



ODI Global

Report

Poverty and public finance: a primer

Martin Evans

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Abbreviations and acronyms

CEQ	Commitment to Equity
CGE	Computable General Equilibrium (model)
COICOP	Classification of Individual Consumption According to Purpose
CPI	Consumer Price Index
DHS	Demographic Health Survey
DRM	Domestic Revenue Mobilisation
ETR	Effective Tax Rate
FAO	Food and Agriculture Organisation
GDP	gross domestic product
HBS	Household Budget Survey
HCES	Household Consumption and Expenditure Survey
HES	Household Expenditure Survey
HIES	Household Income and Expenditure Survey
IMF	International Monetary Fund
LIC	Low Income Country
LMIC	Lower Middle-Income Country
LSMS	Living Standards Measurement Survey
MICS	Multiple Indicator Cluster Survey
MPI	Multidimensional Poverty Index
MPM	Multidimensional Poverty Measure
OECD	Organisation for Economic Co-operation and Development
OPHI	Oxford Poverty and Human Development Initiative
PIT	Personal Income Tax
PMT	Proxy Means Test
PPP	Purchasing Power Parity
SDG	Sustainable Development Goal
SSC	Social Security Contribution
TCLI	True Cost of Living Index
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNICEF	United Nations Children's Emergency Fund
UNU-WIDER	United Nations University World Institute for Development Economics Research
VAT	Value Added Tax
WHO	World Health Organization
WTO	World Trade Organization

Executive summary

This is an introductory guide to poverty for public finance staff. The importance of poverty to public finance policy and practice was found to be the highest priority in cross-cutting challenges for public spending in a recent survey. But the way poverty is defined and measured is technically complex and often differs from approaches used to consider who should contribute to public revenues and how fiscal policy should impact them.

The first part of the primer describes how poverty is defined, measured and reported. Poverty reflects material well-being and is usually measured as a monetary value and captured at the household level using data from representative household surveys. Poverty is defined by setting a minimum threshold in the level of people's standards of living. For most low- and lower-middle-income countries this is captured by measuring household consumption, but for higher and upper-middle-income countries it is more often measured using income (Mancini and Vecchi, 2022).

To ensure that a poverty line can be drawn, people must first be ranked consistently from poorest to richest. The total value of monetary consumption includes both cash and non-cash elements and can impute values for rent and for user-durables to ensure consistent comparison. Annual totals are used and prices adjusted to reflect inflation and locational differences. These totals are then adjusted to reflect household size and composition using equivalence scales.

Poverty lines are usually set at an absolute level in low-income countries (LICs) and lower-middle-income countries (LMICs) to reflect basic needs for food and non-food items. As living standards evolve due to economic development, 'relative' rather than absolute levels are used in higher-income country contexts.

Poverty is best considered as a range that extends either side of the poverty line: how far below the poverty line people are (poverty gaps) and, for those above but close to the poverty line, who can become poor if they experience a shock (the near poor). Poverty is dynamic, and 'chronic poverty' means long or repeated spells.

Poverty is reported using national poverty lines, which can be set to capture food needs alone and all items of basic needs, leading to profiles of 'food poverty'. International poverty lines and national poverty lines are used to measure progress on poverty reduction

under the Sustainable Development Goals (SDGs). It is possible to disaggregate poverty by age, gender and disability and to produce subnational profiles at regional and smaller area level.

Key implications for public finance staff include:

- Understand the survey source and methodologies used by statistical agencies.
- Assess how far the poverty methodology of ranking people and setting their minimum living standards aligns with fiscal policy.
- Be able to incorporate national poverty metrics into evaluation, policy-making and resource allocations.

The second part of this primer explores how public finance affects poverty. Macroeconomic policies to promote poverty reduction can ensure economic growth is shared across the population in the form of jobs and markets for goods, and the flows of people and money in the form of rural–urban migration and remittances. Urban growth can reduce rural poverty by funding infrastructure and social expenditure, while rural poverty can directly be reduced through improved agricultural productivity and the development of non-agricultural employment. Trade policy is an important driver of prices and the goods and services that people in poverty consume. Inflation, especially food price inflation, is worse for them as they spend larger proportions of their income on food but rising prices can also increase the incomes of farmers and food producers.

Fiscal policy promotes programmes for health, education, sanitation and transfers to prevent and respond to poverty, and can ensure infrastructure gives access to economic opportunities. Turning to consider fiscal policy's direct influence on poor households, it is crucial to have both a sense of who gets services and transfers, and how their financing is shared across the population. This analysis is called 'fiscal incidence'.

The definitions and profiling from the first part of the primer allow an assessment of how taxes, transfers and public services are spread across poor and non-poor populations (and by the overall level of consumption, divided into equal shares, 'deciles' or 'quintiles'). This allows an accurate identification of who receives what, in terms of transfers, subsidies and services, and who pays, in terms of direct and indirect taxes and user charges. By combining these, a full consideration can be made of the net effect of fiscal policy on households' material well-being: considering how fiscal policy changes consumption levels, as compared with the 'pre-fiscal' level, and then analysing poverty and inequality before and after fiscal policy.

Optimising fiscal policy for poverty reduction requires an empirical understanding of how poor people behave and their characteristics: often risk averse, engaged in low-productive jobs and activities, relying on informal transfers, loans and credit, having higher levels of home production for their own consumption and using informal markets and barter when making purchases. Understanding how taxation impacts poor people helps ensure that policy is well formed – avoiding inefficient tax expenditures, for example. Similarly, considering how services and user charges affect the living standards of people in poverty is crucial.

Fiscal incidence analysis provides a transparent way of assessing the poverty-reducing effect of fiscal policy and the share of taxes, transfers and services across the whole population. With this information, policy options can be considered using ‘micro-simulation’ – an approach that uses the original survey data that produces the poverty estimate to model different options for reform and their potential impacts.

The policy analysis in this primer demonstrates the importance of an evidence-based approach to fiscal policy formation and evaluation. Optimising this evidence base means engaging with the design and implementation of household surveys together with data from other sources, such as revenue authorities, social assistance registries and ‘big data’. Evidence, analysis and an understanding of the measurement of poverty and its potential implications for fiscal policy lie at the heart of poverty reduction.

1 Introduction

This is an introductory guide to poverty for public finance staff. Its motivation is two-fold. First, it reflects the importance of poverty to policy. Addressing poverty was found to be the highest priority in cross-cutting challenges for public spending in ODI Global's 2025 survey of finance ministries in low- and middle-income countries.¹ The second aim is to simplify and explain the technically complex definition(s) and measurement of poverty to help readers understand how an appreciation of poverty can be optimised into fiscal policy practice and design. Poverty is often surrounded by academic and technically complex issues of measurement. This primer deliberately avoids algebra, econometrics, economic theory and statistical methods to allow a wider readership to get to grips with the essentials of theory and practice.

The primer's focus is on poverty as it is appreciated and measured in low-income and lower-middle-income countries (LICs and LMICs). We concentrate on the most relevant and applied aspects of poverty for public finance in low-income contexts. This means **a primary focus on poverty as a lack of 'money' and on household consumption levels measured using prices**. The primer also looks at income alongside consumption where required and introduces non-monetary approaches to measuring poverty. We use the term **'material well-being'** to refer to both monetary and non-monetary approaches, and **'monetary well-being'** to refer to both consumption and income.

There are many international and domestic policies and targets for poverty reduction; these can be at the national or regional level, and can be based in executive government functions, in ministries and in sectors. This primer aims to help public finance staff understand and interpret how those policies and programmes can be supported through public finance. Some of the most important are:

Poverty reduction in the global Sustainable Development Goals (SDGs)

SDG1 sets several aims:

- The elimination of 'extreme poverty' (in fact, reducing it to 3%) as defined globally.

¹ See <https://odi.org/en/events/what-makes-finance-ministry-officials-tick-survey-evidence-and-suggestions-for-influencing-public-spending-decisions>

- Reducing nationally set poverty levels by 50% for men, women and children.
- Ensuring equal rights to key economic resources and to basic services and technologies.
- Building resilience to disasters caused by environmental, economic and social (e.g. conflict) events.

It identifies three enablers of poverty reduction:

- Mobilising revenue to finance policies to achieve such reductions, including ‘domestic revenue mobilisation’ (DRM).
- Explicitly expanding social protection coverage.
- Establishing poverty reduction frameworks at all levels.

Other SDGs directly relate to poverty reduction:

- Ending hunger and ensuring food security (SDG 2).
- Ensuring optimal healthcare access and health outcomes (SDG 3).
- Access to education (SDG 4).
- Access to clean water and sanitation (SDG 6) and clean energy (SDG 7).
- Reducing inequalities based on gender (SDG 5) and economic status (SDG 10) that can lead to poverty.
- Promoting economic growth through ‘decent’ paid employment (SDG 8).

National Development Plans (Poverty Reduction Strategies)

It is important to understand how SDG and national approaches coincide. This means being able to refer to: poverty reports, usually produced by a country’s national statistical service; national SDG strategies, with particular emphasis on SDG 1; and ministerial reports and budgets that can address poverty – namely social protection (especially non-contributory transfers), education and health, and labour markets and key infrastructure (water, sanitation, energy, roads).

The overarching priorities for public finance can be summarised as ensuring economic growth includes poor people (‘*shared prosperity*’) and raising revenue and distributing government resources to finance programmes for the household population.

2 Poverty definition and measurement

2.1 What is poverty?

The term ‘poverty’ is used here to mean having insufficient resources to achieve a minimum or ‘satisfactory’ standard of living. The crucial point for public finance is that **poverty is a defined standard used by government that influences both the assessment of macro-economic performance and the financing of some programmes**. Every applied and policy-related approach rests on a distinct and specific characteristic: an explicit level of living standards set by a threshold, or ‘**poverty line**’ (explained later), below which the population can be described as ‘in poverty’ or ‘poor’. Identifying people or households as ‘poor’ in this way is the only *precise* and robust way to appreciate poverty, a term that otherwise can often be used loosely.

In recent years there has been an expansion of conceptual approaches to poverty (see Atkinson, 2017 and 2019 for overviews of global and developing contexts). Much thinking has been influenced by Amartya Sen, who sees poverty as an expression of people’s ‘capabilities’: the ability to achieve lives they value, emphasising freedom and agency over mere resources and their distribution (Sen, 1985). Such approaches have informed many governments’ applied approaches to poverty – for instance, multidimensional approaches such as the Multidimensional Poverty Index (MPI, discussed later), which have been extensively employed in many countries. Less common are approaches based non-material well-being (such as ‘happiness’ in Bhutan).² ***The focus of this primer is on the standard approaches to poverty as material well-being, and then on capturing those using income or consumption: or ‘monetary wellbeing’.*** This approach is most consistent with what matters to public finance in low- and lower-middle-income countries and is consistent with official measures of gross domestic product (GDP).

² See www.gnhcentrebbhutan.org/gnh-happiness-index. There has also been a fundamental review of the principles of the current economic assessment of GDP and well-being (Stiglitz, Sen and Fitoussi, 2009). This has been intellectually influential but has not yet led to changes in the applied approach.

2.2 Monetary poverty

A monetary approach identifies the level of resources (income or consumption) that enables overall basic needs to be met. There is one very important consideration, however: **monetary resources (particularly income) are necessary but not always sufficient to avoid poverty**. Some deprivations are responsive to increases in income alone; others – such as infant malnutrition – are less so due to a lack of information or entrenched behaviours and social norms.

2.2.1 Why are monetary poverty and inequality different?

One common confusion is the relationship between poverty and inequality. Poverty is defined as lacking or not reaching a minimum level of monetary resources, while inequality is about their dispersion and the gaps and differences between people across the whole population. Inequality can be captured by using social groups – such as women (compared to men), regions of the country, ethnic and linguistic groups – and this is called ‘horizontal inequality’. This approach can identify differences that result from discrimination or other socio-political causes, and that are often structural. Inequality can also be measured purely in the level of monetary resources spread across the population, to see who has more or the most and less or the least irrespective of their characteristics. This is called ‘vertical inequality’, and the basis of its measurement is clearly consistent with poverty, as it relies on a ranking of poorest at the bottom and richest at the top. Poverty sets a threshold within the ranking that marks a minimum standard. Inequality measures dispersion across the whole population to see what share of total resources are held by whom. An example: the United Nations Development Programme (UNDP) reports that the top 10% of the global population has between 35% and 60% of total income, while the bottom 40% has just 9–10% (UNDP, 2022). The top 1% has over 20% (World Inequality Database, 2023). The ‘Gini coefficient’ captures how far the overall dispersion differs from complete equality. But there is often a relationship between inequality and poverty: groups that suffer discrimination may be poorer, and when elites capture large shares of monetary resources there may be much less distributed towards the poor.

2.2.2 Measurement of monetary poverty

Most government approaches to poverty focus on ‘monetary poverty’. There are two fundamental starting points to understand how monetary poverty is measured:

- 1 Data sources. Monetary poverty measurement normally relies on *representative surveys of the household population* that capture a comprehensive level of detail on income sources, consumption and expenditures and household composition. People who do not live in households, such as street dwellers or people who live

hotels, nursing and care homes, army barracks or refugee camps, are usually excluded from survey-based estimates.

Surveys that collect data on household consumption and expenditure are either specifically focused or multi-purpose. Examples include:

- Household Budget Surveys (HBS)
- Household Expenditure Surveys (HES) – originally used to help produce price indices
- Household Income and Expenditure Surveys (HIES)
- Household Living Standard Measurement Surveys (LSMS), common in LICs and LMICs and usually supported by the World Bank.³

2 Household-based data

The level of poverty is the number of people that are poor (the 'headcount'), i.e. individuals, and can be expressed as a simple population size or as a percentage of the population. However, identification of who is in poverty is usually made at the household level not the individual level. The household level captures 'shared' goods and assets, such as the dwelling, fuel consumption, water and other common items. Within the household, individual incomes and expenditures can be identified but are pooled when calculating household resources. **This approach ignores differences within the household – both in terms of autonomous incomes and assets and in how resources are reshared across members of the household.** Inequality within households is common: women, older people, children and disabled people can be poor within non-poor households, and vice-versa.

2.2.3 Monetary resources

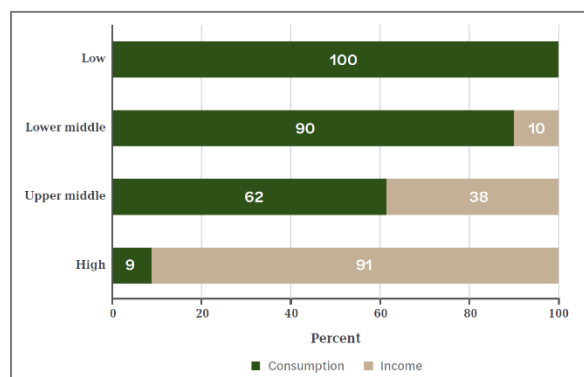
The essential requirement of a monetary poverty measure is to capture standards of living: a household's food and shelter and the utilities needed to keep warm (or cool) and dry, have safe water and hygiene and a range of basic services. A consumption approach measures the value of items consumed by the household – *actual expenditures on goods and services and/or the value of consumption of in-kind goods, such as home-grown fruit, vegetables and animal products*. An income approach measures *the resources required to obtain such levels of use*. In simple terms, the difference is between capturing what is *actually purchased and consumed* for a minimum living standard (consumption) as against the *potential to achieve it* (income).

Figure 1 shows how the choice of income and consumption measures for poverty differs by the level of economic development.

³ www.worldbank.org/en/programs/lms

Low-income countries adopt a consumption approach. High-income countries almost all use income.

Figure 1 Income or consumption poverty measures, by country income group



Source: Mancini and Vecchi (2022), Figure 3.2

2.3 Consumption

Consumption refers to the bundle of goods and services consumed by the household to meet its regular needs. Computation of the ‘consumption aggregate’ is complex.⁴ It will include things that are purchased (*expenditures*), but also things that are gifted, exchanged, bartered for and self-produced. The consumption bundle will reflect tastes and preferences, but it is constrained by the lack of purchasing power (‘*budget constraint*’), isolation from community and family (for gifts and barter) or other factors. Economic theory assumes that the resulting bundle of goods and services represents this level of optimal material well-being (‘*utility*’) and that a consumption bundle can be measured using its *monetary cost*, hence ‘monetary poverty’.

The total level of consumption results from a comprehensive aggregation of all elements based on the total of their *prices*. Some of these will be purchases and have explicit prices; other elements are ‘*in kind*’ prices that will have to be imputed or estimated. For example, for subsistence farming and other forms of home production, if the household eats the corn it has grown or a chicken it has raised, then prices must be given to these as they have not been traded in a market or bought in a shop.

All consumption items can be identified and sorted using the Classification of Individual Consumption According to Purpose (COICOP).⁵

The inclusion of health and education expenditures raises the issue of provision of government services. When calculating the consumption aggregate the value of these services is ignored (and

⁴ This draws on two resources highly recommended to readers who want to pursue these issues in more depth: Mancini and Vecchi (2022) and UNECE (2011).

⁵ https://unstats.un.org/unsd/classifications/Econ/Download/COICOP_2018_draft_publication.pdf

thus is ignored in most poverty measurement). But actual expenditures are included, including all those on healthcare. This presents a problem as some health expenditures (such as acute hospital care) are very large and would distort annual expenditures because they are so ‘lumpy’. National methodologies differ on this issue. School-based and other education expenditure is another inclusion in the consumption aggregate.

The total of all observed and estimated monetary prices for consumption needs to be adjusted to include values for unseen consumption. Note that not all country poverty assessments make these imputations and adjustments in the same way.

- *Imputing rent.* Consider household X, who rent their house, and household Y, who live in a house on communal land with no rent or who have purchased it outright. Only X is seen to have expenditure – rent – to obtain the benefits of the living space, while Z has no equivalent expenditure. To compare and rank them consistently, a figure of notional rent needs to be imputed by asking Z to estimate how much rent they would pay, by finding a comparison rent for a similar dwelling or creating a price based on a regression using the facilities, location and other characteristics of the home in regard to all homes.
- *Consumer durables.* Consumption is typically estimated on an annual basis, but purchases of durable goods such as cars, household appliances and electronic devices are single high-value items of expenditure that then provide useful gains to household consumption over a protracted period beyond the year of their purchase. Treating the purchase as part of annual expenditure may make estimates ‘lumpy’. But it would also mean that comparing household A, who purchased the item in the relevant year, to household B, who purchased it sometime previously, will distort a consistent ranking of their consumption. The solution is to impute a ‘*consumption flow*’ from each durable good (see Mancini and Vecchi, 2022).

2.3.1 Expenditures that are not consumption

Some expenditures do not contribute to consumption. Money that *flows out* of the household is ‘*non-consumption expenditure*’. It includes both monetary and in-kind outflows. Examples include:

- Direct taxes: personal income tax (PIT), social security contributions (SSCs), property tax and local taxes.
- Payments to investments and debts. Paying into savings is setting aside funds to cover future consumption and does not contribute to current consumption. Similarly, payments towards debts or loans relate to past rather than current consumption in part or in whole.

- Payments in cash or gifts to other households. Transfers between households are ubiquitous in LICs and LMICs. Payments made by the donor household do not contribute to its current consumption and should be ignored or subtracted, but they clearly will affect the recipient household's resources to consume. Similarly, if an absent member of household sends money, this contributes to purchases for consumption in their original household, but that remittance should be subtracted from the absent member's consumption.
- Large expenditures on funerals, weddings and other festivals and social events. Like purchases of durable goods, these are large and 'lumpy' expenditures that can distort a calculation of 'normal' or typical levels of current consumption. It is also the case that weddings and other communal events are often planned, and thus consumption patterns will adjust to compensate (for funerals less so, as a death may be unexpected. Methodology varies at the country level.

2.3.2 Price adjustment

After adding imputed consumption and subtracting non-consumption expenditures, there needs to be an adjustment to ensure that values are consistent and take account of inflation over the duration of the survey interviews and that they reflect locational differences in prices. Consumption measured at an annual and national level is adjusted to be nationally representative and to reflect overall inflation levels.

2.4 Income

Measuring household income is a two-step process: first, identifying all sources of income (inflows of monetary and in-kind resources; not wealth, which is a 'stock'); and second, subtracting elements to calculate the '*net disposable income*'. As with consumption, income is assessed at annual or more frequent intervals and will exclude large and 'lumpy' inflows such as lottery and gambling windfalls and other irregular or one-off flows. Also excluded are inflows from the sale of assets, savings withdrawals (but interest earned is included) and loans. These are all instances of reducing the net worth of the household and are not defined as income.

Gross income is the cumulative total of all individual and household sources of regular resources in parts 1 to 3 in Box 1. *Net disposable income* reduces this gross figure by deducting sums set out in parts 4 and 5.

Box 1 Income poverty approach

(1) Income from employment

Employee income is the sum of wages and salaries including bonuses, free or subsidised goods and services from an employer, severance and termination pay and employers' social insurance

contributions. Income from self-employment is revenue from the sale/exchange of output or services and the value of goods produced for barter and/or own consumption, minus the costs of inputs.

(2) Income from capital

Interest from savings, investment income, for example

(3) Transfer Income

Public transfers from social security pensions or other contributory schemes and social assistance benefits;⁶ private commercial transfers such as occupational pensions and private pensions/annuities; and private non-market transfers from non-profit institutions and informal transfers from individuals and other households (including remittances).⁷

Income-based poverty is calculated using **net disposable income**, which is the total of gross income (1, 2 and 3) minus the sum of the following deductions (4 and 5).

(4) Public taxes and fees

Taxes (net of refunds); social insurance contributions paid by the employee (or voluntary contributions); and compulsory fees and fines.

(5) Current informal transfers paid to other households or to non-profit institutions.

2.5 Adjusting for household size and composition

Both income and consumption approaches must be able to compare and rank households consistently. If household A has just one person living in it and total monetary resources of \$1,000, it is much better off than household B with four people and the same \$1,000. To adjust and equalise their resources, a deflator called an '*equivalence scale*' is used. The simplest form purely uses the size of the household (the number of people), and this is called a *per capita* approach.⁸ This is important because the World Bank uses this approach to report poverty levels for every country, region and at the global level for the SDGs.

Other equivalence scales also consider economies of scale and the age of people in the household. Practice varies for national poverty measurement. Economies of scale reflect the assumption that two or more people will benefit from shared goods, known as public goods, in the household, such as housing and energy costs. The most common assumption is that each additional person represents a 0.6

⁶ Note that practice differs in the treatment of in-kind transfers such as food, clothing and other goods.

⁷ As per footnote 1.

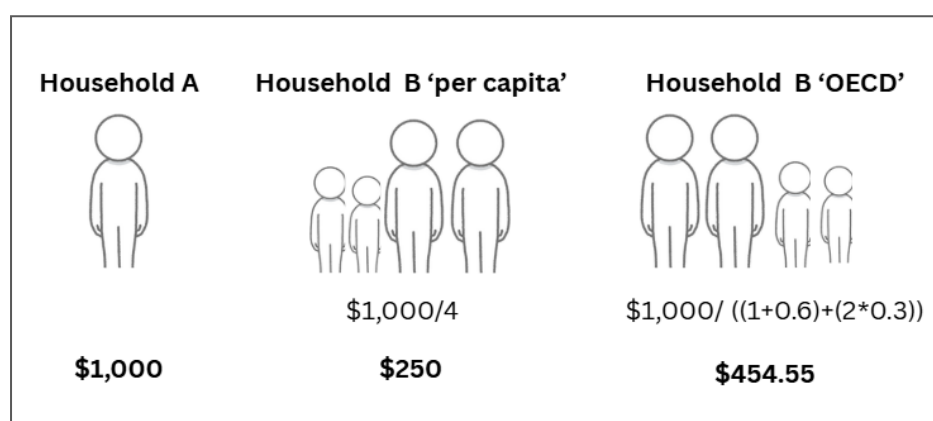
⁸ The 'old OECD' equivalence scale is also per capita but uses the square root of the number of household members.

weight for their increase in needs. Age weights are often used in equivalence scales, with lower weights for children who are assumed to have lower need levels than adults.

To illustrate differences in the use of equivalence scales, consider a ‘model’ household with two adults and two children. A simple per capita equivalence scale will produce a score of 4 (the number of people). The ‘modified OECD scale’, used by the Organisation for Economic Cooperation and Development (OECD) and the European Union (EU) among others, gives the weight of the first adult as 1, the second adult as 0.5 and then 0.3 for each child. The resulting equivalence scale weight for our model household would be 2.2. The different equivalence scales therefore result in different equivalences (see Figure 2).

$$\begin{aligned} \text{Per capita:} \quad & \frac{1000}{4} = 250.00 \\ \text{Modified OECD:} \quad & \frac{1000}{2.2} = 454.55 \end{aligned}$$

Figure 2 Equivalence of \$1,000 consumption by household size and composition



Equivalence scales are essential for an accurate ranking, but do not alter the ‘nominal’ or unweighted resources reported by the household and individuals within it (for PIT for example). On the other hand, social assistance transfers will often reflect household composition. The result of using an equivalence scale means that the whole individual population living in households can be ranked accordingly. Poverty can then be expressed as the proportion of the total population who are poor (rather than as a percentage of households).

2.5.1 Absolute consumption-based poverty lines

An absolute poverty threshold for consumption estimates an objective basis for a ‘minimum’ level of basic needs. There are three main ways of estimating the cost of a minimum standard of living through consumption:

- The ‘cost of basic needs’ approach (see Haughton and Khandker, 2009), which anchors the poverty line in calorific requirements based on ‘human energy requirements’: the average amount of available food energy needed to sustain normal body weight and physical activity. These requirements are specified by age and gender and can also reflect issues that alter calorific needs, such as illness, pregnancy and breastfeeding (FAO, WHO, UNU, 2001). The costs of food consumed to reach these levels is estimated from survey-based consumption, expenditure and price data reported for those in the lower portion of the distribution. This gives a ‘food poverty’ line. Total expenditures and consumption on non-food items for those in the lower part of the distribution are additional and, when added to the food poverty level, produce a higher ‘all items’ poverty line.
- A Specified Basket of Necessary Goods approach, which sets a standard based on a ‘basket of goods’ seen as representing a minimum standard of living in the particular country or context. This standard may be informed by survey data on consumption but is produced using ‘expert’ inputs into needs and costs and is thus a related but external estimate of consumption against needs.
- Using assumptions about food needs as part of overall consumption levels to impute lines using that apportionment for food, the so-called *Engels Curve* that represents the higher proportion of food consumption by those on low incomes.

2.5.2 Relative poverty lines

A *relative poverty line* reflects a minimum standard according to what is considered adequate for a typical low-income household in a particular country. It is socially determined rather than being an absolute approach to a minimum based on essential needs, such as diet or shelter. A relative approach may arise over time from economic growth and changes in preferences in foods and other goods as overall standards of living rise. However, in many middle- and higher-income countries, a relative approach more usually has an *explicit* aim to capture typical or indicative living standards and is therefore framed to better ensure economic and social inclusion rather than the avoidance of an absolute standard of deprivation or destitution.⁹

⁹ The OECD and EU use a purely relative poverty line that sets the threshold at a fixed point in the distribution (50% of average or 60% of median equivalised net disposable income) to capture poverty and ‘risk of social exclusion’ respectively. One drawback of this approach is that, as average/median incomes rise over time, poverty increasingly has no reflection on a minimum standard of living: poverty headcounts can increase while everyone is getting better off. To counter this, a hybrid approach has evolved that also considers material deprivation in the EU (see Atkinson et al., 2002).

Box 2 National and international poverty lines

A common confusion is in the status of poverty lines (and their approaches) and their applied use in policy. All governments should commit to at least one poverty measure as part of their adoption of SDG targets.

National poverty lines are set by country governments and their statistical agencies. They monitor socioeconomic changes and can feed into policies and programming. However, it is often the case that the 'statistical' poverty line adopted is not replicated in the design and targeting of programmes. In Vietnam, for example, the policy poverty line uses income and is set at a level lower than national consumption-based poverty lines. Other national programmes may use direct proxies (such as regression-based 'proxy means tests' that predict poverty status) or indirect proxies such as minimum wage levels.

International poverty lines are set by international and multilateral agencies. The most commonly used and most important are the poverty lines set by the World Bank. One, 'extreme poverty', has been in place since the 1990s and is sometimes called the 'dollar-a-day' standard (US\$). Originally, it calculated poverty across countries using national survey data so that per capita¹⁰ income/consumption was less than \$1 a day in consistent purchasing power across the countries (so-called purchasing power parity, PPP). The standard is updated as prices change, and the extreme poverty standard is currently \$3.00 per capita per day in 2021 prices (World Bank, 2025). This poverty standard is most relevant to low-income countries, and the World Bank has produced a range of international poverty standards according to the 'country classification' (all in per capita 2021 PPP):¹¹

- Low-income countries: \$3.00
- Lower-middle-income countries: \$4.20
- Upper-middle-income countries: \$8.30

The OECD and EU also have international poverty lines. These are less relevant to the context of developing countries.

- OECD: 50% of average equivalised income.
- EU: 60% of median equivalised income, and additional measures that employ material deprivation (see above, p20-21).

¹⁰ Note the use of 'per capita' equivalence assumption discussed in Section 2.5.

¹¹ There is an additional poverty standard for high-income countries that we do not report here.

2.5.3 Different poverty lines and the depth of and vulnerability to poverty

From our discussion so far, we can see that there may be more than a single poverty line in LICs and LMICs: a lower *food poverty* line may exist to identify those with consumption too low to satisfy a minimum diet (usually set by at around 2,000 calories per adult per day); and a higher ‘all-needs’ poverty line. When these are set at national level it is important to understand how they influence policies and development objectives and which is the main ‘anchor’ for setting targets and goals.

Alongside these fixed poverty lines, it is also important to think about ranges below and around any threshold. First, within the population below the poverty line will be a mix of those in deep poverty and those who are closer to the poverty line. The ‘*poverty gap*’ is the term used to capture how far consumption/income is below the poverty line.¹² The population identified as having *large poverty gaps* will probably be a priority for fiscal and other policy and programmes and are sometimes called the ‘*ultra poor*’. Of course, the applied use of poverty gaps must be considered alongside the use of different poverty lines: people with large poverty gaps using the all-needs poverty line will likely coincide with those below the lower food poverty line. There is resulting potential for confusion and obfuscation if the standard used for policy is ambiguous, and a clear and transparent identification of the relevant poverty standard and the position of poverty gaps in relation to it is crucial. Otherwise, poverty reduction can be a moveable and uncertain target and policy aim.

When we think about the duration of poverty spells there are two important issues. First, people may have repeated years of poverty, particularly those with large poverty gaps: ‘chronic poverty’. Second, as poverty status reflects a certain point in time and is based on an averaging of annual resources, people determined as not poor at the time of the survey may experience changes to their resources that increase poverty risk or severity. Changes to the risk of poverty may arise from factors within their household (e.g. death, morbidity, loss of economic activity – known as *idiosyncratic shocks*) or to events that affect their communities (e.g. weather-related shocks, disasters – *co-variant shocks*). When we consider those who are ‘near poor’ (i.e. they have income or consumption levels above but at the margins of the poverty line), then the concept of ‘*vulnerability to poverty*’ can capture the risk and uncertainties of falling into poverty, an important issue when planning policies. New ways of statistically estimating the non-poor population who may be vulnerable to poverty from shocks (Emmanuel et al., 2023; Barriga-Cabinallas et al., 2024) can be part of the data used in the registration of the population and

¹² Statisticians may also produce an ‘intensity’ of poverty measure that takes the square of poverty gaps to ensure that distance from the poverty line is easier to interpret. However, this ‘intensity’ measure is less regularly provided and even rarer in use for applied policy or fiscal considerations. Most evidence on poverty relies on ‘*headcounts*’ (the number of those below the poverty line and as a percentage of the population) and poverty gaps.

their poverty and potential poverty status for social assistance so-called *social registries*.

2.5.4 Disaggregating poverty profiles

SDG poverty reduction specifically mentions population sub-groups that should be assessed in poverty assessment and poverty reduction approaches: *men, women and children of all ages*. Producing estimates of child monetary poverty relies in the first instance in counting the number of children in poor households and expressing that number as a proportion of the child population. This is best done using age groups, such as 0–5 years, 6–11 years and 12–17 years, and these age groups can be set to match school age or other policy definitions. There is a higher level of child poverty compared to adult poverty in global estimates made by the World Bank and UNICEF (Newhouse et al., 2016; Silwal et al., 2020; World Bank, 2024): the ‘extreme child poverty’ rate was 16.8% compared to an adult rate of 6.6% in 2022 (ibid.). Global child poverty is falling at a slower rate compared to adults (Gomez et al., 2023; Ibarra et al., 2025).

Women’s poverty is more complex to profile as simple disaggregation can underestimate the effect of intra-household inequality. The most successful approaches use age disaggregation to consider how women’s poverty changes over their lifetime (Munoz Boudet et al., 2018) and additionally use expenditure on gender-specific items as a proxy for inter-household inequalities (Aminjonov et al., 2025). That approach is also used to produce more granular estimates of child poverty (ibid.). When considering both women’s and child poverty it is important to bear in mind that nutritional deprivation is not always concentrated in monetary poor households (Brown et al., 2019). This may also apply to other material deprivations.

Data on poverty in old age is less available. Extreme poverty in low- and middle-income countries is usually lower for those aged over 60 than for prime age adults (Newhouse et al., 2016), but analysis using relative income poverty in developing countries shows higher poverty for those aged over 64 compared to prime age adults (Roig and Maruichi, 2022).

Data on poverty for people with disabilities in developing countries is very limited. Poverty estimates using multi-dimensional poverty (see below) for 11 countries suggest higher levels of poverty compared to non-disabled populations in middle-income countries (Pinilla-Roncancio & Alkire, 2021). No international evidence on monetary poverty for disabled people in low- and middle-income countries is available. National estimates can be produced if survey data on income or consumption include the ‘Washington Group’ disability module.¹³ Comparisons of disabled and non-disabled populations are best made if an additional equivalisation is used to adjust

¹³ www.washingtongroup-disability.com

consumption/income to reflect the additional needs of disabled people (see Morciano et al. 2015 for a discussion of approaches, which is beyond the scope of this paper).

2.5.5 Subnational poverty

National poverty reports will normally report poverty by region or province and for urban/rural divisions of the population as these reflect the ‘strata’ used in the survey design. The problem for public finance is that allocations of subnational funds to municipal and local governments require a much finer grain of poverty measure if such allocations are to reflect population size, composition and ‘needs’. Having small-area poverty estimates is thus a huge potential gain for subnational resource allocation in public finance. With the household survey only going so far below the national level before becoming unreliable, the production of small area poverty estimates has become an established approach, using a combination of census and survey data to estimate poverty populations at the local level. These methods, called ‘poverty mapping’ or ‘small-area estimation’ (Corral et al., 2022), are now being supplemented with ‘big data’ (for instance from mobile network operators) and satellite imagery. These more recent sources of data can improve survey and census-based estimates and help in drilling down to local government areas.

Any public expenditure allocations to subnational agencies and governments should take into account local poverty estimates and include them in allocation formulae or other approaches if poverty is to be considered in a comprehensive manner. It is also crucial to have clear fiscal incentives for local authorities to assist in the accurate identification of poor households, in particular when they are both raising local revenue and implementing social assistance (Ahmad and Brosio, 2006).

2.6 **Alternative and complementary poverty approaches**

There are several alternative approaches alongside monetary poverty (for more details see Appendix 1).

2.6.1 Multi-dimensional poverty

The most widespread, long-standing and widely known approach is the Multidimensional Poverty Index (MPI) developed by UNDP and the Oxford Poverty and Human Development Initiative (OPHI) in 2010. MPI has large coverage of developing countries (the global MPI). It was updated to capture key SDG indicators in 2018. National MPIs have grown in coverage using dimensions and cut-offs that reflect national policy priorities.¹⁴ The World Bank has produced its own Multidimensional Poverty Measure (MPM) with growing international coverage. The measure is also increasingly being used at country level as part of periodic poverty assessments – see, for

¹⁴ See the Multidimensional Poverty Peer Network (<https://ophi.org.uk/national-mpi/mppn>).

instance, Nigeria (World Bank, 2023). The differences between the MPI and the MPM are discussed in the Appendix.

Other approaches to poverty and material well-being include:

- Proxy means tests (PMT) for social assistance predict poverty status for programme targeting.
- Wealth indices are produced to rank the material well-being of households in Demographic Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) and the lowest quintiles taken as a proxy for poverty.
- Food insecurity measured using food intake in both general surveys and in humanitarian assessments to target aid.
- Experienced Poverty and Basic Necessities measures capture people's assessment of having necessary services, goods and food.
- Subjective Poverty and Life Satisfaction.

The usefulness of alternative approaches to public finance lies in the ability to triangulate across poverty profiles to design and evaluate programmes. The growth of 'multi-purpose' household surveys (such as the LSMS) will allow more than one approach to be used from the same data source.

3 Applying poverty to public finance

Poverty measurement should be accompanied by a **commitment to its applied use**. Two main areas of public finance policies affect poverty reduction:

- Macroeconomic policy affects prices, productivity, trade, economic activity and job creation. This aspect of public finance is well-established in ministries of finance thinking.
- Micro-economic policy influences household poverty risk. Core public finance programmes such as revenue raising (taxes, in the main) and programmes that respond to poverty are often framed at the sectoral Ministry level. Health, education and infrastructural services all impact household monetary well-being.

3.1 The drivers of poverty reduction

The distribution as well as the level of economic growth are major contributors to poverty reduction. Rising per capita GDP has been found to explain 90% of the historical variations in poverty (Bergstrom, 2022). But aggregate growth doesn't always lead to optimal poverty reduction. There must be clear links between growth and poor populations: through jobs, markets and the flows of people and money – for instance through rural–urban migration and remittances. Urban growth can also spill over into rural poverty reduction by raising revenues to pay for public investment in infrastructure and social expenditure.

Domestic revenue mobilisation should result from an increase in real resources produced by economic growth to fund programmes that promote poverty reduction. The sequencing of those policy mechanisms is important. For example, growth in agriculture can hugely decrease poverty when a large segment of the rural population is poor (for instance, in Vietnam in the 1990s: see Scott, 2008) but increasing non-farm incomes over time and ensuring that small firms evolve into medium to larger enterprises with improved productivity matter in the longer term.

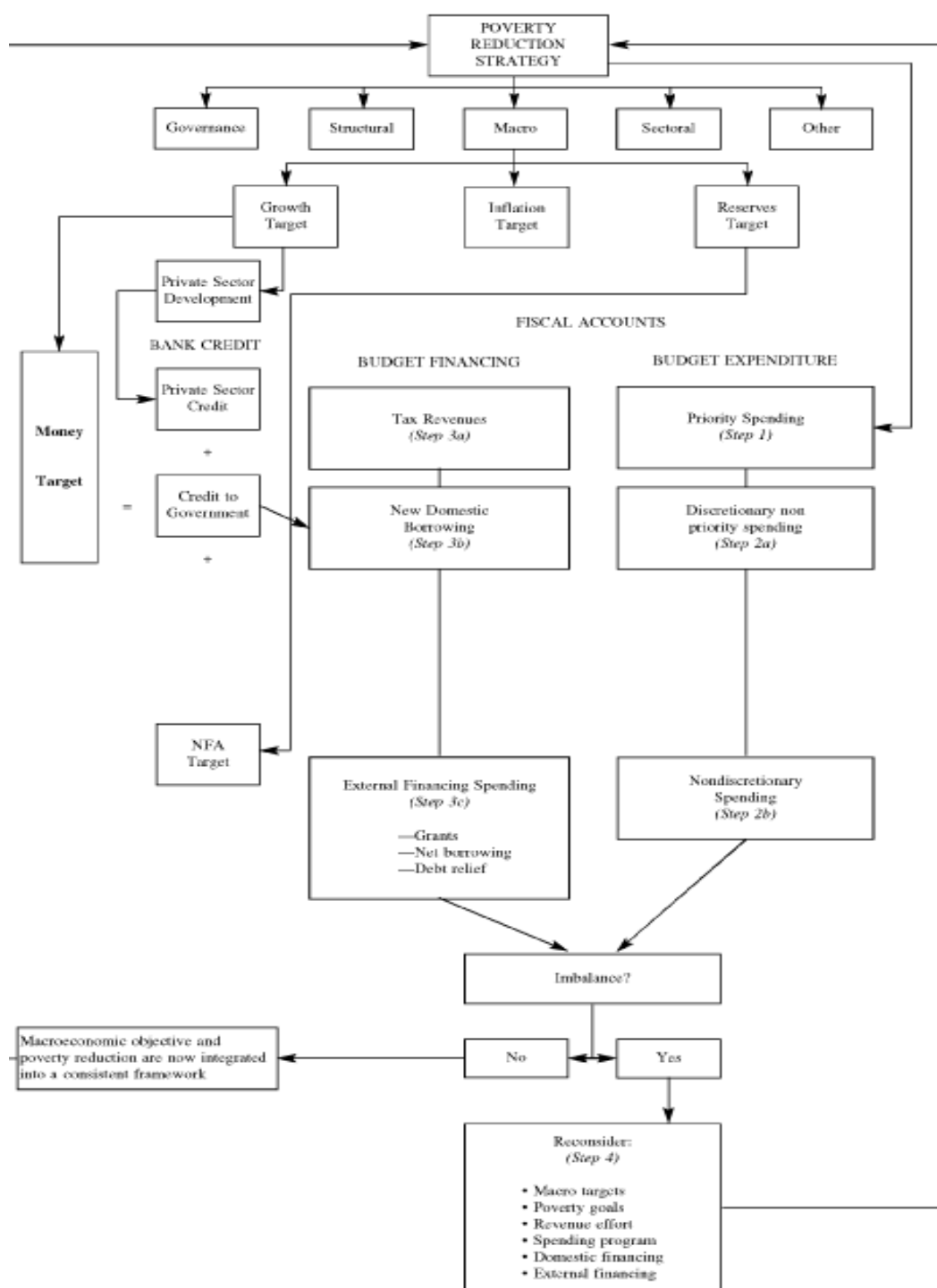
There are countries where economic growth has *not* resulted in poverty reduction, because of the combination of weak links between economic growth and the poor and governments that have not used the resources from such growth to invest and provide social programmes (for instance, extractive industries: see discussion in

Carter et al., 2024). The macro-economic role of fiscal policy has been associated with economic growth in developing countries when focused on productive sectors such as infrastructure, education and health. Tax revenue also contributes positively to the economy, but only when well managed and the level of tax collection is sufficient to fund productive spending. On the other hand, fiscal policies that rely too heavily on budget deficits and public debt risk denting economic growth, especially if debt financing is not used productively.

Trade is also crucial and the WTO and World Bank have clearly identified how best to ensure that trade is poverty reducing (2015: 21): 'Trade will have direct impacts on the poor if it changes the prices and availability of the goods and services they consume and the returns they receive from the goods and services they produce'. They point specifically to lower import prices for goods and services that improve agricultural productivity; competition to reduce rents in the value chain; and transforming jobs into higher-productivity sectors and firms. The role of taxes and regulation in these processes should be carefully considered.

Inflation has dire consequences for those on low incomes. It erodes their purchasing power and, if inflation rates are higher than incomes, will push people into poverty and deeper into poverty if they are poor. Wealthier households are less affected as their income is based less on wages and transfers, their assets can protect them, and they are better able to change consumption patterns without falling into poverty. In general, food price inflation affects low-income households most because they spend a larger share of their income on food and are faced with reducing their food intake and choosing less nutritious staples, with potentially bad nutritional outcomes, particularly for children and older people. In LICs and LMICs, rural households who rely more on non-monetary income from subsistence farming, informal transfers and barter may be affected less, particularly if they get higher prices for their produce. Figure 3 summarises the complex choices and trade-offs in optimising poverty reduction within a framework of macro-economic and fiscal policy.

Figure 3 Financing poverty reduction strategies in a sustainable manner



Source: Izquierdo et al. (2001: Figure 3)

The policy objectives that can ensure economic growth promotes poverty reduction in low- and lower-middle-income countries (Klasen, 2009) can be summarised as:

- Improving agricultural productivity
- Reducing structural ‘horizontal inequalities’:
 - Regional differences in growth
 - Gender inequalities – particularly in economic activity and service access
 - Disadvantaged groups such as caste, indigenous and others subject to discrimination
- Strong state capacity in programme delivery
- Pro-poor political commitment.

3.2 Fiscal policy and its impact on the household distribution

3.2.1 Profiles of the consumption distribution

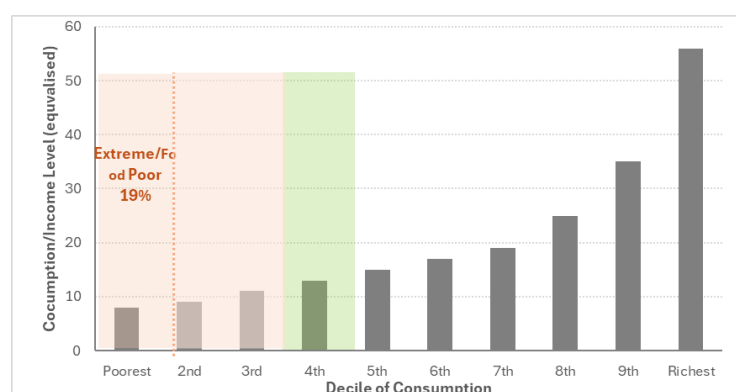
Policies on poverty response are best assessed when there is a focus on the distribution of household consumption/income and this means returning to consider the survey and other evidence we considered in Part 1. A poverty focus for fiscal policy will rest on the ranking of the population according to both their consumption level and their poverty status. There are two main approaches:

- A *poverty-focused* approach will divide the population into two main groups: those in poverty and those who have consumption levels above the poverty line. However, a simple binary distinction between ‘poor’ and ‘non-poor’ can be too blunt, and it may be more useful to additionally distinguish the depth of poverty (for instance, those in poverty who have larger than average poverty gaps) or those who are ‘food poor’ – see earlier discussion) and ‘near poverty’ (those who have consumption/income levels above but at the margins of the poverty line). This makes four groups:
 - Poor: food poor
 - Poor: but not food poor
 - Non-poor: ‘near poor’
 - Non-poor: those clear of the margins of poverty risk
- An inequality-based approach divides the ranked population into ‘shares’. If the ranked population is divided into 5 equal-sized groups, they are called quintiles; if into 10, then deciles. These are the most common groups and are often used in poverty reports. The important thing to note is that these equally sized groups are not based on any direct assessment of their needs or poverty status and are thus ‘relative’. The bottom quintile (or 1/5th) or decile (or 1/10th) are thus the ‘poorest’, and the top quintile or decile are the ‘richest’.

- Identifying the poor within and across these quantiles can be done by assessing where the poverty line would be. For example, if 35% of the population are poor then this line would lie at the 35th quantile: in-between the cut-offs between the 3rd and 4th decile and in-between the poorest and 2nd quintile. The same logic can apply to the levels of extreme or food poor and the near poor.

In Figure 4, the household population has been ranked and divided into 'deciles' of values of consumption/income – shown by the grey vertical bars. The hypothetical level of each 10th of the population is indicated by the height of the bar.

Figure 4 Deciles and poverty status: an illustrative hypothetical



Source: Author's illustrative calculations

The poverty line is shown super-imposed across the deciles, at a value of 12, and the poor are 35% of the population: the pink shaded area, of which 19% are extreme or food poor. The green shaded area shows the status of the near poor: 13% of the population.

A key and fundamental point for public finance **is the importance of understanding the overall distribution alongside poverty. This cannot be understated if fiscal policy aims to be progressive:** that is, to have transfers and services partly funded by higher incomes through progressive taxation. It also suggests that the tax burden can potentially fall on middle consumption/income levels when the median person – the 'typical' level of monetary well-being at the 50th place in the distribution – is often not far above the poverty line.

3.3 Identifying and attributing fiscal policy to households

The key to identifying who receives transfers, accesses services and pays taxes lies in the same (or similar) household survey data that produces poverty estimates. Of course, administrative data from revenue collection agencies and line ministries will also assist, but **the essential issue is to be able to identify both poverty and the incidence of fiscal policies together.** This points to importance of

designing the survey in order to answer this question. Approaches to using survey data to identify fiscal policy incidence are outlined in the Appendix.

3.3.1 Distribution of fiscal incidence and poverty

There are two fundamental questions:

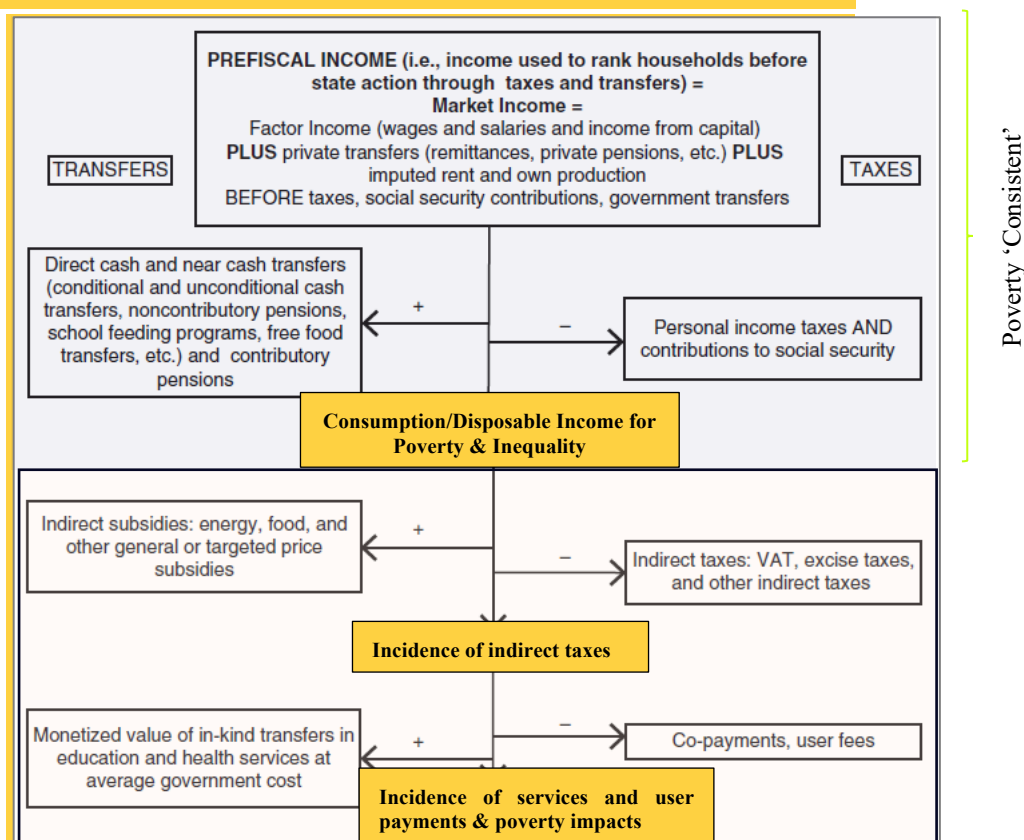
- 1 How are fiscal inputs (taxes and charges) and outputs (transfers and services) distributed?
- 2 What are the values of taxes, transfers and services to those in poverty and across the whole distribution (e.g. by deciles)? Both the absolute values of fiscal inputs and outputs and their relative 'shares' of the totals are important.

Together, these two analyses allow a *fiscal incidence* analysis of the impact of the distribution of fiscal policy.

'Impact' is best identified by *comparison* to a situation where that element of fiscal policy is zero: that is, the levels of consumption/income *before fiscal policy* is allocated. The usual approach to computation of this pre-fiscal distribution is a purely arithmetic one, with no assumptions as to how individuals and households will have behaved differently in the absence of that element of fiscal policy. Impact is a *cumulative* assessment. While the profiles of incidence previously discussed may consider each transfer, tax and service independently, assessment of impact is best made by understanding how fiscal programmes interact. For example, considering both transfers and taxes together is essential to evaluate expansion of transfers or services together with a plan to finance them.

The Commitment to Equity (CEQ) approach to fiscal incidence provides a robust and clear assessment of the impact of fiscal policy.¹⁵ It is summarised in Figure 5.

¹⁵ <http://www.commitmenttoequity.org>

Figure 5 CEQ approach to fiscal incidence

Source: Adapted from Lustig (2022): Figure 1.1

Note that the CEQ description uses the term ‘income’ for what we have previously described as monetary well-being, and this equates to consumption as well as income.¹⁶ The original CEQ outline has been amended to reflect the dominance of consumption approaches in LICs and LMICs. The framework has also been adjusted to anchor it in poverty impacts, reflecting the standard measure of poverty produced in national reports.

Poverty is measured using ‘net’ consumption/income after deduction of taxes and other *non-consumption expenditures*. Figure 5 outlines this as ‘*Consumption for Poverty & Inequality*’: the ‘original’ pre-fiscal starting point with the addition of public transfers and deduction of direct taxes. This part of Figure 5 is shaded light blue and labelled ‘poverty consistent’, as it can be aligned to the national statistical office poverty methodology discussed in the previous section.

CEQ takes fiscal incidence analysis further to consider price subsidies and indirect taxes. These can be profiled against the distribution as outlined in the previous section and can be allocated

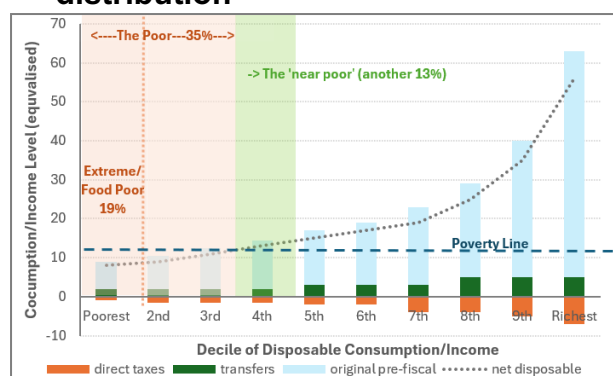
¹⁶ The original CEQ outline is amended to reflect the dominance of consumption approaches in LICs and LMICs and to anchor it in ‘poverty’ impacts that reflect the standard measure of poverty produced in national reports.

to the poor and non-poor populations. CEQ then takes a further step to add the value of services net of user charges and co-payments made by households.

One important point to note is that the CEQ methodology uses aggregate taxes. A more detailed and analytical approach that considers the components of tax policy could consider the distribution of ‘tax expenditures’ – say, tax allowances for PIT and tax exemptions for value added tax (VAT). Understanding the distributional impact of tax expenditures would require a simulation of a reform to them. This is discussed below in relation to ‘micro-simulation’.

3.3.2 Poverty and fiscal incidence

Figure 6 Fiscal incidence, poverty and the consumption distribution



Source: Author's illustrative calculations

Figure 6 duplicates the distribution of net disposable consumption/income from Figure 4 (as the grey dotted line) and shows fiscal incidence as three components illustrated by the vertical bars: the original pre-fiscal consumption/income (light blue bar); transfers (green bar); and direct taxes (orange bar).

Table 1 shows a summary of each decile and the poor's shares of taxes and transfers in this hypothetical case. The overall poor are 35% of the total population, receive 22% of transfers and contribute 16% of all direct taxes, of whom the extreme/food poor group receive 12% and pay 8%. The near-poor group (an additional 13% of the population) receive 8% of transfers and pay 7% of direct taxes. The remainder of the population – those without an assessed risk of poverty – are 52% of the population, receive 70% of transfers and pay 77% of direct taxes. In terms of direct taxation, the truly non-poor pay a greater proportion of taxes than their population share. The poor and extreme/food poor pay a substantial proportion of direct taxes, which may, in conjunction with their reduced share of transfers, not produce optimal poverty reduction overall. The decile shares suggest that there is potential to raise the tax burden on the highest deciles and reduce their share of transfers – the combination would allow a redistribution to the poor.

Table 1 Shares of total direct taxes and transfers

	Direct Taxes	Transfers
Fiscal Incidence and Poverty		
Poor (35% of population)	16%	22%
(of which, extreme poor 19%)	8%	12%
Near Poor (13%)	7%	8%
Remainder of population (52%)	77%	70%
Total	100%	100%
Decile Shares (inequality)		
Poorest Decile	3%	6%
2nd	5%	6%
3rd	5%	6%
4th	5%	6%
5th	7%	9%
6th	7%	9%
7th	14%	9%
8th	14%	16%
9th	17%	16%
Richest Decile	24%	16%
Total	100%	100%

Source: Author's calculations

How do these direct taxes and transfers alter original consumption/income levels? The average amount of tax paid in relation to consumption/income level is called the 'effective tax rate' (ETR). A progressive tax system results from those with higher income paying a higher percentage of their income in taxes compared to those with lower incomes. This system aims to ensure that those with higher incomes contribute more to the tax burden to fund social programmes. A cumulative assessment of direct taxes and transfers together allows a clearer and more strategic analysis of the impacts of fiscal policy.

Table 2 Change to original consumption from direct taxes and transfers

	Taxes (ETR)	Transfers	Combined
Impact on original income for the poor			
Poor (35% of population)	-15%	23%	8%
(of which, extreme poor 19%)	-16%	26%	10%
Near Poor (13%)	-13%	17%	4%
Remainder of population (52%)	-14%	14%	0%
Impact on original income by decile			
Poorest Decile	-14%	29%	14%
2nd	-18%	24%	6%
3rd	-14%	19%	5%
4th	-12%	16%	4%
5th	-14%	21%	7%
6th	-13%	19%	6%
7th	-20%	15%	-5%
8th	-17%	21%	4%
9th	-14%	14%	0%
Richest Decile	-12%	9%	-3%

Source: Author's calculations

Table 2 shows that the cumulative impact of taxes and transfers on the poor is positive, as transfers are larger than taxes, but that ETRs are slightly higher for the poor than for the rest of the population. There remains the issue of how far such a combined impact makes a difference to poverty status or to the depth of poverty. It is noticeable

that taxes represent a larger proportion of original consumption/income for the extreme/food poor – potentially reflecting the influence of flat taxes such as property taxes on the poorest, who also tend to have the largest households. While the case is hypothetical, it illustrates an important issue: ETRs for the non-poor population also show a real non-linearity, with a large jump at the 7th decile and then a decline for the richest decile: potentially the impact of income tax brackets and tax rates not being aligned. Transfers for the non-poor population continue to produce a positive cumulative impact apart from the 7th and richest deciles – suggesting that transfers relating to pensions or other contributory benefits alongside social assistance are driving overall distortions in progressivity.

Table 3 Poverty impacts of direct taxes and transfers

	headcount (% population)	poverty gap (% poverty line)
Pre fiscal	37%	34%
After direct taxes	35%	27%
Change	-2 ppts	-7 ppts

Source: Author's calculations

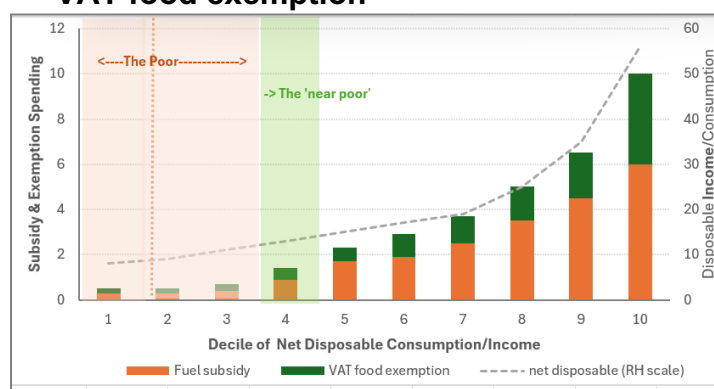
Note: Change shown in percentage points (ppts).

Table 3 shows the impacts on poverty – using the ‘all items’ rather than extreme or near poor thresholds. It shows that the overall impact of transfers and direct taxes in the hypothetical case is a small, 2 percentage points, reduction in poverty, but accompanied by a 7 percentage point reduction in the average poverty gap.

3.3.3 Poverty, subsidies and tax expenditures

We previously considered that price subsidies and tax expenditures were not captured in the definition of monetary well-being used to measure and identify poverty, but that these were hugely important fiscal ‘expenditures’ where they occur. Figure 7 shows an illustrative fiscal incidence profile for (i) fuel subsidies and (ii) VAT exemptions for food using the same profile from Figures 5 and 6. The figures are hypothetical and illustrative to show the pro-rich profiles of both forms of fiscal inputs. Clearly, the poor gain little from fuel subsidies, which mostly flow to those who use petrol and fuels directly. Potentially, the rural poor gain least but the urban poor more. Similarly, VAT exemption on food will not benefit the rural poor who use informal retail and local markets and produce and barter much of their food consumption; the VAT exemption mostly benefits those who use formal shops and supermarkets.

Figure 7 Illustrative fiscal incidence of energy subsidy and VAT food exemption



Source: Author's hypothetical calculations

Note: The Y scales are nominal, and the levels of subsidy and tax exemption are not proportionally set to reflect income levels.

3.3.4 Poverty, service uptake and user-charges

Finally, there is the issue of who receives public services and how their payment for them affects their net consumption/income. Healthcare services are used as an example because healthcare is one of the most pressing issues in LICs and LMICs. The World Health Organization (2024) finds that household 'out-of-pocket' payments were the main source of financing in 30 low- and lower-middle-income countries in 2022 and that, in 20 of these countries, they accounted for over half of all health expenditures. Such spending can dramatically reduce disposable household consumption/income for food, housing and other essential needs, and is termed 'catastrophic health spending'.

Using the approach set out earlier for fiscal incidence, we consider the unit cost value of services provided and then subtract user charges and co-payments (see Figure 5 and discussion) to produce a 'net' financial impact at the household level. We have seen that the inclusion of large and 'lumpy' health expenditures is not consistently approached in the computation of consumption across countries, and this further complicates an easy assessment. But, put simply, there are two approaches to consider together:

- Poverty impacts – either reducing levels of consumption/income below the poverty line or deepening the poverty gaps of those already poor (and lowering levels of those above the poverty line to be 'near poor'). The health expenditures faced by poorer households are reported under SDG 3.8 and are outlined below.
- Fiscal flows and their relationship to these household expenditures.

Issues to consider include:

- Clarify what the data can show. Consider how the household survey used for poverty collects data on healthcare uptake and spending. Consider the best sources of data on healthcare delivery and its unit costs – from health management information systems and financial reporting. Consider data on fee waivers where this is available and estimate the foregone revenue/cost of such waivers.
- Profile the incidence of service uptake from the survey and attribute public expenditure on healthcare and fee waivers to that uptake.
- Profile household spending on healthcare.
- Calculate the difference between public and household spending.
- Profile the levels of household spending and public spending together with any fee waivers and assign it to the distribution of consumption/income. Produce summaries of fiscal incidence, as shown previously, together with totals for household spending (shares, proportion of consumption/income).
- Calculate the proportion of all income/expenditure spent on health for households and see how this aligns with poverty status and decile/quintile position.
- Use national poverty measures for national policy (international poverty measures are used for SDG 3.8), subtract any sums for expenditure from the household consumption aggregate (or net disposable income) and re-estimate poverty headcounts and poverty gaps using constant national poverty line.

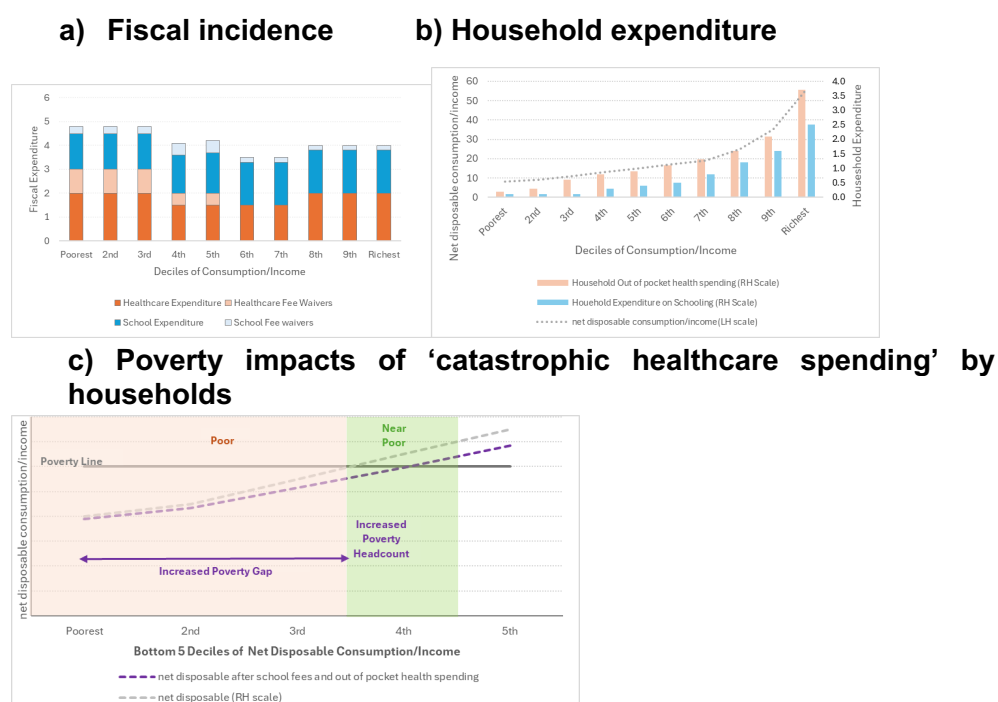
Figure 8 provides an illustrative overview of fiscal incidence. Figure 8a shows the outcome of attributing service costs across the distribution, based on out-turn budget data and survey data on uptake. Note that ‘fee waivers’ have been included as explicit spending, but that may not reflect accounting practice in service ministries.¹⁷ The important thing is to align and attribute such waivers to explicit expenditures (wherever possible) or to reflect the lower costs associated to such waivers in household spending. Figure 8b shows household expenditures on healthcare and school education by decile. Figure 8c focuses solely on the bottom five quintiles and shows the difference in disposable income that results if these user fees and out-of-pocket expenditures for healthcare are subtracted from overall consumption/income levels. The result is to illustrate how such expenditures increase both poverty gaps (for those who are already poor) and increase poverty headcounts when compared to the national poverty line.

The evidence that household spending on health increases poverty is strong. The most recent data from WHO shows how the associated incidence of poverty rises across 39 African countries: ranging from

¹⁷ Note that specific grants or bursaries for school education are assumed to be included in overall transfer income to the household.

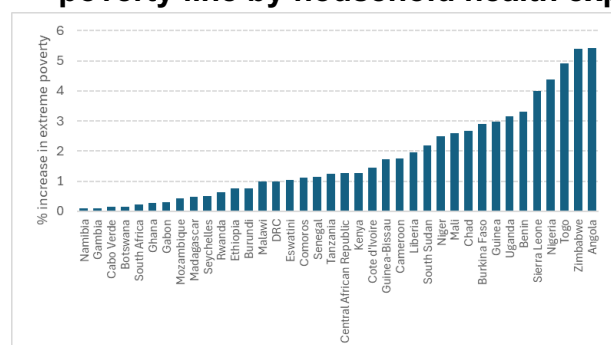
very small increases to large and significant ones (greater than 4% increase in Nigeria, Togo, Zimbabwe and Angola, in ascending order), as shown in Figure 9.

Figure 8 Fiscal incidence and household spending on healthcare and education and the poverty impacts of health expenditure



Source: Author's illustrative hypothetical calculations

Figure 9 Population pushed below the global extreme poverty line by household health expenditures 2014-19



Source: WHO Data Indicators for SDG 3.8

(www.who.int/data/gho/data/indicators/indicator-details/GHO/population-pushed-below-the-1.90-a-day-poverty-line-by-household-health-expenditures)

3.4 Fiscal policy-making and poverty

One advantage of using fiscal incidence analysis is that it makes the distributional effects of policy design transparent, giving an opportunity to both assess current policy impacts and consider reform. Many policies and programmes may rely on definitions and

assumptions about the level of monetary well-being of the poor population. However, to make good fiscal policy it is not enough to know the levels of consumption or income that represent poverty: it is also necessary to understand characteristics and behaviours. Profiles should be generated nationally from survey and other data, but key issues from international evidence include the following:¹⁸

- *Poor households tend to be large and young* – the ratio of those aged under 18 to those aged over 50 is typically 6:1; typically, households have more than 2 children and around 2.5 adults – reflecting the presence of non-parents (aunts, uncles, grandparents). In higher-fertility countries in Africa, it is common to see children in a large proportion of all households, but poorer households have larger families on average.
- *Household composition* often changes through informal childcare sharing and adoption, co-residence and temporary (permanent less so) migration for work.
- There are *high levels of economic activity but based on multiple occupations (agricultural and other) with low, periodic waged work and self-employment that has varying remuneration together with micro (household-level) enterprises* that have very low productivity.
- *High levels of mutual informal assistance*, both in cash and in kind, within extended family and community networks to help with supporting basic needs, savings and loans (such as revolving credit clubs) and responding to shocks.
- *Debt is common* but rarely with formalised loans and often with high rates of interest when taken from non-familial lenders.
- Low levels of assets and lower access to communal infrastructure and services.
- Lower levels of physical health due to nutrition and disease, and poorer mental health due to anxiety and stress.

3.4.1 Liability for taxes

Progressivity ensures that those with the greatest ability to pay (the wealthy, high earners and large corporations) should contribute a larger share of their income/wealth or spending as taxes. This does not always mean that the poor are not subject to taxation, but it does mean that it is crucial to understand what kind of taxes are levied on the poor, to consider their effect and to assess the incidence and impact of taxes across poorer and richer populations.

¹⁸ Banerjee and Duflo (2006); Fields (2014); Fox and Sohnesen (2012); Gindling and Newhouse (2013); Egger, Poggi and Rufrancos (2021); Rohwerder (2016); Rutherford and Arora (2018).

VAT and sales taxes in theory affect the whole population who have monetary spending, but poor people have lower proportions of their consumption monetarised due to self-production, barter and informal exchange of goods. Some monetary transactions are not made in formally registered retail shops, and this means understanding the difference between consumption in kind and expenditures, and what the poor purchase and where/how they purchase it. The regressive nature of such taxes is softened when it comes to poor people, and having lower rates or exemptions on food or other goods will probably benefit richer populations who use formally registered shops (Bachas et al., 2023).

Excise and 'sin taxes': Alcohol and tobacco warrant excises and taxation on the grounds of public health, even though such taxes may be regressive in the first instance. The emerging evidence suggests that the regressive impact of 'sin taxes' falls as behaviour changes in the face of higher prices and health impacts improve economic well-being (Fuchs, Tarlovsky and Gonzales Icaza, 2021; Global Tax Program, 2022).

Income taxes. One structural issue is fundamental: the shape of the distribution of income influences the revenue that can be generated. The largest proportion of the population are in low- to middle-income ranges, but there is a long tail of high incomes that represent much smaller populations. This can mean that a lower tax rate on the many will probably generate a larger proportion of all income tax revenue than a high tax rate on the few. The commitment to progressivity is not affected, but it must be carefully implemented to generate optimal tax revenue.

Personal income tax (PIT) is based on *individual incomes* and as poverty is assessed at the household level, it is important to understand how individuals in the tax base (formal waged or registered self-employed) are spread across the household distribution of incomes and consumption. Poorer people rely on low-productive (and low remunerated) informal employment, self-employment and household-level enterprises and will fall outside of PIT, in the main. This also means there is a potential data gap between the incomes of the poor population and those in revenue authority tax data. Survey data, both that used for poverty and Labour Force Survey (LFS) and other administrative data,¹⁹ can help build clear profiles on which to establish a PIT tax base, which includes the poor and near-poor that are outside the tax system due to informality or have income levels and types of income that are too administratively burdensome to tax.

Taxable income is usually defined by its source: for example business, employment and investment. This excludes informal

¹⁹ Other government databases can be used alongside tax data, subject to data protection safeguards. Data from social insurance and health insurance systems will overlap with formal employment. The growth of both applicant and wider 'social registries' for social assistance and community health insurance programmes provides additional opportunities for data integration.

transfers in cash or in kind from relatives and the community, which are ubiquitous in low-income countries and crucial forms of support for the poor. This also means that the definition of income is different for tax assessment compared to poverty assessment, which includes all forms of income.

Tax allowances can discount taxable income. A personal allowance gives a 0% tax rate on the first 'band' of taxable income. Above that, bands of taxable income will have set rates of tax. Not all countries have a personal allowance and tax income from the first dollar. It is also the case that personal allowances can be adjusted to take dependents into account. Other forms of tax allowance can cover the first tranche of income (or net profit) from agricultural 'business' and provide similar allowances for 'micro-enterprises' that can capture some of the household-level incomes from these activities. Note that reconciling individual incomes from household-level agricultural and business activity will be administratively complex.

It is worth considering the fiscal incidence of tax allowances in general. They can benefit higher incomes, for instance setting off mortgage interest or other interest on loans from tax. Income tax thresholds are often seen to be below poverty lines in low-income African countries (McNabb and Granger, 2022). The applied impact of PIT thresholds on the poor may however be low as the populations of poor and PIT payers may not overlap greatly. If they do, the potential impact on poverty reduction of low thresholds is more or deeper poverty.

Property taxation. For property taxation to be efficient there needs to be a clear way of identifying property value and adjusting for household size and resources, to protect the poor. Here there is much to gain from satellite imaging. Data on the market value of property and rents may be both limited and heavily biased to urban or other commercial locations. Estimates that are additionally based on characteristics of size, construction materials and amenities – a so-called *hedonic* approach – can protect poorer households where rents are high but amenities are poor (such as informal slums) and in areas where communal land tenure dominates and properties are effectively outside a market valuation. Whatever approach is taken, an assessment of progressivity and fairness is essential and taxable property values/income should follow principles that allow clear and consistent ranking.

User charges reflect the funding mix for services where government finance accompanies aid and NGO contributions. Funding differs for primary healthcare compared to acute and hospital-based healthcare. This means that there is a relationship between the allocation of tax revenues to the sector and the financial shortfall from a position that can provide services at low or reasonable cost to all. User charges make up the difference. Co-payments usually arise through health insurance to deter over-consumption and to assist in

financing the full operational costs of elective provision. In other instances, a charge for services may be made, based on a proportion of the overall unit cost of the provision, and then these charges can be waived, in part or in full, by specific programmes that can assure affordability and form part of an overall social assistance programme.

Evidence of the impact of health user charges shows that lower charges were associated with better health outcomes, particularly for children and poorer populations (Qin et al., 2019). The evidence on school fees is more varied and complex because universal primary education has been rolled out widely to raise enrolment, but this can lead to a loss of quality of service and children from better-off families leaving to enrol in private schools. For primary schools a range of fees and costs – for uniforms, materials and school building maintenance – can still deter attendance and retention, and for secondary education the evidence supports more targeted interventions to lower costs, particularly for girls and poorer populations (Morgan et al., 2014).

A programme that protects the poor will set the charges, waivers and co-payments at levels that ensure that services are taken up by the poorest. The fiscal design issues are thus complex as they combine central allocations to sectoral ministries and to subnational governments, and then implementation and operational budgets and programme design that can lead to varying approaches at the local level.

3.5 Poverty coherence and reform

There are good reasons to have measures in place that collect the evidence from surveys and fiscal incidence analysis to show uptake of services by poor populations and spending flows to them. Poverty reduction strategies should have indicators and set targets to assess the performance of public finance. Reporting metrics would follow our earlier approach to reporting fiscal incidence:

- Shares of overall social spending and then each sector and programme expenditure/revenue for each poverty/quantile group.
- Average value as a proportion of average consumption/income for each poverty/quantile group.
- Sectoral and programme spending against varying SDG and national goals – for example, on malnutrition, hunger and school attendance, as well as poverty risk.
- Performance against targets at aggregate, sectoral and programme level.
- Disaggregated performance data for identified priority locations and populations at risk.

Reporting in this form can provide clear evidence at aggregate and programme level of areas of potential reform.

A recommended way of planning reform is to use **micro-simulation**. These are models based on survey data (supplemented by administrative and other data) to do fiscal incidence, and then to consider the impact of potential changes in rules or allocation approaches. Their importance is that they allow iterations to be tested and their potential effects identified and quantified: who would ‘gain’ (i.e. receive more), who would ‘lose’ (i.e. receive less or pay more). Most models use taxes and transfers to give an arithmetic *ex-ante* estimate of the impact of policy change on the household population. Foundational training aimed at low- and lower-middle-income countries is available through the Southmod team at UN Wider.²⁰ A review of microsimulation approaches in LICs and LMICs is also available to demonstrate what they do and how models differ (Abramovsky et al., 2026). However, there is a considerable commitment needed to develop and build a micro-simulation model that includes ensuring that there is the capacity to use it, engage with policy makers using it and to ensure it is updated. Having external partners for this is recommended but it is also worth considering how to build in-house capacity over time before investing in a fully formed model. Using data from the statistical office in table form and building simple spreadsheets may be wise preliminary steps to ensure that buy-in to any model is sustainable.

Micro-simulation improves the empirical foundation of fiscal reform of taxes and transfers and sectoral budget setting, but it comes with some caveats. First, its static and arithmetic approach means that it does not allow for behavioural change. For example, households share transfer income with other households: evidence from a meta-analysis in Africa is that about 70 cents in each dollar of transfer remains in the household (Andrews et al., 2018). This does not mean that simulation is unreliable, but it does mean that any estimate of poverty reduction should be in a range rather than a single point estimate. Second, there are areas of fiscal policy where changes will have large macro-economic impacts – for instance reform of energy subsidies that will change prices across all sectors and not just for households. In these instances, a different form of model that captures wider changes in economic relationships is preferable (Computable General Equilibrium (CGE) type of model). This brings us to an important point: household-based fiscal modelling will join other models used in ministries of finance. Public finance will already be equipped with macro-economic models of various kinds. These are not mutually exclusive or conflicting with mapping ‘micro’, household-level policy change; they can be used together to build robust macro-economic and fiscal scenarios.

²⁰ www.wider.unu.edu/about/southmod-online-course

4 Taking lessons forward

This primer has covered two main topics: the methodology used to calculate poverty and the potential use of such poverty measurement in considering fiscal policy. We have taken a non-technical approach for policy-makers in ministries of finance, to help build a foundational understanding and to link elements of policy-making that regularly become fragmented and uncoordinated: for example, spending ministries often do not have poverty as a major guiding principle, and transfers and taxes are rarely discussed in the same forum. Poverty becomes a technical ‘black box’, understood only by specialist statisticians and economists, and an inexact way of discussing and interpreting needs and how government responds to those needs. This primer tries to build a bridge between those discussions and interested parties.

One intended outcome is to raise knowledge and awareness to start an assessment of key questions that address a policy agenda that can robustly assess and respond to poverty and its related problems. Here are some suggested questions:

1. How is poverty measured by your government?
2. What high-level commitments have been made on poverty reduction as part of SDG goals and other national development plans and policies?
3. What are the drivers of poverty from macro-economic influences on prices and jobs and other household production?
4. In fiscal policy, where does the money on social expenditure go and who pays? How can this be understood and profiled to show how poverty and inequality are impacted by fiscal policy?
5. How can a fuller understanding of the distribution of monetary well-being help review and adjust approaches to taxes, transfers and service provision with user charges?
6. How can options for fiscal reform be empirically assessed? The tools and approaches mentioned in this primer can be built over time rather than relying on the full adoption of CEQ or micro-simulation, for example. Start simple, with commissioned tables from the statistics agency using household data, build spreadsheets based on such summary data and make simple arithmetic analysis. These can be a more robust grounding rather

than turning immediately to external expertise that then needs investment in capacity to take forward.

7. How can data be improved to make better policy and improve tax and transfer administration? First, are there clear assessments of what information surveys provide for fiscal policy decisions; what changes would give better information? Second, how can administrative and other data from satellite imagery and 'big data' sources improve the design and delivery of fiscal policy?
8. How is a poverty focus and poverty reduction coordinated with public finance and fiscal policy and across ministries of planning and finance, line ministries such as health ministries and executive bodies? Where does public finance sit within such coordination?

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Appendices

A1.1 Alternative poverty measures

The first set of measures all use the incidence of material deprivations to produce a ranking of material welfare.

- a **MPI** (Multidimensional Poverty Index) follows the Alkire-Foster methodology (Alkire and Foster, 2011). The methodology establishes a minimum level of deprivation in each indicator (for example the number of years of education received). Each indicator is then counted and weighted to determine how many dimensions are deprived. The poverty line is a score based on the *weighted score of deprivations* by dimension. As with consumption/income an aggregation metric is used reflecting incidence (percentage of poverty) and intensity (on average in how many dimensions the poor are deprived at the same time). The final MPI score is the multiplication of the incidence and intensity of poverty.
- b **MPM** (Multidimensional Poverty Measure) also uses the Alkire-Foster methodology but includes monetary poverty as one dimension.

The differences between MPM and MPI are:

- Global MPI: three dimensions of deprivation
 - Education – enrolment in school or educational attainment
 - Health – child malnutrition and child mortality
 - Standard of living – cooking fuel, sanitation, drinking water, electricity access, dwelling condition, assets
- MPM
 - Monetary – consumption/income below ‘*extreme poverty line*’
 - Education – enrolment in school; educational attainment
 - Access to basic infrastructure – drinking water, sanitation, electricity
- a UNICEF child poverty measures such as **MODA** (Multiple Overlapping Deprivation Analysis) differ from the Alkire-Foster methodology as they *count the dimensions* rather than the indicators of deprivation as each dimension equates to a fundamental child right under the UN Convention on the Rights of the Child (UNICEF, 2020). This methodology means that

measures produce a higher incidence of child poverty compared to counting the component indicators, and that the overall poverty measure is not *monotonic*: it may not decrease with decreasing levels of deprivation (Evans and Abdurazakov, 2018).

- b **Proxy means tests** are used by the World Bank and national governments to *predict poverty status* using regression based on household characteristics (material assets, household composition and economic activity, and other indicators). These are used to target social assistance programmes to those in or near poverty, but they have methodological weaknesses (Brown et al., 2016) and are opposed by advocates of universal approaches.
- c **Wealth indices** produce a ranking of material welfare based on households' asset holdings from which a score is produced by principal component analysis. These indices are used in DHS,²¹ MICS and other surveys that do not capture income or consumption but have been shown to highly correlate to the overall distribution. When used, the index splits the population into quintiles, so that the poorest quintile(s) can be seen as a proxy for poverty.

A second set of measures considers more specific elements of material deprivation.

- a **Food insecurity** measures are based on households reporting meal frequency and quality and food uncertainty in either general multi-purpose surveys or in specific surveys to assess emergencies.
- The Food and Agriculture Organization of the United Nations (FAO) has two levels of food insecurity: moderate (reduced food quality and quantity, skipped meals and rising food uncertainty); and severe (running out of food and going without food for a day or more).
- More severe threats of 'Acute Food Security' using the Integrated Food Security Phase Classification (IPC) drive allocation and targeting of World Food Programme (WFP), FAO and other humanitarian responses. IPC has five levels: minimal, stressed, crisis, emergency and famine.
- b **Experienced Poverty.** Measures of poverty/hardship through the absence of necessities are reported in national and regional 'Barometer' surveys: for instance, in the Afrobarometer in 37 countries (see Mattes and Lekalakeref, 2025). These report how often in the past year households have gone without essentials: for example, cash income, food, clean water, medical care and cooking fuel. These indicators are used to produce the *Lived Poverty Index (LPI)*. They also

²¹ <http://www.dhsprogram.com/topics/wealth-index/Wealth-Index-Construction.cfm>

report if households have sought assistance from familial or community sources.

- Basic Necessities Surveys (BNS) operate in a smaller number of mostly middle- or high-income countries. These ask a series of questions to identify poverty using a Poverty Score Card (Shreiner, 2014).

Subjective poverty and life satisfaction

A subjective approach to poverty measurement captures people's perception of their own material well-being: their assessment of their financial resources and if they are sufficient to meet their basic needs. Expectations can be influenced by peer comparison and cultural norms. A household can be asked to judge where it sits compared to an objective poverty line or to their own assessment of a minimum standard of living. The social aspect of needs can be assessed by asking about the criteria that would represent poverty in their local or national context: for example, constraints on social participation, dependence on charity or public assistance, having low social status as well as being unable to afford necessities. The United Nations Economic Commission for Europe (UNECE) has reviewed subjective poverty measures across 47 mostly middle- and high-income countries (UNECE, 2024).

Issues of 'happiness' and 'life satisfaction' have also become more prominent when discussing material welfare and its relationship to overall well-being. Data now includes low- and middle-income countries covered by the World Values Survey and Gallup World Poll. Most analysis has been on international comparisons of aggregate income (GDP) with a variety of measures that capture life satisfaction, together with indicators of emotional health (see Blanchflower and Bryson, 2023, for a synopsis). Age matters: life satisfaction is higher among youth and elderly people and lower during middle age; health also matters. However, the key concern for policy-makers is how far 'money can buy happiness'. In the US analysis has shown that happiness for those with low incomes increases as incomes rise, but that this flattens out and the unhappy group do not benefit from increased income above a certain point. For those with higher incomes happiness continues to rise as incomes rise (Killingsworth et al., 2022). The evidence from low- and lower-middle-income countries is scarcer but supports the finding that increased income produces consistent gains in life satisfaction for the poorest, but that alongside income, social support, freedom to make choices and overall national economic and social progress matter. Corruption has negative effects (Behera et al., 2024), while comparison with past income and the income of peers is also a key factor (Reyes-Garcia et al., 2016).

A1.2 Survey evidence on fiscal policy

Indirect taxation

Sales taxes, VAT and excise taxes can be attributed and estimated by considering the expenditure on goods and services that attract such taxes. The consumption and expenditure data in many surveys is comprehensive and should allow an identification of taxable purchases and those that have ‘exemptions’ from or lower rates of tax (e.g. food in many countries). One important issue to consider relates to the place where purchases are made: VAT and sales taxes tend to operate on formal retail and wholesale transactions, and poorer populations often use local markets and informal retail outlets that do not levy those taxes on purchases. Knowing the location of such purchases can thus be important (shop, supermarket, local market, barter) when estimating the impact of VAT.

Direct taxation

- Income taxes can be directly reported in many household surveys, especially for those who pay taxes outside of pay-as-you-earn (PAYE) – for instance, the self-employed. The problem in many surveys is that wages are reported as ‘net’, and thus after deductions for PAYE and any social insurance contributions for those formally employed. This means that survey-based estimates of the household incidence of income tax must be cross-checked and adjusted with data from revenue collection agencies and public sector payroll (in many low-income countries a high proportion of income taxpayers are in the public sector).
- Many sources of income are reported at the household level – such as household-level businesses and subsistence agriculture. Economic activity of adults is also recorded in most surveys, and this can allow an apportionment of such household-level incomes, but this points to a potential problem in the PIT tax base if individuals, such as the ‘head of household’, are recorded as having the total of such household income.
- **Social insurance contributions** are similar to income tax in their inclusion in survey data.
- **Property taxes** will usually be itemised in consumption/expenditure data. Other direct general sources of government revenue, such as licence fees, road tolls and fines, will also usually be itemised consumption/expenditure. Fees for public refuse collection and sanitation services will be similar.

User charges for health and education are usually easy to identify – for instance, school building contributions, fees for drugs, community health insurance payments and out-of-pocket health expenditures. Some expenditure on health and education may be for private provision – for instance, for tutoring outside of school and for treatments not delivered through public sector health services. For health expenditures, there is the additional problem that ‘informal’ charges may be levied and recorded in consumption data – where public sector employees demand payments to facilitate or allow access to healthcare. Household surveys are not consistent in

recording these informal expenditures and data will need to be confirmed and understood in each country.

To capture fiscal incidence, attribution of household spending on education and health should thus be made to replicate the revenue flows to the agencies and ministries operating the services: they will be 'on budget' in both allocations and out-turn public expenditure data. Additionally, for poverty assessment, alongside fiscal incidence, it is useful to have the total household spending on health – often also called out-of-pocket spending – and on school-based education to understand how such spending is constrained by affordability for the poor, and thus the impacts of such spending on poverty.

Public transfers in cash or near-cash (such as food assistance) will be identified as income in most services and can range over several programmes based in several ministries and/or agencies. Payments of social insurance benefits for unemployment, maternity, industrial disability, sickness, invalidity and old age/retirement pensions will come from specific social insurance funds held by agencies and may be outside of the central government expenditure account.

Payments of non-contributory transfers may be in the form of general payments to support households – such as social assistance to low-income households or to defined populations: child allowances, social pensions and disability payments. Some sectoral transfers may be made by education agencies: bursaries, school feeding programmes and support for higher education. Transfers from health services can be as 'fee waivers', and identifying them in the take-up of health services and payments made by households may be difficult without additional data from health management information systems. Transfers relating to agricultural support can be of fertiliser, seeds or other inputs to household farmers.

Subsidies that lower prices of energy and fuel are not specifically identified in data but could be computed from data on relevant elements of expenditure in a similar way to indirect taxes.

Services. Most household surveys will record whether children are at school and when healthcare is taken up and record the expenditures involved. However, surveys do not record the public expenditure inputs to provide these services. A full fiscal incidence will estimate these fiscal inputs. Such data will have to be modelled and attributed to households – either 'simply' by having 'unit costs' that are average national aggregate costs of those services from operational budgets for each unit of uptake, or by having more locally adjusted costings for services that reflect subnational and local allocations. LSMS surveys also have 'community' modules that can give data on staffing and class size etc. These adjustments to reflect local and actual service values can be important for both fiscal incidence and to improve financial planning and allocations.