Advancing Methodology on Measuring Asset Ownership from a Gender Perspective

Asset valuation
Why valuing assets is important?

- To allow the calculation of wealth (net worth)

  \[
  \text{Wealth} = \text{Net worth} = \text{Assets} - \text{Liabilities}
  \]

- Studies: value of assets – important for gender analysis

- To calculate gender differentials in wealth measures

- Reflects both quality and quantity of women’s and men’s asset holdings that are not revealed by prevalence measures
Assets valuation at the household level

• Purposes:
  – Estimating household wealth
    • As part of an integrated framework that ensures consistency in measuring household economic well-being along the dimensions of wealth, income and consumption (OECD).
  – Information on the value of some assets, such as the value of owner-occupied dwellings, may be incorporated into living standards measures at the household level.
How should assets be valued?

• Principles:
  – Assets should be valued at current market prices
  – Recorded at current values
  – Assets should be valued consistently across assets
    • Potential sales value approach: *If this [asset] were to be sold today, how much could be received for it?*
  – Assets should be valued *item by item*
  – No double counting
Asset valuation for different types of ownership

- Asset owned exclusively by an owner:
  - that asset should be listed only once as belonging to that and only that owner, and its total value should become a share in the net worth of that owner.

- Asset owned jointly by more than one owner:
  - the asset should be listed as belonging to all joint owners and, for the purpose of estimating wealth, its value should be divided into shares that can be apportioned to the net worth of each owner.
Calculation of wealth – an example

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>House: $200,000</td>
<td>Mortgage: $160,000</td>
</tr>
<tr>
<td>Car: $10,000</td>
<td>Car loan: $5,000</td>
</tr>
<tr>
<td>Bank Deposits: $5,000</td>
<td>Student loan: $50,000</td>
</tr>
<tr>
<td><strong>Total assets:</strong></td>
<td><strong>Total liabilities:</strong></td>
</tr>
<tr>
<td>$215,000</td>
<td>$215,000</td>
</tr>
</tbody>
</table>

Net worth (= total assets – total liabilities): $0
Asset valuation – Alternative methods

1. Collect acquisition prices and the year when the asset was acquired, then adjust the value using price indices
   - If reliable price indices exist

2. Collect current acquisition value of an equivalent new asset, less the accumulated depreciation. E.g., consumer durables.
   - Referred to as “written-down replacement cost” in 2008 SNA

3. Using administrative sources to impute asset values
   - E.g., property records for tax purposes, land registration and cadastre systems
Which assets should be valued?

Two recommended approaches:

1. Value all assets

2. Value priority assets in which bulk of wealth is stored
   - Principal dwellings
   - Agricultural land
   - Other real estate, including non-agricultural land
   - Financial Assets
Which approach to adopt?

1. Value all assets
   – In principle, valuation data should be collected for all assets to understand distribution of wealth by gender across full population

2. Value priority assets in which bulk of wealth is stored
   – Countries may consider valuing priority assets only given operational challenges of valuing smaller assets
Who should provide values?

• If one randomly-selected household member is interviewed:
  – The respondent provides the value of the assets that he or she owns

• If more than one household member is interviewed:
  – The valuation is obtained at the household level from a knowledgeable person capable of constructing a roster of household assets.

• Financial assets should always be valued by their owners.
Valuation of specific assets

- Dwellings and other structures
- Land
- Agricultural Equipment
- Livestock
- Financial Assets
- Consumer durables
- Non-agricultural enterprise assets
- Valuables
Valuation of dwellings

• Principal dwelling is usually the most valuable asset of a household
• All efforts should be made to obtain its value for the purpose of measuring wealth
• Dwellings (principal dwellings and others) should be valued together with the land on which the buildings stand, unless the ownership of the dwelling is different than the ownership of the land
Valuation of dwellings

• Preferred approach in the valuation of the principal dwelling and other dwellings and structures is the potential sales value reported by the respondent

• Alternative valuation methods
  – Purchase price and price index for changes in dwelling prices
  – Property taxes
  – Property records for tax purpose and transaction sales databases
  – Estimated current construction cost
  – Rental rates
Valuation of land

• Similar to valuation of dwellings
• Countries may use prices per unit of agricultural land disaggregated by characteristics of the land (such as type of land use and irrigation), at sub-national level, if available for other statistical purposes
• The disaggregation of agricultural land by use should cover at least the categories “arable land” and “permanent grassland”. The arable land should further include “irrigable arable land” and “non-irrigable arable land”.

Valuation of agricultural equipment

• Recommended to obtain the value of large agricultural equipment at the minimum, item by item, based on the current condition of the equipment

• The preferred valuation method for large agricultural equipment is to ask the respondent to estimate the potential sales value of each piece of equipment owned given its current condition.
Valuation of livestock

• Relatively easy to obtain market value
• If values of livestock cannot be easily itemised, then a suggestion is to collect for each category of livestock only the average sales prices per unit
Valuation of financial assets

• Valuation of financial assets be obtained directly from the respondent owners, item by item
• Financial assets and liabilities should be valued at current prices if they are regularly traded on organized financial markets
• Financial claims that are not traded on organized financial markets should be valued by the amount that a debtor must pay to the creditor to extinguish the claim
Valuation of consumer durables

- At minimum, countries should collect value information on big items likely to cost a significant amount of money, such as vehicles, including cars, motorcycles, boats, caravans, and aircraft.

- These assets should be valued item by item in their current condition. The remaining types of consumer durables may be valued group by group.
Valuation of non-agricultural enterprise assets

• Should be valued by category of asset, including (a) all machinery, equipment and furniture used in the production process; (b) inventories of inputs and supplies, including raw materials; and (c) inventories of finished merchandise (goods for sale)

• The recommended valuation method is to ask the respondent to estimate the potential sales values of each category of enterprise asset, by group of assets

• For the purpose of estimating individual wealth, respondent owners should be asked what percentage of the enterprise they own and the apportioned value of the assets should be assigned to them, accordingly
Valuables

• Although markets exist for valuables, average individual respondents in household surveys (unlike sale and other industry experts) may have challenges in estimating valuables’ prices.

• Suggested approach, is to ask the respondent for the potential sales value of each category of valuables.

• For the purpose of calculating individual wealth, respondent owners should be asked to estimate their own share of the sales value from each group of valuables.
Challenges to accurate asset valuation

• Lack of information from asset owners about asset prices
• Sensitivity of the data being collected, in particular financial assets
Example: Asset Valuation in Georgia pilot

• What assets were valued?
  – All core assets (principal dwelling, land, other real estate), large agricultural equipment, financial assets

• Who were the respondents?
  – Information on assets values asked to each respondent (up to 3 per household)

• Valuation methods?
  – Each item valued separately, questions asked about i) potential sales value; ii) similar transactions in the local community; iii) construction cost (dwellings)
Difficulties in collecting data of asset values were related to:

- Objective reasons: lack of knowledge on the value of assets, such as valuation dwellings (especially in rural areas), land, large ag. equipment;
- Subjective reasons: reluctance to report ownership of financial assets and provide an exact value of financial assets

Scarcity of alternative sources on asset values of dwellings and land in the country due to small number of market transactions and quality of actually reported prices

Expectations of these challenges were present before the survey and were manifested during the pre-testing of questionnaires
The frequency of reported data turned out low. Particularly this was related to the value of financial assets and liabilities and incidence of valuables.

Respondents struggled to estimate the value of dwellings and land reporting inexistence of markets (esp., in rural areas), lack of knowledge in relation to construction cost.

Overall, the missing values for dwelling and land asset valuation amounted to at least 60%, while the number of reported financial assets and valuables was negligible.
What we obtained from the valuation data:

- The numbers of missing values related to asset valuation were higher for women than for men for each asset category.
- There were statistically significant gender differences in valuation numbers (men usually reported higher values).

Gender wealth analysis was made using valuation of dwellings:

- It turned out that in terms of reported ownership 52% of value belong to men, while men owned as high as 65% of wealth as documented owners.
- In rural areas the gender gap was higher, with men owing 59% of dwelling value as reported owners and 74% as documented owners.
Summary principles/recommendations

- Assets should be valued item by item at current market prices
- The method of valuation should be consistent - provide metadata
- If sales markets exist, use the potential sales value method.
  - If not, consider alternative methods presented
- Depending on the aims, countries may consider valuing all assets, or only the major assets.
- One randomly selected person interviewed
  - The same respondent provides the valuation
- More than one randomly selected person interviewed
  - Valuation of non-financial assets provided by a knowledgeable person
• In the Georgian context it seems reasonable to:

- Try alternative sources of information (e.g. gender-based indicator for availability of financial assets in the banking system could be derived from banking supervision).
- Try alternative methods of estimating values of dwelling and land based on characteristics of these assets
- Use interval estimation for financial assets (or other most sensitive assets)
Thank you

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