

# Fiscal Impoverishment in Rich Democracies

Manuel Schechtl<sup>1</sup> and Rourke L. O'Brien<sup>2</sup>

<sup>1</sup>Stone Center on Socio-Economic Inequality, Graduate Center, City University of New York

<sup>2</sup>Yale University

This article introduces *fiscal impoverishment* as a framework for comparative poverty research. We invert standard analyses of welfare state policy and household poverty by focusing not on poverty alleviation but poverty creation and exacerbation. Using harmonized household survey data, we show how the income and payroll taxes most rich countries rely on to finance the public sector serve to push households (further) into poverty. We estimate that across rich democracies on average about one in four households in poverty are made poorer on net after taxes and transfers; with fiscal impoverishment levels ranging from <10% in some countries to more than 70% in others, revealing extreme cross-national variation in how the pocketbooks of poor households are impacted by national tax and transfer policy. We go on to show that fiscal impoverishment does not track with standard measures of welfare state generosity but is instead largely determined by design of income tax systems, particularly a country's relative reliance on (regressive) payroll taxes versus (progressive) income taxes. We consider the implications of fiscal impoverishment for assessing welfare state performance and for comparative poverty research.

## Introduction

Welfare state scholars have long emphasized the primacy of policy in explaining cross-national variation in poverty-related outcomes and, more recently, of poverty itself (Brady 2009; Gornick and Smeeding 2018; Alper, Huber, and Stephens 2020; Marx, Salanauskaite, and Verbist 2016). Recent work by Brady, Finnigan and Hübgen (2017) convincingly demonstrates that cross-national differences in household poverty rates are due not to differences in the prevalence of poverty-associated risk factors—such as low education, single parenthood, young headship, or non-employment—but rather variation in the penalties attached to those risks. When analyzed in comparative perspective, it is undeniable that most rich democracies have the fiscal capacity to eliminate poverty. This is evidenced in study after study detailing how enhanced income

We are grateful for comments on this paper from many scholars, especially from David Brady, Andreas Haupt, Philipp Lersch, Adrian Sinfield, Timothy Smeeding, and Emanuela Struffolino as well as participants of the annual conferences of the Social Policy Association and the European Consortium for Sociological Research. Manuel Schechtl's research was funded by the Support Network for Interdisciplinary Social Policy Research (FIS) of the German Federal Ministry of Labour and Social Affairs. The research leading to these results has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 730998, InGRID-2—Integrating Research Infrastructure for European expertise on Inclusive Growth from data to policy. Corresponding author: Manuel Schechtl, Stone Center on Socio-Economic Inequality, Graduate Center, City University of New York, 365 Fifth Avenue, New York, NY, 10016. Tel.: (929)-662-9075. Email: [mschechtl@gc.cuny.edu](mailto:mschechtl@gc.cuny.edu).

Received: September 13, 2022. Revised: August 11, 2023. Accepted: September 5, 2023

© The Author(s) 2023. Published by Oxford University Press on behalf of the University of North Carolina at Chapel Hill.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

transfers—to pensioners, the unemployed, the disabled, to households with children—would reduce poverty and mitigate its negative effects on individual, household, and societal well-being (see, e.g., Caminada et al. 2020; Worts, Sacker, and McDonough 2010). In the welfare states literature, persistent poverty in rich democracies results from a failure to take policy action.

Yet, poverty is not only the consequence of policy inaction; in every rich democracy, some poor families are made poorer still as a net result of the tax and transfer system, that is, as a direct result of government policy. Household disposable income is the net of market income, transfer income, and income taxation (including payroll taxes for social insurance). Just as transfer income can lift households out of poverty, income taxation can push people (further) into it. Yet, despite substantial research detailing the role of government transfers in reducing rates of household poverty and augmenting the incomes of the poor (see, e.g., Gornick and Smeeding 2018; Caminada et al. 2020), less direct attention is paid to how income taxes increase household poverty rates and reduce the disposable income of poor households.

This article introduces and empirically motivates *fiscal impoverishment* as a construct for use in comparative welfare state research. Building on prior work detailing the effect of taxation on household poverty in developing countries (Higgins and Lustig 2016) and subnational contexts (Kleiman 2021; Newman and O'Brien 2011), our aim is to reveal how the income taxes most rich countries rely on to finance the public sector in many instances also serve to create and exacerbate household income poverty. Using harmonized microdata from the Luxembourg Income Study Database (LIS 2021), we examine two primary research questions: First, across rich democracies, what percentage of households in poverty saw their income reduced as a net result of national income tax and transfer policy? And second, on average by how much is their household income reduced? Our aim is to reveal both the “level” and “intensity” of fiscal impoverishment across welfare states.

In each of the twenty-five countries in our sample, we find a substantial number of poor households paid more in income taxes to the government than they received in the form of income transfers. On average across countries, we find about one in four poor households saw their household income reduced as a net result of national tax and transfer policy. Yet, we also find tremendous variation across welfare states, with fiscal impoverishment levels ranging from <10% of all poor households in Finland to more than 70% in Italy. For these fiscally impoverished households, the net loss to income is often substantial, with average intensity ranging from around 5% of the national poverty line (in the United States about \$1000) in Australia and Canada to almost 15% in Greece and Switzerland, underscoring stark cross-national variation in how income tax and transfer systems impact the pocketbooks of poor households.

Our study makes several contributions to the literature on poverty and welfare states. First, we invert the standard approach to analyzing welfare state policy and household poverty by focusing not on poverty alleviation but poverty creation. In quantifying the fraction of households in each country who are made poor as a net result of taxes and transfers, we provide an additional metric for scrutinizing how policy differences shape cross-national variation in household poverty rates. Second, we move beyond the literature’s preoccupation with who is poor and who is not to detail the number of impoverished households in each country who saw their incomes reduced as a net result of national income tax and transfer policy; measuring how policies shape the disposable income of the poor, we argue, is just as important as counting how many families fall above and below the poverty line. Third, we show that cross-national variation in fiscal impoverishment does not track with standard measures of welfare state generosity but is instead a function of policy design: the generosity of transfers targeted to working-age families and the relative reliance on (regressive) social insurance contributions versus (progressive) personal income taxes together determine the level and intensity of fiscal impoverishment across welfare states.

Beyond the numbers, fiscal impoverishment offers a theoretical lens for evaluating welfare state performance in the twenty-first century. As we argue below, whether a low-income family finds their household income is increased or decreased as a net result of national income tax and transfer policy is a threshold that is both materially and politically salient. Measuring fiscal

impoverishment in a comparative perspective may therefore yield new insights into the policy drivers of cross-national variation in preferences for redistribution and attitudes toward the welfare state. Ultimately, our framework reveals that many welfare states simply take more income from poor families through direct income taxation than they provide in income transfers, underscoring the anti-poverty potential of adopting either more progressive income tax schemas that exempt the poor from income taxation or enhanced transfers to offset tax liabilities.

## Fiscal Impoverishment and Welfare States

Welfare state scholarship has long examined the policy and institutional determinants of cross-national variation in poverty and inequality. Starting with Esping-Andersen and Standing's "Three Worlds of Welfare Capitalism" (1990), a vast literature emerged classifying welfare state regimes based on the level of public sector investment in education, healthcare, and retirement security and the generosity of programs targeted to vulnerable populations such as the disabled or unemployed. Taxation was invoked typically in reference to the scale of dollars needed to fund social investments, noting that more generous welfare regimes tend to be financed by more regressive tax systems (Kato 2003; Prasad and Deng 2010; Steinmo 1993; Wilensky 1976, 2002).

In this early comparative literature, the United States stood out for having markedly lower levels of social spending. This was shown to be illusory, as new work detailed how substantial welfare state spending in the United States is "hidden" (Howard 1999) or "submerged" (Mettler 2011) in the form of tax expenditures, policies that reduce tax burdens as an incentive and/or subsidy for individuals to provide for their own higher education or retirement security or health insurance coverage. Tax policy came to be understood as a key site of welfare state policymaking. Incorporating tax expenditures into estimates of total welfare state spending revealed that the United States is not a laggard relative to other countries in terms of total dollars spent, although those moneys are spent less efficiently and with less redistributive effect. To the extent that tax expenditures impacted household bottom lines, studies found benefits largely accrued to middle- and upper-income households (Avram 2018).

Parallel advancements in the harmonization of cross-national household survey data made possible through the Luxembourg Income Study (LIS) facilitated a new type of comparative welfare state research. This ever-evolving literature details the effects of "tax and transfer" programs on aggregate inequality and household poverty across countries and demographic subgroups. A key advance is the focus on household disposable income, also known as "post-tax and transfer" income. The difference in poverty and inequality levels calculated using pre-versus post-fisc income has become a key metric for assessing the impact of tax and transfer policy (Gornick and Smeeding 2018; Kenworthy 1999; Mahler and Jesuit 2006), and has facilitated a bevy of comparative research on the social, structural, and policy determinants of cross-national variation in the intensity and nature of redistribution (Alper, Huber, and Stephens 2020; Diris, Vandenbroucke, and Verbist 2017; McCabe and Berman 2016; Smeeding 2006), including a productive line of inquiry examining the relative efficacy of "targeted" versus "universal" policies in reducing poverty and mitigating market income inequality (Brady and Bostic 2015; Brady and Burroway 2012; Korpi and Palme 1998; Marx, Salanauskaitė, and Verbist 2016; Jacques and Noël 2018).

This focus on the "net effect" of taxes and transfers seeks to better approximate household disposable income and, with it, a household's relative economic position and level of precarity or privilege. Yet, despite perennial studies detailing the extent to which national transfer programs (do or do not) lift households out of poverty (Immerovoll and Richardson 2011), there has been no systematic evaluation focused explicitly on how national tax and transfer systems in wealthy democracies push households (further) into poverty.

To be sure, prior work has considered the impact of direct taxation on poverty outcomes across countries and household types. For instance, recent studies demonstrate that the impact of taxes on the disposable income of low-income households varies widely across policy contexts (Marchal and Marx 2017), that families with children often perform better when tax-benefits are tied to

the presence of dependent children (Immervoll, Sutherland, and Vos 2001; Chzhen and Bradshaw 2012), and that policy efforts to “make work pay” led to an increase in the use of tax credits (Martin 2015; Pedersen and Picot 2023). Countries differ not only in the generosity of income replacement schemes in times of unemployment but also in how they use tax and transfer systems to support part-time workers, low-wage workers, and parents with childcare responsibilities (Marx, Nolan, and Olivera 2015; Aerts, Marx, and Parolin 2022). These studies do consider the impact of direct taxation on household disposable incomes (e.g., Aerts, Marx, and Parolin 2022), yet they typically do not emphasize how income taxes push some households (further) into poverty.

There is some work examining how taxation increases household poverty in low-income, developing countries (Lustig 2017; Higgins and Lustig 2016). Examining the role of direct and indirect taxes, Lustig, for example, finds that taxation increases the extreme poverty headcount in more than a third of the low-income countries studied (Lustig 2017). She further finds that in most developing countries, more than 30% of poor households are fiscally impoverished, i.e., on net see their incomes reduced after taxes and transfers. Notably, the poor are made poorer in these countries even though the tax and transfer systems are overall progressive and serve to reduce inequality.

There is also work examining fiscal impoverishment by subnational governments, particularly in the United States. This includes work by Newman and O’Brien (2011) who estimated total state income and sales tax liability for a representative household comprising three persons with income equal to the Federal poverty line. They find substantial heterogeneity in how state tax systems impact poor households: in some states, already poor families are taxed substantially further into poverty due primarily to high sales taxes (including on essentials such as food) whereas in other states poor families are lifted above the poverty line thanks to state refundable tax credits. More recent work by Kleiman (2021) extends this analysis to simulate the net effect of income and payroll taxes at the federal level as well as sales, income, and property taxes on the local level on the financial well-being of different household types above and below the poverty line. These analyses reveal how tax policy impacts the financial well-being of poor households with consequences for social outcomes (Newman and O’Brien 2011); yet, within-country variation in taxing the poor is dwarfed in scope by cross-national variation.

## Material and Political Salience of Fiscal Impoverishment

It is conceptually inaccurate to attribute the difference between pre-tax and post-tax poverty and inequality levels to the “effect” of taxation (Martin and Prasad 2014). Taxation is a powerful policy tool with myriad direct and indirect—potential and realized—effects on the behavior of individuals and firms and governments that in turn shapes the (pre-) distribution of market income and the financing, availability, and generosity of government transfers and social programs (Bergh 2005). This distinction is important for our theoretical and empirical understanding of the workings of the welfare state. Yet, it is not how individual citizens understand or experience taxation.

We argue that fiscal impoverishment is materially salient for households and, by extension, politically salient for how they evaluate public policy and the welfare state (Gamage and Shanske 2011). In short, we argue it matters to economic behavior and political preferences whether and to what extent a household is impoverished as a net result of the tax and transfer system.

Here, we take inspiration from legal scholars Murphy and Nagel (2002) who argue that lay assessment of what is fair and what is not in the realm of taxation is distorted by a form of “rights-based libertarianism” that “infects much everyday thinking about tax policy” (Murphy and Nagel 2002, 31). A key heuristic people use in calculating their own tax burden is to take “pre-tax” income as the baseline and compare that to their net or “post-tax” income. What one’s income *would be* in the absence of income taxation becomes the benchmark for evaluating tax policy. This reasoning proceeds by positing a world without taxation and consequently without government; a world that cannot, in fact, exist as government is essential to the enforcement of

property rights and the functioning of the free market required to earn income in the first instance (Gamage and Shanske 2011; Holmes and Sunstein 2000). Nevertheless, individuals are acutely aware of their pre-tax income and assign to it a particular moral value; these are dollars they are “fundamentally entitled” to, motivating the political belief that “what happens to that money is morally speaking *entirely* a matter of our say-so” (Murphy and Nagel 2002, 34–35; emphasis in original). The ubiquity of this framework for understanding and evaluating taxation is evidenced in the political messaging of tax cuts as an effort to “give us back ‘our money’” (Murphy and Nagel 2002, 35).

The logical prioritizing of “pre-tax” income is reinforced in everyday life. Job advertisements list gross salary or wage levels and this is the number individuals respond with when asked to report their income. However, wages and salaries are not the only dollars households “count” in their pre-tax income; households are also acutely aware of income transfer levels, e.g., the amount of monthly child allowance benefit payments. This, too, is factored into household calculations of “pre-tax” income. Even transfers delivered via the tax code, such as the refundable Earned Income Tax Credit in the United States, come to be understood and relied upon as a key component of household income even if the lump sum annual transfer leads households to imbue it with special meaning and designate for special purposes (Sykes et al. 2015).

For households, market and transfer income are viewed as dollars “coming in” that establish a pre-tax baseline whereas income taxes are viewed as dollars “going out” that establishes the disposable income available to make ends meet. A basic insight of behavioral economics is that people are attuned to “losses” and “gains” and, moreover, that the pain felt from loss outweighs the benefit felt from an equivalent gain (Kahneman and Tversky 1979). Here, it does not matter whether a given policy is technically a “tax” or a “transfer” but instead whether the policy “adds to” or “takes from” income—refundable credits are technically a tax policy but are viewed as a transfer if and when it “adds to” their market income.

Of course, income taxes are not the only taxes people pay. Yet, consumption taxes do not factor into household heuristics used to calculate disposable income. Nor do other forms of indirect taxation, e.g., corporate net profits tax paid via higher prices or property taxes paid via higher rent or myriad user fees. Indirect taxes are “hidden taxes” that affect the cost of goods and services which households purchase using their disposable income<sup>1</sup>; disposable income is the binding budget constraint from which other taxes must be paid. For households, then, the contribution of government tax and transfer policy to disposable income is materially and politically salient.

## Determinants of Fiscal Impoverishment

What determines cross-national variation in fiscal impoverishment? A starting intuition is that fiscal impoverishment will track with welfare state generosity; just as more redistributive regimes have less overall household poverty, we might expect more redistributive regimes to have less fiscal impoverishment. This further suggests the upstream determinants of fiscal impoverishment will be the same factors sociologists and political scientists have long argued explain cross-national variation in redistributive intensity, including left power resources (e.g., union density) and institutional characteristics (e.g., veto points and constitutional structure) (Alper, Huber, and Stephens 2020).

Yet, there are also reasons why we might not expect fiscal impoverishment to differ as a function of welfare state generosity and redistributive intensity. In short, fiscal impoverishment is determined not by the overall level of income transfers or income taxation but instead by their joint effect on income for households at a specific part of the income distribution, namely, working-age families near the relative poverty threshold. For these households, the generosity of pension programs will have no impact on fiscal impoverishment whereas the existence and generosity of family or child allowances will be a critical determinant.

Of course, only taxes (not transfers) can reduce household income. Therefore, cross-national variation in the structure of income taxation will likely be the key determinant of fiscal

impoverishment. And though welfare state analyses find countries tend to cluster into “worlds” or “varieties” of welfare capitalism with broadly similar income transfer policies, the structure of their revenue systems—how nations finance the public sector—differ markedly (Hicks and Kenworthy 2003). This includes, for example, relative reliance on consumption taxes (e.g., VATs, sales tax, excise taxes) versus taxes on the income of households and corporations (for more on cross-national variation in welfare state financing, see Castles and Obinger 2008; Prasad and Deng 2010; Kato 2003; Ganghof 2006). There are also important cross-national differences in the policy design each revenue instrument that determine the distribution of tax incidence across households (see, e.g., Atkinson et al. 2017; Leventi, Sutherland, and Tasseva 2019; Figari and Verbist 2014; Guillaud, Olckers, and Zemmour 2020; Amoureux, Guillaud, and Zemmour 2019; Hick and Lanau 2019; Hicks and Kenworthy 2003).

Consider taxes on household income, the dimension of tax policy that determines fiscal impoverishment. In some countries (e.g., Germany), taxes on low-income households come primarily in the form of mandatory social insurance contributions. Also known as payroll taxes, this form of taxation on household income typically has a flat rate schedule with revenues earmarked for specific social programs. Yet, in other countries (e.g., Denmark and Australia), taxation on household income is accomplished primarily through the personal income tax. Personal income taxes are typically designed—with personal and dependent exemptions, tax credits, and progressive rate schedules—to yield a more progressive distribution of tax incidence across income levels and household types relative to social insurance contributions. In the analyses below, we therefore expect to find rates of fiscal impoverishment to be higher in countries with income tax systems more reliant on (relatively regressive) social insurance contributions compared to those more reliant on (relatively progressive) personal income taxes.

## Data and Analytic Approach

To examine fiscal impoverishment in comparative perspective, we draw on household microdata from the Luxembourg Income Study Database. LIS is a collection of representative household data that is harmonized to facilitate comparisons across countries. Following previous research, we select from the LIS all rich democracies (Brady and Burroway 2012) with complete information on taxes, transfers, and household demographics yielding information on twenty-five OECD countries. All countries in our sample provide gross and net income information. Most of the underlying surveys collect gross income before income and payroll taxes. In these cases, the national data provider simulated taxes and contributions (from gross to net microsimulation) to get detailed information on taxes and disposable income. In Greece and Italy, income information is collected net of income and payroll taxes. Here, the national data provider simulated taxes and contributions based on net incomes (from net to gross microsimulation). Hence, all datasets provide comparable information on income and payroll taxes as well as gross and net income.

For each country, we use the most recent year of data available. Essential for this study, all countries have complete household-level information on income taxes and social security contributions paid, as well as cash transfers received. The underlying data are based on information from tax registers or, where applicable, simulated by the national data provider based on the tax-benefit policies in each given year. All monetary information is top and bottom coded and equivalized to household size using the square root of household members as well as ppp-adjusted to 2017 USD.<sup>2</sup> We restrict our sample to all households without members older than 65 in order to avoid confounding by the share of pensioners and the generosity of pension schemes in a given country or a given point in time.<sup>3</sup>

## Measuring Fiscal Impoverishment: Levels and Intensity

We aim to measure two aspects of fiscal impoverishment: level and intensity. Fiscal impoverishment level captures the share of persons in households with disposable income that is both less than their market income and below the poverty line—in other words, the percentage of individuals who are made poor or poorer as a result of income taxation. While the originating

measure of fiscal impoverishment in developing countries applies an absolute poverty line, we construct country-specific poverty thresholds set equal to 60% of median disposable income. We argue that a relative poverty line is more appropriate given our focus on rich democracies. We then assign an indicator of fiscal impoverishment for all households that have market income above the poverty line but disposable, i.e., after-tax and transfer, income below the poverty line. We additionally assign this indicator for all households that have market income below the poverty line and an even lower disposable income.

Formally, fiscal impoverishment indicator equals one whenever  $y_i^0 < y_i^1$  and  $y_i^0 < z$ , where  $y_i^1$  indicates income of household  $i$  before taxes and transfers,  $y_i^0$  represents disposable income after taxes and transfers, and  $z$  is the poverty line (Higgins and Lustig 2016).

We also measure the intensity of fiscal impoverishment, i.e., the degree to which poor households are made worse off as a net result of the tax and transfer system. We first estimate the average income reduction among all impoverished households. For households that are in poverty both before and after taxes and transfers, this equals the absolute difference between market income and disposable income ( $y_i^1 - y_i^0$ ). For households that are non-poor before taxes and transfers but poor afterwards, this equals the absolute difference between the poverty line and disposable income ( $z - y_i^0$ ). To facilitate comparisons across countries, we translate these dollars into a fraction of the national poverty line. Fiscal impoverishment intensity therefore captures the degree to which the tax and transfer system pushes households below the poverty line (Higgins and Lustig 2016).

## Examining Determinants of Fiscal Impoverishment

In order to examine the determinants of cross-national variation in fiscal impoverishment, we first need to construct a summary measure of the relative extent to which the country context yields fiscal impoverishment. We do so by estimating a linear model by OLS where we predict household fiscal impoverishment as a function of household sociodemographic and economic characteristics and country-level fixed effects.

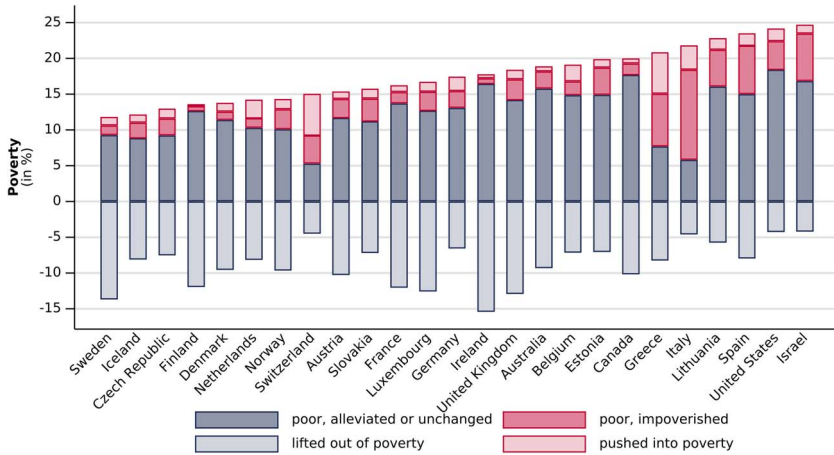
Our baseline equation is as follows:

$$\text{fiscal impoverishment}_{ij} = \beta_0 + \beta_1 \text{household characteristics}_{ij} + u_j \text{FE} + \varepsilon_{ij}$$

where **household characteristics**<sub>ij</sub> refer to attributes of household  $i$  in country  $j$  and  $u_j \text{FE}$  indicates the fixed effect for country  $j$ . Fiscal impoverishment refers to either our level or intensity measure. At the household level, we include measures of household composition (couple, small family (up to two children), large family (three plus children), single parent, single, or other), an indicator if anyone in the household is unemployed, an indicator if there are multiple earners in the household, and gross household income (logged). Standard errors are clustered at the country level.<sup>4</sup>

We then recover the estimated coefficient on each country-fixed effect relative to the grand mean of all countries; net of household covariates, this coefficient provides a useful summary metric of the relative extent to which that country's characteristics increase fiscal impoverishment levels. This captures the overall effect of national tax and transfer systems on fiscal impoverishment.

We then use the welfare state generosity measure from the Comparative Welfare States Data Set (Brady, Huber, and Stephens 2020) to explore whether generosity tracks with cross-national variation in fiscal impoverishment. To examine variation as a function of income tax structure, we draw on the share of personal income taxation levied as payroll taxes versus income taxes from OECD data (OECD 2020) to assess whether a stronger reliance on payroll taxes is related to higher levels of fiscal impoverishment. For supplementary analyses, we use measures of union density, left cabinet, right cabinet, and the share of women in parliament from the Comparative Political



**Figure 1.** Poverty and levels of fiscal impoverishment

Data Set to explore upstream political and institutional determinants of welfare state policy (Armingeon, Engler, and Leemann 2022). All statistical code is made available for replication.

## Results

### Section 1: Levels and Intensity of Fiscal Impoverishment in Rich Democracies

#### Overall levels of fiscal impoverishment

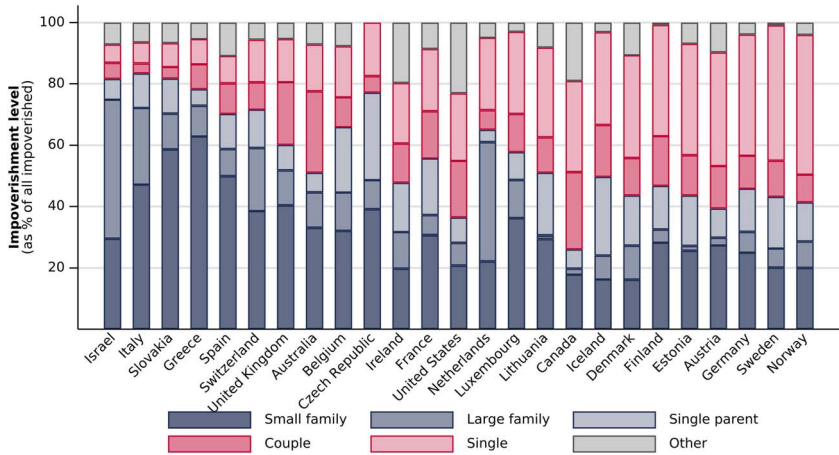
Figure 1 decomposes the effect of tax and transfer systems on household poverty in each country.<sup>5</sup> The light blue bars on the negative scale depict the percentage of households in each country with market incomes below but disposable income above the poverty line—these households are lifted out of poverty as a net result of income taxes and transfers. In most countries, the poverty rate would be around five percentage points higher in the absence of direct household transfers; in the Anglo-liberal countries of United Kingdom and Ireland that number balloons to more than 10 percentage points, underscoring the critical role government transfers play in reducing poverty in those countries.

The positive scale depicts the percentage of households with disposable, i.e., post-tax and transfer or “post-fisc,” income below the national poverty line. The height of the bars corresponds to the “official” poverty rate in each country, capturing the fraction of households with equivalized disposable incomes < 60% of the national median income. Consistent with previous research (e.g., Gornick and Nell 2018), poverty rates are generally lower in northern European countries and higher in southern European and English-speaking countries.

The color segments decompose these poor households into three groups. The dark blue segment at the base of each bar reveals the percentage of poor households with a disposable or post-fisc income that is equal or greater than their market income. These households on net benefit from or are unaffected by the tax and transfer system, although their disposable income remains below the poverty line.

The dark red segment reveals the fraction of households with market income already below the poverty line who are pushed further into poverty as a result of income taxation; these already poor households are made worse off as a net result of the tax and transfer system. Finally, the light red segment captures the fraction of households with market income above the poverty line who are nevertheless pushed into poverty as a net result of the tax and transfer system. The dark and light red bars represent households that are fiscally impoverished.





**Figure 2.** Levels of fiscal impoverishment by household type. *Note:* Small family refers to a couple household with less than three children, large family to a couple with more than two children.

There are several patterns to note. First, although the Anglo-liberal countries (Ireland, Canada, Australia, United Kingdom, and United States) have relatively high overall poverty rates, the fraction of households who are fiscally impoverished is relatively low. This is driven in part by the use of generous, often refundable, tax credits as anti-poverty policy in these countries. That is, countries have different tools to “make work pay”; while some maintain higher wage levels through supporting collective bargaining, others (such as the Anglo-liberal countries) provide transfers to increase low paid workers’ disposable income (Pedersen and Picot 2023), thereby reducing fiscal impoverishment.

There are, of course, also other means to limit fiscal impoverishment. For instance, a joint income tax assessment is known to be beneficial for couples and families (Schwarz 2012). It is therefore not surprising that a country like France—where joint assessment of families substantively reduces the tax burden—has relatively low levels of fiscal impoverishment. This stands in stark contrast to the situation in Switzerland, where over a third of households officially in poverty are only poor as a result of income taxation; Switzerland could instantly cut its poverty rate by almost 40% by zeroing out the income tax burden on poor households. In the southern European nations of Italy and Greece—which post relatively high overall poverty rates—the majority of poor households are made poorer as a net result of the tax and transfer system. Poor households in these countries calculating their disposable income after wages, transfers, and income taxes find that the government policy reduces their disposable income on net.

### Fiscal impoverishment by household type

As detailed above, fiscal policies are often targeted to different household types. For example, the difference between the effective tax rates paid by couples versus single persons at the same income level of household income varies markedly across countries. Moreover, households with children are often entitled to child benefits that should, on net, substantially reduce their likelihood of being impoverished by the tax and transfer system. This interpretation is indeed supported by findings from previous research indicating a substantial increase in child support channeled via the tax system in many European countries (Marchal and Marx 2017). To begin examining this, we take the fraction of fiscally impoverished households in each country—the dark and light red segments in figure 1 above—and decompose them into one of six household types: single person, couple, small family (less than three children), large family (three plus children), single parent, or other. Results are presented in figure 2.<sup>6</sup>



**Figure 3.** Mean fiscal impoverishment intensity

First, we find substantial cross-national heterogeneity in the composition of fiscally impoverished households. Second, in most countries, the majority of fiscally impoverished households are those without children; as predicted, the presence of children qualifies households for transfer benefits (or tax credits) that reduce their likelihood of fiscal impoverishment. Single householders in particular account for most of those fiscally impoverished in the Nordic countries. Tellingly, previous research highlighted how the welfare state retrenchment in dual-earner societies, such as Sweden, has substantially increased poverty among single households in particular (Alm, Nelson, and Nieuwenhuis 2020). Yet, the presence of children is not always a buffer against fiscal impoverishment; indeed, in the southern European countries of Italy, Spain, and Greece, the majority of fiscally impoverished households contain children. In supplementary analyses, we formally examine how the presence of children in the household impacts fiscal impoverishment across welfare states by estimating a regression model that includes household-level covariates and an interaction between the presence of children and the country-level fixed effect. Results presented in Appendix figure A3 reveal the descriptive patterns above are indeed the result of variation in tax and transfer policy and not due to differences in sociodemographic composition.

### *Intensity of fiscal impoverishment in wealthy democracies*

Above, we examined cross-national variation in levels of fiscal impoverishment both overall and as a function of household type. Of course, the fiscal impoverishment level only captures movement above and below the poverty line, a discrete threshold. Depending on the shape of the income distribution, substantively small differences in household income can generate large observable differences in overall household poverty rates. If so, fiscal impoverishment may not be economically meaningful or politically salient. We therefore now turn to examine fiscal impoverishment intensity. Figure 3 plots the mean intensity of fiscal impoverishment—that is, the degree to which poor households are taxed further into poverty—in each country measured as a fraction of the poverty line. The bars capture the mean intensity across all households whereas the diamond and circle indicators show intensity for households with and without children, respectively.

First, note the substantial variation in the intensity of fiscal impoverishment across the countries in our sample, with income reduction equal to just a few percent of the poverty line in Ireland to more than 10% in Greece and Switzerland. Between these extremes, in a majority of countries the tax and transfer system on net reduces the income of poor households by more than 5%, a non-trivial sum (equal to around \$1000 in the United States). Also note

that cross-national variation in the intensity of fiscal impoverishment does not perfectly track with variation in levels; although the fraction of households who are fiscally impoverished is relatively low in the Scandinavian welfare states such as Sweden (figure 1), the intensity of fiscal impoverishment among those who are made worse off is relatively high. This again resonates well with recent literature emphasizing more precarious and atypical employment and a substantial retrenchment of the welfare state in the Nordics since the mid-1990s (Alm, Nelson, and Nieuwenhuis 2020).

Finally, there is also variation in fiscal impoverishment intensity as a function of household composition, specifically the presence of children. In some countries such as Norway and Israel, conditional on being in poverty, the intensity of impoverishment does not vary across household types. By contrast, in many central European countries the intensity of fiscal impoverishment is lower for households with children relative to those without; a pattern that is reversed in countries such as Austria and Australia.

Taken together, the results in Section 1 reveal substantial variation in both the levels and intensity of fiscal impoverishment across wealthy democracies. And moreover, both within and between countries, fiscal impoverishment among households varies markedly depending on the presence of children in the household.

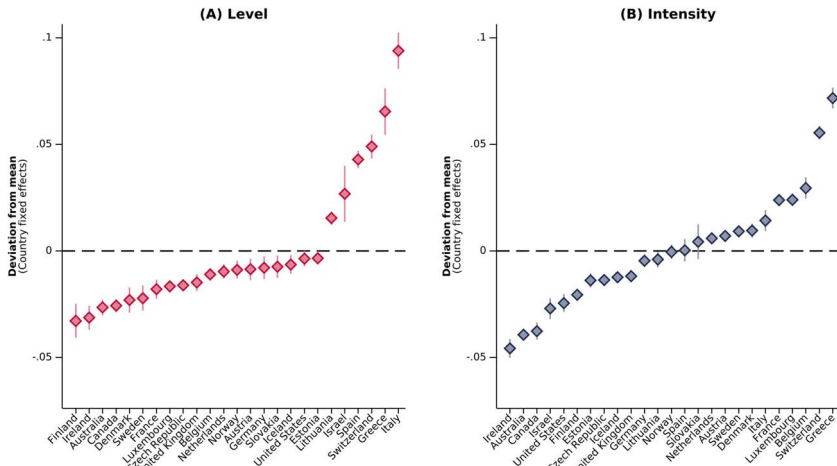
In counterfactual simulations, we ask what poverty and fiscal impoverishment would look like if countries had different tax and transfer systems. We simulate counterfactuals of household poverty and fiscal impoverishment by contrasting the tax and transfer policies of the Anglo-liberal welfare states with their Nordic counterparts. Appendix figures A6 and A7 show that rates of household poverty and fiscal impoverishment would generally be higher in the presence of Anglo-liberal level income transfers and lower in the presence of Nordic level income transfers. At the same time, these analyses reveal that swapping tax systems yields the opposite pattern: poverty would generally be lower in the presence of Anglo-liberal tax systems but would generally be higher in the presence of Nordic style taxes. Notably, we find that every Nordic country would achieve substantial reductions in household poverty if they adopted the Anglo-liberal average income tax policy; a novel finding that underscores the value add of the fiscal impoverishment framework for comparative poverty research.

## Section 2: Determinants of Fiscal Impoverishment

### *Summary measures of fiscal impoverishment*

Given the sometimes-ambiguous distinction between tax and transfer policies (e.g., the earned income tax credit (EITC) in the US context), to examine the determinants of fiscal impoverishment requires us to construct a summary metric that captures the overall effect of each country's income tax and transfer policy. We do so by estimating a linear model by OLS predicting household fiscal impoverishment (binary outcome) as a function of household sociodemographic characteristics and country-fixed effects. We then recover the estimated coefficient on each country-fixed effect set relative to the grand mean of all countries in the sample. This provides a holistic, relative measure of the degree to which each country's system yields fiscal impoverishment, net of household characteristics. We then repeat this process for fiscal intensity (a continuous outcome).

Figure 4, panel A, plots these country-level effects, from lowest (least fiscal impoverishment) to highest (most fiscal impoverishment). The ordering of countries matches what we would expect given the descriptive information in figure 1: the tax and transfer systems of Switzerland and the southern European nations yield relatively more fiscal impoverishment, and the Anglo-liberal countries of Ireland, United Kingdom, and Canada yield relatively less. Panel B on the right depicts the corresponding country-level effect on fiscal impoverishment intensity, with coefficients again presented as deviations from the grand mean. The welfare system in all Anglo-liberal countries yields below-average intensities of fiscal impoverishment, while Greece and Switzerland are well above the mean, also consistent with the descriptive information detailed above.



**Figure 4.** Country-level effect on fiscal impoverishment levels (A) and intensity (B)

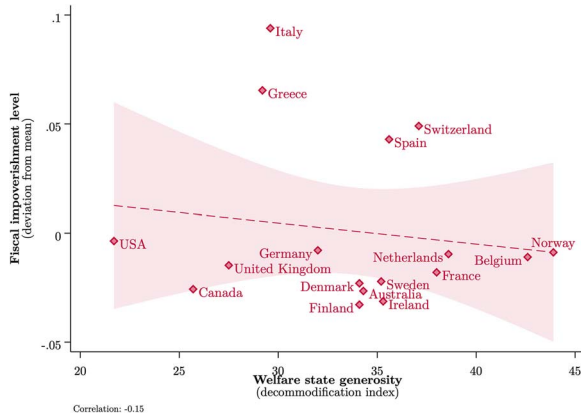
We can use these country-specific fixed effects as a summary measure of the overall effect of the national context on fiscal impoverishment. Notably, this measure tracks well with measures of overall poverty and inequality: in Appendix figure A4, we show that there is a positive relationship between this measure of fiscal impoverishment and the official national poverty rate; fiscal impoverishment is also positively related to disposable income inequality (figure A5).

### Determinants

What accounts for cross-national variation in fiscal impoverishment? To examine this, we plotted the country-specific fixed effect estimated above against union density, left and right party cabinet, and number women in parliament—four determinants of welfare state policy variation in prior work. Notably, none of these explain cross-national variation in fiscal impoverishment (see Appendix figures A8 and A9). Of course, this is expected, as the patterning of fiscal impoverishment across rich democracies revealed in figure 4 does not readily map on to any of the cross-national groupings of welfare state regime types emergent from the vast literature on varieties of welfare capitalism. Figure 5 shows this directly by plotting the country-specific effect of fiscal impoverishment levels from above against a measure of welfare state generosity from the Comparative Welfare State database, a revised version of the decommodification index used in Esping-Andersen’s groundbreaking study (for fiscal impoverishment intensity, see Appendix figure A10). Using this standard summary metric of welfare state policy, we see stark differences in fiscal impoverishment even among countries with similar levels of benefit generosity; for example, impoverishment is much higher in Switzerland compared to France. At the same time, countries with vast and well-known differences in welfare state generosity, such as the United States and Norway, nevertheless have notably similar levels of fiscal impoverishment.

Fiscal impoverishment is not simply another measure of welfare state generosity. It instead captures the joint effect of income taxation and income transfers on households at a specific point in the income distribution, near the relative poverty line. Whether these households are net winners or losers is a function of the design of both income transfer schemas and income tax policy. Given the literature’s standard focus on alleviate poverty via income transfers (net of income taxes), a value add of the fiscal impoverishment framework is revealing how nation states create poverty through income taxation.

There are two different approaches to generate revenue from taxing income: a general household (or “personal”) income tax or mandatory social insurance contributions (aka “payroll taxes”).

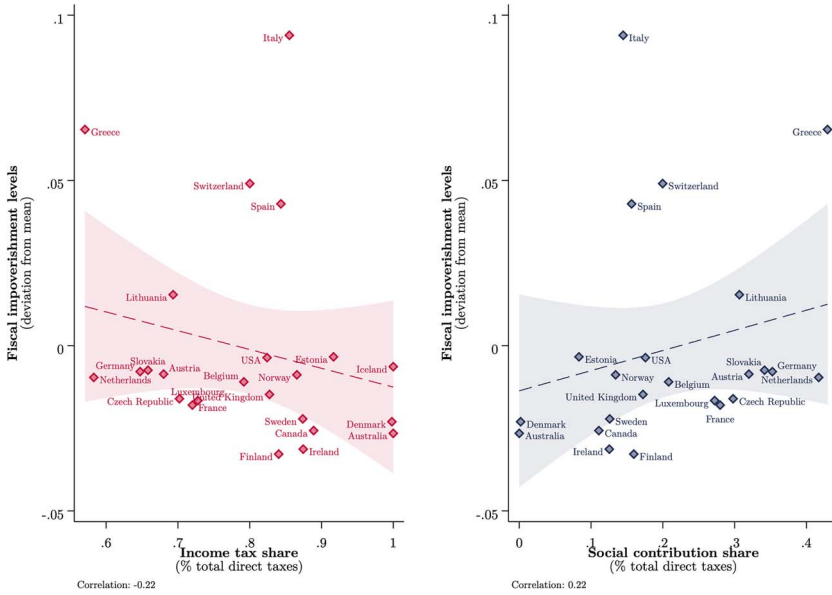


**Figure 5.** The association of welfare state generosity and fiscal impoverishment levels

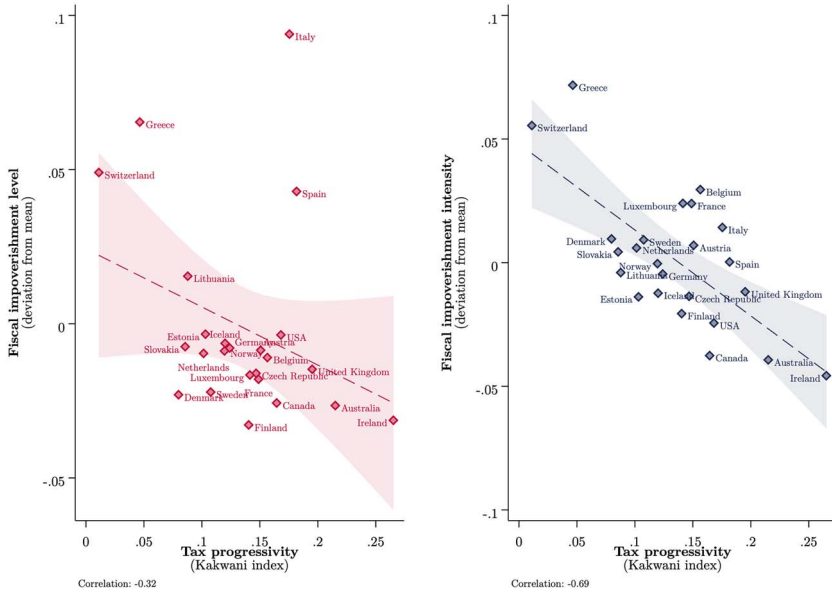
From the government's perspective, these revenue instruments have important differences, namely, that payroll tax revenue is earmarked to finance specific benefits or programs whereas personal income tax revenue is not. A country's relative use of one approach or another is typically the result of historically contingent timing and politics of policy adoption (e.g., payroll tax to finance Medicare in the United States versus general income taxation primarily used to finance NHS in United Kingdom). For households, however, whether the income tax is levied primarily via payroll taxes or the personal income taxes is not materially important; the total effective tax rate determines disposable income. Yet, one key difference between these two forms of income taxation is the distribution of tax incidence: payroll taxes are typically levied as flat rates and are therefore more regressive than personal income taxes, which typically have a progressive rate schedule and often generous personal allowances. For working-age households near poverty, their country's relative reliance on payroll taxes versus income taxes, or more generally on regressive versus progressive forms of income taxation, will likely be a key determinant of fiscal impoverishment.

LIS data do not permit us to distinguish payroll taxes from general income taxes for most of the countries in our sample. We can, however, use national revenue statistics to measure the ratio of total revenue from income taxation coming from payroll taxes versus income taxes in each country and inspect how the structure of income tax revenues correlates with cross-national variation in fiscal impoverishment. Here, we use information from the OECD tax database that measures the share of direct taxation levied as payroll taxes versus income taxes. Results are presented in figure 6 (see Appendix figure A11 for similar patterns on our intensity measure). The right panel shows a positive correlation between a country's reliance on social insurance contributions and the degree of fiscal impoverishment; in countries that rely more on payroll taxes as a means to levy taxes on income, there are generally higher levels of fiscal impoverishment. The left panel shows the inverse: countries that rely more on general income taxes (relative to payroll taxes) having lower levels of fiscal impoverishment.

Consistent with the above, we more generally find fiscal impoverishment tends to be lower in countries with more progressive income tax systems (figure 7). Here, tax progressivity, measured using the Kakwani index (Kakwani and Son 2020), captures the joint distribution of income and payroll taxes (which, we note again, cannot be disentangled at the household level for most countries in the LIS data). Because countries differ in tax rates, schedules, and exemptions, this combined progressivity measure from microdata tracks well with fiscal impoverishment. However, it is important to emphasize that even the most progressive tax systems still fiscally impoverish a substantive share of their poor population.



**Figure 6.** The association between income tax share (left panel) versus social contribution tax share (right panel) and levels of fiscal impoverishment



**Figure 7.** The association between tax progressivity and fiscal impoverishment level (left panel) and intensity (right panel)

In sum, the extent to which national income tax and transfer policy generate fiscal impoverishment depends on not just the overall level of taxation or transfer benefits, but how policy specifics determine their net effect on households in the bottom half of the income distribution. Just as “targeting within universalism” (Marx, Salanauskaitė, and Verbist 2016; Jacques and Noël 2021) in

transfer policy, e.g., in the form of family allowances, will serve to reduce fiscal impoverishment (see Appendix figure A12), so too, targeting the poor with higher effective tax rates on income will serve to increase it.

## Discussion and Conclusion

Household poverty in rich democracies results from politics and policies (Brady 2009). Welfare state scholarship traditionally focuses on how governments can reduce poverty by spending more on income transfers or social insurance schemas or public goods; our findings show governments can also lessen poverty by simply taking less. In every wealthy country examined, we find a considerable share of households below the poverty line would not be so in the absence of income taxation. Moreover, we also find in every country that many already impoverished households are pushed further into poverty as a net result of the tax and transfer system. This fiscal impoverishment is jointly determined by the amount of taxes paid, and the amount of transfer income received, by working-age households near the poverty line. Both income tax policy and income transfer policy are implicated in the production of household poverty.

The fiscal impoverishment framework provides an analytical lens for evaluating welfare state performance, with novel empirical insights. It reveals, for example, that despite higher levels of household poverty in Anglo-liberal regimes, poor households in these countries are more likely to be net “winners” after income taxes and transfers than their counterparts in the more redistributive regimes of continental and northern Europe. This framework also reveals how household composition moderates the threat of fiscal impoverishment across countries: in the more individualistic Scandinavian countries, childless households account for the vast majority of the impoverished, whereas in the familialistic Mediterranean welfare states, it is households with children who are more likely to be fiscally impoverished. Fiscal impoverishment, therefore, adds key information on welfare state performance that is different from and serves as a complement to traditional measures such as overall household poverty or the level of income inequality.

Our results show that neither welfare state generosity nor the well-known correlates of cross-national variation in poverty (including union density and left government) explain variation in fiscal impoverishment. We show that countries that rely more heavily on social security contributions, and in turn have less progressive tax systems, have higher levels (and intensities) of fiscal impoverishment. Our emphasis on poverty creation focuses our attention to characteristics of the tax system, as only taxes can reduce disposable incomes of the poor. Yet, fiscal impoverishment is ultimately the result of the joint distribution of income taxes, payroll taxes, and cash transfers.

To be clear, there are many other policies that may shape cross-national variation in fiscal impoverishment. For instance, labor market activation policies are usually targeted to “make work pay,” essentially reducing the income and payroll tax burden on low-income or part-time arrangements (Bargain and Orsini 2006; Marx, Vanhille, and Verbist 2012). Similarly, differences in the income tax unit (individual or joint) will yield different benefits for different household types (Schwarz 2012), as will variation in the design and use of tax expenditures (Morel, Touzet, and Zemmour 2019; Barrios et al. 2020). Future research using tax-benefit microsimulations could work to decompose how specific policies contribute to increasing or reducing fiscal impoverishment.

This study contributes to several related sub-fields of sociological research. Centering the hidden role of income taxation in the production of household poverty highlights a potentially generative area of overlap between welfare state research and the New Fiscal Sociology (Martin, Prasad, and Mehrotra 2009). As we have shown, although taxes have been incorporated in the sociological examination of poverty, focusing on the “net effect” of taxes and transfers obscured the role of taxation in exacerbating poverty (Kleiman 2021). This underscores the need for researchers to consider the effective income tax rate households pay, which is determined by

both the overall tax level and the progressivity of revenue instruments. Attending closely to what households pay in income taxes is essential for capturing the full scope of government policies and programs that impact attitudes toward welfare state policy.

This paper motivates several avenues for future research. First, examining the levels and intensity of fiscal impoverishment over time can reveal the impact of specific tax and transfer policies adopted. For instance, we would expect to see fiscal impoverishment decline substantially in countries that introduced or expanded the use of tax credits as part of the “fiscalization of social policy” over the last decades (Ferrarini, Nelson, and Höög 2013; McCabe 2018). Second, researchers should examine how the threat of fiscal impoverishment varies over the life course and across different subpopulations. Examining the demographic and socio-economic characteristics of fiscal impoverishment may yield new insights into the drivers of inequality—e.g., across racial groups or for single-parent households—or shed novel insights into patterns of political participation across groups.

This comparative study is only possible thanks to the availability of harmonized household survey data made available through the LIS. One disadvantage of these data, however, is the lack of detailed information on the specifics of national tax systems. For instance, we cannot distinguish between income taxes and employee side payroll taxes—e.g., social security contributions—across all countries of the study. Policymakers and the public, however, may feel differently about fiscal impoverishment that results from general income taxation versus from payroll taxes that are used to finance social insurance benefits or entitlements. We also have no comparable cross-national measure of indirect taxes, which also reduces income and impacts economic behavior, even if these taxes are less salient. More generally, our findings add still greater motivation to improve data on household taxation; the more insight we have into the relative role of taxes, transfers, and market income in shaping disposable income, the better.

As our study demonstrates, fiscal impoverishment provides an additional conceptual and empirical framework for examining the policy determinants of cross-national variation in household poverty. For low-income families, the net impact of national tax and transfer systems on the household pocketbook is salient and relevant—so, too, should it be for policymakers, policy analysts, and scholars of the welfare state.

## Endnotes

1. A vast interdisciplinary literature details how “hidden taxes” are often ignored by households. Witness, for example, the frequent concern over whether VATs make it too easy for politicians to raise revenue because it is not as salient to consumers (Lohmann and Weiss 2002). Experimental evidence finds that individuals reduce their labor supply substantially more in response to a tax on wages compared to an economically equivalent tax on consumption, despite standard economic theory asserting a linear wage tax and comprehensive consumption tax to be economically equivalent (see, e.g., Blumkin, Ruffle, and Ganun 2012).
2. Information on income, taxes, and transfers is top and bottom coded at the 0.1 and 99.9% percentile.
3. Including retirees inflates poverty levels and poverty alleviation achieved by welfare states, as pensioners report zero market income. Restricting the analysis to working-age population is thus the standard approach in the literature. Note also that the ranking of countries by level of fiscal impoverishment is similar if we exclude unemployment and transfer income, although the overall levels are higher.
4. See [table A1](#) in the Appendix for descriptive statistics of the main variables.
5. Patterns are substantively similar if using 50% of national median income as poverty threshold; see [figure A1](#) in the Appendix.
6. Patterns are substantively different if decomposing the alleviated poor instead; see [figure A2](#) in the Appendix.



## About the Authors

**Manuel Schechl** is a postdoctoral research associate at the Stone Center on Socio-Economic Inequality at the City University of New York, Graduate Center. He is a social scientist studying the creation, persistence, and reproduction of inequality, poverty, and mobility, with substantive interests in wealth and wealth inequality and its intersection with welfare state policy.

**Rourke L. O'Brien** is an associate professor of sociology and a faculty fellow of the Institution for Social and Policy Studies (ISPS) at Yale University. He is a social demographer of inequality, poverty, and social mobility with substantive interests in public finance, economic behavior, and the political economy of population health.

## Supplementary Material

Supplementary material is available at *Social Forces* online.

## Data Availability

The data underlying this article were accessed from the Luxembourg Income Study Database (<https://www.lisdatacenter.org>). Due to confidentiality and security restrictions on microdata, the data can only be accessed remotely by registered researchers and exclusively for non-commercial purposes.

## References

- Aerts, Elise, Ive Marx, and Zachary Parolin. 2022. *Minimum Income Support for Families with Children in Europe and the US: Where Does it Stand?*. CSB Working Paper SocArXiv. <https://doi.org/10.31235/osf.io/h8vqu>.
- Alm, Susanne, Kenneth Nelson and Rense Nieuwenhuis 2020. "The Diminishing Power of One? Welfare State Retrenchment and Rising Poverty of Single-Adult Households in Sweden 1988–2011." *European Sociological Review* 36(2):198–217. <https://doi.org/10.1093/ESR/JCZ053>.
- Alper, Kaitlin, Evelyne Huber and John D. Stephens 2020. "Poverty and Social Rights among the Working Age Population in Post-Industrial Democracies." *Social Forces* 99:1710–44. <https://doi.org/10.1093/sf/soaa073>.
- Amoureux, Victor, Elvire Guillaud, and Michaël Zemmour. 2019. *It Takes Two to Tango: Income and Payroll Taxes in Progressive Tax Systems*. LIS Working Paper Series, no. 779.
- Armingeon, Klaus, Sarah Engler and Lucas Leemann 2022. *Comparative Political Data Set 1960–2020*. Zurich.
- Atkinson, Anthony B., Chrysa Leventi, Brian Nolan, Holly Sutherland and Iva Tasseva 2017. "Reducing Poverty and Inequality through Tax-Benefit Reform and the Minimum Wage: The UK as a Case-Study." *Journal of Economic Inequality* 15(4):303–23. <https://doi.org/10.1007/s10888-017-9365-7>.
- Avram, Silvia 2018. "Who Benefits from the 'Hidden Welfare State'? The Distributional Effects of Personal Income Tax Expenditure in Six Countries." *Journal of European Social Policy* 28(3):271–93. <https://doi.org/10.1177/0958928717735061>.
- Bargain, Olivier and Kristian Orsini 2006. "In-Work Policies in Europe: Killing Two Birds with One Stone?" *Labour Economics* 13(6):667–97. <https://doi.org/10.1016/J.LABECO.2005.10.007>.
- Barrios, Salvador, Flavia Coda Moscarola, Francesco Figari, Luca Gandullia and Sara Riscado 2020. "The Fiscal and Equity Impact of Social Tax Expenditures in the EU." *Journal of European Social Policy* 30(3):355–69. <https://doi.org/10.1177/0958928719891341>.
- Bergh, Andreas 2005. "On the Counterfactual Problem of Welfare State Research: How Can We Measure Redistribution?" *European Sociological Review* 21(4):345–57. <https://doi.org/10.1093/esr/jci024>.

- Blumkin, Tomer, Bradley J. Ruffle and Yosef Ganun 2012. "Are Income and Consumption Taxes Ever Really Equivalent? Evidence from a Real-Effort Experiment with Real Goods." *European Economic Review* **56**(6):1200–19. <https://doi.org/10.1016/j.euroecorev.2012.06.001>.
- Brady, David 2009. *Rich Democracies, Poor People: How Politics Explain Poverty*. Oxford: Oxford University Press.
- Brady, David and Amie Bostic 2015. "Paradoxes of Social Policy: Welfare Transfers, Relative Poverty, and Redistribution Preferences." *American Sociological Review* **80**(2):268–98. <https://doi.org/10.1177/0003122415573049>.
- Brady, David and Rebekah Burroway 2012. "Targeting, Universalism, and Single-Mother Poverty: A Multilevel Analysis across 18 Affluent Democracies." *Demography* **49**(2):719–46. <https://doi.org/10.1007/s13524-012-0094-z>.
- Brady, David, Ryan M. Finnigan and Sabine Hübgen 2017. "Rethinking the Risks of Poverty: A Framework for Analyzing Prevalences and Penalties." *American Journal of Sociology* **123**(3):740–86. <https://doi.org/10.1086/693678>.
- Brady, David, Evelyne Huber, and John D. Stephens. 2020. *Comparative Welfare States Data Set*, University of North-Carolina and WZB Social Science Center Berlin.
- Caminada, Koen, Kees Goudswaard, Chen Wang and Jinxian Wang 2020. "Antipoverty Effects of Various Social Transfers and Income Taxes across Countries." *Social Indicators Research* **154**:1055–76. <https://doi.org/10.1007/s11205-020-02572-9>.
- Castles, Francis G. and Herbert Obinger 2008. "Worlds, Families, Regimes: Country Clusters in European and OECD Area Public Policy." *West European Politics* **31**(1–2):321–44. <https://doi.org/10.1080/01402380701835140>.
- Chzhen, Yekaterina and Jonathan Bradshaw 2012. "Lone Parents, Poverty and Policy in the European Union." *Journal of European Social Policy* **22**(5):487–506. <https://doi.org/10.1177/0958928712456578>.
- Diris, Ron, Frank Vandenbroucke and Gerlinde Verbist 2017. "The Impact of Pensions, Transfers and Taxes on Child Poverty in Europe: The Role of Size, pro-Poorness and Child Orientation." *Socio-Economic Review* **15**(4):mww045–75. <https://doi.org/10.1093/ser/mww045>.
- Esping-Andersen, Gosta and Guy Standing 1990. *The Three Worlds of Welfare Capitalism* Vol. **1**, pp. 71–5. Princeton: Princeton University Press.
- Ferrarini, Tommy, Kenneth Nelson and Helena Höög 2013. "From Universalism to Selectivity: Old Wine in New Bottles for Child Benefits in Europe and Other Countries". In *Minimum Income Protection in Flux*, edited by Marx, Ive, Nelson, Kenneth, pp. 137–60. London: Palgrave Macmillan.
- Figari, Francesco and Gerlinde Verbist 2014. "The Redistributive Effect and Progressivity of Taxes Revisited: An International Comparison across the European Union." *FinanzArchiv* **70**(3):405–29. <https://doi.org/10.1628/001522114x684529>.
- Gamage, David and Darien Shanske 2011. "Three Essays on Tax Salience: Market Salience and Political Salience." *Tax Law Review* **65**:19–98.
- Ganghof, Steffen 2006. "Tax Mixes and the Size of the Welfare State: Causal Mechanisms and Policy Implications." *Journal of European Social Policy* **16**(4):360–73. <https://doi.org/10.1177/0958928706068274>.
- Gornick, Janet C. and Emily Nell 2018. "Children, Poverty and Public Policy: A Cross-National Perspective". In *The Handbook on Child and Family Policy*, edited by Rostgaard, Tine, Eydal, Guðný Björk. Edward Elger: Publishing.
- Gornick, Janet C. and Timothy M. Smeeding 2018. "Redistributional Policy in Rich Countries: Institutions and Impacts in Nonelderly Households." *Annual Review of Sociology* **44**:441–68. <https://doi.org/10.1146/annurev-soc-073117-041114>.
- Guillaud, Elvire, Matthew Olckers and Michaël Zemmour 2020. "Four Levers of Redistribution: The Impact of Tax and Transfer Systems on Inequality Reduction." *Review of Income and Wealth* **66**(2): 444–66. <https://doi.org/10.1111/roiw.12408>.
- Hick, Rod and Alba Lanau 2019. "Tax Credits and In-Work Poverty in the UK: An Analysis of Income Packages and Anti-Poverty Performance." *Social Policy and Society* **18**(2):219–36. <https://doi.org/10.1017/S1474746418000118>.

- Hicks, Alexander and Lane Kenworthy 2003. "Varieties of Welfare Capitalism." *Socio-Economic Review* 1(1):27–61. <https://doi.org/10.1093/SOCECO/1.1.27>.
- Higgins, Sean and Nora Lustig 2016. "Can a Poverty-Reducing and Progressive Tax and Transfer System Hurt the Poor?" *Journal of Development Economics* 122:63–75. <https://doi.org/10.1016/j.jdeveco.2016.04.001>.
- Holmes, Stephen and Cass R. Sunstein 2000. *The Cost of Rights: Why Liberty Depends on Taxes*. New York: W. W. Norton & Company.
- Howard, Christopher 1999. *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States*. Princeton: Princeton University Press.
- Immervoll, Herwig and Linda Richardson. 2011. *Redistribution Policy and Inequality Reduction in OECD Countries: What Has Changed in Two Decades?* Luxembourg: LIS Working Paper Series, no. 571.
- Immervoll, Herwig, Holly Sutherland and Klaas de Vos 2001. "Reducing Child Poverty in the European Union: The Role of Child Benefits". In *Child Well-Being, Child Poverty and Child Policy in Modern Nations What Do We Know?* edited by Smeeding, Timothy, Vlemminckx, Koen, pp. 407–32. Bristol: Policy Press.
- Jacques, Olivier and Alain Noël 2018. "The Case for Welfare State Universalism, or the Lasting Relevance of the Paradox of Redistribution." *Journal of European Social Policy* 28(1):70–85. <https://doi.org/10.1177/0958928717700564>.
- Jacques, Olivier and Alain Noël 2021. "Targeting within Universalism." *Journal of European Social Policy* 31(1):15–29. <https://doi.org/10.1177/0958928720918973>.
- Kleiman, Ariel Jurow 2021. "Impoverishment by Taxation." *San Diego Legal Studies Paper* 20(480):1–66. <https://doi.org/10.2139/ssrn.3775246>.
- Kahneman, Daniel and Amos Tversky 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47(4):263–91. <https://doi.org/10.2307/1914185>.
- Kakwani, Nanak and Hyun Hwa Son 2020. "Normative Measures of Tax Progressivity: An International Comparison." *Journal of Economic Inequality*. 19:185–212. <https://doi.org/10.1007/s10888-020-09463-6>.
- Kato, Junko 2003. *Regressive Taxation and the Welfare State*. Cambridge: Cambridge University Press.
- Kenworthy, Lane 1999. "Do Social-Welfare Policies Reduce Poverty? A Cross-National Assessment." *Social Forces* 77(3):1119–39. <https://doi.org/10.1093/sf/77.3.1119>.
- Korpi, Walter and Joakim Palme 1998. "The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality, and Poverty in the Western Countries." *American Sociological Review* 63(5):661–87. <https://doi.org/10.2307/2657333>.
- Leventi, Chrysa, Holly Sutherland and Iva Valentinova Tasseva 2019. "Improving Poverty Reduction in Europe: What Works Best Where?" *Journal of European Social Policy* 29(1):29–43. <https://doi.org/10.1177/0958928718792130>.
- LIS 2021 Luxembourg Income Study (LIS) Database. <http://www.lisdatacenter.org> (Jan 2021–February 2023).
- Lohmann, Susanne and Deborah M. Weiss 2002. "Hidden Taxes and Representative Government: The Political Economy of the Ramsey Rule." *Public Finance Review* 30(6):579–611. <https://doi.org/10.1177/109114202238004>.
- Lustig, Nora 2017. "Fiscal Redistribution and Ethnoracial Inequality in Bolivia, Brazil, and Guatemala." *Latin American Research Review* 52(2):208–20. <https://doi.org/10.25222/larr.90>.
- Mahler, Vincent A. and David K. Jesuit 2006. "Fiscal Redistribution in the Developed Countries: New Insights from the Luxembourg Income Study." *Socio-Economic Review* 4(3):483–511. <https://doi.org/10.1093/ser/mwl003>.
- Marchal, Sarah and Ive Marx 2017. "Stemming the Tide: What Have European Union Countries Done to Support Low-Wage Workers in an Era of Downward Wage Pressures?" *Journal of European Social Policy* 28(1):18–33. <https://doi.org/10.1177/0958928717704747>.
- Martin, Isaac William and Monica Prasad 2014. "Taxes and Fiscal Sociology." *Annual Review of Sociology* 40:331–45. <https://doi.org/10.1146/annurev-soc-071913-043229>.
- Martin, Isaac William, Monica Prasad and Ajay K. Mehrotra 2009. *The New Fiscal Sociology: Taxation in Comparative and Historical Perspective*. Cambridge: Cambridge University Press.

- Martin, John P. 2015. "Activation and Active Labour Market Policies in OECD Countries: Stylised Facts and Evidence on their Effectiveness." *IZA Journal of Labor Policy* 4(1):1–29. <https://doi.org/10.1186/S40173-015-0032-Y/FIGURES/7>.
- Marx, Ive, Brian Nolan and Javier Olivera 2015. "The Welfare State and Antipoverty Policy in Rich Countries." *Handbook of Income Distribution* 2(January):2063–139. <https://doi.org/10.1016/B978-0-444-59429-7.00024-8>.
- Marx, Ive, Lina Salanauskaite and Gerlinde Verbist 2016. "For the Poor, but Not Only the Poor: On Optimal pro-Poorness in Redistributive Policies." *Social Forces* 95(1):1–24. <https://doi.org/10.1093/sf/sow058>.
- Marx, Ive, Josefine Vanhille and Gerlinde Verbist 2012. "Combating in-Work Poverty in Continental Europe: An Investigation Using the Belgian Case." *Journal of Social Policy* 41(1):19–41. <https://doi.org/10.1017/S0047279411000341>.
- McCabe, Joshua T. 2018. *The Fiscalization of Social Policy: How Taxpayers Trumped Children in the Fight against Child Poverty*. Oxford: Oxford University Press.
- McCabe, Joshua T. and Elizabeth Popp Berman 2016. "American Exceptionalism Revisited: Tax Relief, Poverty Reduction, and the Politics of Child Tax Credits." *Sociological Science* 3:540–67. <https://doi.org/10.15195/v3.a24>.
- Mettler, Suzanne 2011. *The Submerged State: How Invisible Government Policies Undermine American Democracy*. Chicago: University of Chicago Press.
- Morel, Nathalie, Chloé Touzet and Michaël Zemmour 2019. "From the Hidden Welfare State to the Hidden Part of Welfare State Reform: Analyzing the Uses and Effects of Fiscal Welfare in France." *Social Policy and Administration* 53(1):34–48. <https://doi.org/10.1111/spol.12416>.
- Murphy, Liam and Thomas Nagel 2002. *The Myth of Ownership: Taxes and Justice*. Oxford: Oxford University Press.
- Newman, Katherine S. and Rourke L. O'Brien 2011. *Taxing the Poor: Doing Damage to the Truly Disadvantaged*. Berkeley: University of California Press.
- OECD. 2020. "OECD Tax Database." Paris: OECD. <https://stats.oecd.org>.
- Pedersen, Siri Hansen and Georg Picot 2023. "Regulating Low Wages: Cross-National Policy Variation and Outcomes." *Socio-Economic Review*. <https://doi.org/10.1093/SER/MWAD019>.
- Prasad, Monica and Yingying Deng 2010. "Taxation and the Worlds of Welfare." *Socio-Economic Review* 8(3):583. <https://doi.org/10.1093/ser/mwq008>.
- Schwarz, Peter 2012. "Tax Disincentives and Female Employment in Organisation for Economic Co-operation and Development (OECD) Countries." *Journal of European Social Policy* 22(1):17–29. <https://doi.org/10.1177/0958928711425267>.
- Smeeding, Timothy 2006. "Poor People in Rich Nations: The United States in Comparative Perspective." *Journal of Economic Perspectives* 20(1):69–90. <https://doi.org/10.1257/089533006776526094>.
- Steinmo, Sven 1993. *Taxation and Democracy: Swedish, British, and American Approaches to Financing the Modern State*. New Haven: Yale University Press.
- Sykes, Jennifer, Katrin Križ, Kathryn Edin and Sarah Halpern-Meekin 2015. "Dignity and Dreams: What the Earned Income Tax Credit (EITC) Means to Low-Income Families." *American Sociological Review* 80(2):243–67. <https://doi.org/10.1177/0003122414551552>.
- Wilensky, Harold L. 1976. *The "New Corporatism," Centralization, and the Welfare State*. Beverly Hills: Sage Press.
- Wilensky, Harold L. 2002. *Rich Democracies: Political Economy, Public Policy, and Performance*. Berkeley: University of California Press.
- Worts, Diana, Amanda Sacker and Peggy McDonough 2010. "Falling Short of the Promise: Poverty Vulnerability in the United States and Britain, 1993–2003." *American Journal of Sociology* 116(1): 232–71. <https://doi.org/10.1086/653542>.