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TAX FAIRNESS:
RECONCEPTUALISING TAXATION AND INEQUALITIES

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I. What is Tax Fairness?

Over the last two decades, the term ‘fair taxation’ has become a ubiquitous presence within public debate.[1] This growing popularity, primarily post-financial crisis,[2] is undoubtedly linked to both

[1] See *inter alia*, European Commission, *Action Plan for Fair and Simple Taxation Supporting the Recovery*, COM(2020) 312 final, 15.7.2020.
[2] On the impact of the crisis on tax policy, see generally R.C. Christensen and M. Hearson, ‘The New Politics of Global Tax Governance: Taking Stock a Decade after the Financial Crisis’ (2019) *Review of International Political Economy* 26, 1068.

increasing concerns about income and wealth inequality,[3] and increasing awareness of other inequalities, even beyond those concerning the so-called 'protected categories',[4] such as political, environmental or education inequalities.[5] Yet, there is also a political economy dimension to this increased popular awareness of 'fairness' in tax policy: the term is sufficiently elastic to be harnessed towards different taxation preferences, appropriately simple to be intuitively understood by voters,[6] and suitably pro-social to persuasively convey a compelling story.[7] From a normative perspective, however, it is precisely this conceptual elasticity that renders the term problematic.[8] As Murphy and Nagel famously stated, '*everyone agrees that taxation should treat taxpayers equitably, but they don't agree on what counts as equitable treatment*'.[9]

The principles of equality and non-discrimination are at the heart of our legal systems, and equity is one of the key principles of taxation. There is now a long and well-established literature on the relationship between taxation and (domestic) income inequality, from a variety of disciplines, and the design of our tax systems often reflect these concerns, most obviously through: progressive personal income taxes; tax credits for low-income individuals; or, VAT exemptions. More recent research has also started shedding light on how taxation can impact other inequalities, such as gender and race,[10] as well as how tax enforcement (administration) can impact, and be impacted by, intersecting inequalities, including income, race, disability, literacy or age.[11] Yet, despite growing policy and academic attention on the link

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[3] C. Delmotte, "Predistribution against Rent-Seeking: the Benefit Principle's Alternative to Redistributive Taxation" (2023) *Social Philosophy and Policy* 39(1), 188-207.

[4] Namely sex, race, religion, national or ethnic origin, age, disability, and sexuality, see Article 14 and Protocol 12, European Convention of Human Rights; Article 21 of the EU Charter of Fundamental Rights; Article 26, UN International Covenant on Civil and Political Rights; Article 1, UN Convention on the Elimination of Discrimination Against Women. It is noteworthy that all these provisions adopt a similar formulation, which is largely the result of cross-fertilisation between them, and a mimetic effect.

[5] On political inequality: B. Ansell and J. Gingrich, "Political Inequality" (2024) *Oxford Open Economics* 3, i233–i261; and T. Christiano, "The Uneasy Relationship Between Democracy and Capital" (2010) *Social Philosophy and Policy* 27(1), 195-217. On environmental inequality: J. Boyce et al, "Measuring environmental inequality" (2016) *Ecological Economics* 124, 114-123. On education inequality: D. Reay, "Measuring and understanding contemporary English educational inequalities" (2024) *Oxford Open Economics* 3, i861-i878.

[6] On the power of intuition in decision-making, see H. Mercier, *Not Born Yesterday — The science of who we trust and what we believe* (Princeton University Press, 2020), and C. Sunstein, *Simpler: The Future of Government* (Simon & Schuster, 2015).

[7] On why we (humans) find fairness-centric narratives compelling, see W. Storr, *The Science of Storytelling* (William Collins, 2019).

[8] For opposing views on the normative usefulness of the term, see A. Christians, "Fair Taxation as a Basic Human Right" (2009) *International Review of Constitutionalism* 9, 211; and P. Lamberts, "Fair Taxation: The Truth is in the Eye of the Beholder" (2017) *Intertax* 45(11), 49-53.

[9] L. Murphy and T. Nagel, *The Myth of Ownership: Taxes and Justice* (Oxford University Press, 2002), at 13.

[10] On gender inequality: Y. Lind and Å. Gunnarsson, "Gender Equality, Taxation, and the COVID-19 Recovery: A Study of Sweden and Denmark" (2021) *Tax Notes International* 101(5), 581-590, M. Stewart (ed.), *Tax, Social Policy and Gender: Rethinking equality and efficiency* (Australian National University Press, 2017). On race inequality: D. Brown, *The Whiteness of Wealth: How the Tax System Impoverishes Black Americans and How We Can Fix It* (Crown Publishing, 2021); S. Dean, "Filing While Black: The Casual Racism of the Tax Law" (2022) *Utah Law Review*4, 801; and A. Abreu, "Racial issues in tax law: identification, redress, and a new vision of horizontal equity" in L. Parada (ed), *A Research Agenda for Tax Law* (Edward Elgar Publishing, 2021).

[11] S. Ranchordas and L. Scarcella, "Automated Government for Vulnerable Citizens: Intermediating Rights" (2021) *William & Mary Bill of Rights Journal* 30(2), 373-418; and J. Bearer-Friend, "Should the IRS Know Your Race? The Challenge of Colorblind Tax Data" (2019) *Tax Law Review* 73(1).

between taxation and inequalities, a broader theorisation is still lacking. What is meant by fair taxation? What is the impact that taxation can actually exert upon inequalities? To what extent should the tax system be used to redress these? And, do we (truly) want it to use it as the means to do so?

To answer these questions, the European Association of Tax Law Professors (EATLP) embarked on a global research project in 2022, the overall aim of which was to fill the scholarship gap and inform policy, by presenting a novel analytical and conceptual framework of taxation and inequalities, informed not solely by tax law, but also by legal theory, human rights, constitutional and administrative law, as well as public economics, political economy, political science, moral philosophy, sociology, and moral and social psychology. The research team was composed of sixty-four law scholars, based in thirty-three different countries, the large majority of whom were tax law scholars, but a minority of whom were human rights and administrative law scholars. Although by the nature of the Association, most of these scholars were based in European countries, there were also a significant number of scholars based in non-European countries, namely Australia, Brazil, Canada, China, Japan, and the United States. Scholars were provided with a standardised questionnaire,[12] on the basis of which they were asked to prepare a national report; some scholars were also asked to prepare thematic reports that delved more deeply into some of the key areas of the project, such as human rights and non-discrimination, gender and income inequalities, inheritance taxes, or tax administration. The questionnaire was designed to provide the (legal) support data for the proposed analytical conceptual framework, and to inform the normative stance.

This book presents the project's findings, and it is broadly divided into three parts. In Part I, as further outlined below, this chapter presents a new analytical and conceptual framework that is informed by the new data collected through the national reports, and the analysis provided in the thematic reports. Part II includes six thematic reports focussing on some of the key areas of the project, prepared by tax law, human rights and administrative law scholars; and Part III includes the national reports, prepared by tax law scholars, each containing detailed data on the tax systems of the thirty-two participating countries.

To further elaborate on the objectives of Part I, this chapter identifies, for the first time, key trends, convergences and divergences in the intersection between tax systems and inequalities; however, its ambitions progress well beyond an analytical synthesis. Rather, by drawing upon this new data and informed by wide-ranging interdisciplinary engagement with legal theory, human rights, constitutional and administrative law, as well as public economics, political economy, political science, moral philosophy, sociology, and moral and social psychology, this chapter provides a normative toolkit that can inform policy. By spotlighting the policy biases and behaviours that inhibit tax policy approaches towards addressing inequalities, and by identifying and unpacking the complex choices that must be made to promote fairness and equality through tax measures, this chapter furnishes a roadmap that will

[12] See Annex I to this book.

equip, inform and orientate more effective tax interventions in this field. Within that framework, the chapter makes three central novel claims.

First, although it is commonly recognised that the design of tax systems has an impact upon inequalities, despite constitutional mandates on equality and non-discrimination, **addressing inequalities through the tax system, or even having a tax system that does not augment inequalities is not a pure aim; on the contrary, it is shown that it must be balanced against other tax and non-tax policy objectives.** In particular, while trade-offs within the tax system, namely between equality and efficiency are well established within the literature,[13] the chapter demonstrates that other tax trade-offs must also be taken into consideration, namely: *(i) trade-offs within inequalities*, so that often the key tax policy design decision is not whether to address inequalities, but rather which inequality the tax system should prioritise addressing, all inequalities are equal, but some may turn out to be more equal than others; and *(ii) trade-offs outside the tax system*, so that addressing inequality has to be balanced against non-tax policy aims, such as environmental sustainability or labour supply.

Second, that **how the tax system can address inequalities is largely determined by political economy and fairness perceptions, and these can be influenced by cognitive factors, such as behavioural biases, heuristics and other psychological and sociological effects**. In particular, information asymmetries, egocentric bias and benchmarking, motivated self-interest, moral psychology imperatives – also known in moral philosophy as 'dessert' – and family loyalty, can result in strong opposition to tax measures that would impact positively on inequalities. Third, that **inequalities can be enhanced by law enforcement (tax administration), regardless of legal design (tax law and policy)**. In particular a revenue maximisation approach to tax law enforcement, and automation of tax administrations can result in an unequal and discriminatory application of tax law.

The remainder of this chapter proceeds as follows. In Section II, the focus is on the constitutional, philosophical, and sociological underpinnings of taxation and inequalities. In Sections III and IV attention shifts to specific inequalities, namely Section III focusses on tax policy and income / wealth inequalities, and Section IV focusses on tax policy and other inequalities. In Section V the focus moves to tax enforcement and its impact on inequalities; and Section VI concludes, with considerations on global trends, and a proposed new conceptual framework to assess taxation and inequalities.

II. Taxation and Inequalities: Constitutional, Philosophical and Sociological Underpinnings

The principles of equality and non-discrimination are basic pillars of modern legal orders, and thus, as Table I demonstrates, universally adhered to. Yet, it is also immediately apparent that this formal hegemony hides substantive divergences, in particular as regards the scope of constitutional mandates

[13] *Inter alia*, A. Okun, *Equality and Efficiency: The Big Tradeoff* (Brookings Institute Press, 1975).

on equality and non-discrimination, the extent to which they apply within the field of taxation, and the benchmark for their application insofar as taxation is concerned.

Table I. Constitutional Principles: Overview

	General Constitutional Principles		*Constitutional Tax Principles*		
	Equality	Non-Discrimination	Legality	Ability-to-Pay	Other
Australia	X	X	X	X	
Austria	√	√		√[14]	
Belgium	√	√	√	√[15]	√[16]
Brazil	√	√	√	√	√[17]
Bulgaria	√	√	√	√	
Canada	√	√	X	X	
China	√	√	X	X	
Croatia	√	√	X	X	
Czech Republic	√	√	√	X	√[18]
Denmark	√[19]	√[20]	√	X	
Finland	√	√	X	X	
France	√	√[21]	X	√	
Germany	√	√	X	√[22]	
Ireland	√	√[23]	X	X	
Italy	√	√	X	√	
Kosovo	√	√	√	X	
Japan	√	√	√	X	
Latvia	√	√	X	X[24]	
Luxembourg	√	√	√	√[25]	
Netherlands	√	√	√	X	
N. Macedonia	√	√	X	X	

[14] Jurisprudential principle, which results from the decisions of the Constitutional Court decisions, but not expressly included in the Austrian Constitution.
[15] Jurisprudential principle, which results from the decisions of the Constitutional Court decisions, but not expressly included in the Belgium Constitution.
[16] Principles of equality in taxation, and prohibition of tax privileges.
[17] Principles of equality in taxation, prohibition of different tax treatment for different professional skills, prohibition of confiscatory taxes, non-retroactivity, progressivity of income taxes, and selectivity of consumption taxes.
[18] Prohibition of confiscatory taxes, principle of non-retroactivity.
[19] Jurisprudential principle, not explicitly set out in the Constitution.
[20] Not explicitly set out in the Constitution, but can be found in secondary legislation, as well as in EU law, and international treaties that Denmark is signatory to.
[21] Not explicitly set out in the Constitution, but can be found in secondary legislation, as well as in EU law, and international treaties that France is signatory to.
[22] Jurisprudential principle, which results from the decisions of the Constitutional Court decisions, but not expressly included in the German Constitution.
[23] Not explicitly set out in the Constitution, but can be found in secondary legislation, as well as in EU law, and international treaties that Ireland is signatory to.
[24] Not explicitly set out in the Constitution, although it can be inferred from Latvian Constitutional Court decisions.
[25] Jurisprudential principle, not expressly set out in the Constitution, but results from 2023 decision of the Constitutional Court.

Norway	√	√	-	X	
Poland	√	√	√	√[26]	
Portugal	√	√	√	√	
Romania	√	√	√	√	
Serbia	√	√	-	√	
Spain	√	√	√	√	√[27]
Sweden	√	√	√	X	√[28]
Switzerland	√	√		√	√[29]
Turkey	√	√	√	√	
Ukraine	√	√	√	X	
UK	√[30]	√[31]	√	X	
USA	√	√	X	X	

Legal mandates on equality and non-discrimination

As set out in Table I above, the principles of equality and non-discrimination are constitutionally protected in nearly all participant countries. In most countries these fundamental principles are guaranteed through a range of legal sources: in most both through national Constitutions – although not in all – and through ratification of various international treaties. In EU Member States, these principles are also protected under the Charter on Fundamental Rights. Additionally, European countries generally – not solely EU Member States – are also signatories to the European Convention of Human Rights. Several countries also have enacted secondary legislation which provides additional legal guarantees against non-discrimination generally, and against specific types of discrimination. There is, however, significantly less convergence on how these principles are interpreted, not least in the context in the context of taxation.

Generally, there are two key areas of divergence, from a constitutional law perspective, namely: *(i)* whether the constitutional mandate should be interpreted as purely ensuring equality and non-discrimination, i.e. 'treating everyone the same' (formal equality), or whether it should be interpreted as a mandate to decrease inequality, and for positive discrimination (substantive equality); and *(ii)* whether the constitutional mandate has been interpreted as extending to all 'protected categories', namely sex, race, religion, national or ethnic origin, age, disability, and sexuality.

[26] Jurisprudential principle, which results from the decisions of the Constitutional Court decisions, but not expressly included in the Polish Constitution.
[27] Decentralisation of taxing powers.
[28] Principle of non-retroactivity of tax law.
[29] Principles of universality and uniformity of taxation.
[30] Not explicitly set out in the Constitution, but can be found in secondary legislation, as well as in EU law, and international treaties that the UK is signatory to.
[31] Not explicitly set out in the Constitution, but can be found in secondary legislation, as well as in EU law, and international treaties that USA is signatory to.

Insofar as point *(i)* is concerned, in a few countries the constitutional mandate is expressly extended to decreasing inequality, with positive discrimination excluded from the scope of the principle of non-discrimination. In Canada, for example, the Constitution includes, not only a general prohibition of non-discrimination, but also an express exception for positive discrimination, i.e. where discriminatory legislation is aimed at decreasing inequality. In this regard, the Supreme Court has confirmed that the purpose of that constitutional provision is to protect groups facing social, political, and legal disadvantages. Similarly, in Turkey, the Constitution includes positive discrimination expressly as an exception to the general prohibition of non-discrimination. Finland adopts a similar approach, albeit sub-constitutionally: it results from a joint reading of the Constitution and secondary legislation, in particular the Non-Discrimination Act, that the principles should be interpreted as not only promoting equality and preventing discrimination, but also as enhancing the protection of those who have been discriminated against. Even in countries, where neither the Constitution nor secondary legislation expressly refer to decreasing inequalities or positive discrimination, the constitutional principles have nevertheless been interpreted as such. This is the case, for example, in Australia, but it also clearly results from the literature on the European Charter of Fundamental Rights and on the European Convention on Human Rights. Ultimately, although useful in various contexts, due to its shortcomings formal equality is regarded as an unsatisfactory conception of equality as a constitutional value,[32] and there is overwhelming support for a substantive conception of equality, particularly within the European context, both under EU law and the European Convention on Human Rights.[33] There is arguably therefore not only a legal mandate for positive discrimination and the decrease of inequalities, but also an implicit endorsement of an egalitarian approach to equality, and of Rawls' second principle of justice, namely the difference principle, according to which inequalities are justifiable only insofar as they benefit the least advantaged.[34]

As regards point *(ii)*, and whether the constitutional mandate extends to all so-called 'protected categories', there are – perhaps surprisingly – significant divergences amongst participating countries. While in some countries the principles of equality and non-discrimination have been found to include protection to other categories beyond the standard ones; in other countries, the principles do not apply, whether *de jure* or *de facto*, to some of the standard protected categories. In Canada, for example, although the legislation includes express protection of the standard categories, these grounds have been interpreted by the Supreme Court as a non-exhaustive list, and over the years courts have added new categories to the enumerated grounds of discrimination. In particular, the following have been recognized as an analogous grounds of discrimination: citizenship,[35] marital status,[36] and 'aboriginality-

[32] I. Trispiotis, "Taxation and inequality: a human rights perspective", Ch. X.
[33] See, *inter alia*, C. Barnard and B. Hepple, "Substantive Equality" (2000) *Cambridge Law Journal* 59(3), 562-585.
[34] J. Rawls, *A Theory of Justice* (Harvard University Press, 1971).
[35] Canada, *Andrews v Law Society of British Columbia*, [1987] 1 SCR 143.
[36] Canada, *Miron v Trudel*, [1995] 2 SCR 418.

residence'.[37] On the other hand, in several other countries one or more of the standard categories is not offered special protection under the principles of equality and non-discrimination. In China, for example, there is no specific legislation against discrimination based on sexual orientation, similarly in North Macedonia, where the grounds for discrimination do not currently include sexual orientation and gender identity; and in Serbia, the rights of LGBTQ+ community are a contentious issue, with the Constitutional Court reported to have made notable interpretative efforts not to grant gay couples the same rights as heterosexual couples. France, on the other hand, rejects any recognition of minority ethnic groups within its citizens, and is therefore reluctant to offer anti-discrimination protection on the basis of ethnic criteria; and in Japan, although *de jure* discrimination on the grounds of ethnic minority and sexual orientation is protected under existing legislation, *de facto* ethnic minority protection is not fully guaranteed and discrimination against members of the LGBT community is still a controversial issue.

It is noteworthy that there is a clear pattern on excluded categories, i.e. in countries where not all categories are offered the same legal protection, those that are excluded tend to be discrimination on the basis of sexual orientation and/or ethnic minority. In the USA, for example, the existence of an implicit hierarchy in non-discrimination protection is now generally accepted within constitutional law literature: only a rational basis is required to justify discrimination based on income and age; quasi-suspect categories receive intermediate scrutiny and include discrimination based on gender and sexual orientation; and the category that receives the highest level of judicial scrutiny, referred to as strict scrutiny are race, religion and national origin. As discussed below, this *de facto* hierarchy within the non-discrimination principle is also noticeable insofar as taxation is concerned: tax policy is often designed to address (some) inequalities, most notably income and wealth, but increasingly also gender, disability or age, but it is less common that tax policy design reflects concerns over ethic minority or sexual orientation inequalities – although there are clear examples of where this is indeed the case.

Despite these divergences, several countries reported a clear enhancement of non-discrimination standards. In Germany, the Federal Constitutional Court has continuously enhanced non-discrimination standards over the last decades. First, by including indirect discrimination within the concept of non-discrimination, and second, by applying much stricter scrutiny to the protection of some categories, such as sexual orientation, than in the early day of the Constitutional Court jurisprudence. As discussed below, this has had a significant impact on taxation. In Canada also, whilst the underlying law has not changed in several decades, judicial interpretation on equality and non-discrimination has continuously evolved. In particular, the discrimination test was recently reworded in a landmark decision: the Supreme Court held *in Fraser v Canada (Attorney General)* that the law protects against not only direct and indirect discrimination, but also 'adverse impact discrimination', i.e. where a law is apparently neutral, but actually has adverse impacts on a protected group.[38] Similarly, in Poland, there has been a

[37] Canada, *Corbiere v Canada (Minister of Indian and Northern Affairs)*, [1999] 2 SCR 203.
[38] Canada, *Fraser v Canada (AttorneyGeneral)*, 2020 SCC 28.

marked evolution as regards equality and non-discrimination, with higher protection afforded on the grounds of disability, nationality, gender and sexual orientation. This evolution is reportedly attributable to two main factors, namely the implementation of EU law, and second the shift in judicial interpretation. A key example of this evolution concerned the resolutions approved by some local governments, between 2019 and 2020, opposing so-called 'LGBT ideology'. Following the intervention of the Polish Ombudsman, the Polish administrative courts successfully repealed these resolutions, on the basis of violation of the non-discrimination principle, as applied to sexual orientation and gender identity.

Legal Mandates on Equality and Non-discrimination in Taxation

There are two main avenues through which legal – constitutional and otherwise – mandates on equality and non-discrimination manifest themselves within taxation. First, where courts apply directly the principles of equality and non-discrimination to tax policy cases. In this regard, several countries report a growing willingness of the courts to apply these principles to tax legislation, despite some remaining reluctance. In Australia, for example, there have been a series of test cases involving ethnic minorities and tax provisions, as a result of which the Supreme Court current view is that differential treatment under tax law is more often not a consequence of a protected characteristic (ethnic minority status) but of broader economic or social disadvantage. Yet, in the Netherlands, where judges were also reluctant to assess tax legislation – or any legislation – against human rights law until the 1980s, the approach has changed significantly since 1989, when in landmark decision the Constitutional Court assessed the compatibility of provisions on joint family taxation with anti-discrimination provisions in the International Covenant on Civil and Political Rights.[39]

In Germany, the general willingness of the Federal Constitutional Court to enhance non-discrimination standards over the last decades has had a significant impact within taxation. For example, the Court has successively required the extension of beneficial tax regimes that were originally reserved to married heterosexual couples to same-sex couples in so-called registered partnerships. Yet, whilst the Court has consistently held that the principle of equality requires the legislator to design tax law with consideration to tax equity, it has specifically ruled one type of taxes from this requirement, namely Pigouvian taxes. Similarly in France, the Constitutional Court has also established that the principle of equality is not absolute within taxation, and in particular the introduction of excise taxes is not a violation of the principle of equality,[40] and neither is the introduction of preferential income tax regimes.[41] These decisions of the German Federal and French Constitutional Courts highlight the courts' awareness of some of the key trade-offs at the heart of the application of the principle of equality to taxation, in particular how addressing inequality through the tax system has to be balanced against other public

[39] Commonly known as 'the dentist's wife judgment', Dutch Supreme Court, Hoge Raad 27 September 1989, ECLI:NL:HR:1989:ZC4110.
[40] French Constitutional Court December 29, 2009, number 2009-599 DC.
[41] French Constitutional Court December 28, 1995, number 95-369 DC.

policy aims, such as health protection or environmental sustainability (excise taxes),[42] and labour supply (preferential personal income tax regimes). They are also consistent with the Court of Justice of the European Union's general approach to the principle of equality, which also hints at trade-offs and the need to assess the principle in the context '[other]the principles and objectives of the field'.[43]

Second, where there are specific legal mandates requiring that equality and non-discrimination considerations are reflected in the design of tax law. As demonstrated in Table I above, there is significant variation amongst participating countries as regards the constitutionalisation of tax principles. While in some countries, there are no specific constitutional mandates as regards taxation, in others taxation matters are heavily regulated at constitutional level. The most extreme case of hyper-constitutionalisation of tax law amongst our participant countries is Brazil, which includes over 200 tax rules, set out in nearly 20 constitutional articles. Although the rationale for this hyper-constitutionalisation is not fully evident from preparatory documentation, it seems to be a consequence of Brazil's federal structure, and the high level of decentralization of taxing powers in the country. In essence, these rules provide additional constitutional guarantees, effectively allowing the constitutional legislator to limit states' taxing powers. It is important to note that, as highlighted in Table I, in Brazil like in other countries that have constitutionalised tax principles, not all these principles or rules are directly related to the equality principle but some are, and perhaps none more prominently than the principle of ability-to-pay.

The origins of the principle of ability-to-pay can be traced back to Thomas Aquinas, and his proposal that individuals should contribute to public expenditure according to their possibilities; although, in its modern formulation, as a manifestation of the principle of equality within taxation,[44] it is substantially more recent.[45] As set out in Table I above, in a significant number of the participating countries, particularly in European countries – but not solely – the principle has a constitutional status, whether by express reference to it in the Constitution, or by judicial interpretation of the constitutional courts. It has also been on occasion recognised by the CJEU.[46] In most countries, the constitutional mandate is vague – leading some to question its enforceability – and does not include specific criteria on how to apply the principle to the various elements of the tax system. It is generally argued that the principle applies primarily to personal income taxes –[47] although it does not necessarily mandate progressive income tax rates – but its application to other taxes is more unclear. In countries where the constitutional

[42] On the rationale of excise taxes and their regulatory function see R. de la Feria, "Non-(Fully) Harmonised Excise Taxes and Irrebuttable Presumptions"(2024) *EC Tax Review* 33(3), 98-108.
[43] CJEU, Case C-127/07, *Arcelor Atlantique and Lorraine and Others*, ECLI:EU:C:2008:728, paras 23-26.
[44] On the interaction between the two principles, see G. Bizioli and E. Reimer, "Equality, ability to pay and neutrality" in C. HJI Panayi, W. Haslehner, and E. Traversa (eds), *Research Handbook on European Union Taxation Law* (Edward Elgar Publishing, 2020), 54-71.
[45] On the history of the principle, see J. Englisch, "Ability to Pay in European Tax Law" in C. Brokelind (ed.), *Principles of Law: Function, Status and Impact in EU Tax Law* (IBFD, 2014), 439-464.
[46] Most notably, or infamously, in Case C-279/93, *Schumacker*, ECLI:EU:C:1995:31.
[47] J. Dodge, "The Fair Tax: The Personal Realization Income Tax" (2016) *Florida Tax Review* 19(9), 522-587.

mandate is vague this has given rise to opposing views in the literature on whether the principle should apply to taxes such as corporate income taxes or VAT.[48] The Courts too, have struggled. In Germany, for example, the Federal Constitutional Court has left open the possibility that property transfer taxes should also be guided by ability-to-pay considerations, but in a landmark decision it held that insofar as inheritance taxes were concerned, the principle needed to be balanced against the constitutional principle of social solidarity.

There are, however, a few exceptions: countries where the constitutional mandate as regards the scope of the ability to pay principle is significantly more specific. In Portugal, for example, the Constitution expressly states that *(i)* the personal income tax shall aim reduce inequalities and be progressive, *(ii)* the taxation of assets must contribute to equality, and *(iii)* the taxation of consumption must take into account social justice. This approach is even more pronounced in Brazil, where constitutional mandates have so-far determined not only the progressivity of all income taxes – not just personal income taxes – but also the selectivity of consumption taxes, according to which essential goods should be taxed less than non-essential goods. Determining what should be regarded as essential, under what is known as the 'selectivity principle', is particularly problematic, and a significant source of litigation in Brazil. Elimination of this selectivity principle was therefore one of the key aspects of the constitutional amendment that approved the Brazilian consumption tax law reform in November 2023.

These constitutional divergences as regards the scope of application of the ability-to-pay principle are largely a reflection of a much broader discussion on the constitutional benchmarking for equality in taxation. Does the constitutional mandate require that all taxes, individually, fulfil these principles – regardless of what that would mean as regards concrete tax design options – or it is sufficient that the tax system, as a whole, does so?

Equality Benchmark: Public Finance vs Taxation

Whilst in most countries there is a constitutional mandate to respect equality and non-discrimination – and in many countries, to decrease inequality – the benchmark for assessing that equality principle in taxation is mostly unclear. In abstract, there are three possible benchmarks for assessing equality, namely individual taxes, the tax system as a whole (tax mix), or the tax and public expenditure system (public finance mix). Although the traditional approach has been to benchmark equality against individual taxes or, at most, the tax mix, there has been growing criticism of this approach.

The central argument behind the use of the public finance mix as the benchmark for equality – or tax justice – is that taxes cannot be dissociated from the way in which they are spent through public expenditure: if revenue is used to enhance equality, or decrease inequality, then it matters little how taxes are collected. This approach, which has been designated as consequentialism, would result, *ad extremis*, in the rejection of tax justice norms – as all distributional justice concerns can be addressed

[48] G. Bizioli and E. Reimer, n. x above; and J. Englisch, n. x above.

through the expenditure side.[49] Defenders of this approach include those who adopt a utilitarian perspective of fairness,[50] as well as – perhaps more surprisingly – those who adopt an egalitarian perspective. In this last group are Murphy and Nagel, who deliver a devastating critique of the 'false' notion of vertical equity, and characterise the principle of ability-to-pay as myopic.[51] According to them, fiscal policy could be designed to the benefit of the worst-off in society, even if the tax system in isolation is regressive.[52] They are not the first to alert against a fairness assessment, from an egalitarian perspective, of isolated individual tax instruments. Rawls' preference for a consumption, flat-rate, tax, as opposed to a progressive income tax has also been subject to much debate,[53] with some arguing it is out of sync with Rawls' distributive justice theory.[54] Yet, there is no obvious incompatibility if the benchmark for this distributive justice is the public finance mix: taxes just need to collect enough revenue, so as to ensure that the distributive aims are achieved by public expenditure.[55]

There are, nevertheless, good arguments not to adopt a public finance mix benchmark – or at least not in its purest form. The first, and probably strongest argument, is that it puts the heavy burden of ensuring equality and decreasing inequalities solely on public expenditure,[56] which is not only a tall order, but a risk-concentrated one. It is therefore unsurprising that – Rawls aside – redistributive taxation is often regarded as a critical element of distributive justice, with authors like Dworkin amongst its key supporters. Crucially, however, the benchmark for equality assessment is the tax mix, not individual taxes, with authors who adopt a Dworkinian approach acknowledging that only some taxes in the overall tax system, such as personal income taxes, or inheritance taxes, are well-suited to act as a benchmark for equality.[57] Second, it has also been argued that individuals have difficulties evaluating fairness claims at this level of aggregation – taxing and spending taken as a whole – and instead tend to evaluate policy in discrete sub-domains, such as taxation.[58] There is indeed evidence of a disaggregation bias in tax fairness perceptions, which can be seen as an extension of the mental accounting heuristic:[59] individuals have an intuition about what a fair tax ought to look like, and will judge the fairness of that

[49] J. Dodge, "Theories of Tax Justice: Ruminations on the Benefit, Partnership, and Ability-to-Pay Principles" (2004-2005) *Tax Law Review* 58, 399.
[50] L. Kaplow, "A Fundamental Objection to Tax Equity Norms: A Call for Utilitarianism" (1995) *National Tax Journal* 48, 497; and L. Kaplow and S. Shavell, "The Conflict Between Notions of Fairness and the Pareto Principle" (1999) *American Law and Economics Review* 1, 63.
[51] L. Sugin, "Theories of Distributive Justice and Limitations on Taxation: What Rawls Demands from Tax Systems?" (2004) *Fordham Law Review* 72(5), 1991-2014.
[52] L. Murphy and T. Nagel, n. x above.
[53] D. Elkins, "Consumption Taxation in Rawls' Theory of Justice" (2021) *Cornell Journal of Law and Public Policy* 29, 799-860.
[54] B. Fried, "The Puzzling Case for Proportionate Taxation" (1999) *Chapman Law Review* 2, 157-195.
[55] L. Sugin, n. x above.
[56] J. Dodge, n. x (2004) above.
[57] J. Dodge, n. x (2004) above; and D. Duff, "Tax Policy and the Virtuous Sovereign: Dworkinian Equality and Redistributive Taxation" in M. Bhandari (ed.), *Philosophical Foundations of Tax Law* (Oxford University Press, 2017).
[58] J. Dodge, n. x (2004) above
[59] R. Thaler, "Mental Accounting Matters" (1999) *Journal of Behavioral Decision Making* 12, 183-206; and R. Thaler, "Mental Accounting and Consumer Choice" (1985) *Marketing Science* 4, 199-214.

one tax individually, failing to take into account other elements of their tax system in their appraisal.[60] While that disaggregation bias cannot, *per se*, dictate the benchmarking of the principle of equality – *ad extremis* it would result in each tax policy measure being assessed in isolation, with no consideration to the way it interacts with the rest of the tax system – it is nevertheless true that, if solely based on very high-level of aggregation, fairness becomes nearly impossible to assess.

The constitutional status afforded to the principle of ability-to-pay in so many countries seems to be an implicit endorsement of this view, namely that relying on public expenditure to achieve equality and decrease inequalities may be necessary – primarily to the extent that specific taxes are regressive – but it is not sufficient; the design of the tax system must itself reflect equality considerations. Even in (most) countries where the scope of application of the principle is constitutionally ambiguous, its mere inclusion means that constitutional benchmark for equality cannot be the public finance mix in its pure form. In Italy, where the principle of ability to pay has constitutionally guaranteed, tax progressivity is mandated by the Constitution, although crucially the mandate refers to the tax system as a whole, not individual taxes, so that the benchmark for equality assessment is the tax mix. This is also the case in Spain, although in 2022, the White Book for Tax Reform – produced by an independent Commission of experts, set-up by the Ministry of Finance – argued against the use of the tax mix, and in favour of adopting the public finance mix as benchmark for equality assessments. Only in a few countries, such as Brazil and, to a lesser extent, Portugal, is the progressivity benchmark, by constitutional mandate, individual taxes.

Yet, granting constitutional status to the principle of ability to pay does not always mean that the public finance mix is disregarded in addressing inequalities. In Austria, for example, where the principle of ability-to-pay is constitutionally protected, the tax system plays a limited role in addressing inequalities, and inequality and redistribution is attained primarily through Government expenditure and social benefits; and in Switzerland, distributional analysis shows that over 70 percent of redistribution is attributable to social and welfare services, and only 29 percent to progressive taxation. Similarly in Denmark and Norway, where the principle of ability-to-pay has no constitutional status, redistribution is attained primarily through the expenditure side, namely high standard public services and a strong welfare system.[61] Interestingly both these countries are amongst the most equal countries in the world,[62] a fact that has been attributed primarily to their welfare system, and highlights how the adoption of a public finance mix as a benchmark for equality can lead to effective results – although, as Australia demonstrates, this is not necessarily the case.[63] This is because as those on the lowest incomes have less

[60] E. McCaffery and J. Baron, "The Humpty Dumpty Blues: Disaggregation Bias in the Evaluation of Tax Systems" (2003) *Organizational Behaviour and Human Decision Processes* 91, 230-242.
[61] Even though Norway also has a wealth tax, see Part II below.
[62] A. Atkinson and J. Søgaard, "The Long-Run History of Income Inequality in Denmark" (2016) *Scandinavian Journal of Economics* 118, 264-291.
[63] K. Lahey, *Australian Tax-Transfer Policies and Taxing for Gender Equality: Comparative Perspectives and Reform Options*, in M. Steward (ed), *Tax, Social Policy and Gender: Rethinking Equality and Efficiency* (ANU Press 2017), 46.

to be taxed, variations in their tax rates may be less important than direct transfers, or high standard public services,[64] such as public education, which increase social mobility.[65] Experiences in these countries are not isolated, and overall, two key findings emerge from empirical cross-country analyses on equality benchmarking, namely: *(i) more redistributive welfare states tend to be financed by less progressive tax systems*, a fact that has been explained by a decrease in support for progressive taxation among average and high-income households, when there is a large pro-poor welfare spending;[66] and *(ii) social expenditure policies are more effective in reducing inequality than progressive taxation*.[67]

Finally, it is noteworthy that, how equality is benchmarked also has significant implications not just for redistributive policies, but also for determining the extent of inequality itself. For example, the ongoing debate about income inequality in the US, and whether the progressivity of the US tax system has decreased over the last decade is, to a large extent, a debate about benchmarking.[68] One side argues that tax rates for the top 1 percent of the income distribution have gone down, and after-tax income share for that group has gone up;[69] while the other side, contends that the tax system has actually become more progressive during that period due to direct transfers to households in the bottom half of the income distribution.[70] Both can be correct, depending on how equality is benchmarked.

Beyond Legal Mandates: Attitudes to Inequalities

Beyond legal mandates, do inequalities matter? It has been argued – particularly as regards economic inequalities, where attention has traditionally been concentrated – that the focus should be on eliminating poverty, or increasing global wealth, not on inequality *per se*. This is particularly relevant in the context of a steep decline over the last decades of global poverty levels, global improvements on a range of well-being indicators, such as child mortality and average life expectancy,[71] and a marked decline in inter-nation inequality.[72] Given these global advancements, it can be argued, domestic inequalities are

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[64] L. Osberg, "What's Fair? The problem of Equity in Taxation" in J. Head et al, *Fairness in Taxation* (University of Toronto Press, 1995)

[65] H. Cremer et al, "Education and Social Mobility" (2010) *International Tax and Public Finance* 17, 357-377.

[66] S. Berens and M. Gelepithis, "Welfare state structure, inequality, and public attitudes towards progressive taxation" (2019) *Socio-Economic Review* 17(4), 823-850. See further discussion below on perceptions of economic inequalities and attitudes to redistribution.

[67] P. Doerrenberg and A. Peichl, "The impact of redistributive policies on inequality in OECD countries" (2014) *Applied Economics* 46(17), 2066-2086.

[68] Although, not exclusively, see D. Shaviro, "Ten Observations about Income Inequality", Chap X.

[69] T. Piketty and E. Saez, "Income Inequality in the United States, 1913-1998" (2003) *Quarterly Journal of Economics* 118(1), 1-39; and T. Piketty, E. Saez and G. Zucman, "Distributional National Accounts: Methods and Estimates for the United States" (2013) *Quarterly Journal of Economics* 133(4), 553-609.

[70] G. Mechling et al, "Do Piketty and Saez Misstate Income Inequality? Critiquing the Critiques" (2017) *Review of Political Economy* 29(1), 30-46; and T. Coleman and D. Weisbach, "How Progressive is the U.S. Tax System?" (2023) *University of Chicago Coase-Sandor Institute for Law & Economics Research Paper* No. 991.

[71] D. Sharrow et al, "Global, regional, and national trends in under-5 mortality between 1990 and 2019 with scenario-based projections until 2030: a systematic analysis by the UN Inter-agency Group for Child Mortality Estimation (2022) *The Lancet Global Health* 10(2), e195-e206.

[72] As a result of a tremendous decline in global poverty, see M. Ravallion, "Inequality and Globalization: A Review Essay" (2018) *Journal of Economic Literature* 56, 620-642.

irrelevant. This view has deep historical and philosophical roots,[73] in particular in Stuart Mill's utilitarianism,[74] which seeks to maximize the overall amount of happiness, and in Nietzsche's morality, which contents that equality is based on a reactive morality of denial, rooted on resentment of the richer.[75] In its modern incarnation, it is also at the root of some of the thinking in welfare economics and utilitarianism, which is concerned primarily with overall welfare maximization, regardless of its distributional impact,[76] and conceptualises wealth accumulation as merely deferred consumption.[77] Yet, beyond egalitarian arguments for objecting to inequalities *per se* – i.e. the difference between what individuals have – there are also important instrumental reasons to object to inequality.[78] In particular, there is now clear multi-disciplinary evidence that perceptions of inequalities have significant social and political implications.

Inequality decreases social cohesion – the willingness of individuals in a society to cooperate with each other for the benefit of all.[79] Empirical evidence shows a strong negative association between perceived income inequality and social cohesion,[80] and the erosion of pro-social civic behaviour;[81] in experimental settings economic inequality has also been found to cause rising intolerance of out-groups and support for anti-immigration messages, both amongst rich and poor income groups,[82] as well as an increase in anxiety and fear. For the poor, economic inequality increases perceptions of relative deprivation, but amongst the rich it also fuels awareness of what may happen if income falls.[83] Consistent with this evidence, in countries with high economic inequality, individuals are more likely to report anxiety over status and fear that others are looking down on their job situation or income.[84] There is also an impact on happiness levels and mental health: those who live in high income localities report lower levels of

[73] For an overview of the key philosophic constructions on equality see, D. Satz and S. White, "What is Wrong with Inequality?" (2024) *Oxford Open Economics* 3, i4-i17.
[74] J. Stuart Mill, *Utilitarianism*, 1861.
[75] F. Nietzsche, *On the Genealogy of Morals*, 1887.
[76] A. Sen, *On Economic Inequality* (Oxford University Press, 1973), 1-23.
[77] J. Poterba, "Lifetime Incidence and the Distributional Burden of Excise Taxes" (1989) *American Economic Review* 79, 325-330; D. Cluter and L. Katz, "Rising Inequality? Changes in Distribution of Income and Consumption in the 1980s" (1992) *American Economic Review* 82, 546-551; and D. Slesnick, "Gaining Ground: Poverty in the Postwar United States" (1993) *Journal of Political Economy* 101, 1-38.
[78] On the difference between broad and narrow egalitarian reasons, see T.M. Scanlon, *Why Does Inequality Matter?* (Oxford University Press, 2018).
[79] D. Stanley, "What do we Know about Social Cohesion: The research perspective of the federal government's social cohesion research network" (2003) *Canadian Journal of Sociology* 28, 5-17.
[80] G. Dragolav et al, *Social Cohesion in the Western World: What Holds Societies Together: Insights from the Social Cohesion Radar* (Springer International Publishing, 2016); and V. Gimpelson and D. Treisman, "Misperceiving Inequality" (2018) *Economics and Politics* 30, 27-54.
[81] E. Uslener and M. Brown, "Inequality, Trust, and Civic Engagement" (2005) *American Politics Research* 33(6), 868-894.
[82] J. Jetten et al, "Relative Deprivation and Relative Wealth Enhances Anti-Immigration Sentiments: The V-Curve re-Examined" (2015) *PLoS One* 10(10).
[83] J. Jetten et al, "Fear of falling: Economic instability enhances collective angst among societies wealthy class" (2017) *Journal of Social Issues* 73(1), 61-79.
[84] R. Layte and C. Whelan, "Who Feels Inferior? A Test of the Status Anxiety Hypothesis of Social Inequalities in Health" (2014) *European Sociological Review* 30, 525-535.

happiness;[85] learning about others' incomes has been shown to have a negative effect on the well-being of people with lower incomes;[86] and high income inequality has been linked to higher prevalence of mental illness,[87] poor health,[88] and other well-being measures.[89] Unsurprisingly, these negative effects are reflected voters' preferences and trust in political institutions more generally.[90]

Economic inequality is positively correlated with participation in political protests –[91] although this correlation has been found to be stronger in OECD countries, and for individuals with higher education levels –[92] and with greater party polarization, where electoral systems so permit.[93] Wealth inequality also creates the risk of plutocratic capture of the political process by the super-rich,[94] and there is evidence that political decisions often are more sensitive to the preferences of the rich than those of the median voter, indicating already existing political capturing.[95] More recently the rise in support for populist authoritarian movements – both in high-income countries, and in developing countries – has also been linked to perceptions of high economic inequality,[96] and the cognitive mechanisms that explain this link explored: the feelings of anxiety and insecurity that result from high or rising inequality drive individuals towards the security of identity,[97] and are linked to stronger national identity, which in turn reduces tolerance of cultural diversity and out-groups;[98] far-right popular leaders then tap into those

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85 E. Luttmer, "Neighbors as Negatives: Relative Earnings and Well-Being" (2005) *Quarterly Journal of Economics* 120(3), 963–1002.
86 R. Perez-Trulia, "The Effect of Income Transparency on Well-Being: Evidence from a Natural Experiment" (2020) *American Economic Review* 110, 1019-1054.
87 K. Pickett et al, "Income Inequality and the Prevalence of Mental Illness: A Preliminary Analysis" (2006) *Journal of Epidemiology and Community Health* 60, 646-647.
88 A. Bergh et al, *Sick of Inequality? An Introduction to the Relationship between Inequality and Health* (Edward Elgar Publishing, 2019).
89 A. Alesina et al, "Inequality and Happiness: Are Europeans and Americans Different?" (2004) *Journal of Public Economics* 88, 2009-2042.
90 A. Deaton, *The Great Escape: Health, Wealth and the Origins of Inequality* (Princeton University Press, 2013).
91 J. Jo, "Weapons of the Dissatisfied? Perceptions of Socioeconomic Inequality, Redistributive Preference and Political Protest: Evidence from South Korea" (2016) *International Area Studies Review* 19, 285-300; J. Castillo, "Inequality, Distributive Justice and Political Participation: an Analysis of the Case of Chile" (2015) *Bulletin of Latin American Research* 34, 486-502; and Y. Lei, "Revisiting China's Social Volcano: Attitudes Towards Inequality and Political Trust in China" (2020) *Socius* 6.
92 J. Jo and H. Choi, "Enigmas of Grievances about Inequality: Effects of Attitudes Towards Inequality and Government Redistribution on Protest Participation" (2019) *International Area Studies Review* 22, 348-368.
93 S. Han, "Income Inequality, Electoral Systems and Party Polarisation" (2015) *European Journal of Political Research* 54, 582-600.
94 R. Formisano, *Plutocracy in America: How increasing inequality destroys the middle class and exploits the poor* (Johns Hopkins University Press, 2015); K. Goss "Policy Plutocrats: How America's Wealthy Seek to Influence Governance" (2016) *Political Science & Politics* 49(3), 442-448; and D. Shaviro, "The Mapmaker's Dilemma in Evaluating High-End Inequality" (2016) *University of Miami Law Review* 71, 83.
95 M. Gilens, *Affluence and Influence: Economic Inequality and Political Power in America* (Princeton University Press, 2014); and L. Bartels, *Unequal Democracy: Political Economy of the New Gilded Age* (Princeton University Press, 2016).
96 R. Inglehart and P. Norris, "Trump and the Populist Authoritarian Parties: The Silent Revolution in Reverse" (2017) *Perspectives on Politics* 15(2), 442-454; and L. Pástor and P. Veronesi, "Inequality Aversion, Populism, and the Backlash against Globalization" (2021) *Journal of Finance* 76, 2857-2906.
97 C. Kinnvall, "Globalization and Religious Nationalism: Self, Identity, and the Search for Ontological Security" (2004) *Political Psychology* 25(5), 741-767.
98 M. Shayo, "A Model of Social Identity with Application to Political Economy: Nation, Class, and Redistribution" (2009) *American Political Science Review* 103(2), 147-174.

feelings of anxiety and stronger national identity.[99] Although most of the research on the political impact of inequalities focuses on income inequality, there is growing evidence that concerns about other inequalities are also spilling over into the political sphere, and that movements like Black Lives Matter or the Me Too are an example of this.[100]

Evidence of the impact of inequality on crime levels or economic growth is not as consistent, but nevertheless noteworthy. Although, there is a widespread belief that inequality affects a range of societal incomes, including crime,[101] and both criminological and economic models do suggest a positive link between inequalities and crime rates,[102] the empirical evidence is patchy: there does seem to be indeed a causal link, but empirically the magnitude of the effect is subject to debate.[103] Similarly, evidence on the economic impact of inequality has been relatively limited: perceptions of inequality decrease belief in meritocracy, thus potentially affecting trust in the market economy and productivity;[104] high economic inequality can also affect demand, thus dampening production;[105] and making higher wealth available to those who are asset poor may unleash new investment.[106] Nonetheless, a recent paper convincingly argues that economic inequality affects job creation, showing that an increase on top incomes account for 13 percent of the decline in the employment share of small firms since 1980.[107]

Given the strength of evidence on the social and political implications of inequalities – particularly economic inequality – and the universality of constitutional mandates on equality, a surge of clear tax policy responses may have been expected. Indeed, it has been recently suggested that, given existing evidence, inequality should be treated as an externality, which would have a wide range consequences for optimal tax theory, namely: a shift from the traditional focus on efficiency, often to the detriment of equity considerations, to placing equity at the centre of efficiency considerations.[108] Yet, as demonstrated below, although economic inequality has grown significantly in the last decades, tax law data in participant countries does not reflect growing concerns. Indeed, the opposite: although it could

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99 S. Jay et al, "Economic Inequality and the Rise of the Far-Right Populism: A Social Psychological Analysis" (2019) *Journal of Community Applied Social Psychology* 29, 418-428.
100 R. Benson et al, "Attitudes to Inequalities" (2024) *Oxford Open Economics* 3, i39-i-63.
101 M. Lobeck and M. Nyborg Støstad, "The Consequences of Inequality: Beliefs and Redistributive Preferences" (2023) *CESifo Working Paper* 10710.
102 K. Heimer, "Inequalities and crime" (2019) Criminology 57(3), 377-394; W. Chiu and P. Madden, "Burglary and income inequality" (1998) *Journal of Public Economics* 69(1), 123-141; and A. Merlo, "Introduction to economic models of crime" (2004) *International Economic Review* 45(3), 677-679.
103 P. Fajnzylber et al, "Inequality and Violent Crime" (2002) *Journal of Law and Economics* 45(1); and M. Pazzona, "Revisiting the Income Inequality-Crime Puzzle" (2024) *World Development* 176, 106520.
104 A. Kuhn, "The Subversive Nature of Inequality: Subjective Inequality Perceptions and Attitudes to Social Inequality" (2019) *European Journal of Political Economy* 59, 331-344.
105 L. Carvalho and A. Rezai, "Personal Income Inequality and Aggregate Demand" (2016) *Cambridge Journal of Economics* 40, 491-505; and A. Auclert and M. Rognlie, "Aggregate Demand and the Top 1 Percent" (2017) *American Economic Review: Papers & Proceedings* 107(5), 588-592.
106 P. Bardham et al, "Wealth inequality, wealth constraints and economic performance" in A. Atkinson and F. Bourguignon (ed.), *Handbook of Income Distribution,* Chapter 10, 541-603 (Elsevier, 2000).
107 S. Doerr et al, "Income Inequality and Job Creation" (2024) *NBER Working Papers* 33137.
108 M. Stostad and F. Cowell, "Inequality as an Externality: Consequences for Tax Design" (2024) *Journal of Public Economics* 235, 105139. See also J. Repetti, "The Appropriate Roles for Equity and Efficiency in a Progressive Individual Income Tax" (2020) *Florida Tax Review* 23, 522.

be argued that tax policy has in fact responded to increased awareness of non-economic inequalities in several (albeit not all) countries, redistributive tax policies to address economic inequality are generally on the retreat. As discussed further below, this lack of tax policy response is consistent with existing literature, and can be attributed to two key factors, namely *(i)* for a range of reasons, historically, high economic inequality does not give rise to a growth in redistributive policies, and *(ii)* globalization and consequent growing mobility, particularly of individuals and labour, has significantly increased the balance of trade-offs within inequalities, between equity and efficiency, and between equity and non-tax policy aims.

III. Tax Policy and Economic Inequalities

Although there is disagreement as regards current levels of economic – i.e. income and wealth – inequality, there is now little doubt that it has been growing over the last decades in most countries, albeit not necessarily at the same rate.[109] Indeed, many countries have seen income inequality drift up in recent decades, and according to the OECD income inequality is at the highest level it has been for the past 50 years or so.[110] Yet, even in countries with comparatively low income inequality – a fact that is often attributed to the highly progressive income taxes and/or a strong welfare / direct transfers system – wealth inequality is still rising, and global wealth concentration at the very top of the distribution has increased.[111] Improvements in wealth measurements and administrative records attest to the fact that wealth inequality in western countries is now typically much larger that income inequality.[112] National reports confirm this trend.

In Austria, for example, although income inequality is not as pronounced as in other countries, the wealthiest 1 percent account for nearly half of the country's total net wealth, while the lower half only has 4 percent of total wealth. Other countries report similar trends: in Denmark, inequality is still moderate by global standards, yet the Gini co-efficient – the standard measure of economic inequality across the income/wealth distribution – has risen from 22 in 1987 to 30 in 2021; in Luxembourg, the impact of taxes and social transfers on the Gini coefficient is significant, but it is smaller now than it was as recently as 2015, and inequalities in wealth are much greater than inequalities in income, particularly since the 1990s; and in Germany, differences in taxation of income and wealth reportedly help explain a comparatively low income inequality, combined with a high wealth inequality. In the UK, both income and wealth inequality have risen, but at different paces: income inequality increased from 1978 to 2008, fell from 2008 to 2019, and has been rising since, leaving the UK with the second highest

[109] A. Atkinson, *Inequality: What Can Be Done?* (Harvard University Press, 2015).
[110] P. Bourquin et al, "Trends in income and wealth inequalities" (2024) *Oxford Open Economics* 3, i103-i146.
[111] OECD, *Taxation and Inequality: OECD Report to the G20 Finance Ministers and Central Bank Governors*, (Paris: OECD Publishing, 2024)
[112] T. Douenne et al, "Do People Distinguish Income from Wealth Inequality? Evidence from the Netherlands" (2024) *World Inequality Lab Working Paper* 2024/15.

level of income inequality in the G7, and higher than almost all EU countries; while wealth inequality has been steadily increasing since the 1970s, and it is thought to be closely linked to property wealth.[113]

This rise in economic – and particularly wealth – inequality has been increasingly subject to public debate in several countries, with some such as Denmark, reporting that public surveys show a strong support for higher taxation on those with high incomes or wealth. This is largely in line with previous research indicating that large shares of the population in western countries in particular express concerns over the size of economic inequality in their country,[114] and generally support the view that those on higher incomes should pay higher taxes.[115] Yet, these results must be read with caution. There is now an established body of empirical evidence, from a variety of disciplines, on people's attitudes to both inequality, and to progressive taxation – or, more generally, redistributive policies. This evidence shows that people do not necessarily equate fairness with complete equality,[116] and in particular two key elements that should inform our understanding of public concerns on economic inequality, namely: *(i)* misperceptions of inequality, and *(ii)* an – at least partially – self-interested approach to redistributive taxation.

First, although individuals care about inequality, and in particular their social position relative to others,[117] what is often designated as inequality aversion,[118] their *attitude towards inequality is influenced by a wide range of factors*, most notably a systematic misperception of their own income relative to others. Indeed, perceptions of economic inequality – not objective levels of inequality – are the key determinant factor in shaping individuals' policy preferences,[119] and although people are on average well-informed about the income levels of their reference group – those with similar skills, employment type, social environment, etc – they are less informed about their position within the wider population.[120] In particular, those with higher incomes tend to overestimate others' incomes, and thus underestimate their own income position, while those with lower incomes tend to underestimate the

113 P. Bourquin et al, n. xx above.
114 L. Osberg and T. Smeeding, "Fair Inequality Attitudes Towards Differentials: the United States in Comparative Perspective" (2006) *American Sociological Review* 71, 450-473; and A. Clark and C. D'Ambrosio, "Attitudes to Income Inequality: Experimental and Survey Evidence" in A. Atkinson and F. Bourguignon (eds.), *Handbook of Income Distribution* (Oxford: Elsevier, 2015).
115 J. Edlund, "Attitudes Towards Taxation: Ignorant and Incoherent?" (2003) *Scandinavian Political Studies* 26, 145-167.
116 R. Benson et al, n. xx above.
117 K. Hvidberg et al, "Social Positions and Fairness Views on Inequality" (2023) *Review of Economic Studies* 90, 3083-3118.
118 Traditionally disregarded in economic analysis until the landmark work of E. Fehr and K. Schmidt, "A Theory of Fairness, Competition and Cooperation" (1999) *Quarterly Journal of Economics* 114, 817-868. See also X. Lu et al, "Inequity Aversion and the International Distribution of Trade Protection" (2012) *American Journal of Political Science* 56(3), 638-654.
119 K. S. Trump, "Income Inequality is Unrelated to Perceived Inequality and Support for Redistribution" (2023) *Social Science Quarterly* 104(2), 180-188.
120 E. Bublitz, "Misperceptions of Income Distributions: Cross-Country Evidence from a Randomized Survey Experiment" (2020) *Socio-Economic Review* 20, 435-462; C. Cruces et al, "Biased Perceptions of Income Distribution and Preferences for Redistribution: Evidence from a Survey Experiment" (2013) *Journal of Public Economics* 98, 100-112; J. Fernandez-Albertos and A. Kuo, "Income Perception, Information, and Progressive Taxation: Evidence from a Survey Experiment" (2018) *Political Science Research and Methods* 6, 83-110.

income of others, and thus overestimate their own position. This bunching phenomenon in the middle of the income distribution, which has been designated as 'centre bias',[121] 'middle-class bias',[122] or 'median bias',[123] has been associated with proximity to individuals on their own reference group, transparency norms, and visible signs of income or wealth. From a tax policy perspective this bunching phenomenon means that individuals' stated concerns about economic inequality, and related support for taxation of those on high income or wealth may, at least partly, be informed by the fact that they do not see themselves as belonging to that group.[124] This would also be in line with empirical evidence indicating that changes in social position overtime, including due to life events such as unemployment or promotions, have an impact on people's perceptions on the fairness of inequality,[125] or similarly, that providing information about their actual income position will result in adjustment of individuals' political preferences.[126]

Beyond misperception of their own income, attitudes to economic inequality are also influenced by individuals' own experiences and social group, including family,[127] the environment in which they grew up,[128] and their exposure to a more socioeconomically diverse group of individuals.[129] There is also a growing literature which emphasizes the impact of socio-economic changes on concerns about economic inequality. Generally, individuals care more about the well-being of other people, if they are more like themselves – what is designated in the literature as social affinity;[130] socio-economic changes have resulted in a decrease in this social affinity, and thus sympathy for beneficiaries of redistributive policies,[131] especially if minorities make up a greater share of those potential beneficiaries.[132] Finally,

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[121] K. Hvidberg et al, n. xx above.
[122] D. Ferh et al, "Your Place in the World: Relative Income and Global Inequality" (2022) *American Economic Journal: Economic Policy* 14, 232-268.
[123] C. Hay and F. Mager, "Why are Relatively Poor People Not More Supportive of Redistribution? Evidence from Randomized Survey Experiment Across 10 Countries" (2021) *American Economic Journal: Economic Policy* 13, 299-328.
[124] Following the famous quote attributed to former US Senate Finance Committee Chair, Russell Long: "Don't tax me, don't tax thee, tax that fella behind the tree."
[125] K. Hvidberg et al, n. xx above; and M. Karadja et al, "Richer (and Holier) Than Thou? The Effect of Relative Income Improvements on Demand for Redistribution" (2017) *Review of Economics and Statistics* 99, 201-212.
[126] I. Günther and B. Martorano, "Inequality, social mobility and redistributive preferences" (2025) *Journal of Economic Behavior & Organization* 229; E. Bublitz, n. xx above; Karadja et al, n. xx above; and C. Engelhordt and A. Wagener, "What do Germans Think and Know About Income Inequality? A Survey Experiment" (2018) *Socio-Economic Review* 16, 743-767. Although, it has been argued that these effects are small, see D. Weisstanner and K. Armingeon, "Redistributive Preferences: Why Actual Income is Ultimately More Important than Perceived Income" (2022) *Journal of European Social Policy* 32, 135-147.
[127] I. Almås et al, "Fairness and Family Background" (2017) *Politics, Philosophy & Economics* 16, 117–131.
[128] C. Roth and J. Wohlfart, "Experienced Inequality and Preferences for Redistribution" (2018) *Journal of Public Economics* 167, 251-262.
[129] J. Londono-Velez, "The Impact of Diversity on Perceptions of Income Distribution and Preferences for Redistribution" (2022) *Journal of Public Economics* 214, 104732.
[130] L. Kristov et al, "Pressure Groups and Redistribution" (1992) *Journal of Public Economics* 48(2), 135-163.
[131] N. Lupu and J. Pontusson, "The Structure of Inequality and the Politics of Redistribution" (2011) *American Political Science Review* 105(2), 1-21; and M. Shayo, n. xx above.
[132] M. Eger, "Even in Sweden: The Effect of Immigration on Support for the Welfare State Spending" (2010) *European Sociological Review* 26(2), 203-217.

they are also influenced by opportunities for social comparisons with others.[133] It is therefore unsurprising that, in a globalized and digitalized society where opportunities for social comparisons have increased, and experiences of economic inequality and wealth signals have become more salient, concern about this type of inequality has also grown. Yet, how to reconcile this growing concern, with evidence on decrease in sympathy for those who are beneficiaries of redistributive policies – and thus, arguably, the primary victims of precisely that growth in economic inequality? New empirical evidence suggests that this apparent contradiction actually reflects two different facets of economic inequality: upwards inequality, concerns about the ‘rich’, which reflect individuals’ self-oriented income maximization motivation; and downwards inequality, giving to the ‘poor’, which reflects individuals’ other-oriental social affinity.[134] So, individuals are concerned about economic inequality to the extent that it would mean taking from the ‘rich’, but less so, to the extent it would mean them giving to the ‘poor’. This finding also fits well with the evidence, discussed below, regarding support for redistributive taxation.

Finally, attitudes to economic inequality are influenced by meritocratic perceptions, and different beliefs regarding the sources of economic inequality have been found to influence people’s fairness perceptions, i.e. fairness preferences do not necessarily follow inequality perceptions. If people believe that economy inequality is a result of individuals’ efforts, they are more likely to think it is fair – and be less supportive of redistributive policies; if, on the contrary, they believe that it is the result of luck, birth, connections or corruption, they are more likely to think it is unfair – and be more supportive of redistributive policies.[135] Indeed, there is now strong empirical evidence suggesting that economic inequality may be regarded as appropriate, or acceptable, if individuals’ believe it results from meritocratic allocation.[136] New cross-country evidence suggest that although these views are evident in all countries, individuals in richer countries, and correspondingly, richer individuals within countries, are more meritocratic.[137] This is consistent with a self-interest bias in beliefs: if richer individuals (in richer countries) are more likely to believe that inequality is a result of meritocratic allocation, they are also more likely to believe

[133] M. Sands and D. de Kadt, “Local Exposure to Inequality Raises Support of People of Low Wealth got Taxing the Wealthy” (2020) *Nature* 586, 257-261; and M. Condon and A. Wichawsky, “Inequality in the Social Mind: Perceptions of Status and Support for Redistribution” (2020) *Journal of Politics* 82(1), 149-161.

[134] C. Cavaille and K.S. Trump, “The Two Facets of Social Policy Preferences” (2015) *Journal of Politics* 77(1), 146-160.

[135] A. Alesina and G.M. Angeletos, “Fairness and Redistribution” (2005) *American Economic Review* 95(4), 960-980.

[136] Interestingly this has been found to apply to adults, but not children: 10-11 years old show a preference for equal division of rewards, whereas 17-18 years old demonstrate a tolerance for unequal outcomes as long as are provided with evidence of unequal inputs, see I. Almas et al, “Fairness and the Development of Inequality Acceptance” (2010) *Science* 328(5982), 1176-1178. See also J. Mijs, “The Paradox of Inequality: Income Inequality and Belief in Meritocracy go Hand in Hand” (2021) *Socio-Economic Review* 19, 7-35; N.G. Mankiw, “Defending the One Percent” (2013) *Journal of Economic Perspectives* 27, 21-34; I. Almås et al “Cuthroat Capitalism Versus Cuddly Socialism: Are Americans more Meritocratic and Efficiency-Seeking than Scandinavians?” (2020) *Journal of Political Economy* 128, 1753-1788; and D. Nettle and R. Saxe “Preferences for Redistribution Are Sensitive to Perceived Luck, Social Homogeneity, War and Scarcity’ (2020) *Cognition* 198, 1-13.

[137] I. Almas et al, “Attitudes to Inequality: Preferences and Beliefs” (2024) *Oxford Open Economics* 3, 164-179.

that economic inequality is acceptable, thus legitimizing opposition to redistributive taxation that require them to pay higher taxes.[138]

Support for redistributive taxation – and redistributive policies more generally – is largely, albeit not exclusively, rationally self-interested: individuals with lower incomes tend to favour more redistributive taxes, than those on lower incomes.[139] This rational self-interest would help explain a growing public support for redistributive taxation, and in the long run rising levels of economic inequality should result higher tax progressivity, primarily among those on comparatively lower incomes, but possibly also including median voters.[140] Yet, recent empirical evidence indicates that, not only there is a growing consensus against redistribution,[141] but historically, tax policy does not respond to rising economic inequality,[142] or said in another way, higher economic inequality has not resulted in higher tax rates on high incomes or wealth. Several explanations have been provided in the literature for this apparent contradiction.

The first possible explanation is that voters do in fact want more progressive taxation, but the policy process is not responding, because it is captured by lobbying groups.[143] This explanation fails to explain, however, the growing number of empirical studies suggesting that rising levels of economic equality does not result in increased demand for redistributive taxation.[144] A second explanation offered in the literature is that redistributive taxation violates either voters' deeply held views on equal treatment by government policy,[145] or individuals' intuition on deservingness. Recent empirical evidence seems provide support for this explanation.[146]

A third possible explanation for the lack of tax policy response to rising economic inequality is that individuals are poorly informed about tax policy, and its consequences. There is indeed strong evidence

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[138] On motivated reasoning generally see, N. Epley and T. Gilovich, "The Mechanisms of Motivated Reasoning" (2016) *Journal of Economic Perspectives* 30, 133-140; and D. Redlawsk, "Hot Cognition or Cool Consideration? Testing the Effects of Motivated Reasoning on Political Decision Making" (2002) *Journal of Politics* 64(4), 1021-1044.

[139] X. Lu and K. Scheve, "Self-centred inequity aversion and the mass politics of taxation" (2016) *Comparative Political Studies* 49, 1965-1997; A. Cansunar, "Who is High-Income Anyway? Social Comparison, Subjective Group-Identification, and Preferences over Progressive Taxation" (2020) *Journal of Politics* 83, 1292-1306; and B. Amable, "The Differentiation of Social Demands in Europe. The Social Basis of the European Models of Capitalism" (2009) *Social Indicators Research* 91(3), 391-426.

[140] P. Rehm et al, "Insecure Alliances: Risk, Inequality, and Support for the Welfare State" (2012) *American Political Science Review* 106(2), 1-21.

[141] N. Lupu and J. Pontusson, n. xx above; and M. Shayo, n. xx above. See also further above, on the impact of ongoing social-economic structural changes on perceptions of inequality.

[142] K. Scheve and D. Stasavage, "Equal Treatment and the Inelasticity of Tax Policy to Rising Inequality" (2023) *Comparative Political Studies* 56(4), 435-464.

[143] A. Bonica et al, "Why Hasn't Democracy Slowed Rising Inequality? (2013) *Journal of Economic Perspectives* 27(3), 102-124.

[144] N. Breznau and C. Hommerich, "No Generalised Effect of Income Inequality on Public Support for Governmental Redistribution among Rich Democracies" (2019) *Social Science Research* 81, 17-191; and K.S. Trump, "Income Inequality and Support for Redistribution" (2023) *Social Science Quarterly* 104, 180-188.

[145] K. Scheve and D. Stasavage, n. xx above.

[146] K. Berg, "Revealing inequality aversion from tax policy and the role of non-discrimination" (2025) *Economica*, forthcoming.

that individuals are poorly informed about the tax system, and often rely on heuristics, such as their own tax rate as a reference to assess the fairness of the tax system,[147] or are influenced by framing and metric effects.[148] For example, individuals are more supportive of the Government 'taking measures' to reduce economic inequality than they are of 'redistribution', possibly because they interpret 'taking measures' as costless, or at least without cost to themselves, whilst the word 'redistribution' implies a group will lose for another to win.[149] There is also ample evidence of the impact of media in framing (tax) policy debates,[150] and in that context the role of news media trust is particularly relevant.[151]

A slightly different, yet related, explanation is that individuals misjudged their contribution to the tax system, and this decreases their tax solidarity. There is now some evidence that individuals may be willing to depart from tax preferences that reflect their self-interest – i.e. support higher tax progressivity even when they themselves would not benefit from it – when fairness considerations are at stake.[152] However, this support is conditional. It is, firstly, dependent on social affinity, i.e. individuals are more willing to pay taxes when they benefit their own group, what is designated as outgroup bias;[153] and secondly on perceptions of fair distribution of the burden,[154] i.e. individuals' support for redistributive taxation is dependent perceptions of who pays how much for the welfare state.[155] Yet, perceptions of fair distribution can be biased, and in particular, as with other joint tasks, egocentric bias is also present in taxation: individuals, whether on high or low income, tend to overestimate their own tax revenue contribution relative to others.[156] In this scenario, growing economic inequality leads both rich and poor to become more unsatisfied with others' contributions, decreasing perceptions of tax solidarity, and thus

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147 J. Slemrod, "The Role of Misconceptions in Support for Regressive Tax Reform" (2006) *National Tax Journal* 59, 57-75.

148 S. Reimers, "A Pay-Check Half-Empty or Half-Full? Framing, Fairness and Progressive Taxation" (2009) *Judgment and Decision Making* 4(6), 461-466; and E. McCaffery and J. Baron, "Framing and Taxation: Evaluation of Tax Policies Involving Household Composition" (2004) *Journal of Economic Psychology* 25(6), 679-705.

149 R. Benson et al, n. xx above.

150 C. Bell and R. Entman, "The Media's Role in America's Exceptional Politics of Inequality: Framing the Bush Tax Cuts of 2001 and 2003" (2011) *The International Journal of Press/Politics* 16(4), 548-572; and D. Crow and A. Lawlor, "Media in the Policy Process: Using Framing and Narratives to Understand Policy Influences" (2016) *Review of Policy Research* 33(5), 472-491.

151 E. Lindgren et al, "Trusting the Facts: The Role of Framing, News Media as a (Trusted) Source, and Opinion Resonance for Perceived Truth in Statistical Statements" (2022) *Journalism & Mass Communication Quarterly* 101(4), 981-1004.

152 S. Stantcheva, "Understanding Tax Policy: How Do People Reason?" (2021) *Quarterly Journal of Economics* 136, 2309-2369.

153 A. Belmonte et al, "Tax Morale, Aversion to Ethnic Diversity, and Decentralization" (2018) European Journal of Political Economy 55, 204–223; F. Nemore and A. Morone, "Public Spirit on Immigration Issues and Tax Morale in Italy: An Empirical Investigation" (2019) Journal of Behavioral and Experimental Economics 81, 11–18; and L. Xin, "Social Identities, Ethnic Diversity, and Tax Morale" (2010) *Public Finance Review* 38 (2): 146–177. For a review of this literature, see Marco Mendoza Aviña et al, "Outgroup Bias and the Unacceptability of Tax Fraud" (2024) *Political Studies Review* 22(1), 223-231

154 M. Schwaninger, "Sharing with the Powerless Third: Other-Regarding Preferences in Dynamic Bargaining" (2022) *Journal of Economic Behaviour and Organization* 197, 341-355.

155 F. Kalleitner and L. Bobzien, "Taxed Fairly: How Differences in Perception Shape Attitudes Towards Progressive Taxation" (2024) *European Sociological Review* 40, 535-548.

156 On egocentric bias generally, M. Ross and F. Sicoly, "Egocentric Biases in Availability and Attribution" (1979) *Journal of Personality and Social Psychology* 37, 322-336.

lowering support for redistributive taxation.[157] It is worth noting that, as identified previously in the literature, this biased perception may also be partially motivated by self-interest: biased perceptions may to some extent function as a mechanism that enables individuals to self-justify their desire to withdraw from the principle of tax solidarity to the detriment of those at the lower end of the income distribution.[158] Nevertheless, egocentric biases are not entirely motivational, and do reflect known cognitive mechanisms.

The above explanations are not necessarily mutually exclusive; indeed, the opposite. It is more likely that individuals' preferences on redistributive policies and progressive taxation are determined by a range of interacting factors, rather than one single one. This complexity in individuals' preferences helps explain some of the key features of tax systems worldwide, and taxation trends discussed below. It also raises the possibility of a potential vicious cycle, whereby lack of progressive taxation is fuelling economic, primarily wealth, inequality,[159] and economic inequality is in turn fuelling a decrease in redistributive tax preferences.

Yet, individuals' preferences do not explain everything – even in all their complexity, they are only part of the full story. One key element so far missing from the literature attempting to explain the lack of tax policy response to rising economic inequality, is the fact that decreasing economic inequality is often only one of the various policy aims taken into consideration when devising tax policy. As discussed further below, tax policy often reflects significant trade-offs between different – frequently constitutionally protected – policy aims. Thus, a dimension generally missing from the analysis in the redistributive taxation literature is the fact that in many situations the decision not to go further on redistributive taxation does not reflect a policy preference *per se*, but rather a prioritization of conflicting policy aims: priority is given, for example, to labour supply or environmental protection, even where the impact on economic inequality is (known to be) negative.

Income Inequality: Personal Income Taxes

Personal income tax progressivity is the most commonly used policy instrument to reduce income inequality.[160] As demonstrated in Table II, the large majority of participating countries – 29 out of 33 – have progressive personal income taxes. Interestingly, the four countries that currently have flat-rate taxation applied progressive taxation at some point, and moved to flat-rate taxation at some point in the last twenty years: Bulgaria in 2008, North Macedonia in 2006, Romania in 2005, and Ukraine in 2015. This phenomenon had already been identified in the literature, and given the mixed evidence on any envisaged benefits, the central question posed was whether countries that had implemented a flat-rate

[157] F. Kalleitner and L. Bobzien, n. xx above.
[158] F. Kalleitner and L. Bobzien, n. xx above.
[159] J. Hubmer et al, "Sources of U.S. Wealth Inequality: Past, Present, and Future" (2021) *NBER Macroeconomics Annual* 35.
[160] Although its effectiveness as a redistributive instrument has been found to be both gradual and temporary, see J. Tovar Jalles and G. Karras, "Tax Progressivity and Income Inequality" (2024) *Economic Letters* 238, 11715.

would be able to move away from it.[161] In this regard, North Macedonia is a telling example of the political obstacles to switching back to progressive taxation, once flat-rate taxation is in place – although, as the Czech Republic demonstrates, these obstacles are not insurmountable. In 2019, under political pressure given the high-levels of income inequality, North Macedonia approved a new income tax law, which abolished the flat rate model and substituted it by a dual income tax model: (mildly) progressive tax for labour income, and flat-rate tax for capital income. Although the law was approved in 2019, the reform was repeatedly postponed until 2023. In 2023, the Government announced its decision to reverse the decision to introduce a progressive income tax, based on two main arguments, namely that (a) progressive taxation would have a limited impact on income inequality (less than 1 percent), and (b) would increase tax avoidance, with up to 50 percent of revenue potentially lost.

Yet, even in countries were progressive personal income tax rates apply, this relative uniformity is deceiving, and hides four key factors that often determine the progressivity of those taxes, namely: *(i) the level to which the progressivity is heterogeneous*, and not only does the number of brackets differ substantially, but the impact on income inequality depends on the actual design of those brackets; *(ii) not all income is necessarily subject the progressive rates*, in the large majority of countries some or all types of capital income are subject to flat-rate taxation – or to no taxation at all, as in Kosovo or Switzerland – and in some countries flat-rate taxation also applies to social security contributions; *(iii) different progressive rates may apply to different types of income*, in which case capital income or self-employment are typically subject to lower rates than labour or employment income – although Serbia applies different rates to each type of income;[162] and *(iv) the number, scope and level of tax expenditures applied*.

Table II. Personal Income Taxes: Progressive vs Proportional Taxes

	Progressive Tax	*Flat-Rate Tax*
Australia	√ (4 brackets)	
Austria	√ (6 brackets)	√[163]
Belgium	√ (4 brackets)	√[164]
Brazil	√ (5 brackets)	√[165]
Bulgaria		√[166]
Canada	√ (5 brackets)	√[167]
China	√ (7 brackets)	√[168]
Croatia	√ (2 brackets)[169]	√[170]

[161] M. Keen et al, "The "Flat Tax(es)": Principles and Evidence" (2006) *IMF Working Papers* 2006/218.
[162] One of the few countries in the world to apply a so-called composite system of personal income taxation.
[163] For capital income and social security contributions.
[164] For capital income, royalties, and social security contributions.
[165] Capital income (dividends and interest).
[166] Flat-rate of 10 percent introduced in 2008; until then, personal income tax was progressive.
[167] For social security contributions.
[168] For all non-labour income, and social security contributions.
[169] 'Annual income', namely employment and self-employment income.
[170] 'Final income', including all capital gains, dividends, interest, etc; and social security contributions.

Czech Republic	√ (2 brackets)[171]	√[172]
Denmark	√ (3 brackets)[173]	
Finland	√ (6 brackets)	√[174]
France	√ (4 brackets)	√[175]
Germany	√ (6 brackets)	√[176]
Ireland	√ (2 brackets)[177]	
Italy	√ (4 brackets)	√[178]
Kosovo	√ (4 brackets)[179]	
Japan	√ (7 brackets)	√[180]
Latvia	√ (3 brackets)	√[181]
Luxembourg	√ (23 brackets)[182]	√[183]
Netherlands	√ (2 brackets)	√[184]
N. Macedonia		√
Norway	√ (5 brackets)	√[185]
Poland	√ (2 brackets)	√[186]
Portugal	√ (9 brackets)[187]	√[188]
Romania		√[189]
Serbia	√ (2 brackets)	√[190]
Spain	√ (5 brackets)[191]	
Sweden	√ (2 brackets)	√[192]
Switzerland	√ [193]	√[194]

[171] Flat-rate tax between 2008 and 2013; capital income treated as other income since 2021.
[172] For social security contributions, and some types of income when earned by self-employed.
[173] Applies to all income, including capital income; however, capital income is taxed at lower rates.
[174] For capital income, and social security contributions
[175] For capital income.
[176] For capital income.
[177] Social security contributions subject to additional brackets.
[178] For capital income.
[179] Progressivity is lower for self-employed than employees; capital income is exempt.
[180] For some capital income.
[181] For capital income, and social security contributions.
[182] Capital income benefits from a preferential treatment.
[183] For social security contributions.
[184] For capital income.
[185] Dual income model: progressive tax for earned income, flat-rate for capital income, as well as social security contributions.
[186] Dual income model: progressive tax for earned income, flat-rate for capital income, as well as social security contributions.
[187] Progressivity is higher for employment than for self-employment income.
[188] For capital income.
[189] Different flat-rates for different types of income.
[190] Composite taxation model: flat-rates for different types of income, and a complementary global tax, applied at progressive rates.
[191] However, rates applicable to capital income are different.
[192] Dual income model: progressive tax for earned income, flat-rate for capital income.
[193] The federal income tax is progressive, as are most cantonal taxes; however, two cantons apply proportional income taxes.
[194] For social security contributions.

Turkey	√ (5 brackets)	√[195]
Ukraine		√[196]
UK	√ (4 brackets)[197]	
USA	√ (7 brackets)[198]	√[199]

The preferential treatment of capital income when compared to labour income is a particularly controversial topic in many participating countries; even more so in those, such as Finland or Germany, where tax progressivity is high for labour income – not solely from an income inequality perspective, but also from the perspective of its effect upon wealth and other non-economic inequalities.[200] In the UK, for example, new empirical evidence shows that effective average tax rates decline significantly at the top of the distribution of income distribution, due to the composition of income: as those at the top of the income distribution tend to have more capital income, they generally pay lower rates of tax on their overall income, than those on (lower) incomes, whose income tends to come primarily from employment.[201] Yet, this preferential treatment is founded on two key sets of trade-offs.

First, trade-offs within the tax system, namely between equity and efficiency: non-taxation of capital income has traditionally found support in optimal tax theory,[202] and although the literature has now moved away from non-taxation, lower taxation of capital income vs labour is often still regarded as optimal.[203] This explains why countries like Canada or Croatia did not tax capital income until 1972 and 2016 respectively, and only started doing so following intense public pressure, and policy debate. Historically, therefore, the reason for the introduction of dual-income tax systems in the 1980s was their efficiency,[204] and despite some evidence that under specific conditions dual-income tax systems may be redistributive, generally equity was not a consideration.[205] Second, trade-offs with non-tax policy aims, such as encouraging investment: international tax competition encourages countries to tax mobile production factors, like, capital more lightly than more immobile factors such as labour.[206] These last trade-offs are specifically acknowledged in Denmark, for example, where the steep decrease in marginal

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[195] For capital income.
[196] Progressive tax rates in place from 2011 to 2015, but abolished then.
[197] Capital income subject to a separate tax, which is also progressive, but at lower rates.
[198] Capital income also subject to a progressive tax, but at lower rates.
[199] For social security contributions.
[200] See further below, Section IV.
[201] A. Advani et al, "How much tax do the rich really pay? Evidence from the UK" (2023) *Oxford Review of Economic Policy* 39, 406-437.
[202] A. Atkinson and J. Stiglitz, "The design of tax structure: direct versus indirect taxation" (1976) *Journal of Public Economics* 6, 55-75.
[203] B. Jacobs and A. Bovenberg, "Human capital and optimal positive taxation of capital income" (2010) *International Tax Public Finance* 17, 451-478.
[204] S. Nielsen and P. Sorensen, "On the Optimality of the Nordic System of Dual Income Taxation" (1997) *Journal of Public Economics* 63, 311-339; and P. Sorensen, "From the Global Income Tax to the Dual Income Tax: Recent Tax Reforms in the Nordic Countries" (1994) *International Tax and Public Finance* 1, 57-79.
[205] A. Kristjánsson, "Redistributive Effects in a Dual Income Tax System" (2013) *FinanzArchiv / Public Finance Analysis* 69(2), 148-166.
[206] Although it is debatable if this assumption on the relative immobility of labour still holds, see further below on the growth of preferential tax regimes in personal income taxes.

tax rates on both labour and capital income, is said to be in line with an overall approach to tax policy that prioritises the supply of labour and investment over reducing income and wealth inequalities. More recent literature has moved away from the equity vs efficiency trade-off, and has advocated equal taxation or even higher taxation of capital income on the basis of both efficiency,[207] and equity considerations –[208] but crucially, not in an international setting, where trade-offs with non-tax objectives necessarily play a role.

The second most common method to address inequalities – not just income inequality, but as discussed further below, non-economic inequalities – is through the tax base, i.e. the use of personal income tax credits, deductions or allowances. What is often designated personal income tax expenditures – an umbrella concept that includes a range policy instruments with different characteristics that reduce the tax base –[209] are a common and possibly growing feature of tax systems worldwide.[210] Yet, there is no uniformity on this regard. On the contrary, participating countries highlight a wide discrepancy in the level of reliance in tax expenditures as instruments to address inequalities: some countries, such as Canada, China, Germany or Romania, report high reliance on tax expenditures to address, primarily income, inequality; others, such as Czech Republic, Denmark, Norway and Kosovo, report low or no reliance at all on tax expenditures; with the remainder, including Ireland, Finland or Latvia, reporting being somewhere in the middle. These cross-country disparities are a reflection of three key factors, namely: *(i)* the mixed evidence as regards the effectiveness of tax expenditures in addressing income inequality; *(ii)* the use of tax expenditures to address not just non-economic inequalities, but also non-tax policy aims; and *(iii)* the political economy obstacles to removing existing personal income tax expenditures.

The *evidence on the effectiveness of tax expenditures in addressing income inequality is not straightforward*. The traditional view within economics literature was that tax expenditures were both inefficient, and yielded no considerable equity gains.[211] The approach to tax expenditures today, however, is much more nuanced. In particular it is now clear that tax expenditures can be both efficient,[212] primarily where they target goods or services which are complementary to labour supply,[213] and equitable. However, their effect on equity is highly heterogeneous: not only do different tax expenditures generate different distributional impacts,[214] but tax expenditures interact with each other,

[207] J. Conesa et al, "Taxing Capital? Not a Bad Idea After All!" (2009) *American Economic Review* 99(1), 25-48.
[208] R. Gordon and W. Kopczuk, "The Choice of the Personal Income Tax Base" (2014) *Journal of Public Economics* 188, 97-110.
[209] C. Heady, "Tax Expenditures: Definitional and Policy Issues" in L. Phillips et al. (eds), *Tax Expenditures: State of the Art* (Canadian Tax Foundation, 2011).
[210] OECD, *Tax Expenditures Report* (OECD Publishing, 2010).
[211] J. Poterba, "Introduction: Economic Analysis of Tax Expenditures" (2011) *National Tax Journal* 64(2), 451-458.
[212] S. Koehne and D. Sachs, "Pareto-improving reforms of tax deductions" (2022) *European Economic Review* 148, 104214.
[213] A view routed in early optimal tax literature, see W. Corlett and D. Hague, "Complementarity, and the Excess Burden of Taxation" (1953) *Review of Economic Studies* 21(1), 21-30.
[214] R. Gordon and W. Kopczuk, n. xx above.

and with the wider tax system, creating unanticipated effects, so that the same tax expenditure may be progressive in one country or in one specific context, and yet regressive in another.[215] Interestingly, despite the uncertainty as regards their distributional effect, as Table III demonstrates, a majority of participating countries – 19 of the 33 – do not undertake a distributional analysis of their tax expenditures, and indeed a sizeable minority (11) do not systematically report their tax expenditures. So, whilst tax expenditures are regularly introduced with the stated aim of decreasing income inequality, no assessment is often carried out *a posteriori* to determine their success in achieving that aim.

Table III. Tax Expenditures Reporting

	Tax Expenditure Report	*Distributional Impact Assessment*
Australia	√	√
Austria	√	X
Belgium	√	X
Brazil	√	√
Bulgaria	X	X
Canada	√	√
China	X	X
Czech Republic	X	X
Denmark	X	X
Finland	√	√
France	√	X
Germany	√	X
Ireland	X	X
Italy	√	X
Kosovo	X	X
Japan	X	X
Latvia	√	X
Luxembourg	X	
Netherlands	√	√
N. Macedonia	X	X
Norway	√	√
Poland	√	√[216]
Portugal	√	X
Romania	X	X
Serbia	√	√
Spain	√	√
Sweden	√	√
Switzerland	X	X
Turkey	√	X
Ukraine	X	X

[215] S. Avram, "Who Benefits from the 'Hidden Welfare State'? The Distributional Effects of Personal Income Tax Expenditure in Six Countries" (2018) *Journal of European Social Policy* 28(3), 271-293.
[216] There are occasional assessment reports (2011, 2018), but none recently.

UK	√	√
USA	√	√

Countries that regularly carry out distributional analysis, or have in the past, confirm reasons for scepticism as regards their envisaged aim. In Australia, for example, where the government regularly publishes the distributional impact of larger tax expenditures based on income level, age, gender and industry, many tax expenditures have been shown to be regressive, conferring the largest benefit to top income earners. In Ireland there is no systematic distributional assessment, but analysis carried out in the past as regards some of tax expenditures, such as mortgage relief for home owners, have shown a negative distributional impact, similarly to what has been found in other countries as regards this type of tax expenditure in particular.[217] Awareness of the potential pitfalls has led a few countries to limit the scope of tax expenditures, or introduce additional legal guarantees to ensure tax expenditures do indeed achieve their stated aim. In Austria, for example, personal income tax expenditures expressly exclude individuals on very high incomes; and in the Netherlands, where the effectiveness and efficiency of tax expenditures is assessed regularly, tax expenditures which are found to have a negative impact should, under the Government's official rules, be either abolished or reduced. In practice, however, strong political pressures often prevent this from happening, especially when it concerns tax expenditure that are highly beneficial to a small but influential group of taxpayers; on the contrary, tax expenditures that apply to larger, not particularly organized, group of taxpayers – and for that reasons perhaps less regressive – are comparatively easier to reduce or abolish.

Yet, notwithstanding the importance of understanding the distributional impact of existing tax expenditures, an exclusive focus on that impact is misguided and reflects a now outdated view of (taxation and) inequality. A distributional analysis by nature focus solely on the impact of expenditures on income inequality; however, as discussed further in Section IV, *the aim of many existing tax expenditures is not necessarily to decrease income inequality, but either to decrease non-economic inequalities, or to achieve other non-tax policy aims.* Achieving these aims, namely, decreasing non-economic inequalities, or non-tax policy aims, does not necessarily entail regressive or at least non-progressive tax measures, but it often will. These trade-offs mean in practice that growing concerns about gender inequality, for example, may lead to the approval of tax expenditure measures, such as household expenditure deductions, which have a negative impact on income inequality.[218] Similarly, a bigger emphasis on regulatory taxation, and concerns about environmental protection, may lead to the approval of tax expenditures measures, such as green energy expenditure, which have a negative impact on economic inequality. It is possible to evaluate these trade-offs in a full cost-benefit analysis of tax expenditures, but it is both complex, and – perhaps paradoxically – costly, so a systematic evaluation of

[217] R. Gordon and W. Kopczuk, n. xx above; and R. de la Feria and A. Redonda, *Tackling Inequality Through Tax Expenditure Reform*, T20 Policy Brief to the G20, Sept 2020.
[218] On trade-offs between inequalities, including gender inequality, see further Section IV below.

tax expenditures is rare.[219] It is also noteworthy that, as discussed further below, both these policy trade-offs are not exclusive to personal income tax expenditures, but are visible across the tax system: in other areas of personal income taxes; in tax expenditures in other taxes, particularly VAT; and even embedded in the core design of some tax instruments, such as excise taxes.

Finally, as the Netherlands example above demonstrates, *the political economy obstacles to removing existing personal income tax expenditures can be extremely high*, particularly if they significantly benefit a small, yet vocal, group of taxpayers. Every public policy reform generates uncertainty that is experienced asymmetrically between losers and gainers: while losers are easily identified, gainers are more uncertain,[220] either because the gains are diffuse – for example, through the whole population – or because there are no guarantees they will indeed take place – for example, additional investment in specific public services or welfare transfers or environmental benefits. *Status quo* bias is therefore not a factor exclusive to tax expenditures policy, or even to tax policy more generally – but it is often felt particularly strongly on tax expenditure reform debates. Tax expenditures have high salience for those who benefit from them,[221] and once in place they create path dependence and legal entrenchment, making it significantly harder to broaden the tax base.[222] A telling example in this regard, discussed further in Section IV in the context of intergenerational inequality, is the reported opposition in several participating countries to potential reforms of preferential personal income tax regimes or tax expenditures relating to pensioners.

Income Inequality: Other Taxes

Although personal income taxes are the most commonly used tax instrument to address income inequality, they are not the only one, and in many countries income inequality considerations are reflected in the design of other taxes, particularly VAT, but also – perhaps surprisingly – corporate income taxes. On the contrary, it does not seem to be generally a feature in the design of excise or environmental taxes – with a few notable exceptions – even though the income inequality implications of those taxes are known to be significant. As demonstrated in Table IV below, in nearly all participating countries (31) the design of general consumption taxes – VAT or RST – reflects to a larger or smaller extent income inequality considerations, and in a sizeable minority (11), progressivity elements have been included in the design of corporate income taxes too – although not necessarily to address income

[219] S. Beer et al, "How to Evaluate Tax Expenditures" (2022) *IMF How to Notes* 2022/005.
[220] R. Fernandes and D. Rodrik, "Resistance to Reform: Status quo bias in the presence of individual uncertainty" (1991) *American Economic Review* 81, 1146.
[221] On the impact of personal tax deductions in the elasticity of income, see P. Doerrenberg et al, "The Elasticity of Taxable Income in the Presence of Deduction Possibilities" (2017) *Journal of Public Economics* 151, 41-55.
[222] J. Bell, "Path Dependence and Legal Development" (2012) *Tulane Law Review* 87, 787; and S. Ranchordas, "One Foot in the Door: Evidence-Based Limits on the Legislative Mandate" (2018) *Hukim —Journal on Legislation* 207.

inequality. As discussed above, in a few countries, the inclusion of income inequality considerations in the design of these taxes is constitutionally mandated,[223] but this is not the case in most countries.

Table IV. Income Inequality in Design of Other Taxes

	Corporate Income Tax	*VAT*
Australia	√[224]	√
Austria	X	√
Belgium	√[225]	√
Brazil	√[226]	√[227]
Bulgaria	X	X[228]
Canada	X	√[229]
China	√[230]	√
Croatia	√[231]	√
Czech Republic	X	√
Denmark	X	X
Finland	X	√
France	√[232]	√
Germany	X	√
Ireland	X	√
Italy	X	√
Kosovo	X	√
Japan	X	√
Latvia	X	√
Luxembourg	X	√
Netherlands	X	√
N. Macedonia	X	√
Norway	X	√[233]
Poland	√[234]	√
Portugal	√[235]	√
Romania	X	√
Serbia	X	√

[223] See sub-section above on equality benchmarking.
[224] Reduced rates for SMEs.
[225] Reduced rates for SMEs; limited deductions for high profits.
[226] Progressive Corporate Income Tax, with reduced rates for SMEs.
[227] At present Brazil does not have a full VAT, but five consumption taxes; a new VAT has been approved and is due to come into force in 2033. Inequality considerations are evident in the design of both the current regime, and the new VAT.
[228] VAT exemptions and reduced rates are applied, but generally not to address inequality concerns.
[229] Limited design impact; although there is a federal VAT rebate for low income families.
[230] Progressive Corporate Income Tax, with reduced rates for micro businesses.
[231] Progressive Corporate Income Tax, with reduced rates for SMEs.
[232] Progressive Corporate Income Tax, with reduced rates for SMEs.
[233] Although to a very limited extent, only insofar as a reduced rate applies to food.
[234] Progressive Corporate Income Tax, with reduced rates for SMEs.
[235] Progressive Corporate Income Tax, with reduced rates for SMEs.

Spain	√	√
Sweden	X	√
Switzerland	X	√
Turkey	X	√
Ukraine	√	√
UK	√[236]	√
USA	X[237]	√[238]

Apart from those countries where there is a constitutional mandate, the introduction of progressivity elements in the design of corporate income taxes does not appear to be necessarily determined by concerns over income inequality, but rather by industrial policy and economic growth considerations. The creation of new companies is critical for economic growth,[239] and regarded as a priority for Governments given their potential for innovation, competition and employment.[240] Although there are many other factors at play, there is now strong evidence that corporate tax rates have an effect on entry levels, i.e. a reduction in corporate tax rates increases the creation of new companies,[241] and as such corporate taxation is perceived as playing a critical role in encouraging entrepreneurship. This is not always the case, however: Belgium option to restriction the tax deductibility of certain expenditures for companies with profits above a high-threshold, for example, seems to be driven by economic inequality concerns.

Much more common than progressive corporate income taxes, however, are exclusions of the VAT base to address its perceived regressivity – and thus limit its impact on income inequality. Despite the widespread perception of VAT as a naturally regressive tax, the matter is far from settled. Traditionally, the main source of contention related to how regressivity is assessed, namely whether it should be assessed relative to current income, or to current consumption: VAT is regressive if its incidence is assessed relative to income, but not if it is assessed relative to consumption, which is regarded as a better indicator of lifetime welfare, as all income is mere deferred consumption.[242] This argument does not fully convince, for two reasons; *(i)* whilst savings can indeed be seen to some extent as deferred consumption, they are much more than that, and until consumption takes place individuals will extract significant benefits from their savings holding; and *(ii)* perhaps more importantly, the higher the savings,

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236 Progressive Corporate Income Tax, with reduced rates for SMEs.
237 Progressive Corporate Income Tax until the Tax Cuts and Jobs Act (TCJA) 2017.
238 Retail Sales Tax (RST), rather than VAT.
239 P. Aghion and P. Howitt, "A Model of Growth Through Creative Destruction" (1992) *Econometrica* 60(2), 323-351; and J. Hause and G. du Rietz, "Entry, Industry Growth, and the Micro Dynamics of Industry Supply" (1984) *Journal of Political Economy* 92, 733-757.
240 P. Aghion and P. Howitt, "Joseph Schumpeter: Appropriate growth policy: a unifying framework" (2016) *Journal of the European Economic Association* 4(2-3), 269-314.
241 M. da Rin et al, "Entrepreneurship, firm entry and the taxation of corporate income: evidence from Europe" (2011) *Journal of Public Economics* 95(9-10), 1048-1066.
242 E. Caspersen and G. Metcalf, "Is a Value Added Tax Regressive? Annual Versus Lifetime Incidence Measures" (1994) *National Tax Journal* 47(4), 731; and G. Carlson and M. Patrick, "Addressing the Regressivity of a Value-Added Tax" (1989) *National Tax Journal* 42(3), 339.

the more deferred in time the consumption will potentially be, and *ad extremis* it can be passed on inter-generationally to a time when consumption is no longer taxed. It is therefore more realistic to argue that, whilst VAT is a proportional tax for the lowest income deciles, where all income is spent on consumption, it becomes regressive once part of that income is saved.[243]

More recently, it has been shown that in countries with high-levels of informality, VAT can actually be progressive when that informality is taken into account, as lower-income households tend to purchase on informal markets, where no VAT is charged.[244] Although, VAT will not be progressive in every country,[245] there is now strong evidence of the vital role informality plays on the effect of VAT on low-income households. This is line with research showing that informality more generally increases tax redistribution.[246] It is also now established that, even in the absence of informality, reduced rates or exemptions can increase VAT regressivity, particularly when *(i)* the reduction applies consumption where there is a public vs private option, as is often the case with medical or educations services, as only high-income households use the private option, and *(ii)* the reduction applies to consumption of meritorious items, with positive externalities, such as books, cultural services or environmentally-friendly products, as these items are overwhelmingly consumed by high-income households.[247] Using VAT exclusions to address income inequality also carries other significant costs, from high litigation to VAT avoidance.[248] On the contrary, where accompanied by welfare transfers, single-rate, broad base VATs, have been found not only increase efficiency, but reduce income inequality.[249] Yet, notwithstanding the strong evidence against the use of exclusions from the VAT base to address income inequality, not only do nearly all participant countries do so, but consistent with existing evidence on the political economy of VAT,[250] several countries report consistent public pressure for VAT cuts, which have intensified in the wake of the pandemic and the more recent inflation crisis. Although, some of these, such as Croatia, Portugal and Spain, have notably given in to the pressure by adopting significant base narrowing reforms, others have resisted. In Finland, for example, the Ministry of Finance looked at distributional effects of VAT and in a 2023 report confirmed that the removal of reduced rates would only be slightly regressive, especially if combined with welfare transfers; and in Norway, the Government – consistently with Nordic countries approach to equality benchmarking – has been openly

[243] This argument is developed further in R. de la Feria and M. Walpole, n. xx above.
[244] P. Bachas et al, "Informality, Consumption Taxes, and Redistribution" (2024) *The Review of Economic Studies* 91(5), 2604-2634.
[245] A. Thomas, "Reassessing the Regressivity of the VAT" (2022) *Fiscal Studies* 43(1), 23-38.
[246] P. Doligalski and L. Rojas, "Optimal Redistribution with a Shadow Economy" (2023) *Theoretical Economics* 18(2), 749-791.
[247] R. de la Feria and A. Swistak, "Designing a Progressive VAT" (2024) *IMF Working Paper* 2024/078.
[248] R. de la Feria and M. Walpole, n. xx above.
[249] I. Correia, "Consumption Taxes and Redistribution" (2010) *American Economic Review* 100, 1673-1694; R. Warwick et al, "The redistributive power of cash transfers vs VAT exemptions: A multi-country study" (2022) *World Development* 151, 105742.
[250] R. de la Feria and M. Walpole, n. xx above; and R. de la Feria and A. Swistak, n. xx2024 above.

reluctant to use the VAT to address income inequality, and has instead relied on direct transfers to vulnerable groups.

Another key area of contention are excise and environmental taxes. Although global taxation history is replete with stories of taxes that altered taxpayers' behaviour in unexpected and often surprising ways,[251] modern excises and environmental taxes stand-out as taxes whose ethos is to regulate behaviour: they are designed to decrease the consumption of items which are deemed to impose additional costs, whether health, environmental or other, on society or on the individual.[252] Their rationale is therefore to internalise in the price of specific products, the negative externalities and internalities of their consumption,[253] so that the price reflects their true societal cost, and thus achieve the Nash equilibrium and optimal Pareto efficiency. Over the last two decades, both modern excise taxes and environmental taxes have been growing in importance. Not only are modern excises still an important source of revenue in many countries, reversing the long decline of the old excise taxes, but perhaps more significantly, they are increasingly seen as the most appropriate regulatory instrument for dealing with a variety of societal problems – from obesity to climate change.[254] Consequently, the range of products to which excise taxes apply has also been growing. Products traditionally subject to excise taxes – such as those referred in Article 1(1) of Directive (EU) 2020/262 as 'excise goods',[255] namely energy, alcohol and tobacco products – are now but a fraction of the range of goods and services subject to modern excise taxes in countries worldwide. These include – but are by no means restricted to – sugar, fat, marijuana, plastics, gambling, air transport, and motor vehicles.[256] In November 2024, Denmark became the first country in the world to approve a so-called "flatulence tax", a tax on methane produced by cattle, namely cow, sheep and pig, with a view to decrease greenhouse emissions. Although this is the first tax specifically on agricultural emissions, other environmental taxes, particularly carbon taxes, are rising at a remarkable rate: in the last decade nearly 40 countries in the world, including many European countries, have introduced a carbon tax.[257]

Yet, despite their growing popularity, both excise and environmental taxes have significant implications for income inequality. There is now consistent empirical evidence indicating that, not only do excise

[251] For a fascinating account of historical tax stories see M. Keen and J. Slemrod, *Rebellion, Rascals, and Revenue: Tax Follies and Wisdom through the Ages* (Princeton University Press, 2021).
[252] On the history of modern excise taxes see R. de la Feria, "Non-(Fully) Harmonised Excise Taxes and Irrebuttable Presumptions" (2024) *EC Tax Review* 33(3), 98-108.
[253] J. Gruber and B. Koszegi, "Is addiction 'rational'? Theory and Evidence" (2001) *Quarterly Journal of Economics* 116(4), 1261-1303; T. O'Donoghue and M. Rabin, "Optimal Sin Taxes" (2006) *Journal of Public Economics* 90(10-11), 1825-1849; and T. O'Donoghue and M. Rabin, "Studying Optimal Paternalism, Illustrated by a Model of Sin Taxes" (2003) *American Economic Review* 93(2), 186-191.
[254] S. Cnossen, "Excise Taxation to Preserve Health and to Protect the Environment: A Review" (2022) *Canadian Tax Journal* 70, 159-184.
[255] Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (recast), OJ L58, 27.2.2020, p. 4-42.
[256] R. de la Feria n. xx2024 above. These arguments are further developed in R. de la Feria and V. Rahal Canado, "The Fall and Rise of Sin Taxes", *forthcoming*.
[257] G. Dolphin and Q. Xiahou, "World carbon pricing database: sources and methods" (2022) *Scientific Data* 9, 573.

taxes tend to be regressive,[258] but results on the price elasticity of demand of products subject to excises are indicative of a wider distributional problem. Indeed, although there is high heterogeneity of the price elasticity of excise products – elasticity is not only commodity but context-sensitive, i.e. it depends on the type of commodity in question, as well the socio-economic circumstances of individuals in that particular jurisdiction – excise taxes tend to achieve their regulatory aims to a large extent because (unsurprisingly) price elasticity tends to be large among the young and in low income groups.[259] Those on higher incomes continue to consume, regardless of excise taxes, but excise taxes do decrease the consumption of those commodities by lower income individuals. Similarly with carbon taxes – and other forms of carbon pricing: although the distributional results are country-sensitive, carbon taxes tend to be regressive in developed countries, although there is some evidence suggesting it may be neutral, or even progressive, in low and medium-income countries.[260] This is because the carbon tax burden depends on what how carbon-intensive households' purchases are, the technologies used for travel and heat, and how much of their income is saved, rather than consumed.[261] Carbon intensity decreases with income – as poor households and households in poorer countries spend a larger budget share on carbon-intensive necessities, consume more carbon-intensive versions of similar commodities, and spend more than save – thus, those on lower incomes pay proportionally more carbon taxes than those on higher incomes.[262]

Two key arguments have been presented against the regressivity of excise and environmental taxes. First, that the responsiveness of young individuals and those on lower incomes means that excise taxes can be progressive. Although in the short-term there is evidence that the price elasticity of demand among low-income individuals is not enough to decrease the overall regressivity of excise taxes,[263] in the long-term, they reduce health inequalities,[264] which has significant implications. Not solely because of the key role that health inequalities play on both standards of living and economic inequalities,[265] but

[258] S. Koch, "Quasi-experimental evidence on tobacco tax regressivity" (2018) *Social Science & Medicine* 196, 19-28.
[259] On tobacco, see S.G. Kjeld et al, "Price Elasticity of Demand for Cigarettes Among Youths in High-Income Countries: A Systematic Review" (2023) *Scandinavian Journal of Public Health* 51(1), 35-43. On sugar taxes, see H. Allcott et al, "Regressive Sin Taxes, with an Application to the Optimal Soda Tax" (2019) *Quarterly Journal of Economics* 134(3).
[260] I. Dorbond et al, "Poverty and Distributional Effects of Carbon Pricing in Low and Middle-Income Countries" (2019) *World Development* 115, 246-257.
[261] J. Linden et al, "The Many Faces of Carbon Regressivity – Why Carbon Taxes are not Always Regressive for the Same Reason" (2024) *Energy Policy* 192, 114210; and N. Ohlendorf et al, "Distributional Impacts of Carbon Pricing: A Meta-Analysis" (2021) *Environmental and Resources Economics* 78, 1-42.
[262] T. Douenne, "The Vertical and Horizontal Distributive Effects of Energy Taxes: A Case Study of a French Policy" (2020) *Energy Journal* 41(3), 231-254; and S. Verde and R. Tol, "The Distributional Impact of Carbon Tax in Ireland" (2009) *Economic and Social Review* 40(3), 317.
[263] G.J. COLMAN and D.K. REMLER, "Vertical equity consequences of very high cigarette tax increases: If the poor are the ones smoking, how could cigarette tax increases be progressive?" (2008) *Journal of Political Analysis and Management* 27(2), 376-400.
[264] H. Allcott et al, n. xx above; and F. Chaloupka et al, "Tobacco taxes as a tobacco control strategy" (2012) *Tobacco Control* 21, 172–180.
[265] A. Case and L. Kraftman, "Health Inequalities" (2024) *Oxford Open Economics* 3, i499–i528.

also because the young may have a tendency to undervalue future health damage,[266] due to present bias – the tendency to overvalue immediate rewards, while undervaluing long-term consequences.[267] A similar argument could be made as regards environmental taxes, given how closely environmental inequalities has been found to be correlated to income inequality – as well as other inequalities, such as race and ethnicity.[268]

Second, the revenues accrued by these taxes can be used to mitigate their regressivity through direct transfers – and thus, on a public finance benchmarking of equality, the taxes could be progressive. This proposal is closely related to – but differs from – the so-called "double dividend hypothesis", which claims that it is possible to obtain an improvement of both environmental and economic welfare, by imposing an environmental tax while recycling revenues obtained to reduce pre-existing taxes.[269] Yet, meta-analysis studies indicate that although the environmental dividend is almost always achieved, the economic dividend remains elusive.[270] On the contrary, there is evidence that recycling revenues from these taxes through direct transfers to low income households would indeed result in a reduction in income inequality.[271] This approach does raise some challenges, however. The most obvious of which is that offering compensation to low-income households for these taxes, reduces their effectiveness:[272] the effect of the increased price on demand is precisely what produces the regulatory effect of these taxes, and thus if this constrain is removed the effect will be necessarily smaller. The biggest difficult with this approach, however, lies (once again) in the political economy of these taxes, and the lack of public support for environmental taxes and excise taxes where the regulatory aim is focussed primarily on the environment, such as fuel taxes – although, paradoxically the political economy resistance to other excise taxes is significant smaller, despite not-dissimilar distributional effects.[273] The differences in the levels of political economy resistance explain, for example, why in the UK fuel tax has been frozen since 2011, and was indeed cut between 2022 and 2025, while other excise taxes, such as alcohol or tobacco have significantly increased during the same period.[274]

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[266] S. Cnossen, n. x2022 above.
[267] On the high prevalence of present bias in health decisions, see Y. Wang and F. Sloan, "Present bias and health" (2018) *Journal of Risk Uncertainty* 57(2), 177–198.
[268] J. Colmer et al, "Income, Wealth, and Environmental Inequality in the United States" (2024) *NBER Working Paper* 33050.
[269] R. de Mooij, "The Double Dividend of an Environmental Tax Reform" in J. van der Bergh (ed.), *Handbook of Environment and Resource Economics* (Edward Elgar Publishing, 1999), Chapter 20.
[270] J. Freire-Gonzalez, "Environmental Taxation and the Double Dividend Hypothesis in GE Modelling Literature: A Critical Review" (2018) *Journal of Policy Modelling* 40, 194-223.
[271] M. Budolfson et al, "Climate Action with Revenue Recycling has Benefits for Poverty, Inequality and Wellbeing" (2021) *Nature Climate Change* 11, 1111-1116; D. Kenert and L. Mattauch, "How to Make a Carbon Tax Reform Progressive: The Role of Subsistence Consumption" (2016) *Economics Letters* 138(C), 100-103; and A. Fremstad and M. Paul, "The Impact of Carbon Tax on Inequality" (2019) *Ecology Economics* 163, 88-97.
[272] M Tovar Reanos and M. Lynch, "The Benefits of Action on Implementing Carbon Taxation in Ireland: A Demand Approach" (2023) *Journal of Environmental Planning and Management* 66(4), 836-860.
[273] See further on this point, R de la Feria and V. Rahal Canado, n. xx above.
[274] I. Crawford et al, "Value added tax and excises" in S. Adam et al (eds), *Dimensions of Tax Design: The Mirrlees Review* (Oxford University Press, 2010), 275-362.

There is now a growing literature on public perceptions of climate-driven policies, including environmental taxes and environment-focussed excises. Opinion polls indicate strong support for environmental policies in general, but they also show strong opposition to taxation as a means to implement these policies,[275] as demonstrated by political movements such as the Yellow Vests, triggered by an increase in fuel taxes in France. Several explanations have been offered for this apparent contradictions, and although opposition to these taxes is unsurprisingly multi-faceted,[276] it is now clear that concerns over regressivity, and the impact of these taxes on low income households plays a key role in opposition to them.[277] Given these concerns, offering direct compensations to low-income households would seem to present itself as an obvious solution to overcoming political economy resistance to these taxes – even at the risk of reducing their effectiveness. Yet, surveys show limited public support for these schemes.[278] Recent empirical evidence indicates that this lack of public support does not result from clashing views on climate policy, but rather on pessimistic beliefs about the effectiveness of the reform: support for environmental taxes and environmental-focussed excises increases if people believe in the progressivity of the scheme; yet, perhaps unsurprisingly, support increases significantly more with self-interest (by 50 percentage points), i.e. if people believe they will direct benefit from the reform.[279] As in other areas of taxation, these results hint at possible motivated reasoning in opposition to these taxes: a self-interested intuitive rejection of the taxes, or tax increases, influencing beliefs over their (un)fairness.[280]

In light of the above limitations, some countries have also experimented with imbedding progressivity in the design of excise taxes. China, for example, applies a progressive approach to excise taxation, with special consumption taxes at high-rates applied to high-end cosmetics, jewellery, golf equipment, high-end watches, and yachts. Also, in Finland, where the distributional impact of excise taxes is a politically heated area, particularly in the context of fuel taxes and motor vehicle taxes, motor vehicle taxes will be restructured in 2025 to favour cars with higher emissions, on the basis that these cars are more often used by low-income individuals. Finland’s approach to these taxes vs fuel taxes demonstrates not only the trade-off between equality and other policy objectives, but how complex and inconsistent decisions on this regard can be: in fuel taxes primacy has been given to protecting the environment, even when this potentially increases income inequality; in motor vehicle taxes the opposite is true, and decreasing

[275] S. Kallbekken et al, “Do you not like Pigou, or do you not understand him? Tax aversion and revenue recycling in the lab” (2011) *Journal of Environmental Economics and Management* 62, 53-64.
[276] M. Tatham and Y. Peters, “Fueling opposition? Yellow vests, urban elites, and fuel taxation” (2022) *Journal of European Public Policy* 30(3), 574-598.
[277] S. Maestre-Andres et al, “Perceived Fairness and Public Acceptability of Carbon Pricing: A Review of the Literature” (2019) *Climate Policy* 19(9), 1184-1204.
[278] S. Maestre-Andres et al, n. xx above.
[279] T. Douenne and A. Fabre, “Yellow Vests, Pessimistic Beliefs, and Carbon Tax Aversion” (2022) *American Economic Journal: Economic Policy* 14(1), 81-110.
[280] T. Douenne and A. Fabre, n. xx above.

income inequality has been prioritised, over internalising the full negative externality of high-emission motor vehicles on the environment.

Wealth Inequality

Several countries report growing concerns about wealth inequality. In Australia, for example, a growing concern about wealth inequality has resulted in a 2021 proposal by the Green Party for a wealth tax; in Austria, where the public traditionally opposed wealth taxes regardless of level of income, concerns about wealth inequality have led to a change in views, with polls now indicating that two-thirds of Austrians now support a wealth tax. Similarly, Belgium, Bulgaria, the UK, and the US also report widening public support for wealth taxes – although poignantly not for inheritance taxes, as regards which nearly all national reports refer to their unpopularity. Yet, despite stated concerns about growing levels of wealth inequality, as Table V demonstrates, tax instruments designed to address it are still not the norm, and indeed they have been on the decline. While several participating countries do apply taxes that are designed partially to address some aspects of wealth inequality – particularly property taxes – wider scope tax instruments, namely inheritance taxes and wealth taxes, are generally in decline.[281]

A sizeable minority of participating countries (ten) had wealth taxes at some point, yet most have abolished them, and today only four of these thirty-three countries, namely France, Norway, Spain, and Switzerland, apply a wealth tax to individuals. Although most reports point to efficiency or unpopularity reasons for the abolition of wealth taxes, a few refer to Constitutional Court decisions, were the Courts assessed the tax in the context of constitutional principles, particularly the principle of equality. This was the case most notably in Germany, where in 1996 the Constitutional Court indicated that a wealth tax would only be compatible with the principle of equality and the protection of private property, if it could be paid out income; more recently in Luxembourg, a 2023 decision of the Constitutional Court found certain provisions of the minimum wealth tax also violated the principle of equality.

The decline of inheritance taxes is even starker. Historically, a large majority of countries had inheritance taxes, but they have been either abolished or, in some of the countries where they were formally kept, their scope of application has been significantly reduced, and thus their importance largely diminished. Particularly noteworthy is the fact that even in countries where inheritance taxes have been kept, exemptions or preferential rates often apply to transfers between direct family members (spouses, descendants, ascendants), or to transfers below an (often high) threshold. Exemptions to transfers between close family members apply, for example, in Bulgaria, Croatia, Luxembourg, Poland, Serbia, and Switzerland; while preferential treatments apply, *inter alia,* in Denmark, Finland, Ireland, and the Netherlands.

Table V. Wealth Taxation: Overview

[281] This is consistent with evidence compiled by the OECD on its member countries, see OECD, n. xx2024 above; and OECD, "The Role and Design of Net Wealth Taxes in the OECD" (2018) *OECD Tax Policy Studies* 26.

	Inheritance Taxes	*Wealth Taxes*	*Other Taxes*
Australia	X[282]	X	X
Austria	X[283]	X[284]	√[285]
Belgium	√	X	√[286]
Brazil	√	X	
Bulgaria	√	X	
Canada	X	X	X
China	X	X	√[287]
Croatia	X	X	√[288]
Czech Republic	X[289]	X	X[290]
Denmark	√	X[291]	√[292]
Finland	√	X[293]	
France	√	√	√[294]
Germany	√	X[295]	
Ireland	√[296]	X	X
Italy	√	X	
Kosovo	X	X	
Japan	√	X	
Latvia	X	X	√[297]
Luxembourg	√	√[298]	
Netherlands	√	X	
N. Macedonia	X	X	√[299]
Norway	X[300]	√	
Poland	√	X	
Portugal	X[301]	X	√[302]

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[282] Estate and gifts tax abolished in 1981.
[283] Abolished in 2008.
[284] Abolished in 1993.
[285] Property Transfer Tax applies even where there is no consideration, and thus to inherited or gifted immovable property.
[286] Property Withholding Tax, applies estimated rental value of immovable property.
[287] Property taxes.
[288] Property taxes.
[289] Abolished in 2013. Inheritance and gifts now formally subject to personal income tax, but exempt.
[290] Property transfer tax abolished in 2020.
[291] Abolished 1995. The two main reasons for its abolition were the *(i)* ongoing personal income tax reform, and *(ii)* its unpopularity.
[292] Taxes on land and real estate.
[293] Abolished in 2006.
[294] Property wealth tax introduced in 2018, to substitute previous wealth taxes.
[295] Formally still existing, but declared unconstitutional by the Federal Constitutional Court in 1996 for violation of the principle of equality.
[296] Capital acquisitions tax.
[297] Property taxes are designed with a view to limit wealth inequality.
[298] Applied only to corporations; individuals wealth tax abolished in 2006.
[299] Property taxes are designed with a view to limit wealth inequality.
[300] Abolished in 2014, not least because it was easy to circumvent.
[301] Abolished in 2003.
[302] Property taxes are designed with a view to limit wealth inequality.

Romania	X	X	X
Serbia	√	X	√[303]
Spain	√	√	
Sweden	X[304]	X[305]	√[306]
Switzerland	√[307]	√[308]	
Turkey	√	X	√[309]
Ukraine	√	X	√[310]
UK	√	X	
USA	√[311]	X	

As discussed above, for a variety of cognitive, social and political reasons, historically rising inequality has not led to an increase in redistributive tax policies. Yet, even against that background, such a steep decline in the significance of wealth and inheritance taxes is puzzling, primarily given the limited number of taxpayers such taxes are likely to affect, and the often-reported public support for wealth taxes in particular,[312] including in several national reports. It therefore requires further exploration. Three additional factors may help explain the decline: *(i)* despite stated public concerns, *wealth inequality is often underestimated*, and public perceptions tend to focus on economic inequality as a whole, rather than distinguishing between income and wealth inequalities; *(ii) effective wealth taxes are difficult to design without triggering significant trade-offs*, particularly in a globalised world, with high capital and labour mobility; and *(iii) inheritance taxes face additional cognitive obstacles to other redistributive tax policies*, i.e. they face the standard resistance to redistribution policies, plus other cognitive obstacles not necessarily present as regards other taxes.

First, despite growing concerns about wealth inequality, there appears to still be some misperception as regards its scale. Until recently there was comparatively limited attention given to perceptions of wealth inequality –[313] notwithstanding a large literature on perceptions of income inequality.[314] Recent empirical studies indicate, however, that despite stated public concerns, individuals still tend to

303 Property taxes are designed with a view to limit wealth inequality.
304 Abolished in 2005.
305 Abolished in 2007.
306 Property taxes are designed with a view to limit wealth inequality.
307 Applied in most cantons; there is no inheritance tax at federal level.
308 Applied by cantons; there is no wealth tax at federal level.
309 Luxury residence tax.
310 Luxury tax, which partly operates as a property tax, but also as a transport tax.
311 Federal estate tax, in addition to an inheritance tax applied in six states.
312 K. Rowlingson et al, "Public attitudes to a wealth tax: the importance of 'capacity to pay'" (2021) *Fiscal Studies* 42, 431-455.
313 F. Mengal and E. Weidenholzer, "Preferences for Redistribution" (2023) *Journal of Economic Surveys* 37, 1660-1677.
314 See discussion above.

significantly underestimate wealth inequality,[315] the share of inherited wealth,[316] and the level of wealth of high-profile billionaires;[317] they also show that individuals do not make a sharp distinction between income and wealth inequalities, rather viewing wealth as dependent on income and economic inequality as a whole,[318] which may result in perceiving tax instruments that tackle specifically wealth inequality seem redundant. Providing information on the correct levels of wealth inequality does help correct misperceptions, and upon given this information individuals, across all groups, express higher support for a more equal distribution of wealth,[319] and taxation.[320] Yet, in line with research discussed *supra*, this increased awareness and rejection of inequality in principle does not necessarily result in a significantly higher support for concrete tax measures designed to address wealth inequality, or redistributive taxation more generally – except as regards inheritance taxes.[321]

Second, effective wealth taxes are notoriously difficult to design.[322] Although the last decade has seen a significant increase in both academic and political attention to, and support for, wealth taxes,[323] initial support for these taxes goes back many decades.[324] Yet, they raise significant challenges: not only is wealth often difficult to measure, often resulting in a heterogeneous measurability of assets that causes horizontal inequity, and creates high administrative costs,[325] but perhaps more importantly, there is now consistent empirical evidence, largely based on European wealth taxes data, showing that they trigger substantial behavioural responses. In Switzerland, a 1 percent decrease in wealth taxes was found to increase reported taxable wealth by 43 percent after six years, and by 96 percent in a subset of larger reforms;[326] in Denmark, reducing the wealth tax by 1 percent was found to raise taxable wealth by 21 percent after eight years;[327] and in Spain, the wealth taxes reduced taxable wealth by 42 to 51 percentage points.[328] These behavioural responses have been the subject of intense public debate in Norway, one of

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[315] M. Norton and D. Ariely, "Building a Better America – One Wealth Quintile at a Time" (2011) *Perspectives on Psychological Science* 6(1), 9-12; and T. Douenne et al, "Do People Distinguish Income from Wealth Inequality? Evidence from the Netherlands" (2024) *World Inequality Lab Working Paper* 2024/15.
[316] S. Bastani and D. Waldenstrom, "Perceptions of Inherited Wealth and the Support for Inherited Taxation" (2021) *Economica* 88, 532-569.
[317] R. Perez-Truglia and J. Yusof, "Billionaire Superstar: Public Image And Demand For Taxation" (2024) *NBER Working Paper* 32712.
[318] T. Douenne et al, n. xx above.
[319] M. Norton and D. Ariely, n. xx above.
[320] R. Perez-Truglia and J. Yusof, n. xx above.
[321] I. Kuziemko et al, "How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments" (2015) *American Economic Review* 105(4), 1478-1508. See further below on inheritance taxes.
[322] J. Oh and E. Zolt, "Wealth Tax Design: Lessons from Estate Tax Avoidance" (2020) *UCLA Law-Econ Research Paper* No. 20.01.
[323] Most notably since the publication of T. Piketty, *Capital in Twenty-First Century* (Harvard University Press, 2014).
[324] F. Scheuer and J. Slemrod, "Taxing Our Wealth" (2021) *Journal of Economic Perspectives* 35(1), 207-230.
[325] F. Scheuer and J. Slemrod, n. xx above.
[326] M. Brulhart et al, "Behavioral Responses to Wealth Taxes: Evidence from Switzerland" (2022) *American Economic Journal: Economic Policy* 14(4), 111-150.
[327] K. Jakobsen et al, "Wealth Taxation and Wealth Accumulation: Theory and Evidence from Denmark" (2020) *Quarterly Journal of Economics* 135(1), 329-388.
[328] E. Jakurti and B. Sussmuth, "Behavioral response to wealth taxes: Evidence from the Spanish Survey of Household Finances" (2023) *Economic Letters* 223, 110976.

the few countries still applying a wealth tax. In particular, the combination of the wealth tax and the tax on dividends – both of which have increased in recent years – is regarded as the most probably reason as to why many wealthy Norwegians have moved in recent years to Switzerland specifically.

Worryingly, there is now evidence that wealth taxes have a hysteresis effect: these behavioural responses last even after they are abolished. A recent paper, using Colombian data, shows that under-reporting of assets following the introduction of a wealth tax persist for years, even after the wealth tax is no longer in place.[329] This is problematic not least because behavioural responses to wealth taxes can also have significant spillovers into personal incomes taxes: in Spain, responses to sub-national wealth taxes generated losses to personal income tax revenues that are six times larger than the direct losses to wealth taxes.[330] There is, however, a substantial variation in the response type.

Generally, decreases in taxable wealth following the introduction of a wealth tax can be attributable to various factors, namely tax planning (reduced savings or capital accumulation), tax avoidance (e.g. shift to tax-exempt assets), tax evasion (e.g. non-declaring assets), individuals' mobility / migration (moving tax residence) – or more often a mixture of all these. The risk of these responses may be minimised through legal design, by for example broadening the tax base to minimise the opportunities for asset shifting, or eliminating bank secrecy and increasing reporting obligation to minimise evasion; yet, even supporters of wealth taxes acknowledge that a well-designed tax will still trigger substantial behavioural responses.[331] In this regard, migration – whether real, or reported as a result of avoidance or evasion – is particularly problematic. This is because it can result in significant spillovers in other taxes, most notably personal income taxes and VAT, as well as in productivity and economic growth.[332] So far, empirical studies on the scale of migration resulting from wealth taxes have focussed on sub-national variations – Switzerland, Spain – where migration is likely to be larger relative to cross-border migration.[333] Yet the prevalence of new preferential individual tax regimes discussed below is indicative of a growth in individuals' mobility, which has significant consequences for wealth taxes, particularly at the top of the income / wealth distribution.

Third, although effective wealth taxes may be difficult to design, this is less true of inheritance or wealth transfers taxes, which can be not only an effective instrument to decrease wealth inequality, but have been shown to be welfare-maximising, particularly – perhaps unsurprisingly – when bequests are concentrated.[334] Their critical role in addressing wealth inequality is also recognised by both policymakers, with often public debates reported in several countries, and the courts. In Germany, for

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[329] J. Londono-Velez and J. Avila Mahecha, "Behavioral Responses to Wealth Taxation: Evidence from Colombia" (2024) *Review of Economic Studies*.
[330] D. Agrawal et al, "Wealth Tax Mobility and Tax Coordination" (2025) *American Economic Journal: Applied Economics* 17(1), 402-430.
[331] A. Advani and H. Tarrant, "Behavioural responses to a wealth tax" (2021) *Fiscal Studies* 42, 509-537.
[332] R. de la Feria and G. Maffini, "The Impact of Digitalisation on Personal Income Taxes" (2021) *British Tax Review* 2, 154-168. See further discussion below on personal tax competition.
[333] F. Scheuer and J. Slemrod, n. xx above.
[334] T. Piketty and E. Saez, "A Theory of Optimal Inheritance Taxation" (2013) *Econometrica* 81(5), 1851-1886.

example, where the Federal Constitutional Court ruled on two occasions on the (in)constitutionality of specific inheritance rules, judges pointed out in their dissenting opinion to the important of the tax in decreasing wealth inequality.[335] Their decline appears therefore to be related to their unpopularity, and the strong political economy pressures to narrow their base, or abolish them altogether.

Indeed, not only most national reports comment on their unpopularity with the wider public, but this unpopularity stretches to those – large majority of the population – who by virtue of the threshold or of other exemptions, would never be subject to the tax. Switzerland appears to be the only country to put this unpopularity directly to the test; in 2015, it put the introduction of inheritance taxes at Federal level – at present most canons apply an inheritance tax – to a national vote. The result was unambiguous: the popular initiative calling for a new tax, at 20 percent rate, subject to a high threshold (€2 million), was overwhelmingly rejected by the public, with 71 percent of the voters. The unpopularity of these taxes is also manifested in lower levels of tax morale: inheritance tax planning is known to be strong, even amongst those who would not engage in income tax planning – for example, there is evidence that onset of a terminal illness leads to a significant reduction in the value of estates reported on tax returns.[336]

This lack of public support can be partly attributable to the general resistance to redistributive tax policies, particularly in the context of high economic inequality, as discussed above. Yet, this alone does not explain the strength of sentiment, nor the nearly universal dislike for *these taxes* in particular – cross-country, regardless of design features, across the income / wealth distribution. Several hypotheses have been put offered to explain this dislike.

The first is that the public's dislike of these taxes is a result of their specific design flaws, such as a low threshold or susceptibility to avoidance and planning, and thus resolving these flaws would result in wider public support.[337] Indeed, several national reports – *inter alia*, Brazil, Bulgaria, Croatia – refer to such design flaws, particularly significant loopholes, which allow those at the top of the income / wealth distribution to escape the tax; other countries refer to the recent introduction of anti-avoidance rules (e.g. Belgium) and other legal amendments (e.g. Germany) to close these loopholes. This theory is not, however, fully satisfactory. Although it is true that many inheritance taxes are poorly designed and susceptible to planning and avoidance, different countries have different designs, and yet popular sentiment is transversal, i.e. their unpopularity is non design-specific. Similarly, it is also non-culture specific, i.e. as opposed to what some have argued, it is not the case that this unpopularity is circumscribed to one specific country, and thus symptomatic of that country's cultural views.[338]

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335 DE: BVerfG, 17 Dec. 2014, 1 BvL 21/12, BVerfGE 138.
336 W. Kopczuk, "Bequest and tax planning: Evidence from Estate Tax Returns" (2007) *Quarterly Journal of Economics* 122, 1801-1854.
337 D. Duff, "Inequality and the Taxation of Wealth Transfers, Ch. X; and M. Perry Feischer, "Divide and Conquer: Using an Accessions Tax to Combat Dynastic Wealth Transfers" (2016) *Boston College Law Review* 57, 913-946.
338 L. Bartels, "A Tale of Two Tax Cuts, a Wage Squeeze, and a Tax Credit" (2006) *National Tax Journal* 59, 403-423.

The second theory is that the unpopularity of these taxes reflects a wide misperception of who pays them, coupled with self-interest, i.e. most individuals do not support these taxes because they mistakenly think they will be subject to them; providing accurate information, with the right framing, would therefore increase public support. There is indeed strong evidence that the public overestimates the amount of individuals or families subject to wealth transfer taxes by very wide margins.[339] There is also evidence that providing accurate information does increase individuals support for the tax,[340] particularly where people are given informational indications that they would not be subject to the tax, thus triggering a "cross-pressure", i.e. circumstance where self-interest collides with previous held values.[341] Yet, even if it can yield positive effects, information is not enough to persuade the vast majority of opponents to the tax,[342] and many will still be more persuaded by anecdotal stories of those devastated by being forced to pay the tax, designed to tap into individuals' emotions.[343]

The third, and probably most frequent given theory to explain the unpopularity of inheritance taxes, is that these are "immoral death taxes", which tax already taxed wealth,[344] and therefore constitute double taxation against which there is a moral aversion.[345] There is again empirical support that confirms this theory: double taxation often cited by survey respondents as the key reason for their opposition to these taxes. Yet, despite this self-reported reasoning, on closer scrutiny this theory is also not fully satisfactory: consumption taxes apply, by nature, to post-tax income; still, the double taxation argument is seldom used as regards these taxes, if ever. It also does not explain why opposition tends to be stronger where these taxes apply to transfers between close family members, and countries with inheritance taxes often exempt those transfers. There seems to be therefore an element of motivated reasoning in survey responses.

A fourth theory, closely aligned with perceptions of fairness, can be found within the psychology and sociology literature. Asked what would constitute a fair inheritance tax, individuals give rather unexpected responses. Unsurprisingly, one of the determinant factors for the perceived fairness of these taxes is the size of the bequest; more surprisingly, however, are the other factors that determine the perceived fairness, namely, the relationship of the heir with the deceased, the type of bequest, and the perceived intentions of the heir and the deceased – transfers between direct family members or within

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339 J. Slemrod, "The Role of Misconceptions in Support for Regressive Tax Reform" (2006) *National Tax Journal* 59, 57-75; and Y. Krupnikov et al, "Public ignorance and the estate tax repeal, the effect of partisan differences and survey incentives" (2006) *National Tax Journal* 59, 425-437.
340 I. Kuziemko et al, n. xx above.
341 J. Sides, "Stories or Science? Facts, Frames, and Policy Attitudes" (2015) *American Politics Research* 44(3), 387-414.
342 J. Sides, n. xx above.
343 M. Graetz and I. Shapiro, *Death By a Thousand Cuts: The Fight over Taxing Inherited Wealth* (Princeton University Press, 2005).
344 W. Gale and J. Slemrod, "Rhetoric and economics in the estate tax debate" (2001) *National Tax Journal* 54, 613-627.
345 S. Sheffrin, *Tax Fairness and Folk Justice* (CUP, 2013).

families with pro-social motives should be taxed less than those without pro-social motives.[346] The relevance of the relationship of the heir with the deceased, and the preference for transfers between direct family members to be taxed less, resonate with the finding that opposition to inheritance taxes lies largely with the perception that they undermine family solidarity and violate the key sociological principle of family unity, according to which families are regarded as an entity that outlives the deceased.[347] This explanation is not necessarily exclusive; on the contrary, all other theories discussed above are likely to also play a role in explaining the near universal unpopularity of inheritance taxes, but these findings do go a long way to explaining existing policy trends, not least the exclusion of transfers between direct family members from the scope of most inheritance taxes still in force.

Global (Personal) Tax Competition

Preferential personal tax regimes are not new, evidence of an emerging tax competition in personal income taxes has been apparent since the 1990s,[348] and some countries, such as Ireland and the UK have applied a non-domiciled tax regime for even longer. Until recently, however, the significance of such competition was relatively small, as restricted to a relative small number of individuals; average effective tax rates for high-income individuals remained therefore stable.[349] This is now changing: as Table VI demonstrates, there has been a very significant growth in preferential personal income tax regimes, starting in the last two decades, and intensifying further post-COVID pandemic; just over half of all participating countries (20), now apply some kind of preferential personal income tax regime, a few apply more than one regime. The phenomenon is not limited to national tax policy: in countries with fiscal decentralisation, there is now evidence of growing competition between cities and regions trying to attract highly skilled and inventive individuals as part of their local development strategy.[350]

Table VI. Preferential Personal Income Tax Regimes: Overview

	Preferential Regime	*Target / Scope*
Australia	√	Preferential regime for foreign expatriates, not tax them on their worldwide savings and investments.
Austria	X	
Belgium	√	Some preferential tax regimes, not aimed at mobile individuals. Preferential tax regime (lower effective tax rates) for expatriate workers.
Brazil	X	
Bulgaria	X	
Canada	X	

346 M. Wrebe, "Fair inheritance taxation in the presence of tax planning" (2014) *Journal of Behavioral and Experimental Economics* 51, 12-18.
347 J. Beckert, "Why is the estate tax so controversial?" (2008) *Society* 45, 521-528.
348 P. Egger et al, "The Taxing Deed of Globalization" (2019) *American Economic Review* 109(2), 353; and U. Akcigit et al, "Taxation and the International Mobility of Inventors" (2016) *American Economic Review* 106(10), 2930.
349 L. Fischer et al, "Tax Policies in a Transition to a Knowledge-Based Economy: The Effective Tax Burden of Companies and Highly Skilled Labour" (2022) *Intertax* 50(4), 286-321.
350 R. Widmann, "Immigrant inventors and local income taxes: Evidence from Swiss Municipalities" (2023) *Journal of Public Economics* 219, 104822.

China	√	Some preferential regimes for specific investment and entrepreneurs (eg individual partners of venture capitals).
Croatia	√	Digital nomads programme, whereby all income is tax exempt.
Czech Republic	√	Preferential CIT and PIT regime under Investment Incentives programme
Denmark	√	Preferential income tax regime for research and high-skill immigrant workers
Finland	√	Preferential income regime for research and high-skill immigrant workers
France	√	Preferential income tax and property wealth tax regimes for research and high-skill immigrant workers
Germany	-	
Ireland	√	Preferential regime for high-income earners immigrant workers Non-domiciliary regime
Italy	√	Several preferential regimes designed to encourage inbound mobility of high-skills, high-net worth individuals.
Kosovo	X	
Japan	X	
Latvia	X	
Luxembourg	√	Preferential income regime for high-skill immigrant workers.
Netherlands	√	Preferential income regime for high-skill immigrant workers.
N. Macedonia	X[351]	
Norway	X	
Poland	√	Preferential income regime for high-skill immigrant workers.
Portugal	√	Preferential regime for high-income earners who have not resided in Portugal in the previous five years (immigrants or otherwise).
Romania	√	Preferential income regimes for high-skill and sector-specific immigrant workers.
Serbia	√	Preferential income regimes for high-skill immigrant workers, and digital nomads.
Spain	√	Preferential income regime for high-income earners who have not resided in Spain in the previous five years (immigrants or otherwise).
Sweden	X	
Switzerland	√	Preferential regimes for expatriate workers.
Turkey	X	
Ukraine	√	Preferential income treatment for immigrant workers, designated as e-residents. Preferential income treatment for residents of a purposely build IT investment city.
UK	√	Non-domiciliary regime.
USA	X	

Although these regimes vary substantially in subjective, objective and even temporal scope, they have broadly a common aim, namely to attract high-skilled, high-earning immigrant workers. The reasons for this are primarily non-tax related. In particular, a high-skilled, high-earning, workforce is associated

[351] The Government has announced a new scheme for high-skill workers in the IT sector, but it has not been approved yet.

with important growth and productivity spillover effects: there is evidence that the presence of these individuals is important for the location of entrepreneurial activity,[352] the emergence of technology clusters and local growth,[353] and the development of technical content and efficient management practices.[354] Yet, there is also evidence of not-insignificant tax spillovers: due to high levels of disposable income, and high consumption propensity, when other taxes are taken into consideration – such as VAT – the revenue maximising tax rate for these workers is quite low; or said in another way, from a single-country perspective, adoption of or preferential tax regimes makes sense from a purely revenue perspective.[355]

The above spillovers are dependent on actual mobility of individuals, however – i.e. whether individuals are willing to move to avail of lower personal income tax rates. On this regard, it is important to note that individuals' mobility is dependent on a wide range of factors, which go beyond consideration of the prospective country's comparative advantages typically present in FDI decisions,[356] and are rather likely to be also dependent on quality of life factors, cultural affinity, as well as family and social links considerations.[357] Nevertheless, there is now evidence of high elasticity of migration in relation to top personal income tax rates, both in domestic, cross-jurisdiction, situations,[358] and cross-country –[359] although the latter is unsurprisingly smaller than the first.[360] In Switzerland, for example, fiscal decentralisation has resulted in strong intra-canton personal income tax competition. There is also evidence of very high elasticity of migration in relation to preferential tax regimes. In Denmark, the preferential regime for research and high-skilled immigrant workers doubled the number of highly paid foreigners in the country, relative to the slightly less paid; and the fraction of foreigners in the top 0.5 percentage of the income distribution is 7.5 percent, compared to an estimated 4 percent counterfactual, absent the regime.[361] Similarly, in the Netherlands, the preferential regime for high-skilled workers has

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[352] R. Widmann, n. xx above.
[353] W. Kerr, "Breakthrough inventions and migrating clusters of innovation" (2010) *Urban Economics* 67(1), 46-60.
[354] E. Moretti, "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions" (2004) *American Economic Review* 94(3), 656.
[355] H. Kleven et al, "Migration and Wage Effects of Taxing Top Earners: Evidence from the Foreigners' Tax Scheme in Denmark" (2014) *Quarterly Journal of Economics* 129(1), 333-378.
[356] On corporate tax competition and competitive advantages assessment see R. de la Feria, "The Perceived (Un)Fairness of the Global Minimum Corporate Tax Rate" in W. Haslehner et al (eds), *The Pillar 2 Global Minimum Tax* (Edward Elgar, 2024), 58-83; and references therein.
[357] See further R. de la Feria and G. Maffini, n. xx above.
[358] E. Moretti and D. Wilson, "The Effect of State Taxes on the Geographical Location of Top Earners: Evidence from Star Scientists" (2017) *American Economic Review* 107(10), 1858-1903; P. Egger and D. Radulescu, "The Influence of Labour Taxes on the Migration of Skilled Workers" (2009) *World Economy* 32(9), 1365-1379; and R. Widmann, n. xx above.
[359] U. Akcigit et al, n. xx above.
[360] For a review of the literature see H. Kleven et al, "Taxation and Migration: Evidence and Policy Implications" (2020) *Journal of Economic Perspectives* 34(2), 119–142.
[361] H. Kleven et al, n. xx2020 above.

been found to more than double the number of migrants, just above the regime's relatively low threshold.[362] In the post-Covid pandemic world, individuals' mobility is likely to continue to rise.[363]

The general effectiveness of these preferential regimes in achieving their main aim, however – namely attracting high-skill, high-earning, individuals – only fuels concerns regarding the key policy trade-off at the centre of these regimes: their effect on equality. Indeed, not only are these regimes a *prima facie* violation of formal equality,[364] but they are regressive; and the more effective they are, i.e. the higher the number of individuals at the top of the income distribution subject to lower taxation, the more regressive the personal income tax system will *de facto* become. It is therefore unsurprising that in some of the countries were these regimes apply, such as Ireland, the Netherlands, Portugal or Spain, they are controversial, and have given rise to sometimes heated public debate – albeit not solely for their (in)compatibility with the principle of equality.[365] Similarly, the strong personal income tax competition between cantons, as well as it many implications equality consequences, including on education success rates, is a heated in Switzerland. Yet, the only country that has so far committed to abolishing its preferential non-domiciled regime is the UK; repeal of the non-habitual tax regime was also considered in Portugal, but ultimately kept by the Government, albeit with a more limited scope. Given their effectiveness, and based on the previous experience with corporate tax competition, it is hard to see an avoidance of a race-to-the-bottom, in the absence of tax coordination measures.

IV. Tax Policy and Non-Economic Inequalities

Tax policy can play a double role as regards non-economic inequalities, namely it can increase them, or it can decrease them. The first role occurs primarily – albeit not exclusively – through indirect discrimination, i.e. laws that, often *accidently*, indirectly discriminate against specific groups or social categories; the second role, occurs where tax policy is used to address existing discrimination against specific groups or social categories, and tends to happen *purposively*, by legal design. In this respect, there is a clear parallel with the role that tax policy plays on economic inequalities: tax policy can also increase economic inequalities, through regressive tax policies; or decrease them, through progressive tax policies. Also like with economic inequalities, tax policy as regards non-economic inequalities is not unidirectional, i.e. tax law can, and often does, play both roles simultaneously: sometimes discriminating against specific groups, while at the same time protecting those same, or other, groups. This apparent paradox is a result of various factors.

[362] L.M Tims et al, "Tax Incentives for Migrants With Mid-Level Earnings: Evidence From the Netherlands" (2025) *American Economic Journal: Applied Economics* (Forthcoming).
[363] R. de la Feria and G. Maffini, n. xx above.
[364] R. Szudoczky and C. Rodríguez Peña, "Preferential Personal Income Tax Regimes in the European Union: A New Form of Permitted (Harmful) Tax Competition?" (2024) *World Tax Journal* 16(2).
[365] See for example, on their effect on the property market, J. Guerreiro et al, "Foreign Residents and the Future of Global Cities" (2023) *NBER Working Paper* 31402.

First, and similarly to the challenges tax policy faces as regards economic equalities, there are often significant trade-offs and conflicting pressures at the heart of tax policy, which means in practice that legal design is not always fully consistent or coherent. Importantly, however, there are also challenges as regards non-economic equalities that are not necessarily present as regards economic inequalities, in particular: *(i)* a *lack of awareness as regards non-economic inequalities*, both amongst the general public, and within policy circles; and *(ii)* the *additional trade-offs that result from the intersectionality of inequalities and privilege* that mean in practice that decreasing one inequality may increase another.

Until recently there was a *lack of awareness of, not only the impact of tax policy on non-economic inequalities, but more fundamentally, of the (independent) existence of those inequalities in themselves.* Some national reports therefore point to the fact that non-economics inequalities play a minimal role in domestic tax policy debate. Gender or race inequalities, for example, were often construed as subsumed to economic inequality, i.e. discrimination against women or racial and ethnic minorities was not a result of discrimination against those groups *per se,* but a consequence of lower incomes or wealth among those groups, a 'secondary ad-on'.[366] We now know that this is not – completely – true; or said in another way, it is indeed true that there is a remarkably persistent gender and racial income/wealth gap,[367] which is difficult to explain under classic human capital models, given the high educational achievements among these groups.[368] However, not only is there now overwhelming evidence that the income/wealth gap is in itself a result of gender, racial or religious biases,[369] often with historical,[370] cultural,[371] and socialising roots;[372] but there is discrimination of specific groups, which is independent of income or wealth.

For example, a recent meta-analysis of the literature regarding discrimination in hiring practices, shows very strong evidence of discrimination, not only against ethnic minorities – a fact that is now well established, particularly in so far as leadership positions are concerned –[373] but against candidates with

366 P. Hill Collins and S. Bilge, *Intersectionality* (Polity Press, 2020), at 20.
367 C. Olivetti and B. Petrongolo, "The evolution of gender gaps in industrialized countries"(2016) *Annual Review of Economics* 8, 405-434; and
368 H. Kleven and C. Landais, "Gender inequality and economic development: fertility, education and norms" (2017) *Economica* 84(334), 180-209; and T. Meschede et al, "'Family Achievements?': How a College Degree Accumulates Wealth for Whites and Not for Blacks" (2017) *Federal Reserve Bank of St. Louis Review* 99(1), 121-137.
369 M. Bertrand and S. Mullainathan, "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination" (2004) *American Economic Review* 94(4), 991-1031; and J. Xu, "The gender gap in executive promotions" (2024) *Journal of Corporate Finance* 89, 102680.
370 A. Alesina et al, "On the Origins of Gender Roles: Women and the Plough" (2013) *Quarterly Journal of Economics* 128(2), 469-530.
371 J. Jessen, "Culture, Children and Couple Gender Inequality" (2022) *European Economic Review* 150, 104310; and P. Giuliano, "Gender and culture" (2021) *Oxford Review of Economic Policy* 36(4), 944-961.
372 L. Farré and F. Vella, "The intergenerational transmission of gender role attitudes and its implications for female labour force participation"(2013) *Economica* 80(318), 219-247; H. Kleven et al, "Children and gender inequality: Evidence from Denmark" (2019) *American Economic Journal: Applied Economics* 11(4), 181-209;
373 M. Adamovic and A. Leibbrandt, "Is there a Grass Ceiling for Ethnic Minorities to Enter Leadership Positions: Evidence from a Field Experiment with Over 12,000 Job Applications" (2023) *Leadership Quarterly* 34(2), 101655.

disabilities, older candidates, and less physically attractive candidates; interestingly, discrimination on the bases of age, disability and physical attraction appear to be as severe as discrimination of candidates with salient racial or ethnic characteristics, but is significantly smaller for discrimination on the bases of gender, motherhood status and sexual orientation.[374] Moreover, although there are cross-country differences – e.g. hiring discrimination against older applicants is more prominent in European that in the United States – there is no structural evidence of recent changes in hiring discrimination,[375] despite anecdotal evidence on businesses' hiring practices. Critically, there is evidence disentangling non-economic from economic discrimination in hiring practice: non-economic discrimination, namely on the bases of gender and ethnicity is unaffected by socio-economic status, i.e. income / wealth inequalities.[376]

These phenomena are also evident in tax law. The preferential treatment of capital income, for example, has negative consequences on protected categories and indirectly discriminates against women, racial and ethnic minorities, or other vulnerable groups, such as the disabled or the elderly. In Denmark, for example, evidence suggests that men account for almost 80 percent of capital and share income declared by Danish taxpayers. Yet this discrimination is largely a function of existing economic inequalities.[377] Individuals within the groups are more likely to be at the lower end of the income/ wealth distribution, depending solely on employment income, and thus by nature of their type of income, may be subject to comparatively higher effective personal income rates. There are, however, situations whereby specific groups are indirectly discriminated against by tax law, regardless of income levels. This is the case, for example, of preferential tax treatment or tax expenditures designed for married couples, which indirectly discriminate against single parents – usually women (gender), more common within ethnic minority groups (race) – and LGBT families (sexual orientation). As discussed further below, this is an area where is there is a wide discrepancy of tax treatment within participant countries: although several countries have moved to extend rules applicable to married couples to single parent or LGBT families, particularly following judicial intervention, thus removing the indirect discrimination on the basis of gender, race and sexual orientation; other countries have been very reluctant to do so.

When developing tax policy considering non-economic inequalities *the concept of intersectionality of inequality must also be taken into consideration*, as this will impose additional trade-offs that are not necessarily present when considering economic inequalities exclusively. Coined over three decades ago,[378] the term intersectionality is today used in many different contexts;[379] yet, at its core is a simple

[374] L. Lippens et al, "The state of hiring discrimination: A meta-analysis of (almost) all recent correspondence experiments" (2023) *European Economic Review* 151, 104315.
[375] L. Lippens et al, n. xx above.
[376] M. Dahl and N. Krog, "Experimental Evidence of Discrimination in the Labour Market: Intersections between Ethnicity, Gender, and Socio-Economic Status" (2018) *European Sociological Review* 34(4), 402-417.
[377] D. Brown, n. xx above.
[378] K. Crenshaw, "Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color" (1991) *Stanford Law Review* 43(6), 1241-1299.
[379] P. Hill Collins and S. Bilge, n. xx above.

insight, namely that categories of race, class, gender, sexuality, ability, ethnicity and age, etc, are not mutually exclusive social categories, but are instead interconnected, and can create – and exacerbate – overlapping and interdependent systems of discrimination or inequalities on one hand,[380] or indeed privilege on the other hand.[381] These categories in turn interact with economic inequality to form what has been designated as a measure of global social inequality.[382]

This interaction between different inequalities is not always straightforward, or predictable, however. For example, it may be expected that individuals who may suffer discrimination in different categories – for example, transgender women, from minority ethnic groups, with a disability – may be subject to higher levels of discrimination, under what has been characterised as supplementary discrimination hypothesis.[383] Yet, there is now strong empirical evidence indicating that this is not necessarily the case, and one characteristic may actually decrease the impact of another characteristic. Males from an ethnic minority background, for example, have been consistently found – across several field experiments, in various European countries, and in a broad spectrum of the labour market – to be subject to higher levels of discrimination, than ethnic minority females,[384] a manifestation of what has been designated as the outgroup-male-target hypothesis.[385]

From the perspective of tax policy, this unpredictability in the intersection of different inequalities creates added challenges. For example, extending the tax benefits afforded to single parent and LGBT parents may have positive effects in several inequalities (gender, race and ethnicity, sexual orientation), and similarly with removing the preferential treatment of capital income (economic, gender, race); but there will be occasions where this is not the case, and addressing positively one inequality will have negative effects on another. As discussed above, this is the case, for example, with environmental and environmentally-focused excise taxes, which although they may decrease health, environmental and even intergenerational inequalities, may also have a negative effect on income inequality. As discussed further below, this may also be the case with what are probably the most effective (and popular) tax measures to decrease gender inequality: measures to decrease what is known as child penalties. These trade-offs between inequalities mean, in effect, that from a tax policy perspective it will be often

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[380] S. Atrey, *Intersectional Discrimination* (OUP, 2019).
[381] C. O'Reilly, "Elite Private Security and the Transnational Intersectionality of Privilege" Paper presented to the *Annual Conference of the European Society of Criminology*, Bucharest (September 2024).
[382] P. Hill Collins and S. Bilge, n. xx above.
[383] C.E. Hornais, "Jeopardy, Consciousness and Multiple Discrimination: Intersecting Inequalities in Contemporary Western Europe" (2015) *Sociological Forum* 30, 971-994.
[384] M. Dahl and N. Krog, n. xx above. See also, M. Arai et al, "The Reverse Gender Gap in Ethnic Discrimination: Employer Stereotypes of Men and Women with Arabic Names" (2016) *International Migration Review* 50, 385-412; and A. Midtdoen, "Discrimination of the Second Generation: Evidence from a Field Experiment in Norway" (2016) *Journal of International Migration and Integration* 17, 253-272.
[385] C. Navarrete et al, "Prejudice at the Nexus of Race and Gender: An Outgroup Male Target Hypothesis" (2010) *Journal of Personality and Social Psychology* 98, 933.

necessary to establish – a non-static – hierarchy of inequalities: at any given moment in time, what inequality should be prioritised?[386]

Gender and Sexual Orientation Inequalities

In line with European Parliament and international bodies' recommendations,[387] gender equality is now a key consideration when devising tax policy in several countries, with some countries imposing additional reporting obligations. In Canada, for example, since 2018 all new budget measures must be assessed in terms of their impact on gender and diversity under the Gender Balancing Act, and annual tax expenditures reports must also include an assessment of the impact of those expenditures on gender and diversity; similarly in Serbia, there is mandatory reporting on the impact of proposed measures in the annual budget report on gender equality. This concern is not universal, however, and several countries, including Croatia, Kosovo and France, still report policymakers' reticence in accepting the impact of taxation on gender inequality. There is, nevertheless, a noticeable trend towards growing awareness of both gender inequality, and the role that tax law that can have in it – either increasing it or redressing it.

It is important to note that this awareness is not necessarily reflected in a systematic approach to addressing of gender inequality within tax law, which is generally still lacking; For example, as discussed above, despite ongoing public debate in several countries, there is no indication of a wide move towards removal of preferential treatment of capital income, which would have a significant impact on gender (and race) inequality. We are also very far from gender-based taxation, proposed under optimal tax theory, whereby there would be higher marginal tax rates on (single and married) men, to compensate for intra-house bargaining dynamics, higher male wages, and higher female home productivity.[388] Nevertheless, there has been noticeable progress in several areas, particularly insofar as they relate to child penalties and encouragement of women back into the workforce post-childbirth. This in turn has manifested itself primarily in two types of tax measures, namely *(i) unit of taxation*, and a general move from family to individual taxation in personal income taxes, and *(ii) childcare tax credits*, and a general move towards broader tax credits and other type of childcare or housework tax incentives.

The move away from family of taxation and using individual taxation as unit of personal income tax assessment is not new, having started in the 1960s. It has, however, intensified in the last decades, and although there are various dynamics at play when choosing the unit of taxation, not least administrative / compliance elements, gender equality is generally perceived as a key factor in the move towards

[386] T. Nagel, *Mortal Questions* (Cambridge University Press, 1979).
[387] European Parliament, *Resolution on Gender Equality and Taxation Policies in the EU* (2018/2095(INI)), P8_TA(2019)0014, 15 January 2019, at para. 27; M Coelho et al, "Gendered Taxes: The Interaction of Tax Policy with Gender Equality" (2022) *IMF Working Paper* 2022/026; and OECD, *Tax Policy and Gender Equality: A Stocktake of Country Approaches* (OECD Publishing, 2022).
[388] A. Alesina et al, "Gender-Based Taxation and the Division of Family Chores" (2011) *American Economic Journal: Economic Policy* 3, 1-40.

individual-based taxation.[389] It has also been argued that it has a positive impact on income inequality, as it prevents the possibility of a high-income earner (often a male) to pay less tax, by limiting the labour supply outside the household of a second earner (often a female).[390] One of the last countries to do so was Switzerland, where a political initiative for an individual taxation irrespective of marital status was launched in 2021, forcing the government to abolish the existing marital tax system, which was reported to indirectly discriminate against working women. As Table VII demonstrates, today only one of the participating countries (France) applies a pure family taxation system, although another (the Netherlands) has recently announced a move towards stronger emphasis on family taxation; most countries a low-level hybrid system, whereby individual taxation is the main unit, but tax law includes some elements of family-based taxation, particularly insofar as tax expenditures are concerned.

This reality does unsurprisingly lead to some discontent: in Luxembourg, for example there have been several petitions before the Parliament, covered in national media, concerning the fact that single individuals are taxed more heavily than married taxpayers. The existence of some family-based tax under most current regimes has likewise, as Table VII also highlights, resulted in a rapid re-characterisation of the concept of family. Many countries have now extended the concept of family to include *inter alia*, single parents, non-married couples, and LGBT+ families. It is noteworthy that this extension has often been a response to judicial intervention. In Croatia for example, in a series of decisions, starting in 2017, the Constitutional Court ruled that the denial to non-married family units of a tax exemption in property transfer tax violated the principle of non-discrimination, and the tax exemption has now been extended to all family units, including LGBT families, regardless of marital status.

Yet, this movement is far from homogenous. Some countries have extended the concept to some of these categories, but not others – e.g. some have extended it to LGBT+ families, but only not co-habiting families – and some countries have so far resisted calls for an extension of the concept of family for tax purposes, not just as regards personal income taxation, but insofar as other taxes are concerned. In Turkey, for example, although there are only a small number of tax advantages applied to married couples, the most important of which is tax exemption on inheritance taxes, none of these are extended to LGBT+ couples; and similarly, in Ukraine, LGBT+ families are excluded from the scope of tax expenditures applied to heterosexual couples, most notably tax exemptions in inheritance taxes between close family members. Of course, in countries were there has been a general reticence to apply equal legal protection to members of the LGBT+ community, such as Serbia or Japan, this reticence also extends to taxation matters.

[389] J. Alm and M. Melnik, "Taxing the "Family" in the Individual Income Tax" (2005) *Public Finance and Management* 5(1), 67-109.

[390] P. Apps and R. Rees, "Optimal family taxation and income inequality" (2018) *International Tax and Public Finance* 25, 1093-1128; and M. Schechtl, "The Taxation of Families: How Gendered (De)Familialization Tax Policies Modify Horizontal Income Inequality" (2023) *Journal of Social Policy* 52(1), 63-84.

Table VII. Personal Income Tax: Unit of Taxation

	Individual	*Family*	*Mixed*
Australia	√		√[391]
Austria	√		√[392]
Belgium	√		√[393]
Brazil	√		√[394]
Bulgaria			
Canada	√		√[395]
China	√		
Croatia	√		√[396]
Czech Republic	√[397]		√[398]
Denmark	√		√[399]
Finland	√		√[400]
France		√[401]	
Germany	√		√[402]
Ireland			√[403]
Italy	√[404]		√[405]
Kosovo			
Japan	√		√[406]
Latvia	√		√[407]
Luxembourg			√[408]

[391] Family tax credits, resulting in a “quasi-joint” tax unit, available also to LGBT families.
[392] Family tax credits, available also to LGBT families, but only to married or registered couples.
[393] Some family unit provisions, such as the marriage coefficient; available also to LGBT families, but only to married or registered couples, *de facto* cohabitations are excluded.
[394] Joint tax return filling is possible for families, to include ascendants; available also to LGBT families.
[395] Some family unit provisions, available also to LGBT families.
[396] Some family-related tax benefits, which 2015 were denied to non-traditional families, such as non-marital unions or same-sex partnerships.
[397] Joint couples’ taxation between 2005 and 2007.
[398] Some family unit provisions, available also to LGBT families.
[399] Some family unit provisions, available also to LGBT families, but still reference to binary sexes and only two persons can be parents.
[400] Some family unit provisions, available also to LGBT families.
[401] Joint tax returns available to LGBT families since 2013.
[402] Income-splitting method, available also to LGBT families since 2013 (same-sex civil unions, and same-sex married couples).
[403] Hybrid individualisation introduced in 2000 to incentivise women’s return to labour force. Family unit for capital gains; some family unit provisions in personal income taxes, only available to married couples.
[404] Individual taxation was introduced following Italian Constitutional Court 1976 decision which deemed family taxation to be unconstitutional.
[405] Some family unit provisions, not available also to LGBT families.
[406] Income-splitting method, but not available to LGBT families.
[407] Some family unit provisions, only available to LGBT families from July 2024.
[408] The unit of taxation is optional: married taxpayers can opt to file jointly or individually; unless they have children in which case they must file jointly. Joint filling only applies to formal unions, such as marriage or partnership, not to cohabitation.

Netherlands	√[409]	√[410]
N. Macedonia	√	
Norway	√	√[411]
Poland	√	√[412]
Portugal	√	√[413]
Romania	√	√[414]
Serbia	√	√[415]
Spain	√	√[416]
Sweden	√	
Switzerland		√[417]
Turkey	√	
Ukraine	√	
UK	√[418]	
USA		√[419]

Another area of the tax systems where gender inequality has played a critical role is childcare credits and related incentives. Motherhood has been identified as the main source of the remaining gender gap,[420] and although this is likely to be a considerable exaggeration considering what it is known the impact of unconscious gender biases in a variety of areas, from educational outcomes to leadership positions,[421] there is now strong evidence of what has been designated as child penalties. Although there is significant heterogeneity in the literature as regards the impact of other variables such as educational

[409] Introduced in 2001, to promote the emancipation and economic independence of women, and encourage the return to work after childbirth.
[410] Some family unit provisions, available to LGBT families. As of 2024, the Dutch income tax will become more focused on family unit, and some conservative parties have strongly advocated implementation of German income-splitting method, which benefits single earner families.
[411] Some family unit provisions, available also to LGBT families.
[412] Married taxpayers can opt to file jointly or individually. However, joint filling only applies to married couples, and it is not available to LGBT families. Similarly, some family unit provisions (PIT expenditures, IHT exemptions), also not available to LGBT families.
[413] Married taxpayers can opt to file jointly; option available also to LGBT families.
[414] Some family unit provisions, not available to LGBT families.
[415] Some family unit provisions, not available to LGBT families.
[416] Married taxpayers can opt to file jointly; option available also to LGBT families.
[417] Three different regimes, namely for single persons, married families and single-parent families; family unit provisions available to LGBT families.
[418] Only those born before 1935 can avail of family tax credits.
[419] There are five filing options: single, married filing jointly, married filing separately, head of household, and qualifying widow. Married couple are incentivised to file jointly. Joint filling also available to LGBT families, following Supreme Court decision in 2013.
[420] H. Kleven et al, n. xx2019 above.
[421] V. Lavy and R. Megalokonomou, "The Short- and the Long-Run Impact of Gender-Biased Teachers" (2024) *American Economic Journal: Applied Economics* 16(2), 176–218; M. Carlana, "Implicit Stereotypes: Evidence from Teachers' Gender Bias"(2019) *Quarterly Journal of Economics* 134(3), 1163-1224; A.H. Eagly and S.J. Karau, "Role congruity theory of prejudice toward female leaders" (2002) *Psychological Review* 109, 573-598.

attainment,[422] or culture,[423] a consistent finding is that labour market trajectories of mothers are strongly affected in the short run by parenthood, and they never fully recover. For example, a recent report using Swedish data, regarding academic careers, indicated that women's publication rates are about forty percent lower than men's two years after a child birth, and this gap increases to eighty percent nine years after the first child's birth the gap arises because women's publication rates stagnate while fathers continue to publish at an increasing rate compared to before having children.[424] The finding is in line with previous research on the impact of child penalties in academic progression.[425]

It is therefore unsurprising that childcare expenditures – tax or otherwise – have received particular attention in the context of gender inequality. There are in principle other reasons to provide childcare subsidies, namely: *(i)* improvement in child outcomes, including reductions in crime rates, teenage pregnancy and other social problems,[426] with corresponding large positive effects' on adult outcomes, particularly for children from families below median income levels;[427] and *(ii)* increased efficiency, both because it enables both parents to be in the workforce,[428] and because it is a complement to labour supply.[429] Yet, it is clear that gender equality is a key concern behind the provision of childcare tax credits or other incentives.

As Table VIII demonstrates, today nearly all countries provide some form of childcare tax incentives, with some like Japan and Italy noting pending increases. Most countries offer these incentives within personal income taxes, a few also offer incentives within corporate income taxation; some of (the minority of) countries that do not offer tax incentives, including Australia, Finland and Norway, offer childcare support at expenditure level – another key example of using the public finance mix as the benchmark for equality, as discussed above. The Netherlands recently announced their intention to follow a similar approach, by abolishing childcare tax incentives from 2025, while increasing the provision of free public childcare; this, however, has proved unrealistic due to labour market constraints, so this constitutes now a notable example of decrease in gender equality, whereby the tax incentives are eliminated, without a suitable substitute on the expenditure side. Aside from the Dutch example, only a

[422] N. Angelov et al, "Parenthood and the Gender Gap in Pay" (2016) *Journal of Labour Economics* 34(3), 545-579.
[423] H. Kleven et al, "Child Penalties Across Countries: Evidence and Explanations" (2019) *AEA Papers and Proceedings* 109, 122-126.
[424] O. Ejermo, *Research or Family: How Does Becoming a Parent Affect Academic Productivity*, SNS Research report, 2024.09.05.
[425] See *inter alia* A. Morgan et al, "The unequal impact of parenthood in academia" (2021) *Science Advances* 7.
[426] J. Heckman, "Skill Formation and the Economics of Investing in Disadvantaged Children" (2006) *Science* 312 (5782), 1900-1902.
[427] T. Havnes and M. Mogstad, "No Child Left Behind: Subsidised Child Care and Children's Long-Run Outcomes" (2011) *American Economic Journal: Economic Policy* 3(2), 97-129; and T. Havnes and M. Mogstad, "Is Universal Childcare Levelling the Playing Field?" (2015) *Journal of Public Economics* 127, 100-114.
[428] L. Powell, "Joint Labour Supply and Childcare Choice Decisions of Married Mothers" (2002) *Journal of Human Resources* 37(1), 106-128; and D. Ribar, "A Structured Model of Child Care and the Labour Supply of Married Women" (1995) *Journal of Labour Economics* 13(3), 558-597.
[429] S. Bloquist et al, "Public Provision of Private Goods and Nondistortionary Marginal Tax Rates" (2010) *American Economic Journal: Economic Policy* 2(2), 1-27; and D. Domeij and P. Klein, "Should Day Care be Subsidised?" (2013) *Review of Economic Studies* 80(2), 568-595.

handful of countries (Kosovo, North Macedonia, and Ukraine) do not offer specific support to childcare through the tax system.

Another interesting development in this area is the emergence of new tax credits for household expenses, such as cleaning, childcare, maintenance and laundry. Although only approved yet in a small set of countries (Finland, Luxembourg, Norway), the measures have the potential to have a significant impact in gender inequality, as it *de facto* outsources work which is often still primarily done by women. Yet, concerns have already been raised as regards their distributional impact: since only those on higher incomes can pay for some of these services, the measures are likely to have a regressive effect. These concerns are not unique to these specific type of tax credits: not only are tax credits in general often regressive, as discussed above;[430] but specifically as regards childcare tax credits, despite their positive effects on gender inequality, they can also be regressive, particularly when variations in the quality of childcare are taken into account,[431] something which has already been a topic of debate in Germany. This again highlights the possible trade-offs between non-economic and economic inequalities: in this case, some of the most popular measures to decrease gender inequality may also increase income inequality.

Table VIII. Childcare Tax Incentives

	Tax Incentives	*Type of Incentives*
Australia	X [432]	
Austria	√	Corporate Tax: tax credit. Personal Income Tax: various credits and exemptions.
Belgium	√	Personal Income Tax credits.
Brazil	√	Personal Income Tax credits.
Bulgaria	√	Personal Income Tax credits.
Canada	√	Personal Income Tax credits.
China	√	Personal income tax credits.
Croatia	√	Personal income tax credits. Employer-provided childcare regarded as non-taxable fringe benefit.
Czech Republic	√	Personal income tax credits.
Denmark	√	Personal income tax credits.
Finland	√	Personal income tax credits, including for household expenses. Employer-provided temporary childcare for sick children regarded as non-taxable fringe benefit.
France	√	Personal income tax credits.
Germany	√	Personal income tax credits.
Ireland	-	-
Italy	√	Personal income tax credits (small).

430 S. Avram, n. xx above.
431 S. Bastani et al, "Childcare Subsidies, Quality, and Optimal Income Taxation" (2020) *American Economic Journal: Economic Policy* 12(4), 1-37.
432 Support is provided through the welfare system, rather than the tax system.

Kosovo	X	
Japan	√	Personal income taxes credits Employer-provided private childcare regarded as non-taxable fringe benefit. Corporate income tax incentives for employer-provided childcare.
Latvia	√	Personal income taxes credits.
Luxembourg	√	Personal income tax credits, including for household expenses, such as housekeeping and childcare.
Netherlands	√	Personal income taxes credits.
N. Macedonia	X	
Norway	X [433]	
Poland	√	Personal income taxes credits.
Portugal	√	Personal income taxes credits.
Romania	√	Personal and corporate income taxes credits.
Serbia	X	
Spain	√	Personal income taxes credits.
Sweden	X	Personal income tax credits for household and domestic expenses.
Switzerland	√	Personal income taxes credits.
Turkey	√	Personal income tax credits. Employer-provided childcare regarded as non-taxable fringe benefit.
Ukraine	X	
UK	√	Personal income taxes credits.
USA	√	Personal income taxes credits.

Although the above are the most common tax measures to decrease gender inequality, there is also evidence of other measures. Belgium, for example, has recently removed specific features in tax compliance which were deemed to be gender discriminatory, and has introduced a gender-neutral tax return. The most popular tax measure in this regard, however, has been the abolition in many countries of the so-called ‘tampon tax’, i.e. the removal or reduction of VAT on female sanitary products.

Nearly every participating country reported ongoing public campaigns on the abolition of the tampon tax. In Kosovo, for example, the high-profile campaign ultimately led to public protests, with banners placed outside Government buildings, conveying the slogan ‘*Government is taxing menstruation*’. Some countries have resisted the pressure, and have instead focussed efforts on providing female sanitary products in schools or other education institutions, local authorities buildings, or even within the military – this is the case, *inter alia*, in some Canadian provinces, Japan, Latvia, and Sweden. Yet, as Table IX demonstrates, the campaign has been remarkably successful, and in the last decade over 2/3 of countries (23) have either reduced or removed VAT altogether on female sanitary products. In the UK, the campaign also had surprising ramifications, which went far beyond a mere VAT cut, and are directly

[433] Support is provided through the welfare system, rather than the tax system.

related to the Brexit vote.[434] In some countries, the tampon tax campaign has now extended to other products used primarily by women (e.g. period pants), or by other protected groups, such as the elderly or those with disabilities.

Table IX. VAT on Female Sanitary Products ('Tampon Tax')

	VAT Reduction or Abolition
Australia	Abolition (2018)
Austria	Reduction (2021)
Belgium	Reduction (2018)
Brazil	Reduction (2023)
Bulgaria	X
Canada	Abolition (2015)
China	X[435]
Croatia	Reduction (2022)
Czech Republic	X
Denmark	X[436]
Finland	Reduction (2025)
France	Reduction (2016)
Germany	Reduction (2020)
Ireland	Abolition (2023)
Italy	Reduction (2019)
Kosovo	X
Japan	X
Latvia	X
Luxembourg	Reduction (2019)
Netherlands	X
N. Macedonia	Reduction (2020)
Norway	X
Poland	Reduction (2020)
Portugal	Reduction
Romania	X
Serbia	X
Spain	Reduction
Sweden	X
Switzerland	Reduction (2023)
Turkey	Reduction (2022)
Ukraine	X
UK	Abolition (2021)

[434] Detailed account of the episode is provided in M. Schofield and R. de la Feria, "Section 126: VAT: women's sanitary products" (2016) *British Tax Review* 5, 611-618; and R. de la Feria and M. Schofield, "Towards an [Unlawful] Modernized EU VAT Rate Policy" (2017) EC *Tax Review* 26(2), 89. See also A. Seely, "VAT on Sanitary Protection" (2016) UK *House of Commons Library Briefing Paper* 01128.
[435] Ongoing campaign since 2023.
[436] Ongoing campaign.

USA	Reduction[437]

As discussed in Section III, the use of VAT expenditures – reduced rates or exemptions – to address income inequality concerns is of course not new, and goes back to the introduction of VATs themselves;[438] but the systematic use of VAT to address other inequalities, in particular gender inequality, albeit not solely, is much more recent.[439] Behind these public campaigns there is of course a compelling legal argument, namely that applying VAT to products used solely by individuals belonging to protected categories, such as women, constitutes a violation of the principles of equality and non-discrimination,[440] considering that some essential products, consumed by all individuals, such as food, are often subject to preferential regimes. Subjacent to this argument – albeit some would argue, not essential – is the assumption that prices on these products will come down, to the benefits of individuals within protected categories. This is, however, far from clear: VAT incidence is a contested area of tax policy.

Although the behavioural response to VAT reductions is highly heterogeneous, and dependent on various factors, there is now strong evidence that decreases in VAT are not necessarily fully passed-through to final consumers; depending on the circumstances, pass-through may be partial, temporary, or completely non-existent.[441] This heterogeneity is also reflected specifically as regards VAT cuts on female sanitary products: while there is evidence of over-shift of VAT cut in Germany, i.e. prices were cut further than the corresponding tax decrease,[442] in the US, there is also evidence that prices went up, even pre-tax cuts, to capitalise on the forthcoming decrease.[443] Even assuming full pass-through, however, there is a trade-off subjacent to these measures: a decrease in gender inequality may come at the expense of income inequality as, for the reasons discussed in Section III, VAT cuts are often regressive. From a political economy perspective, however, it is not difficult to explain the success of the campaign.[444] It allows policymakers to signal action in favour of gender equality, at a relatively low revenue cost and with minimal trade-offs, without addressing the core structural issues that undermine

[437] Ongoing campaign: as of 2024, 33 states exempt sanitary products from the RST, 21 states still charge RST on these products.
[438] R. de la Feria and R. Krever, Ending VAT Exemptions: Towards a Post-Modern VAT" in R. de la Feria (ed.), *VAT Exemptions: Consequences and Design Alternatives* (Wolters Kluwer, 2013), 3-36; and R. de la Feria, "The UK VAT at 50: The Good, the Bad and the Ugly" (2023) *British Tax Review* 30(3), 307-321.
[439] A. Swistak and R. de la Feria, "VAT Equity: Can VAT help fight inequality?", *forthcoming*.
[440] B. Crawford and C. Spivak, "Tampon Taxes, Discrimination, and Human Rights" (2017) *Wisconsin Law Review* 3, 491-550.
[441] For a review of the extensive literature, see R. de la Feria and A. Swistak, n. xx2024 above.
[442] A. Frey and J. Haucap, "VAT pass-through: the case of a large and permanent reduction in the market for menstrual hygiene products" (2024) *International Tax and Public Finance* 31, 160–202.
[443] Ziyue Xu, "Does "Tampon Tax" Repeal Help in Redistribution? Evidence from the State of Illinois", University of Texas Working Paper 2020.
[444] M. Flinders and G. Lowery, "Period politics and policy change: the taxation of menstrual products in the United Kingdom, 1996–2021" (2023) *Contemporary British History* 37(2); L. Coryton and L. Russell, "Paying for Our Periods: The Campaign to Tackle Period Poverty and End the Tampon Tax in the UK" (2021) *Columbia Journal of Gender and Law* 41(1).

gender equality in taxation,[445] which would entail higher revenue costs, higher political risks, larger trade-offs – or all of the above.

Other Non-Economic Inequalities

Policy considerations as regards the role of taxation in non-economic inequalities, other than gender or sexual orientation, is still incipient. It is true that, as Table IX demonstrates, nearly every country applies tax concessions to individuals with disabilities, for example; most commonly through the personal income tax law, although several countries also apply VAT reduced rates and exemptions for the consumption of goods and services used exclusively by those with individuals. Yet, with a few recent,[446] and notable exceptions,[447] there seems to be limited public or academic discussion of either these tax expenditures or, more generally, the overall impact of the tax system on individuals with disabilities. Despite the fact that empirical evidence shows strong discrimination of individuals with disabilities: as severe as discrimination on the bases of racial or ethnic characteristics, much higher than discrimination on the bases of gender or sexual orientation,[448] and that appears to be particularly resistant to anti-discrimination legislation.[449]

Table X. Tax Incentives on Disability

	Tax Incentives	*Type of Incentives*
Australia	√[450]	Personal Income Tax exemptions
Austria	√	Personal Income Tax credits
Belgium	√	Personal Income Tax credits
Brazil	√	Personal Income Tax credits
Bulgaria	√	Personal Income Tax credits
Canada	√	Personal Income Tax credits
China	√	Personal Income Tax credits Corporate Income Tax credits for employers
Croatia	√	Personal Income Tax credits and exemptions
Czech Republic	√	Personal Income Tax credits
Denmark	√	Personal Income Tax credits (case-by-case assessment)
Finland	X [451]	
France	√	Personal Income Tax credits
Germany	√	Personal Income Tax credits Motor vehicle tax reduction Corporate income tax reductions

445 Similarly, K. James, "Removal of the Tampon Tax: A Costless or Pyrrhic Victory?" (2022) *Australian Feminist Law Journal* 48(2).
446 P. Brice, *Is the UK Tax System Effective in Supporting Disabled People?,* University of Oxford, 2023.
447 D. Duff, "Disability and the Income Tax" (2000) *McGill Law Journal* 45, 797.
448 L. Lippens et al, n. xx above.
449 D. Acemoglu and J. Angrist, "Consequences of Employment Protection? The Case of Americans With Disabilities Act" (2001) *Journal of Political Economy* 109(5), 915-957.
450 Most support provided through direct transfers, rather than the tax system.
451 Abolished in 2022, following health and welfare reforms.

Ireland	-	-
Italy	√	Personal Income Tax credits
Kosovo	X	
Japan	√	Personal Income Tax credits Inheritance tax preferential regime
Latvia	√	Personal Income Tax credits
Luxembourg	√	Personal Income Tax credits
Netherlands	√	Personal Income Tax credits Inheritance tax preferential regime
N. Macedonia	X	
Norway	X [452]	
Poland	√	Personal Income Tax credits
Portugal	√	Personal Income Tax credits
Romania	X	
Serbia	X	
Spain	√	Personal Income Tax credits
Sweden	√	Personal Income Tax credits
Switzerland	√	Personal Income Tax credits
Turkey	√	Personal Income Tax credits
Ukraine	X	
UK	√	Personal Income Tax credits
USA	√	Personal Income Tax credits

Racial and ethnic minorities' inequalities also face challenges. As discussed above, there is both growing academic attention on (high) levels both racial and ethnic inequalities generally, and growing public awareness, particularly following the Black Lives Matter movement.[453] There also is growing academic attention as regards the impact of tax law on racial inequality, particularly in the US context;[454] yet, there appears to be a near absence of tax policy debate regarding racial and ethnic minorities. A few notable exceptions emerged from the national reports, however: in China, for example, protection of ethnic minorities is a consideration in the design of the Chinese corporate income tax, with local governments in regions with ethnic minorities' clusters specifically authorised to enact preferential tax regimes for businesses in their regions; in Latvia too, there is currently a case pending before the Constitutional Court regarding a restriction of property tax reliefs to only EU and EEA nationals, to the exclusion of residences from other ethnic or nationality backgrounds.

[452] Support through the tax system has been progressively phased out, whilst increasing support through the welfare system.
[453] J. Sawyer and A. Gampa, "Implicit and Explicit Racial Attitudes Changed During Black Lives Matter" (2018) *Personality and Social Psychology Bulletin* 44(7), 1039-1059; and K. West, "Implicit racism, colour blindness, and narrow definitions of discrimination: Why some White people prefer 'All Lives Matter' to 'Black Lives Matter" (2021) *British Journal of Social Psychology* 60(4), 1136-1153.
[454] D. Brown, n. xx above; S. Dean, n. xx above; and A. Abreu, n. xx above.

One of the most complex areas within non-economic inequalities from a tax policy perspective is, however – and perhaps surprisingly – age. Ageism, a term coined in the 1960s to characterise discrimination against older individuals,[455] is still prevalent. Discrimination against older individuals has been found to be particularly strong in Europe,[456] and against women – what has been designated as gendered ageism,[457] and a clear manifestation of the intersectionality of inequalities. It is therefore unsurprising that older individuals have therefore traditionally been regarded as a vulnerable group, and thus anti-discrimination efforts, including within tax policy, have been almost exclusively directed towards that end of the age spectrum. There are a few notable exemptions. Croatia, for example, introduced a new preferential treatment of young workers to address demographic challenges and the brain-drain of high-skilled youngsters, whereby taxpayers below the age of 25 are exempt from tax on employment income, and those taxpayers aged 25 to 30 are granted a 50 percent tax credit. Similarly, Portugal has recently introduced a so-called "return programme", whereby young workers wanting to return to Portugal after at least three years abroad, will benefit from a reduction in personal income taxation of 50 percent, for a period of five years. Both regimes have been subject to strong controversy, but so far there has been no judicial intervention.

Nevertheless, as Table XI demonstrates, in tax law concerns are still primarily focussed on the elderly, and are largely reflected in widespread granting of tax concessions, not only in terms of preferential treatment of pension income, but in other forms of personal income or property tax credits / allowances, and VAT reliefs. Indeed, today a large majority of countries apply some kind of preferential tax rules to the elderly. In some countries, such as China, protecting the elderly is regarded as a fundamental part of traditional culture, and thus preferential tax regimes are not subject to debate; in other countries, such as Latvia and Serbia, the preferential tax treatment of the elderly, namely as regards pension income, is constitutionally protected, through judicial interpretation. Yet, there is a growing disquiet in several countries, regarding the preferential tax treatment of the elderly, and growing concerns about inter-generational inequality and the discrimination of young people.

Table XI. Preferential Tax Treatment for the Elderly

	Pensions: Preferential Treatment	*Other Preferential Treatment*
Australia	√	
Austria	X	
Belgium	√	
Brazil	X [458]	Personal Income tax credits and allowances
Bulgaria	X	

[455] R. Butler, "Age-Ism: Another Form of Bigotry" (1969) *Gerontologist* 9(4), 243–246.
[456] L. Lippens et al, n. xx above.
[457] D. Neumark et al, "Is It Harder for Older Workers to Find Jobs? New and Improved Evidence from a Field Experiment" (2019) *Journal of Political Economy* 127(2), 465-972; and P. Rochon et al, "Gendered ageism: addressing discrimination based on age and sex" (2021) *The Lancet* 398(10301), 648-649.
[458] However, preferential treatment for pensions resulting from early retirement due to illness or accident.

Canada	X [459]	
China	√	
Croatia	√	
Czech Republic	√[460]	
Denmark	X	Personal income tax credits
Finland	X	
France	√	Property tax exemptions and reductions
Germany	√[461]	
Ireland	X	Personal income tax credits and reliefs
Italy	X	
Kosovo	X	
Japan	√	
Latvia	√	Personal income tax credits and reliefs
Luxembourg	X [462]	
Netherlands	√	Personal income tax credits and reliefs
N. Macedonia	X	
Norway	√	Personal income tax credit
Poland	√	
Portugal	X	
Romania	√	Personal income tax reliefs
Serbia	√	Personal income tax reliefs
Spain	X	
Sweden	√	Personal income tax credit
Switzerland	X	Personal income tax reliefs
Turkey	√	Personal Income Tax credits
Ukraine	X	
UK	√	Limited personal income tax relief
USA	√	Personal income tax reliefs

Even absent any tax benefits, intergenerational economic inequality is growing. In the UK, for example, individual wealth tends to increase with age, peaking in the 60-to-64 age group at a level nine times as high as the 30-to-34 age group.[463] This is not a phenomenon unique to the UK, rather it reflects general patterns of wealth accumulation in property, and pension protection in many countries: younger, working, generations, effectively pay the pensions of retirees. To this, environmental concerns may also be added: the costs of energy benefits enjoyed now, and in the past by the elderly, are shifted to younger

[459] However, preferential taxation of capital gains of immovable property disproportionality benefits elderly.
[460] Abolition of preferential treatment of pensions between 2013-2015, but repealed following decision from Czech Constitutional Court.
[461] Preferential treatment is being phased-out, and from 2040 pension income will be subject to full taxation.
[462] Slightly higher taxation for pension income, than employment income.
[463] UK Office for National Statistics, *Distribution of individual total wealth by characteristic in Great Britain: April 2018 to March 2020*, January 2022.

and future generations.[464] Finally, there is also now extensive evidence that, as intergenerational transmission of human and financial capital is a key determinant in wealth and earning ability,[465] the wealth accumulation among the elderly will lead to higher levels of wealth concentration in the future.[466] Or said in another way, absent counter-acting tax policy measures, wealth concentration amongst the wealthiest may decrease social mobility, and lead to higher levels of wealth inequality in the future.[467]

In light of the above evidence, it is unsurprising that keeping preferential tax rules in place for the elderly has become increasingly controversial in several countries. In Australia, the Treasury's Intergenerational Report shows significant population ageing, with the number of Australians aged 65 and over forecasted to double in the next 40 years; tax expenditure reporting also shows that superannuation tax concessions are among the biggest tax expenditures, with the benefits are skewed towards high income earners. In Norway, a recent tax committee report argued that there are few arguments to support the preferential treatment of pensions, and its abolition would also induce individuals to stay in the workforce for longer; intergenerational equity has also been presented as a key argument in favour of retaining the wealth tax. Yet, removal of preferential tax treatment for the elderly faces strong resistance.

There are a few success cases. In 2002, Japan managed to reduce the preferential tax treatment of pensioners against the backdrop of strong concerns over declining birth-rates, ageing population, and shrinking workforce; but, this was an exception, for which the Government was heavily criticised. There was also a small victory in Finland, to date the only country where inter-generational inequality in taxation was constitutionally tested. Two tax measures designed to incentivise older workers to remain in the workforce for longer – to the detriment of the elderly population – were challenged, namely: *(i)* a supplementary income tax on pension income exceeding a certain limit; and *(ii)* a higher earned income credit for taxpayers over the age of 65. In both cases, the different treatment applied to older workers was deemed to be acceptable in light of constitutional mandate to promote employment; so in essence a conflict between two different constitutional mandates, reflecting two different policy aims, with primacy given to promotion of employment, to the detriment of equality in taxation.

Generally, however, most countries report on the strong political economy obstacles to the removal of preferential tax treatments of the elderly. In the Netherlands, for example, with more than half of voters now over the age of 50, suggestions of eliminating the preferential regime for pensions, or removal of benefits for wealthier pensioners, have been fiercely resisted; and in Serbia, where pension income is fully exempted, the share of retirees amongst the electorate makes any changes nearly politically impossible to approve. These experiences are largely consistent with existing literature. Despite some

[464] S. Caney, "Climate change, intergenerational equity and the social discount rate" (2014) *Politics, Philosophy & Economics* 13(4), 320-342.
[465] C. Mulligan, *Parental Priorities and Economic Inequality* (Chicago University Press, 1997).
[466] M. de Nardi, "Wealth Inequality and Intergenerational Links" (2004) *Review of Economic Studies* 71, 743-768.
[467] T. DiPrete, "The Impact of Inequality on Intergenerational Mobility" (2020) *Annual Review of Sociology* 46, 379-398; and R. Erikson and J. Goldthorpe, "Intergenerational Inequality: A Sociological Perspective" (2002) *Journal of Economic Perspectives* 16(3), 31-44.

inequality aversion, retirees are willing to shift costs to existing workers,[468] so with demographic changes and the ageing of the median voter, older people are increasingly politically powerful,[469] making extremely difficult to approve any reforms that would entail removal of their existing benefits. Indeed, there is empirical evidence of the contrary, namely that countries do not treat cohorts equitably, but on the contrary, reduce the entitlement of younger generations, while spearing those near retirement.[470] The growth in environmental and environment-focussed excise taxes, discussed in Section III above, seems to be the exception that confirms the trend.

The above demonstrates that there is a clear dissociation between policy salience, namely public debate and policy awareness, of non-economics, and the actual introduction of measures to address them – not solely as regards intergenerational inequality, but as regards all non-economic inequalities. Public debate and awareness does not necessarily translate into policy action. In this regard, it is clear that of all non-economic inequalities, gender inequality stands out as the one which has been given more prominence, both in terms of policy salience, and introduction of measures to address it. This does not mean, of course, that gender inequality is no longer a feature of tax law, but there is an attempt to address some of the challenges, particularly as regards child penalties, even countries generally fall short of structural measures. This is perhaps not surprising, considering that women make over half of the world population – and in many countries, are the voters must likely to turn out in elections.[471] On the contrary, while awareness of race and ethnic inequalities is now high, and empirical evidence is strong, that awareness does not appear to have (yet) translated into concentre tax policy measures to address it. On the other side of the spectrum is ability inequality, where countries have almost universally used tax law to address it, despite limited policy salience or public debate. Sexual orientation and age inequalities are somewhere in between those extremes: awareness of these inequalities is growing, but either because of cultural, political economy dynamics – or both, translation of this awareness into concrete tax law measures is not consistent cross-country. Based on the above insights, Chart I is an attempt to provide a visualisation representation of the spectrum on this intersection between policy salience and tax law measures as regards non-economic inequalities. Interestingly, although there is very limited evidence on the public perceptions on an hierarchy of inequalities, a recent study on the perceptions of the British public, concerns about race and ethnic inequalities scored highest, followed by intergenerational inequality, with gender inequality ranking much lower.[472]

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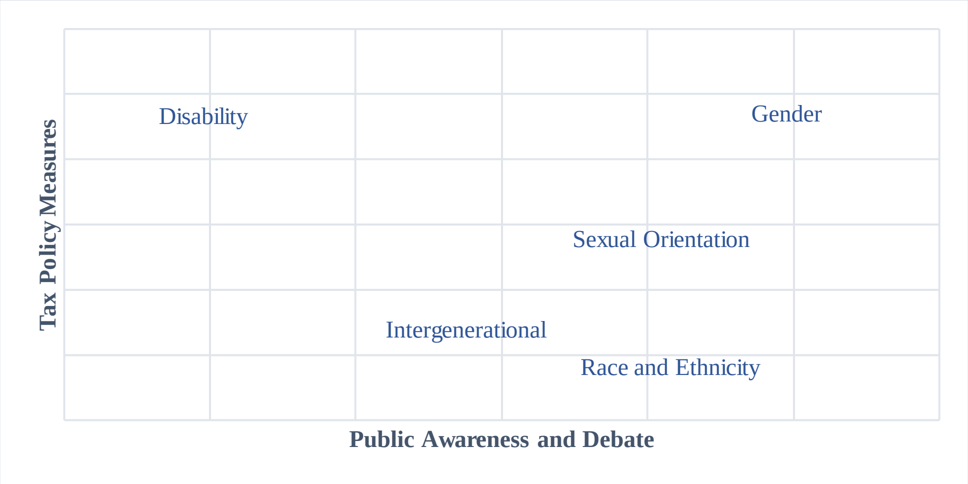
468 H. Cremer and P. Pestieau, "Reforming our Pension System: Is it a demographic, financial or political problem?" (2020) *European Economic Review* 44(4-6), 974-983; and F. Breyer and K. Stolte, "Demographic Change, Endogenous Labour Supply and the Political Feasibility of Pension Reform" (2001) *Journal of Population Economics* 14(3), 409-424.
469 H.W. Sinn and S. Uebelmesser, "Pensions and Path Gerontocracy in Germany" (2003) *European Journal of Political Economy* 23(4), 1175-1184.
470 A. Borsch-Supon, "Entitlement Reforms in Europe: Policy Mixes in the Current Pension Reform Process" in A. Alesina and F. Giacazzi (eds), *Fiscal Policy After the Financial Crisis* (Chicago University Press, 2013).
471 R. Dassonneville and F. Kostelka, "The Cultural Sources of the Gender Gap in Voter Turnout" (2021) *British Journal of Political Science* 51(3), 1040-1061.
472 R. Benson et al, n. xx above.

Chart I. Non-Economic Inequalities: Policy Salience vs Tax Measures



V. Tax Enforcement and Inequalities

Tax policy and tax administration are symbiotic,[473] and the effectiveness of tax systems in achieving stated objectives can only be assessed when both elements are taken into account.[474] Therefore, although discussions on taxation and inequality have traditionally focussed on tax policy and legal design, this does not provide the full picture. First, because there is extensive and robust evidence, going back decades, showing that overall feelings of fairness and social satisfaction are not just based on legal design, but also on how the law is enforced or approved (procedures).[475] Procedural justice – how taxes are collected – and interactional justice – the manner in which tax administrations interact with taxpayers – therefore matter for perceptions of tax fairness.[476] Second, because there is now clear evidence that tax non-compliance can itself increase inequalities, independently of tax policy or legal design, not least as evasion in particular is overwhelmingly concentrated at the top of the wealth distribution.[477] Combating non-compliance, and evasion in particular, is therefore fundamental for ensuring equality; and conversely, not combating evasion has a regressive effect.

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[473] R. de la Feria and A. Schoeman, "Addressing VAT Fraud in Developing Countries: The Tax Policy-Administration Symbiosis" (2019) *Intertax* 47(11), 950-967.

[474] D. Hemel and D. Weisbach, "The Behavioral Elasticity of Tax Revenue" (2021) *Journal of Legal Analysis* 13(1), 381-438.

[475] A. Lind and T. Tyler, *The Social Psychology of Procedural Justice* (Springer New York 1988). See also R. MacCoun, "Voice, Control, and Belonging: The Double-Edge Sword for Procedural Fairness" (2005) *Annual Review of Law and Social Science* 1, 171; D. de Cremer and A. van Hiel, "Procedural Justice Effects on Self-esteem under Certainty versus Uncertainty Emotions" (2008) *Motivation and Emotion* 32, 278; and J. Brockner and B. Wiesenfeld, 'An Integrative Framework for Explaining Reactions to Decisions: Interactive Effects of Outcomes and Procedures' (1996) *Psychological Bulletin* 120, 189.

[476] M. Wenzel, "Tax Compliance and the Psychology of Justice: Mapping the Field" in V. Braithwaite (ed), *Taxing Democracy: Understanding Tax Avoidance and Evasion* (Ashgate Publishing, 2003).

[477] A. Alstadsæter et al, "Tax Evasion and Inequality" (2019) *American Economic Review* 109(6), 2073–2103; J. Londoño-Vélez and J. Ávila-Mahecha, "Enforcing Wealth Taxes in the Developing World: Quasi-experimental Evidence from Colombia" (2021) *American Economic Review: Insights* 3 (2): 131–48; and W. Leenders et al, Offshore tax evasion and wealth inequality: Evidence from a tax amnesty in the Netherlands" (2023) *Journal of Public Economics* 217, 104785.

The rise in taxpayers' safeguards, epitomised by the growth of Bill or Charters' of Taxpayers' Rights shown in Table XII, despite their often non-binding legal nature, is symptomatic of a growing awareness of the role of procedural and interaction justice upon perceptions of tax fairness.[478] Similarly, the multiplication of initiatives to combat evasion, not least automatic exchange of information, since the financial crisis, demonstrates – despite their varying degrees of success – awareness of the link between equitable enforcement and tax fairness perception.[479] Yet, while these are welcome developments, they hide global trends on tax enforcement that have a significant impact on widening inequalities.

Table XII. Bill (or Charter) of Taxpayers' Rights

	Taxpayers' Rights		
	Bill (or Charter)	Equivalent Legal Provisions	Neither
Australia	√		
Austria		√	
Australia			
Belgium		√	
Brazil		√	
Bulgaria			√
Canada	√		
China		√	
Croatia	√	√	
Czech Republic			√
Denmark			√
Finland			√
France	√	√	
Germany			√
Ireland			√
Italy	√		
Kosovo	√	√	
Japan		√	
Latvia		√	
Luxembourg			√
Netherlands		√	
N. Macedonia		√	
Norway		√	
Poland			√
Portugal		√	

[478] D. Bentley, "Formulating a taxpayers' Charter of Rights: Setting the ground rules" (1996) *Australian Tax Review* 25(3), 97; J. Farrar, "An empirical analysis of taxpayers' fairness preferences from Canada's Taxpayer Bill of rights" (2015) *Journal of Accounting and Taxation* 7(5), 71-79.
[479] D. Langenmayr and Z. Lennard, "Escaping the exchange of information: Tax evasion via citizenship-by-investment" (2023) *Journal of Public Economics* 221, 104865; E. Casi, "Cross-border tax evasion after the common reporting standard: Game over?" (2020) *Journal of Public Economics* 190, 104240; and S. Beer et al, "Hidden Treasure: The Impact of Automatic Exchange of Information on Cross-Border Tax Evasion" (2019) *IMF Working Paper* 2019/286.

Romania			√
Serbia		√	
Spain		√	
Sweden			√
Switzerland			√
Turkey	√		
Ukraine		√	
UK		√	
USA	√		

Tax administrations are under significant political pressure to demonstrate both increases in tax revenues, and decreases in tax non-compliance. Whilst little is still known about the political economy of anti-fraud measures, empirical evidence indicates a positive correlation between such measures and political gains: implementation of new anti-fraud measures increases the support, and likelihood of re-election, for political incumbents, particularly in areas with a lower self-reported tolerance for tax evasion and more efficient public services.[480] To ensure that tax administrations deliver, performance incentives have become commonplace worldwide, with several countries now applying performance-related pay or promotions.[481] Unsurprisingly,[482] these incentives have proven to be extremely successful: empirical evidence indicates that application of performance-related pay may increase revenues by up to 40 percent,[483] and penalties for tax fraud by 75 percent,[484] performance-related postings to desirable locations may increase revenues by up to 80 percent,[485] and the introduction of performance incentives leads to a reallocation of resources from other activities to those that will specifically trigger incentives.[486]

Yet, these pressures and incentives create significant challenges for under-resourced tax administrations. Tax enforcement is costly, and the more sophisticated evasion is, the more costly enforcement is likely to be. It is therefore common for tax administrations to assess the relative effectiveness of a range of measures in improving compliance; measuring and designing administrative actions in light of enforcement elasticities, or more generally, of the marginal revenue and costs associated with

[480] L. Casaburi and U. Troiano, “Ghost-House Busters: the Electoral response to a Large Anti-Evasion Program” (2016) *Quarterly Journal of Economics*, 273-314.
[481] An old idea, dating back to the Roman Empire and 18th century French monarchy, but which has picked up momentum in recent decades, see A. Khan et al, “Tax Farming Redux: Experimental Evidence on Performance Pay For Tax Collectors” (2016) *Quarterly Journal of Economics* 131, 219-271; and C. Kahn *et al*, ‘‘Performance-Based Wages in Tax Collection: The Brazilian Tax Collection Reform and its Effects’’ (2001) *Economic Journal* 111, 188–205.
[482] F. Flatters and W.B. MacLeod, “Administrative corruption and taxation” (1995) *International Tax and Public Finance* 2, 397-417.
[483] A. Khan *et al*, n. xx above.
[484] C. Kahn *et al*, n. xx above.
[485] A. Khan *et al*, “Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance-Based Postings” (2019) American Economic Review 109(1), 237-270.
[486] C.M. Kahn *et al*, n. xx above.

administrative actions, is perceived as necessary for optimal tax administration.[487] Enforcement elasticities measurements, however, like performance targets are based solely on the short-term revenue results, which basically means revenue maximisation is used as a proxy for effectiveness of enforcement measures. Over time these dynamics, coupled with political economy pressures and performance targets and incentives, have led to two significant developments in tax law enforcement, namely: *(i) a shift from combating tax non-compliance per se, towards a revenue maximisation approach*,[488] and *(ii) an increase in digitalisation and automation of tax administrations*. It is important to note that these trends are not unique to tax law, but rather reminiscent of worldwide trends in crime control in criminal justice systems, which are the subject of a growing literature on their development, consequences, and risks;[489] yet, awareness of their prevalence in tax law is still incipient.

Revenue Maximisation

There is now cross-country evidence that tax enforcement has gravitated towards tackling the 'low-hanging fruit', cases where tax authorities are likely to increase their revenue collections with limited administrative costs; whilst more resource-intensive cases, such as criminal prosecutions, which are less likely to improve performance statistics for the tax administrations are put into the back burner.[490] Conversely, those at the top of the income/wealth distribution have significant resources, so that tax enforcement on that group will be, by nature, more resource intensive, and the success rate lower, not just because of the often transnational dimension of the activity (wealth offshoring), but because of the professional resources available to those on the income/wealth bracket. Yet, not enforcing tax law on these individuals – while enforcing tax on the majority – will necessarily widen both economic inequalities and non-economic inequalities, to the extent that those on protected categories are less likely to be at the top of the income/wealth bracket. Moreover, tax enforcement decisions can also have a significant impact on non-economic inequalities through a range of other mechanisms, not least implicit bias.[491]

[487] M. Keen and J. Slemrod, "Optimal tax administration" (2017) *Journal of Public Economics* 152, 133-142. On enforcement elasticities see also G. Fack and C. Landais, "The effect of tax enforcement on tax elasticities: Evidence from charitable contributions in France" (2016) *Journal of Public Economics* 133, 33-40.

[488] These arguments are further developed in R. de la Feria, n Tax Fraud and Selective Law Enforcement" (2020) *Journal of Law and Society* 47(2), 240-270.

[489] See *inter alia*, D. Garland, "The limits of the Sovereign State: Strategies of Crime Control in the Contemporary Society" (1996) *British Journal of Criminology* 36(4), 445-471; G. Marx, "Rocky Bottoms and Some Information Age Techno-Fallacies" (2007) *Journal of International Political Sociology* 1(1), 83-110; and J. Hendry and C. King, "Expediency, Legitimacy, and the Rule of Law: A Systems Perspective on Civil/Criminal Procedural Hybrids" (2016) *Criminal Law and Philosophy* 10(33), 1-25. See also, R. de la Feria, n. xx2000 above, and extensive literature cited therein.

[490] P. Alldridge, *Criminal Justice and Taxation* (OUP, 2017); V. Braithwaite, *Defiance in Taxation and Governance – Resisting and Dismissing Authority in a Democracy* (Edward Elgar, 2009); and M. Levi, "Serious tax fraud and noncompliance: A review of evidence on the differential impact of criminal and noncriminal proceedings" (2010) *Criminology and Public Policy* 9(3), 493-513.

[491] J. Bearer-Friend, "Colorblind Tax Enforcement" (2022) *New York University Law Review* 97(1).

Selective tax law enforcement is reportedly a concern in several countries.[492] In Canada, taxpayers' right to 'consistent application of the law' is enshrined in the Taxpayer Bill of Rights, yet the tax administration has been accused of treating taxpayers' inconsistently; in France, a procedure allowing public prosecutors to enter into tax settlements with taxpayers introduced in 2016, sparked significant controversy, and a proposed debate in the National Assembly on how to strike a balance between the need to maximize revenues and the need to ensure public trust in the tax system; and in Norway, although public confidence in tax authorities is high, costs remain a significant obstacle to access to justice for taxpayers on lower incomes. In the Netherlands, tax settlements are common within the limits of the principle of legality, but in 2003 there was a scandal regarding an agreement between the tax administration and 142 taxpayers living in a trailer park. According to the tax administration, due to these taxpayers' aggressive behavior, it became impossible to collect tax debts, and a deal was eventually reached an agreement allowing them to pay a much lower rate than that set out in statutory provisions. The agreement was widely and publicly criticized for rewarding obstructive behavior; yet, it was subsequently found that the tax administration had possibly concluded up to 500 similar agreements, mainly with aggressive taxpayers in illegal businesses, such as cannabis farms or illegal employment agencies. Measures have since been taken to prevent those kind of arrangements in the future.

Although there are many examples demonstrating the prioritisation of short-term revenue benefits over the elimination of tax non-compliance, from third-party liability in consumption taxes,[493] to increases in penalties beyond what would be expected for a deterrence effect,[494] one of the most paradigmatic examples of the impact on economic inequalities of a revenue maximisation approach to tax enforcement are tax amnesties. A common practice in many countries, usually approved during fiscal stress periods with the aim of rapidly increasing revenue intakes,[495] the evidence on their effectiveness is, at best, mixed.[496] Tax amnesties are addictive and create a moral hazard: as the probability of an amnesty rises, individuals report less income,[497] decreasing revenues and thus increasing the need for, and likelihood of, more generous future amnesties;[498] they decrease overall tax morale,[499] and take-up can be low,

[492] A term coined in R. de la Feria, n. xx2000 above.
[493] R. de la Feria, n. xx2000 above; R. de la Feria and R. Foy, "*Italmoda*: The Birth of the Principle of Third-Party Liability for VAT Fraud" (2016) *British Tax Review* 4, 262-273; and M. Malecka, "Not Your Business but Your Liability: a New VAT Third Party in Poland" (2013) *World Journal of VAT/GST Law* 2(3), 253-260.
[494] R. de la Feria and P. Tanawong, "Surcharges and Penalties in UK Tax Law" in R. Seer and A.L. Wilms (eds.), *Surcharges and Penalties in Tax Law* (Amsterdam: IBFD, 2016).
[495] R. Bayer et al, "The Occurrence of Tax Amnesties: Theory and evidence" (2015) *Journal of Public Economics* 125, 70-82; and J. Mikesell and J. Ross, "Fast Money? The Contribution of State Tax Amnesties to Public Revenue Systems" (2012) *National Tax Journal* 65(3), 529-562
[496] K. Baer and E. Le Borge, *Tax Amnesties: Theory, Trends, and Some Alternatives* (Washington DC: IMF, 2008).
[497] A. Malik and R. Schwab, "The Economics of Tax Amnesties" (1991) *Journal of Public Economics* 46, 29-49.
[498] S. Kapon, Dynamic Amnesty Programs" (2022) *American Economic Review* 112(12), 4041–4075.
[499] R. Yücedoğru and I. Sarisoy, "Are tax amnesties good for us all? Understanding influence of tax amnesties on benefiters and non-benefiters" (2020) *CESifo Economic Studies* 66(3), 285-300.

although allowing individuals to vote in advance for or against the amnesty,[500] and nudging deterrence messages reminding them of the consequences of non-take up,[501] seem to yield significant gains.

As Table XIII demonstrates, a large majority of participant countries has applied some type of tax amnesty in the last two decades, although the scope varies significantly. The most frequent are voluntary disclosure programmes, which forego tax prosecutions, and may provide interest relief or reduce penalties; but a few amnesties have gone significantly further by applying preferential treatments (reduced rates or exemptions) to repatriated incomes. Beyond the above uncertainties about the effectiveness of these programmes, however, they raise significant concerns from an equality perspective, which have a few occasions been challenged in the courts. In 2002, an Italian amnesty that allowed a substantial reduction in the effective tax rates paid, including in VAT, was found by the CJEU to be contrary to the EU VAT Directive;[502]and that same year, Poland's attempt to introduce a broad tax amnesty, which would have applied a lower rate to repatriated income was found by the Constitutional Court to constituted a violation of the principles of rule of law, equality and legality. These judicial decisions highlight the key policy trade-off at the centre of these regimes: not only are these regimes a *prima facie* a violation of formal equality, but given the fact that those most likely to benefit from these amnesties are at the top of income/wealth distribution, they are regressive. Moreover, even if they are effective, this effectiveness only further fuels these concerns: the more effective they are, i.e. the higher the number of these individuals are subject to preferential regimes or lower taxation, the more regressive the tax system will *de facto* become.

Table XIII. Tax Amnesties: Overview

	Tax Amnesties	*Amnesties' Scope*
Australia	√	Voluntary Disclosure Programme: no tax prosecution and potential penalties and interest relief.
Austria	√	1993: broad scope; tax exemption, no tax penalties or prosecutions. 2012: limited scope; no tax penalties or prosecutions.
Belgium	√	2003: broad scope; tax exemption, no tax penalties or prosecutions. 2005: limited scope: no tax prosecutions, uniform tax fines. 2013: limited scope, no tax prosecutions, differentiated tax fines. 2023: limited scope, no tax prosecutions, uniform tax fines.
Brazil	√	Most amnesties: reduced penalties and interest. 2016: broad scope; no tax or other criminal prosecutions for income repatriation; reduced tax rate.
Bulgaria	X	
Canada	√	Ongoing Voluntary Disclosure Programme: no tax prosecution and potential penalties and interest relief.

[500] B. Torgler and C. Schaltegger, "Tax Amnesties and Political Participation" (2005) *Public Finance Review* 33(3), 403-431.
[501] P. Gill et al, "Toward an understanding of tax amnesty take-up: Evidence from a natural field experiment" (2024) *Journal of Public Economics* 239, 105245.
[502] Case C-132/06, *Commission v Italy*, ECLI:EU:C:2008:412

China	X	
Croatia	X [503]	
Czech Republic	√	2023: Limited scope; no tax penalties or prosecutions. Collective remission of taxes at the discretion of the Ministry of Finance.
Denmark	√	2012: Income repatriation: reduced tax penalties or prosecutions, no prison sentence.
Finland	X [504]	
France	√	2009: no criminal prosecutions, reduced penalties 2013, 2017: reduced penalties
Germany	X	
Ireland	√	1998-2001: Voluntary Disclosure Programme: no tax prosecution and potential penalties and interest relief.
Italy	√[505]	2002 and 2009: no penalties and interest relief, lower effective rate, no criminal prosecutions (2009). Voluntary Disclosure Programme: no penalties and interest relief (2017-).
Kosovo	√	2008: no penalties 2015: no penalties and interest relief
Japan	X	
Latvia	√	Two amnesties, both with limited scope: reduction of penalties and interest
Luxembourg	√	2015, 2016: Limited scope: reduction of penalties and interest, no criminal prosecutions.
Netherlands	X	Voluntary Disclosure Programme: reduced penalties.
N. Macedonia	X [506]	
Norway	X	Voluntary Disclosure Programme: reduced penalties.
Poland	X	
Portugal	X	
Romania	√	2007 onwards: No penalties or interest, cancellation of some tax obligations.
Serbia	√	2007, 2012, 2016: No penalties or interest, delayed payments. 2020: broad scope amnesty, on tax due for last 5 years.
Spain	X	
Sweden	√	Voluntary Disclosure Programme: no penalties, no criminal prosecutions.
Switzerland	√	Voluntary Disclosure Programme: no penalties, no criminal prosecutions.
Turkey	√	Twelve direct or quasi-amnesty laws were published in the last 20 years, with different scopes, some of which include more than reductions on tax liability, interest or penalties, but also a range of other tax obligations.
Ukraine	√	2014: no tax due to under-reported sales (CIT and VAT). 2021: Voluntary Disclosure Programme, no penalties, no criminal prosecutions.
UK	√	2023: Repatriation of income: no penalties, no criminal prosecutions. Voluntary Disclosure Programme: no penalties, no criminal prosecutions.

[503] There is an ongoing debate as regards tax deferment and tax debt write-off policy, and particularly on whether these should be classified as a tax amnesty or not.
[504] One was proposed in 2015, but was withdrew by Government following significant controversy on its compatibility with the constitutional principle of equality.
[505] Over 80 tax amnesties since the unification of Italy.
[506] The possibility was considered in 2010, but rejected amongst negative public reaction.

USA	√	Repatriation of income: no penalties, no criminal prosecutions, lower rates applied. Voluntary Disclosure Programme: no penalties, no criminal prosecutions.

Automation of Tax Administrations

Over the last two decades, developments as regards digitalisation of tax systems is nothing short of outstanding. Not only are taxpayers increasingly making use of automated systems in tax compliance, but perhaps more importantly, as Table XIV demonstrates, tax enforcement is increasingly reliant on new technologies as compliance-enhancing and fraud-prevention tools. Tax compliance in all participant countries is now, at least partly, digitalised; although it is clear that some countries, such as the US, or the UK, are still lagging behind on this process.[507] An increasing number of countries is also now making use of more sophisticated technology within tax administration, such as predictive algorithms, profiling technology, and real-time technology.

Table XIV. Tax Administrations Digitalisation: Overview

	Technology Type	*Legal Basis, Guarantees and Support*
Australia	Compliance digitalisation AI tools: predictive analytics algorithm	No AI legal basis or guarantees yet Tax compliance assistance: Tax Help programme, and tax clinics to help vulnerable
Austria	Compliance digitalisation AI tools: predictive analytics algorithm, chatbox	No AI legal basis or guarantees Data protection: GDPR Tax compliance assistance: compliance centres and chatbot
Belgium	Compliance digitalisation AI tools: risk assessment and data mining, digital platforms scraping	Federal Ombudsman Data protection: GDPR
Brazil	Real-time compliance (tax returns, invoices) Mandatory digital compliance	Compliance software (including smart phone app) No tax targeted assistance for online compliance No legal safeguards on technology use by administration
Bulgaria	Compliance digitalisation (returns, invoices)	No tax targeted assistance for online compliance Data protection: GDPR
Canada	Compliance digitalisation (returns, invoices)	No tax targeted assistance for online compliance No legal safeguards on technology use by administration
China	Real-time compliance (tax returns, invoices) Mandatory digital compliance	Targeted assistance for online compliance Legal remedies on technology use by administration
Croatia	Compliance digitalisation (returns, invoices)	Compliance software (including smart phone app) No tax targeted assistance for online compliance Data protection: GDPR
Czech Republic	Compliance digitalisation (returns, invoices) Real-time reporting of sales	Data protection: GDPR

[507] R. de la Feria, "The UK VAT at 50: The Good, the Bad and the Ugly" (2023) *British Tax Review* 30(3), 307-321.

	Profiling technology	
Denmark	Compliance digitalisation (returns, invoices)	New AI legal basis or guarantees Targeted assistance for online compliance (exceptional) Data protection: GDPR
Finland	Compliance digitalisation (returns, invoices) Real-time reporting of sales AI-based profiling technology	No tax targeted assistance for online compliance Data protection: GDPR
France	Compliance digitalisation (returns, invoices) Datamining technology	Targeted assistance for online compliance Data protection: GDPR
Germany	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance[508] Data protection: GDPR
Ireland	-	Data protection: GDPR
Italy	Compliance digitalisation (returns, invoices) Limited AI-based profiling technology	No legal safeguards on technology use by administration Targeted assistance for online compliance Data protection: GDPR
Kosovo	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance
Japan	Compliance digitalisation (returns, invoices) AI-based data analysis	No legal safeguards on technology use by administration No targeted assistance for online compliance
Latvia	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance Data protection: GDPR
Luxembourg	Compliance digitalisation (returns, invoices) AI tools: risk assessment	No legal safeguards on technology use by administration No targeted assistance for online compliance Data protection: GDPR
Netherlands	Compliance digitalisation (returns, invoices) AI tools: web scraping, risk assessment for various taxes, automated plate recognition, profiling Real-time technology: dynamic monitoring	No legal safeguards on technology use by administration Targeted assistance for online compliance, but not always sufficient Data protection: GDPR
N. Macedonia	Compliance digitalisation (returns, invoices)	Targeted assistance for online compliance (Mobile Tax Counters).
Norway	Compliance digitalisation (returns, invoices) Ten predicted AI models are used for a variety of purposes (nudging, profiling, risk assessment, etc)	Legal safeguards on technology use by administration, including on the use of algorithms that can result in discrimination. Targeted assistance for online compliance, and some discretion to protect vulnerable.
Poland	Compliance digitalisation (returns, invoices) Real-time technology for e-invoicing AI tools: risk assessment[509]	No legal safeguards on technology use by administration Targeted assistance for online compliance Data protection: GDPR
Portugal	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration

[508] However, following Federal Constitutional Court decision, taxpayers can apply for financial assistance in order to mandate a tax advisor.
[509] Media reports of use of AI tools for profiling, but this has been denied by the tax administration.

	Real-time technology AI tools	No targeted assistance for online compliance Data protection: GDPR
Romania	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance Data protection: GDPR
Serbia	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance
Spain	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration Targeted assistance for online compliance Data protection: GDPR
Sweden	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance Data protection: GDPR
Switzerland	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance Data protection equivalent to GDPR
Turkey	Compliance digitalisation (returns, invoices) Risk assessment tools	No legal safeguards on technology use by administration Targeted assistance for online compliance for vulnerable Data protection equivalent to GDPR
Ukraine	Compliance digitalisation (returns, invoices) Real-time technology	No legal safeguards on technology use by administration No targeted assistance for online compliance No data protection legislation
UK	Compliance digitalisation (returns, invoices)	No legal safeguards on technology use by administration No targeted assistance for online compliance (although some NGOs do provide assistance) Data protection: equivalent to GDPR
USA	Limited digitalisation of compliance	No legal safeguards on technology use by administration No targeted assistance for online compliance No data protection legislation

This outstanding growth of automation of tax administrations can be attributed to a range of factors.[510] First, the elements that determined the shift from combating tax non-compliance *per se*, towards a revenue maximisation approach, are also driving the increase in automation. Increasingly costly tax enforcement, often with a transnational dimension, and under-resourced tax administrations, coupled with political economy pressures and performance targets and incentives, have led to a strong focus on tax enforcement elasticities: taking administrative actions would result in the most revenue, at the lowest possible cost. In this context, digitalisation presents itself as a perfect solution: not only are humans are much more expensive, but they are often less available – particularly in countries with lower administrative capacity – then technology. The significance of these motivations is highlighted in the Danish national repot, where it is noted that tax authorities have been hit by several scandals in the last

[510] These arguments are further developed in R. de la Feria and A. Grau Ruiz, "The Robotisation of Tax Administration" in A. Grau (ed), *Interactive Robotics: Legal, Ethical, Social and Economic Aspects* (Springer Nature, 2022), Ch 20, 115-123.

two decades, during a period where the number of staff was cut due general public finance pressures, and an exaggerated IT optimism – a clear example of what has been identified in the literature as the AI fallacy of unconstrained success.[511]

Second, and perhaps even more importantly, technology has proved itself to be extremely effective in driving up compliance. Not only is automation effective in combating fraud, including newer practices themselves enabled by the digital economy,[512] but they are also effective in decreasing other forms of non-compliance, such as negligence or error.[513] New empirical evidence also convincingly shows that a significant part of tax non-compliance is non-intentional, so that removal of compliance frictions – such as allowing taxpayers to perform tax compliance from the comfort of their home computer – or small compliance nudges can have a significant impact.[514] Third, there is now also evidence of non-negligible spillover effects. In particular, automation can decrease two of the key downsides of tax administrative discretion,[515] namely susceptibility to human cognitive biases and to noise, and opportunities for corruption. There is now consistent evidence to indicate that both cognitive biases and noise – the unwanted variability in judgments – are pervasive in administrative adjudication. Automation eliminates noise, which is a source of unequal treatment, but can also counteract existing biases, as well as decrease the scope for corruption.[516]

Both its effectiveness in driving up compliance, and its spillover effect mean that digitalisation of tax administrations can have a significantly positive effect on reducing inequalities. Automation, however, also has significant risks, not just generally – for example as regards data privacy – but for inequalities in particular. Although automation can correct human biases and noise if well-designed,[517] there is now strong evidence that many algorithms not only entrench the biases of its (human) designers, but augment them.[518] Algorithms are often trained to identify correlations between characteristics and outcomes, using those correlations to predict future outcomes; yet correlation is not causation, and inferring causation from mere correlation can often lead to discrimination of specific groups, such as women or

[511] R. de la Feria and A. Grau Ruiz, n. xx above.
[512] L Scarcella, "Tax Compliance and Privacy Rights in Profiling and Automated Decision Making" (2019) *Internet Policy Review* 8(4), 1-19.
[513] O. Okunogbe and V. Pouliquen, "Technology, Taxation, and Corruption: Evidence from the Introduction of Electronic Tax Filing" (2022) *American Economic Journal: Economic Policy* 14(1), 341-372.
[514] J.E. de Neve et al, How to Improve Tax Compliance? Evidence from Population-Wide Experiments in Belgium" (2021) *Journal of Political Economy* 129(5); and M. Hallsworth et al, "The behavioralist as tax collector: Using natural field experiments to enhance tax compliance" (2017) *Journal of Public Economics* 148, 14-31.
[515] Despite evidence that people actually prefer moral discretion to AI, see J. Jauernig, M. Uhl, and G. Walkowi, "People Prefer Moral Discretion to Algorithms: Algorithm Aversion Beyond Intransparency" (2022) *Philosophy and Technology* 35(2).
[516] C. Sunstein, "Governing by Algorithm? No Noise and Potentially Less Bias" (2022) *Duke Law Journal* 71, 1175-1205; O. Okunogbe and V. Pouliquen, n. xx above; and S. Sequeira, and S. Djankov. "Corruption and Firm Behavior: Evidence from African Ports."(2014) *Journal of International Economics* 94 (2): 277–94.
[517] C. Sunstein, n. xx above; and P. Hacker, "Teaching Fairness in Artificial Intelligence: Existing and Novel Strategies Against Algorithms" (2018) *Common Market Law Review* 55, 1143.
[518] S. Mayson, 'Bias In, Bias Out' (2019) *Yale Law Journal* 128, 2218; and A. Kelly-Lyth, 'Challenging Biased Hiring Algorithms' (2021) *Oxford Journal of Legal Studies* 1–30.

racial minorities.[519] In tax administration, risk assessment tools are particularly susceptible to these profiling problems, and several participating countries report on recent scandals involving discriminating algorithms, and highlighting the massive impact that these can have on inequalities.

In Australia, the most important "wake-up call" as regards the risks of automatic came in the context of the so-called "Robodebt" scandal. Between 2015 and 2019, the statutory agency that administers welfare payments operated an automated debt collection scheme that issued incorrect demands to many thousands of payment recipients. There was evidence that government officials knew early on that the algorithm was incorrect, but continued to operate the scheme in response to political pressure from the government of the day. The process ultimately lead to an investigation by the Royal Commission and a successful class action against the government in which the Federal Court approved a $112 million settlement in favour of the complaints. In 2023, the Australian tax administration introduced automated decision making for taxpayers with long standing tax debts. Whilst these debts were calculated correctly in accordance with the law, the media quickly dubbed the process "Robotax" and reported widespread dissatisfaction with the automated process for debts that were many years old, forcing the tax administration to review the process.

In the Netherlands, the so-called childcare benefit scandal, whereby legislation that was originally designed to combat fraud and abuse resulted in undue targeting of vulnerable groups, also highlighted the risks using of AI. Several measures have now been implemented to ensure that the "human dimension" is included in the decision making process, and in 2022, following a decision of the Supreme Court appealing for limited use of AI by tax administrations in the context of motor vehicle tax, the Dutch State Secretary of Finance defined profiling as discrimination. On November 2023, a new investigation was announced on the historical use of a specific risk assessment tool by the tax administration.

Although following short of scandals on the scale of those witnessed in Australia and the Netherlands, several other countries also reported significant public concerns as regards digitalization of tax administrations. In Bulgaria, a new rule reducing tax liability by 5 percent, so as to encourage online submission of tax returns was challenged before Supreme Administrative Court, and was ultimately deemed to constitute indirect discrimination against individuals who do not use digital services, namely those without computer skills, primarily elderly, and those on low-incomes unable to afford internet access. In Belgium, a study conducted in 2021 indicated that 39 percent of residents had poor digital skills, and for households in the two lowest deciles of the income distribution (20 percent poorest), 18 percent did not have internet connection at home, whilst in the top two deciles, 98 percent did so. In Czech Republic, the introduction electronic record keeping of sales was viewed extremely negatively

[519] J. Kleinberg et al, "Discrimination in the Age of Algorithms" (2018) *Journal of Legal Analysis* 10(113), 134-137.

by the public, ultimately leading to the foundation of a new political party just with the aim of abolishing this measure; the Government eventually gave in, and the legislation was abolished altogether in 2023.

The above examples of judicial – and/or policy – intervention demonstrate a growing awareness of what has been as the ‘digital divide’, namely the consequences of increased automation of life on vulnerable groups, such as elderly, disable, or ethnic minorities, who may lack the necessary skills or means to keep up with technological developments. For most – young, high-income, highly-educated, individuals – digitalisation can be a convenient alternative to bureaucracy; but for those who lack the income to access digital services, or the digital and language skills to understand them, automation of public life can have dehumanising effects.[520] Tax compliance technology is particularly susceptible to these risks, and there is already some evidence of divides emerging in several countries.[521] As Table XIII above demonstrates, although in the large majority of participant countries data protection legislation for the digital world is now in force, only a few countries have either *(i)* put in place additional legal safeguards to prevent discrimination or increase in inequalities as a result of tax administration digitalisation, or *(ii)* increase the provision of compliance assistance to those falling on the wrong side of the digital divide due to existing inequalities.

VI. Reconceptualising Taxation and Inequalities

Informed not solely by tax law, but also by human rights, constitutional and administrative law, as well as public economics, political economy, political science, moral philosophy, moral and social psychology, and sociology, the aim of this project was to depart from the perceived simplicity of the term tax fairness, by: *(i)* identifying general trends and common policy trade-offs; and *(ii)* providing a normative meaning to the term, which could in turn inform policy. It is to these that we now turn.

General Trends

As regards general trends, the project identifies clear legal and policy trends on taxation and inequalities, which largely reflect similarities in tax policy objectives, shared challenges, common trade-offs – as well as the fact that, notwithstanding any economic, social and cultural differences, we are all human. These general trends can be summarised as follows.

First, high standard constitutional and legal protection is granted by the principles of equality and non-discrimination, with near universal adherence to its core tenants, both generally and in the context of taxation. In practice, however, this *legal protection is not granted uniformly. In particular, there are discrepancies in the legal protection afforded to (i) economic and non-economic inequalities, and (ii) different non-economic inequalities*. In this regard, the bigger gains in the last decades have tended to

[520] S. Ranchordas, “Tax and Inequalities”, Ch. X; and S. Ranchordas, “Empathy in the Digital Administrative State” (2022) *Duke Law Journal* 72.
[521] J. Bevacqua and V. Renolds, “The Digital Divide and Taxpayer Rights – Cautionary Findings from the United States” (2018) *eJournal of Tax Research* 16(3).

focus on non-economic inequalities, with courts often intervening to ensure the extension of existing tax benefits to protected categories, such as single mothers (gender) or LGBT+ families (sexual orientation). On the contrary, judicial intervention as regards tax rules to address economic inequalities have been rarer, and the most notable cases on economic inequalities have been those where the courts intervened to, either prevent or limit the scope of application of redistributive tax measures, adopting a formal approach to the equality principle, as it was the case with Germany and Luxembourg constitutional court decisions on wealth taxes; or to endorse regressive taxes, excluding the applicability of the equality principle, as it was the case in France constitutional decisions as regards excise taxes and preferential income tax regimes. Nonetheless, even within non-economic inequalities there are sharp differences in the standards of legal protection afforded. Although in many countries there are great gains in the standard of legal protection afforded to most protected categories, several report a reticence of courts to extend protection to specific categories, in particular sexual orientation, as it is the case in Japan, North Macedonia and Serbia, and ethnic minorities, as it is the case in France.

Second, although the last decades have witnessed a steep decline on global poverty levels, global improvements on a range of well-being indicators, such as child mortality and average life expectancy, and a marked decline in inter-nation inequality, at domestic level, economic inequalities, particularly wealth inequality, have raised sharply. This inequality has significant social, economic and political consequences, and has been convincingly linked to growths in populism and far-right voting. Yet, *growing concerns about economic inequality have not translated into an increase in redistributive tax policies; on the contrary, redistributive tax policies are generally on the retreat*. This is evident in four clear trends, as follows:

(i) *less progressive personal income taxes*: although most countries still apply progressive income taxes to labour income, several have moved to flat-rate taxation of individual income, with limited perspective of a move back to progressive taxation, and many more apply flat and/or lower taxation of specific types of non-employment income, most notably capital income;

(ii) *less emphasis on tax instruments to address wealth inequality*: the number of countries applying wealth and inheritance taxes has decreased significantly, and in countries where inheritance taxes still apply, their scope has often been narrowed, so that their impact on inequality (or revenues) is minimal;

(iii) *more environmental and excise taxes*: the number of countries applying environmental taxes has significantly increased, as has the range of products to which excise taxes apply. Although, beyond the obvious environmental gains, these taxes may have a medium to long-term positive effect on economic inequality, as a result of the decrease in environmental and health inequalities, in the short-term they often have negative distributional effects.

(iv) *more preferential personal income tax regimes*: the number of preferential tax regimes applicable to high-skill and/or high-income individuals, as well as the number of countries applying them, has

increased significantly, reflecting a growing global tax competition in individual taxation, with negative distributional effects.

Put together these factors point towards, not merely a non-increase in redistributive tax policies in the context of growing economic inequality – as predicted in the literature – but an actual decrease in these policies, and an increase in regressive tax policies. It is important to note that the increase in regressive tax policies – namely the spread of preferential personal income tax regimes, and the growth in environmental and excise taxes – can be largely attributed to a casualty of key trade-offs, rather than to a manifestation of a purposeful intention to pursue regressive taxation. The intention of these measures is to achieve other (important and constitutionally mandated) policy aims, whether economic growth and productivity or environmental sustainability; regressivity is therefore a consequence, rather than the aim itself. Yet, they are symptomatic of the not just significant, but growing, trade-offs in a globalised, digitalised world, facing very significant long-term challenges, not least climate change and population ageing.

It is also noteworthy that redistributive tax rules have been approved in many countries – most notably VAT cuts designed to limit the regressivity of the tax; but the tendency has been to focus redistributive efforts on tax expenditures, i.e. by taxing low-income individuals less, rather than by taxing high-wealth or high-income individuals more – even where taxing low-income individuals less entails also taxing high-wealth, high-income individuals less as well, as in the case of VAT cuts. So, legislative approval of redistributive tax measures tends to be successful only where and to the extent that they entail *less* taxation, but not where they entail *more* taxation.

Third, there is *growing awareness of the impact of tax policy on non-economic inequalities, and the role that the tax system may potentially have in either enhancing or decreasing them*, but this policy salience has not always translated into concentre tax policy measures. There are wide disparities in policy efforts not only between economic and non-economic inequalities, but also among non-economic inequalities. All inequalities are equal, but some are more equal than others. Importantly also, there is a dissociation between policy salience, namely public debate and policy awareness, of non-economic inequalities, and the introduction of actual measures to address them. Of all non-economic inequalities, gender stands out as the one which has been given more prominence, both in terms of policy salience, and introduction of concrete measures to address it. Indeed, while structural measures are generally still lacking, two clear trends stand-out in terms of taxation and gender inequality, namely: *(i) an increase in tax measures to encourage women back into the work force post-child birth*, in an attempt to decrease what is identified as child penalties; and *(ii) a reduction, or abolition, of consumption taxes, in products consumed primarily or exclusively by women*, even though the effectiveness of these cuts is not always clear. Efforts to address other non-economic inequalities are patchier, as follows: *(i)* tax measures that increase *inequalities linked to sexual orientation* have been removed in several countries, but are fiercely opposed in others; *(ii)* tax measures to decrease *disability inequality* are almost universally applied, but with limited or no policy discussion as to their effectiveness; *(iii)* there appears to be no systematic approach to the removal of *racial and ethnic inequalities* in tax law; and *(iv)* while there is a strong prevalence of tax measures to address *ageism* insofar as it translates into protection of the elderly, there is a lot more reticence, except insofar as it concerns environmental taxes, in addressing a growing *intergenerational inequality*.

Two more point as regards non-economic inequalities are noteworthy. First, tax measures introduced to address non-economic inequalities have focussed almost exclusively on extending the scope of tax expenditures or preferential tax regimes more generally, from VAT cuts on tampons to preferential treatment of pensions. Therefore, in line with the trend identified as regards economic inequalities, the focus has been on taxing less, rather than taxing more, i.e. in this case, taxing less individuals falling within the scope of protected categories. Second, although in theory some measures to decrease gender or racial inequality would also have a positive impact on economic equality, in practice the focus so far has been on the approval of measures to decrease non-economic inequalities that can also increase economic inequalities. This is particularly evident with some of the tax measures adopted so far to address gender inequality, such as childcare or household tax expenditures, which may increase income inequality, but critically also with preferential tax regimes for the elderly, which can not only increase wealth inequality, but in the absence of further tax measures, help entrench it.

Fourth, although there is *growing awareness of the impact that tax non-compliance can have on inequalities, there is a lot less consciousness of the impact that tax enforcement measures themselves can have on them.* Trade-offs between efficiency and equity are also visible in tax administration, and the drive to maximise revenues (revenue maximisation), at the lowest possible costs (automation) has had a negative impact on both economic and non-economic inequalities. Measures that (may) increase tax revenues, but are both contrary to formal equality, and can have a negative distributional impact, such as tax amnesties, are widespread; while scandals involving algorithms that discriminate against protected categories have multiplied. Despite judicial intervention in some countries, legal guarantees to address these concerns are still not present in most countries.

A New Analytical Framework for Taxation and Inequalities

In so far as the analytical and conceptual framework of taxation and inequalities is concerned, the novel framework presented here does not necessarily provide definite answers – although, on balance, it often points towards better solutions; rather it maps out the core issues at stake, thus providing a roadmap for a better decision-making when addressing inequalities through the tax system. These core issues can be summarised as follows.

First, whilst constitutional adherence to the principle of equality and non-discrimination is nearly universal, the scope of that constitutional mandate is less clear. Not only are there some discrepancies across jurisdictions as to what type of inequalities are covered by that mandate – most notably as regards as regards ethnicity and sexual orientation – but perhaps even more crucially, it is not always clear whether the mandate entails simply *(i)* respect for formal equality, *(ii)* respect for substantive equality and non-discrimination, or *(iii)* it requires positive action to decrease inequalities. In some jurisdictions, there are domestic guidelines on this matter – whether in the constitution itself, or through judicial interpretation – but this does not appear to be the case in most jurisdictions.

Second, in addition to the lack of clarity as regards the exact scope of the constitutional mandates on equality and non-discrimination, the benchmark for that mandate, insofar as taxation is concerned, is also unclear. There are, in principle, three possible benchmarks against which to assess equality, namely: *(i)* individual taxes; *(ii)* the overall tax system (tax mix); and, *(iii)* the tax and expenditure systems put together (public finance or fiscal mix). Said in another way, can one individual tax instrument increase inequality, if the tax system overall –or alternatively, public expenditure– decreases it? In some countries, the constitutional mandate is clear on this regard, stipulating individual taxes as the benchmark for equality assessment on taxation. In most countries, however, this is not the case, and although individuals tend to judge fairness of each tax individually, this disaggregation bias is not in line with the predominant view in public economics literature, which tends to favour the public finance / fiscal mix as the most appropriate benchmark for equality assessments. In line with the literature, this is the *de facto* approach in a few countries, where in the absence of specific constitutional guidelines, the practice has been to address inequality concerns –income or otherwise– on the expenditure side. It is also noteworthy that these countries are often been those with lower income inequality levels, and stronger policies on redressing non-economic inequalities, such as gender or sexual orientation.

Third, outwards inequality trade-offs and the extent to which the constitutional mandate of respect for equality and non-discrimination should take priority over other constitutional policy mandates or policy aims, must be considered. In a few countries this outwards policy trade-off has already been considered by the Constitutional Courts; most notably in the context of wealth taxes, and the need to balance tax policy designed to decrease wealth inequality, on the one hand, and the right to property or formal equality, on the other hand. Yet, various other potential conflicts are subjacent to existing tax rules in several countries. This is the case, for example, with the proliferation of preferential personal income tax regimes designed to attract investment and/or high-skill labour. More than not decreasing inequalities, it can be argued that these regimes violate formal equality – or in tax terms, horizontal equity. Is this violation acceptable in the context of other policy aims, such as ensuring adequate labour supply or promoting economic growth? As of yet, there is no record of constitutional challenges in countries where these regimes are in place, but several countries – including some with no such regimes in force – have reported ongoing public debates on the matter.

Another critical example are environmental taxes –or environment-focussed excises taxes– designed to address the negative environmental externalities of consumption. Here too, more than failing to decrease inequalities, it can be argued that these taxes increase income inequality in the immediate-term, as they are known to be generally regressive; even if in the medium to long-term they can decrease environmental inequality. Thus, whilst the term fair taxation is often used alongside sustainability – as in "fair and sustainability taxation" – the two aims can often be contradictory: sustainable tax policy will often not be fair, at least on the immediate term, and fair taxation will often not be sustainable. This public framing, which implicitly rejects the existence of a trade-off, (whether consciously or unconsciously) may also explain the limited public debate so far on the matter. Yet, as the Yellow Vests protests demonstrate, this is unlikely to continue as the popularity of these regulatory taxes increases, and awareness of their distributional consequences grows.

Fourth, although there is often a tendency to concentrate on income, and more recently wealth inequality, there are many types of non-economic inequalities, including gender, race, age, sexual orientation, or ethnicity. Moreover, the concept of intersectionality of inequality must be taken into consideration: social categories, such as race, class, or gender are interconnected, and thus can create overlapping and interdependent systems of privilege on one hand, or discrimination and inequalities, on the other hand. Addressing one inequality via the tax system may therefore result in enhancing another, and the key question as regards the exercise of the constitutional mandate on equality will often be one of inwards inequality trade-offs: which inequality should the tax system give priority to? These inwards inequality trade-offs are often evident in measures designed to address gender inequality. For example, several countries have adopted tax policy measures to address gender inequality, and increase women's access to the workforce, such as childcare or, even more poignantly, housework tax credits; these credits, however, will by nature tend to benefit more women on higher incomes, and may have negative distributional effects. They therefore, purposively or not, *de facto* prioritise gender inequality over income inequality – even though public awareness on this hierarchy of inequalities is largely absent.

More recently, the preferential tax treatment of the elderly, particularly – although not exclusively – in the form of lower personal income taxation of pensions, has come to the fore of discussions on inwards inequality trade-offs. Many countries have traditionally applied these preferential tax treatments with the aim of addressing age inequality, and protecting the elderly as a vulnerable group. Yet, as the elderly progressively become wealthier than other age groups – a global phenomenon often linked to property values – discussions on inter-generational inequality are becoming more common. Should the tax system give priority to age inequality over growing wealth inequality? Subjacent to the choice of keeping these preferential regimes is therefore a fluid *de facto* hierarchy of inequalities, even where it is clear that the choice owes more to the political economy challenges of removing preferential treatment from a – high-voting – group, than to careful considered design.

Fifth, the above dynamics, as regards preferential tax treatment of the elderly, are symptomatic of a much wider issue, namely that when it comes to addressing inequalities through the tax system, the political economy of tax policy is a critical –and often an underappreciated – consideration. The best tax policy, which delivers on the constitutional mandate for equality in a perfectly balanced equilibrium of trade-offs, means very little if it lacks the public support that enables it to become law. This role of political economy in determining taxation policy has been increasingly acknowledged as a response to an easily observable gap in traditional tax policy analysis: policy outcomes are often sub-optimal, and thus hard to understand without also appreciating political dynamics. Yet, even political economy studies are often based on assumptions of (a majority) rational voters, exercising their voting right based on rational self-interest, even though this assumption does not easily explain many of the observable tax preferences. In reality, the political economy of taxation is also dependent on often unconscious, psychological and sociological phenomena. These phenomena are particularly evident in debates regarding taxation and inequalities.

A key example of these dynamics is the historical link between rising economic inequality and decreasing redistributive tax policies. While this is a well-known paradox that has been subject to multi-disciplinary investigation, the strength and the universality of public opposition to inheritance taxes in the context of stated concerns over wealth inequality is still surprising. This opposition seems to be particularly strong insofar as these taxes apply to inheritances between close family members –namely descendants and spouses– leading countries that still have inheritance taxes to provide broad scope exemptions or reductions to inheritances between those close family members. Although, the unpopularity is undoubtedly partly self-motivated, self-motivation by itself cannot explain this level of opposition given that most taxpayers are unlikely – by virtue of high-thresholds and exemptions – to ever pay these taxes; nor can this unpopularity be attributable to specific policy features of domestic inheritance taxes, as it is often defended, given that it is common to all inheritance taxes, regardless of their specific domestic features. Clearly something else is driving negative perceptions, and the apparent contradiction in tax preferences. There is likely more than one factor at play. The drive towards identity sentiments, and decrease in social cohesion that result from feelings of anxiety and insecurity associated with high or rising inequality are a plausible driver; but probably even more important in the context of inheritance taxes is the sociological principle of family unit. Those taxes are perceived to violate a basic principle that recognises the family as a group unit. Recognition of the importance of these phenomena does not necessarily mean acquiescing to the public's tax intuition, but it means that consideration must be given to them, in order to ensure public buy-in for tax policy that fulfils the constitutional equality mandates.

Sixth, and finally, not just legal design, but law enforcement must also respect the constitutional mandate on equality and non-discrimination. Procedural law and administrative practice can have a very significant impact on inequalities – even if this is often unacknowledged, and the focus on enforcement elasticities, and revenue maximisation can enhance economic inequality. Tax amnesties are a paradigmatic example. A common practice in many countries, at times approved during fiscal stress periods with the aim of rapidly increasing revenue intakes, they raise significant concerns from an equality perspective. Indeed, similarly to preferential personal income tax regimes, more than not decreasing inequalities, it can be argued that amnesties violate formal equality –or in tax terms, horizontal equity– and increase inequalities, most obviously income and wealth.

Another key example is the digitalisation of tax administrations, and the use of AI as a tax compliance-enhancing tools. There are many advantages to process of digitalisation of tax procedures, the biggest of which –although by no means, only advantage– is its effectiveness. Yet, in many countries there is a growing awareness that it can also enhance existing inequalities, not only income, but also gender, race, age and disability. So, the use of technology by tax administrations can decrease inequalities, by ensuring higher levels of compliance, while at the same time increasing inequalities. This apparent paradox can be ameliorated, even if not completely eliminated, by putting in place adequate legal guarantees, and compliance support; but it first this requires acknowledgment of the challenges of digitalisation of tax administrations to equality.

It has been said that for every complex problem there is an answer that is clear, simple – *and wrong*. It is of course true that the intuitive appeal, elasticity and simplicity of the 'fair taxation' term is more likely to galvanise the public, than saying that yes, we can have a fairer tax system, but it's complex, and here are the various things you need to consider in order to achieve it. But progress is possible – even in taxation. Awareness of the societal damage that results from tax non-compliance, for example, is an area where massive gains have been made over the last two decades.[522] The complexity of the task at hand should not therefore make us shy away from engaging fully with it. The costs of failing to do so are too significant: for tax systems, for inequalities, and ultimate for our societies as a whole. If we want fairer tax systems, then we need to fight for them; and that means moving away from simple answers, and engaging fully with the complex ones.

This chapter, and the extensive reporting that follows, represent a fresh attempt to wrestle with these complexities, to advance both academic research agents and advance tax policy debates to a new space. To furnish the intellectual, empirical and indeed rhetorical ammunition, to challenge the harmful simplicities that proliferate tax reform agendas for addressing inequalities, and to provide the normative compass to negotiate the tricky complex choices that lie ahead. Let it not be said that we were not found wanting in our efforts to move beyond easy simplism in addressing some of the most challenging research and policy issues of our time.

[522] M. Mendoza Avina et al, "Outgroup Bias and the Unacceptability of Tax Fraud" (2024) *Political Studies Review* 22(1), 223-231.