Measuring Wealth Inequality in South Africa: An Agenda

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Aroop Chatterjee
Wealth is defined in terms of household balance sheet.

**Net worth**

- **Assets**
  - Financial assets
    - Liquid assets
    - Certificates of deposit (CDs)
    - Mutual funds
    - Stocks
    - Bonds
    - Savings bonds
    - Other managed assets
    - Other financial assets
    - Cash value of life insurance
    - Total quasi-liquid retirement accounts
  - Nonfinancial assets
    - Houses
    - Vehicles
    - Other residential real estate
    - Nonresidential real estate
    - Business
    - Other nonfinancial assets

- **Debt**
  - Mortgage + home equity lines of credit
  - Residential debt
  - Other lines of credit
  - Credit cards
  - Installment loans
  - Other debt

**b/f Wealth**

- Inflows
  - Earnings
  - Investment income
  - Capital receipts

- Outflows
  - Tax
  - Capital transfers
  - Expenditure

**c/f Wealth**

*Source: Survey of Consumer Finance (USA)*

Atkinson (1974)
Why is measuring wealth inequality important?

• Income inequality only gives partial understanding of overall economic inequality

  Most work done from the perspective of income inequality
  Inequality organised around labour market

  Stylized fact that wealth inequality more concentrated
  As wealth increases, income from wealth becomes more significant part of household income

  “captures the historical legacy of low wages, personal and organizational discrimination, and institutionalized racism” (Oliver and Shapiro 2013)

  Impact of wealth inequality on income inequality

  Inform policy interventions
  - wealth tax
  - savings and investment

• Need to create a dataset to inform wealth distribution
Wealth distribution can be split into the top shares and the rest.

Challenging to collect data on wealth -> use administrative data to estimate the top shares.

- Household surveys
- Estate duty method
- Income capitalisation method
Estate duty method

- Estate duty is a tax paid by the executor of a deceased’s estate – on all assets.
- Assume dead are a sample of the living
- Apply mortality rate multiplier

- Estates only report over the taxable threshold -> good focus for the top end
- Mortality multiplier equal to the reciprocal of the mortality rate

- Internationally used by Atkinson (UK), Piketty (France), Saez (USA), and tax collection agencies’ own research units (IRS in the USA, and IR/HMRC in the UK), especially for the earlier years in wealth distribution over years
- In South Africa, only used by McGrath (1981)
Estate duty method - problems

**Mortality multiplier**

Wealth estimates are sensitive to multiplier

- Baseline mortality rates
  - +
  - Socioeconomic differential

**Missing wealth**

Exclusions such as occupational pensions, spousal exemptions,

- Property in discretionary trusts and annuities,
- other forms of tax avoidance,

- Tax evasion/offshore wealth
Income capitalisation

• From income tax records – takes all taxable income from assets and applies a yield multiplier
• Yield multiplier:
  • Earlier studies – yield from individual asset categories multiplied by proportion of wealth holding in that category
  • Later studies – used ratio of national accounts in that category to tax return income
• Key to this is having good records on classification of assets
• Use other sources for assets that do no generate taxable income, namely pensions and owner-occupied housing
• Trust wealth is estimated by using the trust income in the individual’s tax return.

• Used by Atkinson (UK), Piketty (France), Saez (USA).
• Used by Orthofer in South Africa
Income capitalisation - problems

Income capitalisation multiplier

Wealth estimates are sensitive to multiplier

Everybody has the same capitalisation factor within asset class

Dependent on tax institution and information provided

Missing wealth

Non-taxable income generating assets (imputed rent from housing)

Offshore wealth
HH Survey

- Useful to capture information from households that report below tax thresholds
- Combine with other methods to provide information about assets not easily identifiable in tax data:
  - Pension fund, which in the US account for a third of total household wealth, is more evenly distributed than overall wealth, and so is distributed in line with the Survey of Consumer Finance (HH Survey in US)

**HH Survey problems**

- relatively low response rate, leading to underrepresentation from upper wealth groups
- incomplete information
- incomplete coverage in survey design means that some types of assets are excluded
- sampling error, which becomes more amplified at the top end of the distribution given the fewer numbers of the wealthy
What data sources are we using:

- The Personal Income Tax data comprises of two parts: the IRP5 and the self assessed.
- Any individual earnings more than R2000 per year who works in a firm registered for Pay as you earn (PAYE) tax is issued an IRP5 certificate.

- **Local interest earned** – using interest rates we could calculate ‘cash held’.
- **Dividends** – this would be more challenging without information about how many shares are held. This is also an underreported field as it is a withholding tax (taxed at source).
- **Share income** – if the capital gain could be of a revenue nature, i.e. if person is trading rather investing. Difficult to know without duration of holding or number of shares held.
- **Rental income** – Average rental yields can be used to calculate property holdings.
- **Foreign interest earned** – assumptions of SA holdings of foreign currency can be used to calculated weighted ‘foreign’ interest rate to calculate ‘foreign cash’ held.
- **Capital gains** – Challenging to calculate asset value without knowing asset class (e.g. shares, property) or duration.
The project map:

Data organisation
- Estate duty
- Investment income
- Linking Estate duty to Income tax data
- Household surveys

Wealth distribution
- Top shares
- Bottom shares
- Combined

Analysing wealth inequality
- DINA
- Intergenerational wealth transmission
- Calibrated models of wealth inequality

Policy analysis