Taxation and intergenerational equity: should youth be tax favoured? The portuguese perspective

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I. INTRODUCTION

More than ever, the youth must be bold. Facing a more uncertain world and a more insecure employment. Challenged with higher saving needs to deal with the potential unsustainability of their future pensions. Defied by the shortfalls of global crises, be it from a financial, health, safety, labour, or environmental nature, which continue to set the pace of contemporary reality. The youth need to be audacious.

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How should taxation react to this brave new world of increased uncertainty and enhanced interconnection? Should the youth, which seem to be particularly exposed to these risks, be tax-favoured? This is the core question that this article intends to answer.

Such a wide question, naturally demands, first, a fine delimitation of its scope. Taxation is merely one of the instruments in the policy-making toolkit that may be used to deal with the problems confronting the youth. 1 It is not even the core one available.² The world of taxation, in turn, is fairly broad. Too broad for a study of this dimension. For these reasons, this study will focus solely on the role that the Personal Income Tax (PIT) may play in this policy-making arsenal. The PIT, due to its technical configuration, is particularly fit to be adapted to deal with the specific needs and circumstances of certain sectors of the population.3

For a description of the youth employment conundrum, on which this article will mostly focus, and for a competent description of the available policy-making toolkit, see, e.g., Rodrigues, M. et. alii, Livro Branco: Mais e Melhores Empregos para os Jovens, Fundação José Neves, Porto 2022 (for the Portuguese perspective) and O'Higgins, N., Rising to the Youth Employment Challenge - New Evidence on Key Policy Issues, International Labour Organization, Geneva 2017 (for a global perspective).

Based on existing data, the social transfer system and the public expense perform most of the redistributive function of the state. See, e.g., INTERNATIONAL MONETARY FUND, «Tackling Inequality», Fiscal Monitor, Washington DC, October 2017. Nonetheless, as this article will defend, taxation surely has a role to play as an

instrument to tackle this complex conundrum.

Different taxes offer diverse latitude for the configuration of their respective taxable events. There are taxes, such as the PIT and most Real Estate Taxes, where "personalizing" the tax (that is, designing the tax so as to take into consideration the specific characteristics of the taxpayer) is fairly straightforward. In other taxes, such as the Value Added Tax or Excise Duties, customizing the tax to the specific personal circumstances of the taxpayer may be very difficult or impractical, given the particularities of the configuration of the respective taxable event. Indeed, in these types of taxes, the identification of the purchaser (final consumer) is generally irrelevant in determining the tax burden. It must be underlined, though, that even in these cases, taxation can be calibrated to take into account the different elasticities (i.e., degree of behavioral reaction to a tax change) of a given social group. Thus, even in taxes with a reduced margin for personalization, the tax may be designed to have a particular impact on a certain stratum of the population. For instance, the same increase in tobacco taxation will have a different impact on the behaviour of young and older people, given their respective elasticities. The policy-maker can, thus, even in these taxes, target, albeit in a much more limited form, certain social groups on its actions. See, e.g., Ding, A., «Youth Are More Sensitive to Price Changes in Cigarettes than Adults», Yale Journal of Biology and Medicine, vol. 76 (2003), pp. 115-124 (author shows that the youth are quite responsive to price increases through excises taxation, whereas the adult population is relatively less responsive to such price changes). See also Abouk, R., et alii, «Intended

The evaluation of any tax reform, including in the PIT context, is fundamentally based on the principles of equity and efficiency. 4 To understand whether it makes sense to develop a differentiated tax approach to the youth, we need, firstly, to work out, based on these policy tenets, whether adopting such an approach would be a recommended policy path. To do so, it is necessary to evaluate the application of these principles within the precise context that the youth are facing. This article will start by performing this exercise, adopting the Portuguese society and economy as a reference. Although with its own peculiarities, many of the challenges that Portugal currently faces should be common to several countries in Europe, and around the world. Thus, the discussion here undertaken will certainly reflect some concerns and challenges that should be common to a wider number of jurisdictions.

Once the policy approach is defined, the article will then delve into the Portuguese PIT and evaluate recently enacted legislation targeted at the youth. The purpose will be to identify potential venues for PIT reform that adequately deal with the specific nature of the youth and the challenges they face in today's social, economic, and environmental context.

II. THE POLICY APPROACH

THE ABILITY-TO-PAY CRITERION AND THE TAXATION OF 1. YOUTH

Taxes stricto sensu, as compulsory unilateral contributions,⁵ are based on the philosophical and constitutional principle of equality, measured against

and Unintended Effects of E-cigarette Taxes on Youth Tobacco Use», Journal of Health Economics, vol. 87 (January 2023), pp. 1-22.

To these core tenets of taxation, we then add pragmatic concerns, such as administrative

feasibility, simplicity, etc.

The definition of taxes around the world is not unified. In Portugal and Spain, tax stricto sensu, as a compulsory unilateral contribution, is known as Imposto (Portuguese) or Impuesto (Spanish). In turn, Tributo, in both languages (the equivalent to Abgabe in German), includes the concept of taxes stricto sensu, Contributions and Fees. Contributions and Fees incorporate quasi-sinallagmatic or sinallagmatic relationships, respectively. In the Portuguese doctrine, Sérgio Vasques, adopting a position that this study espouses, limits the characterization as "tax" to compulsory unilateral contributions that have as a legal presupposition the ability-to-pay, terming all other compulsory payments, based on the principle of equivalence, as fees or contributions, depending on their quasi-sinallagmatic or sinallagmatic relationships, respectively. See Vasques, S., O Princípio da Equivalência como Critério de Igualdade Tributária, Almedina, Coimbra 2008. See also, with a fine overview of the concept of "taxes" around the the yardstick of Ability-to-Pay. ⁶ We see this reflected in several constitutions around the world, including the Portuguese. ⁷ The Ability-to-Pay concept plays a central role in the design of the tax system. ⁸

world, and noting how in Common Law jurisdictions the concept of "Contribution" does not have the meaning or conceptual richness that can be found in Civil Law jurisdictions, Thuronyi, V., *Comparative Tax Law*, Kluwer Law International, The Hague 2003, pp. 45-54.

6. As Casalta Nabais notes, building upon the work of Tipke, "The principle of equality and the principle of ability-to-pay are not juxtaposed cumulatively, but rather the principle of ability-to-pay is the yardstick against which equality in taxation is measured". Author's translation. See Casalta Nabais, J., O Dever Fundamental de Pagar Impostos, Almedina, Coimbra 1998, p. 444.

7. For instance, the Italian Constitution, on its Article 53.°, states that: "Every person shall contribute to public expenditure in accordance with his/her taxpayer capacity. The taxation system shall be based on criteria of progression". The Spanish Constitution, on its Article 31.°, n.° 1, reads as follows: "Everyone shall contribute to sustain public expenditure in proportion to his or her financial means, through a just and progressive system of taxation based on principles of equality, which shall in no case be confiscatory in nature." The Portuguese Constitution does not explicitly mention the criterion of ability-to-pay, but the doctrine is consensual on its extensive interpretation based on the principle of equality and on Articles 103.° and 104.° of the Portuguese Constitution. Indeed, Article 4.° n.° 1 of the Portuguese General Tax Law clearly states that "Taxes are based essentially on the ability-to-pay, as revealed by law, through income or its use and assets". The Brazilian Constitution is also in line with these constitutional approaches. In article 145.° of its 1988 Federal Constitution, the Brazilian legislator explicitly imposes "Taxes graduated according to the economic capacity of the taxpayer". Author's translations.

In most Civil Law jurisdictions, there are fundamentally two legal presuppositions or fundaments for taxability. The Ability-to-Pay and the Equivalence criteria. In the case of compulsory payments based upon the principle of equivalence, the synallagmatic or quasi-synallagmatic nature of the relationship is a pillar of the instrument configuration. In this type of commutative or para-commutative payments there is an equivalence, which can be closer or more distant, between the benefit and the consideration. This equivalence translates into a payment to the State as compensation for the benefits received by a taxpayer or homogeneous group of taxpayers, or to cover the costs that a taxpayer or homogeneous group of taxpayers imposes on the rest of society. This requirement of bilaterality is distinct in the Fees and in the Contributions. In the case of Fees, we are in the presence of true synallagmatic relations, with a direct link between the State's provision and the consideration of the taxpayer. This is not the case with Contributions. In the latter, also called para-commutative taxes, there is no individual and concrete consideration, but rather the responsibility of a homogeneous group to finance a certain benefit of which it is globally beneficiary, or to compensate society for a cost for which it is responsible. Note that the category of "Special Contributions", in Portuguese Law and in several other Civil Law jurisdictions, is included within the scope of Taxes stricto sensu, as defined in this article, and not in the more general concept of Contributions, based upon the principle of Equivalence, as here detailed. See, for an in-depth analysis of the principle of Equivalence in the Portuguese doctrine, Vasques, S. (2008). See also Tavares DA Silva, S., As Taxas e a Coerência do Sistema

In general, the ability-to-pay is revealed through the receipt of income, the ownership or acquisition of assets, and the purchase of goods and services (income, assets, and consumption). The selection of the ability-to-pay as a legal prerequisite for taxation is essentially justified by the search for a criterion of material justice on which to base taxes whose purpose is to finance State benefits without an individualized beneficiary.⁹

The nature of the ability-to-pay principle has two implications. First, the ability-to-pay as a legal presupposition or fundament is mainly appropriate for unilateral compulsory contributions, i.e., taxes *stricto sensu*. ¹⁰ Given the difficulty of individualizing the specific beneficiary of many of the State's benefits, its financing is made more efficient and fairer by defining that all subjects with an effective connection to the State should finance it according

Tributário, Coimbra Editora, Coimbra 2013; and CORREIA, M., 2023, «A Personalidade Tributária Passiva e a Configuração do Facto Jurídico-Tributário: Algumas Reflexões» in Católica Talks no. 4 – Direito e Personalidade, UCP Editora, Lisbon 2023, pp. 221-259. In Common Law jurisdictions, the principle of Equivalence does not appear to have the conceptual depth that can be found in Civil Law jurisdictions, its conceptualization being generally restricted to its Benefits segment. See, e.g., Thuronyi, V. (2003), pp. 45-54; James, S./ Nobes, C., The Economics of Taxation: Principles, Policy and Practice, 14th ed., Fiscal Publications, Birmingham 2014, pp. 79-82.

^{9.} This is not the place to delve into the philosophical and economic bases of the ability-to-pay principle. See, for a good transversal coverage, Falsitta, G., Manuale di Diritto Tributario – Parte Generale, 13th ed., Cedam, Padua 2020, pp. 153 et seq.; Casalta Nabais, J. (1998); James, S./Nobes, C., pp. 77-85; Freitas Pereira, M., Fiscalidade, 7th ed., Almedina, Coimbra 2023, pp. 76-79; Rosado Pereira, P., Manual de IRS, 4th ed., Almedina, Coimbra 2022, pp. 21-25; and Bankman, J./N. Shaviro, D./J. Stark, K., Federal Income Taxation, Wolters Kluwer, New York 2012, pp. 11-12.

See, in this regard, Xavier, A., *Manual de Direito Fiscal*, vol. I, Faculdade de Direito da Universidade de Lisboa, Lisbon 1981, pp. 42-44 ("The tax does not generate for the creditor any specific duty to pay a consideration. The exercise of public functions is a functional duty of the entities to which they relate and which cannot fail to be individually fulfilled on the grounds of a failure to pay a tax by a specific subject."). Author's translation. Further, note that although ability-to-pay is the assumption par excellence of taxes, it is conceptually possible to design other fiscal instruments, including fees, that, despite based on the assumption of equivalence, take ability-to-pay into account when defining their amount. The doctrine is not, however, uniform regarding the merits of introducing ability-to-pay elements in taxes of a synallagmatic nature. There are some exceptions to this position. Some legal scholars argue that the ability-to-pay may also be a determining element of the rate, functioning as a relief criterion. See Tavares DA Silva, S. (2013), pp. 124-125. Even in these cases, however, it is clear that the ability-to-pay does not constitute a basis for taxation, but a simple aid in defining its measure, i.e., the specific amount of tax to be paid.

to their economic capacity. 11 The ability-to-pay as a legal prerequisite tends to be synonymous with the unilateral nature of the tax. 12

Second, the concrete determination of the ability-to-pay must necessarily be based on economic criteria. What is the measure of income, what is the value of assets, what is the amount of expenditure made, and what is the concrete definition of each of these indicators of contributive capacity, are judgments necessarily based on economic science, although they are subsequently thickened with legal concepts to enable their inclusion as operative concepts in the tax laws.¹³

In the case of direct taxes, such as the PIT on which this article is focusing on, the ability-to-pay, besides being the basis of taxation, also tends to be the measure of taxation, indicating the *quantum* of tax to be paid. ¹⁴ According to the principle of ability-to-pay, the tax should be distributed according to the economic capacity that each one displays, in the specific case of the PIT, assessed through its income. ¹⁵

These theoretical tenets fundamentally impact the overall mechanical structure of the PIT.

In particular, in order to adequately materialize the ability-to-pay principle, most legislators, including the Portuguese, tend to abide by the following rules when structuring their PIT: (i) the PIT tax base is generally

- 11. The definition of what amounts to "an effective connection to the State" is then finetuned for each tax, based on the specific configuration of its taxable event. For instance, in the PIT case, source and residence constitute the core references for delimiting the perimeter of the State's territorial competences.
- 12. As Vasques emphasizes, in a perspective that we share, for a tax to be called unilateral it is not enough to look only at its presupposition or fundament. It is also necessary to take into consideration its purpose. As the author notes, "as long as a tax is demanded on the occasion of an administrative provision, it should not be rejected as a tax. It should only be rejected when the administrative service constitutes its *raison d'être* and the purpose of the tax is to compensate for it". See VASQUES, S. (2008), pp. 136-137.
- 13. See XAVIER, A. (1981), p. 26.
- 14. In the case of indirect taxes, the ability-to-pay will be the basis, but not necessarily the measure (the *quantum*) of taxation. In the latter, the personalization of the tax naturally proves to be more difficult, insofar as the possessor of the ability-to-pay is the taxpayer, a purchaser that generally remains undifferentiated given the operating logic of this type of tax. These are "mass" taxes, where the aim is to avoid the need to know the nature of the acquirer at the final stage of the retail sale. Consider, for instance, the example of VAT.
- 15. In this regard, it is common to refer to the concepts of horizontal equity (treating equals equally) and vertical equity (those with larger tax bases pay larger taxes).

defined in a comprehensive manner so as to align it, as much as possible, with the Schanz-Haig-Simons concept of income, even if some of the components of tax base are then subject to a differentiated treatment or subject to autonomous tax rates; (ii) the tax burden is generally calibrated based on the economic capacity of the taxpayer, taking into consideration his personal characteristics and circumstances (such as children, personal disability, etc.); (iii) taxation only occurs once a certain threshold of income, considered essential for survival, is surpassed; and (iv) progressive tax rates are applicable. ¹⁶ In practice, these different aspects may be implemented through different tax design options (e.g., a certain personalizing element that the legislator considers relevant may be introduced, among other alternatives, through a deduction to the tax base, a tax credit or an alteration to the rate schedule). ¹⁷

A key issue on the design of the PIT with impact on equity is the choice of the time frame to evaluate the ability-to-pay. ¹⁸ Indeed, as Fullerton & Rogers observe, "(t)he distinction between lifetime and annual perspectives would be unimportant if each person's income did not change over the course of his or her lifetime. In that case annual income would accurately reflect permanent income, and individuals would not change annual income categories." ¹⁹ However, as the authors clearly demonstrate, that is generally not the case. As Robinson judiciously notes, "income will vary…at different phases of the life cycle, so an estimate of the real burden of taxes should weight income lost to taxation more heavily for younger and poorer people than for older and richer." ²⁰ For this reason, some authors, such as Robinson or Schunk, have proposed over the last years some methodologies to pursue the principle of tax equity over lifetime,

^{16.} See ROSADO PEREIRA, P. (2022), pp. 25-33. See also Organization for Economic Cooperation and Development, «Fundamental Reform of Personal Income Tax», *Tax Policy Studies*, no. 13, Paris 2006.

^{17.} See discussion *infra* for a more detailed description of the essential elements of PIT design.

^{18.} In this sense, see also Bankman, J./N. Shaviro, D./J. Stark, K. (2012), p. 12 ("Once one accepts that some variant of ability-to-pay ought to serve as the touchstone for allocating tax burdens, the question becomes how to implement it... A key issue in choosing among income, consumption, and wealth as tax bases concerns the choice of time frame for evaluating ability-to-pay").

^{19.} See Fullerton D./Lim Rogers, D., «Lifetime versus Annual Perspectives on Tax Incidence», *National Tax Journal*, vol. 44, no. 3 (*September 1991*), pp. 278-279. For an in-depth description of these and other differences between the lifetime and annual perspectives and their implications for tax analysis, see *ibid*.

^{20.} See J. Robinson, A., «Lifetime Averaging», Canadian Tax Journal, vol. 22, no. 6 (November-December 1974), p. 601.

exploring potential models to allow for that. ²¹ Despite the relevance of these considerations, the full implementation of a lifetime perspective to calculate the PIT is not yet fully mature, and thus, it will not be an alternative this article will consider for policy analysis and recommendations. ²²

Now that the relevant tax conceptual framework has been established, the question that arises at this stage is whether the ability-to-pay, in terms of economic capacity, of the youth is the same as that of the more mature sectors of the population. Let's evaluate the Portuguese context in this regard to better understand the policy direction to adopt.

2. THE PORTUGUESE YOUTH AND THEIR ECONOMIC CAPACITY

There are many ways of measuring economic capacity. For current purposes, in the context of income, this study will focus on: (i) available labour income, assessed through unemployment rates and quality of available employment; (ii) affordable housing; (iii) saving needs for retirement; and (iv) resilience to crises.²³

21. See J. Robinson, A. (1974); J. Schlunk, H., «A Lifetime Income Tax», *Virginia Tax Review*, vol. 25, no. 4 (*Spring 2006*), pp. 939-976. As Schlunk explains: "Like the current income tax, my lifetime income tax would be assessed annually. However, it would be assessed not on the basis of the income earned by the taxpaying unit in a given taxable year, but on the basis of the income earned by the taxpaying unit over the course of its entire life." See *ibid.*, p. 942.

22. Indeed, already as far back as 1948, Silverson sensibly remarked that "(a) scientifically exact measure of 'ability-to-pay' as applied to the individual income tax would require a lifetime accounting", recognizing, however, the associated difficulties, be it due to practical considerations or to revenue needs. See Silverson, H., «Earned income and ability to pay», Tax Law Review, vol. 3, no. 3 (1948), pp. 300-301. More recently, Fullerton & Rogers observed that "(a)ny discussion about equity that is based on annual calculations could be supplemented, wherever possible, with potential lifetime effects" See Fullerton D./ Lim Rogers, D. (1991), p. 286. However, the authors also recognized that, due to the limitations on available data, it is presently very difficult to use a lifetime perspective in tax analysis. For this reason, for the time being, the input of the lifetime perspective must be restricted to qualitative analysis. See ibid.

23. Unless otherwise indicated, all statistical information used in this section has been extracted from PORDATA, a transversal database on the Portuguese economy and society, managed by Fundação Francisco Manuel dos Santos, which can be accessed at (English version): https://www.pordata.pt/en/home (last accessed on 12/06/2023). Information extracted from other sources will be specifically noted, wherever relevant.

2.1. Available labour income, assessed through unemployment rates and quality of the available labour

In April 2023, the youth unemployment in Portugal (for individuals with less than 25 years old) was 18.3%, close to three times as much as the general unemployment rate of 6.8%. This trend has been constant over the recent past. On average, over the last 30 years, youth unemployment has always been between two and three times superior to the unemployment rate found among the more mature sectors of the population.

In Europe as a whole, the youth unemployment rate tends also to be higher than the general unemployment rate, although with lower discrepancies. In April 2023, the EU unemployment rate was $6.0\,\%$, while the euro area seasonally-adjusted unemployment rate was $6.5\,\%$. In the same date, the youth unemployment rate was $13.8\,\%$ in the EU and $13.9\,\%$ in the euro area. ²⁴

In short, young people are generally more affected by unemployment.

Further, the available youth employment in Portugal has a lower quality than the one found on the more mature sectors of the population. Flexible contractual labour arrangements are more common than in other age groups. While in 2019 the proportion of contracts with fixed term was of 14.6% for the general population, for the workers with less than 25 years old it was of 53.9%.²⁵ The proportion of youth with involuntary temporary contracts in Portugal is also much higher than the European average.²⁶

On top of the low quality of the labour contractual relationship, the salaries of the youth are also low, compared with the average for the remaining age groups in Portugal, and with the European average.²⁷ Young people with a job tend to receive lower wages than the other age groups, with a significant proportion of young people earning the minimum wage. In mid 2021, this percentage was around 34% for young people up to 25 years old and around 26% for those aged between 25 and 29 years old.²⁸

To this statistical data, it should be added that the current state of affairs forcefully results in a late emancipation of the youth from the family home,

^{24.} See https://ec.europa.eu/eurostat/databrowser/view/une_rt_m/default/table?lang=en (last accessed on 12/06/2023)

^{25.} See Rodrigues, M. et. alii (2022), p. 8.

^{26.} See Rodrigues, M. et. alii (2022), p. 1.

^{27.} See Rodrigues, M. et. alii (2022), p. 1.

^{28.} This compares with the average rate of 23.7% for those workers aged over 30 years old. See Rodrigues, M. *et. alii* (2022), p. 11.

thus delaying the creation of new family nuclei and prolonging a situation of instability, which, in turn, has an impact on demographic imbalances.²⁹

Further, while the special costs faced by the elderly (namely, regarding health expenses) are commonly highlighted in policy analysis, the costs that the young need to face to start an autonomous life are often forgotten, including the need to invest for the first time in a large array of assets required to initiate their life independently (housing, appliances, professional clothing, etc.) or, in certain cases, to move in the territory so as to find a job.³⁰

In summary, unemployment affects young people more than other age groups, and those who have jobs, in a significant proportion, are poorly paid and have insecure labour relationships. For what interests us here, there is strong evidence that their economic capacity, measured by their present labour income, is lower than in other age groups.

2.2. Affordable housing

Youth struggle to find affordable housing. The price in housing has increased significantly in the recent past in Portugal, especially in the largest city centers. 31 As a result, in 2020, over 20% of the budget of the Portuguese families was spent with their housing. 32 This compares with 12,1% twenty years before, in 2000.

29. See Rodríguez Jiménez, L., «La Juventud como Colectivo en el Sistema Tributario Español: Análisis de los Impuestos y el Principio de Capacidad Económica en España y Extremadura», Cuadernos de Investigación em Juventud, no. 4 (2018), p. 3.

31. There are several reasons for this phenomenon, the surge in tourism being one of the

32. This value includes water, electricity and gas, and excludes maintenance, furniture or electric appliances.

2.3. Saving needs for retirement

Due to population aging (demographic crisis) that results from the long-standing low natality rates and from the improvements in healthcare systems and associated increased life expectancy, the youth face the prospect of having to save more for their retirement than their predecessors.

To ensure the substitution of generations (replacement rate), each woman should have, on average, 2,1 descendants. The total fertility rate in Portugal, in 2021, was of 1,35, below the (also low) EU average of 1,53.33 In 1975, the Portuguese fertility rate was of 2,81. The fertility rate in the country has been consistently at values below 1,45 for the last 20 years. It comes, therefore, as no surprise that, from its population peak of 10.573.100 residents in 2010, taking into consideration also the migration flows, Portugal now has 10.444.242 residents (2022 balance).

Further, lifetime expectancy is now higher. In 2021 the average life expectancy in Portugal was of 81 years old. This compares with 67,1 in 1970.

The long-standing low fertility rates cumulated with longer lifetime expectancy, and with migration flows that do not compensate for this unbalance, mean that a larger fraction of the resident population is now older. Indeed, while the aging index in Portugal was of 65,7 in 1990, it is now of 183,5 (2022 balance). This means that currently, in Portugal, there are approximately 183.5 elderly people for every 100 young individuals. From an another, interrelated perspective, while in 2005, only 17% of the resident population was 65 years old or more, in 2022 this age group represented 24% of the total population. And the trend continues.

In turn, the aging population is putting additional pressure on the pensions system. In 2021, 40% of the Portuguese population was receiving retirement pensions from the State.³⁵ This compares with 30% in 1990. This trend, cumulated with the gradual improvement of the State pensions (which remain low by European standards), has resulted in the doubling

^{30.} See, in this sense, Rodríguez Jiménez, L. (2018), p. 15. For instance, Forman adopts a quite critical perspective to the tax benefits conceded to the elderly, defending, based on North-American data, that many of the elderly have higher incomes and more wealth than their nonelderly counterparts. See Barry Forman, J., «Reconsidering the Income Tax Treatment of the Elderly: It's Time for the Elderly to Pay Their Fair Share», University of Pittsburgh Law Review, vol. 56, no. 3 (Spring 1995), pp. 589-626. Similarly, but more recently, Brassey refers to official UK information to indicate that certain benefits to the elderly may no longer be justifiable since retired people currently have higher average income than younger groups. See Brassey, A., 2023, «The Implications of Intergenerational Issues on Tax Policy in a Post-COVID World: An Examination of Age Discrimination» in Tax Law in Times of Crisis and Recovery, Dominic de Cogan, Alexis Brassey and Peter Harris (eds), Hart Publishing, Oxford, p. 280.

^{33.} The total fertility rate indicates the "mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year". A total fertility rate of around 2.1 live births per woman is considered to be the replacement level in developed countries. See https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics#live_births_per_woman_in_the_EU_in_2021 (last accessed 12 of June, 2023).

The aging index is the number of people aged 65 and older per 100 people under 15.

A value greater than 100 means that there are more elderly than young people.

^{35.} Percentage of the resident population aged 15 or more.

of the public expense with pensions over the last 30 years. While in 1990 Portugal was spending 4.6% of its GDP with its pensions, in 2020 it was spending 9.2%.

This trend is particularly worrisome since individuals paying contributions today are not paying into a fund for their own benefit, rather they are paying for the current expenditure of the older generation.³⁶

2.4. Resilience to crises

The greatest effects of crises tend to fall on the young.³⁷ The youth are more susceptible to crises for a mix of reasons, including: (i) lower quality of their labour relationships, especially regarding higher level of flexible and fixed term labour contracts; (ii) generally cheaper to lay-off, assuming, as in most jurisdictions, that indemnities are calculated based on the duration of the labour relationship; and (iii) lower salaries and, thereby, lower amount of savings and of wealth, including own housing, to serve as a cushion for crises.

This reduced resilience to crises is particularly worrisome in today's globalized world. As the last decade has clearly demonstrated, the global dimension of crises makes them more difficult to predict and avoid and, once they occur, to combat.³⁸ They have tended also to result in periods of great austerity, with particularly negative impacts to the youth worldwide. In the Portuguese case, for instance, while the last financial crisis was particularly harmful to employment, in the case of the youth, the impact was particularly

severe, with youth unemployment reaching 38,3% in 2013 (compared with 15,7% and 15,8%, for those aged 25-54 and 55-64, respectively). By the same token, during the recent COVID crisis, youth unemployment (15 to 24 years old) grew from 19.9% on the second quarter of 2020 to 26.4% on the third quarter of the same year. The unemployment rate growth on the age group 25-29 years old was also very substantial (9.4% to 13.1%). The unemployment rate for the remaining age groups did not experience such large variations.

Within this context, the likelihood of new financial or health crises; the potential labour costs of technological transition (AI and Robotization) and automation, ³⁹ and the expected costs of the environmental challenge that lies ahead, all pose especial hurdles to the youth in their future. This impact should be exacerbated in the light of the high public debt that will need to be repaid in the next decades and the demographic crisis currently building up in many developed countries.

2.5. The Economic Capacity of the Portuguese Youth

All in all, when assessing the economic capacity of the Portuguese Youth based on available labour income, as evaluated through unemployment rates and quality of available employment; affordable housing; saving needs for retirement; and resilience to crises, we can conclude that the Youth possess a significantly more reduced economic capacity than the more mature sectors of the population. Their ability-to-pay is lower⁴⁰.

^{36.} See Brassey, A. (2023), p. 281. Note that the pension sustainability problem may also be approached using age-targeted labour income tax instruments, which result in the reduction of the labour income tax payable by individuals approaching the retirement age. This policy approach increases the net returns to labour, thereby increasing the cost to retire. See Gustafsson, J., «Age-targeted Income Taxation, Labor Supply and Retirement», *Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association*, vol. 113 (2020), p. 1. This policy may result in the individual allocating more time for leisure during the primary working life, as he realizes that the tax change implies that leisure becomes relatively more expensive during retirement age. See *ibid.*, at p. 40. The cost of this initiative should be offset by the reduction of the costs in pension payments. Naturally, the measure would need to be adequately calibrated to ensure a positive final State budgetary effect not only on the short-term, but also on the long-term.

^{37.} See Brassey, A. (2023), p. 283, also making this point using UK data.

See generally on the concept of crises and their legal impacts, M. Mbengue, M./ D'Aspremont, J. (eds.), Crisis Narratives in International Law, Brill | Nijhoff, Leiden 2021.

^{39.} See, e.g., Amparo Grau Ruiz, M. (ed.), *Interactive Robotics: Legal, Ethical, Social and Economic Aspects*, Springer, Berlin 2022; Parr, T., «Automation Unemployment, and Taxation», *Social Theory and Practice*, vol. 48, no. 2 (2022), pp. 357-378; Ford, M., *Rise of the Robots: Technology and the Threat of a Jobless Future*, Basic Books, New York 2015.

As Banks & Diamond underline, taxable capacity is a difficult concept to define, and one on which opinions vary greatly. The Meade Report had already made this point in the 1970's. See Banks, J./Diamond, P., 2010, «The Base for Direct Taxation» in Dimensions of Tax Design - The Mirrlees Review, Stuart Adam et alii (eds), Oxford University Press, Oxford, p. 554. For instance, should needs or tastes be considered in comparing taxable capacities? Equity, in our view, would clearly push for a positive answer regarding needs. Indeed, the taxable capacity, for instance, of a disabled person that needs to acquire special means to move, is inferior, at least by that amount. The same can be said regarding the youth, as here concluded, in the light of the profile of their needs regarding housing; need to save for pensions or to better deal with future crises; or simply to face the initial costs of starting an autonomous life. The issue regarding tastes may not be as consensual. See ibid., p. 610.

3. THE EFFICIENCY CRITERIO AND THE TAXATION OF YOUTH

A second question that arises independently from the ability-to-pay criterion is whether a given taxation option is efficient from an economic point of view. For this purpose, this study defines efficiency as the minimization of sources of deadweight loss. This includes the minimization of substitution effects (*i.e.*, changes in taxpayer decisions or behaviour due to the tax system) and tax overhead costs (*i.e.*, the amount of resources, including the value of time or labour, consumed in applying the tax system, through taxpayer or government activities such as tax planning, compliance, litigation, administration, and law-making).⁴¹

When it comes to this efficiency analysis, a first issue that needs to be tackled is whether, in general, "age" may be a proper element for structuring the income tax base. Based on the available research on the topic, that seems, indeed, to be the case.

The seminal article by Akerlof, already in 1970's, demonstrated that conditioning the tax result on the personal characteristics of the taxpayers correlated with ability (so-called "tagging") could improve redistributive taxation. When More recently, Banks Diamond, building upon prior research, openly defended age-dependent taxes, thereby providing an important impetus to this policy approach. As noted, age is an easily observable, unalterable, and controllable characteristic. It has high "salience". Further, as also demonstrated earlier in this article using the Portuguese example, ability-to-pay tends to significantly vary with age. For these reasons, it should be economically efficient to structure the income tax based on the "age" element.

In this sense, Kataoka & Takamatsu perceptively note: "(a)ge is one of the most relevant candidates for this tagging scheme because it is easily observed by the government, and the average and the variance of the income distribution could be correlated with age." ⁴⁴ In the same vein, Bastani, Blomquist & Micheletto remark that: "In most countries it is easy to observe individuals' age; furthermore, age is a nonmanipulable individual characteristic, and the distribution of wage rates differs by age, the average wage being higher for older cohorts and the dispersion of wages wider. Hence, age represents a potentially relevant candidate to be used for tagging." ⁴⁵

The definition of efficiency here espoused is based on the work developed by Dan Shaviro. See N. SHAVIRO, D., «An Efficiency Analysis of Realization and Recognition Rules Under the Federal Income Tax», Tax Law Review, vol. 48 (1992), p. 4 ("The efficiency norm that I use is that of minimizing excess burden, or the deadweight loss generated by the tax system."); ibid. at 24 ("The standard tax efficiency norm of minimizing excess burden implies two principal objectives. The first is minimizing substitution effects, or changes in taxpayer decisions or behaviour due to the tax system. The second is minimizing ...the amount of resources ...consumed in applying the tax system [.]"). See also A. WEISBACH, D., «Formalism in the Tax Law», University Chicago Law Review, vol. 66, Issue 3 (1999), p. 870 ("Efficiency in the tax law is measured by whether the law raises revenue without creating adverse incentives."); S. ROSEN, H., Public Finance, 6th ed., Irwin/McGraw-Hill, Boston 2001, pp. 284-303 (noting that a tax is efficient if it raises revenue with a minimum of behavioral distortions and other sources of deadweight loss). As may be noted, tax scholars often use efficiency in a manner different from that used by law and economics scholars, who generally refer to Pareto efficiency or Kaldor-Hicks efficiency. See H. SCHENK, D., «An Efficiency Approach to Reforming a Realization-Based Tax», Tax Law Review, vol. 57 (2004), p. 507. But see O'Reilly, T., «Principles of Efficient Tax Law: Apocrypha», Virginia Tax Review, vol. 27, Issue 3 (Winter 2008), pp. 583-630 (criticizing these definitions of efficiency in the tax law); and H. BUCHANAN, N., 2012, The Role of Economics in Tax Scholarship, Legal Studies Research Paper no. 2012-52, George Washington University Law School, at p. 1 (criticizing, as a general matter, the use of efficiency as a tax policy benchmark: "Unfortunately, there is no substance underneath the often-impressive superstructure of efficiency analysis. This makes it not just unwise, but affirmatively misleading, to base academic analysis of taxation - in whole or in part - on attempts to measure and maximize efficiency"). Although we recognize the limits of efficiency analysis, we believe, as this study will try to demonstrate, that it plays an essential part in the process of informed tax policy-making.

^{42.} See AKERLOF, G., "The Economics of 'Tagging' as Applied to the Optimal Income Tax, Welfare Programs, and Manpower Planning", The American Economic Review, vol. 68, no. 1 (March 1978), pp. 8-19. As Weinzierl judiciously points out, "(t)he fundamental challenge for tax policy design... is to use observable information to redistribute income to the low skilled and pay for public goods without discouraging work effort." See WEINZIERL, M., "The Surprising Power of Age-Dependent Taxes", Review of Economic Studies, vol. 78, Issue 4 (2011), p. 1490. See also D. Viard, A., "Optimal Categorical Transfer Payments: The Welfare Economics of Limited Lump-Sum Redistribution", Journal of Public Economic Theory, vol. 3, Issue 4 (October 2001), pp. 483-500.

^{43.} As Banks & Diamond note, "...age-dependent taxes are attractive for two reasons: first, they take account of the fact that the distribution of people's circumstances differs at different ages, and second, they allow tax policy to target individuals with different expectations of the future. The gains from age-dependent labour income taxes may not be trivial and, in addition, there may be a case for varying by age the amount of capital income people can receive without paying tax." See Banks, J./Diamond, P. (2010), p. 550.

^{44.} See Kataoka, T./Takamatsu, Y., «Optimal age dependent income taxation in a dynamic extensive model: The case for negative participation tax on young people», *Journal of Public Economic Theory*, vol. 22, Issue 5 (2020), p. 1339.

^{45.} See BASTANI, S./BLOMQUIST, S./MICHELETTO, L., «The Welfare Gains of Age-Related Optimal Income Taxation», *International Economic Review*, vol. 54, no. 4 (November 2013), p. 1219.

Several other studies demonstrate the economic benefits of age-dependent labour income taxation. 46 For instance, Kremer proposes that welfare will be improved by reductions in marginal tax rates for the youth combined with revenue-neutral increases in marginal tax rates for prime-age workers. 47 As he underlines: "(r)educing marginal tax rates for the young not only improves work incentives at little cost in lost revenue, but also focuses work incentives on the people who are more responsive to those incentives". 48 In turn, Weinzierl, under certain assumptions, defends that age dependence is found to lower marginal taxes on average and especially on high-income young workers and to lower average taxes on all young workers relative to older workers. 49 The author attributes the welfare gains from age dependence to substantial increases in both efficiency and equity. 50 Similarly, Blomquist & Micheleto defend that it is possible to enhance the redistributive mechanisms by relating tax payments to age, departing from the observation that average income varies with age and from the differentiated labour elasticity of the youth. 51 In turn, Heathcote, Storesletten & Violante refine these insights, allowing both the level and the progressivity of the tax schedule to be made age-dependent. They conclude that progressivity should be U-shaped in age and the average marginal tax rate should be increasing and concave in age. 52

In sum, existing research indicates that is should be economically efficient to use "age" as an element for structuring the income tax base. Further, when adopting "age" as a tag, it seems also to be fairly consensual that the youth should be tax-favoured. This is so due to their particular elastici-

46. See, e.g., among several others, WEINZIERL, M. (2011), p. 1 (author defends that age dependence improves tax policy on both the intratemporal and intertemporal margins); and BASTANI et al 2013 (defending, under certain assumptions, that the total welfare gain of switching from age-independent to age-dependent nonlinear taxation may vary between 2.4% and 4% of GDP).

47. See Kremer, M., Should Taxes Be Independent of Age, unpublished paper, Littauer Center, Harvard University 2001, p. 3. See also ibid., p. 2 ("(T)he optimal marginal tax rate at a particular income depends on the hazard rate of the income distribution, the elasticity of labor supply, and distributional considerations. All three factors imply that marginal taxes should be lower for youth than for prime age workers." (emphasis added).

48. See Kremer, M. (2001), p. 3 and p. 25.

49. This last result assumes a context where private saving and borrowing are restricted. See WEINZIERL, M. (2011), p. 1517.

50. See WEINZIERL, M. (2011), p. 1512 and p. 1517.

51. See Blomquist, S./Micheletto, L., «Age-related Optimal Income Taxation», The Scandinavian Journal of Economics, vol. 110, Issue 1 (March 2008), pp. 45-71.

52. See HEATHCOTE, J./STORESLETTEN, K./L. VIOLANTE, G., 2019, Optimal Progressivity with Age-Dependent Taxation, NBER Working Paper no. 25617, National Bureau of Economic Research, Inc., p. 24.

ties. Indeed, the evidence of the variation of the elasticity of labour supply with age strengthens the case for differentiated taxation of the youth. 53 The youth seem to have a higher propensity for substitutive behavior, both at the intensive margin (how many hours to work) and at the extensive margin (whether to work or not to work, privileging leisure).

In a global economy, besides deciding whether or not to work, and how much to work, the youth are also faced with another choice and, thus, possibility for substitutive behavior: to migrate to a different country to develop there their professional activity. This poses a particular risk to countries with the profile of Portugal, characterized, as here described, by an economic and social ecosystem particularly challenging to the youth.

Indeed, the relative lack of job opportunities, cumulated with the low quality of many of the jobs available, and the relatively high tax burden faced in the country, have resulted in a decision of many of the youth to migrate. In 2014, 56.563 individuals aged 15 to 29 years old left the country. This comes as no surprise since, in Puchasing Power Parity (PPP), the average monthly salaries of the Portuguese individuals with less than 30 years old stands at 55% of the EU average. 55

It is, therefore, understandable that a significant portion of the educated and highly educated are deciding to migrate. In 2021, most (total of 82%) of the Portuguese that emigrated did so after the completion of their studies. Approximately 48% had a university degree and 34% had completed their secondary or post-secondary education. This "brain drain" phenomenon has been worsening in recent years. Merely seven years before, in 2014, the majority of the Portuguese emigrants (53%) left the country only with their basic education completed. No more than 29% had a university degree and 17% a secondary or post-secondary degree. ⁵⁶

It should be underlined that Portugal does not have such a high proportion of its residents with their secondary or university studies completed. In 2021, only 49,5% of the population had their studies completed (24,1%)

^{53.} See WEINZIERL, M. (2011), pp. 1515-1516; Kremer, M. (2001), p. 3. See also the seminal work of Clark, K./Summers, L., «Demographic Differences in Cyclical Employment Variation», *The Journal of Human Resources*, vol. 16, no. 1 (*Winter 1981*), pp. 61-79 (suggesting that labour supply elasticities for teenagers may be much greater than for prime-age workers).

^{54.} See Rodrigues, M. et. alii (2022), p. 14.

^{55.} See Rodrigues, M. et. alii (2022), p. 14.

^{56.} Statistics for Portuguese residents with 15 years or older.

with a university degree and 25,4% with a secondary or post-secondary degree). ⁵⁷ This clearly shows that the country is currently experiencing a "brain drain" phenomenon.

4. A TAX POLICY APPROACH TO THE YOUTH

The analysis undertaken up to this juncture demonstrates that, both from an equity perspective and an efficiency standpoint, it makes sense to tax the income of the youth less heavily than the income of the more mature sectors of the population. This should be particularly true in a country with the characteristics of Portugal.

The main potential disadvantage of reducing marginal tax rates on the youth is that it may distort the choice between education and work. ⁵⁸ This is not, however, an inevitability. Eventual education distortions can be tackled or minimized through the cumulation of the tax change with several strategies, such as: (i) to restrict the tax reductions to the youth that have already completed their studies. This was the approach that the Portuguese legislator followed, which, as we shall further discuss, has its pros and cons.

Alternatively, to minimize the incentive to drop out school, while concomitantly focusing on the youth that more urgently need to start working (thereby better encompassing the lower income strata of the population in the regime), an alternative strategy may lie in: (ii) a combination of reductions in marginal tax rates on the youth with subsidies for education designed to leave average incentives for school relative to work unchanged for full-time students working part-time; or (iii) focusing the tax reductions on income levels characteristic of students working part-time. Lastly, although surely not an exhaustive list of all the possibilities available, legislators may opt to focus the tax reductions on (iv) the (relatively older) age groups among the youth in which few people attend school.

As may be clear, all these options present advantages and disadvantages. The particularities of the economic and social context of each country, as well as the constraints of its budgetary position, should dictate the best solution for the case at hand.

Now that this study defined its policy approach, it is time to evaluate the mechanics of the PIT and identify potential venues for PIT technical reform to adequately deal with the specific nature of the Youth and the challenges they currently face in today's social, economic, and environmental context. That will be the purpose of the next section.

III. THE SPECIAL REGIME FOR TAXING YOUTH INCOME IN PORTUGAL

1. THE PERSONAL INCOME TAX MECHANIC DESIGN FRAMEWORK

From a mechanic perspective, ⁶² there are many design options to favour the youth under a PIT. ⁶³ A tax-favoured treatment can be achieved by discriminately altering each of the elements of the fundamental tax equation: Tax Base x Tax Rate = Tax Result. Thus, from a tax mechanic perspective, such result may be achieved through reductions to the tax base, either through exemptions, out-of-scope provisions, or deductions to the base. Alternatively, such tax-favoured treatment may be achieved through alterations to the rate schedule, namely to the level and number of brackets and rates. Finally, it may be achieved through tax credits, that is, deductions to the tax result. From a mechanic perspective, these different options can be calibrated to achieve fairly the same results, although eventually with different side-effects. ⁶⁴ In the next section, this study will analyze and evaluate

^{57.} The youth is more educated than the rest of the population. In 2021, 48% of the Portuguese youth aged between 25 and 34 years old had a university degree, 38% of which at master's level. Rodrigues, M. et. alii (2022), p. 5.

^{58.} See Kremer, M. (2001), p. 3. As the autor notes, "This will only be a serious problem if education subsidies are insufficient to offset positive externalities from education and if the education decision is elastic to labor market conditions." Ibid.

^{59.} See Kremer, M. (2001), p. 3.

^{60.} See Kremer, M. (2001), p. 3.

^{61.} See Kremer, M. (2001), p. 3.

For purposes of this study, mechanic analysis refers to the study of the technical structure of a tax. The dynamic analysis, in turn, aims at understanding the impact of the technical structure of a tax on taxpayer behaviour. See for a more in-depth description and application of this methodological approach, Correia, M., Taxation of Corporate Groups, Wolters Kluwer, AH Alphen aan den Rijn 2013.

^{63.} As noted above, this study focuses solely on the PIT. There is a myriad of other policy tools for intervention, both from a tax as, most especially, from a non-tax perspective. For instance, among many other possibilities, the marginal tax rates for the youth can also be reduced indirectly, through tax credits to the employers. See Kremer, M. (2001). See also discussion *supra*. For a good analysis of the core design options available under a PIT, see, in particular, Organization for Economic Cooperation and DevelopmenT (2006).

^{64.} If desired, the different design options can also be combined.

the solution that the Portuguese legislator has recently proposed to favour the taxation of the youth under the Portuguese PIT. 65

2. THE PORTUGUESE SPECIAL REGIME FOR TAXING THE YOUTH UNDER THE PIT

Portugal introduced a partial PIT exemption regime for young people in 2020 (Law 2/2020, of March 31). Since then, the regime has been subject to changes to broaden its scope and amplify its impact (changes introduced by Law 12/2022, of June 27, and, more recently, by Law 24-D/2022, of December 30). As it currently stands, the core design elements of this regime are the following:

- A. The benefit assumes the form of a partial exemption to the tax base on the income earned from dependent or independent work.⁶⁸
- B. The benefit is restricted to a specified age group. For the regime to kick-in the individual must be older than 18 years old and younger than 26 (or 30 years old in the case of holding a doctorate) in the 1st year in which it obtains income following the year of completion of the relevant study cycle. The maximum age to enjoy the benefit (other than the 1st year) may extend up to 35 years old, inclusive. The individual should also not be considered a family dependent for PIT purposes.

C. The benefit is optional.71

- D. The value of this partial exemption gradually diminishes with time and has a monetary cap and a maximum time limit to be enjoyed. This allows the State to restrict the budgetary impact of the measure, and to focus the incentive where it is more needed, that is, on the initial years of work and on the more limited salaries. With additional budgetary space, these limits could naturally be made more flexible to enhance the impact of the regime. In particular, the regime only applies during the first five years of obtaining income from work following the year of completion of a professional or higher education course. The five years can be consecutive or interspersed, provided the taxpayer's maximum age does not exceed 35 years, inclusive. The tax regime applicable to the income earned by young workers between the ages of 18 and 26 (classified as non-family dependent under the PIT Code) currently has the following limits: 50% in the first year, with a limit of 12.5 times the value of the IAS (i.e., €6005,4);72 40% in the second year, with a limit of 10 times the value of the IAS (i.e., €4804,3); 30% in the third and fourth years, with a limit of 7.5 times the value of the IAS (i.e., €3603,2); and 20% in the fifth year, with a limit of five times the value of the IAS (i.e., €2402,15).
- E. The partial exemption benefit is only applicable provided the individual has completed a professional or higher education course (completion of a study cycle equal to or higher than level 4 of the National Qualifications Framework). This aims at providing an incentive to work, without encouraging school drop out. The approach is interesting in that it makes the access to tax benefits dependent on completing school, thereby trying to establish a healthy balance between encouraging the youth to work, but not disincentivizing them from investing in their education. Despite its relative merits, this approach also has certain disadvantages, which will be further discussed below.

^{65.} Several other aspects of the PIT may have a bearing on the taxation of the youth in Portugal. For instance, the PIT special tax regime designed to incentive the Portuguese that emigrated to return to the country (Article 12.° -A of the PIT Code); the type and extent of available tax credits (Articles 78.° and 78.°-A to D of the PIT Code); the potentially discriminatory (non-taxability) of capital gains derived by the elderly in the sale of immovable property, provided certain conditions are fulfilled (Article 10.° n.° 7 of the PIT Code); the tax treatment of mortage interest, etc. This article, however, has a far more restricted scope, focusing solely on the current Article 12.°-B of the PIT Code, specifically targeting the labour income of the youth during their first years of work.

^{66.} At the time, Article 2.°-B of the PIT Code. This article was later renumbered. The Portuguese Tax Authorities have issue a General Ruling (n.° 20222, of 2020/04/27) explaining the core features of this special regime.

^{67.} Overall, the regime was strengthened, increasing the percentages of income excluded from taxation, as well as the applicable limits.

^{68.} Article 12.°-B, n.° 1, of the PIT Code.

^{69.} Article 12.°-B, n.° 1, n.° 2 and n.° 3 b), of the PIT Code.

^{70.} Article 12.°-B, n.° 1, of the PIT Code. The concept of family dependent, in turn, is defined under Article 13.°, n.° 5, of the PIT Code.

^{71.} Article 12.°-B, n.° 1, of the PIT Code.

^{72.} The Social Support Index (IAS) was created by Law 53-B/2006, of December 29, constituting, as clarified by paragraph 1 of Article 2 of this legislation, a reference value for the calculation, determination, and updating of various supports granted by the State. Its value in 2023 is of €480,43, as defined under Ordinance n.° 298/2022.

^{73.} Article 12.°-B, n.° 1, of the PIT Code.

The practical impact of the measure has been mild, most probably due to its restricted scope and low budgetary allowance. The government allocated a mere €15 million to the initiative, to be potentially allocated to about only 100,000 young people per year. According to PwC estimates, a young person earning €1,000/month (x14 months), single and without dependents, would save approx., €962 in the first year of the benefit. In the following years the savings would be smaller: €770 in the second year, €577 in the third and fourth years, and €385 in the fifth year. 74

All in all, although a solution in the right direction, it is clear from the analysis undertaken in this study, that the challenges currently facing the Portuguese youth require bolder measures, both from a tax and non-tax perspective. Indeed, only a hybrid of well calibrated measures can realistically have some potential for visible success.

Focusing, for now, on the specific design option at hand (i.e., partial exemption to the tax base), 75 its core shortcomings are, in our view, the following:

- A. Its limited impact, in the light of the several monetary restrictions introduced to the benefit. The applicable time limits could also be extended, for instance, to cover, in all cases, in their first year of work, youth up to 29 years old, inclusive (with an additional extension for those having completed a doctorate); and to allow for a longer enjoyment of the regime (more than five years), provided the income at stake continues to remain below certain thresholds during that period.
- B. Its lack of reach to the lower strata of the population, namely the more uneducated youth, and the educated youth with lower salaries. First, the youth that have not completed their studies are left out of the regime. Second, even those that have completed the minimum level of studies required to access the regime, will only be able to benefit from it once they reach the threshold of taxability under the

75. As already noted, many other mechanical solutions could be devised to tax-favour the youth under the PIT. This study, however, only focuses on the analysis of the specific measure currently existing in the Portuguese PIT Code.

PIT. Those that have lower salaries, which are a large component of the Portuguese youth, obtain no visible benefit from this regime. It must be underlined that, in 2021, 33,9% of the Portuguese youth aged up to 25 years old and 25.8% of the youth aged 25 to 29 years old, earned only the minimum official wage. Therefore, under the generally applicable rules of the PIT Code, they would not pay PIT anyway.

- C. In the light of the above, to minimize the incentive to drop out school, while concomitantly focusing on the youth that more urgently need to start working (thereby better encompassing the lower income strata of the population in the regime), the regime could also include, as proposed earlier in this study, the possibility of cumulating the tax benefits with subsidies for education designed to leave average incentives for school relative to work unchanged for full-time students working part-time.
- D. For the educated, low-earners, a possibility that could also be explored would be to introduce a mechanism conceptually similar to the "non-wastable tax credit" instrument, which would allow those that do not receive enough income to pay PIT, and thereby benefit from the partial exemption, to receive an actual reimbursement equivalent to a certain amount, to be defined, calculated based upon the partial exemption conceded.

In our view, this theme should receive renewed attention, in Portugal and in Europe, to adequately face the challenges that lie ahead, most especially, for our youth. The arsenal of technical solutions is varied, as here exemplified. The issue now revolves fundamentally around political will and resolve.

IV. CONCLUSION: TAXATION AND INTERGENERATIONAL EQUITY

The analysis here undertaken demonstrated that, both from an equity perspective and an efficiency standpoint, it makes sense to tax the income of the youth less heavily than the income of the more mature sectors of the population. This should be particularly true in a country with the characteristics of Portugal.

^{74.} These estimates assume that the taxpayer is single, without children, maintains the same salary during the 5 first years of work, and does not have any deductible expenses other the general and family expenses. The calculation has also assumed a IAS amount slightly lower to the one currently applicable. See https://expresso.pt/orcamento-do-estado/2022-10-13-Jovens-poupam-quase-um-salario-no-primeiro-ano-de-IRS-Jovem-veja-aqui-as-simulacoes-fc857fe6 (last accessed June 20, 2023).

^{76.} See Rodrigues, M. et. alii (2022), p. 11.

^{77.} See, in particular, Articles 70.° and 58.°, n.° 1, b), of the PIT Code.

From a mechanic perspective, there are many design options to favour the youth under a PIT. The particularities of the economic and social context of each country, as well as the constraints of its budgetary position, should dictate the best solution for the case at hand.

A core issue to be aware of when devising regimes to reduce the marginal PIT tax rates on the youth is not to provide a disincentive for the completion of professional or university studies. As far as possible, the regime should be designed so as to incorporate a firm incentive to complete these studies.

Further, the regime should be devised so as not to exclude the lower strata of the population from its scope, namely, including solutions to deal with the uneducated youth and with the educated youth that earns low salaries.

The PIT is only one of the instruments available for policy intervention. A myriad of other tax and non-tax solutions is available. An effective solution to the youth employment problem demands a well-calibrated mix of different policy tools.

The issue now revolves fundamentally around political will and resolve. This may pose a serious challenge to effective change, as the 65+ years old "age group" continues to grow proportionally in relation to the youth, and thereby continues to strengthen its electoral voice. This is problematic in that, as already demonstrated in prior research, when evaluating the budget constraints of successive generations, there may be a propensity to focus attention on the short-term winners and overlook the longer-term losers.

78. The elderly, based on current data, tend already to have an electoral weight superior to their relative proportion in society, due to their higher electoral discipline. Forman, for instance, notes that in the 1992 US election more than 70% of the elderly voted, while just 45.7% of the 21 to 24 year old voted. See Barry Forman, J. (1995), ft. 93. In Portugal, the situation is similar. The age groups 65+ and 45-64 are clearly more participative in the elections than their younger counterparts (especially the sub-30, which consistently display low participation rates in elections). See Cancela, J./Vicente, M. (eds), Abstenção e Participação Eleitoral em Portugal: Diagnóstico e Hipóteses de Reforma, Câmara Municipal de Cascais, Cascais 2019, p. 46. Many countries display similar trends. See N. Franklin, M., Voter Turnout and the Dynamics of Electoral Competition in Established Democracies Since 1945, Cambridge University Press, Cambridge 2004.

79. See, on this matter, J. Auerbach, A./J. Kotlikoff, L., Dynamic Fiscal Policy, Cambridge University Press, New York 1987, pp. 181-182. See also Barry Forman, J. (1995), adopting a critical perspective to the tax benefits attributed to many of the (relatively rich and wealthy) elderly, and defending that "(t)he special tax preferences for the elderly appear to be more a response to the political power of elderly voters than a rational response to the needs of the elderly." Ibid., p. 613. In the same sense, see Brassey, A.

For this reason, some doctrine, which we espouse, defends that, more than ever, fiscal policies must start to incorporate an evaluation of their effects on the budget constraints of current and successive generations. 80 Indeed, the strong dependence of future generations on decisions and behaviours that the present generation assumes today, in various areas of social life, but which project their negative effects over a longer time scale, penalizing the quality of life of future generations and their freedom to make their own political choices, forcefully requires States to bind the current generation to principles of sustainability and responsibility for the future. 81

Under current circumstances, should the youth be tax-favoured? Most definitely, yes.

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^{(2023),} p. 284 ("Intergenerational unfairness arises largely because short-term electoral concerns can often trump long term equity.").

^{80.} See J. Auerbach, A./J. Kotlikoff, L. (1987), pp. 181-182. See also Brassey, A. (2023), p. 285 (defending the introduction of a "tax rule of recognition where convention persuades policymakers towards long-term thinking", overseen by a Fiscal Policy Committee, which would act as an independent body to advise the Treasury and the Parliament on new policy proposals with a view to protecting future generations, sheltering them from the short-term thinking of the immediate political needs).

^{81.} See, in this sense, confronting the problem from a transversal and interdisciplinary perspective, Pereira da Silva, J. / Almeida Ribeiro, G. (eds), Justiça entre Gerações - Perspetivas Interdisciplinares, UCP Editora, Lisbon 2017.

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