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税と移転支出による所得再分配：過去25年間における実証研究のサーベイ

Redistribution through Taxes and Transfers: A Survey of Empirical Studies in the Past 25 Years*

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Abstract

This paper reviews 130 empirical studies on redistribution through taxes, transfers, and integrated tax-benefit systems. It first clarifies the main conceptual and measurement issues, then evaluates evidence across distinct fiscal instruments, and finally draw lessons for policy design. The central conclusion is not implied by statutory progressivity alone. It depends on fiscal scale, tax-base coverage, benefit targeting, income concepts, household compositions, horizontal inequality, reranking, behavioral responses, and the interaction among instruments. Personal income taxes are generally progressive, but their aggregate effect is often limited by narrow coverage, low effective rates, and tax expenditures that disproportionately benefit higher-income groups. Indirect taxes are often regressive under current income measures, but their incidence depends on consumption patterns, exemptions, compensation mechanisms, and revenue recycling. Cash transfers, pensions, healthcare, education and other in-kind benefits account for much of observed inequality reduction, although their measured contributions are sensitive to targeting, demographic incidence, and valuation rules. Overall, recent empirical work is most informative when it evaluates fiscal instruments as parts of tax-benefit systems rather than as isolated policies.

Keywords: Redistribution; inequality; personal income tax; consumption tax; transfers; tax-benefit systems.

JEL codes: D31; H20; H23; H24.

1 Introduction

Fiscal redistribution is one of the main channels through which governments reshape the

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distribution of market income. Personal income taxes, social security contributions, value-added taxes, excise taxes, cash transfers, public pensions, health care, education, and other public services all affect household resources after government intervention. Measuring redistribution is more complex than comparing inequality before and after fiscal policy. A progressive tax may have little redistributive effect if the average tax rate is low. A well-targeted transfer may matter little if its budget is small. A pension system may appear redistributive in annual income but much less so over the lifetime. A consumption tax may be regressive under current income but less regressive when expenditure is used as a proxy for lifetime income. A tax-benefit reform may increase statutory progressivity while reducing redistribution if it narrows the revenue base.

This review treats fiscal redistribution as a system-level outcome. The core question is not simply whether a policy is progressive, but through which mechanism it changes inequality, for which household, and under which income concept. The studies reviewed here shows that redistributive outcomes are shaped by four interacting margins: the size of the fiscal intervention, the progressivity or targeting of the instrument, household behavioral and demographic characteristics, and the interaction of each instrument with the wider tax-benefit system.

The paper reviews the 130 studies included in the supplied literature corpus. To keep the discussion synthetic, each study is cited in the section where its main contribution is most relevant. Section 2 sets out the conceptual and methodological foundations. Section 3 reviews direct taxation, especially personal income taxation. Section 4 discusses indirect, consumption, environmental, and corrective taxes. Section 5 examines transfers, pensions, health financing, education, and in-kind redistribution. Section 6 turns to integrated tax-benefit systems and cross-country evidence. Section 7 synthesizes the main lessons and identifies future research directions. Section 8 concludes.

2 Conceptual and measurement foundations

2.1 *Redistribution, progressivity, and fiscal size*

A central point in public economics is that aggregate redistribution is not an inherent property of a tax or transfer schedule. It results from the interaction between policy parameters and the pre-fiscal distribution of resources. The Reynolds-Smolensky index measure the reduction in inequality between pre- and post-fiscal income, whereas the Kakwani index measures progressivity by comparing the concentration curve of a tax or transfer with the pre-tax Lorenz curve. These two concepts are related but not equivalent. A highly progressive instrument with a narrow base may have little aggregate effect, while a less progressive but well-funded transfer can reduce inequality substantially.

Recent methodological work therefore uses counterfactual frameworks to separate policy design from baseline economic conditions. One strand adopts a “transplant-and-compare” method, applying

a country's fiscal schedule to another country's income distribution to separate the schedule from the underlying pre-tax distribution (Lambert et al., 2020). Recent work argue that tax incidence and baseline inequality should be modeled jointly rather than treated as independent objects (Benassi and Randon, 2021). Other studies refine the formal properties of progressivity and redistribution measures. The Zenga equality curve provides an alternative way to capture non-linear patterns in tax-transfer progression, while work on the Kakwani index clarifies the bounds within which progressivity measures can be interpreted (Greselin et al., 2021; Mantovani et al., 2020). Urban (2019) further shows that the normative and counterfactual benchmark selected by the analyst can affect the measured redistributive effect of a fiscal intervention.

2.2 Vertical redistribution, horizontal inequality, and reranking

A second challenge is that real-world tax-benefit systems deviate from pure vertical redistribution. They do not only transfer resources from richer to poorer households; they also treat otherwise similar households differently and may change the post-policy ranking of households. Decompositions of total redistribution into vertical equity, horizontal inequity, and reranking are therefore central concerns. Urban and Lambert (2008) provide a framework for separating intended vertical redistribution from unequal treatment of equals and rank reversals. Later studies show that implementation choices, including the Duclos-Jalbert-Araar decomposition and the definition of “close equals,” can affect the results (Urban, 2013; Van de Ven et al., 2001). Extensions to multiple instruments and group-based decompositions further show that aggregate indices may conceal demographic and subgroup-specific effects (Urban, 2014, 2016).

This decomposition approach is useful because actual fiscal system is not defined by statutory rates amount. Modern personal income taxes combine rate schedules with allowances, deductions, and tax credits, so the distributional effect of a reform depends on how these provisions change taxable income and effective liabilities. The Pfähler-Lambert decomposition has therefore been adapted to model these components and to show how deductions alter aggregate progressivity (Onrubia et al., 2014). When tax systems depart from monotonic progressivity, diagnostic frameworks can identify the source of those departures (Pellegrino and Vernizzi, 2013). Evaluating reform dynamics also requires a clear distinction between “level” and “distance” effects, especially when reforms are not revenue neutral (de Sarralde et al., 2013). These studies show that a reform cannot be assessed only by the direction of statutory progressivity; it may raise liability progression while reducing total redistribution if revenue falls, or it may improve vertical equity while increasing horizontal inequity and reranking.

2.3 Income concepts, counterfactuals, and decomposition methods

A further measurement issue concern how income is defined and how fiscal incidence is assigned.

Methodological frameworks show that the measured effect of a tax-benefit system is sensitive to the “Three Is”: income concepts, incidence assumptions, and inequality indices (Figari and Paulus, 2015). To isolate the structural drivers of change over time, unified decomposition frameworks distinguish market-income shocks from policy changes within the tax-benefit system (Herault and Azpitarte, 2016). Assessments based only on mean effects can also conceal variations across the income distribution; quantile regression methods address this problem by showing how policy effects differ across households at different points of the distribution (Casalone and Sonedda, 2013). This measurement logic is not limited to taxes and cash transfers. Fiscal decomposition methods have also been extended to non-cash domains, showing that financing arrangements in areas such as healthcare can have measurable redistributive effects (Zhong, 2009).

These accounting choices become especially important when fiscal instruments operate across different income sources, asset classes, or time horizons. In dual income tax (DIT) systems, labor and capital incomes are taxed under different schedules. This separation limits the usefulness of one-dimensional progressivity measures and has led to multi-income measures designed to capture the joint incidence of dual tax schedules (Kristjánsson and Lambert, 2015). Because tax-base heterogeneity can change the interpretation of standard indices, evaluating redistribution under a DIT framework requires adjustments that avoid misclassifications (Sölvi Kristjánsson, 2013; Lambert and Thoresen, 2012). Similarly, in flat-rate tax reforms, the ranking of policy alternatives depends on the inequality index and on the design of allowances and demogrants (Davies and Hoy, 2002).

Looking beyond current income also changes cross-national assessments. Joint income-wealth frameworks show that income-based measures can misrepresent the distribution of household resources and fiscal capacity (Kuypers et al., 2021). Longitudinal evidence also indicates that annual measures tend to overstate lifetime redistribution because they mix structure policy effects with life-cycle income smoothing (Bengtsson et al., 2016). The same issue arises in wealth and inheritance taxation, where static annual accounting is often insufficient for identifying intergenerational incidence (Halvorsen and Thoresen, 2021).

These methodological strands imply three cautions. First, redistribution should be evaluated as the joint product of progressivity and fiscal scale. Second, vertical equity should be separated from horizontal inequality and reranking. Third, income definitions, incidence assumptions, and time horizons are substantive choices rather than minor technical details. A critical reading of this literature therefore requires attention not only to what each study finds, but also to what its measurement strategy is able to identify.

3 Direct taxes and personal income tax redistribution

3.1 *Why personal income tax is progressive but often weakly redistributive*

Although the personal income tax (PIT) is usually treated as the main tax instrument for vertical equity, cross-national evidence shows a persistent gap between statutory progressivity and realized inequality reduction. The literature points to two margins: the intensive margin, where deductions, exemptions, credits, and other provisions narrow the effective tax base; and the extensive margin, where limited coverage and labor-market informality reduce the population-wide reach of the tax.

On the intensive margin, the redistributive effect of progressive rate structures is weakened by tax-code provisions such as exemptions, allowances, and tax credits. Long-term studies of the Italian PIT and the Japanese income tax system show that average effective tax rates and the deductions can matter more for redistribution than the headline marginal rates (Baldini, 2021; Miyazaki and Kitamura, 2016). Decomposition studies further show how specific tax parameters shape changes in inequality indices (Di Caro, 2020). Evidence on China's 2018 PIT reform similarly shows that specialized deduction can materially change incidence and welfare outcomes across household income groups (Zhan et al., 2019).

A central methodological problem in this literature is separating the redistributive effect of legal reforms from macroeconomic changes and shifts in the pre-tax income distribution. Fixed income approach address this problem by handling the underlying tax base constant, showing that changes in the taxable base can drive redistribution more than changes in statutory rates (Miyazaki, 2016). Parametric decompositions over time also demonstrate that some observed changes in redistribution reflect income growth and inflation-induced bracket creep rather than deliberate changes in tax laws (Gastaldi et al., 2008).

On the extensive margin, PIT redistribution is limited by narrow taxpayer bases and fragmented labor markets, especially in emerging economies. In these settings, a progressive legal tax schedule can coexist with weak aggregate inequality reduction because informality and limited enforcement leave much of the income distribution outside the tax net. Evidence from India illustrates this constraint: the PIT is progressive among taxpayers, but its society-wide effect is small because coverage is narrow (Datt et al., 2022). Similar limitations appear in Central America, where low effective tax rates and restricted formal employment weaken wage-earner taxation (Galdámez and López, 2024). Thus, progressivity among taxpayers should not be confused with redistribution across the whole population (Linmu, 2013; Du and Zhang, 2018). Tax reforms can raise redistributive capacity only when they broaden the tax base and increase effective burdens at the top of the income distribution (Cano, 2017).

The PIT also operate under behavioral and demographic constraints. A progressive schedule has

to be evaluated as an equity-efficiency trade-off because high marginal rates can create labor supply, avoidance, or other incentive responses (Pellegrino et al., 2019). Distributional effects also vary across age groups and cohorts when reforms alter brackets, thresholds, or allowances (Miyazaki et al., 2019). This literature usefully moves beyond statutory progressivity, although many studies still rely on static incidence assumptions that may understate behavioral adjustment.

3.2 Tax brackets, deductions, credits, and tax expenditures

The internal design of the PIT matters as much as the headline rate schedule. Recent studies suggest that statutory progressivity is often weakened by tax expenditures that operate regressively within the tax code. Deductions tend to provide larger absolute benefits to high-income households, reducing aggregate progressivity, although caps on deductions can partly limit this effect (Ohno et al., 2025). Administrative data also show that much PIT redistribution is concentrated in a small set of parameters, especially the rate schedule and selected employment or pensioner credits, while many itemized preferences are weakly redistributive or regressive (Barbetta et al., 2018). The policy implication is that rate progressivity cannot be evaluated separately from the exemptions and deductions that define the effective base (Boscolo, 2019).

This issue is particularly clear in retirement incentives. Across Europe, tax advantages for private retirement savings provide large and skewed benefits to higher income groups (Barrios et al., 2020). Simulation that remove personal tax expenditures show that base broadening can raise revenue, but the distributional effect depends on how the additional revenue is used. It does not automatically increase vertical redistribution unless the resources are recycled through progressive transfer or other redistributive instruments (López-Laborda et al., 2022). The joint design of marginal rates, family minima, and tax credits therefore matters for income redistribution, poverty reduction, and revenue generation (Badenes-Plá and Buenaventura-Zabala, 2017).

Family provisions and child-related reliefs also affect horizontal equity. Child tax credits can change horizontal inequity within the PIT, while flat-rate tax systems may rely on child-related relief to preserve some distributional balance (Kośny and Mazurek, 2010; Krekó et al., 2023). Poorly calibrated exemptions and allowances can increase horizontal inequity and reduce the net redistributive effect of the tax code (Hyun and Lim, 2005). These examples show why reforms should be evaluated using both social-welfare and redistributive criteria: welfare gains and inequality reduction do not necessarily move together (Castañer et al., 2004).

3.3 Institutional design, tax-base heterogeneity, and political economy

Country-specific institutions explain much of the variance in direct-tax redistribution. European evidence shows the difficulty of tracking redistribution over long policy horizons and shifting the tax burden toward top-income groups (Onrubia Fernández and Picos Sánchez, 2013; Onrubia et al., 2019).

Transitional economies make this path dependence especially visible. Similar post-socialist regimes starting points can produce different redistributive trajectories depending on the alignment of income taxes, social contributions, and benefits (Čok and Urban, 2007). The adoption of flat taxes in former Yugoslav countries weakened redistributive capacities relative to more progressive alternatives (Rakic and Vladislavjevic, 2021). Cross-national data-swapping exercises further show that direct-tax effect depend on the fit between the tax bases, social contributions, and the pre-fiscal income distribution (Kramer et al., 2016).

The evidence also show that direct tax systems are shaped by political economy rather than by technical design alone. In unequal societies, progressivity is a part of a broader contest over redistribution and political stability (Nyamongo and Schoeman, 2007). In federal systems, the link between inequality and taxation are heavily is mediated by sub-national policy choices and state-level taxes vary in their ability to reduce regional inequality (Poterba, 2007; Leigh, 2008). Recent work further connects thresholds, brackets, and base definitions, to demographic transformations and racial composition shifts (O'Brien and Travis, 2022). These findings caution against evaluating direct tax progressivity independently of the political constraints under which it is chosen.

4 Indirect, consumption, environmental, and corrective taxes

4.1 VAT, consumption taxes, and the role of income concepts

Indirect taxes are usually described as regressive because low-income households spend a large share of current income on consumption. Evidence on recent tax shifts generally support this claim when incidence is measured against annual income. The magnitude of regressivity, however, depend on expenditure patterns, exemptions, income concepts, and compensatory transfers. VAT and excise increases after the financial crisis often worsened inequality, but cross-country comparisons show that the distributional effect of consumption taxation varies with design and with the broader fiscal system (Maier and Ricci, 2024; Blasco et al., 2023). The incidence of consumption taxes also depends on how household expenditure weights line up with income distribution (Cirillo et al., 2021). Reforms that harmonize commodity taxes or change rates across goods can therefore create different distributional effects depend on the goods affected (Slintáková and Klazar, 2010).

A key policy question is whether zero-rating, exemptions, and reduced rate are efficient redistributive tools. Comparative evidence suggests that, where administrative capacity allows, targeted cash transfers generally achieve stronger vertical equity than indirect tax exemptions (Warwick et al., 2022). Reduced VAT rates can also function as sectoral subsidies rather than as progressive redistribution (Boeters et al., 2010). Complex multi-rate systems may therefore weaken fiscal efficiency without delivering strong equity gains (Kaplanoglou and Newbery, 2003). This evidence challenge the common assumption that reduced rates are automatically pro-poor, since

higher-income households may capture a substantial share of the implicit subsidy (Decoster and Van Camp, 2001).

4.2 *Horizontal inequality and reranking under indirect taxation*

Indirect taxes also create horizontal inequality because households with similar income may consume different bundles. Similar fiscal capacity does not imply similar consumption-tax liability (Kaplanoglou and Newbery, 2008). Decompositions of GST reforms show that small average changes can conceal substantial reranking across households (Creedy, 2002). Commodity-specific excise intensify this problem because they interact with demographic profiles and demand patterns (Creedy and Sleeman, 2005). Distributional analysis should therefore look beyond average incidence by income group and consider dispersion within groups, especially in economies that rely heavily on commodity taxation (Yilmaz et al., 2019).

4.3 *Environmental and corrective taxes*

Environmental and corrective tax add another complication because they pursue behavioral correction, revenue raising, and distributional goals at the same time. Studies of energy taxation show that decarbonization policies can create distributional pressure during energy-price shocks (Lanterna, 2024). Microsimulation evidence indicates that carbon pricing imposes regressive short-run burden unless revenues are recycled through compensatory channels (Amores et al., 2023). Green incentive schemes, such as automobile feebates, also generate heterogeneous winners and losers depending on substitution possibilities and vehicle dependence (Durrmeyer, 2022).

The perceived fairness and incidence of environmental taxes are also shaped by spatial geography. Rural and peri-urban households may be more exposed to carbon pricing because of transport needs and heating infrastructures (Beck et al., 2016). Petrol and motor-fuel taxes therefore vary in incidence across urban-rural gradients, city sizes, and commuting patterns and can generate expenditure inequalities in cross-border transport settings (Asensio et al., 2003; Berri et al., 2014). Corrective taxes aimed at health externalities raise a related equity-efficiency trade-off. Soda taxes, for example, require balancing regressive monetary burdens against health gains and the design of revenue recycling or compensatory transfers (Allcott et al., 2019).

The consumption-tax literature therefore qualifies regressivity claims. Indirect taxes often burden low-income households under annual-income accounting, but their final distributional effect depends on the tax base, expenditure heterogeneity, behavioral responses, geography, and revenue recycling. A recurring limitation is that some studies evaluate exemptions or rate differentiation without specifying the alternative use of the forgone revenue.

5 Transfers, pensions, health financing, and in-kind redistribution

5.1 *Cash transfer and social security*

Within the tax-benefit system, direct expenditure-side interventions usually account for a larger share of observed inequality reduction than tax-side instruments. Decompositions studies show that public social security transfers reduce inequality more than private safety nets, although local policy shocks can offset this effect (Liu et al., 2025). As economies develop, social security programs may become important, institutional channels of redistribution (Cai and Xu, 2022). Their effectiveness depends jointly on fiscal scale and access across rules across income group (Cai and Yue, 2020). Comparative European evidence further shows that these outcomes differs across universal, earnings-related, and targeted transfer designs (Kraus, 2004). The key issue is not whether transfers are pro-poor in principle, but whether eligibility, take-up, and budget size allow them to affect the whole income distribution (Garcia-Diaz, 2011).

Conditional and quasi-cash transfers also affect behavior. Evidence from conditional cash transfer experiments demonstrates that these policies can change household consumption and human capital investments, so their welfare effects extend beyond immediate income support (Attanasio and Mesnard, 2006). Even narrow fringe benefits, such as meal vouchers, can have redistributive consequences across the income distribution (Janský and Röhrýová, 2016). In decentralized fiscal systems, intergovernmental transfers may also serve both redistribution and risk sharing across municipalities (Arachi et al., 2023). These findings suggest that transfers should be evaluated not only by their static effect on disposable income, but also by their behavioral and institutional effects.

5.2 *Public pensions and lifecycle redistribution*

Public pension move large fiscal resources, but their redistributive effect is difficult to measure with cross-sectional annual income data. Pension systems operate over the life cycle, and net incidence depends on contribution histories, actual rules, and differences in life expectancy across socio-economic groups (Sánchez-Romero and Prskawetz, 2017). Reforms that appear neutral in a static setting, such as abolishing uniform contribution mandates, can shift resource across demographic groups and asset pools (Chen and van Wijnbergen, 2020). Longitudinal and simulation studies therefore show that annual snapshots may confuse life-cycle consumption smoothing with permanent redistribution (Karayel, 2006; Oshio, 2005).

5.3 *Health financing, education, and in-kind benefits*

Public health services and education are central parts of the welfare state, but their redistributive value is also difficult to measure. In unequal societies, the progressivity of health financing can

matter for equity and social cohesion (Ataguba, 2021). Microsimulation studies show that financing arrangements may generate vertical gains while also producing horizontal inequity, depending on the relationship between contributions and service use (Honekamp and Possenriede, 2008). Drug programs illustrate how deductibles, copayments, and subsidy thresholds shape out-of-pocket burdens (Alan et al., 2002, 2005). In education, the redistributive effect of public provision depends partly on private-schooling responses and household selection (Andreoli et al., 2018).

Recent incidence studies integrate cash transfers, in-kind public services, indirect taxes, and collective public consumption into a single accounting framework (Arendt and Christensen, 2024). Their main lesson is that the measured redistributive role of in-kind benefits depends on imputation rules. Allocating benefits by actual use, insurance value, equal per-capita amounts, or income-linked valuations can change the estimated effect of the welfare state. This sensitivity is not only technical; it reflects different welfare concepts and should be made explicit.

5.4 *Minimum wages and non-fiscal redistribution*

A growing literature broadens redistribution beyond budgetary taxes and transfers by examining regulatory policies that alter market income. Minimum wage increases are a leading example. Administrative data shows that their incidence is distributed across workers and business owners, depending on local product-market conditions (Drucker et al., 2021). Microsimulation studies also show that minimum wage changes interacts with the tax-benefit system through benefits withdrawal and marginal tax rates (Alinaghi et al., 2020). Their cost-effectiveness and inequality effects therefore depend on baseline economic conditions and institutional design (Formby et al., 2010). This literature broadens the concept of redistribution to policy-induced changes in household disposable resources outside the budget.

The transfer and in-kind literature emphasizes that redistributive capacity is not a simple function of targeting. It depends on budgetary scale, access rules, demographic structure, life-cycle incidence, valuation assumptions for public services, and interactions with and labor-market behavior. A more critical reading also suggests that transfer should not be judged only by short-run inequality reduction, since long-run effects may operate through health, education, and labor market attachment.

6 Integrated tax-benefit systems and cross-country evidence

6.1 *Whole-system analysis and European microsimulations*

Contemporary public economics increasingly treats isolated instruments analysis as incomplete because households experience redistribution through an integrated fiscal system. Whole system studies examine how direct taxes, social insurance contributions, cash transfers, public pensions, and in-kind services jointly transform market income into disposable or final income. Guillaud et al.

(2020) identify fiscal scale and progressivity as key levers of redistribution, while. Capeau et al. (2024) show that stable disposable-income inequality can conceal rising market-income inequality. Macro-panel evidence further indicate that tax and spending shocks have different distributional effect in middle- and high-income countries (Isiaka et al., 2024). The contribution of this literature is to shift attention from ranking instruments to understanding how instruments interact with institutional settings (Wildowicz-Szumarska, 2022; Muszyńska et al., 2021).

European research is especially developed because harmonized microsimulation infrastructure improves comparability. These platforms allow researchers to simulate tax-benefit reforms before implementation, map redistributive capacities across the European Union, and revisit the relationship between progressivity and realized inequality reduction (Granell et al., 2024; Avram et al., 2014; Verbist and Figari, 2014). They also help analyze the enlarged European Union and hypothetical European fiscal unions (Fuest et al., 2010; Bargain et al., 2013). Still, European evidence should not be treated as automatically generalizable, because its strength rests on data harmonization and administrative capacity that are less available in many developing and middle-income settings (Lago-Peñas et al., 2015).

6.2 *National systems, reforms, and crises*

Country-specific whole-system studies show how institutional design shapes fiscal resilience during crises. After the 2007-2008 financial crisis, tax-benefit systems acted as automated stabilizers that absorb part of the inequality shock (Almeida, 2020). But distributional analysis must be paired with work-incentive analysis when reforms change benefit withdrawal rates or marginal tax rates (Adam et al., 2015). Decompositions of federal taxes and transfer show the long-run contribution of each component to inequality reduction (Hungerford, 2010; Hierro et al., 2012; Kim and Lambert, 2009; Anyaegbu, 2011). This literature also clarifies the distinction between horizontal smoothing and vertical redistribution (Rodrigues and Andrade, 2014, 2020). The two functions should not be conflated, because they answer different normative questions.

In middle-income and emerging economies, whole system analysis reveals constraints related to fiscal capacity and tax mix. CEQ-style evidence clarifies that targeted social spending can be pro-poor, but its effect may be offset by reliance on regressive indirect taxes (Lustig, 2016). This trade-off is visible in Latin America where social spending reduces inequality but commodity-based taxation limits the net effect (Hanni et al., 2015; Higgins and Pereira, 2014; Huesca and Llamas, 2016). Asian systems face a different constraint: where narrow direct-tax bases, low tax-to-GDP ratios, and smaller or less targeted transfers (Claus et al., 2013; Sung and Park, 2011). These findings caution against importing policy prescriptions from advanced welfare states without considering administrative capacity and revenue structure.

6.3 *Post-socialist systems, place-based policies, and institutional transition*

In transitional and post-socialist regimes, whole-system studies how market reforms altered the state's redistributive capacity. As planned systems were dismantled and market-oriented institutions introduced, similar starting points generated different redistributive paths depending on the alignment of direct taxes and social benefits (Čok et al., 2013). Decomposition studies show that changes in personal income taxation and social transfers explain much of the change in income distribution (Yilmaz and Sefil-Tansever, 2019). In some Balkan cases, pensions and targeted benefits dominate inequality reduction, while direct personal taxation remains fiscally marginal (Djindjić, 2014). This evidence treats transition not only as a macro-economic process, but also a reallocation of redistributive functions across instruments.

Small open economy studies similarly show that redistribution depends on the joint calibration of taxes and transfers (Creedy et al., 2010). Microsimulation evidence also indicates that household composition affects whether tax-benefit systems favor low-income households or families with children (Dušek et al., 2015). Place-based policies add a spatial dimension: Empowerment Zone in the United States changed local income distributions, but often functioned as spatial market interventions rather than broad person-based redistribution (Reynolds and Rohlin, 2015).

6.4 *Developed welfare states and comparative political economy*

Comparative political economy studies argue that welfare-state institutions explain much cross-country variation in inequality reduction. OECD evidence suggests that regime type matters more than marginal policy adjustments (Doerrenberg and Peichl, 2014). Multi-country datasets such as the Luxembourg Income Study (LIS) show how different combinations of universalism and targeting shape redistribution across developed economies (Mahler and Jesuit, 2006). The value of this literature lies in connecting fiscal incidence to institutional design; its risk is that broad regime categories can obscure within-country reforms and implementation details.

These institutions also change over time. Longitudinal studies of small open economies identify cases in which redistribution declined, and decomposition methods help determine whether the decline came from market-income changes or from tax-benefit policy shifts (Herault and Azpitarte, 2015). This distinction matters because a stable tax-benefit system can appear less redistributive when market inequality rises, while active policy retrenchment can be hidden if market inequality falls.

The whole-system literature therefore supports a clear conclusion: redistribution is provided by policy packages, not by single instrument. Its magnitude is bounded by fiscal scale, transfer targeting, tax progressivity, household demographics, and pre-fiscal inequality. A critical caveat is that whole-system analysis improves external validity but can reduce transparency about mechanisms. The best studies therefore combine system-level incidence with decompositions that

identify which margins drive the result.

7 Synthesis and research agenda

7.1 *Lessons from the literature*

Structural progressivity should not be conflated with realized redistribution. A fiscal instrument can be steeply progressive but have little redistributive effect if it has a low average rate or a narrow tax base. This distinction explains why many personal income tax schedules show strong statutory progressivity but only modest reduction in aggregate inequality.

Fiscal scale is a central determinant of redistribution. The Reynolds-Smolensky decomposition shows that overall redistribution is jointly driven by progressivity and the average tax or transfer rate. Broad-based transfer schemes, public pensions, and large social programs can therefore reduce inequality more than personal income taxes in absolute terms, even when they are less progressive at the margin.

Horizontal inequity and reranking are substantive concerns rather than technical details. Tax deductions, credits, indirect taxes, healthcare financing, and in-kind public services can treat similar households differently. Ignoring these margin can overstate the vertical equity and fairness of a fiscal system.

The income concept used in the analysis can change the conclusion. Evaluations based on annual income, lifetime income, consumption, wealth, disposable income, extended income, or final income may produce different distributional rankings. This sensitivity is especially important for pensions, wealth and consumption taxation, education and healthcare.

The appropriate unit of analysis is the integrated tax-benefit system rather than a single instrument. VAT exemptions may be less redistributive than uniform taxation combined with targeted transfers; pension-related tax expenditures may subsidize high-income groups; carbon taxes require revenue recycling or compensation; and progressive direct taxes may have little aggregate effect if transfers are small or poorly targeted. This system perspective is what turns a literature review from a list of instruments into an argument about interaction and offsetting effects.

7.2 *Future research directions*

Behavioral redistribution remains an important frontier. Much of the reviewed evidence relies on static microsimulation frameworks or accounting decomposition. These approaches are transparent and policy-relevant, but they often abstract from labor supply, consumption substitution, tax avoidance, benefit take-up, saving, migration, and firm responses. Future work should combine decomposition methods with dynamic behavioral microsimulations and administrative microdata, while making behavior assumptions explicit.

Lifecycle and joint income-wealth perspectives also need to be extended. Studies of pensions, wealth taxation, and consumption taxes shows that annual income measures can misclassify fiscal winners and losers. Future research should extend this multi-period and asset-income approach to healthcare, long-term care financing, public education, environmental taxation, and fiscal adjustments associated with population aging.

Multidimensional redistribution is another priority. Fiscal policy affects not only disposable income, but also health, education, housing stability, consumption smoothing, intergenerational mobility, and exposure to environmental externalities. In-kind transfers and public services are central to this agenda, but their estimated effects depend on contested imputation and allocation assumptions. Future studies should report results under multiple valuation rules rather than presenting a single estimate as definitive.

Cross-country standardization remains an unresolved challenge. Harmonized microsimulation has improved comparability within Europe, but global evidence remains fragmented by differences in income definitions, equivalence scales, tax-incidence assumptions, social security contributions, and the valuation of non-cash benefits. Future survey designs and multi-country platforms should report standardized fiscal-income concepts and comparable decomposition components.

Future research also inform the distributional design of fiscal reforms. Climate transition, population ageing, rising healthcare costs, and post-crisis fiscal consolidation will require change in tax architectures and transfer systems. These future reform should not be evaluated only by revenue neutrality or aggregate inequality. They should also be assessed in terms of horizontal inequity, life-cycle incidence, regional heterogeneity, and compensation mechanisms.

8 Conclusion

This review shows that fiscal redistribution is an outcome of policy interaction rather than a direct reflection of statutory design. Personal income taxes are generally progressive, but their realized effect is often limited by low effective rates, deductions, credits, base erosion, and narrow coverage. Indirect taxes are usually regressive under current income measures, but their incidence depends on consumption patterns, exemptions, behavioral responses, and revenue recycling. Transfers, public pensions, health care, education, and other in-kind services account for much of aggregate inequality reduction, but their measure effects are sensitive to scale, targeting, demographic incidence, and valuation rules. Cross-national variation in redistribution therefore arises less from any single policy parameters than from the way taxes, benefits, social insurance, and public services interact with pre-fiscal inequality and institutional constraints.

The implications are both methodological and policy oriented. A credible analysis of fiscal redistribution should define the income concept, specify the counterfactual, distinguish progressivity

from realized redistribution, separate vertical equity from horizontal inequity and reranking, and evaluate fiscal instruments as parts of an integrated system. Future public economics research will be strongest when it combines transparent decompositions with dynamic behavioral, lifecycle, income-wealth, and multidimensional welfare approaches, while making the normative assumptions embedded in measurement explicit.

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