

Measuring repayment burden of student loans

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Why care about repayment burden?

- ❖ Repayment burden reflects how difficult it is for debtors to repay the debt
- ❖ It is central to the analysis and design of student loans
 - For debtors, RB determines:
 - The consumption sacrifice associated with repaying debt
 - The risk of default and credit reputation loss in case of severely high RB
 - Repayment anxiety associated with high expected RB
 - For government (as lender or guarantor), RB indicates:
 - How much government potentially needs to subsidize for default

Current measure of RB is problematic

Definition:

$$RB_{it} = \frac{\text{repayment amount in period } t \text{ for debtor } i}{\text{labor income in period } t \text{ of debtor } i}$$

Assumptions:

- ❖ Debtor has only labor income → over-estimate RB
- ❖ Debtor receives no financial support → over-estimate RB
- ❖ Ignore consumption needs → under-estimate RB
- ❖ Ignore income tax → under-estimate RB

→ Incomplete picture of repayment ability

Rethinking debtor's repayment problem

❖ Re-visit the meaning of RB:

- Who actually repays the debt?
- Whose welfare is affected by the repayment obligation?
- From what sources does the money come from?
- What is an excessive level of RB?

❖ Four proposed measures to capture the intra-household allocation of:

- Income
- Consumption
- Repayment obligations

$$\frac{\sum L_{it}}{\sum Y_{it}}$$

$$\frac{L_t}{\frac{1}{hsize} \sum Y_{it}}$$

$$\frac{\sum L_{it}}{\sum Y_{it} - \sum C_{it}}$$

$$\frac{L_t}{\frac{1}{hsize} (\sum Y_{it} - \sum C_{it})}$$

Relaxing RB assumptions - evidence from Korea

- ❖ RB of time-based repayment loan is more affordable than previously thought, esp. for young graduates and low-income graduates
- ❖ Inequality in RB across the graduate income distribution is less acute, especially between the poorest 20% and the richest 20%
- ❖ RB is also less volatile over a debtor's life-time
- ❖ Ignoring non-labor income considerably overestimates RB, esp. for the bottom 20%, who are more likely to receive social assistance and private financial support from family and relatives

Implications for student loan analysis

- ❖ The notion of repayment burden and consumption hardship should be interpreted with more nuance
 - Consumption hardship as a reduction in the “usual” wellbeing that debtors would experience in the absence of RB and given their income, or as “falling into poverty”?
- ❖ Loan design should account for:
 - Non-labour incomes and potential intra-household sharing of income and repayment obligations → to ensure effective collection of repayment and minimize unduly subsidies
 - Debtor’s consumption needs and income tax → to ensure loan repayment is affordable
- ❖ Country-specific context, including cultural factors and labour market features, matters.