Finance and Inequality

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Interest rates and inequality

- Conventional argument that high interest rates increase top wealth inequality.
- Wold and Whittle (1957)
  - Fortunes grow relative to the economy
    - Piketty and Zucman (2015)
- Arguments as to why low interest rates should increase inequality at top.
- Literature ignores the role of financing in investments.

Sources
- Gomez and Gouin-Bonenfant (unpublished 2020)
  - Entrepreneurs
- Bolton-Santos-S (RFS 2020)
  - Financiers

SPACs
- Illustrates my general skepticism concerning the role of financial innovations in lowering inequality.
Firms produce homogeneous good with $aK$ technology. TFP evolves over time according to a Markov chain with $S$ states.

To grow capital stock at rate $g$ firm must invest $i(g)K$ units of the consumption good.

- $i(g)$ strongly convex.

Assume firms are financed by debt at a rate $r$.

- Entrepreneurial demand for capital does not affect $r$.
- Gomez and Gouin-Bonenfant allow for any fixed debt to equity ratio. Use actual leverage in estimation.

Lower rate of interest increases rate of accumulation by entrepreneurs relative to others.

Inequality measured by inverse of Pareto exponent.

Estimate that 2/3 of increase in inequality in 1985-2015 is accounted by decline in interest rates.
Capital and Knowledge

- Three types of agents
  1. Originators of projects that payoff in period 2 but want to consume in period 1.
  2. Investors that possess capital $K$ per capita in period 1 but want to consume in period 2.
  3. Financiers that possess capital $\mu K$ in period 1, want to consume in period 2 and also possess knowledge - can distinguish good from bad projects.
    - Financiers are few.

- 3 Markets
  1. Stock market where investors buy projects that they regard as homogeneous at an equilibrium price $p$.
  2. An OTC market where financiers cream-skim good projects and pay originators
    
    $$p^d := \lambda x_h + (1 - \lambda) p$$  \hspace{1cm} (1)

  3. A secure loan market where financiers borrow from investors subject to haircut $0 < \eta < 1$, at an equilibrium gross rate $r$. 
Equilibrium and comparative statics

- An equilibrium consists of a triple $p^d$, $p$ and $r$ such that all three markets clear.
- CIMP (Allen-Gale) allows one to combine risk-neutrality with prices that respond to supply of funds and projects in the stock market.
- Equilibrium determines $p$, leverage of financiers $\ell$ and fraction of projects $m$ cream-skimmed by financiers.
- $R := \frac{x_h}{p^d}$ and $r = \frac{Ex}{p} = \frac{e(1-m)x_h}{(1-em)p}$
- $K$ increases $\Rightarrow$ $r$ decreases, $\ell$ and $m$ increase and $\frac{R}{r}$ increases.
- Increase in $\ell$ increases further the wealth of financiers relative to uninformed investors.
- Decrease in $\eta$ increases wealth of financiers while decreasing wealth of uninformed.
Effect of hair-cut on inequality

\[ \frac{W(L(x,y))}{W(x,y)} \]

\[ \eta = .4 \]

\[ \eta = .5 \]
Michael Cembalist (JPM)

Return analysis of 90 SPAC companies brought public or liquidated between 1/1/2019 and 1/22/2021.

Median return to SPAC sponsor 418%, after considering concessions, vesting etc...

Advantages to companies: Faster speed-to-market some evidence of leaving less money on the table; during SPAC marketing process to institutional and retail investors, management can use its own financial projections (compare with IPO restrictions).

Median return for buy and hold investors (upfront SPAC buyers, PIPE investors, post-merger buy-and-hold investors) much worse and does not beat Russel 2000 Growth.

One more example of innovation in finance that benefits principally the holders of specialized human capital.