

Discussion: Insurance in Human Capital Models
with Limited Enforcement by Krebs, Kuhn and
Wright (KKW)

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Overview

- This paper:
 - Microfoundation for uninsurable human capital risk
 - Limited enforcement + non-pledgeable human capital →
 - Consumption cannot be fully contingent on good human capital shock
 - Clever characterization of optimal contracts
 - Linear human capital technology + CRRA utility →
 - Portfolio choice problem
 - Find large welfare losses from incomplete insurance
 - HH would pay 3.5% of consumption annually to pledge human capital
 - And a lower bound - imposes leverage constraint on pledged household

Comments

- What about the investment margin?
 - Welfare calculation holds human capital constant
 - If allowed to vary, welfare gain is infinite in this model
- Has policy solved this problem already?
 - Student loans cannot be forgiven in bankruptcy
 - Stock of human capital non-pledgeable, but flow confiscated through tax offsets and garnishment
 - Lose access to future aid

Comment One: Investment Margin

Toy three period model:

- $u(c_1, c_2, c_3) = \log c_2 + \log c_3$
- Deterministic returns, $h_2 = x_1, h_3 = h_2 + x_2$
- Linear production $y_t = w \min\{h_t, H\}, w > 1$
- Net interest rate is zero
- Borrow to finance in period one: $b_2 = h_2$
- Household can default in period two
 - Retain h_2
 - Lose access to borrowing
- No default in period three

The Investment Margin

- Under commitment, $h_2 = b_2 = H$
- Without commitment, period two values under repayment and default:

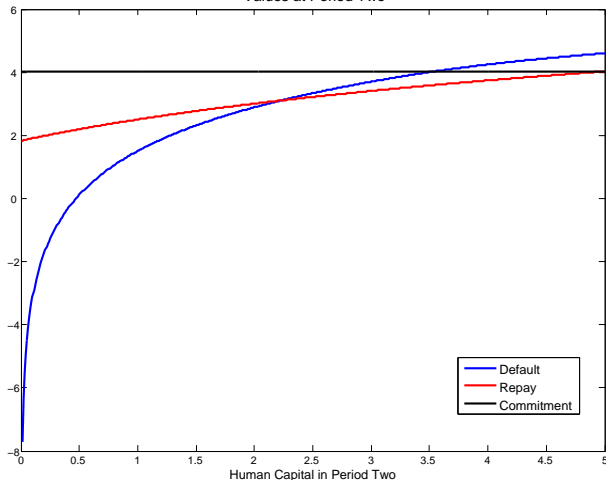
$$V_2^{RP}(h) = \max_{b'} \log \left(wh - (H - h) - h + b' \right) + \log \left(wH - b' \right)$$

$$V_2^{DF}(h) = \max_{h' \leq H} \log \left(wh - (h' - h) \right) + \log(wh')$$

- By inspection:
 - $V_2^{RP}(H) = 2 \log(wH - 0.5H) < 2 \log(wH) = V_2^{DF}(H)$
 - So $h_2 < H$, but
 - $V_2^{RP}(0) > V_2^{DF}(0)$, so $h_2 > 0$
 - Can further verify a single intersection

The Investment Margin

Values at Period Two



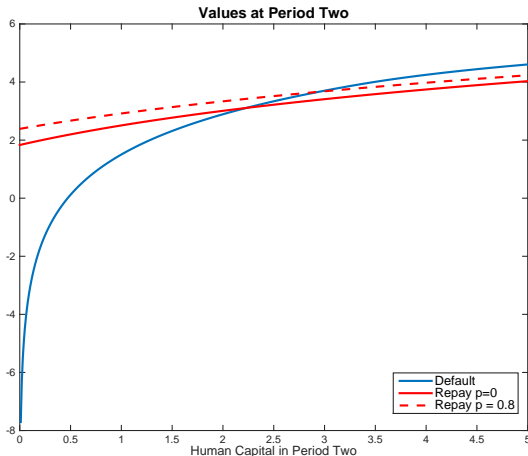
- With commitment, $h_2 = H = 5$
- Without commitment, $V_2^{RP}(h_2^*) = V_2^{DF}(h_2^*)$

Relating to KKW

- A similar margin must be at play in KKW, except $H = \infty$
- Is there a way to keep tractability and finite H ? Or another functional form with optimal scale?
- Interesting questions:
 - Correlation between family wealth and schooling expenditures if $h_{2,i} = b_{2,i} + p_i$ (Lochner and Monge)
 - Lower interest rates on student loans?
 - Increasing grants?

Shifters of V_2^{RP}

Increasing parental contribution, government grants, or reducing rates shifts V_2^{RP} upward without changing V_2^{DF} .

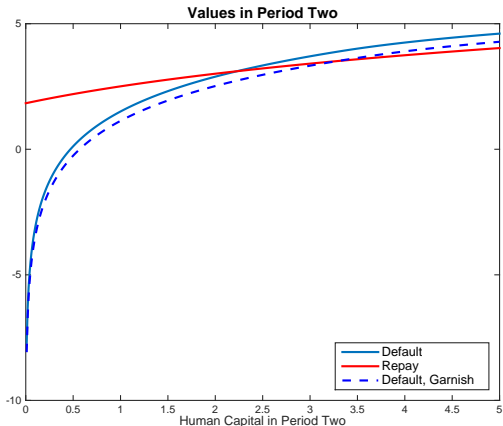


Comment Two: Legal Institutions

- In the US, formal bankruptcy does not expunge student loan debt
- Informal bankruptcy subjects the borrower to punishments:
 - Wage garnishment - Government takes $\max\{0, \min\{0.15w, w - \underline{w}\}\}$
 - Tax refund offsets - Government refuses to pay tax refund.
Not really the issue in this paper
- Together these two policies would seem to alleviate much of this friction
- Would affect insurability in KKW in addition to investment margin
- Question of calibration - is all student loan debt unsecured?

Effect of Wage Garnishment in Toy Model

Garnishing wages shifts V_2^{DF} downward without affecting V_2^{RP}



Conclusion

- Very nice paper!
- Model could address even more questions
- Convinced me that US student loan policy may be well considered!
- Nagging question - which student loans are subject to this friction in reality?