Value-for-money and equity in social protection expenditure

Introductory Course on Social Protection and PFM

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What we will cover

- Value for money in social protection expenditure

- Equity in social protection expenditure

- Exercise: case study applying concepts and tools to analyse social protection expenditure options in Tunisia

Value for money in social protection expenditure

What is VfM?

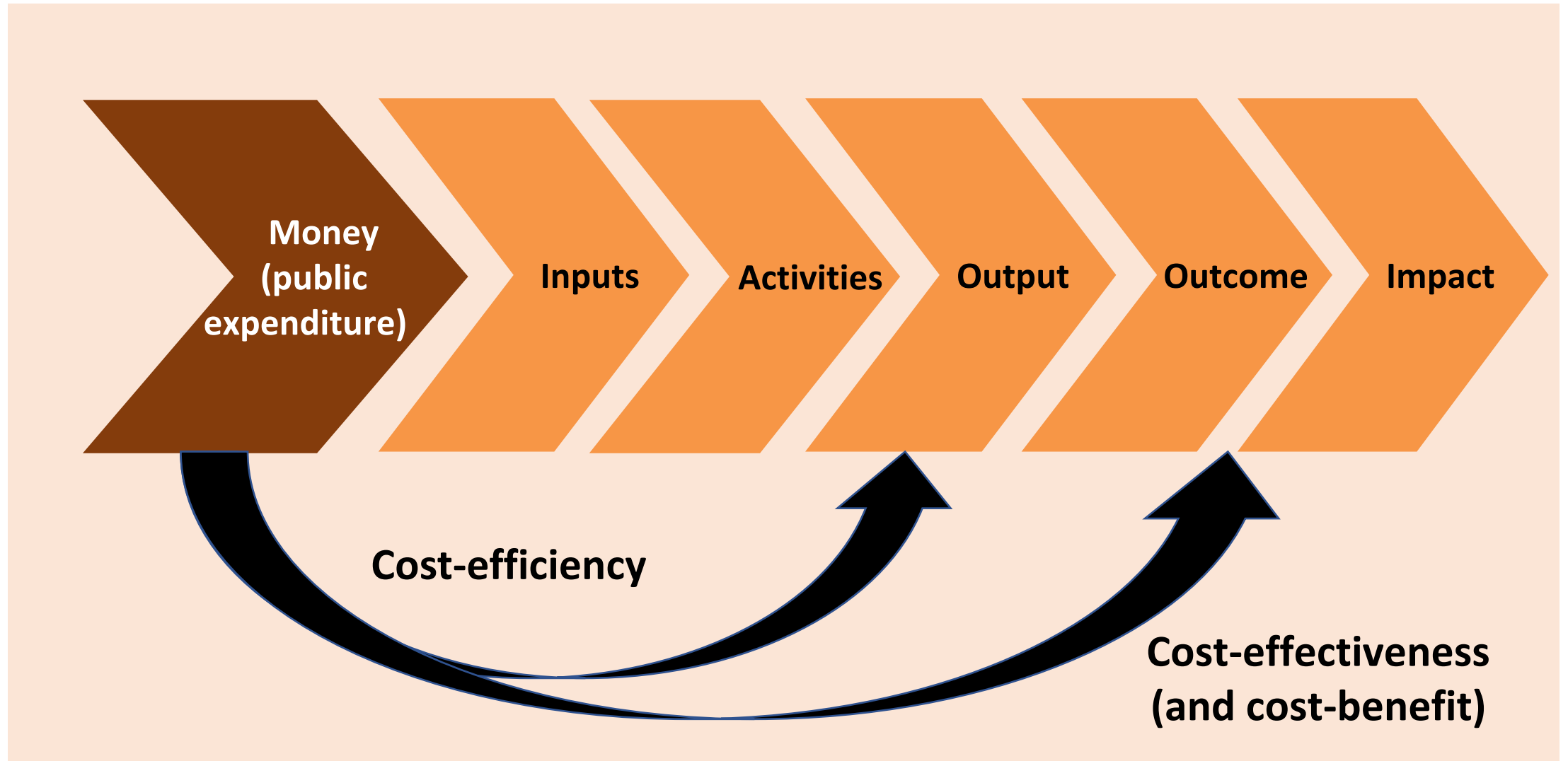**The relationship between the resources spent and the results they buy**

Limited resources imply …..

*… need to get **biggest bang for buck** – i.e. use resources as efficiently and effectively as possible*

Types of value for money analysis

- *Cost-efficiency analysis*: relationship between cost (expenditure) and outputs (e.g., amount of transfers delivered)

- *Cost-effectiveness analysis*: relationship between cost and a single higher-level *direct* outcome or impact (e.g., reduction in poverty, malnutrition or mortality)

- **Cost-benefit analysis**: relationship between cost and benefits (multiple impacts) over *long term* (decades) – much used in investment cases

- *Cost of inaction analysis*: long-term cost of doing nothing
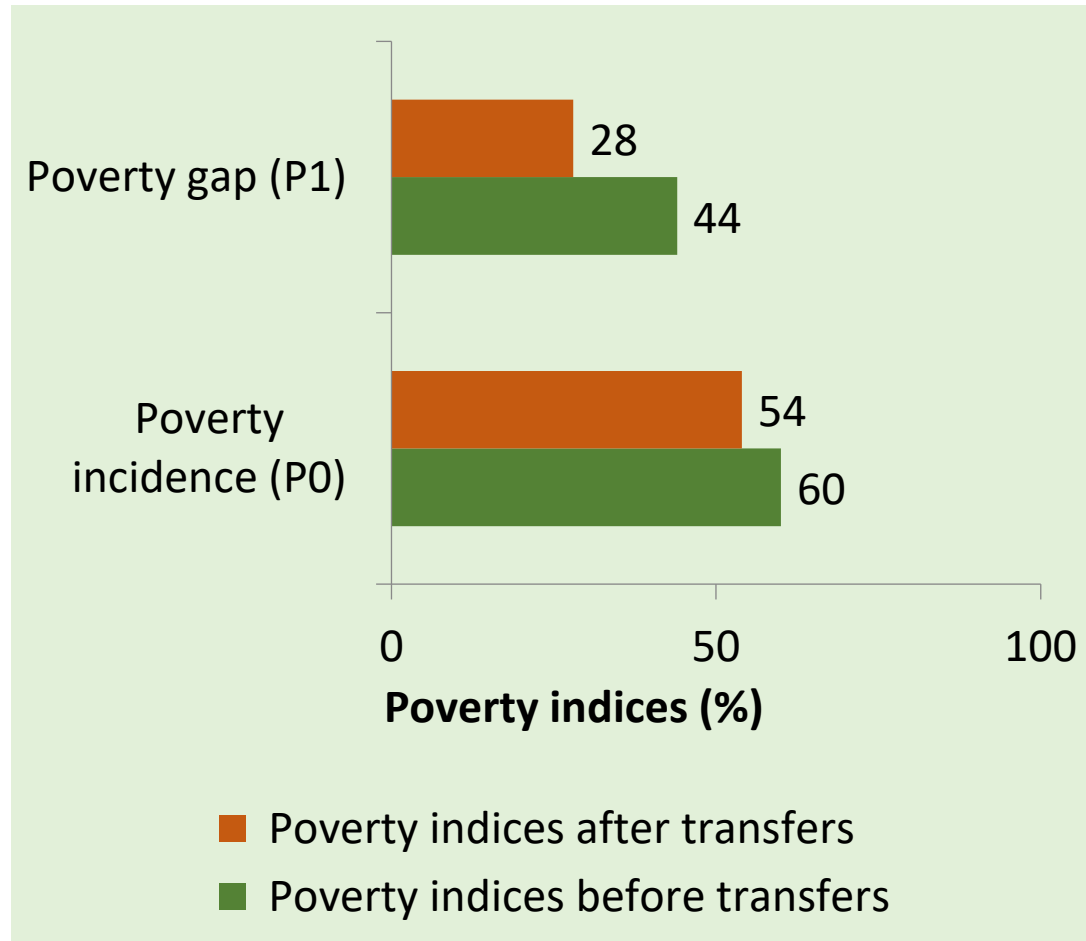
VfM and the results chain (RBM)

Money (public expenditure) → Inputs → Activities → Output → Outcome → Impact

Cost-efficiency

Cost-effectiveness (and cost-benefit)

Cost-effectiveness

- Relationship between **costs** and an **outcome/impact**

- Helps to make rational choices about programmes by showing how much it costs to achieve policy goals using different programme interventions/designs

- Can be applied to existing programmes (**ex post**) and, using simulations, to future programme options (**ex ante**)

- Measured by **cost-effectiveness ratios**

- **Cost-effectiveness ratios** show the cost of a unit change in an outcome/impact indicator, e.g., cost of a 1 percentage point reduction in poverty incidence

Cost-effectiveness of social protection

- Suppose you are interested in the poverty reduction impact of a social transfer programme

- Measure the percentage point change in poverty resulting from social transfers

- Divide the programme cost (C) by the change in poverty ($\triangle P_0$) to calculate a cost-effectiveness ratio

- Cost-effectiveness in terms of poverty incidence and poverty gap:

  - $C/(\triangle P_0)$ where P_0 is poverty incidence (headcount)

  - $C/(\triangle P_1)$ where P_1 is poverty gap (depth)

- Cost-effectiveness measured with respect to the poverty gap is a better indicator, reflecting the reduction in poverty even for those who move closer to the poverty line but do not rise out of poverty

Example: South African social assistance system

Poverty gap (P1): 28 (after transfers), 44 (before transfers)
Poverty incidence (P0): 54 (after transfers), 60 (before transfers)

Poverty indices (%)

Legend:
- Poverty indices after transfers
- Poverty indices before transfers

Source: Woolard, Harttgen and Klasen 2010, using 2008/09 data from National Treasury and National Income Dynamics Study 2008

- Total social assistance expenditure, 2008/09: 5.0% of GDP

- Impact of social assistance system on poverty incidence: 60-54 = 6 percentage points (pp)

- **Cost-effectiveness ratio 1**: cost per percentage point decline in poverty incidence: 5.0% of GDP / 6 = 0.8

- Impact on poverty gap: 44-28 = 16 pp

- **Cost-effectiveness ratio 2**: cost per percentage point decline in poverty gap: 5.0% of GDP / 16 = 0.3

Equity in social protection expenditure

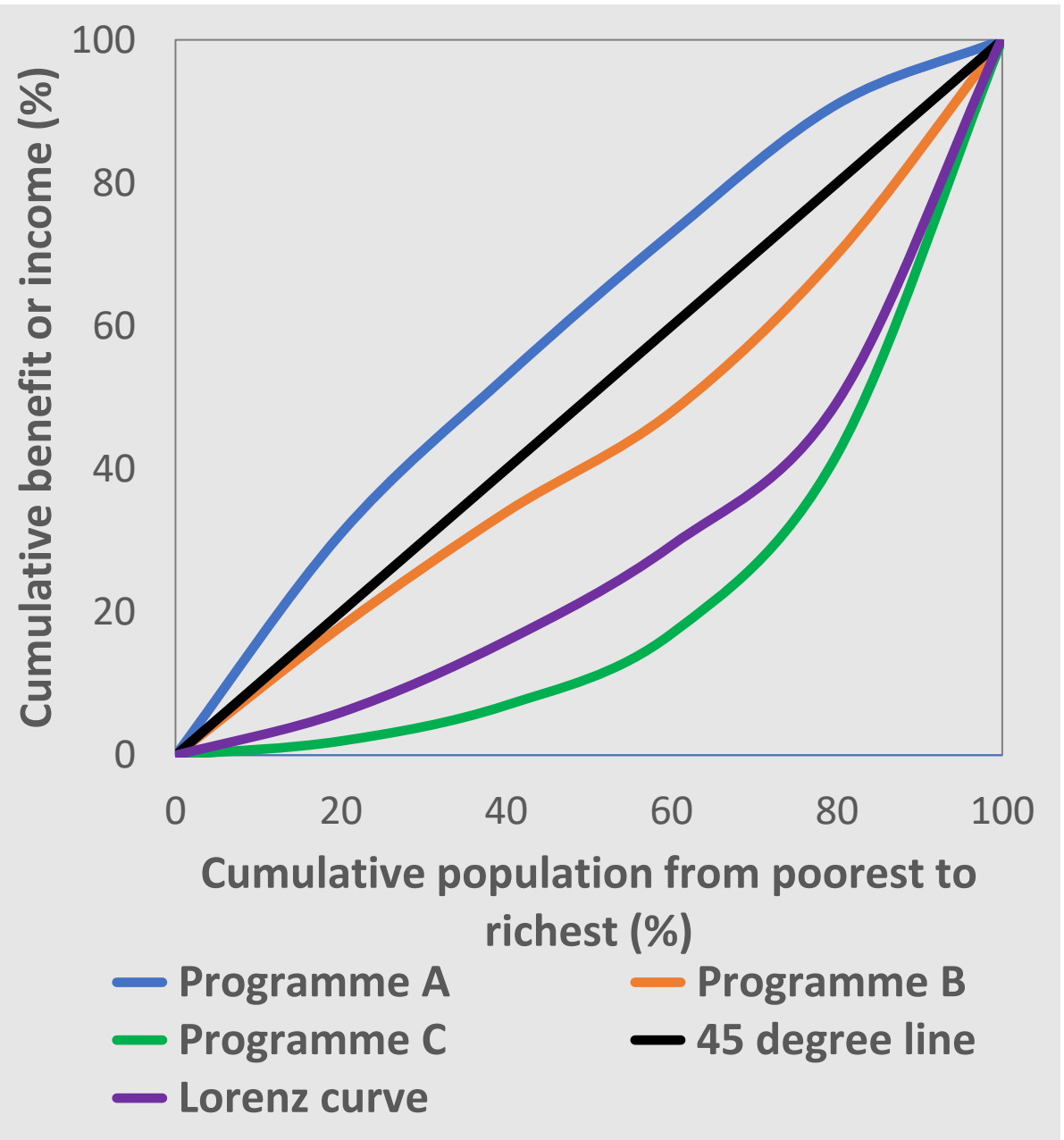# Equity in public finance is measured by incidence analysis

- **Tax incidence**: distribution of tax burden across the population

- **Benefit incidence** (BIA): distribution of the benefits of public services, subsidies & social transfers across the population

- **Fiscal incidence**: overall distribution of taxation and government expenditure across the population

- *Tax and benefit incidence alter the income distribution, thereby increasing or decreasing equity*

Benefit incidence analysis (BIA)

- Calculates the benefit incidence of public expenditure across population sub-groups (e.g., quintiles, territorial areas, gender)

- Multiplies unit cost of service/transfer/subsidy by number of beneficiaries in each population sub-group

- **The distribution across population deciles or quintiles will tell us whether public expenditure on a programme is reducing or exacerbating income inequality**

- For example, if quintile 1 (the poorest 20% of the population) is receiving more than 20% of the expenditure, the programme is redistributing resources towards the poorest

- The distribution can be shown graphically by a **concentration curve** and numerically by a **concentration coefficient**
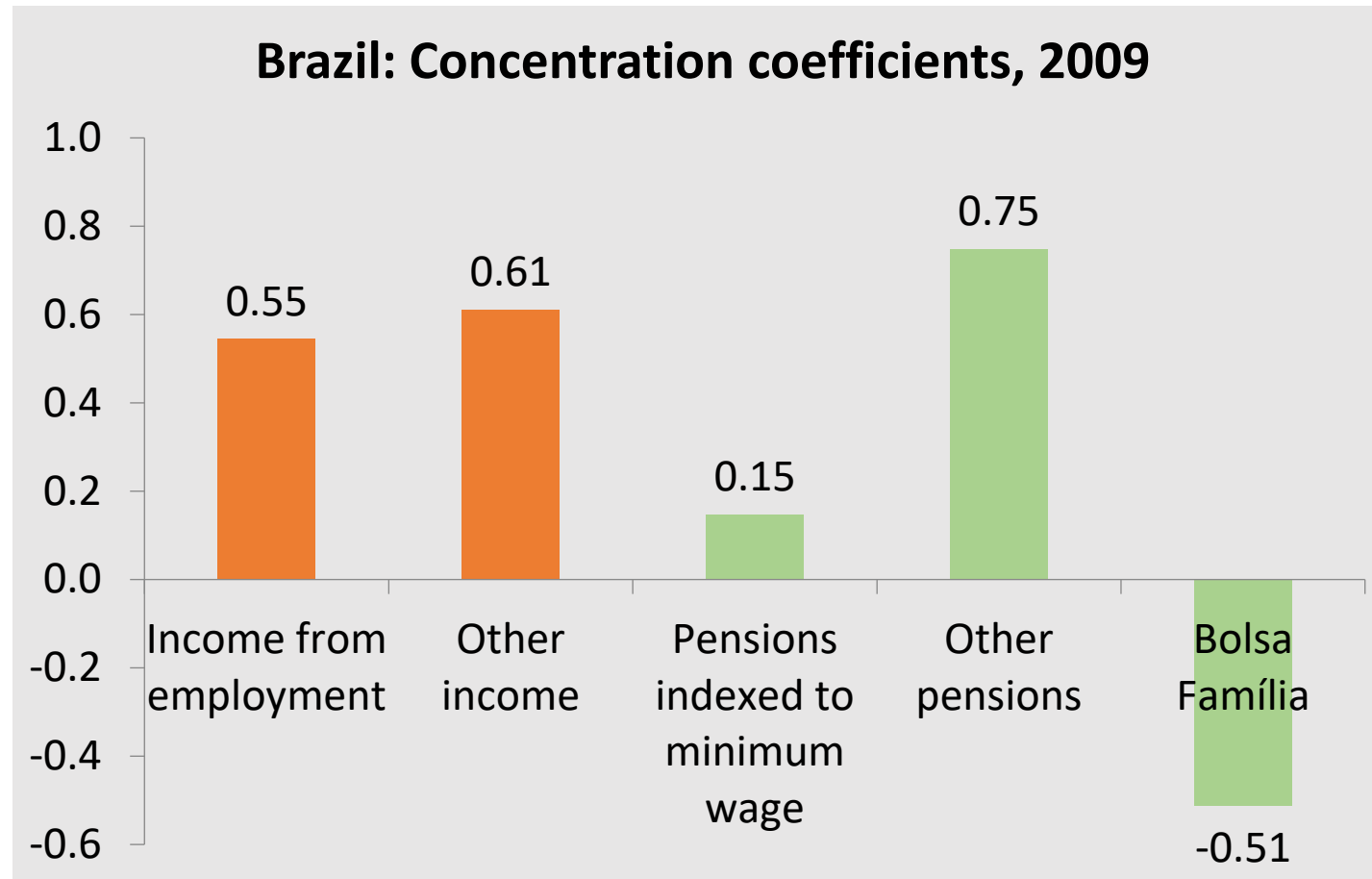
Concentration curves

- Concentration curves show the **cumulative incidence of benefits of public expenditure on programmes across the population, ranked from poorest to richest**

- The **45° line** shows equal distribution across the population

- The distribution of the benefits of public expenditure on programmes can be compared with the income distribution (shown by the **Lorenz curve**)

Concentration coefficients (CC)

Brazil: Concentration coefficients, 2009

Category	CC
Income from employment	0.55
Other income	0.61
Pensions indexed to minimum wage	0.15
Other pensions	0.75
Bolsa Família	-0.51

Source: Soares, S., Ferreira de Souza, P., Guerreiro Osório, R., & Silveira, F. (2010) 'Os impactos do beneficio do programa Bolsa Família sobre a desigualdade e a pobreza', in De Castro, J.A. & Modesto, L., *Bolsa Família 2003-2010: Avanços e desafios*, vol. 2, Instituto de Pesquisa Econômica Aplicada, Brasilia.

- Negative CC: programme is **absolutely progressive**, benefiting poor the most (Bolsa Família)

- CC positive but lower than coefficients for income: programme is **relatively progressive**, as it reduces income inequality (pensions indexed to minimum wage)

- CC higher than coefficients for income: programme is **regressive**, exacerbating inequality ('other pensions', i.e., contributory pensions in formal sector)

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Key take-aways

- **Cost-effectiveness analysis (CEA)** measures the expenditure needed to achieve a unit of impact

  - CEA can be a powerful tool to assess the social results achieved with social protection expenditure, or to compare the cost-effectiveness of different options for expanding SP expenditure

- **Benefit incidence analysis (BIA)** measures the equity effects of public expenditure

  - BIA can be used to assess how the benefits of public expenditure on social protection are distributed across the population, or to weigh up the equity effects of different options

Thank you