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GULBENKIAN – POLICY ANALYSIS PROJECT – EVALUATING INTERGENERATIONAL FAIRNESS IN THE PORTUGUESE PENSION SYSTEM: BLOCO DE ESQUERDA CASE – ASSESSMENT AND SCENARIOS STAGES

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Abstract

The sustainability of Social Security has been widely discussed in academia. Building on the conclusions from that discussion, this paper adds the topic of intergenerational fairness, indivisible from financial sustainability and evaluates the intergenerational fairness of two pension system proposals made by *Iniciativa Liberal* and *Bloco de Esquerda* using the Framework for Intergenerational Fairness, developed by the Calouste Gulbenkian Foundation in Partnership with the School of International Futures, focusing on the assessment and scenarios stages. It concludes that both proposals, despite being substantially different, are probably intergenerationally fair and provides remarks on each policy and recommendations for the framework.

Keywords

Social Security; Pension System; Political Economy; Policy Analysis; Intergenerational Fairness

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Abbreviations

BE – Bloco de Esquerda

DB – Defined benefit

DC – Defined Contribution

EU – European Union

FDC – Funded Defined Contribution

FEFSS – Fundo de Establização Fincanceira da Segurança Social

GDP – Gross Domestic Product

IL – Iniciativa Liberal

INE – Istituto Nacional de Estatística

NDC - Notional Defined Contribution

PAYG – Pay-as-you-go

SS – Social Security

TSU – Taxa Social Única (Single Social Tax)

UN – United Nations

CSI – Complemento Solidário para Idosos

Introduction

The Financial sustainability of pension systems has become a central and increasingly relevant topic, particularly in European countries, given the aging process of their populations, requiring policymakers to face this reality and introduce reforms aimed at reversing this trend. Portugal is no exception. The pension system´s sustainability is indivisible from intergenerational fairness issues as a long-term fiscally imbalanced pension system can lead to lower pension replacement rates for the present working population.

The Framework for Intergenerational Fairness, developed by the *Calouste Gulbenkian Foundation* in partnership with the School of International Futures is applied to assess the intergenerational fairness of two distinct pension system reforms proposed by two Portuguese political parties which are opposing forces in the political spectrum: *Bloco de Esquerda* and *Iniciativa Liberal*. The application of the methodology allows for the following research question to be answered: Are the pension system reforms proposed by *Bloco de Esquerda* and *Iniciativa Liberal* intergenerationally fair?

This analysis adds up to the existing literature by analyzing policies that have not yet reached the implementation stage in the policy-making cycle, contributing to better informing these proposals regarding how they might perform in intergenerational fairness terms between current and future generations. It also contributes to building up on the array of policies the methodology that has already been applied, most notably the 2007 Portuguese pension system reform. Additionally, given that only legislative proposals were assessed, the analysis conducted in this report went beyond the application of the methodology and provides future paths to be followed for a successful implementation of the proposal.

One thing we would like the reader to keep in mind is that, due to the structure of the Framework we used to analyze each proposal, we ended up reaching, in some domains, similar assessments, as the questions asked are identical and even though the proposals might be different and offer different solutions, the assessment of the issues the pension system faces is sometimes similar in both analyses.

This report is structured as follows: Section one begins with an introduction to the issue of intergenerational fairness and its definition. Section two provides a review of social security theory, namely on the public PAYG system, notionally defined contributions, and characterization of the trend in pension system reforms in other countries over the last decades. Section three does an extensive review of the chapter 7 of the World Bank's *Adverting the Old Age Crisis*, presenting the multipillar system and the reference features of a pension system. Section four describes the main features of the 2007 pension system reform in Portugal. Section five identifies the methodology and provides a detailed description of the Framework for Intergenerational Fairness and its different stages applied in the project. Section six and seven describe *Iniciativa Liberal*´s reform proposals and *Bloco de Esquerda*'s additional proposals to the current system, respectively. Here the assessment and scenarios stages of the methodology are applied to evaluate the intergenerational fairness of *Bloco de Esquerda´s* proposals, representing the individual contribution to the Work Project.

And section eight provides conclusions on the analysis of the two proposals and highlights some comments and recommendations on the methodology itself, more precisely, on the framework for intergenerational Fairness.

Social Security

Social Protection has become one of the most relevant and expensive functions performed by the state since the twentieth century, as it expects to alleviate poverty across all ages, and smooth consumption during unemployment or disability cycles. As the World Bank states, "*Social protection systems that are well-designed and implemented are powerful as they enhance human capital and productivity, reduce inequalities, build resilience and end the inter-generational cycle of poverty"* (World Bank 2022).

European countries and western democracies are amongst the biggest spenders of GDP on social protection. According to Eurostat, the average expenditure among EU countries on social protection was 41,3% of the GDP, in 2020. The top 3 spenders were Finland, France, and Italy, spending around 44% each. Portugal, in 2020, spent 38,2% of its GDP (Eurostat 2022 a).

On the other hand, the OECD estimates that France, Finland, and Belgium are the countries that spend the biggest share of GDP on social protection, spending around 31%, 29,1%, and 28,9%, respectively, in 2019. Inside OECD countries, those that spend less are Chile and Turkey, which spend less than 12%, and Mexico spent less than 8% of its GDP, in 2019. According to OECD, Portugal spends 22,61% of its GDP. The difference in values can be justified by the indicators used by each entity (OECD 2019 a).

Social Protection includes several areas, such as disability, unemployment, poverty, maternity and family subsidies, and old age, which has the biggest share of beneficiaries. In Portugal, the public entity responsible for these activities is Social Security, and in 2020, it spent around 19,9% of the Portuguese GDP (PORDATA 2020 a). Figure 1 shows the largest SS program in Portugal is the payment of pensions, supplements, and complements, and 69% of these pensioners receive pensions from old age (PORDATA 2022 c).

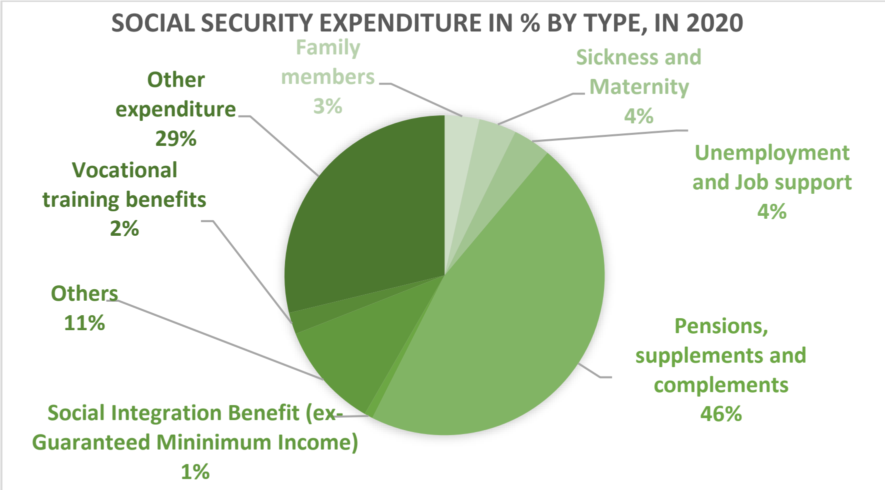

Figure 1 *- Social Security Expenditure in % by type. Source:*

https://www.pordata.pt/en/DB/Portugal/Search+Environment/Table/5830202.

Between the years 2000 and 2017, the total pension expenditure (this includes both private and public) increased by 1,5% of GDP on average among OECD countries (OECD 2021 c). By 2035, the value is expected to reach 3% with the aging population challenge to further raise spending pressure in the OECD community.

Given that the old age pensions are a core activity of SS (see figure 2), the funding for these pensions can take many forms, whether it is privately funded, when companies make pension plans during the worker's working life, usually incorporated in wages, or publicly funded, when the contributions are invested into savings plans or such that will constitute as future benefits. Pensions can also be unfunded, which happens when current contributions are used to pay current benefits, instead of being invested to become future benefits. Many countries adopt a partially funded system.

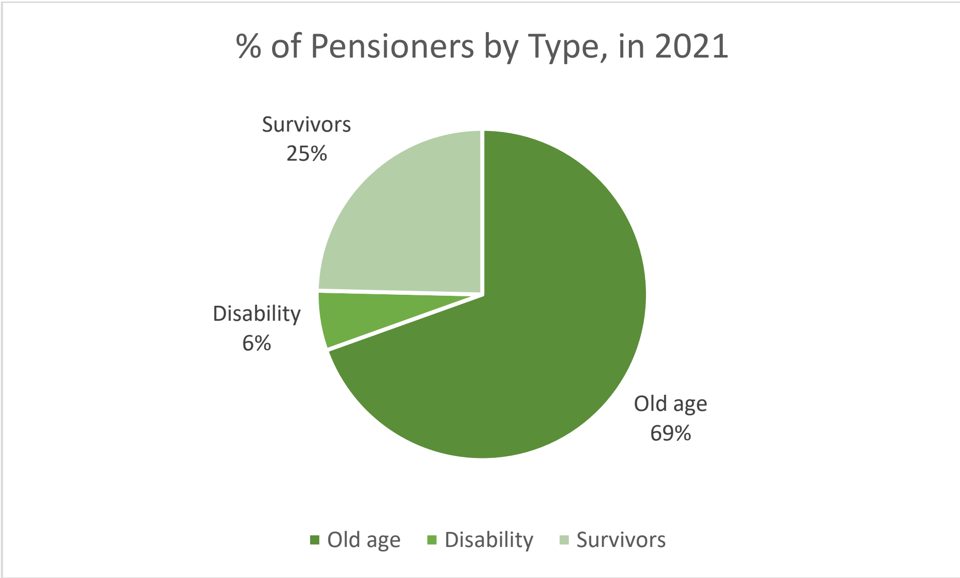

Figure 2 *- % of pensioners by type of pension, in 2021. Source:*

https://www.pordata.pt/en/DB/Portugal/Search+Environment/Table

Other Countries

In response to these new challenges, many countries have been changing their policies on pension systems over the last two decades. The trend in OECD countries is to decrease the reliance on publicly managed plans and increase the reliance on privately managed voluntary or occupational plans and many major reforms have been considered in the Eastern European countries, as is the case for Portugal in 2007 as will be later discussed in this work.

In a recently published report, "Pensions at a Glance", the OECD stressed some of the main policy changes implemented by the different states to face the pension systems' challenges.

Mexico was the country that implemented the most comprehensive reform, raising earnings-related contributions, as well as current and future first-tier benefits. The last implies higher public spending and will significantly weaken the relation between benefits and contributions (OECD 2021 c).

Estonia also reformed its pension policy and made funded pensions voluntary, also allowing the withdrawal of accumulated assets. This reform is likely to have nurture pensions. According to the OECD, one-quarter of pension assets were withdrawn so far. Greece created a new funded defined contribution (FDC) scheme to be gradually implemented and take the place of the existing notional defined contribution (NDC) mandatory auxiliary pensions.

The Netherlands is currently in the transition process of going from quasi-mandatory occupational pensions from defined benefits to collectively defined contribution schemes. Collective defined contribution schemes are "*FDC schemes in which individual choices are more limited in terms of both investment and asset withdrawals as the accumulated assets are only paid out as annuities*." (OECD 2021 c).

There are also different strategies implemented in countries like Canada, Greece, Japan, and Slovenia, that promote longer working lives making possible the option of combining work and pensions.

The report also emphasizes that based on legislated measures, on average in the OECD countries, the normal retirement age will increase by two years in the next four decades, while life expectancy is projected to increase by about four years. This represents one big challenge for the sustainability of the pension systems and public finances.

Pay-as-you-go Pension Systems

'Pay-as-you-go' means that workers' current contributions pay for pensioners' current benefits. The taxes from the current wages are redistributed to the current pensions, affirming the intergenerational dependency from active workers, generally younger generations, to elderly workers, the older generations.

This system has several advantages that make it attractive for governments to set it up, namely, its ability to pay out full benefits straight away, without waiting for a full generation for the pensioners to get full benefits; the redistribution between generations becomes much easier; and it is less burdening for the younger generations when populations are younger and growing when each generation is larger than the last, the less the burden for the contributors.

When pensions were set in place, in the 1920s and 1930s, the population was growing across most countries, so this setting was favorable for the establishment of the PAYG systems. Around the 1980s and 1990s, it was clear this trend would come to an end in most developed countries, where life expectancy consistently increased, while natality rates kept decreasing. In an aging context, PAYG systems became a huge burden for the active population that kept supporting more and more pensioners. In 2021, Portugal had 2,7 active people per old person (PORDATA 2022 c).

In Portugal, the trend is to widen the top of the population pyramid, caused by the increase of the elderly population, given the increased life expectancy and better health services and treatments, while the bottom of the pyramid keeps shrinking, as natality rates steadily decrease, because of many changes of social norms, the poor labor market conditions for young workers, among other reasons, evidenced by Figure 3.

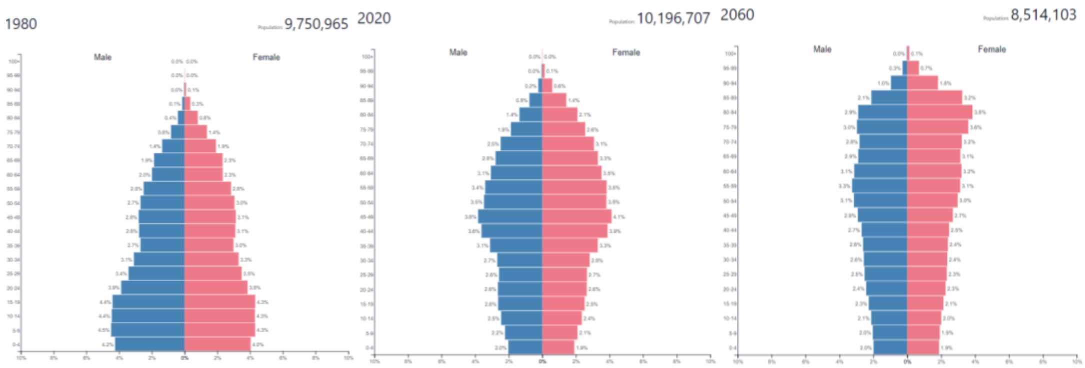

***Figure 3** - Evolution of Population Pyramids in Portugal from 1980 to 2060. Source:* *https://www.populationpyramid.net/portugal/2020/*

In terms of fairness, PAYG favors redistribution across generations, improving the living conditions of pensioners, because of the redistributed income. As there are several rules for the establishment of the number of income pensioners receive, such as having a minimum pension income, pensioners have, at least, their most basic needs met. However, there are still prevailing inequalities within the distribution of pensions.

Defined Benefits

In defined benefit plans, it is defined in advance the formula used to calculate the pension and the benefits may depend on the wage earned over some time, it may be over the last 5 years or the working career average and may also depend on years of employment. Old people are more protected from the risks, as they are less able to adapt than workers, which is a big advantage of these types of plans. On the other hand, working-aged people and the rest of the society bear the risk that the economy will not do so well or that people live and receive benefits longer than expected (World Bank 1994).

There is also the additional risk workers face in occupational defined benefit plans in the case of employer insolvency or worker mobility, and in public defined benefit plans there is also the risk for the taxing ability of the government to decline, or for a new government to modify the law made by a different government.

Notional Defined Contributions

NDC schemes complement PAYG seeming a defined contribution system. Much like the latter, the pension benefits are financed by current, but the link between benefits and contributions is individualized and defined by the NDC accounting mechanism. This means that each individual has their contributions credited and accumulated on individual accounts, kept by the pension system. Even though no real capital is accumulated, it represents the notional pension wealth.

Upon entering retirement, the notional pension wealth is converted into a lifelong pension according to actuarial rules, and such pension benefit depends on three variables:

1) **the notional pension wealth** (proportionality guarantees equivalence) by taking into account the contributions done by each individual.
2) **the interest rate used to compute the annuity** (using the implicit rate of return from the PAYG system guarantees equivalence within each birth cohort); - caused by current pressing factors that threaten sustainability, NDC incorporate demographics into the computation of the pension benefits and current prices fluctuations to better equip the most vulnerable to the unexpected shocks.
3) **life expectancy at retirement** (using up-to-date cohort-specific life tables guarantees actuarial sustainability). - most DB-type PAYG systems, however, have no relation between annual benefits and retirement age, as for the funded DC plans, these automatically link annuity in the actual time of retirement.

World Bank's Averting the Old Age Crisis

We will now proceed to an extensive review of Chapter 7 of the World Bank's policy research report, where the main problems of dominant pillar systems are identified and a multi-pillar system with several design features is suggested.

Every pension system with a dominant single pillar has losses in efficiency and distribution. Systems with a PAYG dominant pillar are schemes without a maximum pension payment, thus by providing adequate wage replacement to previous high-income workers, they require a higher contribution rate as systems mature. In terms of intergenerational fairness, the first pensioner generation did not have as many costs during their working lives with contributions but are the main receivers of benefits, reinforcing the legacy debt[1]. The system itself will create negative net transfers for later contributor cohorts, because of the evolution of the 40-yearlong contributive career, and due to system maturation and population aging, increasing the labor market distortions and incentives to turn to the informal sector, which results in unexpected costs related to the system and the need for the state to increase its funding, foregoing other public goods. There are typical design features that exceed the costs expected of the government, such as early retirement options and high benefit rates.

A PAYG dominant pillar misses the opportunity to develop the capital market, as it disincentives the saving and investment of capital that could become the driver for a larger economy, by creating losses for future income and relying on intergenerational transfers. One last problem is related to the dependence pensioners have on the state, because of the dominant PAYG system, and where any shocks could severely put the pensioners at risk, such as inflation, when the cohorts' nominal pension does not change, but in real terms, it may constitute as a large loss.

However, publicly managed mandatory saving plans have a record of misuse. When the Mandatory Savings Plan is the Dominant Pillar, governments tend to borrow more than what they would have, had it not been publicly managed, and use it in unproductive ways, becoming a hidden tax on labor. There is no transparency about the redistribution

[1] The debt incurred by the government because early generations of beneficiaries received much more in benefits than they paid in taxes. (Gruber 2016)

procedures. Publicly managed systems also deprive the private sector of these large financial assets, preventing the growth of the sector. Privately managed pension plans would generate better capital market outcomes, but it could prevent the smooth functioning of labor markets, given that the redistribution would have market purposes instead of social objectives. Even though these schemes do not fall under the jurisdiction of the government and therefore do not suffer any distortion caused by publicly managed assets, they do not solve problems of poverty among those workers with low lifetime earnings, especially among the older generations.

As a solution, the World Bank proposed a multi-pillar system, with three pillars: a public universal pillar, a second mandatory savings pillar, and a voluntary pillar, each one with different mechanisms and purposes.

The public pillar has the purpose to reduce old age poverty and protect elders against multiple potential shocks. Vested with authority, the government ensures this pillar through taxation, guaranteeing the universality of this pillar, and preserving intergenerational transfers. It is expected that an unambiguous and limited objective to redistribute income to pensioners increases the acceptance of the citizens, establishes an appropriate tax rate that is not too high, and therefore reduces tax evasion, as well as misallocation of resources and overspending.

The mandatory savings accounts or occupation plans pillar should be fully funded and privately managed, however, it should also be publicly regulated. Its functions are mainly income smoothing and savings, and as it has benefits closely linked to costs, it should avoid distortions and manipulations that are prone to the public pillar. This pillar is expected to boost capital accumulation and the development of the financial market, while it is not subject to too many political pressures. It could constitute as an important pillar to finance the public pillar in case there is economic growth.

Finally, the voluntary pillar envisions occupational or personal saving plans voluntarily, where individuals choose to contribute or not, providing additional protection for those who want more.

To conclude the review of Chapter 7, the World Bank presents some design features of the multi-pillar system governments should account for better performance of the schemes, and they are the following:

1) **A means-tested plan for taxation**, to benefit low-income workers, by avoiding taxes on income to alleviate poverty.
2) **A universal flat benefit**, that ensures benefits for all pensioners regardless of their contributive career, meeting the goal of reducing poverty.
3) **An employment-related flat benefit**, giving additional benefits to workers with long contributive careers, above 30 or 40 years for example.
4) **A top-up scheme or minimum pension guarantee** to define a minimum pension above the poverty line, which is the quickest way to reduce old age poverty.
5) **Early retirement with high costs** generates disincentives to retire before a certain age.
6) **An Indexation method**, where pensions should be indexed to prices or to a fifty-fifty combination of prices and disposable wages to maintain their real value and protect pensioners against economic fluctuations.
7) **Finance of the public pillar** should be supported by a progressive tax on the payroll of the cohorts, imposing most of the cost on workers and not companies (to create awareness close to those that benefit or will benefit from it in the future and to reduce effects on labor demand). There should be a floor to the tax, but either very high ceilings or no ceilings at all, to ensure it is progressive and it favors redistribution

2007 Pension System Reform in Portugal

By the 1970's Portugal was benefitting from the return of emigrants from its colonies, and for this reason, though its population growth began to decline faster than other European nations (EU15), it did not pose a concern for the sustainability of social security. At the time, GDP growth was also on par with EU15 nations (OECD 2021 a).

However, age composition moved in another direction, we saw a decline in birth rate and an increase in life expectancy pointed to further deterioration (PORDATA 2021 a, b).

Comparing 1977 to 2017, in 1977 the population aged 65 or over accounted for 10.5% of the total, and in 2017 those numbers were 21.3%, in 1977 those aged 20 to 64 accounted for 54.4%, and in 2017 59.5%, and finally minors under 19 years of age in 1977 were 35.1%, and in 2017 that percentage was 19.2% (Cardoso 2019).

Adding to this, in 2022 the Portuguese population was 10.3 million (Eurostat 2022 e), and according to Eurostat forecasts, it should be 9.3 million by 2050 (Eurostat 2022 f). This has implications for the sustainability of the current pension system that should not be ignored or offset by increases in the levels of contributions and/or taxes (Cardoso 2019).

In 1989, as a complement to the already established pay-as-you-go system, Portugal created capitalization instruments. These are still the dominant option of savers in this field and included the Retirement Savings Plan (RSP), which received favorable tax treatment, justified by the goal of encouraging private savings to supplement post-retirement earnings.

On top of the demographic issues presented before, throughout the 1990s productivity growth fell, and this was a trend that would increase with the fall of employment in the following decade, leading to a slowdown in GDP growth. Meanwhile, the pension commitments from previous decades materialized, and became one of the main points of pressure on fiscal policy, culminating in the 2007 reform of this pension system.

The 2007 reform fully retained the option for the pay-as-you-go system instead of capitalization, though it implemented changes to strengthen the system's sustainability. These changes include a more flexible retirement age and the creation of incentives to extend working life, through the introduction of the "sustainability factor" and stiffer penalties for taking early retirement (Cardoso 2019).

Social Security itself is structured in three pillars. The first pillar covers statutory or public social security schemes. It is based on the principle of solidarity, particularly when the system is based on universalism, which implies a broad network of income redistribution between beneficiaries and recipients.

The second pillar is constituted by complementary schemes, i.e., schemes of an occupational nature, adopted at the initiative of specific enterprises or socio-professional groups.

Finally, the third pillar, which is also complimentary, refers to individual pension plans. These initiatives represent a pure adhesion of the interested parties to the offer of a wide range of financial products, based on capitalization and tax benefits, as is the case of life insurance or Retirement Savings Plans (RSP).

According to the law decree, the main objectives of the reform are to introduce the Sustainability Factor, speed up the transition period for a new pension calculation formula, reinforce incentives for active ageing, strengthen the protection of workers with long contribution careers, the establishment of new pension update mechanisms and deindexation of the National Minimum Wage, introduction of an upper limit only for the calculation of pensions, improving the sustainability and transparency of the financing model, by deepening the selective adequacy of financing sources, changing the special contributory regimes, reinforcing the mechanisms to fight fraud and evasion of contributions and benefits, improvement of Social Protection, through the adaptation of benefits to new risks, reinforcement of the complementary savings mechanisms, structuring of a set of Natality Incentives, and strengthening of the information provided to the government Social Partners and to society in general on the situation of the social security system (Decreto-Lei nº187/2007 Diário da República) .

The formula introduced was the following:

$$P = RR * GPFR * SF$$

P stands for the 'Pension Value'; RR for the 'Reference Remuneration' which is the total revalued annual remuneration from the total contributive career divided by the total of the multiplication of the number of civil years with earning records with the limit of 40 by 14; 'GPFR' for the Global Pension Formation Rate; and 'SF' for the Sustainability Factor.

According to this reform, the effect of these changes was to be gradual but would sharply increase over time, as a result of an increase in life expectancy. The impact of a lower replacement rate is of importance for households, as it implies changes in their behavior, to accumulate savings to avoid the effects of an abrupt drop in earnings on retirement. This explains the gradual introduction of the new system, as it tended to guarantee, initially, earnings in full upon retirement.

A crucial aspect for these changes in behavior to take place was the fact that households had to be aware of the implications of this new system, and at the same time stimuli to encourage savings and suitable financial instruments had to be put in place. But this did not happen, in Portugal, the political debate and public interest did not give the spotlight to this aspect, and instead, the idea that the State was still solely responsible remained and the new facets that the 2007 reform introduced were ignored (Bravo 2020).

One could even argue that this confusion was inherent to the model itself, as it was defined differently from what was proposed by the World Bank, continuing to concentrate funding of the system on the first pillar. The concession made was limited to setting up the Complementary System, which was made of the public capitalization scheme, and complementary (public and private) schemes.

In practice, it remained centered on the public sector and continued to need a high level of contribution (Lagoa and Barradas 2019). The stimuli to the Complementary System's development did not end up happening and no efforts were made to inform households of the need to save, nor to strengthen the means available to achieve that end. We witnessed worsening economic and fiscal difficulties due to the increased pressure on the disposable income of working people, there was a decrease in tax policy stimulus to voluntary saving.

The international financial crisis of 2007 made problems even worse, where debt skyrocketed, and countercyclical restrictive policies were unavoidable. This led to a stagnation of the complementary system, especially concerning the capitalization component (Cardoso 2019).

Intergenerational Fairness

The definition of intergenerational fairness considered throughout the framework used was built on the contribution of the Brundtland Commission Report on Sustainable Development (1987). As given, for a policy to be considered intergenerational fair it must "*allow people of all ages to meet their needs, while not compromising the ability of future generations to meet their own needs*." (Framework for Intergenerational Fairness). Therefore, a policy is considered unfair when it:

1. Disadvantages people at any particular life stage.

2. Disadvantages people at any period in time, present or future.
3. Increases the chances of inequality being passed on through time.
4. Restricts the choices of people in the future.
5. Moves society further away from its vision for the future.

This concept is increasingly important not just as part of sustainable development and planetary boundaries, but also as an issue in its own right, and as the political scientist, Roman Krznaric writes, "*We are in the midst of a historic political shift. It is clear that a movement for the rights and interests of future generations is beginning to emerge on a global scale*" with more and more international organizations bringing attention to the subject.

A survey conducted by the Institute of Chartered Accountants in England and Wales (ICAEW) concluded that "*Ensuring intergenerational fairness is one of the biggest challenges facing policy-makers today*" and OECD also published a Global Report on Youth Empowerment and Intergenerational Fairness, highlighting the need for governments to address inequalities within and between generations and ensure the wellbeing of future generations in the context of uncertainty (OECD 2020).

The assessment looks for any indications of unfairness caused by the policy, considering each of the five aspects of unfairness previously mentioned. It also provides an "overall assessment of whether, on balance, the policy is fair or unfair, probably fair or unfair, or "too close to call", where a political judgment is required to decide whether the trade-offs are worth it." (SOIF 2021).

***Figure 4**. Possible classifications for the policy in the study.*

Methodology

The following description of the methodology is mostly based on the supporting materials and guides SOIF made available.

This vision of the future that requires the assessment of policies is done with a participatory citizen-led discussion of desirable and undesirable impacts, which can be achieved through national dialogue, foresight, and system analysis. These participatory approaches are "*drivers of change in Portugal, map out their dependencies and determine how inequality is transmitted through the system*", as these will constitute as alternative scenarios to what is being put into practice. The UN adopts these types of practices, dialogue alongside citizens, and expert input, through many of their programs, namely the Sustainable Development Goals.

There are three elements required and inter-linked to ensure policy impacts are clear, reflect the vision of the citizens and engage with the public interest, which are:

- **Institutional ownership**, providing legitimacy and accountability to governments, societies, and institutions, and giving the public the ability to be part of the processes through participation.
- **National Dialogue**, so societies can debate and decide their vision of the future, and all policies can be oriented to fulfill that vision, hoping to create a far-reaching and intergenerational public engagement.

- **Policy Assessment Tool** to apply a practical methodology to think and clarify the questions of intergeneration fairness in a systematic and time-extensive way.

All the information on the methodology that will be presented next is mostly based on the work developed by the School of International Futures (SOIF) and Fundação Gulbenkian, *Framework for Intergenerational Fairness – Specialist Report*.

The assessment methodology consists of five flexible stages, applicable to any policy or strategic thinking. Each stage makes several questions of intergenerational fairness accordingly to the purpose of the step.

1. Diagnostic Stage – it captures key information and contexts about the policy, searches for fair or unfair practices, and persistence in the short, medium, and long term. Some assessments can end here.
2. Impact Stages – it deepens the analysis by diving into the complex questions and relies on qualitative, quantitative data, and expert inputs to gather possible impacts on generations over time.
3. Scenarios – In this stage the assessment is put under test by comparing alternative scenarios and their impacts, so it is possible to derive some robust recommendations in an uncertain environment.
4. Process – it examines the design and the policy enactment context, as to find possible sources of fair or unfair practices it.
5. Conclusion – The findings and recommendations are summarized to engage in communication.

Diagnostic Stage

The objectives of the first stage are to identify intended and unintended policy impacts over time, establish the degree of intergenerational fairness, take into account the five aspects of intergenerational fairness, and determine whether further analysis is needed, if the tailoring of the rest of the assessment is needed, or it is possible to proceed to communicate results.

The expected outputs from the Diagnostic are directly related to the objectives of the stage, as they aim to the targeting of the most relevant policy information, as well as the gathering of it; draft some recommendations relating to the context of the policy; the execution of both an initial assessment of the policy and the assessment of the five aspects of intergenerational fairness; decide whether or not the assessment should end already or if it needs to be done completely; and in case it does go on, provide information on if the rest of the policy assessment needs tailoring.

The **first step** captures policy information and context, thus the assessment begins with a systematic group of questions to capture key information, such as reference and title, a brief description, the problem, the objectives, the implementation timeline, the populations affected, and ecological areas affected by the policy. This part also systematizes the context by finding scope constraints, identifying aspects of the problem not addressed, thinking about the relevance of historical unfairness and the lessons to be learned from alternative policies. Potential recommendations may likely emerge here.

The definition of the time horizon is the **second step**, and each policy has its time horizon, and to define one, there should be considered the implementation timeline from step one and the expected time horizon for the impacts that affect the population.

To determine the time horizon, it should be taken into consideration the lasting physical changes to the environment; whether the policy shut off options for the future or not; if it only affects the current cohort of old people; if the policy builds something long-lasting or if it will destroy something; its likelihood to improve the understanding, skills, and health of people in a useful way for the rest of their lives; if it creates change in such a way that people can pass on to their children; and finally think about continued effects of the policy despite fundamental changes in the overall context.

The **third step** begins by deciding on the most appropriate counterfactual for the assessment. To do so, there must be clarity on the situation, given that counterfactuals can constitute business as usual, without real changes, or it can be the expectation of what might get in worse condition in case the policy does not get enacted. Then, the key assumptions about how the counterfactual will change over time should be recorded, given that they have their timelines and changes in contexts could have different impacts on alternative policies and they could be more spread out in time. In the **fourth step**, the impacts of the policy are identified over the chosen time horizon and compared to the counterfactual. The methodology requires an initial assessment of whether the policy moves towards or away from its goal in the future and its effects on human and ecological domains, and an analysis of the transmissions of inequality, the life stages impact, impact on government and finances, future policy options and even other impacts not specifically covered by the methodology.

The methodology relies on several scales as a means to evaluate the policy. The human domain´s scale ranges from improved if the policy has a positive impact on this domain to worsened if the policy hurts this domain, as well as from towards vision if the policy moves Portugal towards the vision statements for this domain to away from vision if the policy moves Portugal away from the vision statements for this domain.

The transmission of inequality is evaluated according to a scale that ranges from weakened if the policy weakens transmission of inequality through generations (good) to strengthened if the policy strengthens transmission of inequality through generations (bad). The different impacts of the policy on different life stages can be categorized on a scale that goes from advantaged if people at this life stage are particularly advantaged by the policy to no specific impact if the policy does not impact people at this life stage in specific ways that differ from other life stages. In the **fifth and sixth steps**, the information and the assessment done so far are used to answer the 5 intergenerational fairness questions, classifying them according to the following assessment options: yes, if there are clear instances of intergenerational unfairness, probably yes if the balance there are probably instances of intergenerational unfairness, probably not, if the balance there are probably no instances of intergenerational unfairness, no if there is no reason to think there are any instances of intergenerational unfairness, or unclear if more information or analysis is required to conclude. In the **seventh step,** the overall intergenerational fairness of the policy is assessed and determined, as well as the following steps for the rest of the assessment. The assessment options are the following: clearly fair, if either there is nothing to suggest that this policy is intergenerationally unfair, or any aspects of unfairness are clearly outweighed by the benefits, probably fair if the balance, any aspects of unfairness are probably outweighed by the benefits, too close to call if there are intergenerational trade-offs that require a political judgment, probably unfair if the balance, the benefits are probably outweighed by intergenerational unfairness, clearly unfair if the benefits are clearly outweighed by intergenerational unfairness, and unclear.

Impacts Stage

This is the second stage, where using available qualitative and quantitative data, expert modeling, or participative sessions any chains of intended and unintended impacts are explored, not only on the present generation but on generations over time. The objectives for this stage are, to deepen the detailed analysis of each domain from the diagnostic stage; to identify relevant indicators, and to revisit the overall assessment of intergenerational fairness from the diagnostic stage.

The **first step** consists of the creation of an Assessment Plan, where first is tailored the planned approach that will be based on the issues identified in the previous stage, the diagnostic, and the time and resources available. Here it may be considered any participative approach, expert inputs, desk-based research, interviews, already existing tools, and models that may be used to forecast impacts under different assumptions and any relevant indicators and already existing data and demographic projections that can be used to conduct quantitative analysis to estimate future policy impacts.

Then, the **second step** is to explore the impacts. Using the methods determined in the assessment plan, it is time to analyse the impacts identified for each domain. Here it is important to include both positive and negative impacts to properly understand the trade-offs and capture key points for each domain. After this, the **third step** is to identify indicators that could be used to monitor significant policy impacts over time. Then, it is important to revisit the answers to the intergenerational fairness questions from the diagnostic and make recommendations, and develop proposals, after identifying ways in which the policy may be unfair. In the end, the Intergenerational Fairness Assessment should be revisited once again so that any new assumptions are added.

Scenarios Stage

At this point, it is time to stress test the policy in a study against a set of scenarios and make recommendations to future-proof the policy and finalize the intergenerational fairness assessment of the policy.

The first step is about the reflection on how the policy as a whole would play out in each of the national scenarios, considering both positive and negative impacts that were identified so far. It should be taken into consideration if there are any impacts increased, reduced, or removed in different scenarios and even if there are new policy impacts created in those different scenarios.

Then, in the second step, it is time to finalize the answers to the five questions about intergenerational fairness from the previous stage, the impacts stage. Next, the third step is about making recommendations that this analysis may have added.

The fourth, and last, the step of this stage is to finalize the intergenerational fairness assessment from the impacts stage. Here it is important to debate if this analysis changed the overall assessment and update the summary to add any additional new information coming from the third stage.

Process Stage

The fourth and last stage before jumping to the conclusions stage is the process stage. Here an analysis is conducted on the way the policy was designed and, on the policy-making process, namely by answering the question: 'were intergenerational issues considered?'. It is important to capture the policy-making timeline, the actors involved, the participative approaches used, the completed impact assessments, possible problems encountered, and significant changes made to the policy.

Afterward, some recommendations are elaborated based on the findings of this stage.

Conclusions Stage

Gulbenkian and SOIF´s last Policy Assessment tool stage is the conclusions. At this stage, the assessor is expected, as a **first step** to outline the main assessment messages driven by the analysis conducted in all other assessment stages. This stage is also aimed at defining the key information on the policy assessment to be shared and communicated to a broader audience in the final report.

This step begins with a reminder to the reader of the background and context information, gathered in the Diagnostic stage, namely the problem the policy aims to solve, its rationale, time horizon, and the chosen counterfactual. The inputs gathered from the process stage regarding the policy-making process will also be valued at this step if it helps to clarify and support the conclusions. If all stages were completed by the assessor, the analysis conducted in the scenarios stage, where the final questions to the Intergenerational Fairness questions are to be refined, will provide the inputs required for this step regarding the overall assessment of the intergenerational fairness of the policy. If not all the steps are concluded, these inputs will derive from the diagnostic stage. This first step ends up with a recap of recommended indicators, that may originate from the impacts stage or the process and scenarios stages and are used for tracking/monitoring the policy.

The **second step** aims at making a comprehensive review of all elements gathered in the first step and adjust/refine them, if necessary, to achieve consistent and effective communication on the policy assessment.

In the **third step** the assessor should delineate short, medium, and long-term impacts, both positive and negative, establishing an impacts timeline to be present in the report.

A follow-up plan shall be developed in the **fourth step**, ensuring that if any follow-up action on the policy assessment is required in the future, it will be done so according to what is outlined in this plan. This is important because, for instance, if the policy is subject to adjustments in its design, if after the policy is enacted the government´s implementation procedure follows a different path than that one it said it would or if the overall context changes, it might be necessary to revisit the assessment, most notably, the impacts of such changes on intergenerational fairness.

The conclusion stage **ends up** with a summary of the main assessment inputs, conducive to the reader's improved understanding of the sources that informed the conclusions, such as data sources, models and people interviewed.

The 2030 Agenda for Sustainable Development will be used to determine what is the vision of the future, as there are no formal institutions actively working to define what the vision is, as the SOIF framework proposes.

The SDGs envision a world without poverty, hunger, and discrimination, where women get equal opportunities legally, and socially and see economic barriers removed from their empowerment. They envision an equitable, socially inclusive society that looks to respond to the needs of the most vulnerable.

It should be noted that for the analysis that will follow, the short term is considered to be the first 10 years after the implementation, here we would see the simpler elements take effect; the medium term is considered to be 30 years, to see fully implemented and working the elements of the two proposals; lastly, the long term aspect considers time after those 30 years, when the proposals would have its full effects into place and political consistency.

Iniciativa Liberal Reform Proposal

Iniciativa Liberal was born out of the *Iniciativa Liberal Association* in September 2016, based on the discussion of the *Liberal Manifest of Oxford* in 1947. It was this that served as the basis of the manifest (named *Portugal Mais Liberal*) and the declaration of the principles that guide the party. The party manifest was elaborated on a collaborative principle of digital democracy (Iniciativa Liberal 2022 a).

In September 2017, around 8100 signatures were delivered to the *Tribunal Constitucional* for the formalization of the party. On November 26th of the same year, the founding convention of the party was held in Porto. *Tribunal Constitucional* accepted its registration on December 13th, 2017. *Iniciativa Liberal* is also a member of the *Alliance of Liberals and Democrats for Europe* (ALDE or Renew Europe). Ever since then they have run the program *Menos Estado Mais Liberdade* establishing itself as a liberal party. On October 6th, 2019, *Iniciativa Liberal* participated for the first time in Legislative Elections where it managed to elect one Member of Parliament (which is the current party president) João Cotrim de Figueiredo, for the constituency of Lisbon. Before this, in 2019 as well, they ran for the European Elections but failed to elect a Member of the European Parliament. After electing João Cotrim de Figueiredo, *Iniciativa Liberal* continued to participate in democratic elections, such as the presidential elections of 2021 with the candidate Tiago Mayan, in the elections of the Legislative Assembly of the Azores in 2020 where they elected Nuno Barata, they ran for the Municipal Elections in 2021, having achieved moderate success. Lastly, they ran in the anticipated Legislative Elections of 2022, having one of the biggest growth ever seen, becoming the 4th biggest party in Parliament, electing 8 MPs (Iniciativa Liberal 2022 b).

As already mentioned, the Portuguese system is composed of three pillars, the first being the public statutory regime, of which the unfunded mandatory earnings-related, PAYG DB scheme is part.

Iniciativa Liberal recognizes the ever pressing and long-run fiscal imbalance of the social security system in Portugal, the result of a combination of factors, namely a sharp decline in birth rates, an improvement in life expectancy, and a slowdown in wage growth that are expected to persist in the future, so that the ratio of workers to pensioners is expected to continue to rise, meaning fewer workers paying into the social security system.

Taking these factors as given, *Iniciativa Liberal* advocates that the funding problem of the public mandatory PAYG defined benefit scheme can´t be solved and long lasting by instituting reforms such as raising the retirement age, lower benefits paid by the SS, increasing future contributions, either by raising taxes or extend the base of taxable wages. According to *Iniciativa Liberal*, these proposals would only further deepen the heavy, onerous burden on Portuguese workers, particularly the upcoming generations, and only temporally mitigate and not solve the system´s inherent funding problem.

This does not imply however that *Iniciativa Liberal* perceives the earnings-related scheme as unreformable. It does not wish to abolish it but rather deeply alter the current features of the system. *Iniciativa Liberal* proposes, then, the transition to a two-pillar pension system, maintaining the existing PAYG pillar, with intergenerational transfers, and a second pillar based on the capitalization of savings, with a mandatory and a voluntary component.

Single Social Tax *(TSU)*

Iniciativa Liberal aims to eliminate the social contribution of 23,75% of gross wages (TSU) that is currently borne by the employer to finance the earnings-related pensions (*Pensão de velhice*), making it mandatory for the employer to fully integrate that amount into the employee gross wage in a phased way during what *Iniciativa Liberal* calls "an adequate timespan" so that the cost of labor associated with payroll taxes for employers remains unchanged with this policy. Furthermore, during this transition period, *Iniciativa Liberal* aims to gradually reduce the TSU paid by employees (11% of gross wages).

For *Iniciativa Liberal*, the current system and mandatory social contributions for social security result in burdensome, high labor costs for employers while also retaining a large portion of active contributor's labor income, those who are currently working and paying into the pay-as-you-go defined benefit scheme so that the transfer of the payroll tax of 23,75% of gross wages to the employee gross wage and the phased reduction of the 11% payroll tax borne by the employee increases the earnings of current contributors before taxes (gross wages) so that current contributors individual private retirement savings may be stimulated.

The mandated full integration of the 23,75% of gross salary social contribution into the employee gross wage proposed by *Iniciativa Liberal* must also be comprehended according to the existing empirical literature on labor taxes incidence, namely the causal impacts of payroll tax reductions on wages. One must understand if a decrease in employers' labor costs induced through lower payroll taxes is captured by employees in the form of higher wages, suggesting evidence for tax shifting.

The absence of tax shifting or the presence of partial tax shifting would provide support for the mandated fully integration into workers' gross wages of the *TSU* currently borne by the employers proposed by *Iniciativa Liberal* as the main rationale for this proposal is the stimulus of private savings by current contributors via the increase in their gross wages. It is not aimed at allowing the employers to retain the amount of TSU currently borne by them, at least in the short run. On the other hand, a mandate would be unwarranted or unnecessary if full tax shifting is observed.

The incidence of payroll taxation has been the subject of fairly extensive and consistent empirical research, particularly in the US and northern European countries. Even though most literature regards settings where payroll taxes are exclusively levied on employers, it still can provide valuable insights into the Portuguese system.

Studies in Sweden and Finland evaluated the payroll tax incidence by using the Difference-in-Differences approach and making use of differences/reductions in regional payroll taxes to estimate employment and wage effects. In all studies, the results indicate evidence for partial tax shifting, employers labor cost reduction is captured by employees in the form of higher wages. Payroll tax rate reductions have estimated positive effects on wages, varying in magnitude, from 0,25% increases in wages in the analysis conducted by (Bennmarker, Mellander, and Öckert 2009) in Sweden, Finland, according to Korkeamäki and Uusitalo (2009) a 1% reduction in labor costs, due to the fall in payroll taxation rate, resulted in estimated 0,6% increases in wages for the service sector. The mandate proposed by *Iniciativa Liberal* is supported by evidence for partial tax shifting on existing empirical research.

Maximum pension benefits

Iniciativa Liberal advocates for the establishment of a maximum level of pension benefits to be paid through the general PAYG defined benefit earnings related arrangement as is the case in some European countries such as Switzerland or Spain.

The absence of a maximum level of benefits and contributions paid through the general earnings-related scheme leads, as present in *Iniciativa Liberal*´s political program, to situations of prominent social injustice. The most notorious one is that the way the current system is designed makes it possible for some pensioners to receive very high pensions while those resources could be channeled to raise the minimum pensions and achieve greater progressivity in the system. Indeed, as measured through the Gini coefficient, Portugal is at the top of old-age income inequality among European countries in OECD (OECD 2019 b).

Another way the current design may induce social injustice is that current contributors are paying, financed through TSU, for pensions that are much higher than their mean salaries, leading to a high burden on active contributors´ labor income. By ceasing to pay extremely high pension benefits, *Iniciativa Liberal* argues, current active workers´

contribution efforts could be lowered, especially the lower income ones while turning the rise in the ratio of workers to pensioners into a less urgent challenge for the fiscal imbalance in the system.

Capitalization Pillar

Introduction of a new capitalization pillar with mandatory and voluntary contributions for the capitalization mechanism, allowing for pension benefits to be greater than the future maximum level of pension benefits in the public PAYG scheme and for further consumption smoothing. The worker shall have free choice when deciding between funded or privately managed pension plans, even if for a short period after the reforms, *Iniciativa Liberal* leaves the possibility for the managing entity to be necessarily public but only if investment decisions' independence is to be guaranteed to ensure efficient investments.

The transition from the current system to a two-pillar system is to be phased, as it happened in Sweden, as a way to smooth the inherent transition costs since, by introducing contributions to funded systems, it is simultaneously redirecting contributions from the PAYG DB system.

As such, an abrupt transfer to funded pensions would make the burden fall indirectly on the current generation of contributors, as they would not only have to contribute to the funded pensions to secure their future pensions but also continue to pay off benefits in the PAYG DB system to past generations (current pensioners) due to the existence of a legacy debt (Gruber 2016, 396). Since contributions to the PAYG DB scheme will fall and to avoid cutting current pensioners' benefits, *Iniciativa Liberal* proposes to pay off this deficit through the state budget as a way to split the transition costs across generations, avoiding it to be exclusively borne by current contributors.

This proposal by *Iniciativa Liberal* must be framed according to a broadscale trend in the design and reform of different national pensions systems that consist of a move towards the introduction of supplementary private pension savings to increase the resilience and financial sustainability of the system that can no longer be assured by relying solely on public DB, financed on PAYG scheme.

Portugal accompanied this trend and the establishment of a public reserve fund (Fundo de Establização Fincanceira da Segurança Social – FEFSS) in 1989 effectively marked the transition from a pure unfunded system to a partially funded system, with partial public capitalization aimed at assuring the funds' ability to pay for two years of pension benefits in the event of shocks that may lead to financial imbalance (Garcia 2014).

Furthermore, the public PAYG DB scheme is already complemented by voluntary funded pension systems, both private funded schemes (personal and occupational plans) and a public funded scheme (RPC-Regime Público de Capitalização), allowing for personal plans, established in 2007, to help individuals maintain their benefits at pre-reform levels and achieve consumption-smoothing by allowing them to voluntarily expand the personal contributions after the inclusion of the sustainability factor for the PAYG public pension benefits formula came into force. This does not imply however that with these measures Portugal moved to a fully-fledged capitalization pillar as they retain a complementary nature, as mentioned previously.

These successive reforms to the system are aligned with the advocacy made by OECD, 2018 for retirement income funding diversification by adding funded components into the system, both public and private. However, this aim is still constrained by the estimated coverage rate of voluntary private pension plans in the country of 17.2% of the working-age population, lagging behind the OECD average (OECD 2019 c). *Iniciativa Liberal*´s proposals for the Portuguese case are therefore aligned with OECD vision for funded pension schemes extended role in pension provision that is currently low in Portugal.

These funded schemes are designed to allow current contributors to receive higher benefits that the public PAYG DB scheme can´t sustain once they retire, stimulating individual long-term saving behavior for retirement and participation in the labor market. They are also justified based on their ability to ensure the sustainability of PAYG DB pensions (first pillar).

Also, *Iniciativa Liberal* presents several reasons for reforms inducing pensions funds development which is aligned with the prominent empirical and theoretical literature that serves as a guide for many international institutions and governments to justify the introduction and extension of pension funds, namely positive markets performance effects induced by pension funds development. For *Iniciativa Liberal*, their proposals will have positive effects on the development of financial markets, by triggering the development of capital markets, encouraging private and national savings, increasing investment, and so fostering economic growth.

Regarding the effects of pension funds on the development of capital markets, extensive literature, such as Catalán, Impavido, and Musalem (2000) and Kim (2010), suggests it has a positive and significant causal effect, particularly for developed countries. However, several studies point out that the magnitude/size of Pension funds effect on capital market development is highly dependent on some components, namely openness to trade, financial development level, shareholders protection, or Pension fund size, for which any reform seeking the introduction or expansion of pension funds should be backed by changes in the institutional apparatus and regulatory frameworks where the reform will take place, if necessary.

The literature on the effects of pension funds development on savings found it to be significant in increasing both national and private savings, especially for mandatory programs (Thomas and Spataro 2014). This can provide ground for *Iniciativa Liberal*'s decision to have a mandatory component for the pension capitalization mechanism. Studies also confirm that the ability of pension funds to increase savings is dependent on factors such as the incentive structure of each program, financial education, and level of financial development, among others.

The economic growth effects of pension funds haven´t reached a consensus among authors, with mixed evidence in the literature, Bijlsma, Van Ewijk, and Haaijen (2014) found that in OECD members, funded pension systems growth has positive effects on economic growth, by having a greater amount of assets held by pension funds which foster financial markets efficiency.

Pension statements

Finally, *Iniciativa Liberal* proposes the creation of pension statements to be sent annually, containing a summary of simple personalized information regarding expected pension benefits.

The proposed reform of Mandatory and Voluntary contributions for the capitalization mechanism is in line with the increasing role in many countries of funded pension arrangements which enhance the need for individual decision-making regarding retirement planning. According to the traditional economic theory, a heavier reliance on individuals' judgment for pension planning would potentiate welfare, given that the *Homo economicus* has as his main characteristics his rationality, self-interest, and utility-maximizing behavior. However, empirical research from behavioral economics confirms the presence of behavioral biases, such as hyperbolic discounting which, together with low financial literacy levels, with Klapper and Lusardi (2019) finding to be the case in Portugal, compromise one´s capacity to decide on his/her retirement outcomes and meet certain individual saving targets.

To address these challenges, increase individual retirement savings, raise contributions to voluntary private pension systems (3rd pillar-pension capitalization mechanism), and promote transparency, many complementary policies can be introduced. A conceivable policy, chosen by *Iniciativa Liberal*, consists in sending pension statements that aim at changing individuals saving behavior by providing them with simple but detailed salient information and financial knowledge on the pension system. In Germany, a similar reform was enacted, and empirical analysis found the pension statements to increase private retirement savings (Dolls et al. 2016). This is in line with similar literature on the effect of higher financial knowledge on raising individual savings and contributions to voluntary private pension schemes.

Another mechanism *Iniciativa Liberal* proposed that serves to promote private pension plans are financial incentives to employers that wish to voluntarily make additional contributions to the capitalization pillar.

Bloco de Esquerda Additional Proposals

Bloco de Esquerda is a Portuguese left-wing progressive movement, assuming the legal form of a political party, as they state their statutes, established in 1998. Their objectives are to defend liberty and present alternatives to capitalism, stand for an environmentally sustainable world, be respectful to animals, and fight against social inequalities to avoid the social exclusion of any groups.

The first election *Bloco de Esquerda* ran, took place in 1999, for the European Parliament, however they did not elect any deputies. In the same year, they did elect two deputies in the election for the Assembly of the Republic. Over the next few years, the deputies kept increasing until in 2015 they elected more deputies than ever, having 19 seats in the Assembly. In that legislature, they made a coalition with *Partido Socialista* (Socialist Party), *Partido Comunista Português* (Communist Portuguese Party) and *Partido Ecologista "Os Verdes"* (Ecological Green Party), to have *Partido Socialista* lead the government with a strong influence of the remaining mentioned parties. In the 2022 elections for the National Assembly, *Bloco de Esquerda* was only able to elect 5 deputies, climbing down from the third biggest political force to the sixth.

Concerned with issues of social justice and equality, *Bloco de Esquerda* presented a set of proposals to the pension system in order to value the pensions and do justice to those that worked throughout their lives, end with double penalties on pensions existing from the 2007 reform, strengthen the sustainability of the pension system, increase the value of pensions received, especially low-income earners, and diversify the sources of financing. The extensive explanation of each proposal is explained in the following paragraphs.

Elimination of Sustainability Factor

The idea behind the imposition of sustainability factors, as the World Bank proposes, is to make the system more sustainable financially and intergenerational fair, by adjusting pensions to changes in life expectancy across cohorts, as it accounts for differences in the length of benefit receipts and provides incentives for people not to retire before the age threshold.

In Portugal, this factor was introduced in 2007 and links automatically the statutory retirement age and life expectancy in 2013, and it applies to people with a contribution record of fewer than 40 years at age of 60 to reduce pensions for each month of early retirement. Its calculation is equal to the ratio of life expectancy at 65 in 2000 over life expectancy at 65 in the year before the old-age pension becomes accessible.

In 2022, the sustainability factor constitutes a cut of 14,06% of the pension and the reduction is a cut of 0,5% in the value of the pension for each month of early retirement. *Bloco de Esquerda* estimates only 10% of pensions are covered from this factor, and as the life expectancy index is already incorporated into other calculations for the pension's value, *Bloco de Esquerda* proposes the elimination of this sustainability factor. Hand-in-hand, they also propose the recalculation of the pensions for those regimes of quick detrition "*desgaste rápido*", to eliminate the sustainability factor.

Recalculation of Retirement Ages

Bloco de Esquerda proposes the deepening of the concept of individual age of reform "*idade pessoal de reforma*" for a fairer and progressive regime without cuts. The individual age should be reduced relative to the general age in contributive careers above 40 years of discounts, at least a year for each extra year of contribution, without suffering any cuts. The goal of this proposal is to value and recognize the long contributive years of workers that have been the in the labor market since they were children. *Bloco de Esquerda* also suggests the reduction of the retirement age according to the working jobs with shifts, at least six months for each contributing year in this modality. This proposal is not very consistent with the concerns of sustainability, prioritizing issues of social fairness.

Extend the Number of Pensioners Eligible for the Solidarity Supplement for the Elderly (CSI)

The Solidarity Supplement for the Elderly (CSI) is a top-up, means-tested cash support paid monthly to elderly people with low-income. The means-testing mechanisms for the CSI requires that the overall annual personal and household income (in case of marriage), be lower than the means-testing threshold. Considering this, *Bloco de Esquerda* wants to extend the number of pensioners eligible for this complement by raising the means-testing threshold (reference value). Another way *Bloco de Esquerda* aims to enlarge the access to this complement is through the removal of the current means-testing requirement which also considers applicants descendants' income when deciding pensioners entitlement to the benefit.

This requirement is often justified by reference to the concept of solidarity and collective responsibility among family members, with the rationale being that high income children are able to support their parents and so reduce the need for this complement and cut costs. Beyond elderly poverty-reduction goals, through the definitive elimination of the means-testing requirement regarding descendants' income, *Bloco de Esquerda* also intends to break the generational cycle of poverty that could be perpetuated through this mechanism, since descendants who were able to take part in social mobility and move up the economic and social ladder will have their disposable income reduced if they happen to have low-income parents, while those whose parents have a high income do not.

Raise Minimum Pensions by ensuring that all workers with more than 20 years of a contributive career receive above the threshold of poverty

Raising the minimum pension amounts is also present in *Bloco de Esquerda*´s electoral program for the 2022 elections, so that regardless of eligibility status for other schemes and complements such as the CSI, those who achieved a contribution period of at least 20 years to the PAYG DB pension scheme (regime geral) will receive a minimum pension amount that will prevent them to ever fall below the poverty line. This policy might have its rationale on the recognition by *Bloco de Esquerda* of the high absolute poverty in Portugal, as measured for instance, by its high rates of severe material and social deprivation at an older age and the risk of poverty.

Around 20,1% of people over 65 years live at risk of poverty[2] after social transfers (before these transfers, the number grows exponentially, reaching 87,4%) and 90,76% of old-age pensioners receive less than the minimum wage in 2021[3]. In 2022, the cohort with 21 to 30 years of contributive career, receive a minimum pension of 321,86€, which means they receive, monthly, 153,35€ under the threshold of poverty (475,21€). The minimum pension for those that contributed over 31 years, is 402,32€ monthly, and these receive 72,89€ less than the poverty threshold (Segurança Social 2022).

Diversify Sources of Funding

To diversify social security´s funding sources, *Bloco de Esquerda* aims to raise the contributions made by large capital-intensive companies (high profits and small number of employees), excluding all micro, small and medium-sized enterprises that constitute the majority of companies in Portugal. These companies operating in capital-intensive industries shall be required to pay a 0,75% contribution of their Net value added (*Valor acrescentado líquido*). With this proposal *Bloco de Esquerda* aims to obtain an extra funding of 300 million euros a year into the system.

[2] At-risk-of-poverty threshold in 2020 is equal to an income of 6653€ annually (equivalent to 475,21€ for 14 months, because of holidays subsidies).
[3] The minimum wage in Portugal, in 2021 was 665€ monthly.

Bloco de Esquerda also proposes other sources of increased revenue for the state, such as the setting of a tax over luxury goods and services, to deepen the progressiveness, a new regime of taxation for property, and the regulation of cryptocurrency.

Assessment of Bloco de Esquerda Proposal

Diagnostic Stage

Food

Food expenses are quite vulnerable to inflation, and it is impossible for households to escape from it. In June 2022, the inflation on food and beverages registered 13,2% (Eurostat 2022 d), and these components weight around 21,7% of the households' income (PORDATA 2022 a). As one fifth of the household expenditure is on food and beverages, it constitutes as the biggest share of expenses. Given the context where pensioners have a high percentage of risk of poverty, we have reason to believe old age pensioners spend an even larger share of their income than those 21,7% mentioned above.

In the last 5 years, the minimum pension increased 1% a year, from 264,32€ in 2017 to 278,05€ in 2022. However, with the 2022 inflation rates of 9,4% in July (Eurostat 2022 d), the Portuguese government announced in September 2022, an increase of 4,43% for pensions under 886€, so the minimum pension in 2023 will amount 290,37€. As the increase rate for the pensions are not proportional to the inflation rate, the real pension value will decrease.

In 30 years, expecting a quinquennial increase of 5,19%, it would mean that by 2052, the lowest pension would be 364,63€, which is still below the poverty line threshold of 2020. In the long term, for this threshold to be achieved, keeping the rate at 5,19% each 5 years, then 53 years would be needed to achieve it.

Health

The expected healthy years at 65 are in average, 7,9 years for men and 6,9 for women. In a setting where the households spend on average 5,9% of their income for health purposes (PORDATA 2022 a), we expect that in a household with a member or more over 65 years, the expenses would be higher than average, especially when 32,1% self-perceive their health as bad or very bad (INE 2022 a). In the population of Portuguese people suffering from a list of chronic diseases, people with more than 65 years are at least 50% of the population in 9 out of the 16 listed diseases, with the highest being coronary heart disease, Urinary incontinence, and Diabetes (Gestational diabetes excluded), with 72%, 71% and 62% respectively (INE 2020 a). One of the causes for the expected reduced years of healthy years after 65 is the 25,9 years on average that a smoking person spent smoking when they reach retirement, in 2019 (INE 2021 b). This long habit might contribute for a reduction of smokers in the retired cohort, given that only 5,31% of retired people kept smoking (INE 2020 b). Furthermore, 26% of the consumption of at least one alcoholic beverage a week is made by retirees (INE 2021 d). Even though it is not the trend, these factors could increase health expenses.

In the short and medium terms, the impacts on this domain can be mixed, as it is possible that the above-mentioned increase of income could take a negative impact by increasing unhealthy consumption habits. The effects of a raise in disposable income can have positive effects by allowing to cope with health expenditures more easily, particularly in the long run, as health outcomes tend to only be perceived over an extended period of time. Additionally, *Bloco´s* proposed extension of the number of CSI beneficiaries allows for deductions in health expenses, such as medications, as this complement is also coupled with these health benefits, generating further positive health impacts.

Education

Extending the number of those eligible for the CSI and increasing the minimum pensions wouldn´t have an impact on the beneficiaries' own education. However, spillover effects may occur if the eligible pensioners are part of third generation households, where there is co-residence with grandchildren or if a large share of grandparents regularly take care of their grandchildren, in what is defined as informal childcare. If verified, these two mechanisms denote a more active grandparental role in grandchildren´s life, including in their education, for which the expected rise in eligible pensioners' disposable income arising from the proposals can lead to an increase in the expenditure on educational goods and services, benefiting those children whose grandparents experience a rise in their disposable income and that are actively present in their life. Portugal´s particular position as a Mediterranean country with a culture that traditionally places a great emphasis on intergenerational family ties as well as an ill-resourced and ill-equipped welfare state has prompted some to consider that patterns of intergenerational co-residence in Portuguese households should be expected, as well as high percentage of grandparents providing informal childcare (Albuquerque 2008). However, up to date estimations on the percentage of extended households in Portugal are scarce. Using ECHP data from 1994 to 2001, (Albuquerque 2011) determined the share of grandparent-grandchild co-residence in Portugal to represent between 6,5 and 11% of all Portuguese households and that the importance of this living arrangement increased in the period analyzed. Regarding the use of informal childcare, OECD estimates that in 2019, 28,4% of children aged 0-2, 30,4% of 3–5-year-olds and 27,2% of those aged 6-12 were users of informal childcare arrangements. However, Portugal stands out among OECD countries when considering the average number of hours of informal childcare provided per week, most notably among children aged 0-2, with 26,2 hours per week, on average of informal childcare dedicated to this age group (OECD 2021 b). It should be noted that the definition of informal childcare extends beyond care provided by grandparents and includes care provided by other members of the extended family or by non-family care providers, if no monetary compensation for the service occurs, so that the precise weight of grandparental childcare provision is difficult to estimate.

Income and work

The main effect of *Bloco de Esquerdas´*s proposals for the Portuguese pension system is the increase in disposable income not only of a significant number of current pensioners but also increases in the expected post-retirement income of future retirees, most notably the established working age, those just below the legal retirement age and that may expect higher pension benefits as a consequence of the elimination of the sustainability factor, if such elimination induces them to ask for early retirement. *Bloco de Esquerda* estimates that around 10% of all new pensions required are subject to the sustainability factor. According to Jornal de Negócios citing data provided by the Ministry of Labor, Solidarity and Social security, in 2020, 38,3% of all new anticipated pensions in the SS general pension scheme were subject to the sustainability factor (Pereira 2021). In the same year, 27,600 anticipated pensions were attributed, totalizing 10,583 new anticipated pensions subject to the factor (Ministério das Finanças 2022, 10). Considering that a total of 87 220 new pensions were attributed, this implies that an estimated 12,1% of all new old age pensions attributed by Social Security were subject to the factor, slightly above *Bloco de Esquerda´*s estimation.

The individuals currently participating in the labor market will not face an increase in payroll taxes, nor a reduction in pension benefits levels through *Bloco de Esquerda´*s proposals once they retire, given that the party is able to successfully diversify social security´s funding sources through the tax on capital intensive firms.

Regarding the work domain, it is important to consider the effect of *Bloco de Esquerda*´s proposals on both current pensioners which are still part of the labor force, on those above the legal retirement age that haven´t yet required their pension benefits but are still active in the labor market (late retirement), on those just below the legal retirement age, and also consider effects on work arising from the proposed tax on capital intensive firms.

A broad range of literature provides evidence for the non-existence of an overriding motive for participating in the labor force after retirement, but rather that multiple reasons justify this participation (Szinovacz 2003). However, the financial condition of the recipient and its household has been subject to a broader range of analysis, most notably that those in greater financial need tend to remain participants in the labor market beyond retirement more often, measured, for instance, through pension income (Sullivan and Al Ariss 2018). This is to be expected as remaining part of the workforce after retirement allows for greater post-retirement financial security for those with lower pension benefits. To reinforce this argument, other studies have found employment after retirement to be higher among the low and high pre-retirement wage distribution, the former possibly out of financial necessity and the latter out of choice and desire to increase their income for a better post-retirement quality of life, so that this distinction is important to make (Cahill, Giandrea and Quinn 2006). The CSI and Minimum Pension proposals may therefore reduce labor supply among those retirees receiving low pension benefits who prior to implementation are active in the labor market or on those who have reached the legal retirement age but are still working, While the long-term sustainability of the pension system calls for policies aimed at prolonging older individuals' participation in the workforce, for which the raise in statutory retirement age and the adoption of the sustainability factor itself are prime examples of such policies, the transition to full retirement by those working after retirement out of extreme financial deprivation, induced by these policies, may be socially desirable, moving the domain towards the vision.

The proposal to eliminate the sustainability factor which softens the penalization for early retirement may have effects on the extensive margin of labor supply by inducing into retirement those just below the legal retirement age. Lastly, the burden of the tax on capital intensive firms could fall on workers, but *Bloco de Esquerda*, perhaps recognizing that possibility, plans to only levy the tax on firms with a small number of employees so that few impacts should be expected on worker´s wages and employment.

Energy

Portugal stands out as one of the European countries with a higher reported financial inability to keep home adequately warm, an indicator commonly used to measure energy poverty, with 17,5% of total households reporting an inability to meet their basic energy needs in their homes in 2020, compared to the EU-27 average of 7,4%. For that same year, 50,9% of households inhabited by a person aged 65 years and over and finding themselves below the at-risk of the poverty threshold (60% median equivalized income) reported an inability to keep their homes warm (Eurostat 2022 c).

As such, low-income elderly are most affected by energy poverty given the considerable amount of time spent in their households as well as being highly exposed to energy market price fluctuations, so an increase in their nominal income could help them face the fluctuations in prices. This is particularly relevant given the present conflict in Europe following Russia´s invasion of Ukraine, in February 2022, and the resulting instability in the energy sector, with poorer final consumers bearing the cost.

Furthermore, individuals receiving the CSI also become automatically eligible for social energy tariffs, monthly discounts in the electricity and natural gas tariffs for domestic use, recalling that, together, electricity and natural gas accounted for 74,4% of the total domestic energy consumption in 2020, with electricity being the primary source of energy consumed in Portuguese households (46,4%) (INE 2021 c).

Social Capital

Non-contributory pensions to alleviate poverty may have positive effects on social capital. The higher disposable income that the entitlement provides potentially increases the participation in family and community activities, strengthening social ties, contributing to solidarity, social fairness, and non-exclusion in communities. The benefits can have these effects through several channels, such as the ability to pay for transportation services and so be able to visit old friends and relatives living far away.

Housing

For a comprehensive analysis of the effects on housing of *Bloco de Esquerda*´s policy proposals, the housing preferences of elderly people are an important aspect to consider. In the Portuguese case, studies suggest the high prevalence of elderly people living in rented or in owned homes (Martin, Santinha and Almeida 2012). The importance of home-ownerships rates among the elderly is related to the extent it can function as a complement to pension income, either by reliving the homeowner from rent expenditures or by granting the possibility of getting equity out of their homes. Indeed, country-specific elements, such as Portugal´s deprived welfare system or its less developed rental market made it so that homeownership represents an important complement to post-retirement income (Delfani, De Deken and Dewilde 2014). As around 45% of all pending housing mortgages in 2018 were set to end when the mortgagor reaches the retirement age, home ownership will still be relevant as complement to post-retirement income in the medium term (Xerez, Pereira and Cardoso 2019). However, individuals who aren´t homeowners are also those who tend to receive lower pensions, possibly due to credit constraints (Dewilde and Raeymaeckers 2008). This sets the case for lesser impacts on the housing domain of proposals that raise disposable income, but aren´t specifically aimed at pensioners in the lowest income bracket, those less likely to be able to use home ownership as a complement to pension income. A conceivable mechanism by which a higher disposable income could affect elderly homeowners is if this income is used to improve the physical conditions of their homes, bearing in mind that according to PORDATA (2022 d), Portugal is the second country in the EU with the highest share of people facing poor housing conditions (25.2% of the Portuguese population). On the other hand, measures aimed at raising minimum pensions and extending the number of CSI recipients, which target pensioners receiving low pension benefits, may allow these pensioners to better cope with rent expenditures.

Gender Equality

Despite significant convergence over the last years, in Portugal, significant gender discrimination is still verified in the labor market, with women´s gross hourly earnings being on average 11,4% lower than those of men (Eurostat 2019). Several factors justify this gender pay gap, namely social norms, a higher percentage of women in lower paid jobs, or the child penalty. Coupled with women´s shorter contribution periods, this gender inequality persists after retirement as women tend to receive lower pensions than men, such that Portuguese women received a pension on average 28,2% lower than that of their male counterparts in 2019 (Eurostat 2022 b).

Considering this, it should not come up as a surprise that women constitute most CSI beneficiaries in 2021 (69,8%) (INE 2022 b) and that about half of women aged 65 or over received a minimum pension compared to one-quarter of men in 2019 (OECD 2019 a).

Moreover, significant differences are observed in the poverty rate after social transfers between men and women aged 65 and over with 22,5% of women being at risk of poverty compared to 16,8% of men in 2020 (INE 2021 a). Such a fact corroborates the unfavorable condition of senior women, so the proposed rise in the number of CSI recipients and increase in minimum pension will tend to benefit this gender the most and effectively contribute to narrow the gender gap among pensioners.

Also, referring to a study conducted in South Africa evaluating the impact of an old-age pension program, grandmothers, in comparison to grandfathers, spend more on grandchildren, showing better health results for girls. There is the prospect that through grandmothers' rise in disposable income, positive effects will be observed in the long term on gender equality (Duflo 2000).

Social Equity

In Portugal, the top 10% of the distribution of earnings have a share of 52,1% of the wealth, highlighting the inequality over the distribution of income. The Gini Coefficient measures that Portugal is 33% far from absolute income equality, in 2020 (PORDATA 2022 b), and it is ranked in 21st place inside the OECD distribution (OECD 2022 a).

Redistributive taxation always reduces inequality, but it is not always the case for poverty (Lustig 2016). Even though it is true that 20,1% of people over 65 years live at risk of poverty after social transfers, it still is a severe reduction from what it is before the social transfers. In terms of poverty, pensions are not fulfilling the goals of *Bloco de Esquerda*, and in the short term it is not plausible to reach the risk of the poverty threshold, however, the inequality will be reduced, because of the redistribution element. In the long run, this is a reachable objective, which means that even though there is an expectation for social equity to be achieved, it will be a long-lasting process.

Family Policy

Retirees in a family can become either a burden or a bonus in terms of income expenditure. They can constitute a burden because of the need for financial support from their families, which many times requires high expenses for their descendants, such as homes, nurses, and informal care. Besides, currently, there is also the means-tested requirement that considers descendants´ income to determine eligibility for the CSI, deepening the burden faced by families. The elimination of this factor would generate more income for the elders that currently see part of their CSI reduced because of their descendants’ income.

Elders in a family can also be drivers of intergenerational mobility, income, property, and investment in education, among others. Both wealth and poverty can be inherited across generations, caused by intergenerational transfers, and that explains the importance of assessing the effects of this proposal on family policy.

Research proves that “*low mobility at the bottom of distributions increases the inheritance of poverty across generations*” (OECD 2008), which means that poor parents most likely inherited the poor conditions from their parents and so on. Research also proves that the mobility of wealth from parents to their children will increase their nutrition, health, living conditions, their investment, and education levels.

Bloco de Esquerda then suggests with its proposals an increase in the disposable income of the pensioners, to increase the intergenerational mobility of income and help escape the poverty trap many low-income households face for generations. One concern that arises here would be the likelihood of welfare dependent parents passing on to their children, as the research highlights. In this sense, there have also been developments in types of policies that could be designed to avoid this dependency that will not be reflected upon in this report.

Well-Being

OECD assesses well-being as a complex junction of many of the mentioned human domains above. It states that "*countries with great average well-being also tend to be more equal*" (OECD 2022 b) and even though money cannot buy happiness, it is an important driver for achieving higher living conditions. Portugal has an average household net-adjusted (not including taxes on income) disposable income per capital of 24 877 USD a year, under the OECD average of 30 490 USD, and it is important to remind that the 10% of the distribution of earnings has a share of 52,1% of the wealth in Portugal (OECD 22 b), highlighting the inequality over the distribution of income.

The country is well positioned in terms of life expectancy at birth, although it could improve the health behaviors of the population. It is important to keep favorable labor market conditions for the younger cohort and avoid their migration to other countries to have a strong and large base of contributors to the Social Security. In the Better Life Index, Portugal scores 5,8 out of 10, under the OECD average of 6,7 (OECD 2022 b), so through *Bloco de Esquerda* positive effects on other domains such as education or Heath, a convergence with the OECD average should be expected.

Intergenerational Fairness Assessment

Bloco de Esquerda's proposals effectively increase the pension benefits of a significant number of current pensioners, for instance, for those who become qualified to receive the

CSI or those affected by the raise in minimum pensions. They may, however, prove unfair for the retired cohort since those retirees who require early retirement before the policy is implemented suffer a higher penalty than those who require it after.

As it stands, the PAYG DB pension scheme is projected to retain its sustainability until 2038 if transfers from the FEFSS are used, period when it will start registering deficits (Moreira et al. 2019, 122). However, if no other policies were pursued aiming at financing the expected rise in pension benefits from the reform, the financial sustainability of the pension system could further deteriorate, with the system registering deficits much earlier than expected. To mitigate this possibility and avoid the current working age to bear the burden of the reform, namely by paying higher payroll taxes, *Bloco de Esquerda* also included a mechanism for diversification of social security sources of funding so that the rise in pension benefits is to be financed by levying a tax on capital intensive firms, avoiding further increases on the taxes on labor, which would disadvantage the current working age cohort. The inability to effectively tax these firms may put into question the intergenerational fairness of *Bloco de Esquerda*´s reform itself, for which complementary mechanisms to combat possible tax avoidance become necessary. Furthermore, the proposals avoid inequality being passed through time, especially due to the proposal on the elimination of means-testing requirement that considers descendant’s income when evaluating pensioner´s entitlement to the CSI. Future generations don´t get restricted in their choices, the opposite may happen as restrictions imposed during the 2007 reform are to be eliminated, namely the sustainability factor.

Scenarios Stage

Discipline

In a scenario of longstanding low government spending to avoid budget deficits and keep Portugal´s government debt low, proposals such as the one aiming to extend the number of pensioners receiving the means-tested complement (CSI) or to raise minimum pensions may be in jeopardy in such a scenario, since these so called first-tier pensions are financed through the state budget. If low government spending is the absolute priority, the uncertainty regarding the ability to meet the party´s estimated revenues from the tax on firms may deteriorate the conditions and political will to implement the policies. As such, the potential effects of this hypothetical future scenario on *Bloco de Esquerda*'s policy proposals relate to the political and fiscal barriers and high uncertainty levels regarding its implementation arising from strict government expenditure controls, so that an effective and deliberative action plan, with detailed processes on how to overcome these obstacles gains prominence in such a scenario. Once these obstacles are overthrown, no substantially different effects on the impacts should be expected in this scenario.

Growth

A scenario of long-term economic expansion provides the optimal setting for *Bloco de Esquerda*'s reform proposals to be enacted. A higher rate of wage growth due to increased productivity allows for payroll taxation to be levied on higher wages. Furthermore, an accelerated population growth, not resulting, at least in the short-medium term, from higher fertility rates but from immigration alongside high levels of employment, effectively extending the base of taxable wages, allows the workforce contributing to the system to obtain high rates of return on paid payroll taxes, with the prospect of receiving high pension benefits as a result once they are retirees. Furthermore, in an economic expansion scenario, it expected the social security sustainability fund to generate higher returns, especially considering that the PAYG DB scheme budget surplus is one of the funds' main financing sources and in such a context of higher contributions largely exceeding the benefits paid, a high budget surplus should be expected, delaying social security´s sustainability problem. While desirable, this scenario is unplausible as just to keep the current volume of the active population in 2060, a projected positive average net migration of 75 000 people a year must be verified (Peixoto et al. 2017). This is an unreasonably high value considering that in the years 2017 to 2020 the average annual net migration remained at 33 456 individuals, after 6 consecutive years of negative net migration values, from 2011 to 2016 (Oliveira 2021).

Particularly important to monitor are the indexation mechanisms in place which consider the evolution of GDP and more importantly, inflation and that contribute to sustaining post-retirement income security.

Transformation

This scenario presumes a radical shift in ways of living, social norms, and the advent of technology, science, and innovation with an enhanced equilibrium between humans and the environment as well as significant progress in an array of human domains, namely on education, gender equality and health, so that the proposals beneficial effects on these domains would be less relevant. Independently of drastic changes in labor market dynamics, the institutional apparatus and the appearance of new industries and business models assumed in this hypothetical scenario, the rational for a pension system remains, as well as the need for post-retirement income security and consumption smoothing that the system provides. Furthermore, *Bloco de Esquerda*´s proposals become increasingly aligned with values shared by society, with a greater emphasis on social equity and cohesion that the proposals entail. Furthermore, the growth of industries related to the green energy and climate transition may allow for greater employment that increases contributions to the system and help this same system follow a trajectory toward financial sustainability, which, as in the growth scenario, provides a more favorable condition for implementing *Bloco de Esquerda*´s proposals.

Collapse

In a scenario of collapse, substantially distinct outcomes should be expected if *Bloco de Esquerda*´s proposals come to fruition. In a recession scenario, with high unemployment, mass young and skilled emigration, and the resulting decrease in labor force participation, with a decrease in the number of workers and employers contributing to the PAYG scheme, the fiscal imbalance of the pension system is worsened. Aimed at raising pension benefits and with that, pensioner´s disposable income, an implementation of the proposals in a scenario of collapse may further deteriorate the financial sustainability of the system, with current working age groups and those who are not yet part of the labor market having to bear the burden with lower pension benefits once they retire. Nonetheless, proposals aimed at increasing pension benefits, targeted at the most vulnerable, are notably relevant in adverse economic conditions, allowing for a social safety net that ensures protection against rising poverty rates and inequality, as is the case of proposals regarding the CSI and minimum pensions, with the proposal to withdraw descendants' income as a means-testing requirement being sensitive to descendants' projected labor market conditions' deterioration in a crisis. The importance of social protection in a crisis scenario has been highlighted by Branco (2022, 66-68), who found the inequality impacts of the great 2008-2015 recession to be less severe in Portugal compared to other southern European countries subject to austerity as measured by the Gini coefficient

Final Remarks

Now, more than ever, the relevance of intergenerational justice is discussed and seen as important in National politics. Recently, in a package of measures put in place to fight the effects of inflation on families' budgets, the Portuguese government announced that pensioners would receive, in October, an extra supplement equivalent to half a monthly pension payment (TSF/Lusa 2022). Though the aim is to fight inflation, these measures need to keep in mind intergenerational fairness, as the Portuguese PM said. That is why he claims it is impossible to increase the pension benefits for the year 2023.

We found that the 2007 reform does not have the ability to tackle all the needs and challenges that Social Security is facing, in demographic terms, one of the pressing problems is the old age dependency rate, and in sustainability terms, the reform expected a 2% economic growth each year to guarantee full sustainability, which did not happen. Therefore, these problems need a long-term solution.

The two analysis conducted and presented throughout this paper concluded that both policies are "Probably (Intergenerationally) Fair" (though fairer to different age cohorts), despite their deeply different proposed measures. We would like to point to the fact that we find the reform proposed by *Iniciativa Liberal* to be intergenerationally fairer when the full implementation is complete, as it does constitute a disadvantage at any life stage, but as it proposes a full reform, the implementation is a much more complicated process, with intergenerational unfairness at the transition. Whereas *Bloco de Esquerda* assumes disadvantages during contributing life stages, supported by the solidarity principle, and as it only proposes additions to the current system, it would be easier to implement.

Motivated by the objective to find solutions to the expected unsustainability of the system, the two parties are concern with the fairness of the system, the living conditions of pensioners, ensuring they do not lose their quality of life, however, by belonging to opposite sides of the political spectrum, each has a different set of proposals, approaches and mechanisms.

As pioneers of this methodology for this kind of analysis, we would kindly make some recommendations and comments in order to improve and adjust it to different contexts. We find that the SOIF tools allow for a very flexible structure, as demonstrated by our two different approaches in the structure of the analysis of each policy, and that it is very applicable to the specific theme of our policy – Pension Systems –, as it is useful in policy analysis, taking into consideration the life-cycle of the policy, not allowing for researchers to have tunnel vision and make them consider all of its impacts, from implementation to long term effects.

One struggle we encountered, was the strong subjectivity the tool may lead to, thus we strongly recommend the framework to demand an extensive quantitative analysis, to keep it as objective as factual as possible. For the proper assessment of the impacts and to derive a better conclusion, the quantitative and qualitative data were a key aspect, which were lacking for several domains, even though the tool was more directed towards a qualitative analysis. Lastly, we also recommend an extension of the process stage to better incorporate the policies that have not been implemented and may need an approach for their gradual enactment. The assumption in the forementioned state that the policy had already been implemented passes the chance to comprehensively design an enactment process that may be fundamental to the evaluation of the intergenerational fairness or that simply is forgotten in the midst of the desire to implement a policy. In this sense, we suggest the addition of a policy map to the toolkit, as we believe it would improve the analysis.

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