

Pensions Policy at the European Level

ETUC SociAll Project

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Executive Summary

This Report is the final stage in the ETUC's SociAll Project, in support of trade union objectives in the field of social protection, including the implementation of the European Pillar of Social Rights.

Based on information in the National Reports for the 12 countries in the Project, a wide range of challenges were reported in achieving formal and effective coverage and pensions adequacy. The most significant and commonly reported challenges were:

- Economic and fiscal: i.e. the invariable assumption by governments that improvements in social protection were unaffordable and that limited account should be taken of their social consequences;
- Demographic: the assumption by governments that the only way to deal with improvements in longevity was by reducing the level of pension benefits, typically by increases in normal pension age;
- Labour market: the way in which poor labour market conditions and in the quality of employment, including factors such as low pay, the development of new atypical patterns of employment and the informal economy and gender discrimination, feed into inadequate pension provision.; and
- Structural and parametric: the structure and rules of pension arrangements provide inadequate benefits.

Elements in a programme to address these challenges are:

- A greater emphasis within the EU on social objectives, vis-à-vis economic objectives, in line with the European Pillar of Social Rights, its implementation Action Plan and its role in leading the EU Semester recommendations;
- A more appropriate understanding of the 'sustainability'" of pension systems that takes
 account of the increasing share of older people among total population and of total
 pension cost (cost shifting from public to private, as frequently recommended, is no cost
 reduction)



- A labour market strategy of 'upwards convergence' that has a positive impact on the development of economic dependency ratios and, thus, on both adequacy and sustainability;
- Improvements in labour market integration throughout working life with pension coverage for all forms of paid work, including self-employment and non-standard employment;
- The further development of a working definition of 'adequacy' that achieves EPSR's and ETUC's objective of 'Ageing in Dignity';
- Guidelines for the appropriate structure and parameters of pension provision that, in accord with different national characteristics, will lead to the provision of adequate pensions;
- The development of more appropriate and more precise indicators, disaggregated by gender and age groups, that properly direct attention to the existing deficiencies (and to policy options) both in employment integration and in social protection; and
- The application of the improved indicators to monitor the implementation of the social objectives of the EPSR; the Recommendation; CSRs; and the social scoreboard.

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1 Background

1.1 Outline of the Report

This Report is the final stage of the ETUC's SociAll (Social protection for All) Project. The intention is to strengthen the capacity of trade unions, at both national and European Union (EU) level, to be influential in policymaking on pensions and social protection. Building upon the research undertaken at earlier stages of the project, including in particular the National Reports, it elaborates a practical knowledge-based methodology for trade unions to contribute to policy determination across the spectrum of pension provision, with the aim of upward convergence. Social protection is only part of the range of social policies that determine an older generations' quality of life and it should be understood throughout that health and social care, and housing issues are also crucial in achieving the objective of Ageing in Dignity.

The Report addresses pension policy at the European level. It provides an overview of the recurrent national challenges to effective and adequate pension provision based on what has been learnt from the national surveys and the National Reports (Section 2). It is not simply a summary of the issues raised in the National Reports, but it also builds on the general lessons they provide. It then looks at the range of solutions that address these challenges, including those that have been considered by trade unions (Section 3). The Report then reviews indicators used to assess progress in achieving the relevant objectives in the area of social protection, pointing out the shortcomings of current indicators and where new or additional ones should be introduced (Section 4). Finally, it summarises and sets out EU level recommendations and guidelines for European social partners and institutions (Section 5).

The Report is based on information for the twelve countries that participated in the project, i.e. Austria; Belgium; Bulgaria; Croatia; France; Germany; Italy; Latvia; Poland; Romania; Spain and Sweden. While the selection of these countries is not designed to provide a statistically representative sample, they offer a broadly based and informative range of examples that have been used to identify the challenges and the appropriate way forward.

1.2 Pensions Policy in the EU

One of the European Union's stated objectives is the upward convergence of social rights, including equal opportunities in access to the labour market, fair working conditions and quality jobs, and adequate social protection. This is encapsulated in the 20 principles set out in the European Pillar of Social Rights (EPSR) (European Commission, 2017). The objectives are also developed through the Council Recommendation on Access to Social Protection for Workers and the Self-Employed (the Recommendation) (European Commission, 2019).

Compliance with the EPSR should be achieved within the framework of European Economic Governance (EEG) (European Commission, 2021). The ETUC has sought a complete reform of the existing EU economic governance system to end austerity, encourage investment, and stop putting pressure on wages and collective bargaining. It is of the view that "deeper



European Economic and Monetary Union (EMU) must be matched by a strong social dimension, with social and environmental indicators as an integral feature" (ETUC, 2021).

Unfortunately, experience shows that national policies on pensions have been influenced more by the economic objectives of the European Union, rather than its social objectives (Guardiancich, Iudicone, Natali, & Raitano, 2019). The main reasons for this imbalance are pressure from financial markets; the more explicit articulation of the economic objectives; stricter and more certain penalties in case of non-compliance with the economic objectives; and a choice by policymakers to accord greater urgency to economic rather than social measures. The Council Recommendation on Access to Social Protection for Workers and Self-employed repeats this pattern (ETUC, 2019).

The result is that the dual objectives of adequate protection for income in old age and the financial sustainability of pensions have been interpreted too often as being in conflict. There is a long history of an asymmetry of competences between the economic and social policy domains. The former has been seen as more important, while the latter has been weak and marginal (Sabato, Corti, Spasova, & Vanhercke, 2019). This asymmetry is demonstrated in the pension field with a consistent failure to achieve a proper understanding of sustainability, as discussed in detail in Section 2.

The clearest articulation of the EU's policies for social protection is through the Country-Specific Recommendations (CSRs) that flow from the European Semester process. These have consistently accorded priority to measures addressing the fiscal aspects of national retirement systems vis-à-vis those related to adequacy. The asymmetry has been aggravated by other EU policy trends, with the misleading understanding of financial sustainability of pensions being a crucial part of EU strategy for fiscal consolidation. It also reflects global trends in pension governance. In simple terms, far too many policymakers have an ideological mindset that takes it as given that expenditure on social protection should be restrained to achieve economic objectives, without giving the issues of adequacy and coverage the attention they deserve.

Given the importance and relevance of the EPSR within this process, it is important to monitor its implementation within the European Semester and the consequences for the balance between Economic and Social Governance. It is also important to undertake the systematic monitoring of the CSRs in the realm of pensions. There are, however, three problems with how CSRs have worked to date (Guardiancich, Judicone, Natali, & Raitano, 2019):

- First, there is a lack of balance in the CSRs between those related to fiscal sustainability compared to those related to pension adequacy. Not only has the ratio between the two been circa 10:1 during the period 2011-18, but also the Commission does not explicitly evaluate whether individual countries have fulfilled the adequacy recommendations in the Country Reports;
- Secondly, the legal authority for recommendations about adequacy is weak vis-à-vis
 the authority for fiscal measures; and while most CSRs are explicit and formal,
 compliance with social objectives is mostly voluntary; and

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• Thirdly, some of the CSRs that refer to adequacy only promote complementary pension funds, even though there is a lack of evidence that they necessarily contribute to fair and effective old age protection.

The European Pillar of Social Rights is accompanied by a 'social scoreboard', which is used to monitor the implementation of the EPSR by tracking trends in 12 areas (European Commission, 2019). However, there is concern that the social scoreboard ought to be more ambitious by, for example, breaking down data not only by gender but also by age, disability, and household composition to account for a range of vulnerabilities when measuring living conditions.

Clearly, the healthier the economy, the more able it is to support all its citizens, not least those who depend on social protection. However, the evidence makes it clear that the EEG has been interpreted, in practice, without regard to its social impact. As a result, many member states have reduced expenditure on social protection, arguing that redistributive systems are not sustainable and concluding there must be a shift towards greater reliance on defined contribution and funded approaches to pension provision.

There is no necessity for such an approach. The ETUC has called for the social and the economic priorities to be rebalanced within a reformed EEG framework (ETUC, 2019). The EPSR and the Recommendation provide an opportunity to promote fiscal sustainability at the service of pension inclusiveness, effectiveness and adequacy, and promote the rights enshrined in the EPSR. While DG ECFIN has referred to pensions, health and long-term care as "costs of ageing", it would be better to deliver in terms of "dignity of ageing" and possible ways, so far neglected in the EEG, to make this concept sustainable.

1.3 The Project's strategic orientation

It is proposed that the objective of the Project should be defined as "Ageing in Dignity". While considering the different national backgrounds, it should promote policies that will make social protection highly inclusive, fair, solidarity-based, adequate, effective and sustainable. Given the European context outlined above, it should highlight the pension system's problems, vis-à-vis objectives of trade unions and support the arguments that might be used, at both the national and EU level, to press for the implementation of EPSR's objectives.

A comprehensive approach to "Ageing in Dignity" must address the following priorities, in line with those that have been identified by the ETUC (ETUC, 2019):

- Filling the gaps in access to social protection by ensuring formal mandatory and effective coverage equally to all workers and self-employed, while taking into account the specificities of national systems;
- Improved labour market integration and quality of work, to allow the effective accrual
 of adequate pension benefits, along with tackling the effect of gender and other forms
 of discrimination and, hence, contributing to the system's sustainability;



- Ensuring adequate public pensions via predictable and coherent reforms, which also ensure the preservation of pensions' purchasing power;
- Ensuring income security to all citizens and residents, without discrimination, with highly inclusive and adequate schemes, combined with a labour market strategy of 'upward convergence and a boost to public employment services;
- Guarantee high quality and universal public health and accessible long-term care as an integral part of social protection systems; and
- Engaging in the adequate and appropriate allocation of public spending, to provide the necessary resources to the concretisation of these rights.

Public and collectively financed statutory systems must play a fundamental role in the universality and adequacy of social protection. Based on universality, risk-sharing, solidarity and fairness, they remain the most effective means to ensure high coverage and benefits. The role of occupational and private systems can be important, yet only complementary – given the uncertain and uneven outcomes across Europe.

It is relevant to point out that this approach is in accord with the view set out in the Fundamental Rights Report 2018 from the European Union Agency for Fundamental Rights (European Union Agency for Fundamental Rights, 2018). This approach favours an approach that:

"... explores the slow but inexorable shift from thinking about old age in terms of 'deficits' that create 'needs' to a more comprehensive one encompassing a 'rights-based' approach towards ageing. This gradually evolving paradigm shift strives to respect the fundamental right to equal treatment of all individuals, regardless of age — without neglecting protecting and providing support to those who need it. A human rights approach does not contradict the reality of age-specific needs; on the contrary, a rights-based approach enables one to better meet needs, as required, while framing them in a human rights-based narrative."

2 Challenges to Pension Provision

2.1 Overview

This Section provides an overview, from an EU perspective, of the significant national challenges to effective and adequate pension provision. The information was obtained through national surveys from designated trade union centres and National Reports written by national pension experts, in co-operation with the trade union centres. Background information on the pension system in these countries is in Appendix 1¹.

¹ In addition to the information gained from the National Reports, reference is also made to the European Commission's major work in this area, the periodic Ageing Reports and the Pension Adequacy Reports. These are produced every three years by the Ageing Working Group of the Economic Policy Committee (EPC) and the

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The challenges that have been identified through the research that has been undertaken at the national level are many and disparate, with a significant proportion that are specific to the respective countries' national context. In broad terms, however, the challenges can be usefully categorised, for the purpose of providing a structure to this report, under the following headings:

- Economic and fiscal;
- Demographic;
- Labour market; and
- Structural and parametric.

These challenges are addressed in turn below. However, it should be understood that in practice, most challenges are multi-dimensional, incorporating a number of these different categories. For example, a proposed increase in retirement age might be advanced as a fiscal measure to reduce the cost of social protection; or as a labour market measure; or as a response to longer lives; or simply as parametric.

2.2 Economic and Fiscal Challenges

It is clear from the National Reports that the most significant challenge to improvements in pension provision is the claim, endorsed by many governments, that the cost of effective and adequate social protection is unaffordable. The National Reports point to the way in which national governments invariably interpret the need for a sustainable pension system almost totally in financial terms, widely ignoring the need to meet social objectives as well. A number of the reports call for some fundamental rethinking of what constitutes sustainability or emphasise that what constitutes a sustainable system is at heart a political rather than an economic matter.

The data does show that the situation varies significantly from country to country. Information about the circumstances of the 12 countries included in the Project is provided in Appendix 2, drawn from the EU's 2018 Ageing Report (European Commission, 2018). This

European Commission's Directorate-General for Economic and Financial Affairs (DG ECFIN) and Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL). Each Ageing Report provides detailed information on current and estimated future age-related expenditures, covering not just pensions, as dealt with in this Report, but also health care, long-term care, education and unemployment benefits. The Pension Adequacy Report (published in parallel) analyses how far current and future pensions help to prevent old-age poverty and maintain the income of citizens for the duration of their retirement

At the time of writing the most recently published version of the Ageing Report is the "The 2018 Ageing Report - Economic & Budgetary Projections for the 28 EU Member States (2016-2070)" (European Commission, 2018). However, we already have the associated scene-setting document that explains the basis upon which the next set of projections will be made, i.e. "The 2021 Ageing Report - Underlying Assumptions & Projection Methodologies" (European Commission, 2020), which provides additional more up-to-date information. The most recent Pension Adequacy Report is that published in 2018, i.e., "Pension adequacy report 2018 – Current and future income adequacy in old age in the EU" (European Commission, 2018).



includes projections of expenditure on public pensions, expressed as a percentage of GDP. Over the period up to 2070 these costs were expected:

- To reduce in seven of these Member States (Croatia, France, Italy, Latvia, Poland, Spain, Sweden); and
- To increase in five of these Member States (Austria, Belgium, Bulgaria, Germany, Romania).

The change for the EU27 taken as a whole is a reduction in the GDP share spent on public pensions from 11.9% to 11.4%, a fall of 0.5 percentage points. The most substantial falls in the 12 countries are in Croatia, from 10.6% to 6.8% and in France, from 15.0% to 11.8%. Such reductions, as projected for several member states, must give cause to fears of massive shortcomings in future social protection. If provision is to be protected, if not improved, it is axiomatic that as the numbers of the elderly grow, so will age-related costs. Given the scale of the increase that is expected in the share of older people among the total population, with a projected increase for the EU27 from 20% to 30% of the population aged 65 and over between 2020 and 2070, intergenerational fairness requires an appropriate rise in the share of GDP used for social spending for older people. The challenge will be even greater where there is a need for what trade unions regard as necessary improvements in provision.

The level of expenditure on social protection is ultimately a political decision, with or without the demographic change that takes place. There is nothing that, a priori, is given about what level of expenditure on pensions is socially and politically acceptable. This is for each country to decide at any given time. Nevertheless, there are constraints on what it is practical to afford, depending most crucially where you are starting from. These constraints include the political acceptability of the amount and the rate of any increase to take account of this demographic change and improved standards of provision that are needed to achieve the objectives of the EPSR and the ETUC.

The economic factors will have an impact on what is feasible to achieve and politically acceptable. Pension provision cannot be isolated from what is happening in the rest of the economy, even if we disregard the crude calls for austerity by those interests who want cuts in public expenditure for their own sake. The economic challenges raised in the surveys and National Reports, within which improved social protection is sought, include the following:

- Sluggish economic growth;
- Inadequate investment and low growth in productivity;
- Low interest rates, making saving unproductive; and
- Growing income and capital inequality, increasing the number of people struggling to make ends meet, for whom providing for their retirement is hard, or not possible.

None of these factors is directly to do with social protection, but the data emphasises that their resolution would contribute to easing the economic and fiscal challenges that are faced directly by a national economy, given the objective of achieving adequate and sustainable



social protection. At the same time, these are not problems that arise from policies that promote social protection, with no robust evidence that there is any definitive link between population ageing and slower economic growth (Guardiancich, Iudicone, Natali, & Raitano, 2019).

2.3 Demographic Challenges

Population ageing, mostly as a result of the continuing improvements in longevity that are anticipated, does represent a challenge to pension provision. On the one hand, longer lifetimes in good health than expected by previous generations are clearly to be welcomed. Nevertheless, as was generally recognised in the National Reports, it does mean that pensions will have to be paid for longer, and, particularly when accompanied by a falling birth rate, pensioners will increase as a proportion of the total population.

These trends' potential impact is illustrated by information from the EC's Ageing Report. The data produced for the EU's 2021 Ageing Report (European Commission, 2020) projects a reduction in the total EU population from 447 million in 2019 to 424 million in 2070. Over the same period, the working-age population (people aged between 20 and 64) is also expected to decrease, but more significantly, from 264 million in 2019 to 216 million in 2070. As a consequence, what the 2021 Ageing Report terms the 'old-age dependency ratio 20-64', i.e. the number of those aged 65 and over relative to the number of those aged 20 to 64, is expected to increase from 34.4% in 2019 to 59.2% in 2070. Figures in Appendix 3 provide more detail on the scale of the challenge.

The demographic data is complemented by the analysis in the 2018 Pension Adequacy Report (European Commission, 2018) of the reform measures aimed at securing adequate and financially sustainable pensions. According to the Report, fiscal costs linked to pensions, healthcare, and long-term care are expected to rise over the coming decades as Europe's population continues to age significantly.

The need for growth in age-related expenditure is neither surprising nor inappropriate for a society with an increasing proportion of older people within the overall population. It is to be expected where a higher share of total resources is devoted to the elderly. Were pension and labour market reform to reduce the share of resources devoted to the elderly, it is axiomatic that this will, on average, reduce their well-being through some combination of lower pensions and longer working lives. But there is no evidence that this ageing process will reduce total resources available in a society – the 2021 Ageing Report (European Commission, 2020) provides figures, included in Appendix 3, that project continued growth in GDP, both overall and per capita. So, the real issue is about the distribution of resources, i.e. how the projected growth in resources will be allocated between those who are economically active and those who are inactive and how the numerical relation between contributors and benefit recipients will develop

Nevertheless, these and similar figures are advanced frequently in the context of social protection, with the explicit or implicit corollary that social protection is under pressure and, hence, needs to be cut back. Some commentators suggest that even a relatively moderate

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increase in the share of GDP that is required to pay for pensions is, in itself, evidence of 'unsustainability', regardless of population ageing. This raises fundamental questions of intergenerational (un)fairness at the expense of today's youth. So, given the prevalence of such figures in our debates, it is vital to have a better understanding of what they mean for the achievement of adequate social protection.

A material demographic shift will indeed result in significant challenges both for society as a whole and, in particular, for pension systems, along with health and long-term care. Ensuring long-term financing of adequate pensions in the context of anticipated population ageing is one of the significant challenges of our times. Therefore, it is of concern that many of the policy recommendations on how to cope with this challenge are based on a misleading interpretation of the demographic figures.

There are three ways in which the demographic challenge is misunderstood.

- First, the wrong comparison is made, where the number of those of working age is repeatedly falsely equated with the number of people in employment (contributors), while the number of those of retirement age is falsely equated with the number of retirees (beneficiaries);
- Secondly, the forecast changes in demography are looked at in isolation, without considering either the accompanying social and economic changes that will occur over the same period, or the timescale over which the change will occur; and
- Thirdly, insufficient attention is given to the fact that longevity figures are typically quoted as averages, ignoring the discriminatory impact of proposals to increase pension age, particularly on people with shorter than average lives.

These misunderstandings are considered in more detail below.

Misunderstanding 1. Equating the number of working-age people with the number of people in employment (contributors); and equating the number of people over retirement age with the number of retirees (beneficiaries).

This error is widespread and persistent. For example, in 2010, at the launching of a European-wide consultation on the long-term perspectives of pension systems, EU Commissioner Andor, "with the full backing of Commissioners Olli Rehn and Michel Barnier", made an attention-grabbing statement: "The number of retired people in Europe compared to those financing their pensions is forecast to double by 2060 - the current situation is simply not sustainable." (European Commission, 2010). Subsequently, a widely disseminated graph published on the EU Commission's website as accompanying information to the 2015 Ageing Report sought to suggest a doubling of the ratio between workers and pensioners with a shift from 4:1 in 2013 to 2:1 in 2060 (European Commission, 2015).

The real position was significantly different when the focus is on those who are actively working and contributing, rather than just looking at their age. The extent of the difference is demonstrated by the figures in *Table III.1.86 Support Ratio (contributors/100 pensioners, Public pensions*) in the 2018 Ageing Report (European Commission, 2018). The Table shows

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that in 2016 there were 159.9 contributors for each 100 pensioners, which translates into a ratio of contributors to pensioners of 1.6:1. This figure is considerably different to the ratio of 4:1 that is shown in the Commission's graph and the Commissioner's alarming 'not sustainable' statement.

The reason why the alleged 4:1 ratio of workers to pensioners differs so much from the actual figure of 1.6:1 is quite simple: Because 4:1 was not the ratio of workers to pensioners but the age group 15 to 64 relative to the age group who were 65 and over. This fails to recognise that in the European Union only around two-thirds of those aged 15 to 64 are in employment. That figure includes those who are not in full-time employment, such as even those with what in Germany are called "mini-jobs". On the other hand, among those not in employment, many million are desperately looking for a job and many more millions in early retirement, a large proportion for health-related reasons. In 2016, 28% of all pensioners in EU-27 were younger than 65 (European Commission, 2018).

The common practice of ignoring this reality has significant consequences when assessing the scale of the ageing challenge. By defining the relationship simply by age rather than economic status, the tremendous shift from the 4:1 ratio to 2:1 between age groups above and below the limit of 65 can only be countered by raising this limit to a higher age. If you define the problem only in terms of age, the solution will inevitably lie in an increase in retirement age². It constitutes circular reasoning, as keeping public pension expenditure at today's level, whatever the population's future age composition might be, is defined, a priori, as sustainability! Even neoliberal analysts share this highly problematic line of reasoning.

In sharp contrast, when the focus is more properly on economic status rather than age, attention is directed to the existing shortcomings within the working-age population, reflected both in low employment rates and high unemployment rates; disability; and early retirement. The necessary conclusion is that to offset a reduction in the ratio of contributors to benefit recipients, an improvement in the labour market integration of those of working age should be the priority. The European Commission itself recognised this reality, when as long ago as 2008 it stated that "Raising employment levels [in quality jobs] is arguably the most effective strategy with which countries can prepare for population ageing." (European Commission, 2008)

To make clear the importance of people's economic status, a clear distinction must be made between purely demographic and economic dependency ratios. This necessitates a significant improvement in how economic dependency is defined for the purpose of assessing sustainability, such as 'pensioners and unemployed relative to people in employment', as was suggested in the European Commission's White Paper on Pensions (the EC White Paper) (European Commission, 2012). Long-term scenario calculations, taking account of the scope that exists within society for the better employment integration of those of working age,

² Building on this consideration, EU Commission's recently published Green Paper on Ageing states "The EU old age dependency ratio in 2040 would only remain at the same level as in 2020 if working life were extended to the age of 70" (European Commission, 2021)



clearly demonstrate the possibility of substantially mitigating the expected increase in economic dependency and, thereby, improving financial sustainability.

Misunderstanding 2. The forecast changes in demography are looked at in isolation, without considering either the accompanying social and economic changes that will occur over the same period, or the timescale over which the change will occur.

All too often, commentators assume that any increase in the dependency ratio is inherently equivalent to unsustainability. Like the figures used by EU Commissioner Andor, they are quoted without putting them into context. They ignore factors such as potential economic growth and the timescale over which the changes will occur. When these are considered, the conclusions drawn are different from those typically reached.

The first point to be understood is that any assessment of the impact of demographic shifts should take account of the other economic and social changes over the relevant period. It is unreasonable to build demographic change into an argument, without also considering other expected developments. This applies particularly to the predicted growth in GDP. While this is not guaranteed, of course, a different picture emerges when this is considered, even when the expected demographic changes that will occur over the next 50 years are forecast to be substantial.

The 2021 Ageing Report (European Commission, 2020) forecasts that over the period from 2019 to 2070, GDP for the EU27 will almost double. When expressed per head of the population of working age or older, the growth is 108 per cent. This means that, even when allowing for an increase in the older population compared to those of working age, the increase in income per head will be more than enough to allow everyone, whether at work or in in receipt of a pension, to be better off³.

We already know from experience, with the expansion of the welfare state, that it is possible for there to be a substantial increase of the overall social spending as a share of GDP, with the associated increase of income tax and social security contribution rates, without harming the living standard of those in employment. This proved possible because of productivity and wage growth. There is no reason to assume that, given the expectations of continued increases productivity shown in the Ageing Report, this mechanism will not continue in the future. There is still inevitably an issue about how the gains from productivity are shared equitably, but the possibility of improved standards for all groups exists.

The second point is that demographic change does not happen all at once; it takes place relatively slowly over extended periods of time. When we consider the past, it is clear that the number of older people, when expressed as a proportion of the adult population, has changed significantly over time. Going back to the year 1900, for example, the number of older people will have been much lower than it is now. But during the twentieth century and into the twenty-first, the proportion of pensioners has grown consistently and sustainably.

³ In addition, European Social Partners have elaborated and proposed an alternative set of indicators Supplementing GDP as welfare measure (3 March 2021 - https://est.etuc.org/?p=817)



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History makes it clear that societies are capable of dealing with substantial shifts in the relative size of different age cohorts, provided they are given sufficient time. There is no reason to suppose that this process has necessarily come to a halt at this particular point in time. So, it is not the absolute size of a change in the number of pensioners that creates problems of sustainability. The limiting factor is the rate of that change. A change that might create social and political difficulties, if it happened over a year or so, becomes acceptable when achieved over many decades. We have seen substantial shifts in the past and there is no reason to assume that they cannot occur again in the future

Turning to the timescale of future changes in demography, consider, for example, the following passage in Section 2 of the Executive Summary of the 2021 Ageing Report (European Commission, 2020) from the European Commission.

"The EU's demographic old-age dependency ratio (i.e. the ratio between people aged 65 years and over and those aged 20-64) is projected to increase significantly in the coming decades. From about 29% in 2010, it had risen to 34% in 2019 and is projected to rise further, to 59% in 2070 ...".

The increase that is forecast from 34% to 59% is substantial. However, no economic or social law determines how national wealth should be distributed between different age groups or that one ratio is, a priori, more sustainable than another. It is simply the combined result of history and current political decisions.

The scale of sustainable demographic change is illustrated in Table 3.1, which compares the change in age distribution that has taken place over the last 60 years with that expected over the next 60 years. For the illustration the Table uses figures provided by the OECD (OECD, 2019) for what it describes as the "demographic old-age to working-age ratio". Figures are shown for individual countries, using those available for countries included in the Project and the EU28.



Table 2.1. Share of Adult Population Over Age 65								
Increase in Historical and Projected Values								
	1960 to 2020		2020 to 2080					
	Total	per annum	Total	per annum				
Austria	37%	0.5%	58%	0.8%				
Belgium	47%	0.6%	46%	0.6%				
France	58%	0.8%	41%	0.6%				
Germany	67%	0.9%	40%	0.6%				
Italy	101%	1.2%	57%	0.7%				
Latvia	74%	0.9%	27%	0.4%				
Poland	146%	1.5%	74%	0.9%				
Spain	94%	1.1%	73%	0.9%				
Sweden	57%	0.8%	32%	0.5%				
FU28	80%	1.0%	52%	0.7%				

Notes:

- 1. Original source for OECD's figures: United Nations, Department of Economic and Social Affairs (2019), World Population Prospects 2019, Online Edition (for future periods: medium-variant forecast).
- 2. The figures in the table are the writer's calculations, based on the figures shown in the OECD report for the number of individuals aged 65 and over per 100 people aged between 20 and 64.
- 3. Figures not provided by OECD for Bulgaria, Croatia and Romania

For example, the Table shows that for the EU28 the adult population aged 65 and over, when expressed as a share of the population age 20 and over, increased by 80% between 1960 and 2020. Expressed as an annual average rate of increase, this is 1.0% per annum. Over the next 60 years the overall increase for the EU28 is expected to be 52%, which is an annual average increase of 0.7%.

What can be seen from the Table is that there have been substantial demographic shifts over the last 60 years, varying from country to country. Nevertheless, these changes at these widely differing rates have all been sustained. The changes that are now expected over the next 60 years are not out of line with those that have been sustained in the past and, in most cases, are proportionately lower. It is really for those who believe that a process of change that has continued for many decades has now reached a point when it ceases to work, to demonstrate why this is the case. It should not be assumed, without any evidence, that such shifts are no longer sustainable.

Misunderstanding 3. The impact of demographic change is discussed too often in terms of averages, ignoring the wide differences in how it affects individuals.

The third misunderstanding is how public debate on increasing life expectancy is almost always limited to average values, only divided by gender. However, longevity among both men and women also differs as much or more widely with socioeconomic status, income or education. It also varies according to race and social class. High-income earners, people with tertiary education etc., tend to live significantly longer than people with a low income and



limited education. Developing policy for the pensioner with the average expected lifespan can result in substantial discrimination against those whose lifespan is shorter. Given that people with a shorter expected lifespan tend to belong to groups who already suffer from discrimination, this simply compounds the problems they face.

In practice, this means that an automatic link between the average increase in life expectancy and the pensionable age is at odds with the evidence that few things are more unequal than individual life expectancy and health conditions. It is clear from economic and epidemiological studies that there is a strong linkage between individual health and socio-economic characteristics (Guardiancich, Iudicone, Natali, & Raitano, 2019). This has been recognised for some time. For example, the Health and Consumer Protection Directorate-General report (Mackenbach, Meerding, & Kuns, 2007) in 2007, "Economic implications of socio-economic inequalities in health in the European Union", concluded:

"Most analyses of the relationship between health and the economy focus on average health, but health is actually very unevenly distributed across society. In all countries with available data, significant differences in health exist between socioeconomic groups, in the sense that people with lower levels of education, occupation and/or income tend to have systematically higher morbidity and mortality rates ..."

These findings were reinforced by the publication in 2013 of the further report from the Directorate-General, "Health inequalities in the EU" (Marmot, 2013).

Therefore, there is a need for a better understanding of the implications that different groups' socio-economic characteristics have for pensions policy. The most salient issue is the differential impact of increases in retirement age on groups with different expected lifespans. The shorter the expectation of life for a given group, the greater the proportionate impact on their expected pension. In other words, groups that are already deprived and lacking social opportunities, are those who lose out most, whenever retirement age is increased. Their situation is systematically disregarded when it comes to the automatic adjustment mechanisms.

2.4 Labour Market Challenges

Based on the data from across the National Reports, it is apparent that poor labour market conditions pose a widespread and significant challenge to adequate, effective and comprehensive social protection. There was substantial evidence of the many ways in which shortcomings in labour markets and in the quality of employment feed into inadequate pension provision. The different factors affect pensions for both:

- the individual, where the build-up of benefits depends on their participation in the labour market; and
- the system as a whole, through their impact on the system's finances.

Examples include cases where a worker moves into the less formal economy, or becomes unemployed, they accrue lower future pensions. At the same time, they are less able to contribute to support those currently in retirement. Consequently, these factors are relevant

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to both today's and for future pensioners and addressing these labour market shortcomings is of crucial importance when considering social protection.

The importance and relevance of the issue are widely recognised. The OECD, in its 2019 edition of its regular report on pension trends, Pensions at a Glance, concluded that "The emergence and expansion of new forms of work have amplified the pension issues related to non-standard work, especially among low-income earners" (OECD, 2019).

The evidence from the National Reports emphasises the relationship between poor quality jobs and inadequate pensions and how this determines what policies are needed to achieve improvements in pension provision. The specific challenges that need to be addressed include:

- low levels of pay;
- job insecurity;
- unemployment at any stage of the career;
- lack of opportunities for career development;
- the growth of the informal economy and new types of employment; and,
- depending on the country's pension structure, lack of access to a reasonable level of complementary pension provision.

From the evidence it is clear that there is a significant challenge because the pensions structure is typically established with a limited view of how employment is organised. There is too often the implicit assumption that work is full-time and life-long with a single employer. This assumption has never been the case for all workers, of course, but recent trends in employment patterns mean that atypical jobs and the irregular economy have become increasingly widespread. As described above, the use of involuntary part-time work; temporary contracts; zero-hours contracts; exploitative traineeships; and bogus self-employment all present a challenge to securing adequate pensions.

Bogus self-employment presents a particular challenge. The demarcation line between dependent work and self-employment is often unclear and becoming less clear as commercial organisations seek to exploit the regulatory arbitrage between the two. As traditional characteristics of employee status become less important, new types of dependent work are developed that do not qualify as such, resulting in the loss of protection by labour law and collective agreements. With respect to pensions, even in systems where all types of employment are automatically included, whether to be qualified or not as a dependent worker matters a lot, at least with regards to sharing contributions with an employer.

Unfortunately, key labour market indicators, such as the overall employment rate, often give a false impression of existing potential for better labour market integration, mainly because no distinction is made between individuals with a wide variation in their working hours. This is why, as discussed in more detail in Section 4, indicators such as the full-time equivalent employment rate should be improved and given more attention, while new indicators should



be established, such as specified employment rates, allowing the separation of marginal parttime employment. Appendix 5 provides some relevant data.

The need for better supplementary employer-sponsored provision varies significantly between different countries, depending on the relevant country's pensions structure. Some countries, through history or design, place relatively limited reliance on private provision. Where this is the case, the challenge is seen as maintaining or further improving public provision and resisting a proposed shift to private provision. However, in those countries that depend to a greater extent on employer or sectoral provision of supplementary pensions, a particular challenge in achieving improvements in pension provision is defending and developing effective industrial relations. Where pension provision depends on the employment relationship, trade unions will inevitably seek to have a significant role, but how effectively they can discharge that role will vary. In these circumstances, measures to strengthen collective bargaining are also required.

The shortcomings in labour markets outlined above affect all sectors of society. However, forms of discrimination persist in labour markets that amplify the deficiencies discussed above for a range of groups, including women, disabled people, ethnic minorities, and sexual and gender minorities. To a large extent, these groups lose out in terms of social protection because they face more general forms of discrimination. They suffer from low pay and lack of job opportunities, which results in low pensions.

For example, labour markets are characterised by sharp gender inequalities. Despite a substantial increase in female employment rates in recent years, gender inequalities regarding labour market integration persist. Women still receive significantly lower hourly wages, spend significantly less time per week in paid employment, have many more career interruptions because of childcare or care of older relatives, while performing most of the unpaid work. All these differences have an impact on women's lifetime earnings and periods of employment, and hence, on their pension outcomes. Aside from women, young people, immigrants, people with reduced work capacity and the long-term unemployed are most affected by poor labour market integration and, hence, at risks of poor pension outcomes.

Significantly lower pension income mirrors all these labour market-related inequalities. According to Eurostat (Eurostat, 2021), 20.9% of women, compared to 15.5% of men, in the age group 65 and over are at risk of poverty or social exclusion. It is also reported that women in the EU aged 65 and over received a pension that was on average 29% lower than that of men, although this is 5% lower than the equivalent figure in 2010. The gender gap also applies to the non-coverage of pensions. While almost all men aged 65+ receive a pension, about 11% of women do not. In 2019, the gender gap in non-coverage for those aged 65 to 79 was 6.2 percentage points lower than in 2008; it was still 10.2%.

2.5 Structural and Parametric Challenges

The National Reports provide evidence of challenges that relate to the structure and rules of a country's pension system that, by their nature, are country-specific and, hence, determined in large part by their history and specific institutions of retirement provision. It is also clear

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that while TU's invariably look for improvements in social protection, most discussion of proposed changes in pension systems in recent years has been, in practice, defensive in nature, i.e. opposing changes that reduce the adequacy of provision or that seek to shift more risk onto workers, as opposed to employers. This has been largely in reaction to measures that are proposed with the aim of austerity, rather than structural improvements.

The overall trend of the changes that have taken place in social protection is clear, although there is wide variation as between different countries (Guardiancich, Iudicone, Natali, & Raitano, 2019). The movement has not been all one way, however with some countries improving pension benefits' adequacy (OECD, 2019). Nevertheless, it is apparent from the National Reports that it is austerity measures that have dominated discussions, with closely linked policies that seek to:

- **First, contain pension spending** through stricter links between contributions and benefits and more meagre indexation of pensions; and
- **Secondly, prolong working life** by increasing the pensionable age and strengthening eligibility requirements for early retirement.

Table 3.2 sets out the subject of the material challenges faced in one or more countries included in the Project, with some explanatory comments. Such challenges might arise in all types of scheme, public and private. Challenges specific to private funded schemes are dealt with separately below.

Table 2.2 Structural and Parametric Challenges in Pension Systems		
Inadequate accrual rate	Theoretical replacement rate calculations for new labour market entrants show that in several EU Member States, due to inadequate accrual rates, even average wage earners with full employment careers cannot expect to achieve income replacement rates that allow 'to uphold a decent standard of living' (Recommendation, 2019) during retirement.	
Restrictive service requirements and thresholds	The service requirement should produce the target pension in conjunction with the accrual rate, as explained above. An associated challenge is how the rules apply to workers with careers that don't fit into the pattern of a single lifetime employment, including provisions for preservation and transferability of accrued rights.	
Insufficient social balancing mechanisms	To provide for workers with gaps in their employment record, often for caring responsibilities and the increasing need for retraining or periods of ill-health and unemployment. Social balancing mechanisms (pension credits for periods of unemployment, sickness, childcare, etc.) are distinguishing characteristics of public pensions systems, aiming to support those with careers that don't fit into the pattern of lifetime employment provided specific criteria are fulfilled. There is also the need to consider what provisions are needed specifically for refugees and other immigrants, who have a curtailed working lifetime.	



Restrictive wage thresholds and ceilings	Many pension schemes, where benefits are related to earnings, have a ceiling on the earnings that are taken into account. This can create problems if it is not set at a sufficient level, for example, because it was set some time ago and has not been revalued after that in line with earnings growth. When set too low, it also deprives a scheme of potential contribution income from higher earners.
Inadequate indexation	Adequate indexation of benefits, both in payment and deferment, i.e. over the period between when the rights are acquired and when they come into payment, is an important element in an adequate pension system. The main challenge is to determine the appropriate basis that maintains the real value of benefits in terms of prices and maintaining parity with the working population's standard of living.
Contributions	Contributions should be set to achieve a fair distribution of cost between the member, the employer and the state.
Lack of transferability	Provisions should ensure cumulation, preservation and transferability of accrued entitlements.
Pension age	Along with accrual rates and social balancing mechanisms, the age at which a pension is payable is the most common challenge in achieving adequate pensions. Members have faced consistent pressure for increases that age, both formally and in practice. Aspects of the challenge are dealt with below.
- Statutory pension age	Pressure from the EU, through CSRs, and from national governments for an increase in the statutory retirement age, as determined by the public pension system, has become almost universal. This has led some countries to introduce what are termed "automatic balancing mechanisms" or "sustainability factors". The common feature is that the 'pension promise' is automatically revised in line with the socioeconomic and demographic factors. Such mechanisms are too often crude and indiscriminate.
- Effective pension age	Whatever the official or statutory pension age, the age at which members, in practice, take their pensions is often different, depending on their circumstances and how effective the pension formula is in delivering what members consider an acceptable pension. It is also determined by conditions in the labour market, where the availability of employment, or otherwise, will impact on the retirement decision.
- Different male & female ages	Statutory pension ages are now almost entirely equalised, with limited exceptions. However, indirect forms of discrimination against women, as outlined above, mean that effective retirement/exit ages from the last employment continue to differ. Earlier retirement ages for women are not necessarily in their favour if it reduces the pension they can accrue.



- Provision for arduous jobs & disability	There remain shortcomings in how pensions are provided for employees with disabilities for whom the length of working life will be less than the average and, hence, find it is more difficult to accrue sufficient service to provide an adequate pension. Such deficiencies also exist for workers in arduous employment, who will often be unable to continue working until the statutory retirement age.
	The lack of employment opportunities and chances to retrain too often forces workers to take early retirement on unfavourable terms, leaving them with inadequate benefits for the whole of their retirement

As well as these challenges that arise in all pension arrangements, additional challenges are specific to supplementary pension provision. Pressure for the development of supplementary pension funds (and their costs) has, in itself, been a further challenge. While social protection systems traditionally contain a wide range of risk-sharing regarding demography, longevity, inflation, periods of unemployment, etc., there has been a substantial risk-shifting in occupational and private pension systems towards individual workers.

In occupational, i.e. employer-based schemes, this has mostly taken the form of a shift from 'defined benefit' to 'defined contribution'. In other countries, where individual contracts have prevailed, it has taken the form of a shift from traditional life insurance contracts to products with very limited or no guarantee. Moreover, in addition to shifting investment risks, the longevity risk is also being shifted in many countries by replacing life-long annuity payments, with financial products foreseeing decumulation over a pre-defined period.

It is worth noting that here, in sharp contrast to the frequent questioning of the long-term sustainability of public pay-as-you-go financed pensions, the long-term sustainability of financial markets on which the functioning of private pre-funded pensions is based, is rarely called in to question. Whatever the structure of the pension system, it has to work within the same economic and social environment. So, any shift in the way in which pensions are funded, from public PAYG to funded pensions, should not be regarded as a reduction in costs. The cost of a pension system will be determined, ultimately, by the benefits that are paid, rather than by the method used to fund those benefits (Barr & Diamond, 2010).

At the same time, more attention should be directed at the market risk that is inevitably associated with pre-funded pensions and its impact on the potential range of outcomes on each individual's benefits. A system with a wide range of likely outcomes should not be judged just on the average result. The fact that a majority of other workers have average or better outcomes will be of no consolation to those who lose out.

The specific challenges observed in supplementary provision are summarised in Table 3.3.



Table 2.3 Specific Challenges in Supplementary Pension Systems			
Limited or no scope for social balancing mechanisms	Against the background of increasing labour market mobility, an increasing number of career interruptions, precarious forms of employment etc., the lack of social balancing mechanisms in most supplementary pension schemes becomes a growing problem. Furthermore, because of waiting and/or vesting periods, many mobile workers, even if formally covered by a supplementary pension scheme, do not gain adequate pension entitlements.		
Risk shifting to members	The main challenge with supplementary pension systems is the shift of risk within such schemes from the employer (and/or the provider) to the individual employee. Typically, this is achieved through a switch from DB (defined benefit) to DC (defined contribution) schemes.		
Privatisation and costs	Associated with the shift of risk to members, there have been moves to market-based provision, as opposed to collective provision, with an inevitable impact on the costs borne by members.		
Inadequate contribution levels	A challenge in DC arrangements is to have contributions set at a level that is expected to yield adequate benefits, with a fair allocation between contributions from employees and employers		
Loss of guaranteed rates of return	One element in the risk transfer that has taken place is the loss of guaranteed rates of return that were, in the past, offered by some schemes.		

3 Policies to Address the Challenges

3.1 Themes from the National Reports

Section 2 of the Report has set out the challenges to achieving the adequacy, effectiveness, and coverage of pension provision following both the ETUC's priorities for social protection and the EPSR and the Recommendation objectives. The National Reports make it clear that the extent and significance of these challenges vary from country to country. Nevertheless, based on the guidelines and recommendations presented in the National Reports, some common themes can be identified that need to be addressed at a European level, with the practical aim of also supporting trade union initiatives at the national level.

The main steps that have been identified in the course of the research that will meet the challenges that trade unions have identified in the social, labour market and economic context at the national and EU level are:

 A better understanding of sustainability and, in particular, that while expected demographic developments will require long-term changes, this is not, in itself, evidence of unsustainability;



- An integrated strategy for employment and pension policy that achieves labour market reforms that improve the quality of work; remove discrimination, and strengthen collective bargaining; and
- The identification, given the different national pension systems, of common structural and parametric factors where appropriate action can increase the provision of sustainable and adequate security in retirement.

These areas are dealt with in turn below. This report focuses on social protection, which is, of course, only part of the range of social policies that determine older generations' quality of life. As emphasised in the Introduction, this should not be taken to mean that issues such as health and social care, as well as housing, are not also highly relevant in achieving the objective of Ageing in Dignity.

3.2 A proper understanding of sustainability

Sustainability is about the ability of a society to maintain or, indeed, to improve the living conditions of the older generations. Unfortunately, as discussed in Section 2, the common understanding of sustainability in the context of expected population ageing is highly questionable. It is not just about the proportion of GDP allocated to older generations or changes in crude population ratios. As dealt with at length in Section 2, such misunderstandings are:

- The deterioration of purely demographic ratios over the next decades is not the same as the change in the ratio between workers and pensioners;
- The significant increase of older people's share among the total population or an increase of the required GDP share for the financing of future pensions is not, in itself, evidence for 'unsustainability', as it should be seen in the context of economic growth and the rate of change; and
- the shift in the cost from public PAYG to funded pensions is misinterpreted as a cost reduction, while the market risk associated with pre-funded pensions is given insufficient attention.

It is important, therefore, that trade unions press for a rethink of the concept of sustainability and the use of related indicators. Indicators are discussed in detail in Section 4, but, in summary, what is required is greater recognition of:

• Dependency ratio: The focus needs to be on dependency ratios that reflect people's economic status, rather than being based merely on groups of a given age. This is as suggested in the EC White Paper (European Commission, 2012) "pensioners and unemployed relative to people in employment". Long-term projections of this ratio, under the assumption of the implementation of a labour market strategy of 'upwards convergence', demonstrate the enormous potential of better labour market integration to contain the future increase of economic dependency and, hence, on



financial sustainability (Wöss/Astleitner/Schäfer/Stadtler/Türk/Watt, 2021) (Wöss & Türk, 2011)

GDP share for pensioners: Against the background of population ageing, intergenerational fairness inevitably requires accepting some future increase in pensioners' GDP share. Such changes are not, in themselves, evidence of unsustainability, with significant shifts having taken place without social difficulties in the past. They also need to be assessed in the context of expected economic growth and the relatively limited and hence sustainable rate of change that would be required.

3.3 An integrated strategy of employment and pension policy

An important theme throughout this Report is the inevitable connection between social protection and the labour market. Almost all financing of pensions is based on earnings through employment, be it directly via the paying of contributions or, as far as systems are financed in part or in whole by taxes, more indirectly via contributing to state revenue by paying income tax. At the same time, in most pension systems the benefits are linked in some way to the progress of the individual member's career via factors such as duration of employment, level of earnings, amount of contributions paid, etc.

The result is that providing for a higher minimum wage might be one of the most effective measures in both achieving more adequate pensions in future and providing the tax base that is needed to pay adequate pensions to current generations of pensioners.

Against the background of a decreasing number of people of working age and an increasing number of older people, the quantity and quality of jobs for those of working age will be even more critical in the coming years and decades. Fair distribution of paid work, decent earnings, good working conditions and a ban of discrimination tend to become even more important objectives in a rapidly changing world of green and digital transition. Training for new jobs also has a crucial role; offering the opportunity of employment over an entire working lifetime. These are all objectives that are important in themselves, but they are also crucially important in the achievement of pensions adequacy.

The European Commission has recognised this relationship in a number of its reports. As mentioned above, it stated as long ago as 2008 that "Raising employment levels [with quality jobs] is arguably the most effective strategy with which countries can prepare for population ageing" (European Commission, 2008). Unfortunately, despite such explicit statements, it has not been given sufficient weight in practice. For example, the White Paper definition has not been used for calculations in the Commission's flagship reports on ageing, the Ageing Report and the Pension Adequacy Report.

Labour market inadequacy is where workers lose the opportunity to build up an adequate pension in practice, even if the system provides an adequate pension in theory. The deficiencies in labour markets that lead to inadequate pensions have been explored in some detail in Section 2 of the Report. While labour market shortcomings run across the workforce,



they are illustrated most clearly by how they affect women. Existing gaps in adequacy reflect to a large extent the sharp inequalities in careers that arise on issues that affect women in particular, such as poorer distribution of paid and unpaid work, wage discrimination and the provision of social support. This is accentuated by a failure to provide adequately for periods of child-rearing.

Against this background, better data on the linkage of pensions to employment should be brought to the fore in analysis and, subsequently, in policymaking. This flows directly from the EPSR and the Recommendation. Trade unions will already be aware of what policies are needed in this area, and this Report is not the place to expound at length at what should be their priorities. However, it is worth emphasising the following labour market issues that are especially relevant to pension provision:

- Promoting labour market integration and fighting precarious and marginal employment so that pension rights are accrued throughout a career;
- Addressing the continuing gender pay gap and other forms of labour market discrimination on grounds such as race; sexual orientation, and gender identity;
- Active labour market policies that boost employment, providing the system with the resources required to pay adequate pensions and provide workers with an adequate benefit;
- Policies for training and career development, so everyone has more control over their working lives and the opportunity to work right up to their retirement; and
- Strengthening the role of trade unions in collective bargaining leads to higher pay levels and better employment conditions.

3.4 Adequacy – Issues of Structure and Parameters

The national surveys undertaken as part of the SociAll Project make it clear that without significant improvements too many pensions are now and will remain inadequate. This is also shown from the evidence presented in successive EU Pension Adequacy Reports (European Commission, 2018). There is, however, no widely adopted definition of what constitutes pensions adequacy and, as will be discussed in Section 4 of the Report, more work is required to find an approach to defining adequacy that, while reflecting the different national situations, satisfies the objective of Ageing in Dignity as set out in Section 1. This work will need to recognise that ultimately the determination of what level of pension income is regarded as adequate will be a political decision about what is seen as economically and socially acceptable.

Policies to address ineffective and inadequate pension provision, even for people who are fully integrated in the labour market, have to address two associated issues:

- Structural inadequacy: shortcomings in the structure of the pension system itself; and
- Parametric inadequacy: the parameters that determine the pension outcome, given the existing pension structure.

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These are discussed in turn.

Structural Inadequacy: Pension structures vary widely across member states and this is reflected in the situation in the twelve countries covered in the current study. As a result, structural inadequacy will be country-specific, depending on the national pension system and, hence, so will be the solutions. The Project, however, has found little pressure on the part of trade unions for any substantial change in the structure of their respective national pension systems. This does not necessarily mean that the existing structure is what the trade union in a given country would seek, given a blank sheet. It is more about what is regarded as practical to achieve politically, coupled with the wish to protect accrued rights.

The area where a pension system's structure is most subject to proposals for change is the balance between an existing state system, run on a pay-as-you-go basis, and pre-funded market-based provision. Based on the evidence in the National Report, trade unions are generally opposed to any substantial shift towards the latter because it exposes workers to excessive risk and imposes unnecessary expense. In general, supplementary schemes are seen as an addition to and not a replacement for a comprehensive system of public pensions. However, it does not necessarily follow that in countries where market-based provision already has a more significant role, that trade unions have actively sought a significant shift to more state provision.

Parametric Inadequacy: Rather than changes in the structure of pension provision, trade unions generally seek improvements in pensions adequacy through parametric change. For example, the formulae used to calculate the benefit fail to provide an adequate benefit, perhaps because a cap on the earnings taken into account when calculating benefits is set at too low a level. Another example in DC schemes is that the contributions rates need to high enough to deliver an adequate pension, given what rates of return it is practical to achieve on the underlying investments.

The relevant parameters depend on the respective pension's structure, but typically it includes:

- Retirement age, i.e. the age from which the full pension first be taken;
- The accrual rate that is applied to the earnings used to calculate benefits;
- The definition of earnings used to calculate benefits, including upper and lower limits;
- The periods of service that are used to qualify for and to calculate benefits;
- The provisions for indexing benefits, both during retirement (increases in payment) and in the period of deferment between when the benefit entitlement accrues and when it becomes payable (increases in deferment);
- The rates of contribution payable by the prospective pensioner and the employer, which is of particular importance in DC arrangements, both funded and national; and
- The deduction and bonus rules for early or late retirement.



The parameters of a pension system need to be judged as a whole, because they are inextricably interlinked. For example, a higher accrual rate could compensate for an increase in retirement age if sufficient to provide an adequate pension on early retirement.

4 Indicators and benchmarks

4.1 Introduction

This Section of the Report looks at the indicators that can be used to assess progress in achieving the objectives of trade unions in the area of social protection. It points out the shortcomings of current indicators, focusing mainly on those employed by the European Commission in the European Semester policy cycle discussions, including those arising from the EPSR and the Recommendation, and where new or additional ones should be introduced.

Throughout this Section, it needs to be kept in mind that factors that determine the distribution of economic wellbeing within a population, not least among the elderly, are complex phenomena that need to be assessed in the round. Focusing on just a handful of indicators runs the risk that it will reveal an incomplete, if not distorted, assessment, with the added risk of biasing the cross-country comparison and policy makers' capacity to identify the appropriate policy measures (Guardiancich, Iudicone, Natali, & Raitano, 2019).

In broad terms the relevant indicators are of two types.

- First, some measure the environment within which pensions are or will be provided, such as fiscal sustainability, labour market, demography, current and future productivity and economic growth. In other words, what is the size of the task for social protection and what resources are and will be available to meet the need for adequate pensions?
- Secondly, some measure the achievement of pension goals, either current or projected, such as adequacy (income replacement & poverty prevention); effective coverage; and, as a cross-cutting issue, fairness (including gender). In other words, how adequate, comprehensive and fair is current pension provision, and how will this change in future?

The key areas where there is a need for a significant improvement in the indicators is required are summarised as follows:

- Sustainability
- Demography
- Labour Market
- Adequacy

These are discussed in turn below, indicating where current indicators are insufficient or, in some cases misleading and, hence, where work is required to develop further those that are



more appropriate. A Summary of the proposed improvements is provided at the end of this section in Table 4.1.

4.2 Sustainability

Successive EU Ageing Reports have centred on financial sustainability as the key indicator used to assess a public pension system's viability. Therefore, it is important to understand there are limits to this approach. It is inevitably based on projections, rather than a definitive forecast, with different scenarios being presented without adequate assessment of their relative likelihood. Despite this uncertainty, which is inevitable given the range of potential outcomes, the baseline scenario that is presented becomes, by default, the centre of public debate and the basis for policy proposals. Therefore, it is crucial to improve both the reliability and understanding of the simulation exercise's limitations.

Neglecting the impact of population ageing when setting fiscal sustainability goals raises fundamental questions of inter-generational unfairness at the expense of today's youth. Furthermore, for assessing the justification of a certain level of pension expenditure (as a share of GDP), the quality of protection offered (effective coverage, adequacy) should also be considered.

There are further problems with an approach to an indicator of pension sustainability that only considers the proportion of GDP spent on social protection and intends to limit it by implementing 'automatic stabilising formulas. The fundamental problem is that a pension system's sustainability is at heart a political decision depending on public attitudes to the level of expenditure on pensions and the quality of the retirement offer. Neither can be contracted out to a formula that only serves to obscure the political decisions that need to be made.

There are also technical problems with assessing sustainability by just looking at the share of GDP. The ratio between the costs associated with old age and GDP is, of course, crucial in making clear the share of total resources appropriated by the elderly and is a main indicator for public budgets. But three difficulties limit its value:

- First, it needs to be recognised that the ratio is only of limited informative value about the quality of life of pension recipients, which is a crucial element of social and political sustainability;
- Secondly, the burden for public finances of the increasing costs of tax deductions in favour of private pension schemes should be included in the calculation; and
- Thirdly, to assess pension systems' impact on public budgets (and capturing countryspecific peculiarities in taxation) spending should be assessed net; rather than gross of taxes.

As outlined in Section 2, the common understanding of sustainability in the context of the anticipated population ageing is highly questionable. It fails to recognise that:

• the deterioration of purely demographic ratios over the next decades is not the same as the change in the ratio between workers and pensioners;



- given the significant increase of older people's share among the total population, an
 increase of the required GDP share for the financing of future pensions is not, in itself,
 evidence for 'unsustainability', as it needs to be seen in the context of economic
 growth and the annual rate of change;
- the shift in the cost from public PAYG to funded private pensions is frequently misinterpreted as cost reduction, while there is no evidence that companies (occupational pensions) and/or individuals (personal pensions) are able and willing to bear the increasing costs; and
- Market risks of pre-funded pensions are given insufficient attention

Given all these significant shortcomings with the present indicators, there is a need to rethink how to assess pension systems' sustainability. This should include the following specific changes:

- Change 1. The publication for all member states of net pension expenditure, in addition to gross values, (in the 2018 Ageing Report net values of the respective GDP share are not published for all Member States);
- Change 2. Life-expectancy indicators that highlight the position not just for the average, but also for population groups with a range of different socio-economic status;
- Change 3. Dependency ratios based on a realistic economic model that allows for the actual numbers of people who are in employment and those depending on income replacement benefits, as suggested in the Commission's White Paper on Pensions (European Commission, 2012);
- Change 4. A more explicit recognition of the increasing share of older people among the total population, taking account of other economic factors and the rate of adjustment that is required; and
- Change 5. The development of an Indicator that measures total pension cost (including public, occupational and private pensions).

4.3 Demography

The subject of population ageing looms large in discussions about the future of pension systems. For decades, public discussion of future challenges to pension systems has tended to focus on the impact of population ageing on the so-called "old-age dependency ratio", conventionally defined as the number of people aged 15-64 or 20-64 relative to the number of people aged 65 and over. Unfortunately, as explained in Section 2, both the current state and future shifts of the "old-age dependency ratio" are frequently misinterpreted in terms of the current state and future changes in the relationship between contributors and pensioners. Policy recommendations on coping with the ageing challenge are too often based on this misinterpretation.

Yet, the EU-Commission's 2018 Ageing Report (European Commission, 2018) discloses a tremendous difference between the purely demographic 'old-age dependency ratio' and the



ratio of contributors to pensioners, which – from the point of view of economic sustainability – is much more relevant. In 2016, the demographic ratio (based on the number aged 20 to 64 compared to those 65 and older) was 3.3:1. However, the economic ratio (i.e. contributors to pensioners) was only $1.6:1^4$.

The focusing on the (re-interpreted) demographic 'old-age dependency ratio' directs attention to determining the limit between working age and retirement age because - for any given age structure – the 'old-age dependency ratio' can be influenced by this factor alone. In sharp contrast, the focus on today's challenging social reality of the 1.6:1 ratio between workers and pensioners forces attention to existing shortcomings throughout all working-age, reflected best in low full-time equivalent employment rates. Even before the outbreak of the Coronavirus, according to Eurostat figures, full-time equivalent employment rates in the age group 20-64 were only 76.1% for men and only 58.7% for women (EU 27 / 2019 values).

Against the background of widespread misinterpretation of the 'old-age dependency ratio', the OECD in its latest 'Pensions at a Glance' edition amended the terminology. The numerical relation between the age groups 65+ and 20 to 64 is now, more correctly labelled as 'old-age to working-age ratio'. Hopefully, EU will follow and also revise the designation of this frequently quoted indicator.

Refocusing attention on the economic status of people uncovers clear evidence that there is both tremendous need and scope for improvement of labour market integration of many millions of women, youth, older workers, migrants, etc. and, as a consequence, improving the effective coverage of pension systems, adequacy of pension benefits and maintaining fiscal sustainability, despite expected demographic changes.

The analysis set out in the EC White Paper (European Commission, 2012) does address both the necessity to make a clear distinction between age and economic status of people and the scope for improving pension adequacy and fiscal sustainability by improving labour market integration. It states:

"The ageing challenge is often illustrated by the doubling of the old-age dependency ratio (population 65+ to population 15-64) from 26% in 2010 to 50% in 2050. Yet the real issue is the economic dependency ratio, defined as the unemployed and pensioners as a percentage of the employed. ... Many countries have considerable scope for improving the future adequacy and sustainability of their pension systems by raising employment rates, and this not just in the higher age groups, but also for groups with lower employment rates such as women, migrants and youths. Reaching the EU employment target or catching up with the best-performing countries could almost neutralise the effects of population ageing on the weight of pensions in GDP."

Thus, based on the economic status of people, the White Paper suggests a definition of the economic dependency ratios focusing on the beneficiaries' side both on all types of pensioners (old-age, early retirement and disability pensions) and on unemployed people,

⁴ Author's calculation based on figures from EU Ageing report, tables III.1.61 and III.1.86) (European Commission, 2018).



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thus, offering a comprehensive approach to economic dependency resulting from the need for income replacement benefits.

Given such a clear statement by the EC, it is incomprehensible that, so far, the White Paper definition of the "economic dependency ratio" has not been used the Ageing Reports and the Adequacy Reports, the Commission's key documents on pensions. The purely demographic 'old-age dependency ratio' is still presented front and central when assessing the future development of the contributors/beneficiaries ratio. In the 2021 Ageing Report (European Commission, 2020) it states "The old-age dependency ratio provides a gauge of how demographic ageing alters the beneficiary-contributor balance". Where the EC says in the Report that it is assessing "the impact of ageing on budgetary expenditure, particularly its pension component it refers to its 'economic old-age dependency ratio' defined as the 'inactive elderly population (65 and over) as a share of total employment (aged 20-64 or 20-74)'. However, this indicator excludes from the assessment both the challenging 28% share of pensioners aged below 65 (European Commission, 2018, Table III.1.80) and all 'dependent' unemployed people on the beneficiaries' side.

In addition to these fundamental errors, there are also significant shortcomings in other indicators that refer to the linkage between labour markets and pensions.

Average effective exit age: This indicator, defined as the exit from the labour force and derived from participation rates, is frequently (mis)interpreted as average effective pension age. However, as long as an older person performs paid work, there is, by definition, no exit from the labour force, even if that person is drawing pension benefits in parallel. As a significant number of pensioners perform some (marginal) part-time work for pay (in many cases to avoid old-age poverty because of a low pension payment), the "average effective exit age" from the labour market tends to be significantly higher than average effective pension age. An indicator measuring the average effective pension age, providing important supplementary information to existing data on 'statutory pensionable ages', is missing.

Disparities in life expectancy: In this context, it also has to be noted that with regard to (increasing) life expectancy, existing indicators disclosing substantial disparities along socioeconomic statuses should receive much more attention. The Report (European Commission, 2020) makes the point that "In all countries, mortality, health and the age that people die at are strongly influenced by socio-economic factors such as educational attainment, employment status and income level." Incomprehensibly, however, data on Eurostat's important indicator 'Life expectancy by age, sex and educational attainment level' is currently only available for a limited number of EU Member States.

In summary, therefore, there is a need for demographic and economic indicators that:

- Distinguish those that are based merely on age, vis-à-vis those based on the economic status of people;
- Use a more realistic definition of 'economic dependency ratio', such as 'pensioners and unemployed relative to people in employment' (European Commission, 2012);



- Show what should be termed the 'average effective pension age'; and
- Pay much more attention to the wide variation in life-expectancy for different socioeconomic groups (European Commission, 2020).

4.4 Labour market

As explained in detail in the proceeding Sections, social protection is inextricably linked to the labour market. Almost all financing of pensions is based on earnings through employment, be it directly via the paying of contributions or, as far as systems are financed in whole or in part by taxes, indirectly through a tax on earnings. In parallel, in most pension systems, both formal and effective coverage and the level of pension benefits (adequacy) are closely linked to preceding employment careers, via the duration of employment, level of earnings, amount of contributions paid, etc. Therefore, it is regrettable that the labour market statistics currently in use fail to reflect this reality.

The quantity and quality of jobs are key parameters that, in practice, determine how pension systems will deliver for both today's and tomorrow's pensioners. Appropriate indicators focussing on the close linkage of pensions to employment should, therefore, be given more weight in the analysis and, subsequently, in policymaking. In adopting this approach, it is essential to look at groups of a different economic status as a pre-condition for indicators' relevancy. The EU Commission's version 0 of the monitoring framework to the Council Recommendation on access to social protection for workers and the self-employed (European Commission, 2020) with its wide range of labour market related 'context indicators' provides some progress in this respect.

Traditionally, in the context of pensions, whenever labour market integration is addressed, reference is almost exclusively made to employment integration of older workers and the exit age from the labour market. In reality, good/bad employment integration has a significant impact throughout the working-age, concerning individual pension entitlements (coverage, adequacy) and the overall financing of pensions (financial sustainability).

Employment/Unemployment: The key labour market indicators, such as activity rate, employment rate and unemployment rate, are provided by the European Union Labour Force Survey (EU LFS) (Eurostat, 2021). Unfortunately, even where divided by sex and age groups, these data are far from accurate enough to give a precise picture of current need (and potential) for improvement. A major shortcoming is that no distinction is made between highly varying working hours (and, more generally, highly variable quality of employment) in employment rates. The classification of 'employed' comprises very different types of employment, from full to marginal part-time work from high quality to precarious jobs, etc. To be registered among "people in employment", it is sufficient that a person reports having worked for pay for at least one hour in the previous week. Based on this extensive definition, employment rates published by Eurostat, OECD, etc., comprise many millions of people performing marginal part-time work of only a few hours per week, in many cases in parallel to receiving a (small) pension or receiving unemployment benefits.



While the EU LFS definition (Eurostat, 2021) of 'employed' is extensive, its definition of 'unemployed' is very narrow. The classification of "unemployed" includes neither the 'discouraged" long-term unemployed, who are available to work but not actively searching, nor those seeking work but are not immediately available. On the other hand, even people receiving unemployment benefits are not classified as "unemployed" in the EU LFS if they perform in parallel a marginal part-time job under full respect of the unemployment insurance scheme's provisions. Given the fuzziness about whether any given individual might be in one or another group, only to consider the official unemployment rate falls short of key requirements.

Consequently, there is an enormous gap between the data on unemployment and the so-called 'labour market slack' due to the definition-based shortcomings of both the official employment and unemployment rate. According to Eurostat (Eurostat, 2021), the seasonally adjusted unemployment rate in the EU-27, in the second quarter of 2020, was 6.5%. At the same time, Eurostat's seasonally adjusted 'total labour market slack', consisting of unmet demand for labour, amounted to 14.0% of the extended labour force. As in almost all pension systems 'labour market slacks' negatively impact on pensions, both on the pension perspectives of the individuals directly affected and on the overall sustainability of the system, this is of key relevance when it comes to finding economically and socially appropriate responses to existing old-age protection deficiencies.

Duration of working life: The number of years a person works will, in most cases, have a significant impact on their pension. Currently, the overall duration is measured with the indicator 'average duration of working life'. Unfortunately, the definition of this important indicator ignores critical differences regarding the economic status of people. Periods of employment and periods of unemployment are put on the same level as 'periods of working life'. Moreover, periods in marginal part-time work are equated with other times in employment. Yet, not to make a distinction between such very different economic statuses will be significantly misleading, e.g. it overestimates current periods of actual employment and, thereby, diminishes the potential of increasing employment integration by reducing times in unemployment and evident under-employment.

In the context of pensions, the duration of individual employment relationships is also relevant. In several countries, some types of temporary employment contracts do not generate pension entitlements, as reported in the OECD's 'Pensions at a Glance' (OECD, 2019). For effective coverage of occupational pension systems, the length of job tenure is even more important because of qualifying and vesting periods.

Development of Indicators: Against this background, existing indicators, such as the full-time equivalent employment rate, need to be developed and brought to the fore. Some new indicators should also be established, such as extended unemployment rates and specified employment rates, allowing the separation of marginal part-time employment. Unfortunately, the 'persons who worked less than 10 hours' indicator used in version 0 of the monitoring framework to the 'Recommendation on access to social protection' does not fulfil this purpose, because the working time limit is set at a too low level. There is a need for

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additional indicators, divided by gender and age groups, to give a more accurate picture of the current situation and existing employment potential and, consequently, allow to set valuable labour market objectives and pension policy goals related to preceding employment careers.

More work is required, therefore, on additional indicators, including the following:

- the employment rate in full-time equivalents (this indicator already exists but is rarely used);
- employment rate excluding marginal part-time employment (e.g. only including people working more than 12 hours per week);
- 'Average duration of (more than marginal) employment' instead of the existing 'average duration of working life' indicator, which unfortunately includes both periods of unemployment and marginal part-time work);
- level and distribution of insured earnings; and
- more comprehensive and relevant assessment of unemployment, including:
 all people receiving unemployment benefits (even if there is marginal employment in parallel);
 - persons seeking a job but not immediately available for work; and
 - discouraged job seekers available for work but no longer actively seeking employment.

Coverage: The labour market also has a significant impact on pension coverage. The monitoring process on the 'Recommendation on access to social protection for workers and the self-employed' which recently started with the publication of version 0 of the monitoring framework with its look at different categories of people in employment will bring some progress in detecting existing gaps. Unfortunately, the monitoring design on formal coverage is restricted to non-standard workers and self-employed. Especially with regard to supplementary pensions, precise monitoring of coverage (including standard workers) is of key importance.

Given the nature of much of the underlying contracts (defined contribution) , the effectiveness of coverage very much depends on the level of contribution paid. Furthermore, because of wide-spread qualifying and vesting periods, effective coverage tends to be significantly lower than formal coverage - primarily at the expense of non-standard mobile workers.

The Gender Gap: Finally, it is crucial to consider, when using labour market indicators, that in almost all EU Member States, there is a considerable gender employment and wage gap, having a negative impact on coverage and pension adequacy. Figures from Eurostat (Eurostat, 2021) measuring the gender pensions gap in the EU27 showed that women received less pension than men in all member states resulting from significant inequalities in labour market integration. Women still receive significantly lower hourly wages, spend considerably less



time per week in paid employment, have many more career interruptions because of child-rearing etc., while performing most of the unpaid work.

Gender-related indicators are therefore of particular importance, such as gender specific full-time equivalent employment rates, gender employment gap and gender pay gap.

4.5 Adequacy

There is currently no single generally accepted definition of pension adequacy. Unlike the definition of poverty, where there is something like general agreement, few countries define what constitutes an adequate pension. The EPSR refers to pension adequacy in article 12 and 15, but does not provide a clear definition. The Recommendation goes a bit further to say that schemes should "provide an adequate level of protection to their members in timely manner and in line with national circumstances, maintaining a decent standard of living and providing appropriate income replacement, while always preventing those members from falling into poverty" (European Commission, 2019). However, this still falls short of a satisfactory definition from a trade union perspective.

The EC 2018 Pension Adequacy Report (European Commission, 2018) does discuss three dimensions of pension adequacy, that are stated to be poverty protection; income maintenance; and pension duration. However, it does not provide a clear statement of what level of pension is considered to be adequate on any of these dimensions. Despite the Report's title, it effectively leaves the reader to form their own judgement on adequacy, from the information it provides. Such an approach might be inevitable as far as the EC is concerned, given the contrary political pressures it faces. However, for trade unions, a more specific target for what counts as adequate pension provision would clearly be of value.

Therefore, as a matter of priority, more work is required to find a working definition of adequacy that, while reflecting the different national situations, satisfies the trade union objective of "Ageing in Dignity" (which apart from good pensions also requires affordable high-quality health care and long-term care).

Despite the lack of clarity of a precise target for adequacy, there is support for the following broad principles for a definition of pension adequacy (building on the Recommendation's goals of "maintaining a decent standard of living and providing appropriate income replacement, while always preventing ... from falling into poverty"):

- It should be sufficient to offer pensioners the opportunity of full and active participation in society, which must always mean something more than just the alleviation of poverty;
- It will have some relationship to the individual's income received while at work, to allow at least average wage earners to maintain their general standard of living while at work into retirement:
- It should allow for the cost of health and social long-term care, in cases where this is borne by the individual; and



• It will need to reflect national characteristics such as regarding housing costs and forms of tenure.

Ultimately, the indicators used to assess adequacy should enable judgements to be made about whether current and prospective pensions are acceptable, which will always be a political decision rather than a matter of statistics.

Given their role in assessing the adequacy of a pension system, now and in the future, it is unfortunate that the indicators that are commonly in use have significant shortcomings and, hence, should be improved or replaced. The following are considered in turn below:

- Aggregate replacement ratio (ARR);
- Average replacement rate;
- Benefit ratio; and
- Theoretical Replacement Rate.

Also, there is a need for a new indicator to cover the increasingly problematic issue of how risk is distributed between the various parties involved in providing pensions, i.e. members; employers; pension providers and government. Furthermore, with regard to pre-funded defined contribution schemes an indication of the potential range of outcomes and their likelihood is required as much as a figure for the average outcome.

Aggregate Replacement Ratio (ARR): The ARR, as defined in the Pension Adequacy Report (European Commission, 2018), is the ratio of (i) the median individual gross pension income of people aged 65-74 to (ii) the median individual gross earnings of people aged 50-59. According to the Pension Adequacy Report, it "... aims to capture the income difference between late-career and the early years of retirement." While this provides useful information on pensioners' (relative) income situation, there is scope for improvement by including, for example:

- Both the actual amounts of pension income underlying the ratios and their composition (i.e. public, occupational, personal pension);
- Ratios based on net as well as gross, as provided for 'theoretical replacements rates';
 and
- The ratio for earners at the highest and the lowest quintiles of pensions/earnings should also be monitored

Average Replacement Rate: This indicator was introduced in the 2018 Pension Adequacy Report's Annex as "provisional" (European Commission, 2018), and represents an attempt to calculate the average replacement rate based on actual administrative data that takes into account differences in career lengths, wages and retirement age, among other things. It could be a key indicator of adequacy, based on comparing the initial gross and net pension income) with average gross and net earnings before retirement. As proposed for the ARR, transparency and detailed information would be valuable (display of amounts of pensions and



earnings; gross and net values; highest and lowest quintile; division by gender; specific attention to gender gaps).

Benefit Ratio (BR): The BR is defined as "... the average pension benefit (including all its components, i.e. contributory and non-contributory) divided by an economy-wide average wage, as calculated by the Commission." (European Commission, 2020) Despite the fact that it is of crucial importance for the projection of pension cost ("crucial to analyse and understand the projection results" / European Commission, 2020) neither the current levels of the average pensions and wages nor the projected future levels and the method (and basic data used) of their calculation are published.

More transparency mainly is needed with regard to the pensions that are taken into account. Only old-age pensions or survivors' pensions too? Only private sector pensions or civil servants' pensions too? Disability pensions? Partial pensions?

Theoretical Replacement Rate (TRR): TRR calculations drawn up both by EU and OECD (European Commission, 2018; OECD, 2019) represent simple simulations of the pension expected for some hypothetical individuals, assuming a given career length, earnings level and age of retirement. They are expressed as a percentage of pre-retirement earnings. Appendix 5 provides figures from the OECD (OECD, 2019) that illustrate base case results for most of the countries included in the Project.

TRRs can provide some useful information, but there are dangers in assuming they provide more than what is an inevitably limited set of examples. First, TRR only compares the initial pension with the final wage, without pointing out whether that pension (or the wage it replaces) is enough to achieve a proper living standard throughout retirement. TRRs should be associated with indicators measuring, for current and future pensioners, the ratio between the pension and a monetary threshold considered a proxy of an adequate economic condition (Guardiancich, Iudicone, Natali, & Raitano, 2019).

Secondly, the impact on the TRR of increases in statutory retirement ages should be disclosed to provide valuable information (and allow a certain comparability level between countries). For example, to calculate the base case, the estimated country-specific pension ages at the target year should be kept within a specific limit, not exceeding 67. For countries with a higher 'standard pensionable age' (i.e. "the earliest age at which people can retire … without incurring any penalties") (European Commission, 2018), the TRR-rate should be calculated considering the penalties deducted if retiring earlier. Presenting TRR-calculations for pension ages ranging up to the age 74, as in OECD 2019 'Pensions at a Glance' edition for Denmark, without disclosing much lower TRR's for those who will have to retire much earlier, is fundamentally misleading with regard to the real retirement-income perspectives of today's youth in countries where legislation is foreseeing a drastic increase of the statutory retirement age, be it via direct decision in Parliament or through linking the statutory retirement age to increasing life-expectancy.

Thirdly, while the TRR is more valid as an indicator in earnings-related systems where the link between wages and pensions is clear, it is of less value where this link is not established, for



example, in defined contribution arrangements, either market based or notional. Concerning pre-funded (defined contribution) components of pension income, alternative variants of the rate of return assumptions (real / after costs) should be calculated and made public, for example, one more optimistic (3%) and one more pessimistic (1%) variant relative to the current 2% assumption of the Commission (European Commission, 2020. Thereby, future retirees and policymakers would receive valuable information regarding the impact of financial market developments on future pension-income from pre-funded DC schemes.

Finally, when the TRR is quoted in key EU Commission documents, including Pension Adequacy Report, it should follow OECD standards (OECD, 2019). This means that it should show both gross and net values and the components (public, occupational, private pension).

Distribution of outcomes and risk. The quality of old-age protection systems depends significantly on the potential range of outcomes, both within and between generations, rather than just the average. Since the 1990s, many pension reforms have shifted more risk to individuals, rather than the state, pension providers or employers, mainly by moving from 'defined benefit' to 'defined contribution' in pre-funded pension schemes. An average figure is of only limited value, given that it is no comfort to those who end up with lower benefits to know that there are others with an average or higher pension. This means that there should be an indicator of the relative risk of getting less than the projected pension and of the potential range of outcomes, over time.

The relative risk might be indicated through the greater use, at the EU level, of dynamic microsimulation models that define over time the evolution of a given population and its income distribution, including the trend for workers characterized by various careers. National Governments are increasingly making use of these types of models, which, given some assumptions, mean it is possible to assess a range of scenarios for the evolution over time of inequality and poverty among the elderly (Guardiancich, Judicone, Natali, & Raitano, 2019).

4.6 Summary of Proposals for Indicators and Benchmarks

The proposals for the development of indicators that are outlined in this Section are summarised in Table 4.1.

Table 4.1. Development of Indicators

Sustainability

- When setting future goals of financial sustainability (share of GDP), the changing age structure of the population must be taken into account. Not to consider populationageing puts in question inter-generational fairness at the expense of today's youth.
- For assessing the justification of a certain GDP share of pension expenditure, the quality of protection offered (level of income replacement, protection against poverty) also has to be taken into account.
- When assessing the development of 'dependency ratios' as an indicator of sustainability, a clear distinction should be made between purely demographic figures



- and much more relevant economic dependency ratios as suggested by the definition in the EU White Paper on Pensions (European Commission, 2012).
- By improving the recognition of employment integration (quantity and quality of jobs) of those of working age the future increase in economic dependency could be substantially alleviated, with a positive impact on financial sustainability.
- As long-term pension expenditure calculations are inevitably based on projections, it is crucial to improve both the reliability, the transparency and the understanding of the simulation exercise and its limitations.
- As a result of productivity growth, economic forecasts predict that GDP will substantially increase in the coming decades. Thus, even if a higher share of GDP is allocated to the increasing share of older people, the increase in income per head will be more than enough to allow everyone, whether at work or in retirement, to be better off.
- Cost shifting from public PAYG provision to funded private provision must not be misinterpreted as a cost reduction, an overall indicator of total public, occupational and personal pension cost is required.

Demography

- Purely demographic ratios should not be misinterpreted as equivalent to the economic dependency ratios. Following OECD (Pensions at a Glance, 2019) the EU should rename the relation between the age groups 65+ and 20 to 64 as 'old-age to working-age ratio' instead of 'old-age dependency ratio'.
- More attention needs to be paid to existing indicators on life-expectancy disparities depending on the socio-economic status of people.

Labour Market

- More attention is needed for full-time equivalent employment rates, gender employment and wage gaps, and job quality indicators.
- Complementary new employment and unemployment indicators are needed for (i) an employment rate where employment is more than marginal, e.g. exceeding 12 hours per week and (ii) a broader unemployment rate, including jobless people classified as 'discouraged' or 'not immediately available'.
- A new indicator is needed to measure the 'average duration of actual employment' that, in contrast to the existing 'average duration of working life' indicator, should not include periods of unemployment and only marginal employment.
- A new indicator is needed for measuring the average exit age of workers from last, more than marginal, employment

Adequacy

- While reflecting the various national situations, there is a need for a working definition pension adequacy satisfying the EPSR and trade union objective of 'Ageing in dignity' (including access to high-quality health-care and long-term care)
- The informative value of the existing indicator 'Aggregate Replacement Ratio' should be improved by disclosing underlying data, including disaggregation of the pension income (share of public, occupational, personal pension).
- The existing indicator 'Theoretical Replacement Rate' should be improved and made more comparable across EU Member States by adding calculations based on similar



(reasonable) retirement age assumptions. Furthermore, the initial pension income and the course of pension income during retirement should be illustrated. For pension income from defined contribution schemes without guarantees, the impact of different investment return rates should be disclosed.

- Broader monitoring needed to measure formal and effective coverage (for both public and occupational pension schemes). Beyond what is already included in the EU Commission's version 0 of the monitoring framework to the 'Recommendation on access to social protection for workers and the self-employed' coverage of 'standard workers' and the unemployed has to part of the monitoring process.
- In the context of widespread shifting from defined benefit to defined contribution, there is a need for an indicator of the relative risk of getting less than the projected pension and the potential range of outcomes.
- Regarding retirement age, an indicator measuring the average effective pension age is needed, relating to the date of the drawing of the old-age or early retirement pension.

5 Trade Unions and Pensions Policy

This final Section of the Report suggests an approach for trade unions seeking to promote adequate and sustainable social protection at the European level, following the EPSR and the Recommendation's objectives. This is in the political and economic environment set by NextGenerationEU, the EU's proposals for recovery following the Covid-19 pandemic (European Commission, 2020). The aim is to provide practical support for a knowledge-based approach for trade unions to contribute to the determination of policies by the EU, by member states and by other actors. The central feature is to establish an effective input by trade unions to the European Semester and EU policymaking, based on a trade union approach to benchmarking on pensions.

The European Semester has become the main arena for economic and social policy coordination among the Member States (Guardiancich, Iudicone, Natali, & Raitano, 2019). The Semester brings together various EU governance instruments with different legal bases: The Stability and Growth Pact (SGP); the Macroeconomic Imbalance Procedure (MIP); the Integrated Economic and Employment Guidelines; and Euro Area Recommendations [2020 targets may be replaced with new targets in the EPSR AP]. Within this structure, the Commission, the Council of the EU and the European Council, on annual basis, set priorities for the Union; review national performance, budgets and reform programmes; produce Country Reports (CRs); and issue Country-Specific Recommendations (CSRs). The Semester was explicitly designed to have a more robust social dimension than the preceding Lisbon Strategy, including specific guidelines and targets on poverty and social inclusion (Verdun & Zeitlin, 2018).

With the COVID-19 pandemic, there is a new situation within which the Semester process must now operate. The SGP has been partially suspended and, in parallel, the Semester cycle for the part concerning the coordination of economic and social reforms is now dedicated also to the implementation of national plans under the recovery and Resilience Facility. This



means a new design that may change the role and timing of CRs, CSRs and, consequently, the continued application of those published in May 2020. The EC has set out strategic guidance for implementing the Recovery and Resilience Facility in its 2021 Annual Sustainable Growth Strategy (ASGS) (European Commission, 2021). The Facility is the key recovery instrument at the heart of NextGenerationEU, which is intended to ensure that the EU will emerge stronger and more resilient from the current crisis. The EC has said it believes that by shedding light on long-standing weaknesses of social protection systems, the pandemic crisis is a catalyst for extending social protection to previously uncovered groups.

The publication of the ASGS launched this year's European Semester cycle. In last year's ASGS, the Commission launched a new growth strategy based on the European Green Deal and the concept of competitive sustainability. This year's ASGS continues the previous year's approach, with its four dimensions of environmental sustainability, productivity, fairness, and macroeconomic stability, adapting the strategy to the unfortunate consequences of the pandemic crisis on the EU economy, on employment and social protection systems. These four remain the guiding principles underpinning Member States' recovery and resilience plans and their national reforms and investments. They are intended to ensure that the new growth agenda helps to build foundations for a green, digital and sustainable recovery.

Trade unions clearly have an important role in policymaking within this structure, along with other social partners. They can be influential, given the size of their membership, their role in collective bargaining, and their capacity for social mobilisation. In some cases, they have a formal role in social protection governance, or informal influence through their political role, including links with political parties. They also have the operational resources needed to develop effective inputs to the policy-making process (Ebbinghaus, 2017).

Unfortunately, the move to retrenchment in social protection in recent years has seen a lessening of trade unions' capacity to influence policymaking. Trade unions are naturally predisposed to the improvement in social protection, and it will be easier for them to have an impact on the process when the trend is to improve provision. When governments are actively seeking to reduce provision, it will become more evident that collaboration and consultation only go so far, where the government will still have ultimate responsibility for defining any package of pension reform.

Also, the trend towards more personal provision, as opposed to collective, has had a two-fold effect. First, trade unions have generally found it more difficult to establish a clear role in this area of provision, making their involvement more difficult. Secondly, it has introduced other commercially driven actors to the policy mix that can deploy even more substantial resources to influencing policy outcomes.

So, trade unions need to recognise the challenges they face in having an effective influence on pension policies, particularly at the EU level. As indicated earlier in this Report, they centre principally on the following:



- The persistence imbalance and even, to some extent, contradiction between the EU's
 economic and social objectives, in terms of both the way they are established and how
 they are implemented;
- The need to develop a more effective and broadly accepted concept of adequacy, when applied to pension provision;
- The global context within which pension policy is developed, within both international organisations and financial markets, with all-pervading but misleading ideas of demographic change and what counts as sustainable; and
- The growing involvement of actors with a commercial or ideological interest in the active promotion of funded pensions, despite the absence of evidence that they provide an answer to the challenges that are faced.

Despite these challenges, trade unions still need to play their role. This should include the following further work:

- Clearly define and promote the definition of "sustainability", that takes complete account of social as well as economic objectives;
- Develop and promote a clear statement of the objective of "Ageing in Dignity";
- Develop the working definition of "adequacy" and identify pension designs that ensure such standards;
- Work on the development of more meaningful indicators that monitor provision in crucial areas, as summarised in Table 4.1; and
- Engage with Action Plan implementing the EPSR to rebalance social and economic objectives of the EU semester, meeting targets, using these indicators, continue to monitor the implementation of the EPSR; the Recommendation; CSRs; and a reinforced social scoreboard for evidence of the impact of EPSR vis-à-vis economic governance.

It will be particularly important to undertake the systematic monitoring of the CSRs that emerge from the Semester that impact on pensions policies, while bearing in mind the inadequacies of CSRs set out in Section 1. These include the priority given to economic as opposed to social objectives when setting and monitoring their implementation.



Appendices

	Old-age pension			Private Pensions		Statutory				
	Туре	Earnings	Indexation	Occupation al	Individual	2019	2050	Automatic mechanism	adjus	tment
Belgium (BE)	DB/ER	Full career	Prices & living standard	M private V self-	V	65	67	None		
Bulgaria (BU)	DB/ER	Full career	Prices & wages	V	M/V	64.2M/ 61.3F	65	None		
Germany (DE)	DB/ER	Full career	Wages and sustainability	Voluntary	V	65.7	67	Automatic mechanism	bala	ancing
Spain (ES)	DB/ER	Last 25 years	Index for pension	V	V	65.7	67	Benefit lin expectancy	< to	life
France (FR)	DB + PS/ER	Full career	Prices	V	V	66.8	67	Benefit lin expectancy	< to	life
Croatia (HR)	PS/ER	Full career	Prices & wages	None	М	65M/ 62.3F	65	None		
Italy (IT)	NDC/ER	Full career	Prices	V	V	67	69.3	Benefit lin expectancy	< to	life
Latvia (LV)	NDC/ER	Full career	Prices & wage sum	None	V	63.5	65	Benefit lin expectancy	< to	life
Austria (AT)	DB/ER	Full career	Prices & wages	M	V	65M/ 60F	65	None		
Poland (PO)	NDC/ER	Full career	NDC 1 st : Wages NDC 2 nd : GDP	V	V	65M/ 60F	65M/ 60F	Benefit lin expectancy	< to	life
Romania (RO)	PS/ER	Full	Prices & wages	None	М	65M/ 61.2F	63	None		
Sweden (SE)	NDC/ER	Full	Wages	Quasi M	V	67	67	Benefit lin expectancy/		life matic

DB: Defined benefit system NDC: Notional defined contribution system PS: Points system ER: Earnings related

V: Voluntary M: Mandatory

Appendix 2. Gross Public Pension Expenditure Projections (% of GDP)								
	2016	2040	2070	2070/2016				
EU 27	11.9	12.7	11.4	- 0.5 p.p.				
Italy	15.6	18.7	13.9	- 1.7 p.p.				
France	15.0	15.1	11.8	- 3.3 p.p.				
Austria	13.8	14.9	14.3	+ 0.5 p.p.				
Spain	12.2	13.9	10.7	- 1.5 p.p.				
Belgium	12.1	14.5	15.0	+ 2.9 p.p.				
Poland	11.2	10.8	10.2	- 1.0 p.p.				
Croatia	10.6	8.3	6.8	- 3.8 p.p.				
Germany	10.1	12.0	12.5	+ 2.4 p.p.				
Bulgaria	9.6	9.8	10.9	+ 1.4 p.p.				
Sweden	8.2	6.8	7.0	- 1.2 p.p.				
Romania	8.0	7.7	8.7	+ 0.7 p.p.				
Latvia	7.4	6.3	4.7	- 2.6 p.p.				
2016 – 2070 (EU 0	Commission, The 2	018 Ageing Repo	rt)	•				

Appendix 3. Der	nographic and		- Current & Fore			I	I	
		Population		Support Ratio	Employment	GDP Index	Expectation	of Life at age 65
	Year	Total (millions)	Old-Age Dependency Ratio	- contributors per 100 pensioners	rate age 20 to 64	2070 (2019 = 100	Male	Female
Belgium (BE)	2019	11.5	307.7	164.9	70.6	184	79.8	84.3
	2070	11.8	187.6	128.4	70.9		86.3	90.3
Bulgaria (BU)	2019	7.0	277.8	126.8	75.2	184	71.5	78.8
	2070	5.0	164.5	107.9	73.5		82.9	87.7
Germany	2019	83.1	277.0	157.1	80.6	184	79.1	83.7
(DE)	2070	81.7	183.2	103.7	80.7		86.0	89.9
Spain (ES)	2019	47.1	311.5	195.3	68.1	203	81.2	86.8
,	2070	47.0	160.0	149.0	76.2		87.1	91.4
France (FR)	2019	67.1	274.0	137.1	71.6	193	80.1	86.3
	2070	69.4	175.7	124.6	74.5		86.7	91.4
Croatia (HR)	2019	4.1	287.4	117.8	66.8	175	75.3	81.6
	2070	3.0	154.8	104.0	69.6		84.3	88.8
Italy (IT)	2019	60.3	257.1	155.1	63.6	166	81.3	85.7
	2070	53.9	152.4	139.1	69.8		87.0	90.9
Latvia (LV)	2019	1.9	289.0	168.7	77.6	184	70.6	80.2
	2070	1.2	157.2	123.7	77.4		82.6	88.5
Austria (AT)	2019	8.9	325.7	166.2	76.8	193	79.8	84.3
•	2070	9.2	178.9	116.3	79.5		86.3	90.2
Poland (PO)	2019	38.0	344.8	179.0	73.3	214	74.1	82.0
	2070	30.8	147.5	91.1	72.1		84.3	89.5
Romania	2019	19.3	321.5	108.5	71.0	236	71.9	79.5
(RO)	2070	13.7	161.0	88.3	72.7		83.5	88.5
Sweden (SE)	2019	10.3	284.1	230.4	82.1	248	81.4	84.7
	2070	13.1	200.8	151.6	83.0		86.8	90.3
EU27	2019	447.2	290.7	159.0	73.1	193	78.7	84.2
	2070	424.0	168.9	122.6	76.2		86.1	90.3

Source: 2021 Ageing Report (European Commission, 2020) and 2018 Pension Adequacy Report, Vol 1 (European Commission, 2018)

Old Age Dependency Ratio calculated from Table 1: Population age 20-64/100 population 65 and older

Support Ratio from Table III.1.86: contributors per 100 pensioners, Public pensions - figures for 2016 & 2070

Gross Public Pension Expenditure - figures for 2016 & 2070

Appendix 4: Labour Market Indicators										
	Employment Rate (Age 20-64) %				Employment rate (Age 55-64) %			Full-time Equivalent Employment Rate (Age 20-64) %		
	Total	Male	Female	gender gap	Male	Female	gender gap	Male	Female	gender gap
Belgium	70.6	74.6	66.6	8.0 p.p.	57.6	47.3	10.3 p.p.	71.4	57.1	14.3 p.p.
Bulgaria	75.2	79.4	70.8	8.6 p.p.	69.3	60.0	9.3 p.p.	78.4	69.9	8.5 p.p.
Germany	80.6	84.6	76.5	8.1 p.p.	77.0	68.3	8.7 p.p.	80.3	59.9	20.4 p.p.
Spain	68.1	74.0	62.2	11.8 p.p.	61.1	47.0	14.1 p.p.	71.7	55.6	16.1 p.p.
France	71.6	75.2	68.1	7.1 p.p.	55.3	50.9	4.4 p.p.	72.9	61.1	11.8 p.p.
Croatia	66.8	72.2	61.5	10.7 p.p.	53.2	36.0	17.2 p.p.	71.0	59.7	11.3 p.p.
Italy	63.6	73.3	53.8	19.5 p.p.	64.8	44.6	20.2 p.p.	70.7	46.5	24.2 p.p.
Latvia	77.6	79.4	75.9	3.5 p.p.	67.6	67.7	- 0.1 p.p.	77.4	72.1	2.3 p.p.
Austria	76.8	81.2	72.4	8.8 p.p.	63.4	46.0	17.4 p.p.	77.6	57.4	20.2 p.p.
Poland	73.3	81.0	65.5	15.5 p.p.	61.4	39.4	22.0 p.p.	79.5	62.8	16.7 p.p.
Romania	71.0	80.5	61.3	19.2 p.p.	60.3	36.5	23.8 p.p.	78.8	59.7	19.1 p.p.
Sweden	82.1	84.5	79.7	4.8 p.p.	80.0	75.8	4.2 p.p.	81.0	72.7	8.3 p.p.
EU 27	73.1	78.9	67.2	11.7 p.p.	66.1	52.6	13.5 p.p.	76.1	58.7	17.4 p.p.
best / worst performer	82.1 – 63.6 18.5 p.p.	84.6 – 72.2 12.4 p.p.	79.7 – 53.8 16.1 p.p.		80.0 – 53.2 26.8 p.p.	75.8 – 36.0 39.8 p.p.		81.0 – 70.7 10.3 p.p.	72.7 – 46.5 26.2 p.p.	

Eurostat

Appendix 5	Appendix 5. Projected Theoretical Replacement Rates (TRR)										
	Pension age	Career length (years)	Gross replacement rate mandatory public	Gross replacement rate mandatory* private	Gross replacement rate voluntary** private	Net replacement rate mandatory schemes	Net replacement rate mandatory + voluntary				
Italy	71	49	79.5			91.8	91.8				
Austria	65	43	76.5			89.9	89.9				
Spain	65	43	72.3			83.4	83.4				
France	66	44	60.1			73.6	73.6				
Belgium	67	45	46.8		14.2	66.2	72.4				
Latvia	65	43	44.6			54.3	54.3				
Sweden	65	43	41.6	12.5		53.4	53.4				
Germany	67	45	38.7		13.5	51.9	68.0				
Poland***	65	43	29.4			35.1	35.1				

Source: OECD, Pensions at a Glance 2016, Tables 51, 5.3, 5.6

No figures provided by the OECD for Bulgaria, Croatia and Romania

Key assumptions (base case):

Labour market entry in 2018 at age 22

Full career constantly at average earnings (real earnings are assumed to grow by 1.25% p.a.)

Retirement at national legal retirement age

(For pre-funded schemes) Average real rate of investment return: 3% p.a.

The calculations refer to the main national scheme for private-sector employees.

- * OECD classifies schemes with at least 85% coverage rate as (quasi)mandatory
- ** OECD considers voluntary private schemes with more than 40% coverage rate
- *** Value for men (for women retirement age is 60, replacement rates are lower)

Bibliography

- Barr, N., & Diamond, P. (2010). Pension Reform; A Short Guide. Oxford: Oxford University Press.
- Davis, A., Hirsch, D., Padley, M., & Shepherd, C. (2020, July 8). *A Minimum Income Standard for the United Kingdom in 2020*. Retrieved from Josef Rowntree Foundation:

 file:///C:/Users/brinl/AppData/Local/Temp/a_minimum_income_standard_for_the_united_kingdom_in_2020_-_report.pdf
- Ebbinghaus, B. (2017). The role of trade unions in pension policymaking and private pension governance in Europe. In P. Lang, *The New Pension Mix in Europe: Recent Reforms, theit Distributional Effects and Political Dynamics*. Brussels: PIE.
- ETUC. (2019, April 4). *ETUC Action on access to social protection (Resolution)*. Retrieved from ETUC: https://www.etuc.org/en/document/etuc-action-access-social-protection-resolution
- ETUC. (2019, July 4). *ETUC Action Programme 2019-2023*. Retrieved from ETUC: https://www.etuc.org/sites/default/files/publication/file/2019-08/CES-14e%20Congre%CC%80s-Action%20Programme-UK-02.pdf
- ETUC. (2021, February 24). *Economic Governance / European Semester* . Retrieved from ETUC: https://www.etuc.org/en/issue/economic-governance-european-semester
- European Commission. (2008). *Demography Report 2008: Meeting Social Needs in an Ageing Society.*Brussels: European Commission.
- European Commission. (2010, July 7). *EU launches public debate on the future of pensions*. Retrieved from European Commission: https://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=839
- European Commission. (2012). White Paper: An Agenda for Adequate, Safe and Sustainable Pensions. Brussels: European Commission. Retrieved from European Commission: https://www.esn-eu.org/news/agenda-adequate-safe-and-sustainable-pensions
- European Commission. (2015, May 5). *Graph of the week: Ageing report*. Retrieved from European Commission: https://ec.europa.eu/economy_finance/graphs/2015-05-12_ageing_report_en.htm
- European Commission. (2015). *The 2015 Ageing Report: Economic and Budgetary projections for the 28 EU Member States (2013-2060)*. Brussels: European Commission.
- European Commission. (2017). European Pillar of Social Rights. Retrieved from European Commission: https://ec.europa.eu/info/european-pillar-social-rights_en
- European Commission. (2018). *The 2018 Ageing Report: Economic & Budgetary Projections for the 28 EU Member States (2016-2070).* Brussels: European Commission.
- European Commission. (2018). The 2018 Pension Adequacy Report: current and future income adequacy in old age in the EU, Volume 1. Brussels: European Commission.

- European Commission. (2019, November 11). Council Recommendation on access to social protection. Retrieved from European Commission:

 https://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=9478&furtherNews=yes
- European Commission. (2019, September 12). *Social Scoreboard*. Retrieved from European Commission: https://composite-indicators.jrc.ec.europa.eu/social-scoreboard/
- European Commission. (2020, December). *Monitoring framework on Access to social protection for workers and the self-employed Version 0*. Retrieved from European Commission: https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8358&furtherPubs=yes
- European Commission. (2020, September 17). NextGenerationEU: Commission presents next steps for €672.5 billion Recovery and Resilience Facility in 2021 Annual Sustainable Growth Strategy. Retrieved from European Commission:

 https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1658
- European Commission. (2020). *The 2021 Ageing Report: Underlying Assumptions & Projection Methodologies*. Luxembourg: European Commission.
- European Commission. (2021, February 24). *Annual Sustainable Growth Strategy 2021*. Retrieved from European Commission: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0575&from=en
- European Commission. (2021, November 2020). *Demographic change in Europe green paper on ageing*. Retrieved from European Commission: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12722-Demographic-change-in-Europe-green-paper-on-ageing_en
- European Commission. (2021, February 22). *EU Economic governance: monitoring, prevention, correction*. Retrieved from European Commission: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction_en
- European Union Agency for Fundamental Rights. (2018). Fundamental Rights Report 2018.
- Eurostat. (2021, February 2). *Closing the gender pension gap?* Retrieved from Eurostat: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210203-1
- Eurostat. (2021). European Union Labour Force Survey. Retrieved from Eurostat: https://ec.europa.eu/eurostat/statistics-explained/index.php/EU_labour_force_survey_%E2%80%93_data_and_publication
- Eurostat. (2021). Glossary:Employed person LFS Statistics Explained. Retrieved from Eurostat: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Employed_person_-_LFS
- Guardiancich, I., Iudicone, F., Natali, D., & Raitano, M. (2019). European challenges for pension adequacy: Background Paper. Brussels: ETUC.
- Harasty, C., & Ostermeier, M. (2020). *Population Ageing: Alternative measures of dependency and implications for the future of work.* Geneva: ILO.

- Mackenbach, P. D., Meerding, D. W., & Kuns, D. A. (2007, July). Economic implications of socioeconomic inequalities in health in the European Union. Retrieved from European
 Commission:
 https://ec.europa.eu/health/ph_determinants/socio_economics/documents/socioeco_ineq
 ualities_en.pdf
- Marmot, S. (2013, December). Health inequalities in the EU Final report of a consortium.

 Consortium lead: Sir Michael Marmot. Retrieved from European Commission:

 https://ec.europa.eu/health//sites/health/files/social_determinants/docs/healthinequalities ineu_2013_en.pdf
- OECD. (2019). Health at a Glance 2019: OECD Indicators. Paris: OECD Publishing.
- OECD. (2019). Pensiond at a Glance 2019, OECD and G20 Indicators. Paris: OECD.
- Sabato, S., Corti, F., Spasova, S., & Vanhercke, B. (2019). *Integrating the European Pillar of Social Rights into the roadmap for deepening Europe's Economic and Monetary Union*. Brussels: European Economic and Social Committee.
- Verdun, A., & Zeitlin, J. (2018). Introduction: the European Semester as a new architecture of EU socioeconomic governance in theory and practice. *Journal of European Public Policy*,, 137-148.
- Wöss, J., & Türk, E. (2011). Dependency ratios and demographic change: The labour market as a key element. Brussels: ETUI.