		
Southern           PT         0.526         0.742         0.479         0.542           ES         0.388         0.582         0.347         0.561           IT         0.43         0.585         0.43         0.437           MT         0.271         0.283         0.241         0.255           CY         0.436         0.454         0.286         0.33           EL         0.351         0.445         0.322         0.358           Mean         0.4         0.52         0.35         0.41           Liberal           IE         0.385         0.421         0.362         0.369           UK         0.339         0.331         0.304         0.324           Mean         0.36         0.38         0.33         0.35           Median         0.396         0.502         0.344         0.393	LU	0.48	0.662	0.431	0.521		
PT       0.526       0.742       0.479       0.542         ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393	Mean	0.47	0.64	0.44	0.56		
ES       0.388       0.582       0.347       0.561         IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393			Souther	n			
IT       0.43       0.585       0.43       0.437         MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393	PT	0.526	0.742	0.479	0.542		
MT       0.271       0.283       0.241       0.255         CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393	ES	0.388	0.582	0.347	0.561		
CY       0.436       0.454       0.286       0.33         EL       0.351       0.445       0.322       0.358         Mean       0.4       0.52       0.35       0.41         Liberal         IE       0.385       0.421       0.362       0.369         UK       0.339       0.331       0.304       0.324         Mean       0.36       0.38       0.33       0.35         Median       0.396       0.502       0.344       0.393	IT	0.43	0.585	0.43	0.437		
EL     0.351     0.445     0.322     0.358       Mean     0.4     0.52     0.35     0.41       Liberal       IE     0.385     0.421     0.362     0.369       UK     0.339     0.331     0.304     0.324       Mean     0.36     0.38     0.33     0.35       Median     0.396     0.502     0.344     0.393	MT	0.271	0.283	0.241	0.255		
Mean         0.4         0.52         0.35         0.41           Liberal           IE         0.385         0.421         0.362         0.369           UK         0.339         0.331         0.304         0.324           Mean         0.36         0.38         0.33         0.35           Median         0.396         0.502         0.344         0.393	СҮ	0.436	0.454	0.286	0.33		
Liberal           IE         0.385         0.421         0.362         0.369           UK         0.339         0.331         0.304         0.324           Mean         0.36         0.38         0.33         0.35           Median         0.396         0.502         0.344         0.393	EL	0.351	0.445	0.322	0.358		
IE     0.385     0.421     0.362     0.369       UK     0.339     0.331     0.304     0.324       Mean     0.36     0.38     0.33     0.35       Median     0.396     0.502     0.344     0.393	Mean	0.4	0.52	0.35	0.41		
UK     0.339     0.331     0.304     0.324       Mean     0.36     0.38     0.33     0.35       Median     0.396     0.502     0.344     0.393			Liberal				
Mean         0.36         0.38         0.33         0.35           Median         0.396         0.502         0.344         0.393	IE	0.385	0.421	0.362	0.369		
Median 0.396 0.502 0.344 0.393	UK	0.339	0.331	0.304	0.324		
	Mean	0.36	0.38	0.33	0.35		
Mean 0.406 0.523 0.356 0.428	Median	0.396	0.502	0.344	0.393		
	Mean	0.406	0.523	0.356	0.428		

Source: Own calculations on basis of EUROMOD simulations

Variant 1: steady inflow into unemployment over the duration of the shock.

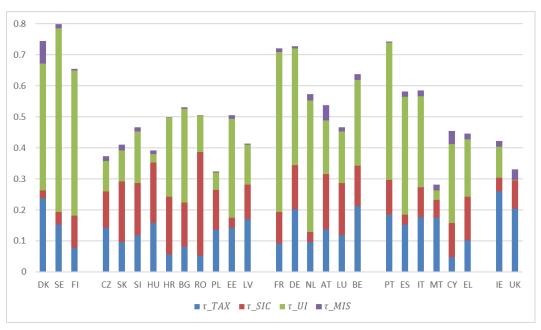
Variant 2: sudden increase in unemployment, new unemployed lose job in the first month of the shock.

Figure 6.2 Decomposition of income stabilisation coefficient in small shock scenario (variant 1)



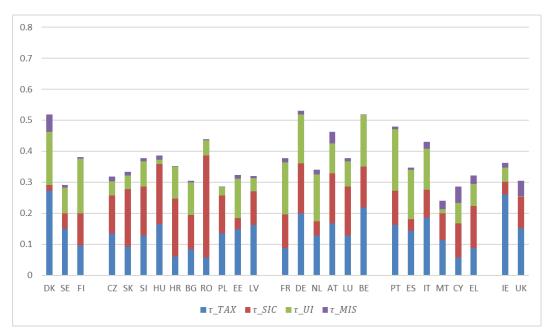
Source: Own calculations on basis of EUROMOD simulations

Figure 6.3 Decomposition of income stabilisation coefficient in small shock scenario (variant 2)



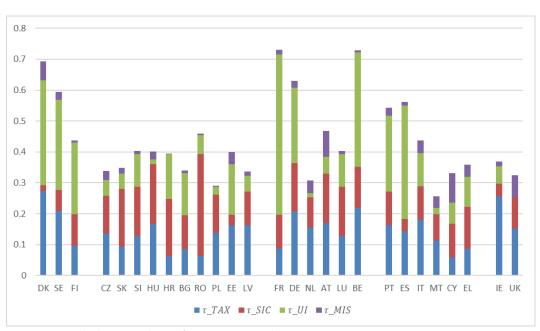
Source: Own calculations on basis of EUROMOD simulations

Figure 6.4 Decomposition of income stabilisation coefficient in large shock scenario (variant 1)



Source: Own calculations on basis of EUROMOD simulations.

Figure 6.5 Decomposition of income stabilisation coefficient in large shock scenario (variant 2)



Source: Own calculations on basis of EUROMOD simulations.

Table 6.5 Gini coefficients across EU Member States

Country	Baseline	Small	Large	Baseline	Small Shock	Large Shock				
		Shock	Shock	without MIS	without MIS	without MIS				
	Nordic									
DK	22.1	22.11	22.41	24.08	24.1	24.9				
SE	24.77	25.11	25.6	25.82	26.27	26.85				
FI	24.63	25.37	25.53	25.68	26.42	26.69				
Mean	23.83	24.2	24.51	25.19	25.6	26.15				
			P	ost-socialist						
CZ	21.75	21.97	22.55	21.86	22.13	22.82				
SK	21.87	22.06	22.92	22.19	22.43	23.36				
SI	22.68	22.92	23.08	23.79	24.17	24.41				
HU	29.74	29.89	30.68	30.1	30.26	31.16				
HR	29.56	29.67	29.81	29.98	30.12	30.27				
BG	38.86	38.93	38.91	39.46	39.54	39.57				
RO	31.37	31.43	31.65	31.58	31.66	31.93				
PL	27.82	27.98	28.53	27.95	28.13	28.69				
EE	26.33	26.57	26.94	26.81	27.12	27.6				
LT	31.3	32.44	34.71	31.71	32.92	35.21				
LV	33.58	33.89	34.21	33.78	34.11	34.48				
Mean	28.62	28.89	29.45	29.02	29.33	29.95				
			(	Continental						
FR	28.7	28.75	29.46	29.69	29.76	30.67				
DE	25.62	25.67	26.19	26.87	26.96	27.62				
NL	25.1	25.3	25.89	26.54	26.79	27.47				
AT	25.33	25.81	26.16	26.83	27.61	28.29				
BE	22.68	22.67	22.78	23.2	23.19	23.32				
LU	25.63	25.77	25.97	27.6	27.91	28.47				
Mean	25.51	25.66	26.08	26.79	27.04	27.64				
				Southern						
PT	32.52	32.66	33.15	33.49	33.69	34.4				
ES	31.36	31.4	32.26	32.8	32.85	33.84				
Π	30.46	30.55	31	31.43	31.55	32.1				
МТ	26.7	26.7	27.11	27.67	27.7	28.23				
CY	31.09	31.32	31.7	33.15	33.58	34.24				
EL	30.28	30.51	31.12	31.55	31.87	32.67				
Mean	30.4	30.52	31.06	31.68	31.87	32.58				
				Liberal						
IE	29.88	30.23	30.47	31.82	32.4	32.72				
UK	30.4	30.51	31.08	35.11	35.3	36.19				
Mean	30.14	30.37	30.78	33.47	33.85	34.46				
Mean	27.93	28.15	28.64	29.02	29.31	29.93				

Source: Own calculations on basis of EUROMOD simulations.

## 6.3.4 Effect on labour market integration

To investigate the role of MIS for labour market integration, we calculate participation tax rates (PTRs) for each member state. PTRs can be interpreted as the proportion of additional income lost due to higher taxes and social insurance contributions and lower benefits resulting from the transition from unemployment to employment. In formal terms, the participation tax rate is defined as follows:

$$PTR_i = 1 - \frac{Y_h^W - Y_h^U}{E_i}$$

Where  $E_i$  represents the gross employment income of individual i when in work,  $Y_h^W$  disposable household income when in work and  $Y_h^U$  disposable household income when individual i is unemployed. We restrict our analysis to employees without any self-employment income, households with two earners at most as well as individuals between 18 and 65.

In general, PTRs can be calculated as short- and long-term PTRs. We focus on long-term PTRs – i.e., when entitlement to unemployment insurance benefits is mostly expired – as we aim to investigate the effect of minimum income schemes on work incentives at the extensive margin<sup>25</sup>.

In our analysis, we closely follow the approach by Jara et al. (2020) and conduct simulations for situations in which individuals are in and out of employment. We calculate PTRs by moving individuals currently in employment into unemployment. We set their employment income to zero but hold the employment income of a potential second earner in the household constant. Finally, the new disposable income of the household is simulated. We repeat this procedure also for the second earner, setting his or her employment income to zero while holding it constant for the first earner. We follow this approach for two reasons. First, this scenario is more realistic compared to a scenario where both household earners become unemployed. By construction, we would underestimate PTRs as  $Y_h^U$  would be considerably lower. Second, by moving individuals currently in employment into unemployment and simulating their work incentives, we capture a larger part of the labour force than if we only simulated work incentives for the currently unemployed. With the latter approach simulating transitions into employment for those who are currently unemployed, we would need to make strong assumptions concerning their wages and hours worked. This information is readily available for those in employment for whom we calculate participation tax rates, i.e., we do not need to make arbitrary assumptions which might bias our results in one direction or the other.

In addition to setting earnings to zero, we make further adjustments to the data, in particular we set hours worked and months in employment to zero, such that our simulation resembles a situation of long-term unemployment for each individual. This is done as our analysis focuses on work incentives stemming from MIS systems.

Table 6.6 shows the mean and median values of long-term PTRs for EU Member States and the UK. Long-term PTRs range from 52 percent in Denmark to 19 percent in Poland. In contrast to the other dimensions of social resilience, differences in long-term PTRs across welfare state clusters are not that pronounced. However, we observe relatively high PTRs in countries of the Continental (mean of 40 percent), Liberal (mean of 38 percent) and Nordic type (mean of 41 percent) and relatively small PTRs in Southern European (mean of 30 percent) and Post-Socialist countries (mean of 30 percent), whereby the latter is characterised by substantial within-group variation. Higher rates are typically interpreted as indicating low incentives to take up work. The reason is that a higher share of gross employment income is taxed away and a higher portion of benefits is lost.

The incentives of different elements of the tax-transfer system – with our focus being on working incentives stemming from minimum income schemes – can be investigated by decomposing the

<sup>&</sup>lt;sup>25</sup> We restrict individual PTRs to lie between 0 and 150% following Jara et al. (2020).

## Simulation results

long-term PTRs. Figure 6.6 shows the decomposition into the effects of taxes, social insurance contributions (SSC), unemployment insurance benefits (UI), MIS and other benefits such as family or housing benefits.

Table 6.6 Long-term participation tax rates across EU Member States in %

Country	Mean	Median	
	Nordic		
DK	51.88	46.25	
SE	32.52	27.46	
FI	38.25	34.9	
Mean	40.88	36.2	
	Post-socialist		
CZ	31.29	30.69	
SK	26.85	27.25	
SI	39.61	36.29	
HU	35.81	34.5	
HR	26.97	24.85	
BG	23.83	22.4	
RO	42.82	41.5	
PL	18.91	24.59	
EE	24.07	20.59	
LV	29.53	28.22	
LT	35.56	36.51	
Mean	30.48	29.76	
	Continental		
FR	38.28	34.5	
DE	42.57	41.2	
NL	30.17	28.71	
AT	40.32	37.1	
LU	43.89	43.59	
BE	44.99	46.25	
Mean	40.04	38.56	
	Southern		
PT	30.22	27.44	
ES	26.55	23.1	
IT	38.25	32.27	
MT	25.58	22.51	
СУ	30.29	23.71	
EL	28.73	25.66	
Mean	29.94	25.78	
	Liberal		
IE	41.52	42.44	
UK	35.3	31.91	
Mean	38.41	37.18	
Mean	34.09	32.01	
Median	33.91	31.3	

Source: Own calculations on basis of EUROMOD simulations.

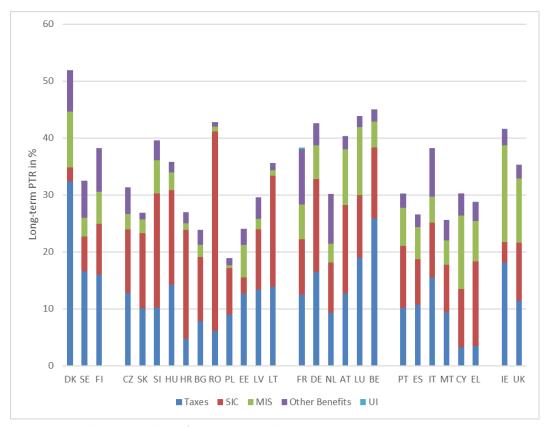


Figure 6.6 Decomposition of long-term participation tax rates across EU Member States

Source: Own calculations on basis of EUROMOD simulations.

The decomposition shows that taxes and social insurance contributions are the most relevant components of PTRs. The effect of paying higher taxes when taking up work is especially pronounced in Denmark and Belgium, while Romania stands out regarding social insurance contributions in both absolute and relative terms. As expected, the role of unemployment insurance benefits is negligible and mostly zero across all countries as we focus on long- rather than short-term PTRs. We only observe a small disincentivising effect of the withdrawal of unemployment insurance benefits in Belgium, France and Portugal, where receipt of unemployment insurance benefits can potentially be very long. Note again that we interpret some elements of unemployment benefits as minimum income support, especially non-contributory unemployment benefits for long-term unemployed like in Finland or Germany, for instance "Arbeitslosengeld II" in Germany.

The role of minimum income schemes for work incentives at the extensive margin differs both across and within welfare state clusters, although general patterns are not that pronounced as in case of the other dimensions of social resilience. In Post-Socialist countries, minimum income schemes explain relatively little of the participation tax rate, with on average 2.5 percentage points (8 percent of total participation rate). Notable exceptions are Slovenia and Estonia. These findings coincide with the analysis of the stabilisation dimension, where we found relatively small effects of minimum income schemes on stabilising incomes in periods of crisis in Post-Socialist countries. In the logic of the PTRs, this translates into low disincentives to work at the extensive margin due to a low benefit withdrawal rate. On the other side of the range are the Liberal welfare states where the withdrawal of MIS accounts for over one-third of the overall participation tax rate on average, making their contribution as important as those of taxes.

In both Ireland and the UK, unemployment insurance benefits play only a minor role in the taxbenefit system as seen in the analysis of the stabilisation dimension and benefit load is mostly passed on to minimum income schemes. In Southern (average of 23 percent of participation tax rate) and Continental European (average of 17 percent of participation tax rate), minimum income schemes also play an important role for work incentives at the extensive margin, although their effect is smaller compared to taxes or social insurance contributions. Furthermore, the within-group variation with respect to MIS PTRs is relatively large, ranging from 12 percent (Italy) to 43 percent (Cyprus) of the total PTR in Southern European countries and from 10 percent (Belgium) to 27 percent (Luxembourg) in Continental European countries. In the Nordic welfare state cluster, MIS PTRs make up 15 percent of total PTRs, with MIS PTRs being larger than those stemming from social insurance contributions.

Turning to other benefits, we observe quite substantial contributions in some countries, e.g. France, the Netherlands or Italy. We interpret these values to be driven by interactions of family or housing benefits with social or unemployment assistance benefits.

We should emphasise that high (low) PTRs do not necessarily mean that work incentives are low (high). Our analysis of PTRs does not account for activation policies which play a crucial role in this context and will be analysed in the case studies more in depth. PTRs rather capture pure monetary incentives to take up work, but not other instruments aimed at fostering labour market integration, especially activation measures like retraining.

## 6.4 Conclusion

Our results from the simulation of stylized unemployment shocks hitting European labour markets suggest that the tax-benefit system – in particular unemployment insurance and minimum income schemes – contributes to social resilience in periods of crises along multiple dimensions. However, the separate contribution of MIS is relatively small, especially in comparison to other components of the tax-transfer system such as the unemployment insurance system.

Across the different welfare state clusters, we can observe that countries belonging to the Nordic and Continental types tend to be more resilient than the other types, a finding that confirms our initial assumptions. This relates to the design of social policies, first considering a strongly developed unemployment insurance system, and second MIS. As a result, those two country clusters exhibit typically strong income stabilisation coefficients and a smaller impact of a shock on poverty risks. This is also true for Denmark and France in particular, which show very strong stabilisation capacities and will be studied in depth in the subsequent section. Shocks translate more strongly into poverty risks and income losses in Post-Socialist countries, in Southern Europe and in Anglo-Saxon welfare states where the countries of the other case studies Poland, Spain and Ireland fit in. In the Anglo-Saxon group, MIS is of greater importance than in the other clusters, thereby achieving a medium overall income stabilisation. Increases in inequality as measured by the Gini coefficient are relatively modest, as is the contribution of MIS to cushion these increases during periods of crisis, except for the Anglo-Saxon group. The findings for the Anglo-Saxon group support one of the hypotheses stated in chapter 3.2, that in case upstream systems, like unemployment insurance benefits, do not work well, MIS contribute to stronger resilience in periods of crisis.

The analysis of the labour market integration dimension based on the calculation of participation tax rates shows that the contribution of MIS to work incentives at the extensive margin differs widely across countries and welfare state types. While disincentives to take up work due to withdrawal of MIS are low in Post-Socialist countries, we observe high contributions of MIS to the participation tax rates in Nordic, Continental and especially Anglo-Saxon welfare states. It is important to note that there is no consensus in the literature about the level at which a PTR is defined 'too' high<sup>26</sup> or disadvantageous for work incentives. Note also that our analysis focused on long- rather than short-

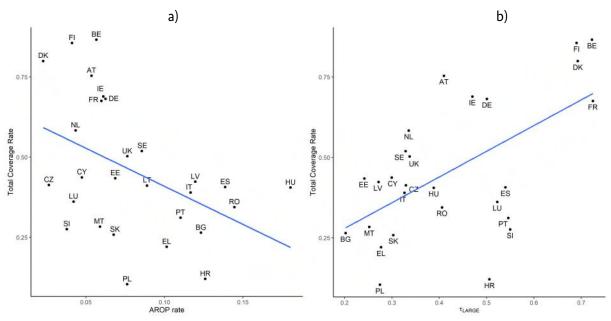
<sup>&</sup>lt;sup>26</sup> See Jara et al. (2020) for a discussion.

term PTRs as our goal was to analyse work incentives stemming from MIS systems. Importantly, PTRs only capture monetary incentives to take up work. Other instruments not captured by the PTRs, in particular activation policies, might be more important to foster employment. Moreover, there might be conflicting goals between the PTRs as an indicator for work incentives and the other measures of social resilience studied here. Even if one agrees that lowering the PTR might be beneficial for work incentives, this would come at the cost of a lower ability to stabilise household incomes and prevent poverty and social exclusion in the event of unemployment.

Finally, we return to the question of how key indicators of social resilience studied in section 6.3 coincide with the coverage rates discussed at the beginning of this chapter (c.f. Figure 6.1). Figure 6.7 portrays the relationship between total coverage rates (MIS + UI) on the one hand and the AROP rate (c.f. section 6.3.1) and the income stabilisation coefficient (c.f. section 6.3.2) on the other hand. In panel a) we document a strong negative correlation between coverage rates and standard AROP rates, whereas panel b) reveals that coverage rates and income stabilisation coefficients are positively correlated (variant 2 of the large shock)<sup>27</sup>. These results forcefully illustrate that higher coverage rates coincide with improved social resilience. A policy conclusion that can be drawn from these findings is that poverty and social exclusion as well as income stabilisation in case of macroeconomic shocks can be tackled by relaxing eligibility criteria for unemployment insurance and MIS systems.

To show the complex functioning of the different institutional arrangements – including the wider setup of upstream systems – qualitative case studies in the following section will look in depth into five selected countries that belong to the different welfare state clusters. This will also allow for a closer tracking of changes in performance and policy reforms over time.

Figure 6.7 Correlation between a) total coverage rates and AROP rates and b) total coverage rates and income stabilisation coefficients



Source: Own calculations on basis of EUROMOD simulations.

<sup>27</sup> A similar, but less pronounced relationship can be seen when comparing coverage rates and GINI coefficients. This can be explained by the fact that the Gini coefficient is more sensitive towards changes in the middle of the income distribution, whereas coverage rates of unemployment insurance and MIS schemes have a larger impact on the bottom of the income distribution.

# 7. Country case studies

## Main findings:

Case studies can show how countries representing the five different welfare state types reacted to the crisis periods experienced since the mid-2000s. They can shed light on the complex relations between upstream protective institutions and MIS. In addition, they are particularly suited to track institutional reforms in detail.

In a comparative view, the distinct traits of the different welfare state models can still be identified. However, the countries included in the sample have undertaken considerable reforms that modify the social policy and labour market arrangements in response to the crisis experiences in the period studied. It seems fair to say that within the given institutional legacy of welfare state models, important steps have been undertaken to move towards more activation-oriented social policies. Where they existed, dualisms in the labour market and the welfare state have been addressed, although national differences are still significant.

The Continental European welfare state in France could provide strong income stabilisation and poverty avoidance over the whole period. This was achieved despite long-term issues with high unemployment and a divided labour market. The dualisms in the labour market and social policy were repeatedly addressed but not solved, which led to the creation of a strong MIS including inwork benefits. However, overcoming fundamental divides in employment and implementing more effective inclusion policies remain pending issues.

Spain was confronted with a massive economic shock in 2008/09 that could only partly be accommodated by the stabilisation mechanisms in UI and rather limited, regional MIS. This led to a lasting deterioration of outcomes and a deep fiscal crisis. The subsequent austerity period brought about steps to reduce severe labour market dualisms – primarily by deregulating dismissal protection – and strengthen social protection. Most important is the introduction of a national MIS in 2020, which is transforming the institutional arrangement towards a more universal system.

Denmark initially provided generous income support primarily through UI, but also MIS as well as comprehensive ALMPs. It was strongly affected by job losses after 2008, which triggered a sequence of austerity-oriented policies that led to cuts in benefits, stricter activation and lower spending on enabling ALMPs. In this sense, it departed to some extent from the Nordic welfare state legacy, but still shows quite favourable overall performance on core outcomes. MIS has become somewhat more fragmented over time with a differential treatment for younger citizens and foreigners.

Poland followed a path of economic catching-up during the observation period. It was much less affected by the 2008 crisis and could use its fiscal capacities to expand social policies, in particular in the area of family support. In addition, the country addressed some of its deep labour market dualisms. Nonetheless, as to be expected from a welfare regime perspective, benefit generosity and coverage are still lagging behind the other cases.

To cope with the Financial Crisis that hit the country most heavily, Ireland had to rely massively on its medium stabilisation capacities that the MIS-centred welfare state could provide. The fiscal tensions of the early-2010s triggered a wave of austerity-oriented reforms regarding social benefits and traditional active labour market policies. This paved the way to embark rather late on activation policies, also with the ultimate aim to reduce welfare expenditure and low working intensity in the working-age population.

This section provides an assessment of the five main countries representing diverse welfare state types regarding their institutional arrangements, reforms and performance when confronted with economic shocks in the 2000s. We have seen from the descriptive first glance (sections 4.1 and 0), the regression results (section 5.2) and the simulation part (section 6) that there are relevant differences between welfare state clusters (as well as within them) that can hardly be interpreted without a closer look into the national systems and their development over time, in response to crisis experiences and related reform episodes. Hence, the main aim of the case studies is to look into the institutional details that influence stabilisation and resilience and see if crises experiences have led to institutional change, which may or may not have had major consequences for the basic structures of these arrangements.

# 7.1 Implementing the case studies

The country case studies are based on three types of information. In a first step, a comprehensive document analysis was carried out via desk research. This focused on

- descriptions of the existing institutional and legal structure of the national social security systems and in particular of the minimum income systems, including information on regulatory details in information systems such as MISSOC, as well as changes in the systems during the period under study;
- available evaluation reports and academic research on the effectiveness and efficiency of national social protection arrangements as a whole, and individual components thereof, and significant changes and reforms of the protection systems;
- existing country case studies and international comparative studies on social security and minimum income schemes covering the selected case study countries.

Statistics and other quantitatively oriented information that are suitable as indicators for the design and performance of social security systems and in particular the MIS schemes were included in this first step. Whenever available, preference was given to time series information covering the period under study, which allows an assessment of changes in national systems or the performance of the systems under different economic conditions. In many dimensions, the indicators derived from EU-SILC as well as the EUROMOD simulation findings above provided important reference points for the interpretation of the country cases. For institutional indicators some reference could be made to standardised, comparative indicators such as the OECD indicators on employment protection or the net replacements rates when in unemployment. In this respect, the case studies relate to the large number of time series for corresponding indicators that are consistently comparable across countries as shown in the descriptive part and used for the multivariate analysis.

However, the information obtained in this way alone was not sufficient to gain a sufficiently differentiated picture of the situation and developments of national arrangements, especially referring to performance in times of crisis or reform episodes. For example, the handling of formal requirements in administrative practice or the motivations for tackling reforms and their consequences cannot be completely or inconsistently clarified based on document and data analysis alone. For this reason, 25 semi-structured online and in-person interviews with country experts were conducted as part of the study. The information obtained through desk research was used to draw up the interview guidelines. For reasons of confidentiality findings from expert interviews are integrated into the main text without making direct reference to them or the individuals consulted.<sup>28</sup>

<sup>&</sup>lt;sup>28</sup> Overall, 25 interviews were carried out in the five countries, involving academic experts, experts at independent research institutes as well as experts working with ministries or think tanks close to government. Most interviews were done online via Zoom, some via email. In some cases, additional material from national sources was handed over to the research team. Sometimes, remaining questions were clarified via email exchange following up the interview.

# 7.2 Structuring the case studies

In order to systematically answer the research questions of this study, case studies require a uniform analysis and evaluation grid to ensure comparability. In this grid, four dimensions are considered essential for assessing the performance of national social minimum income schemes in general and in particular in times of crisis:

- general contextual conditions,
- institutional structures,
- administrative practice,
- performance and achievement of objectives.

Regarding the national contextual conditions for minimum income provision, first of all, the main features of economic development in the selected sub-period under consideration was surveyed to identify phases of economic weakness and in particular crisis-related changes that have had an impact on the need for reliable minimum income benefits and could have revealed the need for reform or brought about adjustments in social policy.

Second, the development of the regulation of the labour market as well as the spread of different types of employment with varying degrees of access to unemployment insurance - i.e. the most important system upstream of social minimum income – are taken into account. In this context, the requirements for the acquisition of entitlements to unemployment benefits, for example, depending on the type of employment contract, minimum employment periods, or lower earnings limits, as well as benefits compensating for loss of income in the case of short-time work, play are particular role. The details of the upstream systems are covered to the extent that they are important for understanding the function and performance capacity of the basic social security system, especially in times of economic crisis.

With reference to institutional structures of minimum income provision, its goals, location and scope in the structure of the respective national welfare state are analysed, for which in part internationally comparable quantitative indicators are also available. In particular, the following is mapped:

- the access criteria, in particular the delimitation of the group of beneficiaries;
- the design of the monetary benefits of social minimum income and supplementary monetary benefits;
- the degree of income security or poverty reduction provided, differentiated according to household types (in particular single persons, single parents, couple families) and living situations;
- the mechanisms for determining and adjusting the level of benefits;
- the activation requirements such as conditionality of benefit receipt with respect to job search or participation in ALMPs, but also the use of work incentives, in particular through inwork benefits and earnings disregard clauses;
- the accessibility of the administration responsible for paying out the transfer benefits, as well as the quality of the accompanying offer of supporting social or activating labour market policy services.

In addition, information on how the administrative practice of social minimum benefits works, i.e. how effectively the responsible institutional structures work, and how existing room for manoeuvre in the framework is used by the responsible actors, was collected to the extent possible, relying also

on expert judgment expressed during the interviews. In this context, the following dimensions were considered particularly relevant:

- the type and intensity of activation in practice
- expenditure on transfer payments and various accompanying services for the purpose of activation; as well as
- the development of the number and structure of benefit recipients.

As shown in the descriptive part above, the performance and achievement of objectives of national MIS schemes can be measured in particular by how well the target groups are actually reached, i.e. by the rates of claiming or not claiming benefits by those formally entitled to them. In addition to differences in access probabilities, benefit levels that are not in line with needs can also prevent the social goals associated with the minimum income scheme from being achieved. Gaps in protection resulting from the interaction of both factors can be determined by the extent to which the average poverty gap (i.e. the distance of disposable income from the at-risk-of-poverty threshold) or the AROP rate is reduced by the social minimum income system, or by the extent to which the protection system contributes to a reduction in the number of households or persons in severe material deprivation that can be interpreted as a proxy to absolute poverty. The combination of different poverty measures is important because it reveals different facets of the performance of social minimum income schemes, as shown in chapter 4. Furthermore, a dynamic perspective was chosen. In this perspective, the performance of a minimum income system can be assessed, based on studies and experts' views, in particular by how well those in need manage to leave benefit receipt and to earn an income that overcomes the risk of poverty or absolute poverty and social exclusion.

This study focussing on crisis responses of upstream and MIS schemes cannot provide an exhaustive description of the complex and ever-changing legal landscape of social protection systems in the five countries. It was necessary to place the main focus on those features of social policy arrangements that were identified as most relevant for the topic of crisis responses in the literature and during the expert talks, which is inevitably selective.

## 7.3 France

France has been identified as a Continental European welfare state with strong income stabilisation capacities regarding unemployment shocks. This finding is confirmed by our simulation analysis in section 6 and shared by the literature (Bargain et al., 2017) as well as expert assessments. While France was affected by a relatively deep economic shock in the late-2000s, as shown in section 4.1, this did not result in a strong negative reaction of (additional) unemployment and a significant deterioration of poverty or exclusion risks.

This section looks into the regulation of the French labour market and the complex social protection system to identify the core institutional features that can explain this outcome. In line with the typologies of welfare states and MIS, we expect a prominent role of both UI und MIS, but also fragmentation, dualisms and coverage gaps in France as a Continental European welfare state and labour market since these divides constitute one of the features used to identify this type. As we can show, much of the French experience is driven by considerable spending on in-work and out-of-work support schemes that were made more generous and accessible over time. Nonetheless, and despite many reform steps that have tackled coverage issues and dualisms, there are persistent issues with labour market integration and labour market segmentation that make entry into stable and better paid jobs quite difficult for labour market entrants and those supposed to leave benefit systems.

## 7.3.1 Phase 1 (pre-2008)

#### 7.3.1.1 Economic environment

In the leadup to the Great Recession, France had long experienced steady GDP growth. Relatively high unemployment figures (approximately 9 percent) were on the decline just before the recession, bottoming out at around 7 percent (Askenazy, 2018). In the late-20<sup>th</sup> century, leading into the 21<sup>st</sup>, French labour market policy tended towards establishing a dualised system of labour, with core, long-term breadwinner workers having greater access to support than other groups (Caune and Theodoropoulous, 2018). This dividing line – which is quite typical for Continental European countries – is crucial in understanding the function of the French policy responses and subsequent reforms over the period studied here.

#### 7.3.1.2 Labour market regulation and unemployment insurance

France has a long-standing dualised labour market with strongly regulated employment relationships (see Figure 7.1 and Figure 7.2 with reference to the OECD aggregate index of employment protection) and a deep divide between permanent and fixed-term contracts. This puts strong emphasis on non-standard forms of work, in particular regarding new and rather short temporary contracts with limited transition possibilities to permanent contracts (Caune and Theodoropoulou, 2018; Palier and Thelen, 2010). However, there was nevertheless a gradual weakening of dismissal protection already over the second half of the 2000s, including for core workers on permanent contracts, e.g. with the 2008 principle of "rupture mutuelle" (dismissal by mutual agreement) (Béthoux and Laroche, 2021; Eichhorst and Marx, 2021). The principle of negotiated employment protection was reinforced again later on, e.g. in 2013. Further, over time France provided better access to unemployment insurance, but also larger flexibility for employers and additional options for temporary employment.

Apart from dual employment protection, France also featured (and largely continues to do so) a traditionally dualised model of unemployment protection and a heavy reliance on subsidised forms of

temporary employment in the area of active labour market policies (Caune and Theodoropoulou, 2018; Clegg, 2011). In fact, since 1984, unemployment benefits had taken the form of a formal two-tier system, combining a) contribution-based unemployment insurance (managed by the social partners) and b) a tax-funded solidarity regime with general MIS and unemployment assistance as described below.

Regarding the French unemployment insurance benefit ARE ("aide au retour à l'emploi"), international comparisons showed relatively generous benefits with a rather high ceiling over this period so that the status of high-wage earners was quite well protected (and continued to be so later on) (see also the rather high UI-related net replacement rates in Figure 7.5, Figure 7.6 and additionally Figure 10.22 and Figure 10.23 in the appendix). Unlike many other European countries, unemployment insurance in France is based on social partner agreements that are to be renewed every two to three years and are formally approved by the state (Clegg, Heins and Rathgeb, 2022). These agreements define the parameters of benefits in the French UI system and the contributions to be raised – all within the legal framework. Experts describe this system as quite pro-cyclical as it does not build up savings from surpluses, but tends to lower contributions in good times while generating deficits and building up debts during and after recessions (see e.g. Cahuc, Carcillo and Landais, 2021).

UI coverage proved to be an issue in France in the 20th century with the rise of non-standard work in a dual labour market. The share of people working in atypical employment situations grew strongly throughout the last decades, which the existing UI schemes were not adequately equipped to handle. Those in atypical employment situations, and those with more minimal contributions to UI funds, tended to lack coverage despite their vulnerability (Caune and Theodoropoulou, 2018). Limited coverage by UI has been a long-standing issue, as expected given the Continental European institutional legacy, and led to subsequent reforms. For example, already in 2008, the social partners negotiated a new formula on the relationship between unemployment insurance contribution periods and benefit durations, which would be related on a one-to-one basis, up to a maximum benefit duration of 24 months (36 months for those over 50). At the same time, the minimum period of affiliation (i.e. the required employment spell) was reduced to only four months in a 28-month reference period. According to Clegg et al. (2022), the "pseudo-actuarial" logic of the one-to-one model resulted in a redistribution of benefit spending from workers with longer contribution records to those in more unstable jobs. This can be seen as one of the first steps to make UI in France less dualising, i.e. more encompassing, by way of better coverage of those not in permanent or long-term employment relationships. However, making UI systems more accessible for short-term contract workers also strengthened incentives for employers and employees to use such a model, indirectly deepening labour market dualization, as experts observe.

Within this policy area there has been a growing focus on activation of the unemployed in France, especially in the 2000s, in line with reform trends in other countries. This included personalised integration plans ("plan d'action personnalisé") and an employment bonus ("prime pour l'emploi"). The "prime pour l'emploi," a tax credit, was designed to encourage entry into the labour market, but take-up was limited due to the design of this programme as an annual tax credit. These reforms both arrived in 2001 and were accompanied by stricter criteria on what could be considered a suitable job ("offre raisonnable d'emploi") (Caune and Theodoropoulou, 2018). In this sense, the 2000s saw a partial turn towards more activation-oriented policies in France.

## 7.3.1.3 Minimum income support systems and reforms

In line with the segmented Continental European welfare state tradition, France relied (and still does so) on a complex and fragmented MIS system, with unemployment assistance ("allocation de solidarité specifique," ASS) and general social assistance ("revenu minimum d'insertion", RMI), the

latter being in place since 1988 and reformed later. Besides that, there are different categorical minimum income benefits, which remains quite in line with the tradition of Continental European welfare states.

ASS was introduced in 1984 and has continued to exist over the whole period. ASS is an unemployment benefit that is means-tested at the individual (not the household) level and taxfunded as part of the 'solidarity' tier of the French social policy. It is available to former employees whose entitlements to UI benefits have expired. Therefore, it requires some prior contribution and employment record of at least five years and depends on the availability for work, although, according to experts, activation of ASS recipients has never been relevant in practice. ASS provides a flat-rate benefit for renewable periods of six months, which depends on the family context and is not earnings-related, unlike the French unemployment insurance benefit ARE (see Eichhorst et al. 2020). Over the whole period, ASS has continued to be a major benefit system for older long-term unemployed. ASS beneficiaries continue to acquire pension entitlements (in contrast to other MIS benefit recipients). As experts observe, there was no political initiative to abolish ASS or to strengthen the activation side of it.

RMI, on the other hand, was the main MIS available to most working-age persons older than 25 years; it was only available for younger people if they had children. This scheme provided benefits to people without income or UI entitlements. Compared to schemes implemented later, RMI was a rather restrictive last safety net as it included a number of stipulations, namely being available for work within three months after the first payment, being out of work, education, or training, and not living in a joint household with an individual who did not fulfil these requirements. RMA – a revised form of RMI, from 2004 onwards – placed more emphasis on the job search requirements. A two-year test of a new MIS scheme – RSA ("Revenu de solidarité active") – was implemented in this period. RSA was intended to replace the existing RMI scheme by 2009 and will be discussed in further detail in the next phase.

## 7.3.1.4 Outcomes

Despite a rather medium level of overall employment rates, a dualised labour market and relatively high unemployment, main outcome variables showed a rather low risk of poverty and social exclusion (see section 4.1) in France at the beginning of our observation. This rather favourable general profile has persisted over the subsequent periods. This points to the fact that the cushioning or redistributive capacities of the French welfare state - in particular the unemployment insurance and the MIS system - were (and are) quite strong while labour market integration (and subsequent transitions to permanent jobs) was less impressive. The problematic situation of young people in the French labour market has been a persistent weakness since.

#### 7.3.2 Phase 2 (2008/09)

#### 7.3.2.1 Economic environment

France experienced two consecutive years with declining GDP in 2008 and 2009, but managed to stabilise economic output by 2010, and reinitiated growth by 2012 (Caune and Theodoropoulou, 2018). Nevertheless, France's 2009 strong public deficit of 7.2 percent resulted in it being faced with the threat of the European Excessive Deficit Procedure. High unemployment and labour market segmentation continued to be France's main issues. This was particularly to the detriment of young people – often in temporary contracts – while adult workers with permanent contracts were better shielded from these losses. Owing to the highly cycle-dependent nature of the French welfare state, in particular UI, the downturn corresponded to a sharp increase in expenditure while funding dried

up (Coquet, 2015). This issue became more prominent even in the subsequent phases and triggered interventions into the governance of French UI later on.

#### 7.3.2.2 Labour market regulation and unemployment insurance

France entered the crisis with a core segment of the labour market protected by relatively strict dismissal protection on the one hand and rather generous UI on the other hand. Though short-time work schemes had long existed in France, they only worked under limited circumstances. These schemes were expanded and rebranded in response to the Great Recession of 2008/09. What was previously known as partial unemployment was reinvented as partial activity ("activité partielle") and long-term partial activity ("activité partielle de longue durée"). The effect of this scheme was limited, impacting a mere 1 percent of the workforce, but the concept of short-time work was critically reinforced, both in 2009 and again in 2013.

France's UI response during the crisis entailed a notable departure from its rather conservative focus on the core working population (Caune and Theodoropoulou, 2018; Clegg, 2011). In 2009, UI was increased for workers with lower contribution records, particularly for young people, paving the way for further reforms in that direction later on. This essentially amounted to a reshuffling of benefits, with increasing generosity to vulnerable workers, and decreasing generosity for core workers, a notable departure from the previous paradigm, but continuing the first steps undertaken in the previous years (Clegg, 2011).

Nonetheless, as the crisis persisted, more of the unemployed saw their benefits expire. As in earlier periods, France's contributory UI scheme was particularly vulnerable to losses of economic viability during the downturn (Coquet, 2015). During the crisis, the amount of funding available to the scheme plummeted, largely as a result of being dependent on contributions from the private sector. Many were not eligible for other schemes, which the introduction of temporary emergency benefits ("aide exceptionelle pour l'emploi") sought to rectify. This was coupled with attempts to improve the coverage of subsidised employment and training, particularly for young people in the spring of 2009 and the early-2010s.

Finally, in France, 2008 was a year of historically significant structural transformation of active and passive labour market policies, affecting both UI and MIS. These important structural reforms were designed before the crisis but happened to be implemented in the crisis years of 2008 and 2009. Therefore, they cannot be classified as crisis responses in a direct sense. Regarding mainly the unemployment insurance tier, the creation of "Pôle Emploi" was the most important reform to overcome the fragmentation between unemployment insurance benefit administration and public employment service governance, an issue that had been on the agenda for many years. This integrated agency consolidated the previous benefit administration (UNEDIC) and the public employment agency (ANPE) into a single organisation. This reform effectively limited the role of social partners in the governance of ALMPs (but not yet in UI itself) as it also removed the social partner-operated sectoral and regional entities that existed within UI (Clegg, Heins and Rathgeb 2022). The main aim of this new agency was to strengthen the capacities for the activation of jobseekers, as well as to reduce the cost of public employment services and making them more efficient (Caune and Theodoropoulou, 2018). According to expert views, the new administrative structure of activation policies has led a more coherent implementation for those in UI receipt, but less so for those in MIS (who are only partly dealt with by "Pôle Emploi", as will be shown further below).

## 7.3.2.3 Minimum income support systems and reforms

The creation of "Pôle Emploi" came more or less in parallel with another substantial reform in the benefit system: On 1st July 2009, the RMI system and the single-parent benefit API were replaced with a new system called the RSA, considered and designed already as a major MIS reform step in the years before. Since then, RSA has been the main general MIS scheme for working age people in France. RSA had been implemented partially during a pilot phase at regional level before the beginning of the 2008/09 crisis. Initially, the system was designed for economically active low-income earners and for the unemployed (Clegg, 2011), reducing the complexity and fragmentation of the French arrangement to some extent. The former group benefited from an effectively permanent and – relative to the preceding "prime pour l'emploi" – more generous in-work benefit ("RSA activité"), while the latter received an out-of-work benefit ("RSA socle") essentially in line with the previous RMI. In contrast to initial plans to restrict RSA to those 25+ and those younger than 25 if they had children, RSA has also been made available to those younger than 25 provided that they had already worked two years (full-time equivalent) within the last three years ("RSA jeunes," since 2010). In line with means testing, RSA payment rates are reduced if other income sources exist, e.g. ARE benefits, child benefits or housing benefits.

"RSA activité" was a renewed in-work benefit taking into account the household income, while the existing "prime pour l'emploi" continued as an individualised in-work benefit (tax credit). However, already by January 2016, low-income earners were moved to a specific regime providing in-work benefits ("prime d'activité," see below). Overall, reliance on these schemes grew over the 2010s (see Table 7.1) while benefit adequacy remained rather stable at 80 percent of the 60 percent poverty threshold over the whole period as shown in Figure 7.12 and Figure 7.13).<sup>29</sup>

Overall, this scheme increased the number of French entitled to support significantly due to a strong expansion of coverage regarding people at risk of poverty out of work and in work. Hence, the main impact of the RSA was its focus on significantly increasing the pool of potential beneficiaries by including a larger scale in-work benefit. This can be interpreted as a policy reform to stabilise employment (in the lower pay segment) with massive public spending.

However, while most prominent, RSA is far from being the only means-tested benefit providing for income support; rather, experts note that there continue to be fifteen different schemes to date, among them ten MIS schemes for different target groups. This still mirrors the tradition of categorial benefits in the Continental European tradition and has not been addressed politically so far. Some of these benefits can be combined depending on the household and individual circumstances. Besides RSA, which is the general support scheme for poor working-age people, and ASS— only available for former employees— important further targeted benefits exist for handicapped people (AAH, "allocation aux adulted handicapés") and pensioners 65+ ("minimum vieillesse"), but also for incapacitated people and students etc. Additionally, France provides for housing benefits ("allocation logement").

<sup>&</sup>lt;sup>29</sup> Alternative measures of benefit adequacy related to median disposable income can be found in the appendix (Figure **10.17** to Figure **10.20**). These figures are lower overall.

Table 7.1 Beneficiaries of main minimum income support schemes in France (individual beneficiaries, and including household members)

	2010	2012	2014	2016	2018	2020
Individual beneficiaries						
RSA socle only	1,168,200	1,273,500	1,422,300	1,359,100	1,338,600	1,455,500
RSA activité only	460,000	466,700	535,700	-		
Combination of RSA socle + activité	205,600	224,000	268,300	-	(a)	
Combination of RSA and prime d'activité	250	-	-	328,700	358,000	391,600
RSA socle (total)	1,373,800	1,497,500	1,690,600	1,687,800	1,696,600	1,847,100
Prime d'activité only	141	=	-	2,233,800	2,683,200	4,035,100
Prime d'activité including combination with RSA socle		-	-	2,562,500	3,041,300	4,426,700
Figures including partners and children in the household						
RSA socle only	2,321,800	2,526,400	2,809,500	2,689,800	2,609,100	2,782,000
RSA activité only	1,087,600	1,121,600	1,298,000	-	-	
Combination of RSA socle + activité	464,700	510,300	620,400		227	
Combination of RSA and prime d'activité	2 <del>7</del> 3	-	7.	730,900	787,400	850,300
RSA (socle)	2,786,500	3,036,700	3,429,900	3,420,700	3,396,500	3,632,200
Prime d'activité only	3=3	~	2	4,386,800	5,420,400	7,841,600
Prime d'activité including combination with RSA socle	-	-	-	5,117,700	6,207,800	8,691,900

Note: Break in time series in 2016.

Source: Direction de la recherche, des études de l'évaluation et des statistiques (2022).

RSA did not phase in without difficulties, though. The increase in unemployment during the Great Recession led to limited activation outcomes, as the system was essentially not prepared to deal with those case numbers in the early stages (Caune and Theodoropoulou, 2018). Furthermore, the implementation of activation measures within RSA is decentralised as some RSA beneficiaries are dealt with by regional administrations (at the level of the "départments"), some by Pôle Emploi or in combination between the two, due to different modes of cooperation between the departmental level and Pôle Emploi. To date, there is no country-wide monitoring or convergence of governance, but information available points at a diverse treatment of RSA beneficiaries across regions, e.g. regarding access to supportive services, job search assistance or the practice of integration agreements.

#### 7.3.2.4 Outcomes

Employment protection, some use of short-time work and steps to enlarge coverage of unemployment insurance protection helped to mitigate the potential inflow into MIS in France facing the Financial Crisis. Efforts to increase coverage and more specifically improve the situation of vulnerable groups experienced mixed results. On the one hand, the RSA led to a massive increase in those eligible for benefits, and the Pôle Emploi led to a consolidation of the previously diverse support system. On the other hand, youth employment remained a sticking point for the following years, and the cycle-dependent welfare state continued to be hampered with a widening budget deficit. Additionally, despite being largely conducive to the overall resilience of the French arrangement, RSA faced initial difficulties due to high levels of unemployment. However, the overall poverty outcome indicators were not strongly affected by the 2008-09 recession, pointing at the strong distributive capacities of the French arrangement.

#### 7.3.3 Phase 3 (2010–2019)

#### 7.3.3.1 Economic environment

Following initial downturns, France returned to a positive growth rate after 2010. After initial hits to employment levels, unemployment in terms of headcount remained stable before reducing in 2013. Given the cyclical nature of France's UI and MIS schemes, the massive stabilisation effect tends to be associated with wide budget deficits during and after acute crisis periods. This led to an austerity phase with cuts in public expenditure, aimed at closing the budget deficit, resulting in the dismissal of around 100,000 public servants (Caune and Theodoropoulou, 2018). In essence, France pursued two separate but related goals in this period: the promotion of economic growth, and greater activation of the unemployed. Nevertheless, the country experienced a rather protracted and slow recovery, with the youth being in an especially difficult position. Youth unemployment remained high, pushing many into fixed-term contracts with gradually declining durations (Caune and Theodoropulou, 2018; Ashkenazy, 2017; Fontaine and Malherbet, 2016).

## 7.3.3.2 Labour market regulation and unemployment insurance

In 2013, a series of reforms placed further emphasis on company-level negotiations on restructuring and employment protection. These reforms included attempts to limit the spreading of vulnerable working situations, namely short-term contracts. This was accomplished by increasing UI contribution requirements on such contracts. The classically dualised French system was consequently further challenged. In addition, in fall 2017, there was another EPL reform that reduced compensation in case of unfair dismissal and eased hiring and firing from the employer side, including more emphasis on decentralised bargaining (Béthoux and Laroche 2021). This reform can be seen to be in line with earlier steps in that direction that aimed at weakening individual dismissal protection and discouraging the use of short fixed-term contracts.

However, the policy setting continued to be somewhat ambiguous. Building upon some earlier reforms in that direction, in 2014, an agreement between social partners led to the adoption of a system of so-called 'rechargeable' UI benefits, essentially meaning that any unused benefits were to be accumulated over subsequent employment spells, with the minimum period of work needed to trigger new entitlements fixed at just 104 hours of paid employment. This way, a worker could fall back on unused benefits in the case that they again found themselves unemployed. This served the additional purpose of increasing the attractiveness of returning to work, although it also created incentives to work in such types of short temporary contracts. This rather costly measure was funded by extended waiting days for those receiving larger severance payments after dismissal (Caune and Theodoropoulou, 2018; Clegg, Heins and Rathgeb, 2022). The rechargement reforms clearly increased benefit coverage, i.e. the share of unemployed receiving unemployment insurance benefits in France despite the large share of short duration temporary contracts that would otherwise be excluded (Immervoll et al., 2022). According to so-called pseudo-coverage shares that establish the relation between UI benefit recipients and unemployed using register data from national sources and can be used as approximation of UI coverage, France exhibited the highest coverage in the 2010s above Denmark (see e.g. Figure 7.15). This is confirmed with high coverage rates of UI based on EU-SILC data on benefit receipt amongst the unemployed. Combined with the rather generous benefit level, this also explains the strong and dominant stabilisation effect of UI in France (see Figure 6.4 and Figure 6.5).

Most interestingly, towards the end of the period, regarding UI, in 2019 it became possible for selfemployed closing their business to receive a special benefit called ATI ("allocation des travailleurs indépendants") funded via the general social tax in France. Being eligible for this benefit required an existence of the business for at least two years and passing a means test (Eichhorst et al., 2020). According to experts, this initial step created a rather restrictive scheme. Further, UI was also granted in case employees quit voluntarily to start an individual professional project ("project professionnel") and receive support and advice on this. At the same time, preparatory training for newly employed was strengthened.

Table 7.2 Revenues and expenditures of unemployment insurance in France (in bn EUR)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue	31.855	32.466	33.233	33.936	34.52	35.146	36.364	38.322	39.2	35.8	40.1
Expenditure	33.419	35.193	37.23	37.746	38.769	39.503	39.874	40.126	41.1	53.2	49.4
Exceptional items	-0.895	-0.038	0.2	0.071	-0.154	0.045	0.066	0.022			
Total	-2.459	-2.765	-3.797	-3.739	-4.403	-4.312	-3.444	-1.782	-1.9	-17.4	-9.3
Debt	-11.026	-13.791	-17.588	-21.327	-25.73	-29.957	-33.549	-35.53	-36.8	-54.6	-63.6

Source: UNEDIC, prévisions financières

Despite the tradition of rather exclusive Continental European UI systems, France had some of the least restrictive unemployment insurance eligibility criteria in Europe over that period (OECD, 2020b, Clegg, Heins and Rathgeb, 2022), which can explain the high coverage. As stated by Clegg et al. (2022), while in 2016 contributions paid by temporary workers accounted for only 12 percent of the revenues, benefits for those who had entered unemployment after a fixed-term contract represented 40 percent of all unemployment insurance expenditure. Hence, as French UI became more inclusive over time, it also became more costly, which in turn triggered steps towards stricter activation and some cuts in generosity. In fact, a long-standing and widening budget deficit that led to growing UI debts shown in Table 7.2 (which were guaranteed by the state of UI) led to a stronger impetus to implement austerity measures. This led France to reduce the benefits received by the core workforce, i.e. the working population protected by UI, by increasing the waiting period for those entitled to the benefits. Taking a more long-term perspective, this represented a partial departure from the historically dualised system with extraordinarily generous benefits for labour market insiders. (Caune and Theodoropoulou, 2018).

Further along these lines, to stabilise the unemployment insurance fund, in 2018 a part of the general social contribution tax CSG ("contribution sociale généralisée") raised on earnings from work was used to replace employee contributions as of 2018. The use of the CSG to partly fund UI already meant a partial shift from contributions towards the tax system, with a stronger role of government, making the system rather tripartite instead of bipartite. This became most evident when the government issued a letter on main focal points for the formally autonomous negotiations between the social partners for the 2019-22 period. This way, the government has increasingly restricted the leeway for the social partners governing UI and even implemented direct decrees on UI design as of 2019 as negotiations had failed to come to a conclusion along the lines requested by the government (Cahuc, Carcillo and Landais, 2021). In this sense, the financial pressure on French UI led to a change in the governance mode, restricting the role of the social partners and bringing the government into a central position.

## 7.3.3.3 Minimum income support systems and reforms

With respect to substantial changes in MIS, 2016 saw the introduction of a new in-work benefit for economically active persons with low income, known as the Activity Bonus ("prime d'activité"). The new Activity Bonus took two previous employment bonus schemes ("RSA activité" and "prime pour l'emploi") and consolidated them into a single metric, with the singular goal of incentivising the unemployed to return to work (Legros, 2015). The "prime d'activité" combines in-work benefits for households and for individuals. What became the "prime d'activité" had been part of RSA when it was introduced, but it was now extended to strengthen work incentives ("make work pay") and avoid stigmatisation stemming from the integration of in-work benefits into poverty-preventing assistance RSA. Technically, it is a means-tested in-work benefit for employed people who work few hours or at low wages. RSA can therefore be combined with the Prime, and both are administered by CAF, the "Caisse des allocations familiales." Compared to the "prime pour l'emploi" (which was an annual tax credit) the "prime d'activité" provides for stronger and monthly in-work support. Overall, the prime is more generous than the earlier schemes, and it was extended further in response to the "Gilets Jaunes" protests.

Overall, this scheme is perceived by experts as quite redistributive and more generous than the earlier in-work benefits. Over time, it has been expanded regarding the individual in-work component (benefitting those with low income). Besides a fixed basic amount (that depends on the household composition) it provides a degressive earnings top-up benefit for earnings between 0.5 and 1.5 times the monthly statutory minimum wage (i.e. not supporting very low earnings in small jobs). Benefit levels are lower than in RSA for the unemployed (which is lost when starting to work). This creates disincentives to take up work gradually. However, there is no general evaluation about the mobility effects of this scheme regarding transitions into non-subsidised jobs. While in-work benefits ease the take-up of some work and tend to reduce high PTR, earlier studies on PPE and "RSA activité" showed problems with transition to substantial jobs. While "Prime d'activité" is an important in-work support scheme and tends to mitigate in-work poverty, there are hints at a non-take-up of about one-quarter of those entitled.

In France, there has been a general trend towards lower ALMP expenditure and more emphasis on general subsidies in recent years, including the Activity Bonus to workers and the permanent reduction of employers' social insurance contributions on low-wage jobs. At the same time, there has been some departure from the long-standing tradition of subsidised temporary jobs and training contracts in the private and public sector, which were very prominent in earlier decades, and more emphasis on job search and funding for the public employment service to improve its service delivery.

According to experts, relative to the activation of the UI benefit recipients, RSA activation does not seem to be stringent and universal as it still very much depends on local implementation. Only about 50 percent of the job seekers in RSA have in fact a contractual integration agreement with the administration by the regional administration of the "départements" or Pôle Emploi, and the concrete structure of activation governance varies across regions, which points at administrative constraints and coordination issues (Cour des Comptes, 2022). In principle, the assessment of individual barriers to employment should be undertaken by the "départements", with the most job-ready people referred to general ALMP and job placement via Pôle Emploi, while the more difficult-to-place people would receive more intensive support from the social support services (social workers) provided by the "départements". As the administration of RSA is the responsibility of the local authorities, they are also required to provide for financing of the RSA (partly from own funds, partly from contributions provided by the state), to lead and manage support measures, control and ensure adherence to reciprocal commitments and fighting fraud. This arrangement suffers from funding

problems as before and after COVID-19 the number of beneficiaries has continued to increase, with no corresponding increase in the funds and revenues to match this, thereby crowding out the activation part of RSA (Cour des Comptes, 2022).

In 2019, expenditure on the payment of 28.3 billion EUR (+2.9 percent in one year), or 1.2 percent of GDP, was recorded for means-tested benefits in France. Social minima and other non-contributory social benefits (e.g. housing benefit, family benefit, youth guarantee and activity premium) accounted for 40 percent of the disposable income of poor households in 2018. According to a government report, together with direct taxation, they reduced the poverty rate by 7.5 percentage points: 14.8 percent of the metropolitan population is poor, compared to 22.3 percent without redistribution (DREES, 2021).

#### 7.3.3.4 Outcomes

The unemployment rate in France remained stubbornly high for most of the 2010s, hours worked per capita remained somewhat low, and growth was painfully slow-going (Gazier, 2019). Nonethless, overall comparative socio-economic indicators showed great stability over the period. Relative to other countries, the strong redistributive capacities of the French tax-transfer system should be noted, which was able to keep poverty and exclusion risks at bay over the period. The increased permanent subsidisation of low pay or non-permanent employment by the French welfare state can be seen as one reason why working-age poverty has not increased more in France despite difficult overall economic conditions (Askenazy and Palier, 2018). This can be seen as the French approach to reconcile high employment rates (in the lower segment of the labour market) with limited wage inequality.

Despite further reforms in employment protection and the design of UI, France could not overcome its long-standing dualisms in the labour market and social policy in this period. While benefit coverage could be maintained at high levels and even be increased, the success in sustainable integration and activation is more limited. In general, insufficient mobility from entry-level jobs, often very short-term contracts, to more regular employment has been a long-standing concern in France, given employer practices and some negative side effects of UI expansion in this area. A second major concern is the lack of a stringent implementation of activation in the RSA tier. Here, administrative complexities between levels of government and funding issues regarding administration and supportive services seem to be a particular issue (Eydoux, 2015).

#### 7.3.4 Phase 4 (2020/21)

#### 7.3.4.1 Economic environment

On the eve of the COVID-19 crisis, France found itself struggling with the same issues it had been struggling with since 2008. Most critically, unemployment and the rise of short-term contracts continued to leave many workers vulnerable, in particular the young. During the pandemic, France's unemployment rate changed only little relative to other countries, at times even seeing a reduction. Nonetheless, there has been a sharp reduction in hours worked, indicative of France's focus on short-time work schemes (European Commission, 2021, p. 33).

#### 7.3.4.2 Labour market regulation and unemployment insurance

While short-time work had existed before, it had only been used to a lower extent in 2008/09 in France. However, during COVID-19 France relied very heavily on job retention via short-time work. This trend could be observed in many different countries across welfare state clusters, but France

was one of the countries with the highest shares of short-time workers in the peak months in the second quarter of 2020, which helped keep registered unemployment quite stable (see Figure 7.4). . To achieve this, at the outset of the crisis, short-time work ("activité partielle", see above section 7.3.2.2) was reformed such that benefits were more generous and eligibility was eased, including larger groups of non-standard workers, moving away from a system that just protects core permanent staff as in the past (Cahuc et al., 2021). In fact, the long-standing partial unemployment scheme was expanded to better cover certain vulnerable groups. Short-time work was partly phased out later in 2020, but a new long-term short-time work scheme was set up to avoid or postpone dismissals from firms in more persistent difficulties (Cahuc 2022).

Furthermore, for those losing jobs and income, in March 2020 France introduced emergency income replacement measures to extend coverage to those who would otherwise be coming to the end of their coverage period. The eligibility period for UI benefits was extended to increase coverage for those in atypical working situations (see also OECD, 2020). Previous increases to the strictness of UI eligibility were furthermore temporarily reduced to account for the effects of the pandemic (European Commission, 2021, p. 95). Moreover, further UI and activation-oriented reforms planned for this year were postponed. Overall, in 2020, according to official figures, about 185 bn EUR were spent on labour market policies (outside MIS), with 76 bn EUR on unemployment insurance benefits and short-time work, 73 bn EUR on general labour cost subsidies, 19 bn EUR on publicly sponsored training and 11 bn EUR on in-work benefits ("Prime d'activité"). This shows the main role of UI and short-time work during the pandemic, but also the long-standing priority of French labour market policies to support employment via subsidies, not least by reducing employer contributions (DARES 2022).

In addition, after the initial but limited expansion of UI benefits to self-employed people shutting down their business (ATI) in 2019, France has further facilitated the expansion of UI to the self-employed as of January 2022 since the ATI benefit was hardly used (about 900 cases only) and given the experiences with the need to stabilise self-employed income during COVID-19 (Eurofound 2022a). Now, less strict eligibility criteria are applied in case of the self-employed claiming benefits.

Some long-planned reforms were actually implemented after some delays with the aim of fixing budgetary issues in UI. In particular, the minimum employment record for UI benefit renewals was raised to six months (instead of the previous four) and benefit levels were reduced for high-wage earners after nine (and later on already after seven) months of unemployment. An experience rating regarding employers' UI contribution was implemented in seven sectors (valid as of July 2021) to strengthen incentives for more stable employment. Most importantly, UI benefits are now calculated based on average monthly earnings instead of only days worked which reduces benefit levels for those with short-term employment spells and reverses earlier steps in the opposite direction. Hence, after some years, the rather generous inclusion of fixed-term contract workers with interrupted employment records was curtailed. According to experts, the main motivation was to reduce the cross-subsidisation of temporary employment and limit the externalisation of costs in this employment model. Overall, these reforms aim at improving the budgetary situation of the UI fund.

Further, as there is now the need to reach a new social partner agreement for the design of UI in mid-2022, there is still an ongoing debate about the governance of UI. This might bring about ever more control for the parliament and a closer integration of French UI into the state budget, implying a further curtailed leeway for the social partners in deciding on the UI design. One main issue is the accumulated UI debt of more than 60 bn EUR, including the cost of the pandemic (UNEDIC, 2022).

#### 7.3.4.3 Minimum income support systems and reforms

At the end of 2019, 4.30 million people were receiving a minimum social benefit in France, a figure that increased slightly (+1.2 percent) compared to the end of 2018. Including spouses and dependent children, around 6.9 million people were covered by all social minima just before the COVID-19 crisis, i.e. 10 percent of the population. In 2020, the health crisis had an impact on the number of people receiving social benefits. The number of recipients of minimum social benefits increased by 4.3 percent to reach 4.48 million by the end of 2020. Regarding the main schemes RSA and "Prime d'activité", figures for 2020 show that close to 2.1 million adult people (including spouses and dependent children: nearly 3.9 million people) were receiving RSA (5.7 percent of the population) and nearly 8.9 million people were covered by the Activity Bonus "prime d'activité" (including spouses and children), which corresponded to 13 percent of the French population. Close to one in five of the households receiving RSA socle also benefited from the Activity Bonus (Cour des Comptes, 2022).

In general, both ASS and RSA continued during COVID-19 without substantial modifications. However, there have been some ad-hoc payments during the crisis period, in particular a one-time payment for RSA recipients and emergency support for solo self-employed (and small businesses) outside the permanent social policy arrangement (see Eurofound, 2022b, OECD, 2020). RSA continues to exist as the main and general MIS benefit for adults aged 25 and older, with some extension to younger people if they have at least two years' full-time (or equivalent) employment record at young age or if pregnant or a parent; however, specific benefits for young people were introduced as more attention was paid to this issue ("garantie jeunes," transformed into "contrat d'engagement des jeunes" as of 2022).

Taking into account the development of the French MIS over the last ten years, experts note that while the benefit level of RSA depends on household composition, the combination with other means-tested benefits is sometimes complex to calculate. Combined with the "Prime d'activité", in most cases taking up jobs leads to increasing net income except for some constellations where the withdrawal of other means-tested benefits, e.g. housing allowances, leads to income losses when earning more. Experts note that given fifteen different means-tested social minimum benefits, the structure of benefit receipt remains complex. While RSA is the central and most general MIS benefit, it is only received by half of the beneficiaries. Nonetheless, there are estimates that non-take-up of RSA is close to one-third (Bargain et al., 2017).

In response, current policy debates address the issue of the age limit of 25+ in RSA and the regionally unequal implementation of the activation side (Cour des Comptes, 2021). This might pave the way to a more systematic activation of RSA beneficiaries through better integration of the different agencies and government levels in charge.<sup>30</sup> This would also imply a redesign of the current funding channels regarding RSA that places strong pressure on the regional entities ("départements") as they have not been fully compensated for the increase in RSA caseloads, which in turn restricts spending and staffing for activation purposes. There is also a general perception that it might be useful to simplify the multitude of means-tested benefits in France by creating more universal benefits and identical thresholds for means testing. Further, there is some concern about the need to step up activation and skill formation for non-employed and low-income/low-wage earners as contrasted with the strong policy and funding priority on subsidies of different kinds provided to support low-wage/low-income employment patterns.

<sup>&</sup>lt;sup>30</sup> Currently, there is a debate to create a new and more integrated entity called "France Travail".

#### 7.3.4.4 Outcomes

While France's long-term unemployment in the period was above the EU average, it remained low relative to many other Member States (European Commission, 2021, p. 84). The share of people at risk of poverty in France increased over previous years, but only slightly, and still remains below the EU average (European Commission, 2021, p. 98). This points at the sustained and high capacity of the French arrangement to stabilise income. Entry into jobs and transitions to stable employment are more of a persistent challenge – as experts note – given the continued segmentation of the French labour market that could not be reversed effectively, despite considerable effort at reforming the regulation of contracts and the design of benefit systems.

## 7.3.5 Main insights from the French case

Over the whole period, France exhibited a strong redistribution capacity given its tax-benefit system. This confirms our initial expectation regarding the Continental European welfare state type that the French welfare state should be able to limit poverty and exclusion risks as well as inequality. Its reliable income stabilisation even during crisis periods can be attributed to the design of UI and MIS. Both tend to provide relative generous income support and reach high coverage, besides stable employment for the core workforce. UI plays a particularly important role due to its high coverage and generosity, which helps to contain inequality and poverty during not so severe crisis periods as experienced in France – but MIS also plays a prominent role in this setting. This was supported by employment protection and short-time work (in particular most recently). In that respect, poverty and exclusion are less cyclically related in France, but there are persistent issues with medium employment levels, difficult labour market entry and upward mobility, in particular with the young.

However, over time, there have been steps to even out the long-standing dualism in social policy and labour market regulation in France without fully overcoming this divide that is typical for Continental European settings. French unemployment insurance has become more inclusive while protection of labour market insiders, i.e. permanent and high-income workers, has declined to some extent in unemployment insurance and employment protection legislation. This was combined with (unsuccessful) efforts to limit the heavy reliance on short temporary contracts. The minimum income system is still fragmented, given the existence of categorial schemes for some target groups, but over the period observed the main scheme RSA has been expanded, not least with a strong focus on permanent in-work benefits to strengthen work incentives which has brought more people into paid work to some extent while low pay and in-work poverty could be contained.

However, overall the French minimum income support system and the wider social policy arrangement seem stronger with respect to income stabilisation than regarding activation and entry into non-subsidised and permanent jobs. While France pays strong attention and devotes large funds to support workers (and jobs) at the lower end of the income/wage distribution, thereby avoiding strong wage and income dispersion, upward mobility through skill formation and complementary activation policies seems less effective. One could argue that the Continental European welfare state of France continues to exhibit remarkably strong redistributive capacities, but it has at least partially departed from its heavily dualised model of social protection and labour market regulation. This could now be classified as a modified Continental European model.

Table 7.3 Main developments in France, 2005-2021

	Pre-2008	Great Recession	Austerity/recovery	COVID-19
Economic environment	Stable growth and steadily declining unemployment.	Moderate increase in unemployment accompanied economic downturn.	Slow economic recovery but persistently high unemployment levels.	Long-term unemployment and non- traditional work left many vulnerable to economic crisis.
Unemployment insurance and labour market regulation	Generous benefits but with strongly dualised and fractured eligibility across groups.	Increased use of short-time work and a departure from focusing only on the core working population. Drying up of funding placed strain on UI benefits.	Benefits to the core working population were reduced, and coverage increased, reducing the dual character of the system.	Use of short- time work and limited increase of benefits to compensate for downtime. New wave of UI reforms.
Minimum income support systems	Schemes based on contributions or lack of eligibility. Progressive shift to greater activation.	Consolidation of prior administration to encourage activation. Expansion of benefit eligibility.	Expansion of in- work benefits, but with limited for move to higher paying jobs.	Maintenance of status quo with the introduction of some one-off benefit payments; growing attention to youth.
Outcomes	Low risk of poverty and social exclusion despite high unemployment, especially among young people.	Rather stable socio-economic outcomes during the crisis period, particular problems with youth coverage.	Unemployment remained high and long-term, but tax-benefit system provided strong redistribution, albeit only limited success in activation and labour market integration.	Rather stable situation.

# 7.4 Spain

In this sample of case studies, Spain represents the Southern European or Mediterranean welfare state type. It is characterised by traditionally heavy reliance on employment protection rather than social protection. Hence, unemployment shocks can be absorbed to the extent that jobs continue to exist, but for those not in permanent jobs there is generally a strong income risk due to the limited role of income stabilisation through the tax-benefit system (see also our earlier calculations in section 6). There is also a clear dualism between strongly developed unemployment insurance and fragmented, less developed MIS systems, stressing the role of UI in stabilising income during crisis periods. In Spain, for most of the period under scrutiny there was no national MIS scheme. This is a particularly stark contrast to the Continental European type as shown with the French case in the preceding section. As shown above, Spain was hit very hard by the crisis of 2008 and 2009 and a subsequent double dip recession. As a consequence, Spain exhibited a strong medium-term increase in unemployment and poverty during a long and protracted recovery phase that lasted until the mid-2010s. Hence, the rather vulnerable and fragmented social policy setup came under massive pressure. The case study tracks the role of labour market regulation, unemployment insurance and MIS in Spain since the mid-2000s, pointing in particular at the latest reconfiguration of the MIS setup, which marks a departure from the traditional institutional arrangement.

## 7.4.1 Phase 1 (pre-2008)

#### 7.4.1.1 Economic environment

Spain experienced a very long phase of strong GDP and employment growth from 1990 up to the Great Recession (Guillén and Begega, 2019), comparable to the dynamic development in Ireland (see section 7.7 below). This contributed to a massive increase in GDP per capita and facilitated the rather late expansion of the Spanish welfare state. Spain managed to reach a record low in unemployment in 2007 at 8 percent. Part of this development was due to a real estate boom, and the economic model of the time was characterised by low productivity growth, early deindustrialisation and an expansion of temporary employment in small firms at low labour costs (Guillén and Begega, 2019)

#### 7.4.1.2 Labour market regulation and unemployment insurance

For many decades, the Spanish labour market was characterised by strict employment protection for permanent workers (see Figure 7.1), reducing their risk of dismissal, but shifting the risk of unemployment on those unable to enter the permanent workforce. Spain exhibited the largest share of temporary jobs and high youth unemployment in Western Europe even before the Great Recession (see Figure 7.3). In a way, this dualism was even deeper than in the French case.

Before the first regional MIS scheme was started in the Basque Country (see next section), unemployment was only addressed in unemployment insurance and assistance. Over time, this central social security mechanism was adapted in so far as the requirements for unemployment insurance were raised while the unemployment assistance was expanded. The unemployment insurance and the means-tested unemployment subsidies (referred to as unemployment assistance in the Spanish context) had to play a major role in cushioning the impact of unemployment spells. Unemployed persons usually switched and moved from the unemployment insurance into the unemployment assistance and then a regional minimum income scheme according to the duration of their benefits. The unemployed persons had to apply for each scheme again and some do not claim their benefits, accounting for the non-take-up in the system.

The contributory unemployment insurance has existed in Spain since the 1980s. UI is available for registered unemployed persons between 16-65 who are available and actively seeking work. They must not have left their previous job voluntarily. A pledge of activity is used as an activation measure.

In 2005, but also later on, the minimum contribution necessary for receiving UI benefits was fixed at 360 days in the six years prior to being unemployed. The benefit level was 70 percent of the average gross *earnings* over the last 180 days, with 70 percent of the reference earnings being paid for a maximum period of 180 days, then 50 percent of the reference earnings for the remaining benefit period of the benefits. This benefit duration was between 120 to 720 days depending on the contribution record. The drop in UI benefit levels from 70 to 60 percent after 180 days was changed to a drop from 70 to 50 percent in 2012 (OECD, 2005/2011/2012/2020, ES). (OECD, 2005/2011/2012/2020, ES).

Spain's unemployment assistance was (and still is) available for those unemployed of working age without UI entitlements or who have exhausted them and meet a number of criteria, in particular related to age and family context (OECD 2020, ES). The claimants receive both unemployment assistance and social security contributions for health coverage, family protection and retirement after an initial waiting period of 1 month. In contrast to France, for example, unemployment assistance is limited in duration in Spain in relation to employment record, age and family situation. In general, the assistance lasts six months and the maximum duration is 30 months for certain cases with family responsibilities. There were and are several unemployment subsidies linked to the unemployment assistance for different groups. Examples of specific subsidy types were those for workers over 52 years, people released from prison or workers over 45 who have exhausted their 24month unemployment benefits. There were also options for topping up the unemployment assistance with the regional income scheme. One other programme for the long-term unemployed is the active integration income (Renta Activa de Inserción, RAI) which has existed in Spain since 1994. It supports the long-term unemployed in returning to work when they are without access to UI or social assistance. Applicants must be aged 45-65, and the RAI benefit provides for a maximum duration of eleven months (OECD 2020, ES). The details of the benefit were altered on a yearly basis until 2005, at which point the scheme was made more permanent (OECD, 2007, ES).

#### 7.4.1.3 Minimum income support systems and reforms

Until the 2020 reform introducing the national MIS scheme "Ingreso Minimo Vital" (see section 7.4.4), MIS schemes were in place only at the regional level in Spain (OECD 2020, ES) and reached about 60 percent benefit adequacy for singles and about 40 to 50 percent for families relative to the 60 percent poverty threshold (see Figure 7.12 and Figure 7.13).<sup>31</sup>

In order to understand the development of the Spanish MIS up to the introduction of a national scheme in 2020, the chronological development of the regional schemes is essential. In the 1990s the Autonomous Communities in Spain were given power over social and employment assistance and non-contributory benefits through a process of decentralisation. Only at this time, the regions started to implement their programmes of minimum income (*Rentas Minimias de Inserción*). Country experts highlighted the diversity of regional programmes and the different capabilities of these since their introduction. With their strong budgetary and fiscal autonomy, the Basque Country and Navarre were referred to as the regions in Spain with the strongest schemes and this legacy even affects the current situation and possibly the future of regional MIS in Spain.

<sup>&</sup>lt;sup>31</sup> Note that these figures from OECD are based on the regional scheme of Madrid which provides an average level of income support compared to other regions in Spain.

The minimum income scheme's aim of social insertion of the recipients can be compared to the French RMI at the time. However, despite having similar goals, their setup was diverse (AIReF, 2019). A typology of the regional programmes of minimum income of insertion based on information by Aguilar, Gaviria and Laparra from 1995 shows three levels of coverage and protection intensity of minimum income programmes (Arriba and Moreno, 2002; 2005). This typology established three groups:

- a) a genuine minimum income scheme in the Basque Country;
- b) a second group of minimum subsides with legal restrictions; and
- c) a third one with limited coverage and intensity (see Table 7.4).

Table 7.4 Typology of regional programmes of minimum income of insertion

Coverage and Protecting Intensity	Renta mínima de inserción	Social Assistance Programmes	Protected social employment
High	Basque Country		
Medium	Madrid	Aragon*	Asturias
	Catalonia	Galicia	Castille-La Mancha
	Navarre	Murcia*	
		La Rioja*	
Low		Balearics	Andalusia
		Canaries	
		Cantabria	
		Castille and Leon	
		Valencia	
		Extremadura	

<sup>\*</sup> The small amount of the benefits involved were to some extent compensated by other subsidies of family integration. Source: Aguilar, Gaviria and Laparra (1995).

After the Basque Country had started its regional MIS in 1989, other minimum income schemes spread in the Autonomous Communities. Over time, MIS were consolidated and extended between 1990 and 2000. This stage also saw a rationalisation of the schemes for greater efficacy and a further decentralisation of schemes. From 2000 to 2008, the fight against social exclusion was linked to the Lisbon Strategy, national reform plans and social inclusion plans. This offered an opportunity to coordinate the different minimum income schemes and different levels of government. However, even with a more widespread access to MIS in the regions, the schemes operated under different logics of need or activation, with some combining these two approaches. Cabrero (2009) further describes these three elements of need, activation and the institutional framework as a point of tension for the Spanish MIS and relates this to the system's ability to offer protection and social insertion. Experts observed that changes in the setup of regional MIS happened from around 2000 to 2007 when regions started to ease requirements and increased coverage of their MIS.

As a last safety net, the MIS in the Autonomous Communities played an important role in the fight against social exclusion and poverty. Besides the coverage and benefit amounts, this is already implicit by the number of beneficiaries. Only the active integration income RAI has seen a similar, continuous growth since its implementation (from around 50,000 in 1995 to 100,000 in 2008, followed by a steep increase thereafter). As Cabrero (2009) mentions and the typology above suggests, the design of the minimum income schemes in the Autonomous Communities was not

homogenous: One difference is the duration of the minimum income schemes. MIS were limited in duration between 6, 12 or 24 months and only in the case of Castille and Leon, Madrid and the Basque Country minimum income was not time-limited (AIReF 2019 – *Los programas de rentas minimas en España*). The differences regarding the setup of the MIS were not only relevant for the duration but also for coverage and benefit levels.

Comparing the regional MIS benefits is not easy as the Autonomous Communities used different reference indicators to link their benefits to (IPREM and SMI being the common indicators; IPREM = Public Income Rate of Multiple Effects, SMI = National Minimum Wage). Cabrero's comparison using the IPREM, the minimum salary/wage and the poverty threshold shows significant differences in the benefit levels of regional MIS (see Table 7.5). Hence, there were (and still are) substantial differences in the generosity of the various regional Spanish MIS schemes. The Basque Country and Navarra's schemes were (and are) the most effective in reducing poverty – most other regions fall short in this regard (Hernández et al., 2020).

Table 7.5 Minimum Income of Autonomous Communities in 2007

Region	Monthly amount, EUR	% Minimum wage	% IPREM	% Poverty threshold	Number of beneficiaries
Andalusia	353.77	53%	71%	58%	18,838
Asturias	396.67	60%	80%	66%	6,399
Basque Country	585.62	88%	117%	98%	36,004
Castille & Leon	374.40	56%	75%	62%	2,147
Madrid	340.00	51%	68%	57%	8,681
Murcia	300.00	45%	60%	50%	286

Source: Adopted after Cabrero 2009.

#### 7.4.1.4 Outcomes

The growth phase of the 2000s was characterised by a substantial improvement of the notoriously difficult labour market situation in Spain, i.e. declining unemployment to record lows, while still being characterised by a heavily dualized labour market and a welfare state in line with the Southern European legacy. However, poverty and exclusion risks as well as the poverty gap were still substantial (see Figure 4.4 or Figure 4.6) relative to the other countries in our sample, showing the limits of the Southern European welfare state of Spain. Most noteworthy was the absence of a national MIS framework in a situation where regional schemes exhibited strong differences in benefit levels and coverage.

#### 7.4.2 Phase 2 (2008/09)

#### 7.4.2.1 Economic environment

Spain experienced a massive economic shock after the bursting of the real estate bubble and an associated breakdown of the construction sector as shown in chapter 4. This led to a deep and long phase of recession until 2010 and transformed into a sovereign debt crisis. In Spain, there was a strong impact of the fall in GDP on employment, pointing at a strong and direct translation of the economic shock into a job crisis as shown in section 4.2 and in the EUROMOD simulations that showed only limited coverage and stabilisation capacities when faced with an economic shock (see

also Guillén and Begega, 2019). While there was a "Keynesian" demand policy at the beginning of the recession, it only had limited effects, resulting in a massive increase in public debt.

#### 7.4.2.2 Labour market regulation and unemployment insurance

The labour market in Spain suffered mainly from a massive destruction of temporary jobs, exhibiting once more the deep dualism between permanent and fixed-term contracts in Spain at the time. This led to some emergency measures during the initial phase of the recession. As a response there was an additional special non-contributory benefit for those in training who had exhausted their UI benefit (Guillén and Begega, 2019). It was renewed under different names in subsequent years.

Spain first provided for short-time work benefits in the 1980s, and there were only very minor changes between its foundation and the 2008 crisis. In this period, eligibility required a one-third reduction in hours with a corresponding reduction in wages. Payments could amount to anywhere between 75 and 220 percent of the national minimum wage and were payable for two years. In response to the crisis, a 2009 reform allowed for a 50 percent bonus in payments in the case of temporary suspension, but this benefit expired by the end of that year (*European Commission*, 2010). Financial incentives to employers were increased in 2009 (Arroz et al., 2018).

After 2008, to contain some of the immediate income shocks, temporary programmes were introduced targeted at those who lost access to the time-limited unemployment assistance. They were activation programmes combined with benefits. Spain implemented temporary non-contributory assistance programmes such as Temporary Program for Unemployment Protection and Insertion (PRODI), Professional Retraining Program for People who Exhaust their Unemployment Protection Rights (PREPARA), and Employment Activation Program (PAE)), albeit with limited effect on unemployment, training and activation (Guillén and Begega, 2019; Jansen, 2016). After the Spanish Constitutional Court ruled in 2014/2015 that these were indeed activation policies and had to be under regional responsibility these programmes expired.

## 7.4.2.3 Minimum income support systems and reforms

The fragmented regional MIS system was put to the test during the rather protracted crisis period in Spain. The rise in beneficiaries continued from the increase since the 1990s, now counting around 100,000 households. The coverage of those at risk within each Autonomous Community was spread unevenly; the Basque Country, Andalusia, Catalonia and Madrid accounting for almost 75 percent of households covered by regional MIS (AIReF 2019). Some Autonomous Communities tried to adapt to the new needs during the crisis so that coverage as well as benefits increased. This is a contrast to the weaker response to the previous crisis of 1992/94, suggesting a better-established administration, larger budgets as well as stronger social and political support. Meanwhile, the minimum income schemes saw a stark influx of beneficiaries post-crisis, which presented challenges for them (AIReF 2019). Although the rather stable and resilient unemployment insurance and the temporary unemployment assistance took the first brunt of the unemployment spell, eventually claimants reached out to the regional MIS that were not really prepared to cope with this massive demand for income support.

#### **7.4.2.4** Outcomes

Core outcome indicators started to deteriorate dramatically in 2009, starting with unemployment, but also translating into a steep increase in poverty and exclusion risks as shown in Figure 4.2 as well as a massive poverty gap, in-work poverty and low labour market attachment for many (see Figure 4.9). All of these negative developments persisted over the first half of the 2010s. This showed clearly

the structural weakness of Spain's deeply dualized labour market and welfare state arrangement with a large share of economically vulnerable temporary jobs as well as an underdeveloped and fragmented MIS system.

## 7.4.3 Phase 3 (2010 – 2019)

#### 7.4.3.1 Economic environment

After the acute Global Financial Crisis, Spain moved into a longer sovereign debt crisis, requiring support from the European Stability Mechanism (ESM) in 2012/13, with the recession continuing until 2013. Compared to other European countries, and similar to Ireland, Spain continued to suffer severely over the early-2010s. There was a steep increase in unemployment up to 27 percent in 2013 – in particular youth unemployment – and a loss of temporary contracts. The shift to austerity policies began in 2010 and was intensified after 2012 up to 2014 with a massive and lasting impact on private and public sector employment, pensions and early retirement, wages, including a freeze on the minimum wage. High unemployment persisted. Compared to the other countries in our sample, the recovery in Spain was more protracted and started later, given the double dip recession after 2008.

### 7.4.3.2 Labour market regulation and unemployment insurance

The 2010s were characterised by attempts to encourage internal flexibility within firms, e.g. by adjusting working time, over the destruction of jobs, i.e. external flexibility. While external flexibility dominated in Spain – in particular using temporary contracts as the main buffer – job retention via short-time work was in principle available for permanent employees but it was not used as heavily as in other countries between 2008 and the end of the recession (Arranz et al., 2018). Over the 2010s, as a response to the 'excessive' external flexibility experienced after 2008, policy reforms were implemented to strengthen internal flexibility of firms, also laying a better foundation for working time adjustments. At the same time, structural changes were implemented with respect to employment protection legislation. In this sense, the Financial Crisis triggered a structural change in upstream systems in Spain. However, this not only concerned attempts at strengthening internal working flexibility.

First, regarding unemployment insurance, over time, a decline in unemployment insurance coverage was observed in long unemployment spells, falling from 70 to 54 percent from 2008 to 2017 (after a peak at 82 percent in 2009), but there was no major discretionary retrenchment (Guillén and Begega, 2019). In comparative terms, UI coverage was still substantial and quite inclusive in Spain (see also Immervoll et al., 2022 and the contribution of UI to income stabilisation in Spain as shown in Figure 6.5). Most notable, in 2010 Spain created a special unemployment system for the self-employed which was made mandatory in 2019. This regime, called RETA, is funded through contributions and provides benefits in case of business closure. In terms of activation, this phase saw a massive inflow into temporary hiring incentives as shown in Figure 7.11 which experts qualify as rather ineffective in facilitating mobility into permanent employment

Second, the post-crisis period was characterised by further and substantial reforms of employment protection in Spain, building upon earlier reforms trying to tackle the persistent dualism in the Spanish labour market. Several reforms had already been adopted in the 1990s and the 2000s, most notably the creation and expansion of a less regulated type of open-ended contract between 1997 and 2006 combined with some restrictions on fixed-term contracts. However, a particularly intense debate emerged in the aftermath of the 2008/09 economic crisis, which prepared the ground for further deregulation of dismissal regulation. The most important structural reforms of employment

protection in Spain were implemented in 2010 and 2012 in a context of high unemployment and strong concerns about financial markets' assessment of the Spanish economy (Eichhorst and Marx, 2021). The Spanish reform from 2010 reduced restrictions on individual dismissals of permanent staff by extending and clarifying the reasons for justified separations to limit judges' discretion in court procedures. Two years later, the compensation for unfair dismissal was reduced from 45 to 33 days per year of tenure up to a limit of 24 instead of 42 months. In addition, workers' entitlement to back pay for the period of dismissal-related court proceedings was abolished. The burden for employers was eased to document dismissals as ultima ratio, the probationary period in small companies was extended to one year, and the need for an administrative authorisation of collective dismissals was abolished. At the same time, fixed-term contracts became less attractive to employers through financial disincentives in the form of a severance payment for expiring contracts.

Additionally, and much later, an extraordinary means-tested unemployment allowance ("Subsidio extraordinario por desempleo") addressing the long-term unemployed was passed in response to the expiration of certain benefits in 2018 (OECD, 2019).

Overall, Spain tried to move away from a deeply dualized labour market and social protection arrangement in the Mediterranean tradition and establish a more encompassing upstream system, evening out at least partially the long-standing dualism in employment protection.

## 7.4.3.3 Minimum income support systems and reforms

Quite in contrast to the significant reform efforts in upstream arrangements, the 2010s were characterised by a continued patchwork of regional MIS schemes. As MIS schemes are the last safety net for people who lose access to unemployment insurance or assistance benefits, they were confronted with a massive inflow in the early 2010s. Spending jumped after a period of stability before the 2008 Global Financial Crisis and after the peak in spending in 2010, expenditure decreased while the number of beneficiaries did not see a drop until around 2012 following the first attempt at economic recovery. However, this was only a short slump and the number of beneficiaries kept steadily increasing after that, given the protracted recovery and the exhaustion of upstream systems (AIRef 2019). While regions saw a higher demand for minimum income, their financial capacities were limited. The existing minimum income support systems at the regional level were thus affected by retrenchment measures of the austerity period, with large differences across regions in terms of generosity, requirements etc. (Guillén and Begega, 2019). As a response, regions restricted access to the MIS again after easing them in a climate of extension just before the Great Recession.

Consequently, the regional MIS schemes in the 2010s continued to exhibit major differences (Rey, 2014). For example, Andalusia's *Ingreso Mínimo de Solidaridad* offered a base amount of 400.09 EUR in 2013, increasing for each child until 645.30 EUR (or 100 percent of the Minimum Wage). It lasted 6 months and had no complementary details. By contrast, the *Salario social básico* in Asturias offered a higher minimum of 442.96 EUR up to 730.88 EUR, had no limitations and only depended on claimants meeting the requirements. The "Renta de Garantía de Ingresos: Renta Básica para la inclusión y protección social" in the Basque Country was even far more generous as it offered a base amount of 662.51 EUR up to a maximum of 941.06 EUR. Additional housing allowances added up to 250 EUR a month to these amounts (other than mortgage payments) or even higher in special cases. The duration of the Basque MIS was 24 months. Madrid also did not have a time limit for its *Renta Mínima de Inserción* and evaluated if requirements were met on an annual basis. However, the benefit level in Madrid was rather low and ranged from 375.55 EUR to 532.51 EUR (Equivalent to 100 percent IPREM). Since there was no minimum amount established, the difference compared to the income of the family unit was paid with respect to the family composition.

In most Autonomous Communities the benefits were established relative to a certain index using one of three methods. Most regions use the IPREM and index the minimum income as a percentage of it. A second group of regions index their MIS using a percentage of the minimum wage (Andalusia, Navarre, the Basque Country and Melilla). Finally, a third group uses more diffuse indexing mechanisms associated with inflation (Asturias), the evolution of non-contributory pension benefits (Balearic Islands), or the evolution of the economy (Catalonia). This indexing can also be compared to the national median equivalised income to offer a reference point (see Table 7.6).

Table 7.6 Regional MIS amounts in relation to national median equivalised income by household type (2014)

Autonomous Community	Single person	Two adults with two dep. children		
Asturias	43.63%	67.16%		
Andalusia	39.41%	54.63%		
Basque Country	61.00%	86.60%		
Castille & Leon	41.96%	62.91%		
Madrid	36.99%	52.43%		
Murcia	29.55%	43.81%		

Source: Rodriguez-Cabrero, Arriba, Marbán and Montserat 2015.

Besides generosity, eligibility conditions also are an important element to the configuration and adjustment of the regional MIS. A general overview of these conditions from 2014 shows that usually recipients could first apply for MIS at 25 years and had to be registered as residents at the municipality for 12-24 months with some regions even requiring 36 months. The access to the minimum income schemes was not portable between regions and if the recipient moved, he or she had to start over with the process, possibly not being entitled to benefits in the other region. The requirement of being on the municipal register for a sufficiently long period to be entitled to receive minimum income meant that many people faced the risk of losing their benefits when moving or looking for work outside their region. This might have been one factor limiting the adjustment of the Spanish labour market after the crisis shock, as experts argue. Another hindrance to the job search was that working while receiving benefits was incompatible with the MIS in some Autonomous Communities. The last two requirements might have discouraged people from looking for work (Rey 2014).

One way to get people back into employment is by activation. Examples of activation measures in the Autonomous Communities in 2013 were agreements to active inclusion (Basque Country) or individualised plans for integration or insertion (Asturias, Castille & Leon, Madrid and Murcia). Measures also included job placement (Asturias and Murcia) or similar labour market actions (Madrid). Overall, there was a divide between (social) integration measures and activation measures used within the regional MIS. Some experts stated that this split existed since the first regional MIS had been launched. In some regions the focus was more on income transfer than on fighting social exclusion through activation and integration which manifested itself in the access conditions being either a social right or following strict activation requirements. Notwithstanding available activation measures, there seemed to be a lack of active inclusion strategies or at least regarding the practical application of it across the country at the time, i.e. after the Financial Crisis that had put the Spanish labour market under extreme pressure. Even when the activation measures were employed there were few impact assessments, or the impact was not conclusive, experts argue. The practice of

activation was influenced by the budgetary resources available relative to the number of recipients, and this relationship was rather unfavourable in the post-crisis period in Spain. The European Anti-Poverty Network conducted a survey on activation in Spain and 78 percent of respondents claimed that there was no active inclusion strategy in their region and 22 percent stating that there was an active strategy, but it was applied only partially (Rey, 2014).

In addition, while the regional MIS had followed an expansionary trajectory before, they became more restrictive in the aftermath of the 2008 crisis. For example, experts mentioned that an additional requirement of being "socially excluded" to access the regional MIS was introduced in Navarre, but this clause left open what that meant in practice, thereby increasing the leeway for more restrictive implementation in individual cases. The Basque Country reduced benefit amounts to adjust to the austerity measures.

A snapshot from the poverty indicators in 2013 showed diverse levels of protection against poverty in Spain. The AROPE rates reported a maximum of 38.3 percent for Andalusia and a minimum of 14.5 percent for Navarre. The Basque Country and Navarre had the highest coverage rates, which have a positive relation with lower relative poverty and AROPE rates. Low levels of coverage also coincided with high levels of AROPE in the other Autonomous Communities (Rey 2014). Coverage rates for our selected regions are presented in Table 7.7. They range from 1.66 per 1,000 inhabitants for Murcia to 34 per 1,000 inhabitants for the Basque Country. The number of recipients meanwhile increased in all five selected regions by between 86 percent and 364 percent (Rey, 2014).

Table 7.7 Coverage rates and recipients of regional Minimum Income Schemes (2013)

Autonomous Community	Coverage rates (per 1,000 inhabitants)	Recipients 2013	Recipients 2008	2013-2008 variation
Asturias	11.43	12,205	6,575	86%
Andalusia	6.60	55,711	18,392	203%
Basque Country	34.00	74,528	39,715	88%
Castille & Leon	4.12	10,372	2,235	364%
Madrid	3.05	19,780	10,445	89%
Murcia	1.66	2,441	369	562%

Source: Adopted after Rey, 2014.

However, given the lack of reliable income support that had become evident in the first half of the 2010s, around 2015 the topic of MIS design became a national political issue for the first time. Political parties came up with different proposals such as a first version of a national MIS, a generalised application of the Basque model in Spain, a negative tax on income and improved coordination of regional MIS. A 2019 study attested three core issues besides the regional disparities and the lack of coverage in the regional MIS: Fragmentation, low benefits and coverage gaps - effectively leaving some groups of the population unprotected (AIReF, 2019). Until then, the regions' MIS were the only general non-categorically restricted instruments against the risk of poverty. A possible solution to some of these issues was proposed again in 2019 in the form of the IMV as a national minimum income scheme, although the IMV was not introduced before the pandemic (see next section).

#### 7.4.3.4 Outcomes

Faced with austerity measures, a protracted recovery, and a limited capacity to buffer against income losses, this period was characterised by high levels of poverty risks and financial hardship. This continued to increase until the mid-2010s in Spain (Guillén and Begega, 2019). It affected in particular the unemployed while permanent workers and pensioners were in a more comfortable position. There was an increase in poverty until 2014, pointing at the very strong transmission of economic decline into poverty as a medium-term consequence of the recession and the regionally fragmented and overall limited MIS system. This weakness, however, became a policy reform issue in the mid-2010s.

The delayed recovery affected households differently, depending on them having dependent children or not. Other economic and labour market outcome indicators for Spain showed signs of a recovery around the mid-2010s. The transition from unemployment to employment rose from 2013 until 2019 (Fig 7.5). More people could leave unemployment, finally (OECD 2021b, Fig. 1.2 B). Lowering unemployment rates from 2013 on were observed after an already present decline in the expenditure on guaranteed MIS from 2011 onwards (Figure 7.14). Despite consistent growth and falling unemployment in that period, the structural issues of the Spanish welfare state and labour market were not solved. Long-term unemployment, a rather passive orientation of social policy and a lack of ALMPs was considered one of the main challenges along the continued dualism between permanent and temporary contracts and low transitions between the segments (Sanz-de-Galdeano and Terskaya, 2020; Dolado et al., 2021)).

## 7.4.4 Phase 4 (2020/21)

### 7.4.4.1 Economic environment

Once more, Spain was affected by a severe crisis regarding a decline in GDP and an increase in unemployment in response to COVID-19 and strict containment measures. Again, the labour market impact was particularly visible in a loss of fixed-term contracts, despite reforms aimed at overcoming the deep divide of the Spanish labour market in the 2010s (Ramos 2021).

### 7.4.4.2 Labour market regulation and unemployment insurance

At the policy level, the crisis response was notably different during the COVD-19 pandemic. This can be interpreted as a learning process from the earlier crisis experiences. Most prominently, and in stark contrast to the 2008/09 Financial Crisis, which had had a severe impact on unemployment in Spain due to the dominance of external flexibility ( through the destruction of fixed-term contracts) capacities for internal flexibility at firm level were now more relevant. This holds in particular for working time adjustments via the Spanish version of job retention policies that could build upon reform steps undertaken already in the 2010s. In Spain, the regulation on "Expedientes de Regulación Temporal de Empleo" (ERTE) – which has been in place since 1995 and 2012, respectively – was extended at the beginning of the COVID-19 crisis. ERTE now included further groups of employees whose working time was reduced or suspended regardless of the duration of contributions as well as additional sectors that were affected by a decline in consumer demand and revenues given containment measures (without being formally closed). That implied a massive use of job retention in Spain during COVID-19 (see Ramos, 2021, and OECD, 2020, ES as well as Figure 7.4).

In addition, measures were undertaken to provide additional support for those who lost their jobs. While the Spanish UI requires 360 days of contributions within six years in normal times, special regulations were in place during the COVID-19 pandemic in 2020. The normal rules concerning the

minimum contribution period for unemployment benefits were suspended for workers who had been furloughed or had their working hours temporarily reduced as a result of COVID-19. The rules governing the minimum contribution period were also suspended for so-called "intermittent permanent employees" whose work was interrupted or who could not return to work due to COVID-19. They could claim unemployment insurance benefits for a maximum of 90 days even if they did not meet the minimum contribution period requirement. Similar emergency measures covered performing artists. (OECD 2020, ES). Furthermore, in response to COVID-19, any benefit receipt between 18th March and 30th September 2020 did not count towards the maximum duration of unemployment benefits. However, this extension did not apply to those who had been unemployed before. "Intermittent permanent employees" who had not paid sufficient contributions could receive UI benefits for up to 90 days (OECD, 2020, ES).

Other targeted and time-limited policy responses included an extraordinary benefit for self-employed workers – including seasonal self-employed – affected by economic activity suspension, an extension of unemployment benefits to cover workers who were laid off during the probation period, as well as those who were switching jobs (International Monetary Fund, 2021). Furthermore, there was a temporary monthly allowance for fixed-term workers whose contract (at least two months' duration) expired during the first state of emergency and were not entitled to collect unemployment benefits. All in all, the Spanish crisis response was characterised by the use of upstream systems such as job retention and ad hoc measures in unemployment insurance to stabilise jobs and incomes, thereby also reducing the pressure on unemployment assistance and MIS in the early phase of the crisis.

### 7.4.4.3 Minimum income support systems and reforms

In the context of COVID-19 – but considered and planned before, as described above – Spain implemented a remarkable reform in response to the crisis (OECD, 2020, ES). In June 2020, the *Ingreso Minimo Vital* (IMV) was introduced, a new national MIS scheme. As in most European countries, it provides a non-contributory, tax-funded social minimum depending on a means test that accounts (at the household level) for savings and other income sources. Other conditions are age (23-65, or 18+ with children) and active job search. It is not taxable but can be combined with other social benefits and income from work. This is probably one of the most encompassing social reforms observable in Europe in that period, and it fundamentally changed the MIS landscape in Spain, although it is still too early to assess how IMV will alter existing regional MIS in the long run. In any case, with the IMV reform Spain has undertaken a decisive step in overcoming the Southern European legacy of a fragmented and rudimentary MIS arrangement.

The reform essentially achieved a standardisation of the conditions of various regional minimum income schemes, but duration and generosity of the new scheme also meant an improvement compared to the status quo in most regions (Bengochea, 2021). Within the new IMV setting, the guaranteed annual income for an individual beneficiary is set at 100 percent of the amount of non-contributory pensions as defined in the annual General State Budget Law: therefore, in 2020, the annual amount of guaranteed income for an individual beneficiary was 5,538 EUR. This corresponded to 61.4 percent of the (2019) relative poverty threshold. Accordingly, for the same individual beneficiary, the annual benefit amount corresponds to the difference between the actual income and the full rate of 5,538 EUR: supplements were provided for single parents (22 percent), and 30 percent for each additional household member up to a maximum increase of 220 percent (Raitano et al., 2021). Hence, while a single adult could receive around 5,500 EUR per year, families could get up to 12,000 EUR (Ramos, 2021). As was already the case with regional MIS (at least formally), the IMV benefit is also conditional upon participation in activation programmes that aim at labour market

integration and social inclusion. In addition, to overcome potential inactivity traps, IMV can also be paid as an in-work benefit.

Since the new IMV is complemented with inclusion and activation measures, it requires cooperation with autonomous regions and municipalities to implement it (OECD 2020, ES) as the activation policies remain in the hands of the regional authorities. According to expert views, there is still a general lack of coordination between public employment services and IMV administration.

Initial projections expected that IMV would reach more than 2 million individual recipients. Nonetheless, in September 2021, more than a year after the introduction, total applications were still well below that number. Although the number of applications was high (1.5 million), only 337,000 of them were approved and around 975,000 rejected (see below). This means that approximately 800,000 people have so far benefited from the reform (Ramos, 2021). This gap between initial ambitions and actual numbers (as well as between applications and approvals) could point to too strict eligibility criteria and a need to adjust them (AIRef, 2022). Another possibility is that the application process is quite bureaucratic and cumbersome given the multi-level structure of MIS in Spain (which requires a coordination framework between central government, the regions and the municipalities). One issue the country experts mentioned regarding the IMV is that the benefit access is calculated based on last year's income. Therefore, situations where people had a decent income last year but have experienced income losses most recently are not appropriately dealt with by IMV. Both under- and overpayments may result. This way to assess the access to IMV also complicates the integration with the existing regional MIS, experts argue., as they take into account the current situation of households. Further, information barriers seem to prevent eligible people from applying for the benefit in the first place (Bengochea, 2021). Despite these implementation issues, a preliminary assessment of the new benefit suggests that it made a noticeable contribution to alleviating poverty and inequality during the pandemic in Spain.

The independent authority on fiscal responsibility in Spain (AIReF) published a first assessment of the IMV scheme in July 2022 (AIReF, 2022). This report finds that the IMV by design would increase the coverage (relative to the status quo with only regional MIS) by about 250,000 households and improve the situation of those who were previously covered only by the regional MIS and can now claim IMV. Only around 65 percent of potential IMV beneficiaries could claim MIS before, so that IMV increases coverage substantially for those people in Autonomous Communities which had only limited MIS before. While the IMV should cover about 52 percent of households in poverty (700,000 households), 8 percent of the households who are not covered by the IMV would still be covered by the existing regional MIS due to differing entitlement criteria. The remaining 40 percent (~537,000 households) could be (partially) covered if the Autonomous Communities use their resources gained from savings on the MIS spending since the implementation of the national IMV. 33 percent of households in poverty that are not covered by the IMV fail just the income criterion and 30 percent fail the wealth criterion. The IMV together with the MIS should help those beneficiaries reach 80 percent of the poverty line while single-parent households would reach the poverty line thanks to the IMV. With cost of at least 2.8 billion EUR, spending in regional budgets would be reduced as 65 percent of the beneficiaries would have previously been eligible for the existing regional MIS and now receive the IMV, which would free up resources from these programmes and allow for adjustments in regional MIS (AIReF, 2022). The costs to stop poverty would amount to additional 2.2 billion Euros.

The first results on the actual implementation of IMV available as of December 2021 show that the IMV reached 40 percent of its targeted households (284,000 of 700,000) and with that it achieved a reduction in the poverty intensity of 32 percent of its full potential. Meanwhile 56 percent of the

annual budget for the IMV was used. Besides the approximately 975,000 rejected IMV applications (until December 2021) for non-fulfilment of the income and cohabitation criterion, the non-take-up makes up around 57 percent of the targeted households. Factors for non-take-up are having some form of income, receiving unemployment benefits or the level of household income. The Ministry of Inclusion, Social Security and Migration has promoted a number of actions and pilot exercises to analyse and reduce the non-take-up (AIReF, 2022).

Despite limited data availability, the following observations can be made regarding the practical interrelations between IMV and regional MIS: For Autonomous Communities with limited MIS, the impact of the IMV seems to be a replacement of the former regional MIS with the IMV (e.g. Madrid and some regions in Southern Spain). In the regions with stronger MIS, the IMV has had only a small impact so far. For regions like the Basque Country there might even be more reasons to not replace their regional MIS with the federal IMV as MIS can be part of the regional identity. This shows how the regional MIS schemes differ in their reaction to the introduction of the IMV either by replacing them for the IMV or keeping both as in the case of the Basque Country, where the regional MIS benefits trump the current level of IMV. The overhaul of the MIS systems is still in progress and so far so that a harmonised system has not yet emerged.

## 7.4.4.4 Outcomes

For the time being – and in contrast to the recession that started in the late-2000s and hit Spain severely – socio-economic outcomes seem quite stable so far. This might point at the heavy use of crisis-related stabilisation measures, including the stronger role of publicly supported working time reductions and extended upstream systems. While it remains too early to attribute a major role to the phasing-in of the new IMV scheme, it seems plausible to argue that the additional resources devoted to IMV has strengthened the stabilisation capacities of the Spanish MIS arrangement and closed some gaps in the regional MIS landscape.

## 7.4.5 Main insights from the Spanish case

This case study shows that the Spanish employment and social protection system, characterized by the Southern European combination of fragmented and weak MIS with a comparatively strong system of job and unemployment protection for permanent workers as opposed to temporary employees, came under massive pressure during and after the Financial Crisis. Spain was particularly affected given the transformation of the economic crisis into a public debt crisis resulting in a double dip recession. This was followed by austerity measures in social protection and structural changes in the long-standing pattern of employment protection. As the crisis unfolded, it became clear that neither the relatively encompassing UI nor the existing minimum income protection system relying mainly on the diverse regional MIS systems in place did suffice to stabilise income and contain poverty. Adopting a longer-term perspective, under strong internal and external pressure, Spain questioned its institutional status quo and the legacy of the Mediterranean welfare state type, trying to establish more encompassing unemployment insurance, and a more balanced and flexible model of employment protection. During the COVID-19 crisis, it could provide more support through shorttime work than ten years earlier, and it was able to establish a national MIS system that is now in the process of implementation and brings Spain closer to the European mainstream. In this sense, the Spanish welfare state was modernised at the institutional level, departing from the Southern European legacy and moving more in the direction of Continental European models, e.g. France. Despite these efforts at reforming the welfare state and the labour market, it seems difficult to overcome long-standing patterns of labour market and social policy dualism since Spain continues to show massive problems with labour market integration of those trying to (re)enter the labour market

via temporary contracts. The latter phenomenon is also quite similar to the French situation.

Table 7.8 Main developments in Spain, 2005-2021

	Pre-2008	Great Recession	Austerity/recovery	COVID-19
Economic	Strong growth	Large and long-	A severe	Loss of fixed-
environment	in GDP and	lasting economic	unemployment	term
	employment,	downturn with a	crisis, long-lasting	contracts led
	but	particularly	recession, and	to severe
	economically	strong impact on	sovereign debt	GDP
	vulnerable.	jobs and	crisis had deep	contraction.
	2.	employment.	impacts.	
Unemployment	Strict	Expansion of	Deregulation of	Expansion of
insurance and labour	employment	short-time work	employee	benefit
market regulation	protection led	benefits and	dismissal to	eligibility in
, , , , , , , , , , , , , , , , , , ,	to high share of	implementation	improve labour	response to
	temporary	of limited	market flexibility.	pandemic
	contracts and	additional UI	Introduction of	crisis.
	youth	payment	new UI scheme for	
	unemployment.	schemes.	self-employed.	
Minimum income	Provision of	Continued	Implementation of	Introduction
support systems	limited benefits	regional	temporary	of a national
	to specific	fragmentation of	assistance	MIS scheme
	groups, but	MIS schemes.	benefits to	to replace
	marked by		compensate for	the diverse
	significant		strain on local MIS	local
	regional		schemes.	schemes.
	differences.	59-5		20 20
Outcomes	Increase in	Deterioration of	High levels of	More stable
	unemployment	employment and	poverty resulted	outlook
	situation did	poverty situations	from Spain's	compared to
	not correspond	set in.	inability to buffer	previous
	to the rather		against the effects	crisis, but it
	heavy poverty		of the crisis.	is too early
	outlook in			to assess the
	Spain.			impact of the
				new MIS
				scheme.

## 7.5 Denmark

Representing an encompassing and traditionally quite generous Nordic welfare state, Denmark was also impacted heavily by the 2008/09 crisis as section 4 has shown. In contrast to Spain, but more in line with France, the direct link to unemployment and poverty risks was more mitigated due to the strong stabilisation capacities of the Danish or Nordic welfare state arrangement as shown in chapters 5 and 6. However, the extent of the crisis also put Denmark under heavy pressure during the first half of the 2010s. This led to a medium-term, but overall moderate deterioration of its generally quite favourable main socio-economic outcomes such as employment decline, relative high unemployment and rising poverty figures. This could obviously not be contained and buffered fully even in the Danish case. This section looks closer into the role the different tiers of protection played in Denmark, and it highlights the main reforms of the 2010s. The initial theoretical expectations regarding the Danish case – as a typical example of a Nordic welfare state – are as follows: Denmark should have a distinctly better upstream social protection system that relegates MIS to a marginal role. This was already confirmed in section 6 and the finding of a strong income stabilisation in Denmark through social protection during crises. The expectation is also that the system is less segmented in terms of access to social protection. In addition, Denmark should have more developed activation policies and more successful integration measures than the other cases. Finally, a path dependent logic was assumed so that the differences between Denmark and the other cases should be maintained throughout the observation period. However, as this section shows, Denmark implemented some reforms that challenged the widely shared perception of a generous, universal and enabling welfare state.

## 7.5.1 Phase 1 (pre-2008)

#### 7.5.1.1 Economic environment

Up to the Great Recession the Danish economy was characterised by low unemployment, high levels of labour force participation, and relatively low earnings inequality. This strong performance has been conducive to the sustained existence of a highly developed and resource-intensive welfare state regarding monetary benefits and services along the lines of the Danish flexicurity model. Its emphasis was on the combination of flexible dismissal regulation (see Figure 7.1), strong active labour market policies, education and social protection through relatively generous and comprehensive benefits.

#### 7.5.1.2 Labour market regulation and unemployment insurance

Denmark entered the period studied with its long-standing flexicurity arrangement. This means flexible statutory regulation of dismissals (see Figure 7.1) – associated with low temporary employment shares (Figure 7.3), but high mobility on the labour market. This "liberal" aspect was combined with a strong role of collective bargaining, a strong emphasis on income protection (mainly through encompassing unemployment insurance) and massive spending on active labour market policies (Figure 7.10) as to ensure mobility, employability and employment security (Bredgaard and Madsen, 2018; Goul Andersen, 2019; Andersen, 2017).

The logic of Danish unemployment insurance is distinct given its voluntary, but still encompassing character. According to the account of the OECD for 2005 (OECD, 2005, DK) – and subsequent years – around 90 percent of the workforce was covered (see also coverage data in chapter 6). As is the case in most unemployment insurance systems, the benefit level in Danish UI was (and still is) related to previous earnings but subject to a continued low benefit ceiling so that low-wage earners experience a higher replacement rate than workers with medium or high income (see Figure 7.5 and Figure 7.6). In fact, income replacement was provided at 90 percent up to the relatively low benefit ceiling of (at

the time) 440 EUR per week (2005) for up to four years in 2005 (this only applied to unemployed 60+ as of 2007, and was lowered for younger people to 2.5 years). The Danish UI system therefore is less status-maintaining than the French system, for example, but quite universal. Nonetheless, workers in Denmark have to be voluntary members of an unemployment insurance fund for the last year and contribute to this fund via their membership fee. UI is open for apprentice graduates (under the age of 18) and all adult employees. Hence, certain minimum requirements regarding contribution periods applied, generally twelve months of full-time work within the last 36 months. UI benefits in Denmark are taxable and liable to some social contributions. To requalify, 26 weeks of work were required. Lower rates applied to young workers and labour market entrants. Overall, given the low benefit ceiling, the Danish UI system is sometimes considered effectively a quasi-flat-rate model. Compared to countries in Continental Europe, the combination of low employment protection and a universal, but not overly generous UI created a labour market with higher levels of mobility and lower job stability as well as – at least for high and medium skilled workers – strong incentives to take up work.

For older workers 60+ with a long employment record there was the option of early retirement. For the unemployed with a permanently reduced capacity to work that did not manage to re-enter the labour market, a temporary unemployment benefit was available before flexible temporary job opportunities were made available.

### 7.5.1.3 Minimum income support systems and reforms

In line with the expectation that Nordic models are less centred around different benefits for different groups, in the mid-2000s (and later on) there was no unemployment assistance for long-term unemployed with a previous employment record (OECD, 2005, DK). Over the whole period, social assistance has constituted the main safety net of last resort in Denmark below UI. It was administered by local authorities, while benefit amounts were determined by national guidelines. Reforms implemented before the mid-2000s ensured that social assistance usually was lower than unemployment insurance. Social assistance in Denmark was made contingent on a "social event" such as unemployment (while not for low income as such) but was in general not available for those in work; rather, social assistance recipients were expected to take up work (and exit from benefit receipt) as soon as possible.

Social assistance in Denmark was (and still is) calculated at the individual level and reached about 80 percent of the maximum UI benefit for beneficiaries with children and 60 percent for those without. It tends to meet the adequacy requirement of the 60 percent median income threshold better than many other countries (see Figure 7.12 and Figure 7.13). The benefit ceiling was reduced after six months of social assistance receipt. An earnings disregard was applied to earnings from work or activation. As with the UI benefit, social assistance was taxable. Special rates applied to young people and married couples, but also for them, benefit cuts took place after six months. There was a special regime to cover housing cost for social assistance beneficiaries that was different from general housing allowance.

An important structural reform in 2007 adjusted the role of municipalities in administering social assistance. Municipalities traditionally have strong autonomy in implementing policies in Denmark. On the face of it, municipalities received greater competencies in labour market policy. Whereas they used to be in charge only for non-insured workers receiving social assistance, they now had to develop broader employment policies for all job seekers (in newly created *Jobcenters*). In practice, this meant sharper trade-offs, because municipalities have to have a balanced annual budget. The fact that funding education and training for job seekers now competed with other tasks (regarding health, childcare, and the elderly) reduced possibilities to invest in this area. In addition, the central governments built economic incentives into the allocation of its funds in the form of penalties for

jobseekers not brought into employment. The share of expenses for benefit payments that the municipalities received from government funds strongly depended on the time that an unemployed person spent in the system. This made it increasingly attractive to push recipients into jobs instead of taking a costly long-term approach to their integration. According to Weishaupt et al. (2022), this reform at least partly explains the decline of human-capital oriented active labour market policies in Denmark over time.

#### 7.5.1.4 Outcomes

Denmark exhibited a low poverty rate and overall below-average inequality due to the highly developed welfare state and a high degree of labour market integration of the working-age population as shown in the figures in section 4. During that period, the flexicurity arrangement was sustainable also due to availability of sufficient funding for active and passive labour market policies because of high employment and low unemployment. In this regard, the structural reform at the end of the first period can be seen as an important shift towards less generous policies, although the precrisis patterns are still largely in line with the initial expectations.

### 7.5.2 Phase 2 (2008/09)

#### 7.5.2.1 Economic environment

Denmark was heavily hit by the Great Recession, not least due to the bursting of the national housing bubble (Bredgaard and Madsen, 2018; Goul Andersen, 2019). Consequently, there was a massive decline of GDP by 6 percent in 2009 and a significant increase in unemployment up to 8 percent in 2012 (from less than 4 percent in 2008). The strong outflow from employment to unemployment can be seen as the flipside of a flexible labour market with relatively weak employment protection and no (major) job retention policy (Bredgaard and Madsen, 2018). This is as a joint trait with Ireland and Spain.

#### 7.5.2.2 Labour market regulation and unemployment insurance

As a general principle, unemployed members of UI funds had to register with the public employment service and be available for work. UI funds were required to interview unemployed members every third month to check for their availability for work. As of January 2008, i.e. before the recession, unemployed persons in the UI systems also had to register digitally once a week on a job exchange platform to confirm their availability for work. If someone had quit their job voluntarily, a waiting period of three weeks was implemented (OECD, 2008, DK).

## 7.5.2.3 Minimum income support systems and reforms

The system continued during the acute crisis period. While stricter availability criteria were introduced for couple households claiming social assistance (OECD, 2008, DK), major reforms were only introduced after crisis effects had fully materialised (see below). Hence, in the Danish case major reform activity in MIS could only be observed with some delay, which is quite in line with the expectation that regular buffering capacities in UI worked in the first place.

#### 7.5.2.4 Outcomes

With hindsight, one could argue that the Financial Crisis was a massive shock for the social model of Denmark. There was a relatively strong increase in unemployment due to the limited extent of

employment protection and short-time work. This subsequently translated into a relatively persistent increase in poverty, albeit still at a low level in comparative terms.

### 7.5.3 Phase 3 (2010 – 2019)

## 7.5.3.1 Economic environment

In Denmark, high unemployment persisted until a peak in 2012, and the employment rate remained lower than before the crisis even in the mid-2010s (Bredgaard and Madsen, 2018). Hence, it is fair to say that the labour market impact of the Great Recession was stronger and potentially more long-lasting in Denmark than expected and more severe than in many other EU Member States. Additionally, youth and long-term unemployment increased more persistently. That means that the capacity of the Danish labour market to (re)integrate workers was weakened in the aftermath of the Great Recession – while segmentation to the detriment of more vulnerable groups increased. This is an unexpected pattern that is not typically associated with the Nordic welfare model. Nonetheless, as argued by Andersen (2017), there was a continuously high level of mobility contributing to labour market re/integration for many and on average unemployment spells were rather short. A more stable recovery only started in the mid-2010s.

# 7.5.3.2 Labour market regulation and unemployment insurance

The 2010s were a phase of tighter unemployment insurance benefit conditions in Denmark, making them the strictest in our country sample at the time (see Immervoll and Knotz, 2018). The maximum benefit duration of UI was reduced from four to two years as of 2010/11 (OECD 2010, DK; Bredgaard and Madsen, 2018; Goul Andersen, 2019). Employment spells needed for requalification for UI benefits were extended from 26 weeks of employment to 52 weeks. In the same period, the full-time employment requirement was transformed into an hours-worked requirement for both initial and requalified entitlements (1,924 hours of work, which corresponds to slightly less than one year of full-time work, within three years). Hence, eligibility was tightened and entitlements were shortened. It is worth mentioning that before the 1990s, there existed no maximum duration of benefit receipt, so these steps have to be seen as strong retrenchment in the Danish context. These reforms made receipt of UI benefits more difficult and marked a departure from the pre-crisis setting.

The reforms started to produce effects and more recipients than expected actually exhausted their benefits (50-70,000 persons lost their UI benefit entitlement in 2013 to 2015), while not being eligible to social assistance due to means testing (Bredgaard and Madsen, 2018; Goul Andersen, 2019). The government reacted to this situation with repeated temporary extensions of the benefit period. This counter-acted the original goals of the reform at least during the harsh post-crisis period. The situation also led to trade union initiatives to strengthen employment protection legislation to stabilise jobs and mitigate perceived (and actual) job insecurity. In addition, there was an accelerated postponement of the early retirement exit age and regular pension age, with some incentives for voluntary early retirement (Goul Andersen, 2019).

Furthermore, there was still the long-term decline in the net replacement rate in Danish UI (Bredgaard and Madsen 2018) which had already been observed before the crisis. The replacement remained high (only) for low-wage earners, but was overall still quite generous in internationally comparative terms. Overall, this was a period of stricter activation, but also expansion of training in active labour market policies (ALMPs) (Bredgaard and Madsen, 2018).

In 2017, the minimum hour requirement to be entitled to unemployment insurance benefits was changed into an earnings criterion corresponding to at least twelve months of employment up to a certain earnings limit; there was now also the option of a part-time work UI benefit model (OECD 2017, DK).

In the second half of the 2010s, reforms overall shifted away from blunt retrenchment to adjustments with the goal of making the system more transparent and incentive-compatible. A reform package in 2017 with this goal incorporated insights from behavioural economics and "nudging" research. For example, the calculation of the unemployment benefit rate was based on the twelve months with the highest income within the past 24 months. The aim was to ensure that no one was punished for taking a temporary low-paid job before becoming unemployed. As a consequence, more unemployed people received a higher benefit amount after the reform.

Furthermore, while the benefit period was continued in 2017 with two years within a three-year period this was complemented with a new option to prolong the benefit period by up to one year by working for a period of six months during the benefit period. Hours worked were now recorded in an "employment account" (which the unemployed can access and monitor) that could be exchanged for unemployment benefits at a ratio of 1:2 (every hour worked produces to new hours of entitlement). This means that "every hour of work counts" towards extending the benefit duration. The main goal of this simple rule and the individual account was making the benefits of taking up work more transparent to the unemployed and case workers.

Another modification concerned the implementation of waiting days. Waiting days mean that one is not eligible for unemployment on day one of an unemployment spell. In Denmark, these were moved from the beginning of benefit receipt towards the third month. After every four-month period without employment, the unemployed lose one day of benefit receipt (the original plan in the reform commission was two days every three months). The idea was to use waiting days to influence short-term preferences (and loss aversion) to nudge the unemployed into accepting shorter employment spells during benefit receipt. The waiting days can be avoided if the unemployed work on average one week per month. Evaluations of employment effects have been inconclusive because reform effects were difficult to disentangle from the positive macro economy after 2017. However, the reform seems to have translated into more subjective security of the unemployed and a better understanding of procedures, which is in line with the goal of a more transparent and predictable system (Danish Agency for Labour Market and Recruitment 2022).

Insured unemployed persons who had exhausted their entitlement to unemployment benefit up until the second half of 2013 were entitled to the special education benefit if available for the labour market and accepting a special plan of training/education. A temporary labour market benefit was given to persons who had exhausted their entitlement to unemployment benefit and/or the special education benefit during the first half of 2014 and before the end of the first half of 2016. It was limited to members of an unemployment insurance fund that were registered as job seekers and available for work (OECD 2014, DK). Both the special education benefit and the temporary labour market benefit comprised 60 (80) percent of the maximum rate of the unemployment insurance benefit for those without (with) children. The duration of the special education benefit was six months, gradually phased out by the end of 2014. The labour market benefit was granted for up to 1¼ years in 2014 and gradually shortened as well as phased out by the end of 2017. The total period of unemployment benefit, the special education benefit and temporary labour market benefit could last for a maximum of four years.

While in Denmark there has already been a voluntary insurance scheme for the self-employed against unemployment ("opt-in"), it was redesigned in 2017 with effect from mid-2018 (Kvist, 2017; Mailand and Larsen, 2018). Self-employed persons have access to the general unemployment insurance system in Denmark (MISSOC, 2021). The new unemployment insurance system can be understood as an insurance against loss of earned income regardless of status (Kvist, 2017). Self-employed persons must close their entire self-employed business to receive full-time unemployment benefits (MISSOC, 2021). Self-employed persons in Denmark must also have been members of the unemployment insurance fund for at least one year to be eligible for unemployment benefits. Self-employed persons must provide evidence of earned income, which includes income from self-employment and income from employment (MISSOC, 2021).

In sum, the period saw the implementation of various liberalising elements. These show that the Danish system of unemployment protection is not characterised by overly strong path dependence. However, when the effects of retrenchment (in conjunction with strong crisis effects) started to produce shrinking coverage, the system was adjusted to restore its traditional decent performance in relative terms. Nonetheless, the system was considerably less generous at the end of the period compared to the 2000s.

## 7.5.3.3 Minimum income support systems and reforms

Overall, while there was little attention devoted to the Danish MIS system in welfare state analysis relative to UI and its reforms, this focus changed during the 2010s, when Danish social assistance was tightened and 'activated' in line with the overall more restrictive social policy stance. However, first there was a notable more expansionary reform along with the UI reforms also in social assistance in 2011:

- Start assistance for migrants was replaced with regular social assistance
- Cumulative ceiling to support social assistance recipients abandoned
- No further requirement of 450 hours of unsubsidised work for social assistance recipients

However, reversing these steps, between 2014 and 2016 there was a series of reforms that deliberately went in the direction of more retrenchment (Kvist, 2016). The reform taking effect in 2014 was based on the premise that the Danish social assistance system is not conducive to reintegration into the labour market. To incentivise taking up education or work, social assistance was divided into three distinct schemes: general social assistance ("kontanthjælp"), resource programme benefit ("ressourceforløbsydelse") and educational help ("uddannelseshjælp"). A fourth scheme, integration benefit ("integrationsydelse") was created (by the new government supported by the Danish People's Party), replacing the start assistance, in September 2015.

The 2014 reform thereby effectively excluded many claimants younger than 30 years from social assistance and instead created two new benefits for this group. Educational help supports claimants younger than 25 who do not have an educational degree. The resource programme benefit supports claimants with additional (e.g. health-related) integration barriers. General social assistance is available for those older than 30 years or younger people who have an education or participate in activation schemes. The integration benefit really is targeted at immigrants (formally, it is for those residing in Denmark for less than seven out of the past eight years).

Generally, an important underlying goal behind the fragmentation of the MIS system is to differentiate benefit levels. The reforms have led to considerably lower rates for recipients below the age of 30 and for asylum seekers (Kvist, 2016). In addition, the 2016 reform introduced a ceiling for

the total amount received from different benefits (social assistance, housing, etc.), which strengthened the retrenching character of the reforms as shown in **Table 7.9**. While the benefit levels in the new system depend on a range of criteria, the table below illustrates the extent of differentiation in generosity. Again, this can be seen as a path revision given the more universal Nordic welfare state tradition.

Table 7.9 Minimum income benefit levels and ceiling in EUR (2015) by type of benefit, age, and family situation, Denmark

	Social assistance > 30 years		Social assistance < 30 years		Educational help / integration benefit	
	Level	Ceiling	Level	Ceiling	Level	Ceiling
Single without children	1,454	1,759	937	1,346	797	1,293
Single with two or more children	1,932	2,062	1,847	2,022	1,593	1,926
Cohabiting and married without children	1,454	1,454	937	1,253	797	1,201
Cohabiting and married with two or more children	1,932	1,932	1,847	1,633	1,593	1,552

Source: Kvist (2016), p. 11.

The 2016 reform also strongly increased activation and work requirements, which can be interpreted as a move to lower (perceived) work disincentives built into the benefit system. Social assistance (but not educational help and the integration benefit) claimants must have worked 225 hours in the previous year to be fully eligible for continuation of benefit receipt. If one person in a household of several recipients fails to meet the 225-hour work requirement, benefits are withdrawn completely for the individual. Singles face a reduction in benefits. There are similar sanctions for refusing activation measures.

The above-described economic incentives for municipalities to bring the unemployed into employment (in the form of central government refunds depending on the time when individuals receive benefits) continue to exist. The financial framework also means that the central government can steer the Danish activation approach in a joint direction despite the decentralised character of employment policies. However, the precise nature of the financial framework and the incentives that derive from it are constantly adjusted and subject to experimentation (usually in close exchange between government, municipalities, and the social partners). According to our interviews, the system still provides sufficient flexibility to give justice to various employment barriers and find long-term solutions. Nonetheless, it is quite clear that the incentive structure has firmly implemented a work-first approach in Denmark. This means that the Danish system by now clearly prioritises counselling, placement, and training strategies that lead to (rapid) integration into the regular labour market. This has come at the expense of programmes for sheltered employment or pure training schemes that aim at a general upskilling without link to an employer. For example, whereas municipalities tended to rely on their own training centres, they now prioritise on-the-job training, sometimes in combination with wage subsidies.

While the immediate effects of the retrenchment-oriented UI reform were mitigated by a delayed implementation and some additional temporary benefits at the social assistance level (as described above), a stronger reliance on social assistance could be observed in Denmark (Goul Andersen 2019). Overall, the high replacement rates in Denmark eroded somewhat over that period (see e.g. Figure 10.21). The massive decline for couples with children (see Figure 7.8 and Figure 7.9) relates to the 2015 reform that – effective as of October 2016 – reintroduced the cumulative benefit ceiling (or cap) and reinforced work requirements (225 hours per year) for both partners which resulted in benefit cuts if this requirement is not met (see Mailand and Larsen, 2018). This became also apparent with the decline of benefit adequacy in the second half of the 2010s as shown in Figure 7.12 and Figure 7.13).

#### 7.5.3.4 Outcomes

This period can be characterised as a long phase of return to better socio-economic outcomes in Denmark. Ultimately, in the later phase of the 2010s some outcome variables returned to levels comparable to the situation before 2009 while others did not, e.g. the poverty risk (see Figure 4.5). Nonetheless, this relative decline occurred against the background of an overall favourable performance in terms of inequality and exclusion, including due to the strong redistributive capacities of the Danish welfare state and related high social expenditure, while benefit adequacy also remained at a relatively high level.

### 7.5.4 Phase 4 (2020/21)

# 7.5.4.1 Economic environment

Denmark was also affected by the global pandemic, but according to quarterly GDP data, Denmark only experienced a relatively small decline in economic activity in 2020 with only one quarter of negative GDP growth.

# 7.5.4.2 Labour market regulation and unemployment insurance

During the pandemic, there have not been permanent UI changes. Regarding job retention during the pandemic, Denmark created a new and temporary crisis-related short-time work scheme on the one hand ("lønkompensationsordningen") and adapted a long-standing part-time furlough scheme on the other hand ("arbejdsforderling") (Drahokupil and Müller, 2021; Larsen and Ilsoe, 2021). This created also a more prominent role of job retention schemes and short-time work in Denmark during COVID-19 as compared to the Great Recession (Cahuc, 2019).

## 7.5.4.3 Minimum income support systems and reforms

Denmark's social assistance scheme has been stable over this period. Individuals can receive social assistance if they continue to meet the criteria for UI benefit receipt (e.g. availability for work, or, in case of sickness or disability, for rehabilitation). Both partners in couple households need to be available for employment. Danish social assistance benefits are always calculated on an individual basis, reaching about 80 percent of the maximum UI benefit in case of recipients 30+ with children, 60 percent for adults without children; individual and household income and savings are taken into account (means test), special rates apply for lone parents and for younger beneficiaries. There is a special housing benefit available for needy recipients of social assistance. Since the last reform, benefit rates are reduced after one year if beneficiaries have not worked at least 225 hours in that period. For singles this cut is about seven percent (suspended during the initial phase of the pandemic). There was also an interruption of PES activity in spring 2020 (OECD, 2020b).

#### 7.5.4.4 Outcomes

For the poverty-related indicators shown in section 4.1 there has not (yet) been a major reaction in Denmark, confirming, at least for 2020, the positive performance profile.

# 7.5.5 Main insights from the Danish case

As formulated in our expectations, Denmark entered the 2008/09 crisis with a highly developed and inclusive welfare state. The crisis had a major impact on socio-economic outcomes in the first half of the 2010s. While still guite favourable overall and in comparison to the other countries in our sample, unemployment and poverty risks increased and stayed at relatively high levels for quite some time. The flexible labour market in Denmark with very limited employment protection suffered more from the crisis than one would have expected. As a response at the policy level, the 2010s were characterised by a sequence of emergency measures on the one hand and structural changes following an austerity orientation on the other hand. This made MIS and unemployment insurance more restrictive, exclusive (fragmented) and activating, while traditionally high spending on 'enabling' ALMPs was cut. In that sense, the Nordic welfare state of Denmark has become more 'demanding' over time by lowering benefit generosity and tightening work requirements. This calls into question a path dependent logic according to which the Nordic model is characterised by a stable policy approach leading to superior performance. In some ways, Denmark has lost distinct advantages that sets it apart from other countries. While unemployment insurance was adapted and enlarged in coverage, transitions from unemployment to employment are more frequent in Denmark than in other countries (see Figure 10.24). However, over time Denmark has moved away from the ideal type Nordic model as it was perceived and referred to over the 2000s.

Table 7.10 Main developments in Denmark, 2005-2021

	Pre-2008	Great Recession	Austerity/recovery	COVID-19
Economic environment		Flexible labour		
Economic environment	Strong	market and	Long-lasting economic	Relatively
	economic			little impact:
	performance	bursting of	downturn resulted	only one
	and high levels	housing bubble	in poor	quarter of
	of	led to economic	employment	economic
	employment.	downturn and	situation.	downturn.
		increasing		
		unemployment.		
Unemployment	Strong	Strict availability	Sweeping	Introduction
insurance and labour	emphasis on	requirements.	reduction of	of temporary
market regulation	flexicurity;		benefit eligibility	payments,
	benefits based		and corresponding	but no
	on income		reduction in	permanent
	instead of		replacement	changes to
	status.		rates.	UI.
Minimum income	Covered the	Held steady	Reintroduction of	General
support systems	gaps of a	during this	benefit ceiling led	maintenance
	weaker UI	period. Some	to reduced	of previous
	system.	minor	replacement	status quo.
		adjustments to	rates.	
		work availability		
		requirements.	2	
Outcomes	Low poverty	Limited	Long-term	Minimal
	and inequality	employment	recovery to pre-	increase in
	rates.	protection and	crisis levels.	poverty
		poor use of short-		indicators,
		time work led to		indicating a
		increases in		positive
		poverty and a		performance
		general shock to		profile.
		the Danish		302
		system.		

## 7.6 Poland

Poland has been identified as a CEE country classifiable as a Post-Socialist welfare state model with a rather reduced level of social protection and income stabilisation, also confirmed by the simulation findings in chapter 6 that show relatively low benefit generosity and coverage. As the data presented in section 4.1 showed, over the last two decades Poland has been less affected by economic shocks than the other countries in our sample. Hence, given this long-term economic catching-up path, the (more limited) cushioning capacities of the welfare state were not as crucial for the development as in other countries. However, the profile of Poland also exhibited a high share of employed people with low income or in in-work poverty, as highlighted in the descriptive analysis. This section explores how and to what extent this has led to specific medium- and long-term modifications in the Polish social protection system and the labour market institutions. Given the economic catching up path pursued by Poland, we tend to expect reforms – if any – that are distinct from those reforms implemented in countries that underwent a deep crisis and a period of austerity given that in Poland the fiscal space has rather grown than shrunk over time.

### 7.6.1 Phase 1 (pre-2008)

## 7.6.1.1 Economic environment

Quite in contrast to the later improvement, Poland entered the 21<sup>st</sup> century with extremely high unemployment but started to reverse this situation leading up to 2008. This trend proved to be the case even for groups that in other countries are often vulnerable, i.e. older and younger workers. However, at the same time, atypical work became more common (Lewandowski and Magda, 2018). Benefits pay-outs grew steadily during this period (OECD, 2006, 2007, 2008, PL).

#### 7.6.1.2 Labour market regulation and unemployment insurance

The main element of income protection in Poland is the so-called Unemployment Allowance, a contributory, but means-tested benefit. According to experts, this allowance represents Poland's primary benefit that can best be classified as an UI scheme. Funding for this benefit is pooled into the Labour Fund, and funding from this is then distributed to the local labour offices, which are responsible for administering the benefit. Contributions to the Labour Fund are made for individual employees by their employers. Contributions to the Labour Fund are merely optional for the self-employed, as explained by national experts. 2004 saw the passage of the Law on Employment Promotion and Labour Market Institutions. This Act mostly served to restructure the organisational element of UI provision, but also outsourced the provision of services such as active job search assistance (Kalužná, 2009).

According to MISSOC, the UI benefits in Poland consist largely of this flat-rate Unemployment Allowance (with some variation, see below) and an earnings-related Pre-Retirement Benefit. However, the Unemployment Allowance saw a stable yearly increase over these years as benefit amounts were tied to the consumer price index. The 2004 Law on Employment Promotion and Labour Institutions was amended in 2007 to expand employment benefits to those who are unemployed after imprisonment. In principle, the benefit is available to men between the age of 18 and 65, or women aged 18 to 60. A qualifying period of 365 days worked in the previous eighteen months applies. Applicants must be unemployed and willing and able to take up suitable employment – refusal of eligible employment would lead to the recipient being stripped of benefits for 90 days. There are no job search requirements, but beneficiaries must report to their local labour office at specified times to confirm employment readiness. Those with more than 2 hectares of arable land and those with an income more than half the minimum pay rate are excluded from benefits. The

duration of UI benefits was contingent on the level of unemployment in a given area: six months if total unemployment is below 150 percent of the national average, and twelve months if it is above 150 percent, or if the claimant has a sufficient qualifying period. There are no benefits available for partially unemployed. Since 2007, UI benefits for groups such as those below 25 and the long-term unemployed are limited to a duration of six months (OECD, 2010).

Payments under the Unemployment Allowance are calculated against the backdrop of the so-called Basic Unemployment Allowance (BUA). In 2005, the BUA totalled PLN 504.20 monthly. The BUA is then cross-checked with the years worked by the recipient to yield the total pay-out. One to five years of work yield 80 percent of the BUA, between five and 20 years yield 100 percent, and more than 20 twenty years yield 120 percent. The BUA is indexed to consumer prices, and consequently is increased annually (OECD, 2005, PL). The provision of benefits under the UA scheme is the responsibility of diverse local district labour offices. These offices, however, tend to struggle with staffing shortages and have often faced difficulties in carrying out their duties so that the effectiveness of the labour offices varies by district (Sztandar-Sztanderska, 2009). In Poland, the activation of the unemployed tended to be traditionally focused on job creation and training. The Polish government provides a large amount of funding for vocational training and the provision of workplaces for the unemployed (Wisniewski and Maxim, 2013). Poland spent around PLN 1.9 billion on ALMPs in 2005, accounting for approximately one-third of all spending on labour market policies (Wisniewski and Maxim, 2013).

The Pre-Retirement Benefit served to cover older workers nearing retirement age who had lost their jobs and had been unemployed for the previous six months. Eligibility was determined by the applicant's age and insurance contribution record. There was no special benefit for lone parents, but portions of the costs of childcare can be temporarily reimbursed if an unemployed parent takes up work or training (OECD, 2018).

Understanding the Polish labour market is not possible without acknowledging its fundamentally segmented nature. A massive proportion of Poland's labour force is either temporary or self-employed. By the mid-2010s, temporary workers and the self-employed each accounted for one in five Polish workers (Spasova et al., 2017, see also Figure 7.3). Apart from the benefit dimension, regarding labour market segmentation, Poland developed one of the highest rates of temporary contracts in the 2000s without major and lasting legislative changes (Eichhorst and Marx 2021). However, to avoid a further expansion of temporary employment, from 2004 onwards only two consecutive fixed-term contracts were permitted, although their duration was not limited (Lewandowski et al., 2017).

Regarding self-employment, the Law of 13<sup>th</sup> October 1998 on the system of social insurance established a functional distinction between the self-employed in the agricultural sector and those in all other sectors. Generally, since then, the self-employed enjoy the same or similar UI benefit level and coverage as all other workers, albeit with higher individual contributions in lieu of payments from an employer. However, those employed in the agricultural sector are fully excluded from UI benefits. The legal basis for this scheme has not been majorly altered since 1998 according to MISSOC.

Another noteworthy feature of the Polish labour market has been the widespread practice of so-called civil law contracts for temporary employment. This is a category of workers that operate in the grey zone between dependent and independent work. Nonetheless, workers executing civil law contracts are formally classified as self-employed and hence outside of major parts of labour and social security regulation, which makes them relatively flexible and cheap for employers. They are often used for quasi-dependent jobs and such workers are often included as temporary employees in

the Labour Force Survey. Lewandowski and Magda (2018) found civil law contracts to represent a rather small but growing portion of the contracts in Poland. Unfortunately, there are no records distinguishing civil law contracts from other temporary contracts (Lewandowski and Magda, 2018). As stated above, unemployment benefits are usually paid by an employer on behalf of their employees; for the self-employed or those on civil law contracts, these payments must be made by the contract workers individually and are optional. Due to this – along with a general lack of trust in the welfare system – according to experts many workers in these groups tend to not be covered by unemployment insurance, or do not seek to collect benefits even when they are eligible. This also holds for those who own and work on small farms. In that sense, the segmented Polish labour market translates into deep coverage gaps in upstream systems.

### 7.6.1.3 Minimum income support systems and reforms

MIS in Poland takes the form of a broad range of benefits falling under the umbrella term of social assistance. These payments are also variably referred to as Social Welfare Allowance (SWA). The Polish SWA uses a system which distinguishes between temporary and permanent MIS schemes. The permanent schemes are intended for those who are permanently incapable of working, i.e. the elderly or disabled. These schemes have an indefinite duration and have a fixed rate of benefit pay-out. The temporary schemes are theoretically intended for those temporarily unable towork, but also provide coverage for those suffering from general conditions of poverty – benefit pay-outs are contingent on a family's income. Both schemes essentially serve as catchalls and cover highly diverse elements of those at risk of poverty. Eligibility is contingent on being below the guaranteed monthly income threshold (MISSOC; OECD, 2008). That same guaranteed income threshold is used to adapt payment levels. The specified minimum income is used as a reference. For singles, minimum benefit payments were 30 percent of the difference between the guaranteed minimum and the applicant's income. For families, the amount was 20 percent of that same difference at the time, with increases later on (OECD, 2005, PL).

Within the Polish SWA, there are a number of supplementary payments on top of the permanent and temporary schemes. The largest among these are the Birth Supplement and maternity leave payments. The Birth Supplement is a one-off payment paid when a child is born, amounting to PLN 500 in 2005 (OECD, 2005 PL). Starting in 2006, this amount was raised to PLN 1,000 as a one-off payment (OECD, 2010, PL). Additionally, there is the childcare benefit in case of maternity leave. At the time, this amounted to PLN 400 per month and generally lasted two years in this period but could be extended to 36-72 months in special cases (OECD, 2005, PL).

Family Benefits are of special significance in the Polish welfare system. Such benefits are provided to anyone with children below 18, or 21 in active education, or 24 if the child is in active education and disabled (OECD, 2009, 2010, PL). Before 2006, Benefit pay-out was decided on a per child basis: monthly PLN 43 for the first and second child, PLN 53 for the third, PLN 66 for further children. However, after 2006, the pay-out mechanism was switched to be dependent on the age of each child. The new benefits amounted to PLN 44 monthly for children aged 0-5; PLN 56 monthly for children aged 5 to 18; and PLN 65 for children aged 18 to 24 (OECD, 2006, PL, p. 11). The Housing Benefit is an entirely separate benefit intended to support those below a certain income threshold in paying for housing. For singles to be eligible, income must be below 160 percent of the minimum retirement pension monthly; for families, it is 110 percent of the same per capita within the family. The access criteria have become increasingly generous over time (OECD, 2005, PL). Polish public policy provides for "reasonable" sizes for accommodation. An accommodation's size cannot exceed the specified reasonable amounts by more than 30 percent. The Housing Benefit, then, is the expected housing cost minus the expected contribution (OECD, 2005, PL). There do not seem to have been any major

changes to this calculus since 2005 (OECD, 2005, 2010, 2018, PL). Since 2004, the administration of the Housing Benefit is the responsibility of individual communes (OECD, 2010, PL).

Regarding the self-employed, the notable distinction between farmers and all other workers is less sharp under MIS schemes. While farmers are fully excluded from the right to normal UI benefits, they generally enjoy the very same rights to MIS schemes as other categories of self-employed workers. Self-employed workers overall are provided the same MIS coverage as employees, but sickness and maternity benefits are optional for the self-employed; these systems are based on individual opt-in insurance financing schemes (MISSOC *Social Protection for the Self-Employed*, 2021). Our experts indicated that farmers (particularly those working small plots) tend to suffer from significant material depravation and poverty rates compared to the rest of the Polish population.

2004 saw the passage of the Act on Social Welfare (Wolniak, 2020), which increased the pay-out amount to working people and set a standard rate of benefits, but did little to improve coverage (Wóycicka, 2009). This piece of legislation has been in place since, but was modified several times, according to experts interviewed, in particular regarding a variation of UI benefit duration for mothers or for unemployed in regions with high unemployment rates.

While Polish national legislation provides for the conditions and requirements of MIS schemes, the national government is not responsible for the provision of the benefits (Wolniak, 2020). The provision of social assistance policies was (and still is) the domain of diverse local organisations, including Municipal Social Welfare Centres and private groups such as the Catholic Church. The details of available MIS schemes are contingent on which locality is providing those schemes (Wolniak, 2020).

Our experts indicated that, while benefit levels are adjusted over time, there is a certain level of arbitrariness in the timing or amount. Large changes to benefits and their goals are often related to some kind of present political goal. The type of benefits provided are also contingent on political or demographic goals, i.e. a greater focus than other European countries on birth/family-related benefits to address declines in fertility rates. These sorts of direct monetary transfers tend to be much more common than ALMPs or other activation measures.

#### 7.6.1.4 Outcomes

Despite Poland's accession to the EU and the reforms that came with it, the impact on poverty of these systems was minimal. The poverty line cut-off in the MIS scheme left coverage very low, and benefits were lacking in generosity (Wóycicka, 2009), confirming the findings from the simulation studies above. Specifically, the guaranteed minimum as outlined in the SWA scheme has been criticised for being ineffective in that it is so low that it only targets the most desperately poor (Wóycicka, 2009). Our experts confirmed this by stating that the threshold was so low as to only apply to Poland's most destitute in practice. Indeed, the very poor represented a large portion of MIS recipients (Szulc, 2012). This supports the initial expectations regarding the limited character of MIS and income security policies in a Post-Socialist country.

Notwithstanding the coverage and adequacy issues in the Polish benefit system, the socio-economic outcomes improved significantly as Poland generally experienced recovery from previous troubles during this period. In the late-1990s and early-2000s, Poland had suffered greatly from poor economic performance and high unemployment. However, after the early-2000s, economic growth (and emigration) led to rapidly decreasing unemployment which in turn raised overall personal income in Poland and reduced the demand for benefits (Lewandowski and Magda, 2018). This is also

shown in Figure 4.7. However, atypical work and self-employment became more common during this period (Brzezinski, 2015). In that sense, Poland was characterised by economic dynamism, a dual structure of the labour market and rather inadequate benefit systems at the time.

## 7.6.2 Phase 2 (2008/09)

#### 7.6.2.1 Economic environment

Compared to other countries in our sample, Poland experienced only a mild economic downturn after the crisis of 2008 as is visible from the GDP growth figures shown above. While unemployment rose in this period, it did not reach the levels it had earlier in the 2000s (Lewandowski and Magda, 2018). Consequently, the policy response in Poland appears to have been limited and focused on activation measures.

### 7.6.2.2 Labour market regulation and unemployment insurance

The Act of 19<sup>th</sup> December 2008 was a major reform that impacted multiple aspects of the Polish UI and ALMP landscape. The Act directed local labour offices to focus more individually on those in especially long-term unemployment, and the eligibility for internship or vocational training programmes was greatly expanded. The scholarships for people up to 25 engaged in vocational training was raised from 40 percent of the unemployment benefit to 100 percent (Gajewski, 2015). Receipt of UI benefits was made contingent on not having refused to take part in an ALMP scheme. There was also a greater importance placed on subsidised reduction of working hours amounting to 70 percent of the unemployment benefit (Gajewski, 2015). The Polish Anti-Crisis Package of 2009 provided for the limited subsidisation of employee wages in the case of a work stoppage. This amounted only to partial compensation (Stelina, 2014). In 2008 and 2009, benefit pay-outs continued to increase and there were no major changes to eligibility or duration (OECD, 2008, 2009, 2010, PL). Overall, short-time work, while available, did not play a major role in Poland – which was also partly due to the mild crisis impact.

#### 7.6.2.3 Minimum income support systems and reforms

The Anti-Crisis Package in this period introduced tax credits for the private provision of social assistance measures (Strzelecki and Wyszyński, 2016). Benefits under the Family Allowance were raised in 2009 by about 40 percent (OECD, 2010, PL), and total social assistance pay-outs continued to rise as they had in the years before the crisis (OECD, 2009, PL). Overall, the response packages seem to have focused less on MIS schemes *per se*, and more on supporting employers so as to keep employees in work (Strzelecki and Wyszyński, 2016). In October 2008, a new supplement was added under the Family Benefits. Children and single parents were now able to collect payments less than or equal to PLN 500 monthly if the family income per capita did not exceed PLN 725 per month (OECD, Poland, 2010).

#### 7.6.2.4 Outcomes

The initial stages of the crisis were very mild for Poland. Unemployment did not begin to rise just yet, and the country did not enter a recession. As before, the existing MIS and UI programmes served to limit income losses only for many of Poland's poorest (Brzezinski, 2015). Policy changes during and following the crisis were minimal, and Poland could largely avoid the negative economic impacts experienced by other European countries (OECD, 2009, PL). However, this is most likely the result of a more favourable economic development and a lower intensity of the 2008 economic shock

compared with the stabilising capacities of the system, as they were limited but also needed less in that period than in other countries.

### 7.6.3 Phase 3 (2010 – 2019)

#### 7.6.3.1 Economic environment

Despite initially holding steady, unemployment in the years after the crisis began to rise but dropped off again in the second half of the 2010s. Economic growth continued, albeit quite sluggishly (Lewandowski and Magda, 2018).

## 7.6.3.2 Labour market regulation and unemployment insurance

The initial economic outcome of the crisis (large numbers of layoffs in specific sectors) meant that Poland was faced with a larger number of unemployed, so the primary strategy became the reintroduction of the unemployed into the workforce. To this end, the previous flat-rate UI pay-outs were reformed in 2010 to a degressive system in the hopes of incentivising a timely return to work. Benefits were now reduced by 21 percent per month after the first three months. This explains the rise in net replacement rates for those in the early months of unemployment in Poland (see Figure 7.5 and Figure 7.6). Additionally, funding for ALMPs was reduced by 50 percent across all areas of support (Strzelecki and Wyszyński, 2016). Those below the age of 25 were permitted after 2010 to collect UI benefits for up to twelve months so long as they had found placement in an apprenticeship. Nevertheless, there was a push to move young people away from special treatment and into the benefits provided to the general population (OECD, 2010, PL).

A 2014 amendment to the Act on Employment Promotion and Labour Market Institutions sought to increase activation measures for those below the age of 30. This included the introduction of funding to cover the costs of training or apprenticeships, as well as the refunding of employer contributions in return for employing a previously unemployed person for at least eighteen months. The amount of time that local labour offices were given to find work or training for an unemployed person was shortened from six to four months (OECD, 2015, PL).

In order to achieve the Polish government's goals of greater labour activation, four distinct programmes ("vouchers") were introduced:

- 1. **Training Voucher**: provided to an unemployed person pursuing employment-relevant training or education. The maximum possible benefit pay-out corresponds to the average salary, i.e. the benefit pays out up to an average monthly salary, but nothing more.
- 2. Work Practice Voucher: guarantees placement in employment for a total of six months. The employer in the relevant workplace is compensated with a bonus of PLN 1,500, with the understanding the unemployed person will be employed for an additional six months (for a total of twelve months) as an intern.
- 3. **Employment Voucher**: provides refunds of remuneration costs to employers for their employees. These remunerations last for twelve months. The employer is thereafter obligated to employ the relevant employee for at least six more months.
- 4. **Voucher for Settlement**: provides support for unemployed people who are taking up employment in a new area. Pay-outs could reach as much as double the average salary but are intended to cover housing costs. In order to be eligible, the new job must provide a monthly wage which at least meets the minimum wage. Further, the person must stay in the

new job for at least six months, and the person has to relocate at least 80 kilometres from their former residence (OECD, 2014, PL).

Madoń et al. (2021) found that these training vouchers were broadly effective in improving employment outcomes for young people. However, according to latest data available from experts, the maximum number of unemployed using such vouchers was rather small, reaching around 10-12,000 in 2020 and 2021 (out of about 1 million registered unemployed), two-thirds of them using a settlement voucher and about 20 percent a training voucher.

Polish replacement rates tended to be unstable in this period. Benefit pay-outs and eligibility were raised in 2010, but only for the first three months of collecting those benefits. The pay-outs declined thereafter. Additionally, the growth of the minimum wage tended to outpace the growth of benefit rates in this period (Gajewski, 2015, p. 39). Figure 10.22 shows the volatile nature that results from the temporal disparities between wages and benefit levels, and it also reflects the sudden increases to social benefit levels that occur once every three years given the existing rules that govern benefit uprating and lead to payment rate hikes (OECD, 2014, 2017, PL).

Apart from UI and ALMP reforms, in 2015, the regulation of fixed-term contracts was tightened so that since 2016, there is a maximum duration of 36 months, while now three consecutive temporary contracts were permitted. In the same year, to minimise the 'abuse' of civil law contracts, employers were made liable to pay social security contributions for a 'contract of mandate' (umowa zlecenie) calculated in relation to the minimum wage, irrespective of the actual remuneration. The minimum (hourly) wage applies to such contracts since mid-2016 (Lewandowski et al., 2017). This means an attempt to reduce the reliance on civil law contracts in the Polish labour market.

# 7.6.3.3 Minimum income support systems and reforms

Benefit rates for the temporary social assistance scheme were steadily increased in the 2010s. In 2009, singles were entitled to a benefit of 35 percent of the difference between the specified minimum and actual income (OECD, 2010, PL). By 2019, this had increased to a maximum of 100 percent of that same difference (OECD, 2019, PL). Similarly, families saw an increase from 25 percent (OECD, Poland, 2010) to 50 percent (OECD, 2019, PL) of that difference. However, it remained the case that pay-outs could not exceed PLN 418 per month throughout this period (OECD, 2010, 2019, PL).

In 2009, a reform was passed which abolished early pension entitlements. This meant that workers now needed to wait the additional five years until statutory retirement age to collect benefits (Strzelecki and Wyszyński, 2016). The Pre-Retirement UI, a separate benefit, was not impacted by this change (OECD, 2010, PL). The abolishment of the early pension resulted in a longer-term increase in unemployment levels, increasing the demand on other MIS schemes (Strzelecki and Wyszyński, 2016).

However, most of the 2010s where dominated by the introduction and expansion of monetary transfers to families, which also changed the generosity of support provided to households (with children) in Poland. In 2013, the single payment birth grant was limited to parents with a monthly income lower than PLN 1922, less contributions to taxes and UI/MIS schemes (OECD, 2012, PL). This meant that the birth grant – which was previously universal – was no longer generally available to all new parents. Further, June 2013 saw the introduction of a formal parental leave system, providing 26 weeks of paid leave to new parents. The new system takes place alongside the pre-existing maternity leave, as well as the pre-existing entitlement to 36 weeks of unpaid parental leave. The new system is

therefore distinct in that it provides paid leave, but it is only available to parents for the first year of the child's life, as opposed to the first five for the unpaid leave. A "special attendance allowance" was also introduced in this period – this benefit provides PLN 520 per month to those who must resign from work to care for a disabled family member. The benefit contains income criteria, namely a maximum income of PLN 664 starting in 2014 (OECD, 2014, PL).

Starting in January 2016, a new parental benefit was introduced. The new benefit was targeted at parents in a family who were not otherwise receiving some kind of benefit. The benefit is not meanstested and amounts to PLN 1,000 per month. The benefit is granted for 52 weeks after the birth of a first child, and 71 weeks for every child thereafter (OECD, 2018, PL). And in 2017, the Family 500 Plus Programme was introduced. This programme provided a means-tested, non-contributory benefit for those with children below the age of 18. Originally, the means test assessed whether a family earned below a specific income threshold, but the means test was abolished in 2019 (OECD, 2019, PL). In addition, in 2018, the Good Start program was introduced. This is a non-contributory benefit without a means test. The benefit provides a modest benefit to families with school-age children at the beginning of every school year (OECD, 2019, PL).

All in all, these family- and child-related benefit reforms led to higher replacement rates and benefit adequacy for families in Poland as shown in Figure 7.8, Figure 7.9 and Figure 7.13.

#### 7.6.3.4 Outcomes

The labour market remained flexible (Strzelecki and Wyszyński, 2016), but benefits remained less-than-generous, resulting in a disproportionate impact of economic risks on people in atypical work situations (Brzezinski, 2015). However, this was less evident regarding macro-level figures as Poland did not have to cope with a massive economic crisis as the other countries in our samples did. Rather, the overall economic improvement dominated the picture but was not enough to overcome issues with in-work poverty, for example. Active inclusion policies remained more limited. Still, the voucher system implemented in this period shows signs of positive employment outcomes at least for younger groups of the working population (Madoń et al., 2021). It seems fair to say that the overall focus of the Polish government in this period (relative to earlier phases) was more on activation of the unemployed on the one hand and more on monetary transfers to families on the other hand which tend to have more ambiguous effects on labour market participation. Regarding the core indicators, Poland could continue its catching-up path from the 2000s and move closer to the other countries in our sample, mainly due to its economic progress. As far as benefit provision is concerned, the expansion of child-related monetary transfers is remarkable for the Polish trajectory over this period and quite different from reforms in the other four countries

#### 7.6.4 Phase 4 (2020/21)

#### 7.6.4.1 Economic environment

The pandemic resulted in increases in unemployment, especially for young people (*Selected aspects of the labour market in Poland*, 2021). However, Poland was not as affected as other EU nations (European Commission, 2021).

#### 7.6.4.2 Labour market regulation and unemployment insurance

Again, job retention, which was implemented as a temporary wage subsidy in Poland, only played a minor role in Poland in 2020 and 2021 in terms of spending and take-up due to limited support

available to employers (Ebbinghaus and Lehner, 2022). Among the five countries covered, Polish job retention policy was the least prominent (Drahokupil and Müller, 2021).

One measure introduced in 2020 was the Downtime Allowance. This benefit was provided specifically to the self-employed and those on civil law contracts who could not work due to the pandemic. It amounted to 80 percent of the minimum remuneration amount under Polish law, i.e. a maximum of PLN 2,080 per month in 2020. Further, the government introduced the Tourist Voucher, which provided a supplementary benefit to the Family 500+ scheme for the sole purpose of tourism within Poland (OECD, 2020, PL).

A significant benefit introduced in this period was the Solidarity Allowance (OECD, 2020, PL). The benefit is not means-tested, and technically not contributory, but still requires applicants to have made 60 days' worth of contributions to the Labour Fund. It is a benefit intended largely for those who lost their job due to the COVID-19 – those who were already unemployed may also apply for the benefit, but it would replace all other benefits that person was already collecting. The benefit totalled PLN 1,400 per month and was available from June to August 2020. Our experts indicated that groups such as women and young people were overrepresented in the group of recipients of this benefit, as they were otherwise not eligible for other benefits. The benefit's eligibility requirements were significantly more broad than other benefits.

### 7.6.4.3 Minimum income support systems and reforms

Reforms to MIS systems were not reported for this period. Instead, Poland passed favourable laws for employers so as to maintain employment levels (Stelina, 2021). Self-employed workers were exempted from social security contributions for a period of three months. A temporary benefit was provided for those whose children could no longer attend school due to pandemic restrictions (Florczak, 2020; OECD, 2020, PL).

### 7.6.4.4 Outcomes

The COVID-19 anti-crisis shield appears to have been effective in curbing the growth of unemployment in Poland. As before, the government tended to shift its focus towards ALMPs and ad hoc income support programmes instead of introducing permanent measures to bolster minimum income schemes (Stelina, 2021). Groups which normally would have been excluded from the Polish welfare structure were incorporated (at least for a short time) through the implementation of the solidarity allowance. At the policy level, this is broadly in line with crisis responses in other countries.

# 7.6.5 Main insights from the Polish case

The Post-Socialist welfare state setting in Poland experienced a somewhat asynchronous development relative to the other countries in our sample. Most importantly, the role of crisis periods was more contained. This also implied that the rather weak stabilisation capacities of the Polish welfare state due to low generosity and coverage on the one hand and labour market dualisms on the other hand were not put to a test to the same extent as in the other countries in our sample. Hence, coping with the aftermath of the Financial Crisis was not the main issue in Poland over the 2010s. Rather, departing from a limited social protection system with low coverage and low benefits as well as a rather dualised labour market with notable segments of low pay and low job stability, Poland could catch up significantly in economic terms. This overall positive development gave Poland the opportunity to pursue a different social policy agenda in the 2010s. Not having to deal with a severe economic shock and subsequent labour market deterioration created the fiscal space for a partial

expansion of social policies and some attempt at reducing the dual character of the Polish labour market. However, this all occurred within the long-standing institutional structures of unemployment insurance (allowance) and MIS so that the basic structures continued to exist. A main focus of Polish social policy in the 2010s was laid on family benefits, but also – to some extent – on streamlining activation policies. While the emphasis on family policies seems to be a topic of political choice in the Polish context, the move towards activation is more in line with broader European trends. Still, it makes sense to set Poland as a Post-socialist welfare state apart from other types. Based on this case study, however, it is not possible to assess to what extent the Polish experience is typical for the Post-socialist country cluster. In fact, this cluster is quite heterogeneous in institutional terms and in crisis exposure.

Table 7.11 Main developments in Poland, 2005-2021

	Pre-2008	Great Recession	Austerity/recovery	COVID-19
Economic	Progressively	Relatively unaffected	Unemployment	Relatively
environment	declining	in the first years, but	increase reversed,	minor
	unemployment,	eventually	return to overall	economic
	general	experienced minor	favourable	impacts.
	economic	unemployment	conditions.	
	growth	increase.		
Unemployment	Progressive	General expansion of	Much greater	Minimal
insurance and	expansion of	benefits. Special focus	emphasis on	changes.
labour market	benefit	placed on long-term	activation and	Some minor
regulation	eligibility,	unemployed and	workfare	policy
	duration, and	those impacted by	introduced to	changes to
	generosity.	work stoppages.	handle large	address the
	Progressive	Short-time work and	numbers of	self-
	increase of non-	downtime	unemployed after	employed
	standard	remuneration	the crisis.	who lost
	employment	utilised.	Increased funding	work due to
	without		to ALMPs and	the
	matching		activation	pandemic.
	legislative		measures, e.g.	
	changes.		internships and	
			vocational	
			training.	
Minimum income	Low generosity	Introduction of new	Limitation and	Minimal
support systems	in payments,	supplements and	abolishment of	changes in
	but fairly	increases to existing	select benefits,	favour of
	universal	payment schemes.	but introduction	focus on
	coverage. Minor	300	of other new	relief for
	increases and		benefits and	employers.
	adjustments to		general increase	
	payments in this		to payment levels.	
	period.			
Outcomes	Great economic	Minimal changes to	Increase in key	Policies
	growth but poor	legislation. Existing	indicators due to	protected
	MIS coverage	schemes served to	economic growth,	population
	meant a	protect many from	but benefits	from crisis-
	minimal impact	the impacts of the	remained less-	related
	on poverty	crisis.	than-generous.	impacts.
	levels.		Increased pace of	Continuing
			shift to ALMPs.	shift to
				ALMPs and
				activation.

## 7.7 Ireland

In Ireland, a phase of dynamic growth came to an abrupt halt with the Great Recession and a massive financial as well as fiscal crisis in the late-2000s and the early-2010s. This put the medium buffering capacities of a Liberal welfare state like the Irish one – that rely strongly on MIS – under massive pressure when faced with a dramatic unemployment inflow. It also led to a rather quick and massive deterioration of core socio-economic outcomes in the aftermath of the crisis as section 4.1 has shown. In particular, low work intensity was identified as a major issue in the Irish post-crisis phase rather than monetary poverty. As this section shows, comparable to Spain, the very high fiscal pressure of the early-2010s led to a subsequent restructuring of the social protection system in Ireland. In line with the classification of Ireland as a Liberal welfare state with a strong emphasis on MIS, we expect reforms to concentrate on the consolidation of the benefit and activation side of MIS.

## 7.7.1 Phase 1 (pre-2008)

## 7.7.1.1 Economic environment

Similar to Poland, Ireland experienced a period of rapid economic growth in the early-2000s. Though previously underpinned by the growth in global trade, demographic changes resulted in a strong housing boom, financed by foreign credit (Bergin and Kelly, 2018; Dukelow, 2018). This led to a general improvement of the overall social and labour market situation in Ireland (often described as the "Celtic Tiger" period). In line with these economic developments, the number of Irish people seeking benefits declined leading into the 2000s, then remained stagnant until just before the crisis. Jobseeker's Benefit remained relatively stable during the 2000s, with Jobseeker's Allowance seeing a mild uptick. Long-term and lone-parent unemployment were issues for Ireland in this period, with the Irish system encountering notable difficulties with reactivating the long-term unemployed (Grubb et al., 2009). The number of recipients of social benefits around the year 2005 tended to hover around 150,000 to 170,000 as an annual average, with a notable increase just before the 2008 crisis.

# 7.7.1.2 Labour market regulation and unemployment insurance

The overarching system of UI and MIS in Ireland is referred to as "Social Welfare." Within Social Welfare, there are two salient categories: Jobseeker's Benefit and Jobseeker's Allowance, combined with Supplementary Welfare Allowances (SWA). Sources occasionally also refer to Social Welfare payments as an SWA. The existing Social Welfare system was created by the 2005 Social Welfare Consolidation Act (McGuinness et al., 2011).

The Jobseeker's Benefit (JSB) is the Irish contribution-based unemployment insurance scheme intended for those who are newly unemployed. Eligibility was progressively expanded to most categories of workers through the 2000s (McGuinness et al., 2011). Other contributory benefits include the Illness Benefit for those who lose work due to illness, and the Invalidity Pension for those who are permanently disabled from working (Dukelow, 2018). The previous legal basis for Irish UI and MIS benefits was the Social Welfare Consolidation Act of 1993 – this legislation was replaced by the Social Welfare Consolidation Act of 2005 (MISSOC Tables, 2006, 2007, Ireland).

In this period, eligibility for the Jobseekers' Benefit was granted to any worker between the ages of 16 and 66 who had been unemployed for at least three of the previous six consecutive days (Sundays were not included in this count). 52 weeks of contributions since starting work and 39 social insurance contributions in the reference period (last two years) were necessary for eligibility. UI benefits were increased in the years leading up to 2008, aiming to provide wider coverage; the weekly

benefit rate rose from 148.80 EUR in 2005 to 197.80 EUR in 2008. Benefit payment amounts in Irish sources are usually referred to in terms of weekly payments, not in monthly payments as in other countries. The benefit was payable for fifteen months after a three-day waiting period. Benefit rates were lower for those younger than 18 or older than 65 (OECD, 2005, IE). This scheme does not make a strong distinction between temporary and permanent contracts (Dukelow, 2018). There is no difference in benefit pay-out after the minimum number of contributions have been made (OECD, 2007, IE). Benefit generosity remains at essentially the same level even during long-term spells of unemployment (Immervoll and Scarpetta, 2012), as the limited-duration Jobseeker's Benefit can eventually give way to the unlimited Jobseeker's Allowance (JSA, see next section), which can also be seen as an unemployment assistance benefit (OECD, 2012, IE). Nevertheless, and in line with expectations regarding a Liberal welfare state model, Irish UI benefits are relatively less generous than in many other EU Member States (Papadopoulos, 2018, see also Figure 7.5 and Figure 7.6).

In 2005, Ireland spent 16.7 percent of its GDP on social expenditure. ALMPs represented 3.8 percent of total expenditure. UI schemes represented 5,4 percent of spending. Cash payments represented a further 8,4 percent of social expenditure (Immervoll, 2009, p. 6). Ireland keeps track of its various unemployed through the use of the Live Register, which is a central database for tracking and classifying the different types of benefit seekers. From 2005 through 2007, there were roughly 130,000 annual recipients of both Jobseeker's schemes. JSA, addressed in the next section, typically had 20,000 more recipients than JSB in each year (Live Register, 2005, 2006, 2007).

## 7.7.1.3 Minimum income support systems and reforms

The conception and state of MIS schemes in Ireland overall are a mixed bag. Irish benefits are multivariate to the point of being described as a "mongrel" system, being composed of numerous actors in the state and civil society; it has long been the case that services traditionally supplied by the state in other countries (healthcare, childcare etc.) also have significant suppliers/contributors in the Irish private sector (NESC, 2005). Neither the MIS schemes nor the UI schemes in Ireland have a sharp legal distinction between different benefits for different categories of workers (Murphy and Dukelow, 2016, p. 39). There was a general trend of consolidation in MIS schemes leading up to 2008. This coincided with greater economic growth in Ireland, a shift of focus from social insurance to social assistance, and a push led by the National Economic and Social Council (NESC) to focus on flexicurity (Keane, 2016).

Besides the contribution-based social insurance against unemployment (i.e. the Jobseeker's Benefit), Ireland's social protection system comprises means-tested social assistance (e.g. Jobseekers' Allowance and Housing Benefit) and universal payments for dependent children (Bergin and Kelly, 2018). For all benefits, recipients are guaranteed the personal rate of benefits, which was 148.80 EUR in 2005 (OECD, 2005, IE).

Jobseeker's Allowance in Ireland is a means-tested scheme that focuses on those who would otherwise not qualify for the Jobseekers' Benefit, or who have exhausted their entitlement to Jobseeker's Benefit. Other benefits within Social Welfare sought to provide a housing subsidy (Housing Benefit), support families (Family Income Supplement), or simply cover those that otherwise would not qualify for other benefits. The overall governmental contributions to this scheme were low relative to other EU States before the Great Recession (Dukelow and Considine, 2009, p. 67).

The Jobseeker's Allowance was identified by our experts as being the largest benefit for the unemployed in the Irish system. However, while JSA has many more recipients than JSB, our experts

indicated that the difference between these benefits (in terms of payment levels) from the recipient's side is so small in practice that many recipients often are unsure which benefit they are collecting.

Besides this, there was a strong reliance on alternative benefits such as a one-parent family payment, disability allowance and illness benefits. The Disability Allowance was and still is a means-tested, non-contributory benefit intended for those who are prevented from working due to a substantial disability. Receipt is contingent on furnishing proof of a substantial disability. According to MISSOC, the benefit payment level is equivalent to that of the Jobseeker's Benefit and Allowance. Those between the ages of 16 and 66 are eligible. Our experts indicated that Disability Allowance has been the single largest benefit for working-age people in Ireland by number of recipients. This benefit is closely related with the Carer's Allowance, which is a means-tested benefit for those who look after people who need full-time care. Tracking the number of recipients of the Disability Allowance is more difficult than for JSB or JSA as the Disability Allowance is not recorded in the Live Register, although there are a few older reports. In terms of recipient numbers, the Disability Allowance has increased at a steady annual rate since at least 2005. By 2010, the number of DA recipients had reached 100,000 (*Recipients of Illness, Disability, Caring Payments*).

For a long time, and in contrast to other European countries, Ireland did not shift to activation but continued with a rather 'passive' social policy favouring monetary benefit payments and some work incentives through earnings disregard clauses. Included in these efforts was the Back to Work Benefit, which provided a degressive supplement for those who set up a business or found work (OECD, 2005, IE), although there were concerns at the time that the benefit may have resulted in repeat spells of unemployment (Grubb et al., 2009). Before the crisis, policy attention shifted towards better protection against poverty, with rising replacement rates for the long-term unemployed (Dukelow, 2018). By 2003, Ireland had imposed sharp restrictions on the new cases of unemployed being accepted into the Back to Work Benefit. This seems to have been the result of the high numbers of new applicants for the benefit and the apparent development of a cycle of repeat unemployment for those on the benefit. The new restrictions were eased slightly after 2003, but the scheme never became as widespread as before (Grubb et al., 2009, p. 110).

However, during this period Irish activation policies were not well integrated or developed. The state provided only low expenditure on ALMPs, focusing on training and direct job creation (e.g. so-called Community Employment). Ireland maintained a rather traditional and fragmented system for a long period, with a rather late, and partial and protracted turn towards activation since the 1990s (Dukelow, 2018). Indeed, according to our experts, the activation requirements in place until 2010 were so lax that they bordered on being non-existent in practice. Irish Labour activation since the 1990s was separated into two distinct realms: pay-outs as provided by the benefit agencies, and job training provided by the separate Training and Employment Authority (FÁS). This is in contrast with other countries that integrated these roles into one agency much earlier (Dukelow, 2018, p. 200; Grubb et al., 2009). Grubb et al. (2009) discuss the three following public employment programmes:

- Community Employment, which places participants in (temporary employment) projects within their own community. These projects were sponsored and partially funded by the FÁS and represented a substantial portion of the working population in many areas.
- Job Initiative (JI) and Social Economy (SE) Programmes. JI provided a three-year full-time employment position to those who had been unemployed for the last five years; JI stopped taking new applicants in 2004. SE placed those on unemployment or lone-parent benefits for three years in employment with various social sponsors. There was a focus on employment in areas or enterprises that were economically disadvantaged. SE was transferred from FÁS to the Department of Community, Rural and Gaeltacht Affairs in 2004.

Before 1998, job search requirements were not strictly enforced, and certain groups were effectively exempt from job search requirements until the beginning of the Great Recession. As discussed above, 2003 saw cuts to funding for initiatives such as the Back to Work Allowance, resulting in even lower levels of labour activation (Grubb et al., 2009, p. 97). People partaking in full-time ALMP schemes are also exempt from the job search requirements (Venn, 2012). However, both Jobseekers' Allowance and Benefit formally required that the applicant be actively seeking work (Immervoll and Scarpetta, 2012; MISSOC Tables, 2005, Ireland; OECD, 2005, 2006, IE). Generally, even known violations were not frequently sanctioned through the whole of the 2000s (Cousins, 2019, p. 6), and activation intensity was low until around 2010.

Reforms of activation to a more active system were hampered by the highly complex Irish social insurance system and a profound labour shortage resulting from the Celtic Tiger period (Dukelow, 2018, p. 201). Indeed, FÁS directly owned a fair few of the institutions responsible for placement and training, which integrated these two functions under its umbrella. Much like the wider fragmentation in the Irish system, this is unusual in that other OECD countries leave training to other agencies or private social partners. This might be advantageous for a smaller country, as Ireland will have fewer resources to support multiple institutions, and this arrangement left FÁS in direct contact with many of its partners (Grubb et al., 2009, p. 111). While the Back to Work Benefit has been degressive based on benefit duration, i.e. declining over the benefit period, other UI/MIS schemes were not (Dukelow, 2018, p. 2018; Immervoll and Scarpetta, 2012).

Finally, there are notable schemes in place for families. The Child Benefit is a non-means-tested, flat-rate benefit provided for each child in a family. Children are eligible if below the age of 16, or 19 if in full-time education. As of 2006, for the first two children, the payment amounted to 150 Euros monthly. For all subsequent children, the benefit it was raised to 185 Euros per month (OECD, 2006, IE). In this period, there also was a One-Parent Family benefit, which was intended for single parents with children below 18 years old, or 22 if that child was in full-time education. The benefit could be collected for 52 weeks at a benefit amount of 165.80 Euros weekly. After 52 weeks, recipients were entitled to a transitional payment of half of this rate for a period of 26 weeks. One-Parent Family benefit recipients were entitled to certain benefits at half the normal payment rates (OECD, 2012, IE).

### 7.7.1.4 Outcomes

The overall development in Ireland resulted in a decline in poverty from the late-1990s to the late-2000s, but authors note that the Irish economy remained frail (Bergin and Kelly, 2018; NESC, 2020, p. 54). The overall expenditure in and generosity of Irish welfare and minimum income schemes trended generally upward in this period, culminating in a system that was comparatively quite generous (Daly, 2018) and reached quite adequate benefit levels on par with Denmark, only to decline a bit later in the 2010s (see Figure 7.12 and Figure 7.13). This highlights the core stabilisation function of MIS in the Liberal welfare state in Ireland. Regarding activation and ALMPs, Ireland seems to have lagged in this otherwise quite dynamic period, with FÁS tending to set goals that were more ambitious than what was achievable (Murphy, 2012). Minimum income benefits represented around 40 percent of the median household income in Ireland. According to our experts, the Celtic Tiger years resulted in a lack of focus on labour activation, as the low levels of unemployment meant there were comparatively fewer people to activate.

### 7.7.2 Phase 2 (2008/09)

#### 7.7.2.1 Economic environment

As a small open liberal economy with a large financial sector and a housing boom, Ireland was severely hit by the Financial Crisis (Dukelow 2018; Doorley et al. 2013). The crisis resulted in a massive reduction of economic activity in Ireland. Unemployment became very high in this period, especially among men and the youth (Murphy and Dukelow, 2016). This massive increase in unemployment and long-term unemployment began in 2008/09 and lasted until the mid-2010s (Dukelow 2018). This was associated with emigration from the country, in particular by young and well-educated people. In this period, those receiveing Jobseekers Allowance increased from 121,763 in 2008 to 160,122 in 2009 (Dukelow, 2018, p. 202). Overall Live Register figures reported an increase of first 29 percent from 2007 to 2008, then 75 percent from 2008 to 2009. By 2009, the total number of Live Register applicants reached 398,000, up from 176,000 in 2006.

## 7.7.2.2 Labour market regulation and unemployment insurance

Austerity measures started in 2008. The first round of reductions to UI duration took place already in 2008, seeing a reduction of three months for all groups. It has to be noted that the flexible employment protection in Ireland did not stabilise existing employment relationships to the extent observed for permanent contracts in Continental Europe, and employment protection in Ireland was quite liberal as shown in Figure 7.1.

### 7.7.2.3 Minimum income support systems and reforms

Workers below the age of 21 experienced cuts of 50 percent to the Jobseekers' Allowance, while those under 25 experienced a 30 percent cut (Papadopoulos, 2016). Benefits for new claimants under 20 years of age in the Jobseekers' Allowance scheme were reduced by 100 Euros per week. Across all eligible groups, the Housing Benefit/Rent Allowance was reduced, and the universal child benefit was reduced by 20 Euros per month (Daly, 2018). The Back to Work Benefit was closed to new applicants in May 2009. The pension system managed to avoid cuts to benefit amounts, but the retirement age was raised from 66 to 68 years old (Daly, 2018, p. 123). Qualifications for the Illness Benefit were made stricter, and its duration was greatly reduced (Dukelow, 2018, p. 203). Hence, according to experts, this period was characterised by a main emphasis on cost containment rather than on work incentives in an adverse labour market situation.

The number of recipients of Jobseeker's schemes jumped from the usual 130,000 per year to 235,366 for the year of 2008. Normally, JSA tends to have more recipients than JSB on the Live Register; JSB usually has 66 to 70 percent the number of JSA recipients. However, in 2008, this number spiked and overtook JSA by a wide margin (see also Figure 7.15). Reflecting the contribution-based nature of JSB, this disparity returned to normal over the course of the next two years. By 2010, there were 385,000 recipients of both schemes, among whom 261,850 were collecting JSA.

## 7.7.2.4 Outcomes

The massive increase in unemployment in reaction to the Financial Crisis was associated with a considerable increase in poverty rates in Ireland as shown above. Lone parents and young people were particularly hard hit (Doorley et al., 2013). There was some delay in the increase of the MIS caseload, but the number of people relying on the Jobseekers' Allowance rose by 30 percent between 2008 and 2009 and had tripled by 2013 (Dukelow 2018). Nonetheless, experts see the MIS-centred income support scheme in Ireland as rather effective in containing income inequality and poverty in a

Liberal welfare state setting that was affected by a deep crisis. This is also confirmed by the simulation results in section 6 that show that the medium income stabilisation capacities in Ireland mainly stem from MIS. Clearly, upstream systems such as employment protection and UI mattered less.

### 7.7.3 Phase 3 (2010 – 2019)

#### 7.7.3.1 Economic environment

Ireland suffered from a severe deterioration of public finances, a subsequent sovereign debt crisis, the most severe among the countries in our sample, and it had to be supported by a three-year financial assistance programme by the EU, the IMF and the ECB (the 'Troika') from 2010 to 2013 with associated strict surveillance. This triggered austerity measures that continued until 2014. The economic recovery was difficult and protracted as Ireland went through a double-dip recession, similar to Spain. When Ireland began recovering from the Great Recession, it still faced considerable issues with long-term unemployment and labour market participation. While the total number of those unemployed decreased, the long-term unemployed stayed unemployed for longer (NESC, 2020). The years 2010 through 2013 saw the highest numbers of average annual recipients recorded on the Live Register, hovering between 400,000 and 440,000. 2010 saw a nearly 11 percent increase of total recipients compared to 2009. This number started to decline after 2013, eventually seeing a 10 percent annual decrease, but the total number of those on the Live Register did not reach pre-recession levels again until 2019 (sourced from Live Register archives).

### 7.7.3.2 Labour market regulation and unemployment insurance

There were further austerity measures in the early-2010s in Ireland. The contributory Jobseekers' Benefit was subject to cuts in benefit rate (2010 and 2011), benefit duration (2013) and tighter conditions (2009, 2012, 2013) to pursue fiscal consolidation, but this was partly countered by some increase in the child rate in 2010; similar changes were implemented in the (contributory) Illness Benefit where access became more difficult (Dukelow, 2018, p. 203).

Disability Pensions remained stable in this period, and 2012 saw the passage of the Partial Incapacity Benefit, which helped to activate ill or disabled persons. In 2015, the Back to Work Family Dividend provided a new in-work benefit.

Altogether, benefit cuts dominated in contributory systems during the immediate 2008/09 crisis and the subsequent fiscal austerity regime in Ireland. Activation became stricter for Jobseeker's Benefit recipients. 2014's Irish Youth Guarantee sought to increase activation of the younger unemployed (Murphy and Dukelow, 2016). Disentitlement was particularly to the detriment of part-time workers, many of whom were unable to shift to full-time work due to the loss of benefits (Dukelow, 2018). However, the effects of benefit cuts on the youth are less monolithic, with the youngest cohort of unemployed experiencing a reduction in unemployment duration following benefit cuts (Doris et al., 2017).

By this period, both the Jobseeker's Benefit and Allowance had acquired strict job search requirements in Ireland. Refusing a job or ALMP offer could result in a complete loss of benefits, meaning a claimant must accept the majority of jobs offered to them so long as they are within a reasonable distance. However, there are a few exceptions, namely if the new job is in the same district as the old one but with less favourable pay or conditions, or if pay or conditions are below

what might be considered reasonable for that district. Availability is determined through interviews seven, twelve, and fifteen months after unemployment has begun (Venn, 2012, p. 19).

Most notably, Ireland has compulsory insurance for the self-employed in respect of Jobseeker's Benefit Self-Employed (JBSE) (MISSOC, 2021) besides the general means-tested minimum benefit (Jobseekers' Allowance). Unemployment Benefit for the Self-Employed – granted since 2019 – is a weekly cash benefit for people who have lost their self-employment and are covered by social security (MISSOC, 2021). In order to be eligible for the self-employment benefit, self-employment in Ireland must be ceased. However, the benefit can be combined with employment for up to three days per week (MISSOC, 2021a. Claimants must have lost their self-employment involuntarily, not due to temporary cessation or seasonal closure.

#### 7.7.3.3 Minimum income support systems and reforms

In 2012, overhauls were made to family benefits, primarily the One Family Parent benefit. The previous transitional payment was abolished for new recipients, meaning benefits were to cut off entirely after 52 weeks. Furthermore, entitlements to half-rate benefits (such as Illness Benefit, Jobseeker's Benefit at a reduced level, among others) were abolished (OECD, 2012, IE).

A 2013 reform to the Social Welfare Act introduced strict penalty rates for failure to seek work (Cousins, 2019; Murphy and Dukelow, 2013; Daly, 2018). The benefit rates under the Jobseekers' Allowance were reduced by 4 percent in 2010 and 2011. A notable exception was the child rate, which was in fact increased in 2010 (Dukelow, 2018, p. 203). In 2013, the qualification requirements regarding unemployment were made stricter, in line with greater fiscal pressure on social protection measures (Dukelow, 2018, p. 207). In general, a belief emerged in Irish society that the state had lived beyond its means before the crisis, and that it needed to pursue a workfare-focused paradigm (Dukelow, 2018). The earlier age-related cuts to benefits for young people were extended until 2014 (Dukelow, 2018, p. 207). Ireland also shifted lone parents to the status of jobseekers, and it implemented particular retrenchment regarding the One-Parent Family Payment (in particular lower age limit of the child, 2012-15) while creating more generous earnings disregard clauses than in general Jobseeker's Allowance (but reduced in 2012-14) (Cousins, 2019). This can be interpreted as a retrenchment policy aimed at lowering benefit expenditure and beneficiary stocks.

Irish activation policy had long been passive and somewhat lax (McGann, 2021). After the beginning of the recession, training was reorganised to further activation and labour market orientation, associated with a notable increase in expenditure from 2008 to 2013 and participant stocks – but with shorter courses, less generous benefit levels, and with outsourcing (Dukelow, 2018, p. 217). While the following paragraphs will detail some of the programmes implemented during the 2010s to rectify a poor focus on activation in Ireland, McGann (2021) notes that, even into the COVID-19 crisis, Irish activation remained fragmented and marked by two key downfalls: poor cooperation between agencies caused by competition over marketised contracts, and a generally weak tradition of programme evaluation. Furthermore, the new system has been described as being focused on "boxticking" rather than real employment outcomes, and recipients often put in minimal job-searching effort in response (Finn, 2021).

Nevertheless, this period saw a major expansion of the Irish activation cosmos (McGann, 2021). Community Employment experienced cuts to funding and duration in this period. Two other programmes were created to make up for this: Tús in 2011 and Gateway in 2013. Both of these programmes offered work placements and a top-up to benefits in return for 19.5 hours of work per week. These programmes were notably strict (Dukelow, 2018, p. 210). JobBridge (operating 2011-

2017) was another programme that placed the unemployed in internship settings in exchange for a benefits top-up. While some criticised the scheme for providing low-quality work experience and insufficient benefit funding (Dukelow, 2018, p. 211), participants reported fairly high satisfaction with the experience, and perhaps up to half of participants ended the programme with full-time employment opportunities (*Indecon Evaluation*, 2016).

At the behest of the Troika, Ireland also passed its *Pathways to Work* (PTW) policy, first in 2012 but with successive alterations to adapt to changing events. PTW was a sweeping attempt by Ireland to bring its activation policies into line with international developments. The programme was and is conceived around "strands," or core pillars of the programme's goals and function. At the outset of the programme, there were the following five strands:

- 1. **Regular and ongoing engagement with the unemployed**: this meant "profiling" recipients from the Live Register for the purposes of assessing the type and severity of their unemployment. This information was then used to assign recipients to relevant engagement mechanisms, depending on severity level and employment history.
- 2. **Greater targeting of activation places and opportunities**: this meant prioritising work allocations for those with the longest periods of unemployment on the Live Register, as well as optimising the allocation of resources given the budgetary constraints under the crisis. For example, of the remaining positions in the Community Employment scheme, one-third were slated to be shortened and made more "focused" for the purpose of expediting the programme's goals.
- 3. **Incentivising the take-up of opportunities**: among other actions, this resulted in a reshuffling of the benefits provided by JSB and JSA to "casual" workers. The intent was to ensure that it was not tenable to continue working part-time while also collecting benefits. This strand also sought to increase social support benefits to those receiving a low income while working full-time.
- 4. Incentivising employers to provide more jobs for people who are unemployed: this strand's primary strategy was exempting employers from paying into social insurance funds on their employee's behalf. After hiring a new employee, employers were exempt from contributing on that employee's behalf for eighteen months. Employers were also granted this exemption when hiring employee.
- 5. **Reforming institutions to deliver better services to the unemployed**: this strand set out numerous goals and expectation for the National Employment and Entitlement Service (NEES). NEES was tasked with increasing interaction with recipients and job providers, as well with the government (Government of Ireland, 2012).

Importantly, 2016 saw the introduction of a strategic agenda broadening the coverage of the activation approach. The goal was to focus on increasing avenues of activation and incentives to return to work to reduce reliance on welfare. Incentives have become more broadly accessible since the crisis, but also more demanding, bringing Ireland in line with other countries (Dukelow, 2018, p. 209). Hence, activation came relatively late to Ireland, but in a rather strict version, given the overall austerity orientation at the time.

JobPath is yet another avenue of activation which the Irish government attempted. JobPath is a scheme whereby two private, contracted organisations (Seetec and Turus Nua), in partnership with the Irish Public Employment Service, arrange mentorships/temporary working opportunities to the long-term unemployed. In return, employers are provided free recruitment and training services. Jobseekers are selected for the programme at random. This scheme in particular is noted by McGann (2021) as being a kind of privatisation in disguise. The scheme is on a "Payment-by-Results" basis,

meaning that the two contracted organisations maintain their contracts with the understanding that they must provide results through employment or satisfaction outcomes. The low population density in many parts of Ireland means that, while this sort of scheme would theoretically benefit from competition in a marketised setting, there is not much room for more than a handful of contracted providers at most (McGann, 2021).

McGann et al. (2020) note that Ireland's new focus on activation was driven by a desire to reduce the total number of people on the Live Register more than reducing poverty. As a result, many vulnerable groups – especially lone parents – ended up being forced into in-work poverty. A substantial portion of lone parents moved into work by these activation measures (up to half) experienced drops in income and increases in material deprivation rates (p. 971). Our experts further characterised the Irish system of labour activation as being focused on poverty alleviation rather than poverty avoidance and mentioned that incentives did not apply to everyone or discouraged some from moving from part-time to full-time work as a broadly generous or adequate (out-of-work) MIS system can be associated with low incentives to expand labour market participation. This can also be seen as one of the Archilles' heels of the rather generous Irish MIS.

#### 7.7.3.4 Outcomes

Ireland persisted in a period of austerity where, although overall social spending increased massively in Ireland (Murphy and Dukelow 2013, see also Figure 7.14), individual benefit pay-outs were restricted (Cousins, 2019; Daly, 2019). The Irish system was effective in addressing issues of poverty, but the long-term austerity led to higher levels of deprivation among the poorer population, resulting in an increase in poverty as well as wealth inequality (Daly, 2019). Unemployment peaked in the years after the crisis and was associated with a large share of households with low work intensity (see Figure 4.8) but declined gradually after the mid-2010s (Bergin and Kelly, 2018). Fears over poor policing of distribution led to the adoption of more coercive measures for those out of compliance with activation measures (Dukelow and Kennett, 2018). Nonetheless, activation remained fragmented and marked by poor inter-agency coordination, as well as attempts at the marketisation of activation providers (McGann, 2021). Activation measures may have forced certain groups into in-work poverty (McGann et al., 2020). However, with hindsight one could argue that the Irish shift towards activation can be seen as way to counter high benefit dependency and low work-intensity in a system characterised by a prominent and rather generous MIS.

#### 7.7.4 Phase 4 (2020/21)

#### 7.7.4.1 Economic environment

Ireland's strict and longer-lasting lockdown measures led to very high levels of unemployment in this period. The impact was asymmetric, striking more heavily on workers who were already vulnerable. Overall, Ireland sought to balance its growing budget deficit with the high number of welfare seekers in this period, mainly through activation of the unemployed (McGann et al., 2020). The Live Register saw a notable increase in applicants during this period, up 8.8 percent to an annual average of 208,000. However, this number does not count those on pandemic-specific programmes, which added up to over one million extra recipients at the very outbreak of the pandemic (Live Register source). This would make the unemployment crisis the most severe Ireland has ever seen based solely on the numbers of benefit recipients, temporary or otherwise.

#### 7.7.4.2 Labour market regulation and unemployment insurance

More strict activation requirements left many vulnerable groups behind and did not seem to be effective in reducing poverty overall. During the pandemic, fears over disincentives to return to work led the Irish government to increase its funding of activation measures (McGann et al., 2020). Adjacent to this, the Temporary Wage Subsidy Scheme (TWSS) was passed. This scheme provided state-subsidised wages to employers so long as they retained their workforce (Hick and Murphy, 2020). This TWSS could be combined with the permanent part-time furlough scheme (Drahokupil and Müller 2021), although the latter only held minor importance. For the wage subsidy, a medium level of spending was reached, requiring more resources than short-time work in France (but less than in Spain) – for example – for a considerable number of employees supported. Job retention during COVID-19 was clearly more important than during the Great Recession in Ireland (see also Figure 7.4).

Further, the Pandemic Unemployment Payment (PUP) was created to provide a scheme similar to Jobseekers' Benefit to workers who had lost their jobs due to the pandemic. Eligibility was quite broad: anyone who had lost their (self-)employment due to the COVID-19 crisis, and who had satisfied the qualifying period requirements, was eligible for the benefit (OECD, 2020, IE). Recipients could receive up to 350 Euros per week (Hick and Murphy, 2020); the benefit was originally valid from March 2020 to March 2021 (OECD, 2020, IE), but was extended until April 2022 (*Government sets out future of Pandemic Unemployment Payment*, 2022) and therefore included in the OECD net replacement rate figures. The scheme's generosity sparked fears that workers were being disincentivised to return to work (McGann et al., 2020).

#### 7.7.4.3 Minimum income support systems and reforms

The eligibility for the Rent Allowance was significantly expanded for a short time to avert large-scale evictions (Hick and Murphy, 2020). In addition, the Illness Benefit was expanded to 350 Euros per week, as long as the applicant could provide qualifying documentation. The waiting period was waived for those infected with coronavirus (Mangan, 2020).

In the context of the COVID-19 crisis, Ireland sought to readjust the PTW scheme, calling it Pathways to Work 2021-2025. This new version of the programme continued the old practice of using strands to identify the Irish government's goals along the lines of an activating labour market policy that is inclusive and supportive for both jobseekers and employers.

The government outlined a wide range of performance indicators in regard to restoring prepandemic employment levels. Some key indicators included increased funding for education and placement programmes, increasing the number of case officers, and increasing job promotion to those on the Live Register. Special emphasis is placed on reducing long-term and youth unemployment (Government of Ireland, 2021).

This new iteration of *PTW* continues the Irish trend of turning towards activation and increasing evaluation of policy approaches. Our experts noted that Ireland has a poor history of institutional evaluation of policy outcomes. This new programme seeks to rectify that through such measures as a systematic review of programme effectiveness and regular client interviews (Government of Ireland, 2021).

As concerns youth unemployment, the new PTW commits to the implementation of EU Reinforced Youth Guarantee of placing those below 30 years old in employment within three months.

Mechanically, this means arranging monthly meetings between benefit recipients and case officers. These meetings involve guidance on training and employment opportunities (Government of Ireland, 2021), but there is limited indication that the culture of "box-ticking" outlined by Finn (2021) will be substantially addressed – the government makes occasional mention of personalising service and intervention for each recipient, but the mechanism for this is not adequately explained (Government of Ireland, 2021, p. 36). Additionally, spots in ALMP schemes are to be specifically set aside for young people, though only in small numbers (about 1,000) (Government of Ireland, 2021).

The government further seeks to tackle long-term unemployment in all groups through the use of statistical profiling. Jobseekers are organised into varying risk categories (low, medium, high) and receive varying levels of support accordingly. Those at low risk of long-term unemployment – for example – do not receive the one-on-one consultations afforded to those of medium or high risk, and those at high risk are potentially eligible for direct intervention through workfare placement; for example, in Community Employment and Tús. The new PTW is integrated with the PUP, as the government recognised the need to cater specifically to this new cohort (Government of Ireland, 2021).

#### 7.7.4.4 Outcomes

This crisis entrenched Ireland further into job search conditionality as a pre-requisite for collecting UI bonuses (McGann et al., 2020). Overall outcome indicators still show considerable improvement over the last decade. Ireland is now also closer to the sample on average. What is notable is the improvement in poverty exposure, which can also be linked to a relatively generous (and effective) MIS arrangement, as stressed by experts' views. While nominal benefit levels are only now starting to approach their pre-2008 levels again, our experts indicated that they remain effective as redistributive tools and in reducing poverty.

Programmes such as PUP appear to have performed as intended in cushioning the large numbers of unemployed during the COVID-19 crisis. The initial stages of the crisis saw Ireland experience its highest ever levels of unemployment. Nonetheless, these same programmes – albeit with varying impacts on different groups – contributed to warding off poverty for those who were awaiting a return to work (Dwan-O'Reilly & McNelis, 2022).

The new PTW iteration appears to address some long-standing issues with Irish activation and evaluation policies. However, because the first evaluation of programme outcomes is not due until 2023, and because the programme was only introduced in 2021, it may be too soon to evaluate the programme's effectiveness.

#### 7.7.5 Main insights from the Irish case

Ireland suffered heavily from the Financial Crisis and its aftermath. As expected, MIS schemes played the primary role in containing poverty and income dispersion in the Anglo-Saxon model in normal times and was also particularly relevant during the deep crisis after 2008 along with the limited and transitory role of UI. As a consequence, the massive shock from the late-2000s put the Irish welfare state under massive fiscal pressure, not least due to the negative development of employment and large shares of working-age people out of work or with low work intensity. This situation could not be overcome easily and lasted until the mid-2010s. In contrast to the UI-focused systems in France, Spain and Denmark, representing different welfare state types, the Irish MIS was the main income stabilisation mechanism during the Financial Crisis, mirroring the expected prominent role of the means-tested secondary tier in the Liberal welfare state type. In this context, the Irish system

provided an effective and broadly adequate MIS model in the early phase of the recession. To counter the massive increase in the fiscal pressure of the escalating crisis, the early-2010s in Ireland were characterised by strict austerity policies, trying to contain the cost associated with the Irish MIS. This included more efforts to overcome low work intensity, which could be attributed to persistent lack of jobs on the one hand but also high benefit withdrawal rates when entering the labour market. However, adopting a medium-term perspective, Ireland moved away from the established model of rather transfer-heavy social policies that did not place much emphasis on activation. In fact, the mid-2010 saw attempts at more systematic and effective activation of job seekers. In this respect, the MIS-centred model of the Liberal Irish welfare state was ultimately complemented by an activation focus that brought Ireland closer to the European mainstream setting. The focus of income stabilisation through MIS during the crisis and subsequent austerity and activation shifts in this scheme confirm the expected crucial role of MIS in the Anglo-Saxon setting as opposed to countries with more emphasis on UI and related reforms.

Table 7.12 Main developments in Ireland, 2005-2021

	Pre-2008	Great Recession	Austerity/recovery	COVID-19
Economic environment	Very large economic growth, the "Celtic Tiger."	Massive retraction in GDP growth due to crisis.	Protracted period of economic malaise and prolonged economic slump; slow recovery towards the end of the 2010s.	Strict lockdown measures led to economic slowdown.
Unemployment insurance and labour market regulation	Initially low in generosity, but progressive expansion of eligibility accompanying economic growth.	Imposition of austerity measures; reduction of benefit duration across all groups to cope with higher volume of recipients.	Cuts to benefit rates, duration, and eligibility. General shift to more intense labour activation measures.	Increased focus on activation and ALMPs to increase work incentives. Introduction of targeted pandemicrelated job retention.
Minimum income support systems	Wide, often complex array of different schemes. Few sharp distinctions between different groups. Lax and often poorly enforced activation measures.	Near universal cuts to eligibility and payment levels.	Large shift to activation and ALMPs.	Some smaller measures implemented to ease pressure on renters, the ill, etc. General refocusing of efforts onto activation policies.
Outcomes	Fairly effective poverty reduction outcomes. Notable lag in ALMPs.	Limited stabilisation effects of Irish schemes led to increase in poverty levels.	The Irish system addressed issues of poverty, but its structure led to an increase in wealth inequality and the severity of poverty for some. Introduction of more severe activation measures.	Improvement of conditions for those in poverty; some groups, such as the elderly, experienced better results than others. Even greater focus on job search conditionality.

## 7.8 Comparative assessment

The case studies have revealed the complex interaction between crises periods, existing employment and income protection systems and reform trajectories. First, regarding the relevance of welfare state types, we were in fact able to identify a large degree of institutional stability in the general setup of national social policies. While important, the reforms that we have documented did not amount to a complete and transformative change of the models that existed in the 2000s, which makes the notion of distinct welfare state models still meaningful. One possible exception is the new Spanish MIS, which has the potential to change the basic arrangement fundamentally in the near future. Table 7.13 brings together the findings from the case studies and main quantitative figures from sections 4, 5 and 6 above.

As shown in the quantitative section 6 and tracked with the case studies in depth, the stabilisation capacities continue to differ along the lines discussed in the conceptual part and stated in our hypotheses in section 3.2. This can be related to the coverage and generosity of the MIS systems as described in the case studies, but also to upstream systems that play a role in avoiding or postponing poverty and exclusion when faced with an economic shock. There are strong buffering effects in Nordic and Continental European countries (Denmark and France). In France – i.e. Continental Europe – and the Nordic country of Denmark, unemployment insurance played the most prominent role in buffering against income shocks, but this was also complemented by rather generous and accessible MIS schemes. While these countries (and clusters) can be described as more crisis-resilient, there was considerable fiscal pressure over the post-crisis period that led to some deterioration of socio-economic outcomes, in particular in the Danish case. In terms of stabilisation, they are followed by the Anglo-Saxon case of Ireland. Here, in line with our expectations, MIS played a strong role in weathering a deep economic crisis in the late-2000s and the early-2010s, resulting in strong and swift extra social expenditure on means-tested benefits.

In line with the information available and expert assessments, Post-Socialist and Southern European countries did provide less income stabilisation. This lack became more prominent in Spain after the Great Recession as socio-economic outcomes were negatively affected for a rather extended phase. Economic shocks were less of an issue in Poland as it went through a long economic growth period.

The continuity of broad models notwithstanding, there was considerable reform dynamism that can only be uncovered and fully appreciated by looking in depth into the national cases. Of course, given the analysis of only five cases, these reform episodes cannot be said to be 'typical' for the respective welfare state cluster. Important changes were sometimes introduced not through major reforms but through consequential adjustments within the existing policy framework. Reform activity has been particular intense in response to economic shocks, i.e. the Financial Crisis of 2008/09, and subsequent periods of high unemployment, deteriorating poverty and exclusion issues, and growing fiscal pressure. In this respect, it is important to look into longer periods of reforms as sequences of changes triggered by a crisis event can span over five years or more. This tends to confirm our initial hypothesis that economic crises trigger reforms that modify the institutional status quo significantly while national political dynamisms play a crucial role in the concrete design of the reforms. In fact, despite quite diverse starting conditions and path dependency, we could see some emerging similarities and some degree of a limited convergence across countries. However, it is still reasonable to distinguish between broad welfare state types and setting and not to claim a broad converging trend.

More specifically, all countries that were heavily hit by the crisis in the late-2000s and its mediumterm impact on employment and unemployment underwent a phase of austerity policies in the first half of the 2010s as to mitigate the fiscal cost of social policy expenditure (and meet external pressure). This was most notable in Spain and Ireland as members of the Eurozone exposed to fiscal risks and stabilisation efforts. Similar movements could also be observed – more unexpectedly – in Denmark, where objective problem pressure had been much less intense, as well as in France, where long-standing problem pressure and funding issues accumulated more gradually over time. Taking the whole period of the 2010s into account, we can see major reforms in all countries.

Spain implemented significant structural reforms in its heavily dualised employment protection legislation and went through a phase of social policy austerity in the early-2010s that affected benefit systems. In Ireland, while relying heavily on MIS as the main instrument of protection, there was a similar wave of cuts during the austerity period, followed by a rather late turn towards activation policies, which can also be understood as a policy to provide relief for the benefit systems given the large group of working-age people excluded or only marginally attached to employment. Activation had not played a major role in Ireland before. Denmark restricted the generosity and access of its benefit systems after the Great Recession, emphasised work requirements and turned away, at least partially, from its long-standing pattern of enabling ALMPs that was considered a main pillar of its Nordic model. These significant reforms do not clearly affect the performance at the level of overall indicators, but they only become visible when tracking the reform paths closely. Hence, it seems fair to say that - in contrast to widely shared perceptions - the generous and enabling Danish welfares state became more restrictive and demanding over time. Somewhat surprisingly, one might even describe the development in Denmark as one of more fragmentation or exclusion. Young people and immigrants increasingly receive special treatments that lead to less protection than enjoyed by other groups. France finally placed more emphasis on reducing the strictness of dismissal protection and increased subsidies for low-wage employment, and it expanded UI coverage to those with interrupted employment spells, however, this might have contributed to an ever heavier reliance on short-term temporary contracts, deepening the traditional dualism in the French labour market and triggering further reforms.

Austerity and deregulation are not the only relevant issues; rather, when broadening the time horizon and the perspective on different policy areas, we can see some movement to overcome traditional fragmentation and dualisation of labour markets and social protection, in particular in Southern and Continental Europe. For example, we can see steps of making employment protection less dualistic to reduce labour market segmentation not only in Spain but we can observe similar steps in France, where reforms overall proceeded in a more incremental fashion. This more step-wise approach in France was possibly due to the fact that even though there was a permanent pressure of high (youth) unemployment, the outfall of acute crises and recessions are buffered more, reducing the need for deep and swift discretionary interventions. In some cases, this was complemented by steps towards a better coverage by unemployment insurance of non-standard workers, e.g. temporary contract holders or self-employed people. This was true in Denmark and France – for example – while Spain also moved in that direction. In this sense, unemployment insurance became more broadly applicable to non-standard workers but is still far from universal. Yet, this can be seen as a step towards more reliable upstream systems.

Not only were coverage gaps in unemployment insurance addressed at least partially in European countries, but there has also been some movement to overcome fragmented MIS where this was most pressing. The most prominent example is Spain, where a national MIS scheme was introduced for the first time in 2020 that has the clear potential of establishing a more adequate and reliable minimum income system for the whole country. This is a major break with the Southern European legacy.

Nonetheless, the formal and de facto access to MIS is a contested issue in countries such as Denmark or France, in particular regarding young people, given debates around the minimum age or access, education requirement and lower payment rates. The Spanish MIS reform can also be seen as one of the few cases where during COVID-19 a permanent change was implemented. Otherwise, the pandemic period of 2020 and 2021 was mostly characterized by emergency measures regarding extension of unemployment benefits and job retention as well as ad hoc measures, e.g. lump-sum payments, for those in MIS and the self-employed.

Hence, one could argue that after the acute post-crisis austerity phase, at the institutional level there has more been a broader move in different welfare states to tackle long-standing dualisms in social protection coverage and employment protection. Despite these changes at the institutional level, we cannot claim that this was a full policy reversal and that patterns of the labour market have changed swiftly in accordance with the aim of those reforms. This is particularly true for the continued role of temporary contracts representing a highly volatile segment of the labour market with limited chances of moving to a permanent position in countries such as Spain or France, despite fundamental and unprecedented changes in employment protection legislation. Similar phenomena can be observed with the civil law contracts in Poland. The continued relevance of these dualisms can also be shown by the latest experience during the pandemic. While we cannot yet assess the medium-term socioeconomic outcomes of the COVID-19 pandemic, at the policy level the reactions in the different countries have been characterised by largely comparable responses. The strong emphasis on job retention – via short-time work and wage subsidy schemes – and temporary increases in benefit generosity and coverage are clear cross-national trends. These initiatives seem more systematic and larger than in the late-2000s. However, so far it does not seem that this has led to lasting policy innovations, as most crisis responses took the form of ad-hoc adjustments that have expired by now. Nonetheless, one can expect considerable learning effects to have taken place. These will likely shape policy-making in the future. In structural terms, the COVID-19 crisis has once more shown clearly that there remain gaps in formal and de facto benefit access for non-standard workers. These workers are more directly affected by job destruction (and they are less well integrated into job retention schemes).

Furthermore, the expansion of activation (or active inclusion) policies remains a common trend in European welfare states, although assessing the profile and actual impact of activation policies in a comparative and encompassing manner is difficult. In general, activation was formally reinforced during the austerity period in the 2010. Hence, it was characterised by a more demanding profile, increasing the strictness of availability criteria, job search monitoring or participation requirements. Making benefit receipt conditional upon behavioural requirements has been a long-standing policy trend that continued and was accelerated during the period of observation. Particularly in times of austerity, this came at the expense of more costly types of measures such as extended training programmes, notably also in countries like Denmark, where human capital-oriented ALMPs were traditionally the main focal point. However, training and incentive schemes continue to play an important role and their use continues to differ along the familiar lines of welfare models. Because the implementation of activation approaches depends on local actors (municipalities, employment services, case workers), it is not always easy to assess what policy changes and aggregated statistics reveal about employment models in practice.

Hence, taking everything together, we see movements within the countries representing the five welfare state clusters that have challenged and at least partially modified the institutional status quo when they entered the phase of observation in the mid-2000s. Although important differences in overall institutional arrangements and socio-economic performance remain, there is a tentative policy consensus informing reforms in MIS and active inclusion policies. This includes the spread of

#### Country case studies

activation, the establishment of general social safety nets and closing coverage gaps, as well as more active efforts at job retention during crises. The future will show whether our observations are part of an unfinished path of convergence in Europe around these principles. For now, institutional settings still clearly reflect the different legacies and socio-economic conditions in our cases.

Table 7.13 Main patterns of crisis responses in five selected welfare states

	France	Spain	Denmark	Poland	Ireland
Welfare state type	Continental European	Southern European	Nordic	Post-Socialist	Anglo-Saxon
GDP change 2008-09	-2.6	-2.9	-5.4	7	-9.6
Unemployment rate	7.4 (2008)	8.2 (2007)	2.9 (2008)	7.1 (2008)	4.8 (2007)
from low to peak	+ 2.9 (2013)	+ 17.9 (2013)	+ 4.8 (2011)	+ 3.2 (2013)	+ 10.6 (2012)
AROPE from low to peak	18.9 (2008)	21.2 (2007)	16.9 (2008)	30.8 (2008)	21 (2007)
(age 16-64)	+ 1.4 (2011)	+ 10.8 (2014)	+ 4.4 (2013)	-3 (2010)	+ 11.6 (2011)
Simulated AROP change (large shock)	2.2	2.61	1.12	2.31	2.41
Income stabilisation coefficient (large shock, V2)	0.73	0.56	0.69	0.29	0.37
Contribution of UI + MIS to stabilisation (large shock, V2)	0.519 + 0.015	0.367 + 0.011	0.34 + 0.061	0.026 + 0.003	0.056 + 0.016
Main classification	Strong resilience primarily via UI and MIS in second place	Strong resilience via UI, weaker MIS	Strong resilience primarily via UI and MIS in second place	Lower resilience	Intermediate resilience, but strong MIS
Benefit adequacy 2009 (single person)	68.8	50.0	117.1	53.3	116.7
Benefit adequacy 2009 (jobless couple with two children)	62.3	37.1	112.6	74.7	113.0
Expenditure change from low to peak (means-tested)	0.2 (2007, 2009)	0.8 (2008, 2011)	0.8 (2007, 2013)	0.1 (2008, 2013)	2.2 (2007, 2011)
Main observations	Strong income	Massive increase in	Relative increase in	Country less affected	Quite strong stabilisation
	stabilisation, but issues	poverty and exclusion	inequalities in a	by the crisis during a	of income via MIS, but
	with labour market	in a dual system with	strongly redistributive	long catching-up	massive fiscal pressure in
	and social protection	rather limited	and encompassing	phase, limited	the aftermath of the
	1.020 (1.000 to 1.000			• 0/10/19/00/• 0/19/00/00/00/07	
	dualisms	stabilisation capacities	welfare state	stabilisation not	acute crisis
				strongly put at test	

## Country case studies

	France	Spain	Denmark	Poland	Ireland
Main structural reforms	Employment	Deep austerity phase	Austerity phase with	Steps towards reducing	Severe austerity phase
(2010s)	protection reforms	with partly de-	benefit cuts and shift	dualisms in the labour	with social policy
	(weak de-dualisation)	dualising employment	towards more	market and social	retrenchment
	Expansion of in-work	protection reforms and	demanding activation	protection	Rather late shift towards
	benefits	benefit cuts	continuous adjustment	Expansion of family	activation
	Activation policies	Creation of national	of UI	benefits	
	Expansion of UI	MIS scheme			
	coverage	Expansion of UI			
		coverage			

3,0

2,5

2,0

1,5

0,0

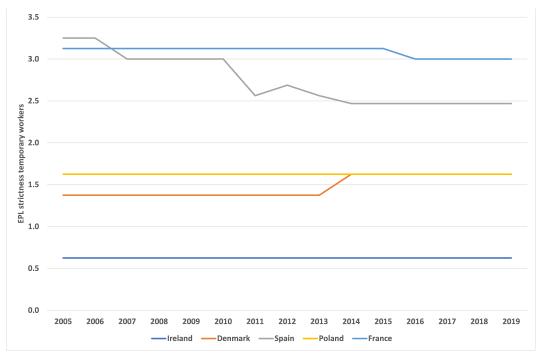
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

— Ireland — Denmark — Spain — Poland — France

Figure 7.1 Strictness of employment protection legislation for regular workers, 2005-2019

OECD statistics, OECD aggregate indicator on the strictness of employment protection – individual and collective dismissals (regular contracts), Version 2 (1998-2019).

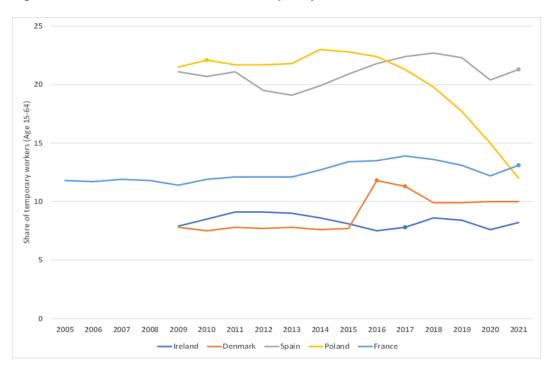




Source:

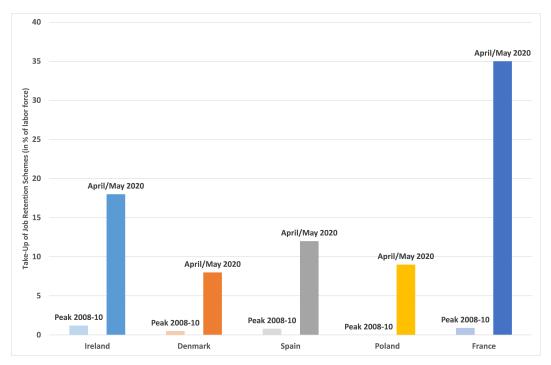
OECD statistics, OECD aggregate indicator on the strictness of employment protection – temporary contracts, Version 1 (1985-2019).

Figure 7.3 Share of workers with temporary contracts, 2005-2021



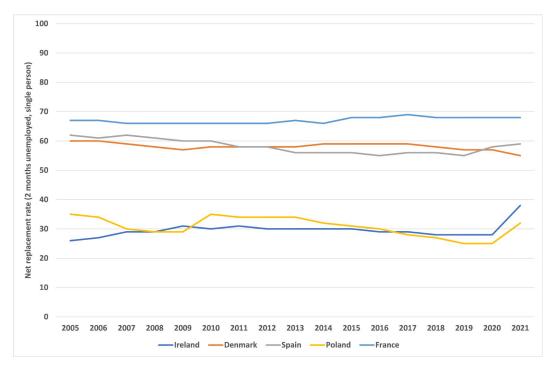
Source: Eurostat (<u>lfsi pt a</u>).

Figure 7.4 Take-up of job retention schemes (in % of labour force), comparison between financial crisis (2008-2010) and COVID-19 crisis (2020)



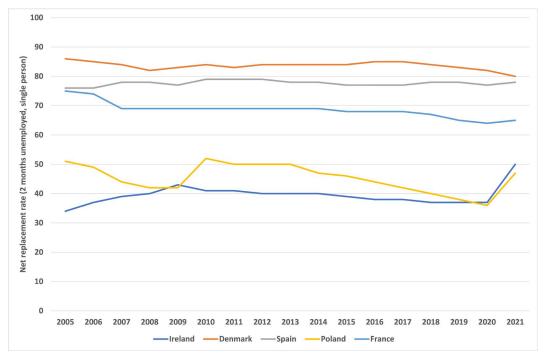
Source: own representation based on data from Ebbinghaus and Lehner (2022).

Figure 7.5 Net replacement rate, two months in unemployment, single, 100% average wage, 2005-2021



OECD statistics, net replacement rate, two months in unemployment, single person without children, 100% of the average wage, social assistance and housing benefits not included.

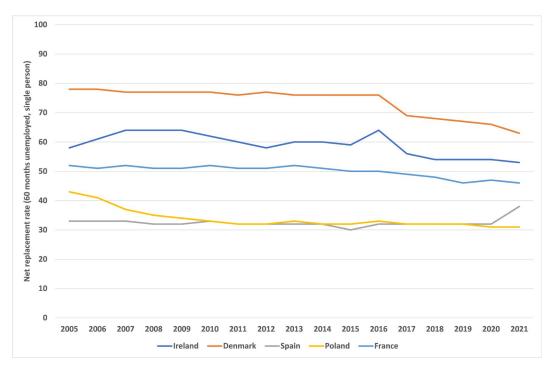
Figure 7.6 Net replacement rate, two months in unemployment, single, 67% average wage, 2005-2021



Source:

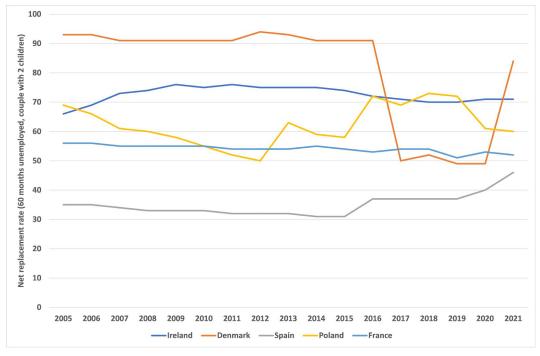
OECD statistics, net replacement rate, two months in unemployment, single person without children, 67% of the average wage, social assistance and housing benefits not included.

Figure 7.7 Net replacement rate, 60 months of unemployment, single, 67% average wage, 2005-2021



OECD statistics, net replacement rate, 60 months in unemployment, single person without children, 67% of the average wage, social assistance and housing benefits included.

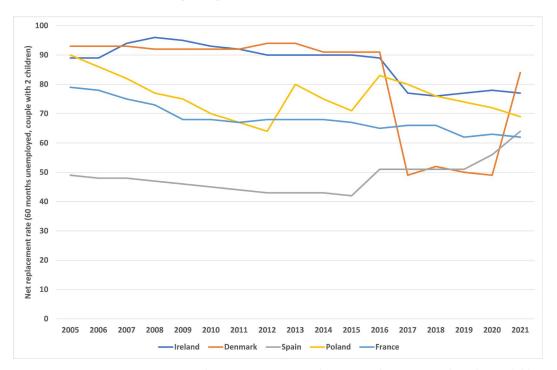
Figure 7.8 Net replacement rate, 60 months of unemployment, couple with two children, 100% average wage, 2005-2021



Source:

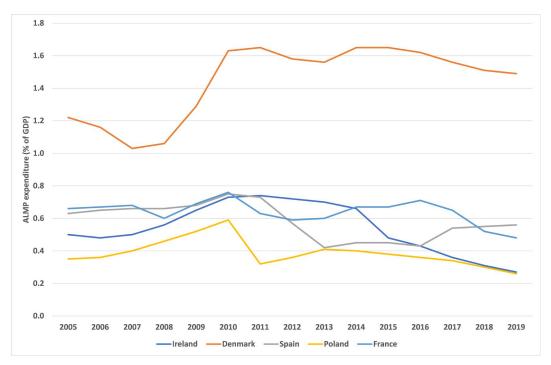
OECD statistics, net replacement rate, 60 months in unemployment, couple with two children, partner is out of work, 100% of the average wage, social assistance and housing benefits included.

Figure 7.9 Net replacement rate, 60 months of unemployment, couple with two children, 67% average wage, 2005-2021



OECD statistics, net replacement rate, 60 months in unemployment, couple with two children, partner is out of work, 67% of the average wage, social assistance and housing benefits included.

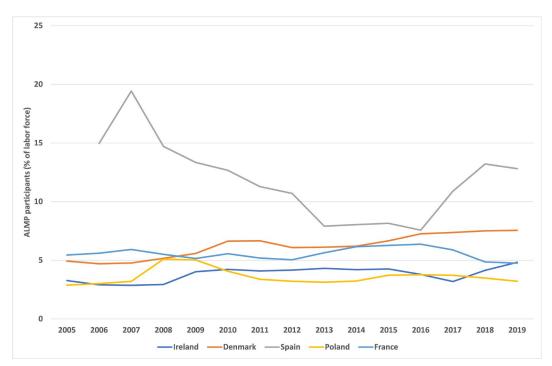
Figure 7.10 Public expenditure on ALMP (in % of GDP), 2005-2019



Source:

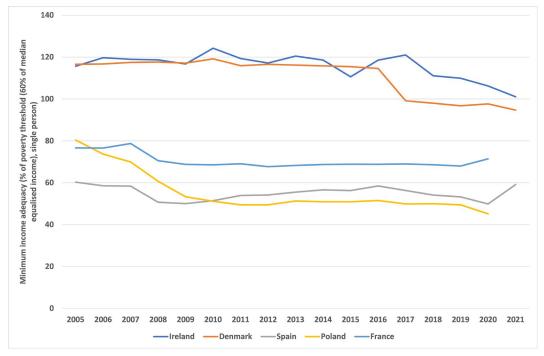
OECD statistics, Public expenditure as a percentage of GDP, active measures (categories 20-70).

Figure 7.11 Participant stocks of LMP as a percentage of the labour force (categories 20-70), 2005-2019



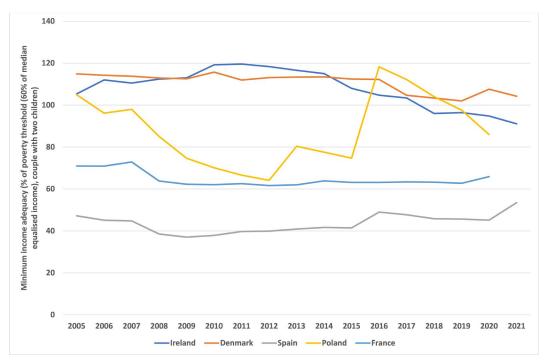
Source: OECD statistics, Public expenditure and participant stocks on LMP, active measures (categories 20-70).

Figure 7.12 Adequacy of guaranteed minimum income benefits, jobless person without children (% of at-risk of poverty threshold (60% of median equivalised income)), 2005-2021



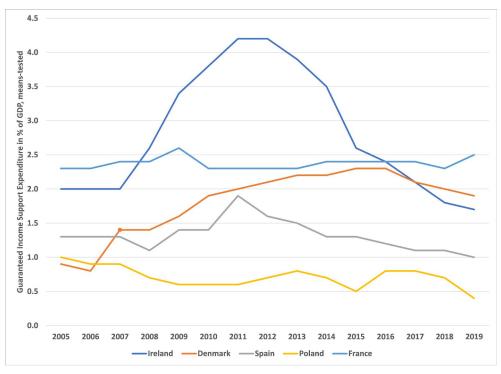
Source: own calculations based on OECD statistics (Adequacy of guaranteed minimum income benefits, GMI amount in local currency, jobless person without children, including housing benefits) and Eurostat (ilc li01)

Figure 7.13 Adequacy of guaranteed minimum income benefits, jobless couple with two children (% of at-risk of poverty threshold (60% of median equivalised income)), 2005-2021



own calculations based on OECD statistics (Adequacy of guaranteed minimum income benefits, GMI amount in local currency, jobless couple with two children, including housing benefits) and Eurostat (ilc li01)

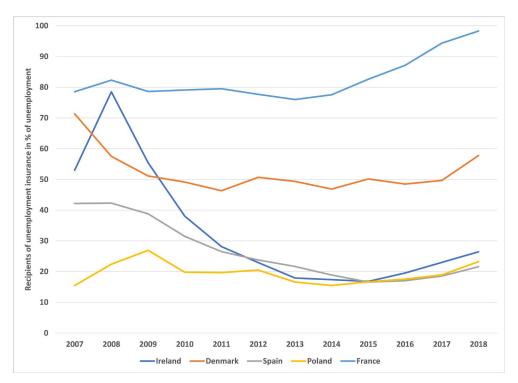
Figure 7.14 Expenditure on guaranteed income support (means-tested benefits, in % of GDP, categories: unemployment, social exclusion, housing, family/children)



Source:

Own calculations based on the Eurostat ESSPROS database (SPR EXP GDP) and Coady et al. (2021).

Figure 7.15 Recipients of unemployment insurance (pseudo-shares, in % of unemployment), 2007-2018



Source: Own calculations based on OECD statistics, Social Benefits and Recipients (earnings-related unemployment benefits)

# 8. Conclusion

#### Main findings:

There are consistent differences in terms of crisis resilience across countries and welfare state types. In general, Nordic and Continental European welfare states with strong upstream systems and MIS show better outcomes in core socio-economic outcomes, however, labour market integration shows some dualisms in Continental Europe. MIS are also quite strong in Liberal welfare states.

MIS are of particular importance if there are gaps in upstream systems or cases of severe and lasting crises. In Continental Europe and Nordic countries, MIS play an important role in stabilisation of income and inclusion, but they are rather secondary to UI in particular. MIS are the crucial stabilisation mechanism in the Liberal setting while they are less strong in the Southern European and Post-Socialist models.

Over time, UI and MIS underwent a phase of austerity in all case-study countries hit by the 2008/09 crisis, but were reformed and expanded later on. The Mediterranean MIS in Spain is now becoming more integrated, departing from its long-standing legacy. The role of activation, both with demanding and enabling elements, has become more prominent over time in all countries. There was some convergence in this respect.

Remaining policy issues concern three main design challenges:

First, a better design of upstream systems to ease pressure on jobs, individual income and eventually MIS remains a pending issue. In particular, UI coverage is crucial in this respect.

Second, the adequacy of MIS benefits does not always suffice to overcome poverty in the household and meet the threshold targets. Fixing an appropriate level of support and adjusting and uprating it appropriately over time would be important. Another issue concerning MIS relates to formal and de facto access to benefits, i.e. making sure benefit coverage is sufficient both formally and in practice.

Third, the governance of activation seems to pose particular challenges in many countries. This is related to the dualism between unemployment insurance and MIS on the one hand and the frequent involvement of partly autonomous lower levels of regional government in combination with the public employment service or national-level entities on the other hand.

This study tries to identify the contribution of social protection systems, in particular MIS and upstream schemes such as unemployment insurance and job retention, to crisis resilience in European countries that belong to different welfare state types. To this end, the study uses a mixed-method design that combines different types of quantitative and qualitative evidence.

The period studied here (2005 to 2022) allows for an assessment of the empirically observable impact of one major crisis, the Great Recession that started in 2008, on socio-economic outcomes, in particular poverty, social exclusion and labour market integration. The effects of COVID-19 cannot be identified with the standardised quantitative data available but can be tracked at the policy level. Therefore, it is not yet possible to assess the extent to which the latest crisis compares to the Great

Recession in terms of its effects on outcome variables concerned here. It is only possible to detect different responses at the policy level, in particular a stronger emphasis on the ad-hoc stabilisation of incomes of vulnerable groups (not protected by UI) and short-time work that was implemented to avoid a steep initial increase in unemployment. Furthermore, we have not seen a full recovery and/or an eventual austerity shift yet, reflecting the dominating policy stance in the early-2010s in those countries most affected at that time. Due to this restriction with the latest data, the quantitative analysis mainly refers to the short-, medium- and long-term consequences of the Great Recession.

The study was motivated by the need to have a closer look into the contribution of MIS systems and upstream systems of income and employment protection during and after crises. To this aim, three main questions were raised:

- 1. How successful are the systems in ensuring adequate minimum income protection and the empowerment and (re-)integration of recipients into the labour market (i.e. implementing active inclusion concept)?
- 2. What is the contribution of MIS to social resilience during times of crisis? What differences and similarities can be identified between the countries studied and to what extent can these be attributed to the different role and importance of the MIS schemes?
- 3. How have MIS systems developed since the Financial Crisis of 2008/09 in the respective socio-economic and political context? What adjustments and reforms have taken place? Which development/reform paths can be discerned? In particular, to what extent were MIS schemes adapted during the Financial Crisis or COVID-19?

The main findings to these three questions are summarised in table 8.1 below and explained more in detail in the subsequent sections.

Table 8.1 Research questions and major findings

	Research question	Major finding
1	Success in income protection and labour market (re)integration	Superior overall performance of the Nordic and Continental European welfare states with strong upstream systems and MIS; labour market integration shows some dualisms in Continental Europe; MIS also quite strong in Liberal welfare state
2	Contribution of MIS	MIS are of particular importance if there are gaps in upstream systems or cases of severe and lasting crises; in Continental Europe and Nordic countries, MIS play an important role in stabilisation of income and inclusion, but they are rather secondary to UI in particular; MIS are crucial stabilisation mechanisms in the Liberal model; they are less strong in the Southern European and Post-Socialist model
3	Change in MIS	Over time, MIS underwent a phase of austerity in all countries hit by the 2008/09 crisis, but were reformed and expanded later on; the Mediterranean MIS in Spain is now becoming more integrated; the role of activation, both with demanding and enabling elements, has become more prominent over time in all countries

# 8.1 Upstream systems, minimum income support and crisis resilience across welfare states

Regarding the first and second question, the descriptive analysis in chapter 4 showed considerable – and expected – differences across countries and welfare state clusters regarding the effectiveness of income protection and active inclusion through MIS and upstream systems.

While the observable impact of the Financial Crisis was diverse across countries, among the most affected countries different levels of income support and inclusion could be reached. In that sense, the pre-crisis situation and the developments during and after the 2008/09 crisis showed clearly that better developed social protection systems (e.g. in Continental Europe and the Nordic Countries) were (and are) better able to mitigate the impact of a (deep) crisis. There, upstream systems, in particular unemployment insurance, played a major role, but they were complemented by rather adequate MIS, while crisis-stricken Liberal welfare states, e.g. Ireland, could and had to rely more heavily on its MIS scheme alone. The capacity for stabilisation and inclusion were less developed in the other two countries or welfare state types, the Post-Socialist cluster and the Mediterranean welfare states.

In that sense, findings from the different methods applied in this study converge and tend to confirm each other. Using the full sample of countries, it became evident from the multivariate analysis shown in section 5 that the relation between the unemployment shock (due to a preceding economic shock) and poverty outcomes seems stronger and more linear when the tax-benefit arrangements and the overall social protection system are more limited and therefore less able to stabilise income when unemployment increases or persists. This was clearly the case in many Southern European and Post-Socialist welfare states at the time, but also in the Anglo-Saxon cluster, where a rise in unemployment was more directly associated with a rise in poverty and exclusion risks, albeit with some delay, as detectable in the descriptive time series and lagged models. The relation between economic shocks and poverty shocks was less strong and therefore less visible in Nordic and

Continental European welfare states due to stronger redistributive capacities, i.e. the capacities for stabilisation of income and contain poverty risks in case of (long-term) unemployment. In our multivariate analysis, mainly covering the period before, during and after the Great Recession we could find some evidence that welfare state arrangements play a major role in moderating the poverty and exclusion effect of an economic shock by reducing unemployment risks and related income risks. Hence, benefit availability and generosity play a role here – as do measures to stabilise jobs in acute phases of crisis.

This general observation is also confirmed by simulation results using EUROMOD in section 6 that assume hypothetical shocks that are identical across countries. The advantage of this step of analysis lies in the possibility to control for an asymmetry of economic shocks - observed in the empirical data used in section 5 - by substituting this with a pre-defined hypothetical (symmetric) shock for all economies in Europe. According to the simulations using EUROMOD, the clustering into five welfare state types seems largely plausible and legitimate, stressing again the better stabilisation capacities of the Nordic and Continental European clusters. However, the simulations executed in this study again show notable differences within country clusters in terms of income stabilisation and other core outcomes even when individual countries are confronted with identical shock scenarios. The differences at country level are directly related to features of the tax-benefit system incorporated into EUROMOD. From this analysis, it also became clear that besides the tax system and social security contributions, unemployment insurance and MIS play an important, but varying role in income stabilisation regarding the type of shock assumed and the national arrangements. Across European countries and welfare state clusters, the role of upstream UI and second-tier MIS strongly varies, as we could show when disaggregating the income stabilisation arrangements. Nordic and Continental European countries tend to put more emphasis on rather encompassing UI, which is particularly effective in short or small shock scenarios and complement it with rather well-developed MIS schemes that come in during deeper crises. In Anglo-Saxon countries, MIS is the core income stabilisation tool. The simulation studies also show high participation tax rates in those countries with strong income stabilisation which points at somewhat weaker work incentives unless activation policies are implemented coherently. On average, both tiers have a smaller scope in the Southern European and Post-Socialist clusters, therefore leading to lower income stabilisation.

Interpreting this in institutional terms, economic shocks translate more clearly and directly into a poverty shock (i.e. an increase in risk of poverty and social exclusion):

- 1. if the upstream systems of unemployment insurance (including job retention and short-time work) are weakly developed or limited in coverage or generosity; *and*
- 2. if MIS is inadequate in levels or in terms of access and activation of job seekers.

In this sense, the "stronger" (more generous and more encompassing) Nordic and Continental European welfare states tend to buffer shocks better than Anglo-Saxon, Southern European and Post-Socialist models. The stronger buffering capacities can help keep poverty risks under control and avoid a long subsequent period of high risks of poverty and exclusion. In this sense, the Nordic and Continental European welfare states are found to be more resilient overall.

However, when looking more in depth into individual countries, it is difficult to disentangle the asymmetric effect of the economic and unemployment shock after 2008 from country-specific features of social protection. First, even within the same group, the (economic) crisis impact of the Great Recession varied obviously between countries belonging to the same welfare state cluster – e.g. Denmark vs. Sweden, Spain vs. Italy, Ireland vs. UK – when looking at GDP and unemployment.

In comparative terms, the quantitative analysis as well as the case studies show that despite some decline in performance in the aftermath of the Financial Crisis and subsequent austerity-oriented reforms, the Nordic welfare state model, e.g. Denmark, seems the strongest, followed by Continental Europe, e.g. France, with its strong redistributive capacities. Overall, the ranking of countries by core outcome variables is quite stable over time. Nonetheless, even in those countries, pressure on the welfare state increased. Indeed, even the best-in-class systems were not fully successful in providing and maintaining adequate income support and optimum inclusion policies, but showed some weakness in addressing target groups such as young people or with respect to sustainable labour market (re)integration. The countries with superior crisis resilience clearly combine upstream systems' buffering capacities with reliable MIS (and employment protection in the French case rather than in Denmark), thereby reducing the burden placed on MIS alone. The latter is the main instrument in Ireland, where unemployment insurance (and employment protection) are less relevant.

Further, as can be seen from a closer inspection of the data for countries such as Spain, Ireland or Denmark that saw significant crisis-related increases in unemployment during the Great Recession and thereafter, it took a couple of years to reverse this trend. A massive medium-term increase in the unemployment rate was associated with massive fiscal and societal costs and translated eventually into an increase in the share of people in long-term unemployment and at risk of poverty, the more so if MIS systems could not fully cushion this and maintain integrative and activating policies. This can explain the particularly difficult socio-economic situation in Spain and Ireland in the early-2010s. Moreover, also Denmark was facing major challenges to its comprehensive, strongly redistributive and activating welfare state arrangement. Hence, even strong welfare states can come under heavy pressure that leads to deteriorating outcomes and reduced capacities to ensure activation and inclusion.

One note of caution regarding the labour market inclusion side of crisis resilience is to be raised, based on the in-depth analysis of the cases. In general, the Nordic country of Denmark and the Continental European welfare state of France exhibited low levels of exclusion from work and quite strong inclusion also along this dimension. However, some issues with substantial and sustainable labour market integration in the post-crisis period over the 2010s could be observed even in these welfare states. In Denmark, the employment situation clearly was more difficult in the 2010s than before and could not easily be overcome. This may also partly be related to the departure from enabling ALMPs that constituted a core pillar of the established flexicurity arrangement. More demanding activation policies seem less conducive to sustainable integration. In France, long-standing issues with a heavy reliance on temporary contracts could not really be overcome, and a main focus in France was on permanent in-work benefits and employer subsidies in the low-pay segment while stabilised employment and inclusion into paid work, but upward mobility was not strongly encouraged. There are also hints at a general weakness of activation policies for MIS recipients in France, but also – given its late start – in Spain and Ireland, although it is difficult to establish a clear picture on this dimension.

Overall, a main finding of this study is that the profiles of redistributive capacities of national welfare states are quite stable over time and rather confirm the initial hypothesis of stronger cushioning capacities in Nordic and Continental European welfare states relative to Anglo-Saxon, Southern European or Post-Socialist arrangements., while it remains useful and informative to distinguish five welfare state clusters as we used them in terms of cushioning capacities, the descriptive, multivariate and simulation analysis also revealed considerable heterogeneity within the five country groups. However, to better understand that, a further analysis of additional cases would be required to identify what reactions are typical for the cluster and which steps can rather be explained by country-

specific factors. For example, one might question the continued existence of a distinct Mediterranean cluster to the extent that other countries in that group also adopt more universal MIS and relaxed employment protection as was observed in the Spanish case (e.g. in Italy). This would move the Southern European cluster closer to the Continental European one. A further issue certainly is to look closer into the heterogeneous group of Post-Socialist welfare states and check to what extent the changes observed in Poland correspond to reforms in other countries in that region.

### 8.2 Reform trajectories

Regarding the third research guiding question that addressed institutional adaptation and reforms, aggregate quantitative indicators can only provide a first comparative picture and some anchor points, although it is necessary to complement them with in-depth case studies. As for the different tiers of social protection, both quantitative aggregate indicators (such as net replacement rates and employment protection indices) and more qualitative institutional accounts from the case studies show quite some stability regarding their basic structures in virtually all countries and over the whole period. However, it is fair to say that stability with many quantitative institutional indicators and basic welfare state structures is only part of the story and a rough approximation to reality as there have also been sequences of significant reforms in the five selected countries.

These reforms have altered the design of the welfare state arrangements in these countries and highlight dynamism that might be 'typical' for the respective clusters. However, this naturally could not be checked for generalizability by focusing on just five cases.

Both unemployment insurance and MIS schemes were not left unchanged, but were reformed to some extent in the five Europe countries. In most instances, this occurred rather within existing structures than by revising the basic setup. With hindsight, it becomes clear that one type of structural change was most prominent in those countries that were strongly exposed to the Great Recession and subsequent fiscal and external pressure in the 2010s. In these cases, the typical reaction was a shift towards austerity and stricter, i.e. more demanding rather than enabling, activation (see Ireland, Denmark and Spain in the early-2010s). A second type of reform can be described as more incremental, cumulative in countries such as France or Poland (the latter characterised by a longer catching-up process). In many countries this put net replacement rates and benefit adequacy under pressure.

Apart from the austerity reforms, there are quite a few examples of significant expansionary or 'progressive' reforms in MIS systems, e.g. in France with RSA or, more recently, the introduction of the national MIS system IMV in Spain in 2020 after a longer phase of austerity. In fact, after the retrenchment phase in the early-2010s one can identify some effort at the national level to make in particular unemployment insurance somewhat more universal, enlarging its potential coverage. This can be seen as an attempt to strengthen upstream systems (with the notable exception of employment protection for permanent contracts). In particular, the most deeply fragmented and segmented systems have taken steps to provide more equal access to benefits and to the labour market, addressing some of the long-standing dualisms in social protection and employment protection legislation, e.g. in France and Spain. Further steps were undertaken during the COVID-19 pandemic on a temporary basis, e.g. providing better benefits for those not insured and a much wider application of short-time work, which can be interpreted as a lesson from the 2008/09 crisis. It is not yet clear to what extent these emergency measures pave the way for more long-lasting institutional changes in order to strengthen overall crisis resilience.

While the impact of these reforms is not directly visible at the macro level or in available quantitative indicators, they have clearly brought about different arrangements as compared to the situation in 2005. It would require additional in-depth case studies to see if those changes observed in the small sample of five diverse countries are representative for the respective welfare state clusters and if there is broader convergence across countries and clusters. It also remains to be seen to what extent the temporary emergency measures adopted during the COVID-19 pandemic are opening up windows of opportunity for significant and permanent modifications.

## 8.3 Policy issues

Some observations in this report, in particular findings from our in-depth case studies, point at policy challenges that need to be discussed and addressed regarding the provision of reliable income support and active integration in European countries over the years to come. This has to do with a) reliable and accessible upstream systems, b) benefit adequacy and coverage in MIS and c) effective governance structures.

First, a better design of upstream systems to ease pressure on jobs, individual income and eventually MIS remains a pending issue despite the recent moves in that direction. Both the Great Recession and the COVID-19 crisis have shown that buffering against economic shocks through job retention can avoid premature job and income losses if implemented in due course and with appropriate instruments. Here, the design issues lie with coverage, adequate support and timely phase-out. Effective coverage by upstream short-time work systems and an adequate level of support plays a major role in crisis resilience. Job retention schemes should be available quickly, based on administrative routines, when needed rather than be introduced on an improvised basis in a case of emergency.

In addition, the long-standing topic of better unemployment insurance coverage remains an issue to the extent that non-standard workers are typically less well protected than permanent employees. This is particularly true for labour market entrants, temporary workers with short and interrupted employment spells and the self-employed in many countries. These groups tend to exhibit more volatile employment situations and earnings. Hence, designing protection systems that work for them, without creating incentives to use temporary contracts or own-account work even more, is crucial. That also means that relaxing employment protection to reduce labour market dualisms should be complemented by better protection through unemployment insurance.

Second, the income stabilisation and inclusion capacity of MIS benefits does not always suffice to overcome poverty and exclusion risks in the household effectively as poverty risks after social benefits or weak labour market attachment show. This has two important dimensions: the level of benefits (benefit adequacy) and the accessibility of benefits (coverage). Some groups face more difficulties than others. Regarding benefit adequacy, fixing an appropriate level of support and adjusting and uprating it appropriately over time would be important. Regarding the issue of coverage by MIS, this relates to formal and de facto access to benefits for specific groups, e.g. young people or lone parents. In some cases, we have seen formal exclusion, a differentiated treatment or significant non-take-up in MIS so that reliable income protection and poverty prevention is not always achieved. Therefore, making benefits accessible is highly important.

However, strong income stabilisation might weaken incentives to work through high participation tax rates. Realising the goals of labour market entry and upward mobility and simultaneously maintaining an adequate level of income support are not always easily reconciled and call for careful policy design reforms. Low work intensity in MIS households might be countered by in-work benefits which bring

about the risk of persistent in-work poverty by discouraging upward mobility to longer working hours or better paid jobs, depending on the design of such schemes and household circumstances. A better alternative might be activation policies that also provide for appropriate training and employment stabilisation measures for those entering the labour market from the benefit system. This strategy, however, requires adequate funding and effective governance, which leads to the third main policy topic.

Third, while more difficult to assess in general, the governance of activation seems to pose particular challenges in many countries, given the dualism between unemployment insurance and MIS on the one hand and the frequent involvement of partly autonomous lower levels of regional government in combination with the public employment service or national-level entities on the other hand. Clearly, this is more relevant for activation targeting MIS beneficiaries than unemployment insurance claimants, where there is a more coherent administrative structure in most countries. Typically, the decentralisation of administration, leads to some differences in treatment and support across places within the countries we studied. Indeed, in some cases, a lack of resources hampers properly targeted and promising support for working-age people receiving MIS benefits. The case studies collected in this study show that active inclusion that leads to a sustainable departure from benefits requires consistent objectives, appropriate – also national level - funding for enabling active labour market policies that match with clients' needs as well as an effective coordination between the different agencies in charge. In addition, in many cases the monitoring and evaluation of such interventions would need to be developed further. In that sense, the case studies tend to highlight some structural shortcomings in existing active inclusion governance that inhibit a better performance of MIS systems.

# 9. References

O.pdf

- Aguilar-Hendrickson, Manuel and Ana Arriba González de Durana (2021): El IMV y las rentas mínimas, un año después. INCOME-INN: Innovaciones en programas de garantía de rentas: políticas, pilotos y propuestas. https://lleiengel.cat/wp-content/uploads/2021/10/Post\_Llei\_Engel.Aguilar.Arriba.IMV\_.Un\_ano\_despues.CASTELLAN
- Aguilar, Manuel, Mario Gaviria and Miguel Laparra (1995): La caña y el pez. El salario social en las Comunidades Autónomas 1989-1994. Madrid: Fundación Foessa.
- Aidukaite, Jolanta, Steven Saxonberg, Dorota Szelewa and Dorottya Szikra (2021): Social policy in the face of a global pandemic: Policy responses to the COVID-19 crisis in Central and Eastern Europe. *Social Policy & Administration*, 55(2), 358-373.
- Andersen, Torben M. (2017): The Danish labor market, 2000-2016, IZA World of Labor, 404.
- Angrist, Joshua D., and Jörn-Steffen Pischke (2009): Mostly Harmless Econometrics: An Empiricist's Companion. Princeton University Press.
- Anne, Denis and Yannick L'Horty (2012): The RSA (Revenu de solidarité active) and back-to-work incentives in France. *International Social Security Review*, 65(3), 77-100.
- Arellano, Manuel and Stephen Bond (1991): Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations, *The Review of Economic Studies*, 58(2), 277-297.
- Arriba, Ana and Luis Moreno (2002): Spain: Poverty, Social Exclusion and 'Safety Nets'. Unidad de Políticas Comparadas (CSIC) Documento de Trabajo 02-10.
- Arriba, Ana and Luis Moreno (2005): Spain: Poverty, Social Exclusion and 'Safety Nets'. In: Ferrera, Maurizio (ed.) Welfare State Reform in Southern Europe. Fighting poverty and social exclusion in Italy, Spain, Portugal and Greece. London/New York: Routledge, 141-203.
- Arranz, José M., Carlos García-Serrano and Virginia Hernanz (2018): Short-Time Work and Employment Stability: Evidence from a Policy Change. *British Journal of Industrial Relations*, 56(1), 189-222.
- Askenazy, Philippe (2018): The changing of the French labor market, 2000-2017. *IZA World of Labor*, 412.
- Askenazy, Philippe and Bruno Palier (2018): France: Rising precariousness supported by the welfare state. In: Nolan, B (ed.) Inequality and Inclusive Growth in Rich Countries. Oxford University Press, 129-152.
- Autoridad Independiente de de Responsabilidad Fiscal/AIReF (2022): 1.ª Opinión Ingreso Mínimo Vital.

  https://www.airef.es/wp-content/uploads/2022/08/IMV/OPINION-AIREF-IMV.pdf.
- Autoridad Independiente de de Responsabilidad Fiscal/AIReF (2019): Los programas de rentas mínimas en España, Estudio. Madrid: Autoridad Independiente de Responsabilidad Fiscal.
- Ayala, Luis, José Maria Arranz, Carlos Garcia-Serrano and Lucía Martinez-Virto (2016): The income guarantee system in Spain: trends, results and necessary reforms. https://www.mdsocialesa2030.gob.es/derechos-sociales/inclusion/contenido-actual-web/TheIncGuarantSyst-ResEjec.EN.pdf

- Bahle, Thomas, Vanessa Hubl and Michaela Pfeifer (2011): The Last Safety Net: A Handbook of Minimum Income Protection in Europe. Bristol: Policy Press.
- Bahle, Thomas (2019): Soziale Mindestsicherung. In: Herbert Obinger and Manfred G. Schmidt (ed.): Handbuch Sozialpolitik, 761-782. Berlin: Springer.
- Bargain, Olivier, Stéphane Carcillo, Étienne Lehmann and Yannick L'Horty (2017): Mieux lutter contre la pauvreté par des aides monétaires. *Notes du conseil d'analyse économique*, 41/2017, 1-12.
- Bengoechea, Gonzalo Gómez (2021): The impact of the COVID-19 crisis on income distribution under different protection schemes: the case of Spain. *Public Sector Economics*, 45(4), 517-541.
- Bergin, Adele and Elish Kelly (2018): The labor market in Ireland, 2000-2016. *IZA World of Labor*, 410.
- Béthoux, Élodie and Patrice Laroche (2021): Employment relations in France. In: Greg J. Bamber et al. (ed.): International and Comparative Employment Relations: Global Crises and Institutional Responses, 159-182.
- Bonin, Holger, Werner Eichhorst, Annabelle Krause-Pilatus and Ulf Rinne (2021a): Corona-Pandemie: Stresstest für das System der sozialen Sicherung. IZA Research Report Nr. 109.
- Bonin, Holger, Werner Eichhorst, Annabelle Krause-Pilatus, Ulf Rinne and Vincent Jungnickel (2021b): Wirksamkeitsanalyse der Corona-Maßnahmen. IZA Research Report Nr. 110.
- Bontout, Olivier and Katalin Szatmari (2020): Benchmarking on Minimum Income Principle to Facilitate Upward Convergence, BMAS EU2020 Reader.
- Bredgaard, Thomas and Per K. Madsen (2018): Farewell flexicurity? Danish flexicurity and the crisis. Transfer: European Review of Labour and Research 24(4), 375-386.
- Brzezinski, Michael (2015): Income Dynamics in Poland during the Great Recession and Re-covery: The Role of Tax and Benefit System.

  http://coin.wne.uw.edu.pl/mbrzezinski/research/WBIncomeDynamicsPoland rev.pdf
- Bundesministerium für Arbeit und Soziales (2021): Lebenslagen in Deutschland. Der sechste Armutsund Reichtumsbericht der Bundesregierung. https://www.armuts-und-reichtumsbericht.de/SharedDocs/Downloads/Berichte/sechsterarmuts-reichtumsbericht.pdf?\_\_blob=publicationFile&v=6
- Cabrero, Gregorio Rodríguez (2009): Assessment of Minimum Income Schemes in Spain. European Commission: DG Employment. https://ec.europa.eu/social/BlobServlet?docId=9043&langId=en
- Cahuc, Pierre (2022): IZA COVID-19 Crisis Response Monitoring: France. https://www.iza.org/wc/files/downloads/iza\_\_crisismonitor\_countryreport\_fr\_202202.pdf
- Cahuc, Pierre (2019): Short-time work compensation schemes and employment. *IZA World of Labor*, 11.
- Cahuc, Pierre and Sandra Nevoux (2018): Inefficient short-time work. Banque de France Working Paper 693.
- Cahuc, Pierre, Stéphane Carcillo and Camille Landais (2021): Repenser l'assurance-chômage: règles et gouvernance. *Notes du conseil d'analyse économique*, 61/2021, 1-12.
- Card, David, Jochen Kluve and Andrea Weber (2018): What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations. Journal of the European Economic Association 16(3), 894-931.

- Caune, Hélène and Sotiria Theodoropoulou (2018): French employment market policies: dualisation and destabilisation. In: Sotiria Theodoropoulou (ed.): Labour market policies in the era of pervasive austerity. A European perspective. Bristol: Policy Press.
- Clegg, Daniel, Elke Heins and Philipp Rathgeb (2022): Unemployment benefit governance, trade unions and outsider protection in conservative welfare states. *Transfer: European Review of Labour and Research*, 28(2), 195-210.
- Clegg, Daniel (2011): France: Integration versus dualization. In: Jochen Clasen and Daniel Clegg (eds.): Regulating the Risk of Unemployment. National Adaptations to Post-Industrial Labour Markets in Europe. Oxford: Oxford University Press, 33-53.
- Coady, David, Samir Jahan, Riki Matsumoto and Baoping Shang (2021): Guaranteed minimum income schemes in Europe: Landscape and design. International Monetary Fund. https://www.imf.org/-/media/Files/Publications/WP/2021/English/wpiea2021179-print-pdf.ashx
- Coquet, Bruno (2015): Labour market measures in France 2008-13: The crisis and beyond. International Labour Organization. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms\_449923.pdf
- Cour des Comptes (2022): Le Revenu de Solidarité Active. Rapport public thématique. Évaluation d'une politique publique.

  https://www.ccomptes.fr/sites/default/files/2022-01/20220113-rapport-RSA.pdf
- Daly, Mary (2019): Ireland: The Welfare State and the Crisis. In Welfare and the Great Recession: A Comparative Study (pp. 115–131). Oxford: Oxford Academic, 115-131. https://doi.org/10.1093/oso/9780198830962.001.0001
- Danish Agency for Labour Market and Recruitment (2022): Evaluering af dagpengereformen Et tryggere dagpengesystem 19-04-2022, https://star.dk/om-styrelsen/nyt/nyheder/2022/04/evaluering-af-dagpengereformen-et-tryggere-dagpengesystem/, website last checked on December 20, 2022.
- DARES (2022): Dépenses en faveur de l'emploi et du marché du travail .

  https://dares.travail-emploi.gouv.fr/donnees/les-depenses-en-faveur-de-lemploi-et-du-marche-du-travail
- Direction de la recherche, des études de l'évaluation et des statistiques (2022): Minima sociaux, RSA et prime d'activité. https://data.drees.solidarites-sante.gouv.fr/explore/dataset/336\_minima-sociaux-rsa-et-prime-d-activite/information/, website last checked on December 20, 2022.
- Dolado, Juan J., Florentino Felgueroso and Juan F. Jimeno (2021): Past, present and future of the Spanish labour market: when the pandemic meets the megatrends. *Applied Economic Analysis*, 29(85), 21-41.
- Dolls, Mathias, Clemens Fuest and Andreas Peichl (2012): Automatic stabilizers and economic crisis: US vs. Europe. *Journal of Public Economics*, 96(3), 279-294.
- Dolls, Mathias, Clemens Fuest, Andreas Peichl and Christian Wittneben (2022): Fiscal Consolidation and Automatic Stabilization: New Results, *IMF Economic Review*, 70(3), 420-450.
- Doorley, Karina, Werner Eichhorst and Michael J. Kendzia (2013): The social and employment situation in Ireland (update February 2013). IZA Research Report No. 52.
- Doris, Aedin, Donal O'Neill and Olive Sweetman (2017). Does Reducing Unemployment Benefits During a Recession Reduce Youth Unemployment? Evidence from a 50% Cut in Unemployment Assistance. IZA Discussion Paper No. 10727.

- Drahokoupil, Jan and Torsten Müller (2021): Job retention schemes in Europe: a lifeline during the Covid-19 pandemic. ETUI Research Paper Working Paper 2021.07, http://dx.doi.org/10.2139/ssrn.3931230.
- DREES (2021): Minima sociaux et prestations sociales Ménages aux revenus modeste et redistribution. Edition 2021.

  https://drees.solidarites-sante.gouv.fr/publications/panoramas-de-la-drees/minima-sociaux-et-prestations-sociales-2021
- Dukelow, Fiona (2018): No longer 'fit for purpose'? Consolidation and catch-up in Irish labour market policy. In: Sotiria Theodoropoulou (ed.): Labour market policies in the era of pervasive austerity. A European perspective. Bristol: Policy Press, 197-214.
- Dukelow, Fiona and Mark Considine (2009): Irish Social Policy: A Critical Introduction. Bristol: Policy Press.
- Dwan-O'Reilly, Jeff and Michael McNelis (2022): Trends in Post-PUP Employment: Examining the employment transitions of those closing their Pandemic Unemployment Payment claims. IGEES/IGSS Working Paper. https://assets.gov.ie/220452/f3108990-b982-40a3-9580-cf25d3cec025.pdf
- Eardley, Tony et al. (1996): Social assistance in OECD countries: Synthesis Report. Department of Social Security Research Report No. 46. London: HMSO.
- Ebbinghaus, Bernhard and Lukas Lehner (2022) Cui bono business or labour? Job retention policies during the COVID-19 pandemic in Europe. *Transfer: European Review of Labour and Research*, 28(1), 47-64.
- Eichhorst, Werner, Paul Marx, Johannes Brunner and Jannis Kettenring (2020): A Comparative Analysis of National Unemployment Benefit Schemes. IZA Research Report No. 101.
- Eichhorst, Werner, Otto Kaufmann and Regina Konle-Seidl (eds.) (2008): Bringing the Jobless into Work? Experiences with Activation Schemes in Europe and the US. Berlin: Springer.
- Eichhorst, Werner, Paul Marx, Ulf Rinne et al. (2021): IZA COVID-19 Crisis Response Monitoring: The Second Phase of the Crisis.

  https://www.iza.org/wc/files/downloads/iza\_crisismonitor\_interimconclusion\_202101.pdf
- Eichhorst, Werner, Paul Marx and Caroline Wehner (2017): Labor market reforms in Europe: Towards more flexicure labor markets? *Journal for Labour Market Research*, 51(3).
- Eichhorst, Werner and Paul Marx (2021): How stable is labour market dualism? Reforms of employment protection in nine European countries. *European Journal of Industrial Relations*, 27(1), 93-110.
- Escudero, Verónica and Elva López Mourelo (2015): The Youth Guarantee programme in Europe: Features, implementation and challenges. International Labour Office Research Department Working Paper No. 4.
- European Commission (2021): Joint Employment Report 2021. Brussels.
- European Commission (2022): Proposal for a Council Recommendation on adequate minimum income ensuring active inclusion. COM(2022) 490 final. 28.09.22.
- Eurofound (2022a): Factsheet for case FR-2022-1/2073 measures in France. Support plan for the self-employed.

  https://static.eurofound.europa.eu/covid19db/cases/FR-2022-1\_2073.html

- Eurofound (2022b): Factsheet for case FR-2020-14/536 Updated measures in France Solidarity fund for very small companies, the self-employed and micro-entrepreneurs. https://static.eurofound.europa.eu/covid19db/cases/FR-2020-14\_536.html
- Eydoux, Anne (2015): Activating solidarity: The French reforms of minimum income schemes: a critical assessment. *Social Cohesion and Development*, 10(1), 5-20.
- Finn, Philip (2021): Navigating indifference: Irish jobseekers' experiences of welfare conditionality. *Administration*, 69(2), 67-86.
- Fontaine, Francois and Franck Malherbet (2016): *CDD vs CDI: Les effets d'un dualisme contractuel.*Presses de Sciences Po.
- Florczak, Izabela (2020): COVID-19 and Labour Law: Poland. *Italian Labour Law E-Journal*, 13(1S). https://doi.org/10.6092/issn.1561-8048/10784
- Frazer, Hugh and Eric Marlier (2016): Minimum income schemes in Europe. A Study of National Policies. European Social Policy Network (ESPN). European Commission: DG Employment, Social Affairs and Inclusion.

  https://ec.europa.eu/social/BlobServlet?docId=15304&langId=en
- Gajewski, Pawel (2015): Labour Market Measures in Poland 2008-13: The Crisis and Beyond. Geneva: ILO.
- Gazier, Bernard (2019): Opportunities or tensions: Assessing French Labour market reforms from 2012 to 2018. *International Journal of Comparative Labour Law and Industrial Relations*, 35(3), 331-354.
- Gough, Ian (2001): Social assistance regimes: A cluster analysis. *Journal of European Social Policy*, 11 (2), 165-170.
- Gough, Ian, Tony Eardley, Jonathan Bradshaw, John Ditch and Peter Whiteford (1997): Social assistance in OECD countries. *Journal of European Social Policy*, 7(1), 17-43.
- Goul Andersen, Jørgen (2019): Denmark: The Welfare State as a Victim of Neoliberal Economic Failure. In: Ólafsson, Stefán, Daly, Mary, Kangas, Olli and Joakim Palme (eds.): Welfare and the Great Recession: A Comparative Study. Oxford: Oxford University Press, 192-209.
- Pathways to Work 2021-2025. (2021). Government of Ireland.
- Pathways to Work—Government Policy Statement on Labour Market Activation. (2012). Government of Ireland.
- Government of Ireland (2022): Government sets out future of Pandemic Unemployment Payment.

  Press Release 21 January 2022.

  https://www.gov.ie/en/press-release/157fd-government-sets-out-future-of-pandemic-unemployment-payment/
- Grubb, David, Shruti Singh and Peter Tergeist (2009). Activation Policies in Ireland. OECD Social, Employment and Migration Working Paper No. 75.
- Guillén, Ana C. and Sergio González Begega (2019): Spain: Economic Crisis and the Politics of Welfare under Austerity. In: Stefán Ólafsson, Stefán, Daly, Mary, Kangas, Olli and Joakim Palme (eds.): Welfare and the Great Recession: A Comparative Study. Oxford: Oxford University Press, 97-114.
- Hassel, Anke and Bruno Palier (eds.) (2021): Growth and Welfare in Advanced Capitalist Economies: How Have Growth Regimes Evolved? Oxford: Oxford University Press.

- Hernández, Adrián, Fidel Picos, Fidel and Sara Riscado (2022): Moving towards fairer regional minimum income schemes in Spain. *Journal of European Social Policy*, 32(4), 452-266.
- Hick, Rod and Mary P. Murphy (2021): Common shock, different paths? Comparing social policy responses to COVID-19 in the UK and Ireland. *Social Policy & Administration*, 55(2), 312-325.
- Hijzen, Alexander and Danielle Venn (2011): The Role of Short-Time Work Schemes during the 2008-09 Recession. OECD Social, Employment and Migration Working Paper No. 115.
- Hölsch, Katja and Margit Kraus (2004): Poverty alleviation and the degree of centralization in European schemes of social assistance. *Journal of European Social Policy* 14(2), 143 164.
- Hölsch, Katja and Margit Kraus (2006): European schemes of social assistance: An empirical analysis of set-ups and distributive impacts. *International Journal of Social Welfare* 15(1), 50-62.
- Immervoll, Herwig et al. (2022): De-facto Gaps in Social Protection for Standard and Non-standard Workers: An Approach for Monitoring the Accessibility and Levels of Income Support, IZA Discussion Paper No. 15289.
- Immervoll, Herwig and Carlo Knotz (2018): How demanding are activation requirements for jobseekers. OECD Social, Employment and Migration Working Paper No. 215.
- Immervoll, Herwig and Stefano Scarpetta (2012): Activation and employment support policies in OECD countries. An overview of current approaches. *IZA Journal of Labor Policy*, 1(1), 1–20.
- Indecon (2016): Indecon Evaluation of JobBridge Activation Programme. Indecon International Research Economists.

  https://assets.gov.ie/88530/09a8cd23-4017-4fc2-b680-8ed4e0da415d.pdf
- International Monetary Fund (2021): Policy Responses to COVID-19 (Spain). Policy Tracker, last updated on July 2, 2021. https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#S, website last checked on December 20, 2022.
- Jansen, Marcel, Sergi Jiménez-Martín and Lucía Gorjón (2016): The Legacy of the Crisis: The Spanish Labour Market in the Aftermath of the Great Recession. Studies on the Spanish Economy eee2016-10, FEDEA.
- Jara, H. Xavier, Katrin Gasior and Mattia Makovec (2020): Work incentives at the extensive and intensive margin in Europe: the role of taxes, benefits and population characteristics. *Social Indicators Research*, 152(2/13), 705-778.
- Kalužná, Daniela (2009): Main features of the public employment service in Poland. OECD Social, Employment and Migration Working Paper No. 80.
- Keane, Eddie (2016). The flexicurity system in Ireland. European Labour Law Journal, 7(2), 310-320.
- Konle-Seidl, Regina (2021): Strengthening minimum income protection in the EU, European Parliament, Briefing Note, March 2021.

  https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/662900/IPOL\_BRI(2021)66290
  0\_EN.pdf
- Kneeshaw, Jack, Diego Collado, Nicolo Framarin, Katrin Gasior, Holguer Xavier Jara Tamayo, Chrysa Leventi, Kostas Manios, Daria Popova and Iva Tasseva (2021): Baseline results from the EU28 EUROMOD: 2017-2020. EUROMOD Working Paper Series, EM1/21.

- https://www.iser.essex.ac.uk/wp-content/uploads/files/working-papers/euromod/em1-21.pdf
- Kvist, Jon (2017): A new unemployment insurance system for the future labour market. ESPN Flash Report 2017/45.
  - https://www.researchgate.net/profile/Jon-
  - Kvist/publication/323700793\_Kvist\_2017\_A\_New\_Unemployment\_Insurance\_Scheme\_for\_the \_Future\_Labour\_Market\_-\_Flash\_Report/links/5aa67ccfa6fdcc29af5312fd/Kvist-2017-A-New-Unemployment-Insurance-Scheme-for-the-Future-Labour-Market-Flash-Report.pdf
- Larsen, Trine P. and Anna Ilsøe (2021): Job retention schemes in Europe: Denmark. ETUI Working Paper No. 2021.07.
- Lewandowski, Piotr and Iga Magda (2018): The labor market in Poland, 2000-2016. *IZA World of Labor*, 426.
- Lewandowski Piotr, Gora, Marek and Maciej Lis (2017): Temporary employment boom in Poland: A job quality vs. quantity trade-off? IBS Working Paper 04/2017.
- Lødemel, Ivar and Bernd Schulte (1992): Social assistance: Apart of social security or the poor law in new disquise?' in European Institute of Social Research (ed.): Reforms in Eastern and Central Europe: Beveridge 50 Years After. Leuven: Acco, 515-538.
- Lødemel, Ivar and Heather Trickey (ed.) (2001): An offer you can't refuse': Workfare in international perspective. Bristol: Policy Press.
- Madoń, Karol, Iga Magda, Marta Palczynska and Mateusz Smoter (2021): What Works for Whom? Youth Labour Market Policy in Poland. IZA Discussion Paper No. 14793.
- Mailand, Mikkel and Trine P. Larsen (2018): Hybrid work-Social protection of atypical employment in Denmark. WSI Study 11/2018.
- Mangan, David (2020): Covid-19 and labour law in Ireland. *European Labour Law Journal*, 11(3), 298-305.
- Marchal, Sarah, Ive Marx and Natascha Van Mechelen (2016): Minimum income protection in the austerity tide. *IZA Journal of European Labour Studies* 5:4.
- Marchal, Sarah and Natascha Van Mechelen (2017): A new kid in town? Active inclusion elements in European minimum income schemes. *Social Policy & Administration*, 51(1), 171-194.
- McGann, Michael (2021). "Double activation": Workfare meets marketisation. *Administration*, 69(2), 19-42.
- McGann, Michael, Murphy, Mary P. and Nuala Whelan (2020): Workfare redux? Pandemic unemployment, labour activation and the lessons of post-crisis welfare reform in Ireland. *International Journal of Sociology and Social Policy*, 40(9/10), 963-978.
- McGuinness, Seamus, O'Connell, Philip J., Kelly, Elish and John R. Walsh (2011): Activation in Ireland: An evaluation of the national employment action plan. ESRI Research Series No. 20.
- MISSOC (2021): Social Protection for the Self-Employed. https://www.missoc.org/missoc-database/self-employed/
- Murphy, M. (2012). The politics of Irish labour activation: 1980 to 2010. Administration, 60(2), 27-49.
- Murphy, Mary P. and Fiona Dukelow (2016): Irish Welfare State in the Twenty-First Century. Berlin: Springer.

- Natili, Marcello (2019): Worlds of last-resort safety nets? A proposed typology of minimum income schemes in Europe. *Journal of International and Comparative Social Policy*, 36(1), 57-75.
- National Economic and Social Council (2020): The Future of the Irish Social Welfare System: Participation and Protection (No. 151). (2020). National Economic and Social Council.
- Nelson, Kenneth (2014): Minimum Income Protection and European Integration: Trends and Levels of Minimum Benefits in Comparative Perspective. In: Vincente Navarro and Carles Muntaner (eds.): *The Financial and Economic Crises and their Impact on Health and Social Well-Being. New* York: Baywood.
- Nolan, Brian (2017): Poverty and social exclusion in the European Union. In: Patricia Kennett and Noemi Lendvai-Bainton (ed.): Handbook of European social policy. Cheltenham: Edward Elgar, 353-370.
- OECD (YEAR, COUNTRY): The OECD tax-benefit model for country x, year y.
- OECD (2016): Irish GDP up by 26.3% in 2015? https://www.oecd.org/sdd/na/Irish-GDP-up-in-2015-OECD.pdf
- OECD (2020a): Job retention schemes during the COVID-19 lockdown and beyond (updated on 12 October 2020). Paris.
  - https://read.oecd-ilibrary.org/view/?ref=135\_135415-6bardplc5q&title=Job-retention-schemes-during-the-COVID-19-lockdown-and-beyond
- OECD (2020b): OECD Employment Outlook. Paris.
- OECD (2021a): OECD Employment Outlook. Paris.
- OECD (2021b): OECD Economic Surveys Spain. Paris. https://www.oecd.org/economy/surveys/Spain-2021-OECD-economic-survey-overview.pdf
- Palier, Bruno and Kathleen Thelen (2010): Institutionalizing dualism: Complementarities and change in France and Germany. *Politics & Society*, 38(1), 119-148.
- Papadopoulos, Orestis (2016): Economic crisis and youth unemployment: Comparing Greece and Ireland. *European Journal of Industrial Relations*, 22(4), 409-426.
- Raitano, Michele, Matteo Jessoula, Giovanni Gallo and Costanza Pagnini (2021): Fighting poverty and social exclusion including through minimum income schemes, European Parliament: Policy Department for Economic, Scientific and Quality of Life Policies Directorate-General for Internal Policies.
  - https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662932/IPOL\_STU(2021)662932\_EN.pdf
- Ramos, Raul (2021): IZA COVID-19 Crisis Response Monitoring: Spain. https://www.iza.org/wc/files/downloads/iza\_\_crisismonitor\_countryreport\_es\_202112.pdf
- Rat der Europäischen Union (2020): Stärkung der Mindestsicherung zur Bekämpfung von Armut und sozialer Ausgrenzung in der COVID-19-Pandemie und darüber hinaus. Schlussfolgerungen des Rates (9. Oktober 2020).
  - https://data.consilium.europa.eu/doc/document/ST-11721-2020-INIT/de/pdf
- Central Statistics Office Ireland (n.d. (a)): Recipients of Illness, Disability, Caring payments.

  https://www.cso.ie/en/statistics/socialconditions/recipientsofillnessdisabilitycaringpayments/

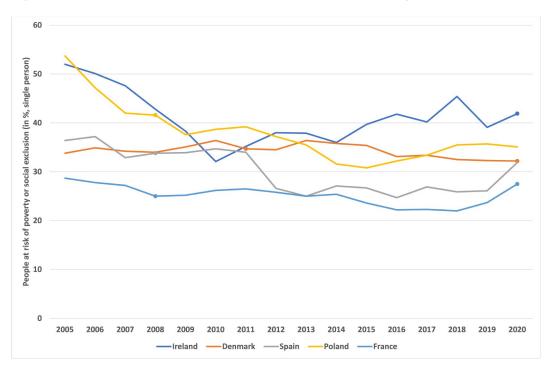
- Central Statistics Office Ireland (n.d. (b)): Recipients of Unemployment and Employment Supports by Type of Payments.
  - https://www.cso.ie/en/statistics/socialconditions/recipentsofunemploymentandemployment supportsbytypeofpayments/
- Rey, Graciale Malgesini (2014): European Minimum Income Network country report Spain Analysis and Road Map for Adequte and Accessible Minimum Income Schemes in EU Member States. European Anti-Poverty Network (EAPN). Brussels: European Commission DG Employment and Social Affairs and Inclusion.
  - https://eminnetwork.files.wordpress.com/2013/04/emin-spain-2014-en.pdf
- Rodriguez-Cabrero, Gregorio, Ana Arriba González, Vincente Marbán, Julia Montserrat and Francisco Javier Moreno-Fuentes (2015): ESPN Thematic Report on minimum income schemes Spain 2015. Brussels: European Commission DG Employment, Social Affairs and Inclusion. https://ec.europa.eu/social/BlobServlet?docId=15176&langId=en
- Sanz-de-Galdeano, Anna and Anastasia Terskaya (2020): The labor market in Spain, 2002-2018. *IZA World of Labor* 2020: 403v2.
- Schröder, Martin (2009): Integrating Welfare and Production Typologies: How Refinements of the Varieties of Capitalism Approach Call for a Combination of Welfare Typologies. *Journal of Social Policy*, 38, 19-43.
- Selected aspects of the labour market in Poland. Economic activity of the population before and during the COVID-19 pandemic period. (2021): Statistics Poland. https://stat.gov.pl/en/topics/labour-market/yearbook-of-labour/selected-aspects-of-the-labour-market-in-poland-economic-activity-of-the-population-before-and-during-the-covid19-pandemic-period,6,1.html
- Short-time working arrangements as response to cyclical fluctuations (Occasional Papers No. 64). (2010): Brussels: European Commission DG Economic and Financial Affairs. https://ec.europa.eu/economy\_finance/publications/occasional\_paper/2010/pdf/ocp64\_en.pdf
- Spasova, Slavina, Denis Bouget, Dalila Ghailani and Bart Vanhercke (2017): Access to social protection for people working on non-standard contracts and as self-employed in Europe. A Study of National Policies. Brussels: European Commission DG Employment, Social Affairs and Inclusion.
  - https://ec.europa.eu/social/BlobServlet?docId=17683
- Stelina, Jakub (2021): Anti-COVID labour law in Poland. *Istorie, Cultura, Cetatenie in Uniunea Europeana*, 13(1), 94-105.
- Strzelecki, Pawel and Robert Wyszyński (2016): Poland's Labour Market Adjustment in Times of Economic Slowdown WDN3 Survey Results. National Bank of Poland Working Paper No. 233.
- Sutherland, Holly and Francesco Figari (2013): EUROMOD: the European Union tax-benefit microsimulation model. EUROMOD Working Papers EM8/13.
- Sutherland, Holly (2018): Quality assessment of microsimulation models. The case of EUROMOD. *International Journal of Microsimulation*, 11(1), 198-223.
- Sztandar-Sztanderska, Karolina (2009). Activation of the unemployed in Poland: From policy design to policy implementation. *International Journal of Sociology and Social Policy*, 29(11/12), 624-636.

## References

- Szulc, Adam (2012). Social policy and poverty: Checking the efficiency of the social assistance system in Poland. *Eastern European Economics*, 50(5), 66–92.
- Theodoropoulou, Sotiria (ed.) (2018): Labour market policies in the era of pervasive austerity. A European Perspective. Bristol: Policy Press.
- UN (2020): Visit to Spain Report of the Special Rapporteur on extreme poverty and human rights https://documents-dds-ny.un.org/doc/UNDOC/GEN/G20/097/28/PDF/G2009728.pdf?OpenElement
- UNEDIC (2022): Situation Financière de l'Assurance Chômage pour 2022-2024. June 2022. https://www.unedic.org/sites/default/files/2022-06/Situation%20financière%20de%20l%27Assurance%20chômage%20pour%202022-2024.pdf
- Venn, Danielle (2012). Eligibility Criteria for Unemployment Benefits: Quantitative Indicators for OECD and EU Countries. OECD Social, Employment and Migration Working Papers No. 131).
- Weishaupt, Timo, Henning Jørgensen and Alexander Nunn (2022): Delivering Activation: The Perpetual Reform of Public Employment Services in Europe. In: Douglas J. Besharov and Douglas M. Call (eds.): Work and the Social Safety Net: Labor Activation in Europe and the United States, New York: Oxford University Press, 2022.
- Wisniewski, Zenon, and Monika Maksim (2013): Active labour market policies in Poland. *CESifo Forum*, 14(1), 22-28.
- Wolniak, Radoslaw (2020): Social welfare organisation in Poland. Scientific Papers of Silesian University of Technology Organization and Management Series No. 143.
- Wóycicka, Irena (2009): Poland: Minimum Income Schemes, a Study of National Policies. Gdansk Institute for Market Economics. Brussels: European Commission DG Employment, Social Affairs and Equal Opportunities.

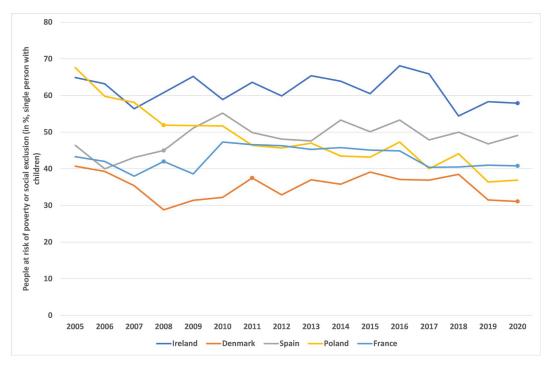
## 10. Appendix

Figure 10.1 People at risk of poverty or social exclusion, single-person households



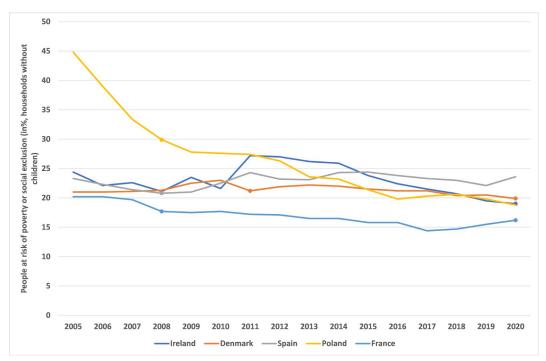
Source: Eurostat (ilc peps03)

Figure 10.2 People at risk of poverty or social exclusion, single-person households with dependent children



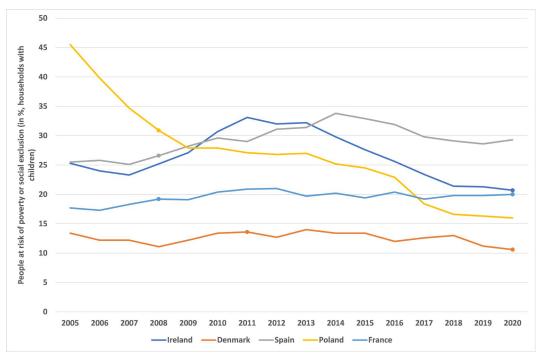
Source: Eurostat (ilc peps03)

Figure 10.3 People at risk of poverty or social exclusion, households without dependent children



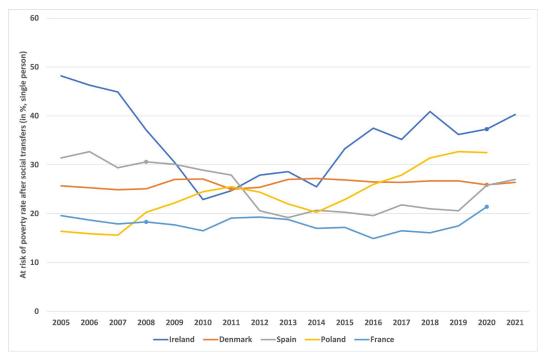
Source: Eurostat (ilc peps03)

Figure 10.4 People at risk of poverty or social exclusion, households with dependent children



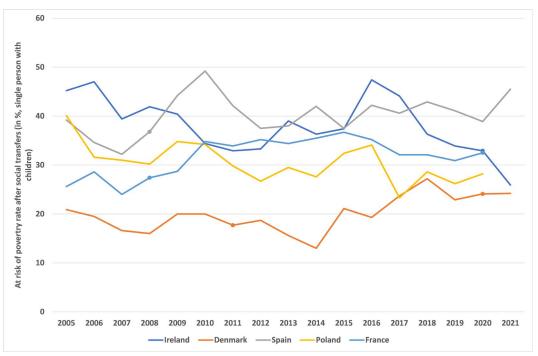
Source: Eurostat (ilc peps03)

Figure 10.5 At-risk-of-poverty rate after social transfers, single-person households



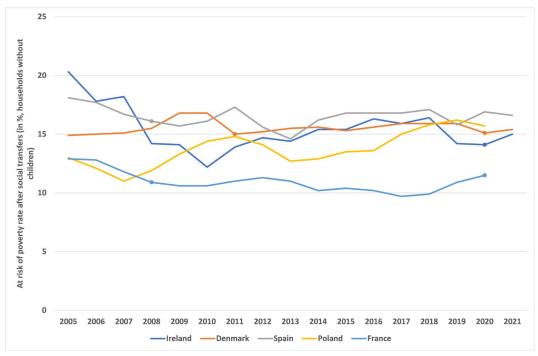
Source: Eurostat (ilc li03)

Figure 10.6 At-risk-of-poverty rate after social transfers, single-person households with dependent children



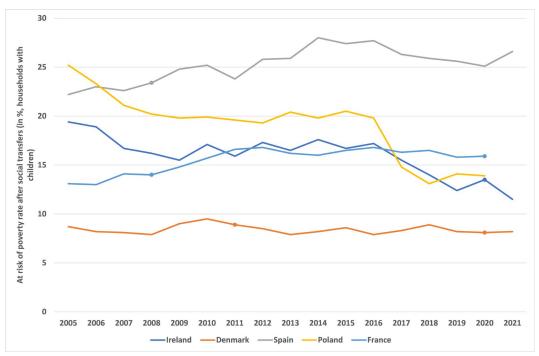
Source: Eurostat (ilc li03)

Figure 10.7 At-risk-of-poverty rate after social transfers, households without dependent children



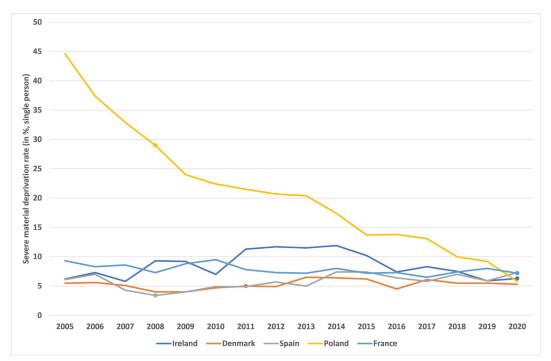
Source: Eurostat (ilc li03)

Figure 10.8 At-risk-of-poverty rate after social transfers, households with dependent children



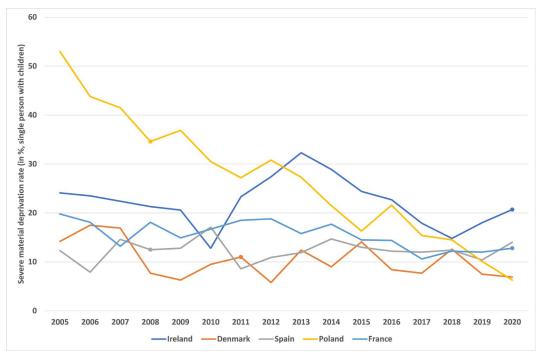
Source: Eurostat (ilc li03)

Figure 10.9 Severe material deprivation, single-person households



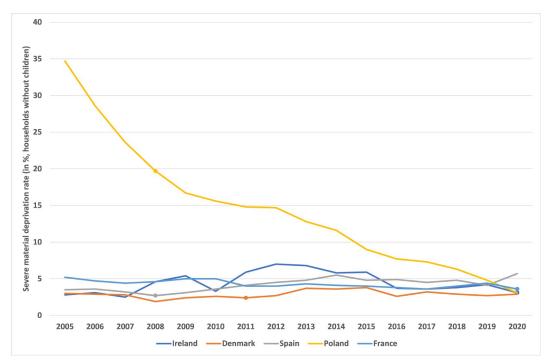
Source: Eurostat (ilc mddd13)

Figure 10.10 Severe material deprivation, single-person households with dependent children



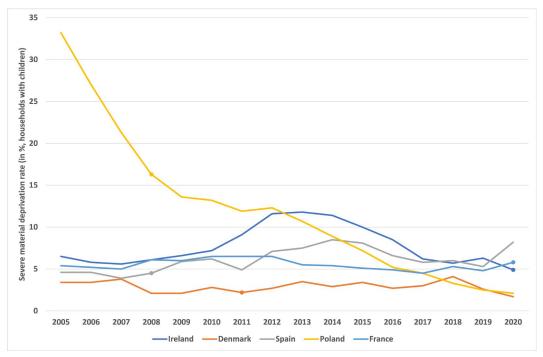
Source: Eurostat (ilc mddd13)

Figure 10.11 Severe material deprivation, households without dependent children



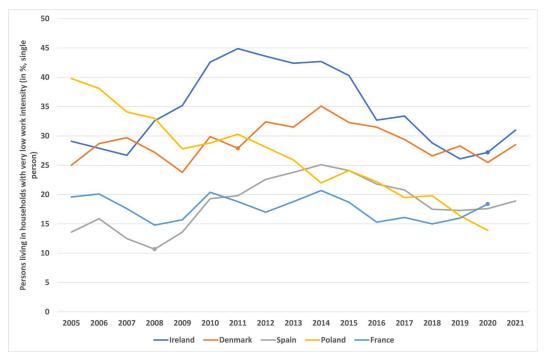
Source: Eurostat (ilc mddd13)

Figure 10.12 Severe material deprivation, households with dependent children



Source: Eurostat (ilc mddd13)

Figure 10.13 People living in households with very low work intensity, single-person households (% of total population aged less than 60)



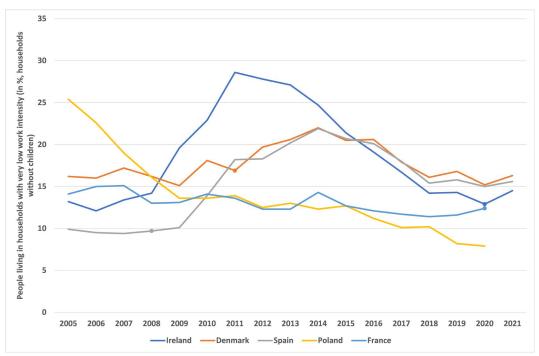
Source: Eurostat (ilc lvhl13)

Figure 10.14 People living in households with very low work intensity, single-person households with dependent children (% of total population aged less than 60)



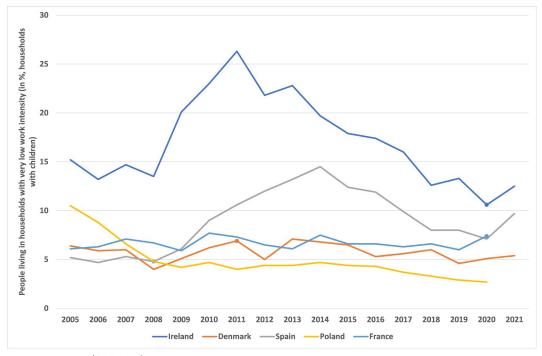
Source: Eurostat (ilc lvhl13)

Figure 10.15 People living in households with very low work intensity, households without dependent children (% of total population aged less than 60)



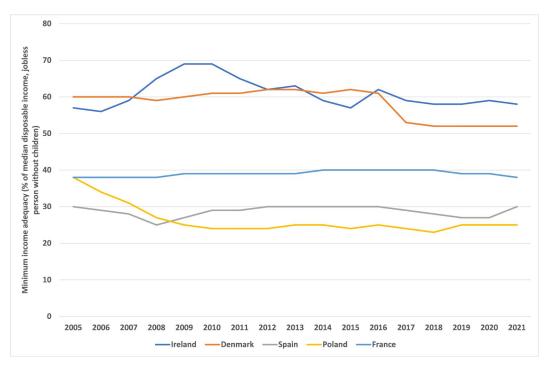
Source: Eurostat (ilc lvhl13)

Figure 10.16 People living in households with very low work intensity, households with dependent children (% of total population aged less than 60)



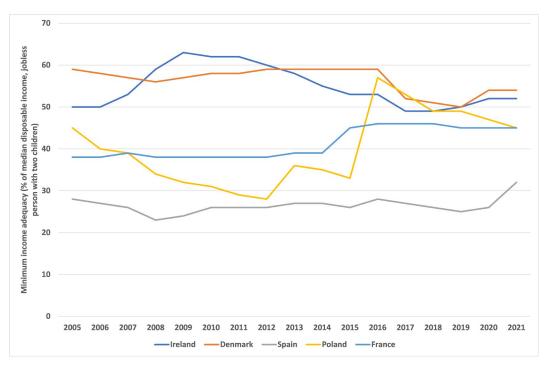
Source: Eurostat (ilc lvhl13)

Figure 10.17 Adequacy of guaranteed minimum income benefits, jobless person without children (% of median disposable income), 2005-2021



OECD statistics, Adequacy of guaranteed minimum income benefits, GMI amount in % of median disposable income, jobless person without children, including housing benefits

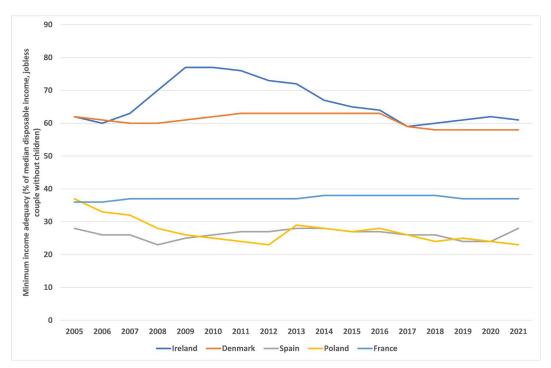
Figure 10.18 Adequacy of guaranteed minimum income benefits, jobless person with two children (% of median disposable income), 2005-2021



Source:

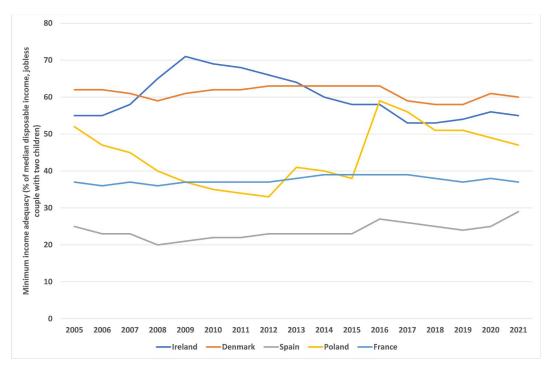
OECD statistics, Adequacy of guaranteed minimum income benefits, GMI amount in % of median disposable income, jobless person with two children, including housing benefits.

Figure 10.19 Adequacy of guaranteed minimum income benefits, jobless couple without children (% of median disposable income), 2005-2021



OECD statistics, Adequacy of guaranteed minimum income benefits, GMI amount in % of median disposable income, jobless couple without children, including housing benefits.

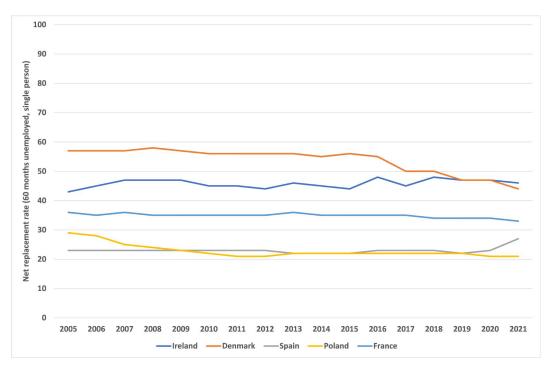
Figure 10.20 Adequacy of guaranteed minimum income benefits, jobless couple with two children (% of median disposable income), 2005-2021



Source:

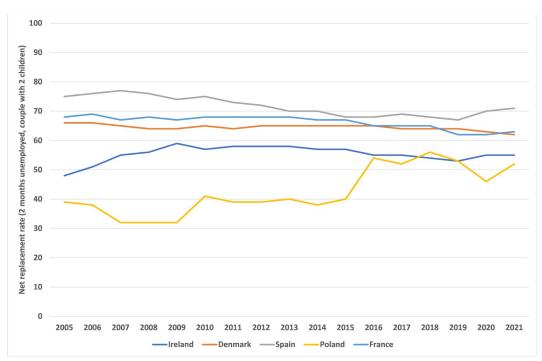
OECD statistics, Adequacy of guaranteed minimum income benefits, GMI amount in % of median disposable income, jobless couple with two children, including housing benefits.

Figure 10.21 Net replacement rate, 60 months of unemployment, single, 100% average wage, 2005-2021



OECD statistics, net replacement rate, 60 months in unemployment, single person without children, 100% of the average wage, social assistance and housing benefits included.

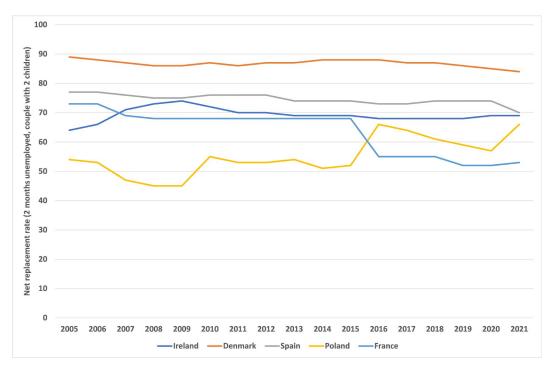
Figure 10.22 Net replacement rate, two months of unemployment, couple with two children, 100% average wage, 2005-2021



Source:

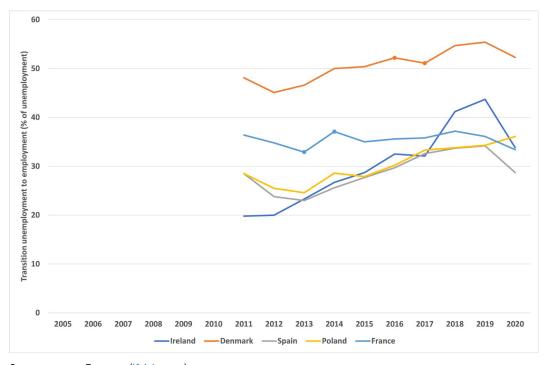
OECD statistics, net replacement rate, two months in unemployment, couple with two children, partner is out of work, 100% of the average wage, social assistance and housing benefits not included.

Figure 10.23 Net replacement rate, two months of unemployment, couple with two children, 67% average wage, 2005-2021



OECD statistics, net replacement rate, two months in unemployment, couple with two children, partner is out of work, 67% of the average wage, social assistance and housing benefits not included.

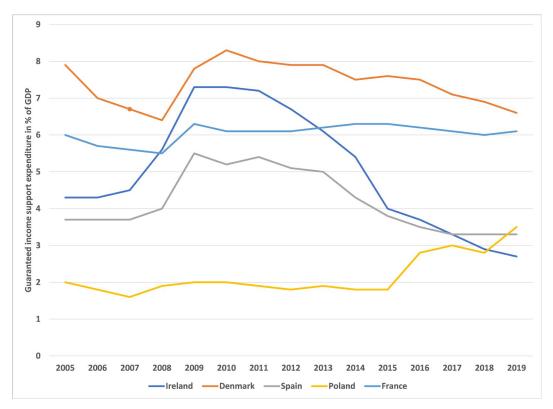
Figure 10.24 Transitions from unemployment to employment, 2011-2020



Source:

Eurostat (<u>lfsi long a</u>).

Figure 10.25 Expenditure on guaranteed income support (total expenditure in % of GDP, categories: unemployment, social exclusion, housing, family/children)



Source: Own calculations based on the Eurostat ESSPROS database (SPR EXP SUM) and Coady et al. (2021).

Table 10.1 Arellano-Bond regression results with different dependent variables, unemployment rate and interaction terms with welfare state type

	Dependent variable:							
	Risk of poverty or social exclusion (age 16-64)	At risk of poverty rate before social transfers (age 16-64) (2)	At risk of poverty rate after social transfers (age 16-64) (3)	Severe material deprivation rate (age 16- 64) (4)	Poverty threshold (couple with two children, PPS) (5)	Households with very low work intensity, % of population less than 60 (6)	Transition unemploy- ment to employment (7)	
Unemployment rate	0.458***	0.134*	0.151***	0.408***	-19.529	0.106*	-2.783***	
onemployment rate	(0.091)	(0.078)	(0.054)	(0.103)	(40.209)	(0.055)	(0.506)	
Unemployment rate*	-0.130	0.572***	-0.083	-0.649**	-386.652***	0.649***	-0.888	
Welfare state type Liberal	(0.262)	(0.203)	(0.150)	(0.295)	(112.297)	(0.142)	(1.888)	
Unemployment rate*	-0.237	0.132	-0.082	-0.610*	-26.925	0.243	0.929	
Welfare state type Continental	(0.305)	(0.247)	(0.173)	(0.344)	(131.820)	(0.171)	(1.741)	
Unemployment rate*	-0.569*	0.014	-0.107	-0.661*	-94.390	0.062	-0.395	
Welfare state type Nordic	(0.320)	(0.243)	(0.174)	(0.355)	(135.414)	(0.181)	(1.324)	
Unemployment rate*	-0.089	0.051	0.053	-0.135	-10.640	-0.041	0.633	
Welfare state type Mediterranean	(0.161)	(0.128)	(0.091)	(0.183)	(70.644)	(0.092)	(0.774)	
Unemployment rate (1 lag)	0.184	0.202*	0.066	0.200	-94.376*	0.303***	2.386***	
onemployment rate (1 lag)	(0.126)	(0.104)	(0.070)	(0.143)	(54.385)	(0.074)	(0.845)	
Unemployment rate (1 lag)*	-0.111	-0.174	0.107	-0.152	400.121**	-0.139	-1.023	
Welfare state type Liberal	(0.389)	(0.310)	(0.221)	(0.440)	(170.979)	(0.228)	(2.492)	
Unemployment rate (1 lag)*	-0.001	-0.076	0.107	-0.084	64.951	-0.049	-3.288	
Welfare state type Continental	(0.373)	(0.299)	(0.213)	(0.422)	(164.746)	(0.216)	(2.722)	
Unemployment rate (1 lag)*	-0.196	-0.441	-0.189	-0.155	55.680	-0.019	-1.727	
Welfare state type Nordic	(0.375)	(0.282)	(0.200)	(0.419)	(154.863)	(0.205)	(2.250)	
Unemployment rate (1 lag)*	-0.136	-0.071	-0.029	-0.227	-81.017	0.064	-1.659	
Welfare state type Mediterranean	(0.247)	(0.193)	(0.136)	(0.280)	(105.273)	(0.140)	(1.159)	
Unemployment rate (2 lags)	-0.166*	-0.229***	-0.115**	-0.178*	5.416	-0.059	-0.167	
onemployment rate (2 lags)	(0.096)	(0.079)	(0.053)	(0.106)	(40.179)	(0.061)	(0.582)	
Unemployment rate (2 lags)*	0.209	-0.182	-0.008	0.482	-114.323	-0.115	0.162	
Welfare state type Liberal	(0.263)	(0.205)	(0.152)	(0.302)	(112.161)	(0.144)	(1.570)	
Unemployment rate (2 lags)*	-0.017	0.098	-0.004	0.173	70.647	0.056	1.464	
Welfare state type Continental	(0.318)	(0.246)	(0.177)	(0.361)	(130.373)	(0.176)	(1.935)	
Unemployment rate (2 lags)*	-0.018	0.400*	-0.160	0.216	0.812	-0.094	0.939	
Welfare state type Nordic	(0.335)	(0.243)	(0.173)	(0.367)	(135.020)	(0.178)	(2.165)	
Unemployment rate (2 lags)*	0.100	0.045	0.003	0.122	89.702	-0.018	0.487	
Welfare state type Mediterranean	(0.157)	(0.126)	(0.087)	(0.181)	(67.315)	(0.091)	(0.707)	
Observations	354	363	363	354	363	363	171	
Dependent variable (1 lag)	✓	✓	✓	✓	✓	✓	✓	
Dependent variable (2 lags)	✓	✓	✓	✓	✓	✓	✓	
Growth rate	✓	✓	✓	✓	✓	✓	✓	
Growth rate (1 lag)	✓	✓	✓	✓	✓	✓	✓	
Growth rate (2 lags)	✓	✓	✓	✓	✓	✓	✓	
Further controls	✓	✓	✓	✓	✓	✓	✓	

Eurostat (all dependent variables and share of self-employed) and OECD statistics (GDP growth rate, unemployment and labour force participation rate) for all EU countries and the UK, all years available from 2005-2021.

Notes:

Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column represents a different regression. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed.

Table 10.2 Robustness Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable and different variants of the business cycle measure

	Dependent variable: Risk of poverty or social exclusion (age 16-64)							
_	Robus	tness 1	Robustness 2		Robustness 3		Robustness 4	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Independent variables								
GDP growth rate	-0.134***	-0.047	-0.153***	-0.061*	-0.177***	-0.064	-0.165***	-0.059
ODI GIOWAITALO	(0.032)	(0.033)	(0.034)	(0.035)	(0.039)	(0.040)	(0.035)	(0.037)
GDP growth rate (1 lag)	-0.215***	-0.085**	-0.197***	-0.066*	-0.208***	-0.048	-0.186***	-0.056
ODI grown rate (1 lag)	(0.032)	(0.034)	(0.033)	(0.035)	(0.038)	(0.042)	(0.033)	(0.035
GDP growth rate (2 lags)	-0.056	0.018	-0.127***	-0.045	-0.158***	-0.042)	-0.126***	-0.035
GDF growiii rate (2 lags)	(0.034)	(0.034)	(0.034)	(0.035)	(0.039)	(0.049)	(0.034)	(0.035
	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.012)	(0.001)	(0.000)
Negative GDP growth rate (binary)	0.276	-0.333	0.351	-0.323	0.313	-0.399	0.318	-0.382
	(0.305)	(0.269)	(0.312)	(0.288)	(0.307)	(0.280)	(0.312)	(0.285
Negative GDP growth rate (binary) (1 lag)	1.511***	0.587**	1.083***	0.073	1.019***	0.003	1.014***	0.034
	(0.291)	(0.258)	(0.297)	(0.276)	(0.290)	(0.267)	(0.288)	(0.266
Negative GDP growth rate (binary) (2 lags)	-0.062	-0.543**	0.519*	-0.238	0.443	-0.340	0.543*	-0.229
	(0.321)	(0.270)	(0.314)	(0.284)	(0.310)	(0.278)	(0.307)	(0.276
Downturn	-0.371	-0.206	-0.644***	-0.430**	-0.659***	-0.450**	-0.724***	-0.509
	(0.245)	(0.197)	(0.239)	(0.201)	(0.234)	(0.197)	(0.240)	(0.204
Downturn (1 lag)	0.352	0.238	-0.088	-0.143	-0.066	-0.152	-0.281	-0.303
	(0.228)	(0.184)	(0.225)	(0.190)	(0.219)	(0.184)	(0.235)	(0.200
Downturn (2 lags)	-0.338	-0.305	-0.261	-0.203	-0.291	-0.254	-0.296	-0.277
	(0.259)	(0.209)	(0.254)	(0.214)	(0.247)	(0.207)	(0.253)	(0.214
Depression	1.415***	0.492*	1.253***	0.420	1.212***	0.295	1.025***	0.393
Doprossion	(0.300)	(0.286)	(0.283)	(0.279)	(0.280)	(0.275)	(0.262)	(0.249
Depression (1 lag)	0.835***	0.135	0.987***	0.225	0.975***	0.107	0.964***	0.309
Doprossion (Tlag)	(0.290)	(0.262)	(0.272)	(0.261)	(0.271)	(0.260)	(0.247)	(0.229
Depression (2 lags)	0.580**	0.182	1.154***	0.683***	1.061***	0.481*	0.714***	0.233
Doprossion (2 lags)	(0.294)	(0.261)	(0.278)	(0.260)	(0.279)	(0.260)	(0.254)	(0.233
Observations	323	323	343	343	350	350	327	327
Dependent variable (1 lag)	✓	✓	✓	✓	✓	✓	✓	✓
Dependent variable (2 lags)	✓	✓	✓	✓	✓	✓	✓	✓
Unemployment rate		✓		✓		✓		✓
Unemployment rate (1 lag)		✓		✓		✓		✓
Unemployment rate (2 lags)		✓		✓		✓		✓
Further controls		✓		✓		✓		✓

Source: Eurostat (risk of poverty or social exclusion (in %, age 16-64) and share of self-employed) and OECD statistics (GDP growth rate, unemployment and labour force participation rate) for all EU countries and the UK, all years available from 2005-2020.

Notes: Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column and also each panel divided by a line represents a different regression. The binary negative GDP growth rate variable is equal to 1 if the growth rate is negative in the country in the respective year and zero otherwise. The variable "downturn" is equal to 1 if the GDP growth rate of the current period is lower than the former one for three years in a row (growth ratet < growth ratet-1 < growth ratet-2). The variable "depression" is equal to 1 if the growth rates of two consecutive periods are below a quarter of a standard deviation of the average growth rate of the country. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed. Robustness 1: estimations without Bulgaria, Croatia, Romania. Robustness 2: estimations without UK. Robustness 3: estimations with Ireland's growth rate 2015 coded as missing. Robustness 4: estimations without the years 2020 (for 2021, data for the dependent variable are not yet available at the time of reporting).

Table 10.3 Robustness Arellano-Bond regression results with the risk of poverty and social exclusion as dependent variable, depression as business cycle measure and interaction terms with welfare state type

	Dependent variable: Risk of poverty or social exclusion (age 16-64)					
	Robustness 1	Robustness 3	Robustness 4			
	(1)	(2)	(3)	(4)		
Independent variables						
D	0.700*	0.770**	0.700*	0.050**		
Depression	0.760*	0.776**	0.729*	0.856**		
	(0.442)	(0.381)	(0.377)	(0.378)		
Depression*	-1.144	-1.418	-1.726*	-1.244		
Welfare state type Liberal	(0.840)	(1.155)	(0.917)	(0.891)		
Depression*	0.041	-0.322	-0.217	-0.491		
Welfare state type Continental	(0.674)	(0.704)	(0.698)	(0.604)		
Depression*	-0.367	-0.711	-0.664	-0.659		
Welfare state type Nordic	(0.751)	(0.777)	(0.769)	(0.781)		
Depression*	-1.015*	-1.262**	-1.225**	-1.365**		
Welfare state type Mediterranean	(0.586)	(0.583)	(0.578)	(0.565)		
Depression (1 lag)	0.044	0.005	-0.050	-0.067		
	(0.419)	(0.367)	(0.363)	(0.378)		
Depression (1 lag)*	0.601	0.369	-0.536	0.795		
Welfare state type Liberal	(808.0)	(1.224)	(1.001)	(0.866)		
Depression (1 lag)*	0.251	0.222	0.349	0.506		
Welfare state type Continental	(0.653)	(0.682)	(0.677)	(0.573)		
Depression (1 lag)*	-0.050	-0.048	0.011	0.155		
Welfare state type Nordic	(0.688)	(0.709)	(0.703)	(0.725)		
Depression (1 lag)*	0.050	0.200	0.218	0.298		
Welfare state type Mediterranean	(0.569)	(0.566)	(0.561)	(0.551)		
Depression (2 lags)	0.543	1.134***	0.961***	0.648*		
Depression (2 lags)	(0.403)	(0.347)	(0.347)	(0.349)		
Depression (2 lags)*	-0.088	1.138	-1.342	0.016		
Nelfare state type Liberal	(0.815)	(1.117)	(1.041)	(0.871)		
Depression (2 lags)*	-0.683	-1.325*	-1.150*	-0.889		
Welfare state type Continental	(0.656)	(0.686)	(0.680)	(0.583)		
Depression (2 lags)*	-0.979	-1.646**	-1.480**	-1.122		
Welfare state type Nordic	(0.734)	(0.759)	(0.752)	(0.770)		
Depression (2 lags)*	-0.038	-0.202	-0.133	-0.422		
Welfare state type Mediterranean	(0.549)	(0.549)	(0.545)	(0.513)		
Observations	323	343	350	327		
Dependent variable (1 lag)	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>		
Dependent variable (2 lags)	<b>✓</b>	<b>√</b>	<b>V</b>	<b>√</b>		
Unemployment rate	<b>∨</b> ✓	<b>v</b>	<b>∨</b>	<b>∨</b>		
Unemployment rate (1 lag)	<b>∨</b> ✓	<b>v</b>	<b>v</b>	· ·		
Unemployment rate (2 lags)	<b>∨</b> ✓	<b>v</b>	<b>v</b>	<b>√</b>		
Further controls	✓	✓	✓	✓		

Source: Eurostat (risk of poverty or social exclusion (in %, age 16-64) and share of self-employed) and OECD

statistics (GDP growth rate, unemployment and labour force participation rate) for all EU countries and the

UK, all years available from 2005-2020.

Notes: Standard errors in parentheses. Significance levels are displayed as follows: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Each column represents a different regression. The variable "depression" is equal to 1 if the growth rates of two consecutive periods are below a quarter of a standard deviation of the average growth rate of the

country. Year dummy variables are included in all regressions. Further control variables include the labour force participation rate and the share of self-employed. Robustness 1: estimations without Bulgaria, Croatia, Romania. Robustness 2: estimations without UK. Robustness 3: estimations without the years 2020 (for

2021, data for the dependent variable are not yet available at the time of reporting).

Table 10.4 At-risk-of-poverty rates with 50% at-risk-of-poverty threshold

Country	Baseline	Small		Large		Baseline	Small Sho	ck without	Large Sho	ck without
		Shock		Shock		without	MIS		MIS	
	(1)	(2)	(3)	(4)	5)	MIS (6)	(7) (	8)		(10)
	$AROP_B$	$AROP_S$	Δ	$AROP_L$	Δ	$AROP_B^a$	$AROP_S^a$	Δ	$AROP_L^a$	Δ
					No	rdic				
DK	2.28	2.26	-0.02	2.92	0.64	5.65	5.75	0.1	7.05	1.4
SE	8.56	9.06	0.5	10.14	1.58	9.44	10.11	0.67	11.3	1.86
FI	4.11	5.59	1.48	6.14	2.03	6.38	7.7	1.32	8.31	1.93
					Post-s	ocialist				
CZ	2.63	3.09	0.46	4.39	1.76	2.83	3.28	0.45	4.67	1.84
SK	6.76	7.23	0.47	8.88	2.12	7	7.52	0.52	9.22	2.22
SI	3.78	4.27	0.49	5.41	1.63	6.3	6.91	0.61	7.94	1.64
HU	18.03	18.36	0.33	19.71	1.68	18.31	18.64	0.33	20.16	1.85
HR	12.6	12.9	0.3	13.57	0.97	12.82	13.13	0.31	13.76	0.94
BG	12.32	12.6	0.28	13.66	1.34	13.74	14.01	0.27	15.07	1.33
RO	14.46	14.74	0.28	15.73	1.27	14.64	14.92	0.28	15.96	1.32
PL	7.62	7.98	0.36	9.32	1.7	7.81	8.2	0.39	9.55	1.74
EE	6.87	7.64	0.77	8.76	1.89	7.35	8.13	0.78	9.31	1.96
LT	8.89	11.14	2.25	13.85	4.96	9.55	11.69	2.14	14.47	4.92
L <b>V</b>	11.97	12.78	0.81	14.05	2.08	12.2	13.03	0.83	14.25	2.05
				•	Conti	nental				
FR	5.98	6.17	0.19	7.85	1.87	8.44	8.64	0.2	10.39	1.95
DE	6.25	6.44	0.19	7.35	1.1	7.57	7.77	0.2	8.78	1.21
NL	4.34	4.6	0.26	5.79	1.45	6.59	6.93	0.34	8.23	1.64
AT	5.36	6.5	1.14	7.68	2.32	7.93	9.34	1.41	10.64	2.71
BE	5.67	5.74	0.07	5.91	0.24	6.72	6.8	0.08	6.95	0.23
LU	4.21	4.58	0.37	5.37	1.16	9.5	9.91	0.41	11.15	1.65
					Sou	thern				
PT	11.03	11.39	0.36	12.84	1.81	11.94	12.33	0.39	13.79	1.85
ES	13.87	14.04	0.17	16.12	2.25	15.59	15.73	0.14	17.77	2.18
IT	11.66	11.89	0.23	12.92	1.26	12.78	13.03	0.25	14.08	1.3
MT	5.89	6.38	0.49	7.07	1.18	7.62	8.11	0.49	8.88	1.26
CY	4.74	5.33	0.59	6.69	1.95	11.16	12.03	0.87	13.68	2.52
EL	10.15	10.75	0.6	12.3	2.15	11.56	12.21	0.65	13.8	2.24
		1	1	1	Lib	eral	1	1	1	
IE	6.1	7.07	0.97	7.57	1.47	9.82	10.78	0.96	11.52	1.7
UK	7.64	7.93	0.29	9.19	1.55	17.35	17.81	0.46	19.45	2.1

Notes: AROPs are calculated as the percentage of individuals with income under the at-risk-of-poverty threshold. In this table the threshold is defined as 50 percent of the national median household equivalised disposable income.

Table 10.5 At-risk-of-poverty rates with 70% at-risk-of-poverty threshold

Country	Baseline	Small		Large		Baseline	Small Sho	ck without	Large Sho	ck without
		Shock		Shock		without	MIS		MIS	
	(1)	(2)	(3)	(4) (	5)	MIS (6)	(7) (	3)	(9)	(10)
	$AROP_B$	$AROP_S$	Δ	$AROP_L$	Δ	$AROP_B^a$	$AROP_S^a$	Δ	$AROP_L^a$	Δ
					No	rdic				
DK	16.12	16.39	0.27	17.8	1.68	19.1	19.36	0.26	21.29	2.19
SE	20.9	21.78	0.88	23.72	2.82	21.14	22.02	0.88	23.99	2.85
FI	18.87	21.21	2.34	22.65	3.78	20.03	21.87	1.84	23.23	3.2
					Post-s	ocialist				
CZ	12.49	13.34	0.85	15.52	3.03	12.57	13.41	0.84	15.62	3.05
SK	16.58	17.24	0.66	19.81	3.23	16.74	17.4	0.66	19.98	3.24
SI	18.53	19.49	0.96	21.33	2.8	18.98	19.92	0.94	21.75	2.77
HU	29.39	29.82	0.43	31.83	2.44	29.51	29.95	0.44	32.01	2.5
HR	26.35	26.81	0.46	27.95	1.6	26.42	26.87	0.45	28.02	1.6
BG	29.35	29.91	0.56	31.29	1.94	29.61	30.17	0.56	31.55	1.94
RO	27.97	28.31	0.34	29.69	1.72	28.03	28.38	0.35	29.76	1.73
PL	21.33	21.95	0.62	24.03	2.7	21.45	22.07	0.62	24.15	2.7
EE	22.83	23.75	0.92	25.33	2.5	23.4	24.34	0.94	25.88	2.48
LT	24.53	26.81	2.28	30.09	5.56	24.96	27.24	2.28	30.42	5.46
LV	27.7	28.87	1.17	30.89	3.19	27.95	29.13	1.18	31.17	3.22
					Conti	nental				
FR	19.91	20.17	0.26	22.39	2.48	21.73	21.99	0.26	24.02	2.29
DE	19.82	20.13	0.31	21.64	1.82	20.15	20.46	0.31	21.99	1.84
NL	17.17	17.81	0.64	19.67	2.5	18.58	19.25	0.67	21.15	2.57
AT	21.04	22.85	1.81	24.57	3.53	21.32	23.14	1.82	24.87	3.55
BE	18.24	18.36	0.12	19.33	1.09	18.84	18.95	0.11	19.98	1.14
LU	22.02	22.55	0.53	24.5	2.48	22.76	23.29	0.53	25.24	2.48
					Sout	thern				
PT	25.05	25.56	0.51	27.38	2.33	25.56	26.08	0.52	27.87	2.31
ES	26.95	27.24	0.29	29.91	2.96	28.01	28.29	0.28	30.81	2.8
IT	25.74	26.05	0.31	27.58	1.84	26.23	26.53	0.3	28.05	1.82
мт	23.4	24.03	0.63	25.86	2.46	25.04	25.66	0.62	27.46	2.42
CY	24.11	25.14	1.03	27.39	3.28	27.15	28.31	1.16	30.71	3.56
EL	24.07	24.92	0.85	26.74	2.67	25.39	26.26	0.87	28.09	2.7
					Lib	eral				
IE	19.69	20.89	1.2	23.08	3.39	21.79	22.94	1.15	25.2	3.41
UK	23.81	24.34	0.53	26.28	2.47	30.59	31.19	0.6	33.11	2.52

Notes: AROPs are calculated as the percentage of individuals with income under the at-risk-of-poverty threshold. In this table the threshold is defined as 70 percent of the national median household equivalised disposable income.

Table 10.6 Decomposition of income stabilisation coefficient in the small shock scenario (variant 1)

Country	$\tau\_TAX$	$ au\_SIC$	$ au\_UI$	$\tau\_MIS$
		Nordic		
DK	0.238	0.024	0.208	0.058
SE	0.09	0.022	0.372	0.007
FI	0.079	0.104	0.268	0.002
		Post-socialist		
CZ	0.142	0.117	0.07	0.008
SK	0.092	0.195	0.08	0.012
SI	0.118	0.169	0.088	0.02
HU	0.155	0.192	0.025	0.007
HR	0.055	0.187	0.132	0.002
BG	0.081	0.142	0.186	0.002
RO	0.051	0.333	0.065	0.004
PL	0.135	0.129	0.035	0.002
EE	0.133	0.032	0.182	0.007
LV	0.167	0.112	0.094	0.002
		Continental		
FR	0.091	0.103	0.191	0.011
DE	0.202	0.142	0.198	0.007
NL	0.087	0.011	0.296	0.017
AT	0.138	0.177	0.138	0.033
LU	0.118	0.169	0.088	0.02
BE	0.203	0.132	0.171	0.003
		Southern		
PT	0.185	0.111	0.228	0.002
ES	0.152	0.033	0.186	0.016
IT	0.177	0.096	0.138	0.019
МТ	0.175	0.058	0.017	0.02
СҮ	0.048	0.11	0.245	0.033
EL	0.101	0.142	0.09	0.018
		Liberal		
IE	0.26	0.044	0.061	0.02
UK	0.204	0.091	0.001	0.043

Table 10.7 Decomposition of income stabilisation coefficient in the small shock scenario (variant 2)

Country	$\tau\_TAX$	τ_SIC	<b>τ_U</b> I	$ au_{\_MIS}$
		Nordic		
DK	0.238	0.024	0.409	0.073
SE	0.152	0.042	0.591	0.014
FI	0.078	0.104	0.468	0.004
		Post-socialist		
CZ	0.142	0.117	0.099	0.015
SK	0.097	0.195	0.1	0.019
SI	0.118	0.169	0.166	0.014
HU	0.158	0.194	0.027	0.013
HR	0.055	0.187	0.254	0.002
BG	0.081	0.142	0.302	0.006
RO	0.053	0.333	0.117	0.003
PL	0.136	0.129	0.056	0.003
EE	0.143	0.032	0.318	0.013
LV	0.169	0.112	0.129	0.003
		Continental		
FR	0.091	0.103	0.514	0.013
DE	0.202	0.142	0.376	0.007
NL	0.096	0.032	0.424	0.021
AT	0.138	0.177	0.173	0.05
LU	0.118	0.169	0.166	0.014
BE	0.211	0.132	0.276	0.018
		Southern		
PT	0.185	0.111	0.444	0.003
ES	0.152	0.033	0.38	0.017
IT	0.177	0.096	0.293	0.019
МТ	0.175	0.058	0.03	0.019
СҮ	0.048	0.11	0.254	0.043
EL	0.101	0.142	0.185	0.018
		Liberal		
IE	0.259	0.044	0.1	0.019
15-	0.200	***	**-	

Table 10.8 Decomposition of income stabilisation coefficient in the large shock scenario (variant 1)

Country	$\tau$ $TAX$	$ au\_SIC$	τUI	τ MIS
-		 Nordic	<del>-</del>	
DK	0.273	0.019	0.171	0.055
SE	0.151	0.048	0.083	0.01
FI	0.097	0.103	0.176	0.005
		Post-socialist		
CZ	0.135	0.123	0.045	0.016
SK	0.092	0.185	0.045	0.011
SI	0.128	0.159	0.08	0.011
HU	0.164	0.195	0.014	0.014
HR	0.061	0.187	0.103	0.001
BG	0.085	0.11	0.105	0.004
RO	0.057	0.33	0.048	0.004
PL	0.135	0.123	0.026	0.002
EE	0.149	0.035	0.127	0.013
LV	0.163	0.108	0.042	0.007
		Continental		
FR	0.088	0.108	0.168	0.013
DE	0.199	0.161	0.159	0.011
NL	0.128	0.046	0.152	0.015
AT	0.168	0.16	0.097	0.038
LU	0.128	0.159	0.08	0.011
BE	0.219	0.132	0.165	0.002
		Southern		
PT	0.162	0.11	0.199	0.009
ES	0.143	0.038	0.159	0.007
IT	0.186	0.09	0.132	0.023
МТ	0.113	0.086	0.015	0.027
СҮ	0.058	0.109	0.066	0.054
EL	0.088	0.135	0.072	0.027
		Liberal		
IE	0.26	0.041	0.046	0.015
UK	0.153	0.101	0.001	0.05

Table 10.9 Decomposition of income stabilisation coefficient in the large shock scenario (variant 2)

Nordic   N					
DK         0.273         0.019         0.34         0.061           SE         0.209         0.067         0.293         0.025           FI         0.096         0.103         0.232         0.006           Post-socialist           CZ         0.135         0.123         0.052         0.028           SK         0.095         0.185         0.049         0.019           SI         0.128         0.159         0.106         0.01           HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.519         0.015           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022 </td <td>Country</td> <td>τ_TAX</td> <td>τ_SIC</td> <td>τ_UI</td> <td>τ_MIS</td>	Country	τ_TAX	τ_SIC	τ_UI	τ_MIS
SE         0.209         0.067         0.293         0.025           FI         0.096         0.103         0.232         0.006           Post-socialist           CZ         0.135         0.123         0.052         0.028           SK         0.095         0.185         0.049         0.019           SI         0.128         0.159         0.106         0.01           HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.06           PL         0.138         0.123         0.026         0.03           EE         0.162         0.035         0.163         0.03           LV         0.163         0.108         0.519         0.015           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.104         0.04			Nordic		
FI         0.096         0.103         0.232         0.006           Post-socialist           CZ         0.135         0.123         0.052         0.028           SK         0.095         0.185         0.049         0.019           SI         0.128         0.159         0.106         0.01           HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           LV         0.163         0.108         0.052         0.013           LV         0.163         0.108         0.052         0.013           LV         0.163         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083	DK	0.273	0.019	0.34	0.061
CZ         0.135         0.123         0.052         0.028           SK         0.095         0.185         0.049         0.019           SI         0.128         0.159         0.106         0.01           HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.052         0.013           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01	SE	0.209	0.067	0.293	0.025
CZ         0.135         0.123         0.052         0.028           SK         0.095         0.185         0.049         0.019           SI         0.128         0.159         0.106         0.01           HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.052         0.013           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE </td <td>FI</td> <td>0.096</td> <td>0.103</td> <td>0.232</td> <td>0.006</td>	FI	0.096	0.103	0.232	0.006
SK         0.095         0.185         0.049         0.019           SI         0.128         0.159         0.106         0.01           HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.052         0.013           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           PT </td <td></td> <td></td> <td>Post-socialist</td> <td></td> <td></td>			Post-socialist		
SI         0.128         0.159         0.106         0.01           HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.052         0.013           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           PT         0.162         0.11         0.246         0.025           ES <td>CZ</td> <td>0.135</td> <td>0.123</td> <td>0.052</td> <td>0.028</td>	CZ	0.135	0.123	0.052	0.028
HU         0.166         0.195         0.015         0.025           HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.052         0.013           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367	SK	0.095	0.185	0.049	0.019
HR         0.061         0.187         0.144         0.001           BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.052         0.013           Continental           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           MT	SI	0.128	0.159	0.106	0.01
BG         0.085         0.11         0.137         0.008           RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           LV         0.163         0.108         0.052         0.013           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           FT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.133         0.086         0.019         0.038	HU	0.166	0.195	0.015	0.025
RO         0.063         0.33         0.061         0.006           PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135	HR	0.061	0.187	0.144	0.001
PL         0.138         0.123         0.026         0.003           EE         0.162         0.035         0.163         0.039           Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0	BG	0.085	0.11	0.137	0.008
EE       0.162       0.035       0.163       0.039         LV       0.163       0.018       0.052       0.013         Continental         FR       0.088       0.108       0.519       0.015         DE       0.206       0.157       0.245       0.022         NL       0.156       0.097       0.014       0.04         AT       0.169       0.16       0.056       0.083         LU       0.128       0.159       0.106       0.01         BE       0.219       0.132       0.371       0.006         Southern         PT       0.162       0.11       0.246       0.025         ES       0.143       0.04       0.367       0.011         IT       0.181       0.108       0.107       0.041         MT       0.113       0.086       0.019       0.038         CY       0.058       0.109       0.069       0.095         EL       0.088       0.135       0.096       0.039         Liberal         IE       0.256       0.041       0.056       0.016	RO	0.063	0.33	0.061	0.006
LV       0.163       0.108       0.052       0.013         Continental         FR       0.088       0.108       0.519       0.015         DE       0.206       0.157       0.245       0.022         NL       0.156       0.097       0.014       0.04         AT       0.169       0.16       0.056       0.083         LU       0.128       0.159       0.106       0.01         BE       0.219       0.132       0.371       0.006         Southern         PT       0.162       0.11       0.246       0.025         ES       0.143       0.04       0.367       0.011         IT       0.181       0.108       0.107       0.041         MT       0.113       0.086       0.019       0.038         CY       0.058       0.109       0.069       0.095         EL       0.088       0.135       0.096       0.039         Liberal         IE       0.256       0.041       0.056       0.016	PL	0.138	0.123	0.026	0.003
Continental           FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal         IE         0.256         0.041         0.056         0.016	EE	0.162	0.035	0.163	0.039
FR         0.088         0.108         0.519         0.015           DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal         IE         0.256         0.041         0.056         0.016	LV	0.163	0.108	0.052	0.013
DE         0.206         0.157         0.245         0.022           NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal         IE         0.256         0.041         0.056         0.016			Continental		
NL         0.156         0.097         0.014         0.04           AT         0.169         0.16         0.056         0.083           LU         0.128         0.159         0.106         0.01           Southern           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016	FR	0.088	0.108	0.519	0.015
AT       0.169       0.16       0.056       0.083         LU       0.128       0.159       0.106       0.01         Southern         Southern         PT       0.162       0.11       0.246       0.025         ES       0.143       0.04       0.367       0.011         IT       0.181       0.108       0.107       0.041         MT       0.113       0.086       0.019       0.038         CY       0.058       0.109       0.069       0.095         EL       0.088       0.135       0.096       0.039         Liberal         IE       0.256       0.041       0.056       0.016	DE	0.206	0.157	0.245	0.022
LU       0.128       0.159       0.106       0.01         BE       0.219       0.132       0.371       0.006         Southern         PT       0.162       0.11       0.246       0.025         ES       0.143       0.04       0.367       0.011         IT       0.181       0.108       0.107       0.041         MT       0.113       0.086       0.019       0.038         CY       0.058       0.109       0.069       0.095         EL       0.088       0.135       0.096       0.039         Liberal         IE       0.256       0.041       0.056       0.016	NL	0.156	0.097	0.014	0.04
BE         0.219         0.132         0.371         0.006           Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016	AT	0.169	0.16	0.056	0.083
Southern           PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016	LU	0.128	0.159	0.106	0.01
PT         0.162         0.11         0.246         0.025           ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016	BE	0.219	0.132	0.371	0.006
ES         0.143         0.04         0.367         0.011           IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016			Southern		
IT         0.181         0.108         0.107         0.041           MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016	PT	0.162	0.11	0.246	0.025
MT         0.113         0.086         0.019         0.038           CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016	ES	0.143	0.04	0.367	0.011
CY         0.058         0.109         0.069         0.095           EL         0.088         0.135         0.096         0.039           Liberal           IE         0.256         0.041         0.056         0.016	IT	0.181	0.108	0.107	0.041
EL     0.088     0.135     0.096     0.039       Liberal       IE     0.256     0.041     0.056     0.016	МТ	0.113	0.086	0.019	0.038
Liberal           IE         0.256         0.041         0.056         0.016	СҮ	0.058	0.109	0.069	0.095
<b>IE</b> 0.256 0.041 0.056 0.016	EL	0.088	0.135	0.096	0.039
			Liberal		
<b>UK</b> 0.153 0.101 0.001 0.07	IE	0.256	0.041	0.056	0.016
	UK	0.153	0.101	0.001	0.07

developed and managed by the Institute for Social and Economic Research (ISER), since 2021 EUROMOD has been maintained, developed and managed by the Joint Research Centre (JRC) of the European Commission, in collaboration with Eurostat and national teams from the EU countries. We are indebted to the many people who have contributed to the development of EUROMOD. The results and their interpretation are the authors' responsibility.
This publication is made available free of charge as part of the public relations work of the Federal
Ministry of Labour and Social Affairs. It may not be used by parties or by election candidates or electoral assistants during an election campaign for the purpose of campaigning. This applies to elections for the European Parliament and the German Bundestag, as well as elections at the level of the Länder and municipalities. In particular, its distribution at election events or the information stands of political parties constitutes improper use, as does inserting information from political parties or advertising material into it, printing that information on it, or placing stickers with this information on it. Distributing it to third parties for the purposes of election advertising is also prohibited. Regardless of when, by what means and in what quantity this publication reaches the recipient and of whether an election is imminent at the time, it may not be used in a manner that could be understood as partisanship of the Federal Government in favour of individual political groups. Moreover, this publication is provided free of charge and is not for re-sale, regardless of when, how and in what quantities it was supplied.
All rights are reserved, including photomechanical reproduction and reprinting extracts.