

On the Political Economy of Financial Regulation

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- Housing bubble was fueled by “irresponsible” lending practices
 - Acharya et al (2011), Brunnermeier (2009), Dell’Ariccia, Igan & Laeven (2012), Mian & Sufi (2009)
- The excessive risk-taking was permitted by loose regulation
 - Bernanke (2010), Zingales (2008)
 - Securitization, Fannie & Freddie
- This regulation failure may have political origins
 - GSEs are set up to enable home-ownership
 - Narrative: Rajan (2010), Calomiris & Haber (2014)
 - Empirical: Mian, Sufi & Trebbi (2010, 2013), Igan, Mishra & Tressel (2012)

Main Mechanism

- Loose financial regulation permits banks to gamble
 - by investing in risky mortgage portfolios
 - protected by limited liability (and deposit insurance)
- Gambling banks loosen lending standards
 - They are willing to make loans at less than actuarially-fair interest rates
 - as they are anyway insolvent in the adverse aggregate state
- This opens the door to home-ownership to low-wealth buyers
- And the added demand drives up house prices
- Thus two groups benefit from regulation failure:
 - young low-wealth home-buyers
 - incumbent old home-owners

This paper

- Develop a simple two-period model that captures the main mechanism
 - Aggregate uncertainty regarding house prices at $t = 2$
 - Decreasing returns-to-scale in construction
- Identify winners and losers from financial (de)regulation
- Map the distribution of gains onto a simple majority voting political economy model

ENVIRONMENT

Model

- Two periods with overlapping generations
 - Key: Young households and bank(er)s in the 1st period
 - Aggr. housing valuation shock at $t = 2$ (worthless w.p. $(1 - p)$)
- Young households
 - Random wealth y realized in period 1
 - Can buy houses from old HHs or construction firms
 - Excess wealth is deposited into banks
 - Objective: $\max_{h \in \{0,1\}, (d,m) \in \mathbb{R}_+^2} [uh + (1 - p)c_L + pc_H]$
- Old households sell houses (H_0 of them) and consume
- Measure 1 of construction firms operate at $t = 1$
 - Strictly convex cost of production
 - Objective: $\max_{I \in \mathbb{R}_+} [qI - k(I)]$

Banking

- Measure 1 of risk-neutral bankers with heterogeneous wealth
 - May choose to open a bank and accept deposits
 - or just invest own funds and not be subject to regulation
- Banks are subject to limited liability
- Invest in risky mortgages (M) and/or safe assets (S)
 - Mortgage interest rate r is endogenous (and paid w.p. p)
 - Return on safe assets is exogenous: $\bar{r} = 0$
- (Promised) interest on deposits i is endogenous
 - as is fraction τ not paid back in the bad aggr. state
- Banking regulation: Risk-weighted capital adequacy requirement

$$E_j \geq \alpha(\omega_s S_j + \omega_m M_j)$$

RESULTS

Laissez-Faire Equilibrium

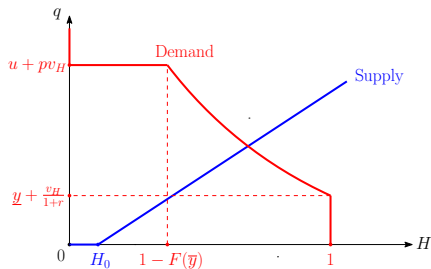
- In the absence of regulation, banks are under-capitalized
- Zero-wealth bankers channel deposits into mortgages
- Young households with wealth $y \geq \bar{y}$ buy houses

$$\bar{y} = q - \frac{v_H}{1+r}$$

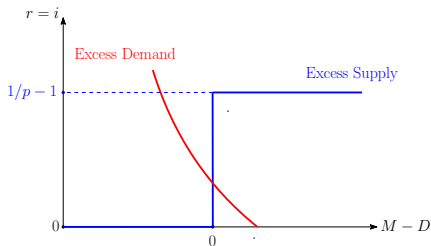
- Households with wealth $y < \bar{y}$ and $y > q$ save (deposit)
- while those with $y \in [\bar{y}, q)$ take out mortgages
- Prices q and $r = i$ adjust to clear the market

Laissez-Faire Equilibrium

Housing Market



Financial Market



Laissez-Faire vs Efficient Allocation

- Unregulated equilibrium allocation is inefficient
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- Regulation can restore efficiency
 - has to preclude banks from channeling any deposits into mortgages

Winners and Losers

- Who gains and who loses from effective regulation?
- Laissez-faire equilibrium has
 - More borrowers
 - More houses
 - Higher promised but lower expected interest on deposits
 - Higher house prices
- Hence, laissez-fair allocation is preferred by
 - Young home-buyers who are priced out in efficient allocation
 - Old home-owners
- but not by bank depositors

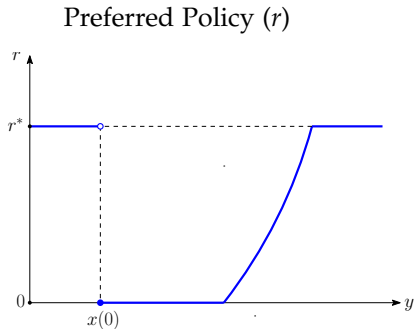
POLITICAL ECONOMY

Political Economy Equilibrium

- The basic insight is simple:
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Political voting equilibrium
is not as simple

Subset of “new”
home-buyers prefer
intermediate policies

Intermediate r affect the
cut-off x

Conclusions

- There are multiple beneficiaries from loose banking regulation:
 - Young borrowers who are excluded under effective regulation
 - Construction firms' owners who benefit from increased demand
 - Old homeowners who benefit from higher price of their houses
- This coalition may compose a majority in a political process
 - resulting in an inefficiently loose regulation
 - and an inefficient housing boom

Young Household's Problem

$$\begin{aligned} \max_{h \in \{0,1\}, (d,m) \in \mathbb{R}_+^2} & [uh + (1-p)c_L + pc_H] \\ \text{subject to} & \quad d + qh = y + m, \\ & \quad c_L = (1+i)(1-\tau)d, \\ & \quad c_H = (1+i)d + q_H h - (1+r)m, \\ & \quad (1+r)m \leq q_H h, \end{aligned}$$

where

- q_H is the house price in the second period in good state
- τ is the fraction of deposits lost in bad state
- i and r are interest rates on deposits and mortgages, respectively