The Political Risks of Fighting Market Failures: Subversion, Populism and the Government Sponsored Enterprises

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This paper

- Motivation: How should GSEs be reformed?
- A spectrum of approaches
  - Status quo
  - Privatisation / Laissez-faire
  - Price regulation
  - Quantity subsidies
  - Total public ownership

This discussion

- Start with housing market facts
- Describe the model and results
- Show non-U.S. data on mortgage market regulation
- Discuss limitations

Some facts (from Boston Fed)

- In 2007 and 2008, residential real estate value fell by more than $4 trillion
- To compare: $8 trillion fall in the value of U.S. stocks (2008)
- Pew Research Center survey (March 20112): nearly 40% strongly agreed that "buying a home is the best long-term investment a person can make"

Model: assumptions

- Government is benign and competent
- No information/coordination issues
- Problems with public ownership acknowledged but assumed away
  - Operating losses
  - Generous union contracts
- The planner **can** and will achieve efficiency with any intervention
- But political risks make interventions potentially unappealing
  - Risk from corruption
  - Risk of populism
- Purpose: Clarify the trade-offs from interventions

Sources of market failure

- Desirability of any intervention will hinge on the **strength at resisting corruption and populism**
- Sources of market failure
  - Monopoly
  - Externalities
  - Market breakdown
  - (Perverse lending behavior if the government is the lender of last resort)

Political risks (definitions)

- Corruption → gov. maximizes private profits
- Populism → lowering prices and borrowing costs
  - Only the wealthy pay taxes

Both treated as exogenous

Old lesson: private ownership provides a bulwark against targeted spending to favored groups

Main results (preview)

- P(Corruption) $= \pi_C$ high $\Rightarrow$ Public option is best (lowest social loss)
- P(Populism) $= \pi_P$ high $\Rightarrow$ Catastrophic insurance is optimal

The model

- Monopolist produces at total cost $C(Q)$
- N consumers, they become wealthy with prob. λ
- Utility: $V(q) + Income - pq$
- $V'(q) > 0, V'(q) = 0$ for some q^{MAX}
- All agents (rich and poor) value q identically
- Social welfare function: $V(q) - \frac{C(Nq)}{N}$
- The government's objective function will not be the same as SWF under capture or populism

The model

- From SWF, the optimal level of q is $V'(q_{COMP}) = C'(Nq_{COMP})$
- By global concavity: $V''(q_{COMP}) - NC''(Nq_{COMP}) < 0$
- Monopolist's problem: $max_q\ Nqp(q) - C(qN)$
- At the optimum $p + q_{LF} \times p' = C'(q_{LF}N)$
- Demand: $V'(\frac{Q}{N}) = V'(q) = p$
- $\Rightarrow$ FOC is $V'(q_{LF}) + q_{LF}\underbrace{V''(q_{LF})}_{<0} = C'(q_{LF}N)$
- $qLF < q_{COMP}$ and $U(q_{LF}) < U(q_{COMP})$

Problem of monopoly

Possible solutions

1. The LF outcome can be improved by **nationalization** – optimal Q^* is produced and price is set to clear the market
2. **Price ceiling:** Setting a maximum $\bar{p} = C'(Nq_{COMP}) = C'(Q^*) \Rightarrow$ efficient output level
3. **Subsidy** equal to $-q_{COMP}V''(q_{COMP})$

So far, the preferences of the government and the citizens are aligned

The corruption risk problem

1. The public option is safe: there is no private entity to capture the government
2. Price restrictions: the corrupt government will allow q_{LF}, since it maximizes the private firm's profits
3. Subsidy case: the maximum subsidy is set; output satisfies $V'(q_{\bar{S}}) + q_{\bar{S}}V''(q_{\bar{S}}) + \bar{S} = C'(q_{\bar{S}}N)$, welfare falls

Risk of populism

1. Public option: the rich are ignored; $p = 0$; $q_{MAX} > q_{COMP}$
2. Price controls: set $\bar{p}$ to maximize $V(q(\bar{p})) - \bar{p}q(\bar{p})$ the monopsony quantity is denoted q_{Mon}
3. Subsidy: set at the maximum

Outcomes in the 8 situations

	Corrupt Politician	Populist Politician
Laissez-Faire	Monopoly Outcome	Monopoly Outcome
Public Ownership	Competitive Outcome	Free Good
Price Control	Monopoly Outcome	Monopsony Outcome
Subsidize Quantity	Maximum Subsidy	Maximum Subsidy

Recap

- Recall that policy is broadly optimal
- But **implementations has risks** of private influence
  - Laissez-faire: no risk of C or P; under-production $\Rightarrow$ welfare loss
  - Price regulation: C same as laissez-faire; price ceiling at max. profit
  - Quantity subsidies: C or P will lead to max. subsidies
  - Total public ownership: C irrelevant (no private entity); P leads to social losses from underpricing

Results

- LF dominates public ownership if $\pi_P > \frac{U(q_{COMP})-U(q_{LF})}{U(q_{COMP})-U(q_{Max})}$
  (*intuition:* if gains from the competitive outcome are relatively small, compared to the risk of populism).
- LF dominates price controls if $\frac{U(q_{COMP})-U(q_{Mon})}{U(q_{COMP})-U(q_{LF})}\pi_P + \pi_C > 1$.
- If $U(q_{MAX}) > U(q_{Mon})$, public ownership always better than price controls.
- If $U(q_{MAX}) < U(q_{Mon})$, then price controls better than private ownership if $\pi_P > \frac{U(q_{COMP})-U(q_{LF})}{U(q_{Mon})-U(q_{Max})}\pi_C$.

Results, ctd.

- Under negative externalities, if politicians are benevolent, revenue-raising taxes are better than revenue-less taxes.
- If politicians are corrupt, no taxes are raised.
- If the threat of populism is large, revenue-less taxes are better than revenue-raising taxes.

Sketch of Section IV

- 3 types of agents: investors, non-discretionary borrowers, and discretionary borrowers.
- Both borrowers may receive one unit of good in period two.
- ND borrowers completely impatient
- Probability δ of default; if default state high, proportion $\delta + \Delta$ will default, otherwise $\delta - \Delta$
- Investors give money to borrowers in period zero.
- Claims can be traded in period one, but a lemons problem may arise
- Investors are impatient with probability t
- Multiple equilibria can arise

Results

- Private insurers end up undercapitalised
- Public sector solution: capital requirements
- C and P push toward more subsidized risk-taking
- High C: Nationalization efficient
- High P: Creates most losses

A few comments

- Several recent papers stress the costs of policy uncertainty (Pastor and Veronesi; Baker, Bloom and Davis)
- Context of this paper: reform is needed
- But how to balance the goal for policy stability and the need for reform?

Comments II

- Appealing feature: a model where privatisation can lead to regulatory capture
- But corruption takes many forms that are omitted
- One common form is appointment of (incompetent) cronies, which makes nationalization unattractive, but corruption costs under public ownership are zero in the current model

Comments III

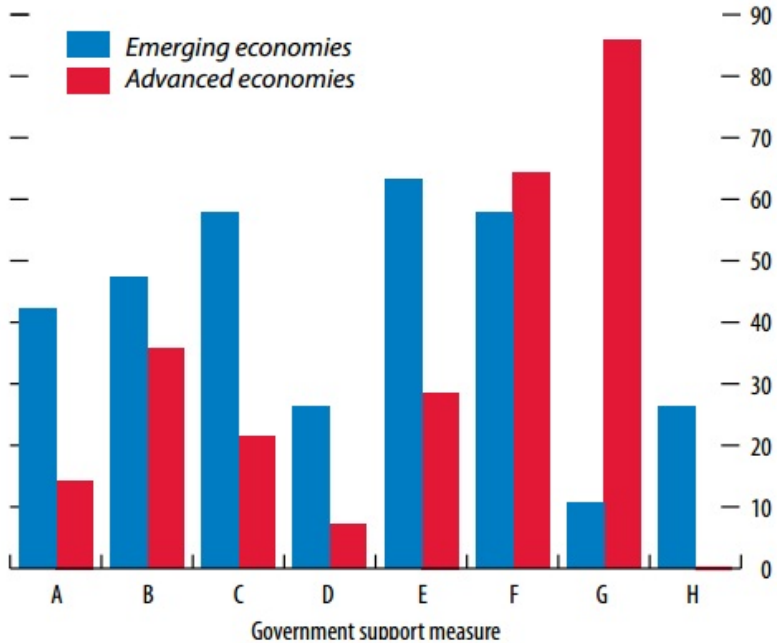
- What are the costs/benefits of financial innovation?
- Privatisation generally pushed for efficiency reasons; yet it may come at the cost of quality/clarity
- Partial privatisation is often said to improve monitoring
- In a GE model (competitive markets), ownership does not matter; in IO theory, no difference between natural monopoly in gov. vs. private ownership; contract theory: private ownership creates incentives to innovate

Home ownership

	Circa 1990s[1]	2004[2]
Australia	71.4	69.5
Austria	46.3	51.6
Belgium	67.7	71.7[3]
Canada	61.3	68.9
Denmark	51.0	51.6
Finland	65.4	66.0
France	55.3	54.8[3]
Germany	36.3	41.0
Italy	64.2	67.9
Luxembourg	71.6	69.3
Netherlands	47.5	55.4[3]
Spain	77.8	83.2
Switzerland	33.1	38.4
United Kingdom	67.5	70.7
United States	66.2	68.69

Types of support

Figure 3.2. Government Participation in Housing Finance
(Percentage of countries that have the government support measures detailed below)



1 Table 3.5).[18] While the aim

Source: IMF staff estimates.
Note: See Table 3.5 for details. The government support measures in the x-axis are as follows:
A) subsidies to first-time or other buyer up front;
B) subsidies to buyers through savings account contributions or through preferential fees;
C) subsidies to selected groups, low income;
D) provident funds early withdrawal for house purchase;
E) housing finance funds or government agency that provides guarantees/loans;
F) tax deductibility of mortgage interest;
G) capital gains tax deductibility; and
H) state-owned institution majority market player >50 percent.

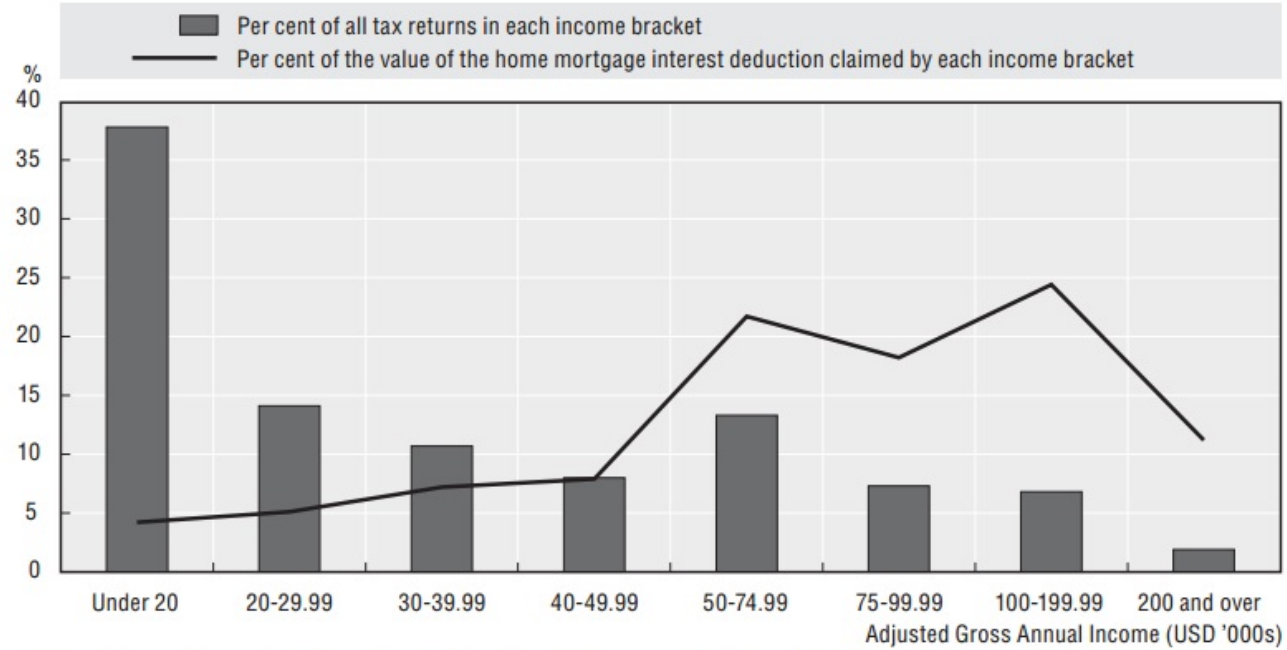
Categories by country

	Government Support Categories and Weights[1]							
	Category (A)–(D)				Category (E)	Category (F)–(G)		Category (H)
Category Weight	0.25				0.25	0.25		0.25
Subcategory Weight	0.0625	0.0625	0.0625	0.0625	0.25	0.125	0.125	0.25

	Subsidies to First-Time or Other Buyers Upfront (A)	Subsidies to Buyers through Savings Account Contributions or through Preferential Fees (B)	Subsidies to Selected Groups, Low and Middle Income (C)	Provident Funds Early Withdrawal for House Purchases (D)	Housing Finance Funds, Government Agency Provides Guarantees, Loans (E)	Tax Deductibility of Mortgage Interest (F)	Capital Gains Tax Deductibility (G)	State-owned Institution Majority Market Player in Mortgage Lending > 50 percent (H)	Index of Government Participation (higher weight to subcategory H) (I)	Alternative Index of Government Participation (equal weights to the eight subcategories) (J)
France		1				1	1		0.31	0.38
Germany		1					1		0.19	0.25
Ireland						1	1		0.25	0.25
Italy						1	1		0.25	0.25
Japan					1	1			0.38	0.25
Netherlands					1	1	1		0.50	0.38
Spain[3]		1				1	1		0.31	0.38
United Kingdom							1		0.13	0.13
United States			1		1	1	1		0.56	0.50

Figure 7. **Who benefits from the home mortgage interest deduction?**

United States, 2003[1]

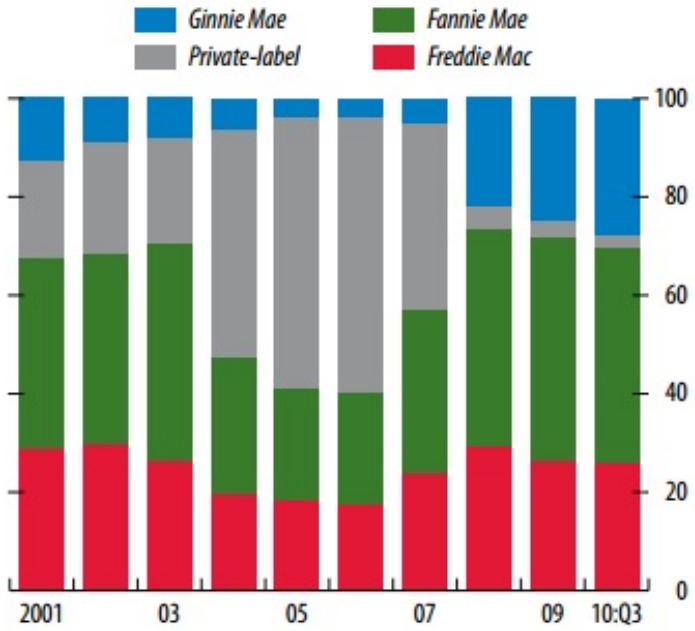


1. The columns show the share of tax filers in each income bracket, while the line shows the share of the value of mortgage interest deductions claimed by each income bracket. For instance, while 38% of all filed tax returns in 2003 pertained to adjustable gross incomes of less than 20 000 USD, this income bracket accounted for only 4% of the value of mortgage interest deductions. As noted in Prante (2006), while adjustable gross income differs somewhat from other measures of personal income, this distinction does not affect the distributional analysis shown above.

Source: Calculations from Prante (2006) based on Internal Revenue Service data.

How big were FM & FM?

Market Share of Mortgage-Backed Securities, by Issuer
(In percent)



Source: Inside MBS & ABS.

U.S. case

- Freddie Mac and Fannie Mae: more than $170 million spent on lobbying since 1998
- Public entities (Federal Housing Administration and Ginnie Mae) performed better
- In the U.S. context, populism is arguably the lower risk
- Note the definitions of corruption/populism in this paper

Summary in 3 points

- $\pi_C > \pi_P$: public option $\Rightarrow$ highest welfare
- π_C and π_P both high: privatisation best
- $\pi_P > \pi_C$: price controls lead to more losses