Secondary Market for Government Bonds: Breaking the Bank-Sovereign Nexus

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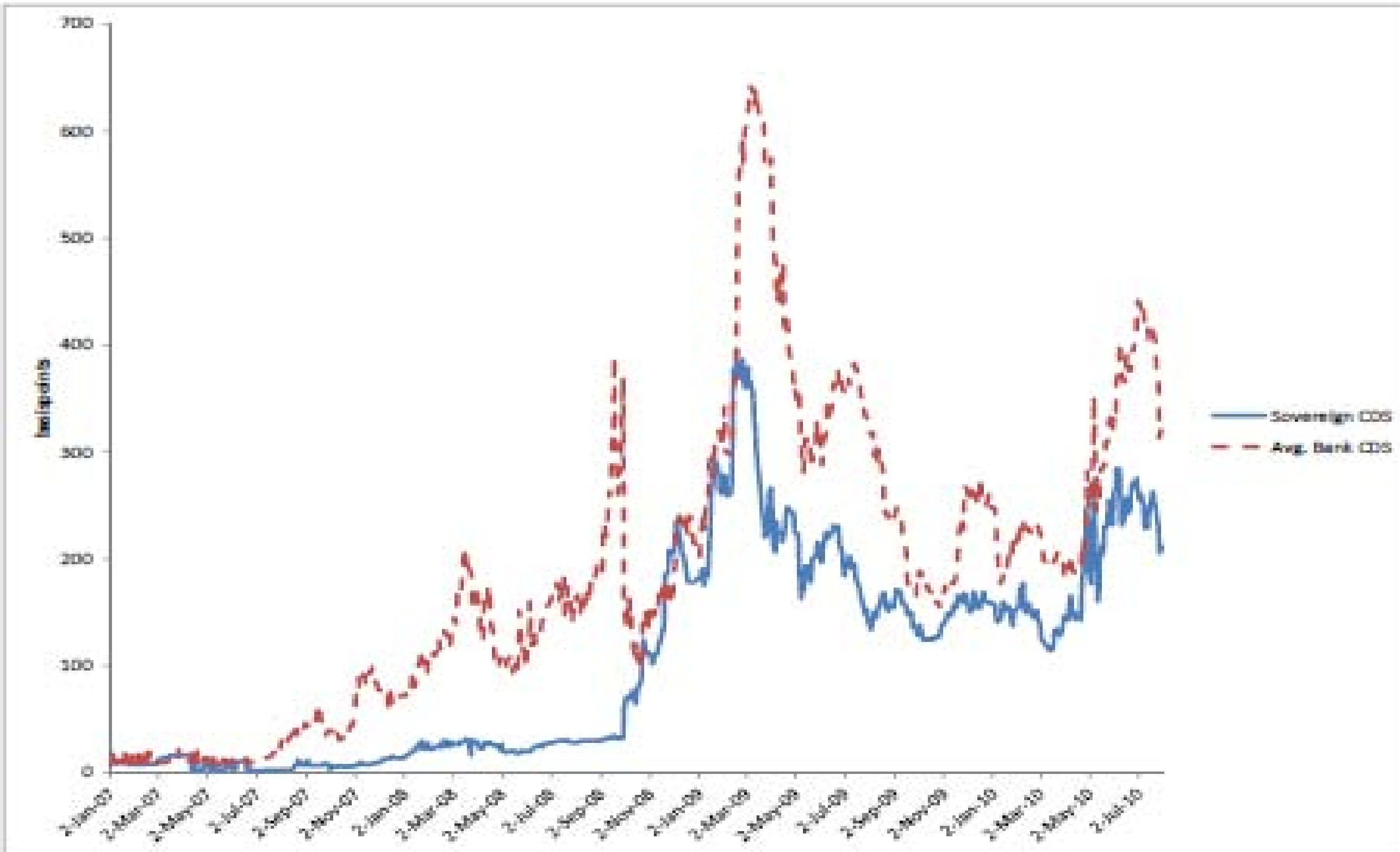
Banking crises have been followed by sovereign crises and vice-versa

- In some cases, governments took on excess debt and risks while rescuing failed banks or stimulating the economy
  - Ireland
  - United States?

From Irish banks to sovereign (Acharya, Drechsler, Schnabl 2011)



Banking crises have been followed by sovereign crises and vice-versa

- In some cases, governments took on excess debt and risks while rescuing failed banks or stimulating the economy
  - Ireland
  - United States?
- And, in yet others, private debts and growth slowdown engulfed governments too (Spain)
- And in some others, governments took on excess debt and deficits prior to the financial crises
  - Greece, Italy
  - United States?

Spain and Ireland were prudent fiscally… until banking crises

Country	2005	2006	2007	2008	2009	2010	Pct. pt. Change (2005-2010)
Ireland	27.4	24.8	25	44.4	65.6	96.2	68.8
Greece	100	106.1	105.4	110.7	127.1	142.8	42.8
United Kingdom	42.5	43.4	44.5	54.4	69.6	80	37.5
Portugal	62.8	63.9	68.3	71.6	83	93	30.2
Hungary	61.8	65.7	66.1	72.3	78.4	80.2	18.4
Spain	43	39.6	36.1	39.8	53.3	60.1	17.1
France	66.4	63.7	63.9	67.7	78.3	81.7	15.3
Germany	68	67.6	64.9	66.3	73.5	83.2	15.2
Italy	105.9	106.6	103.6	106.3	116.1	119	13.1
Slovenia	26.7	26.4	23.1	21.9	35.2	38	11.3
Netherlands	51.8	47.4	45.3	58.2	60.8	62.7	10.9
Poland	47.1	47.7	45	47.1	50.9	55	7.9
Austria	64.6	62.8	60.7	63.8	69.6	72.3	7.7
Denmark	37.8	32.1	27.5	34.5	41.8	43.6	5.8
Belgium	92.1	88.1	84.2	89.6	96.2	96.8	4.7
Norway	44.5	55.4	51.5	49.1	43.1	44.7	0.2
Malta	69.6	64.2	62	61.5	67.6	68	-1.6
Cyprus	69.1	64.6	58.3	48.3	58	60.8	-8.3
Sweden	50.4	45	40.2	38.8	42.8	39.8	-10.6

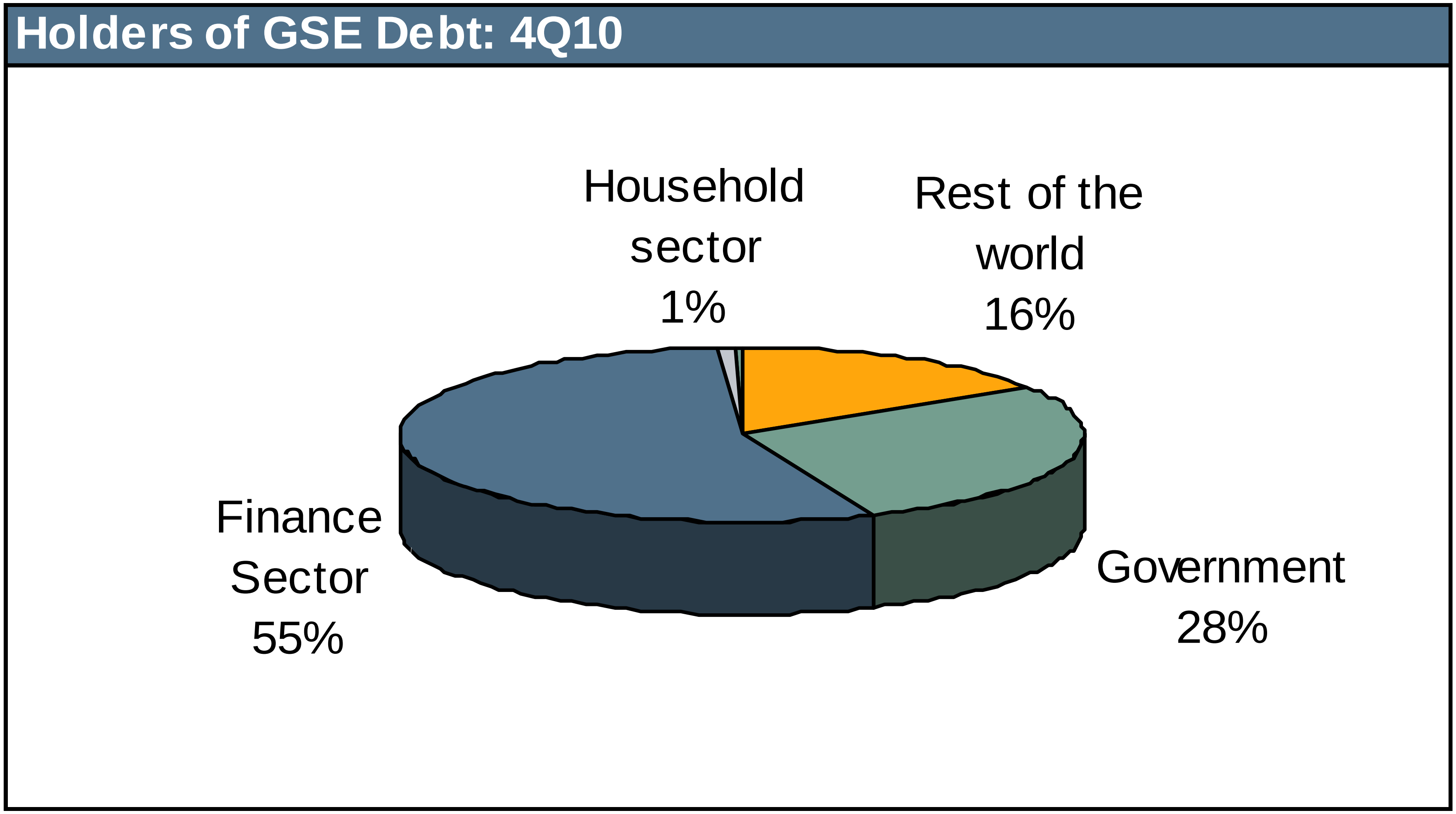
Lessons from ongoing crises

- Governments keen to expand fiscally.
  - Easier to subsidize consumption than to sustain growth
- Governments reluctant to cut back fiscally, even in wake of mounting debt on balance-sheets.
- BUT much sovereign debt held by own banks.
- Sovereign debt used in repos/as collateral to facilitate financial transactions.
- Sovereign deterioration has "collateral damage"
  - Broner-Martin-Ventura (2010), Bolton-Jeanne (2011), Gennaioli-Martin-Rossi (2011), …

Governments entangle “banks”

- Countries choose the extent of “entanglement” of financial sector with govt bond markets
- Example I: Government-sponsored enterprises (GSEs)
  - Fannie Mae privatized in 1968
  - But “agency” debt maintained special status, e.g., as OMO collateral at the Fed
  - Over 50% of debt held by financial firms
  - This commitment allowed agencies to borrow and stimulate housing in the United States
  - Commitment was upheld ex post

Entanglement of GSE debt

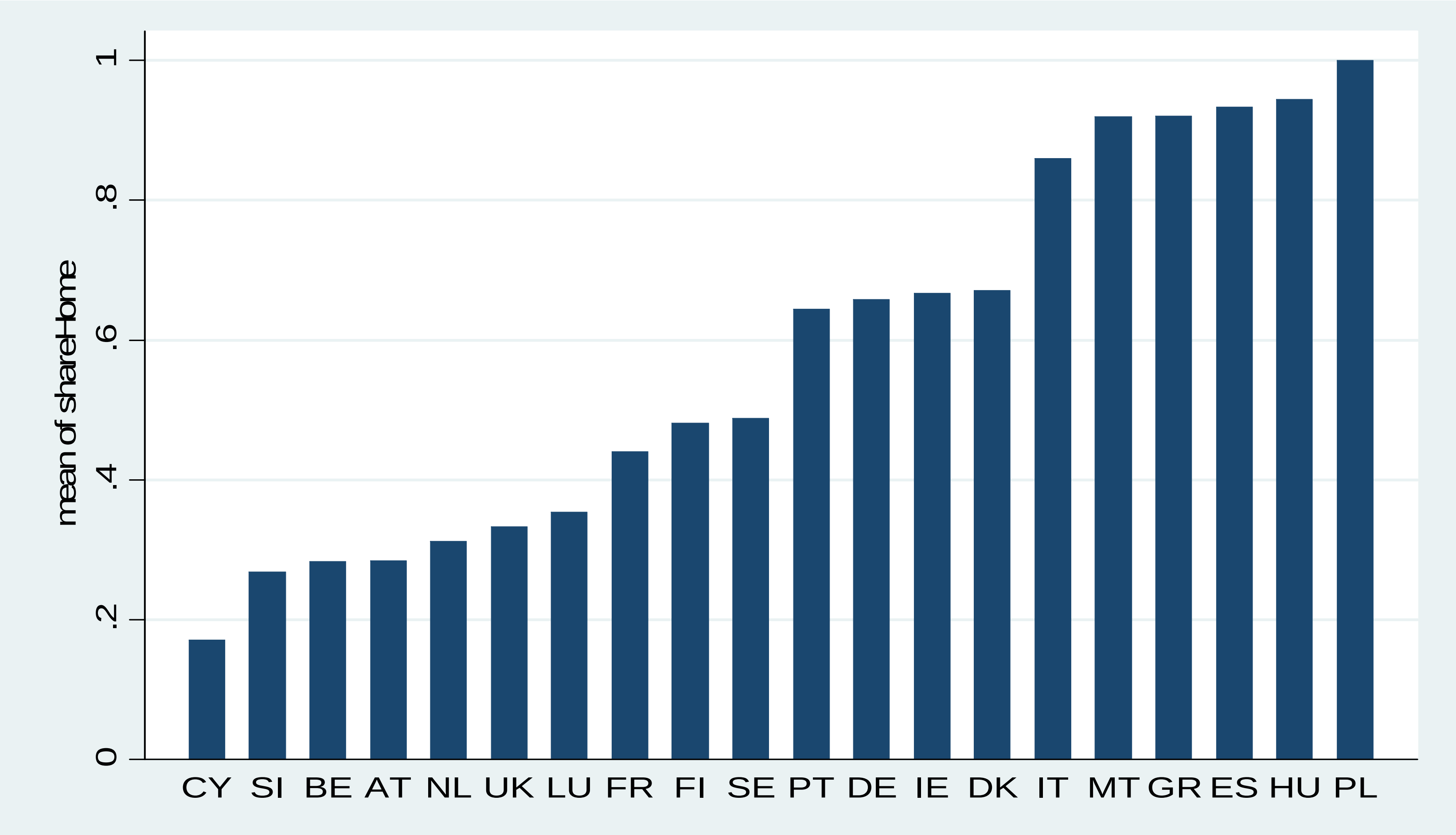


Source: Federal Reserve, Credit Sights

Governments entangle banks…

- Myopic governments increase financial sector entanglements to borrow more
  - Example II: Financial repression in Europe (zero sovereign debt risk-weights)
  - Example III: High liquidity requirements for domestic banks (India, among others)
- Increases current debt capacity
- But with uncertainty, such entanglement also increases the future cost of failure
  - Double whammy

"Home bias" in govt bond holdings of the European financial sector



Source: Acharya, Drechsler and Schnabl (2011)

Summary

- Strong nexus of government debt and banks leads to financial fragility
  - Banking crisis -> Difficult for sovereign to issue
  - Sovereign credit deterioration -> Collateral damage for the banking sector
- Instead of government debt markets being an antidote to banking crisis, and banks being an antidote to sovereign crisis, the two amplify each other's problems
- Constitutional debt/deficit limits might be valuable if the problem is excess government spending and bank-sovereign nexus

Alternative: Secondary market?

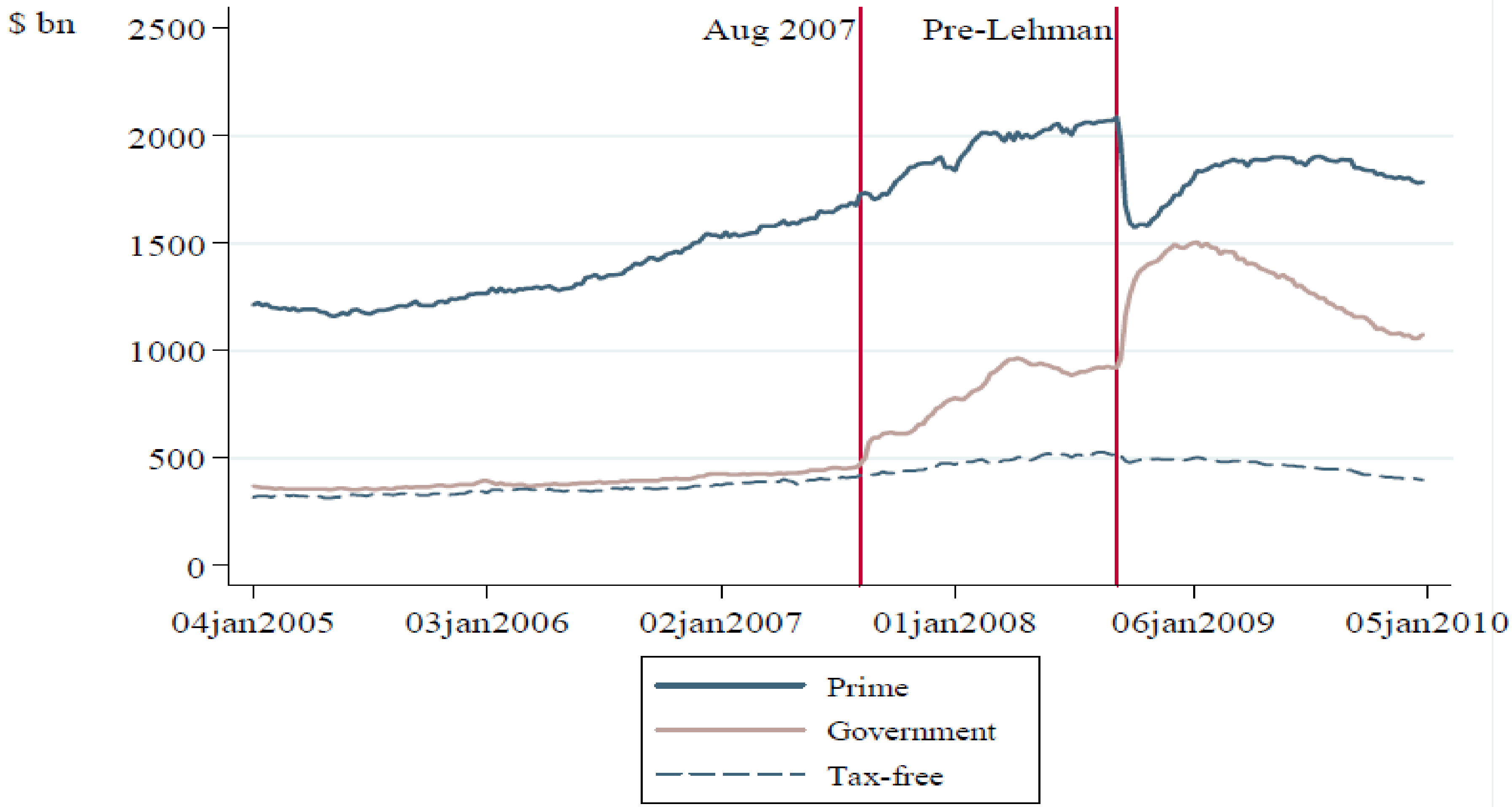
- A secondary debt market with government debt held by a range of financial institutions can help break government-bank nexus
- Secondary market may be essential for non-banking institutions to hold substantial portions of debt
  - Trading-based, fast-moving demand for debt
- Conversely, non-banking institutions with fast-moving demand crucial for liquidity of the secondary market

Breaking the nexus

- In case of a banking crisis, investors would allocate funds away from banks to the government bonds
  - Money market funds invested in government debt
  - Other institutions holding government debt
- Impairment of banking sector would not impair the government bond market
- Indeed, the government may experience a flight to safety and can fiscally stimulate if necessary
- Conversely, a credit deterioration of the government need not impair banks substantially as government debt also held by other FI's

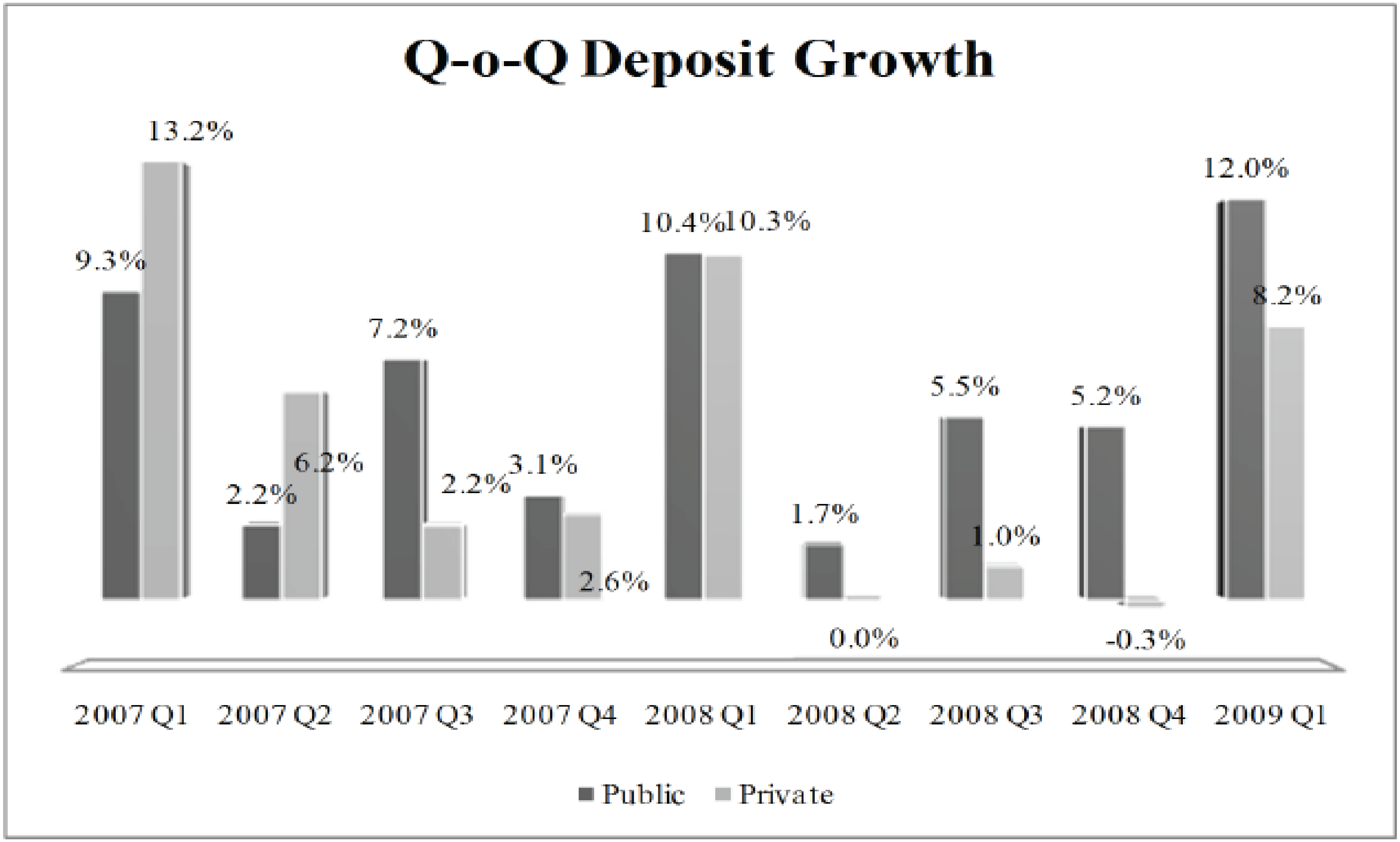
Flight to government debt in banking crisis: Acharya-Mora 2010

Figure 3a. Assets under management in money market mutual funds



Source: iMoneyNet for money market mutual funds (MMMFs), weekly data.

Case of India: Flight to SBI & PSBs (Acharya-Kulkarni 2010, RBI)



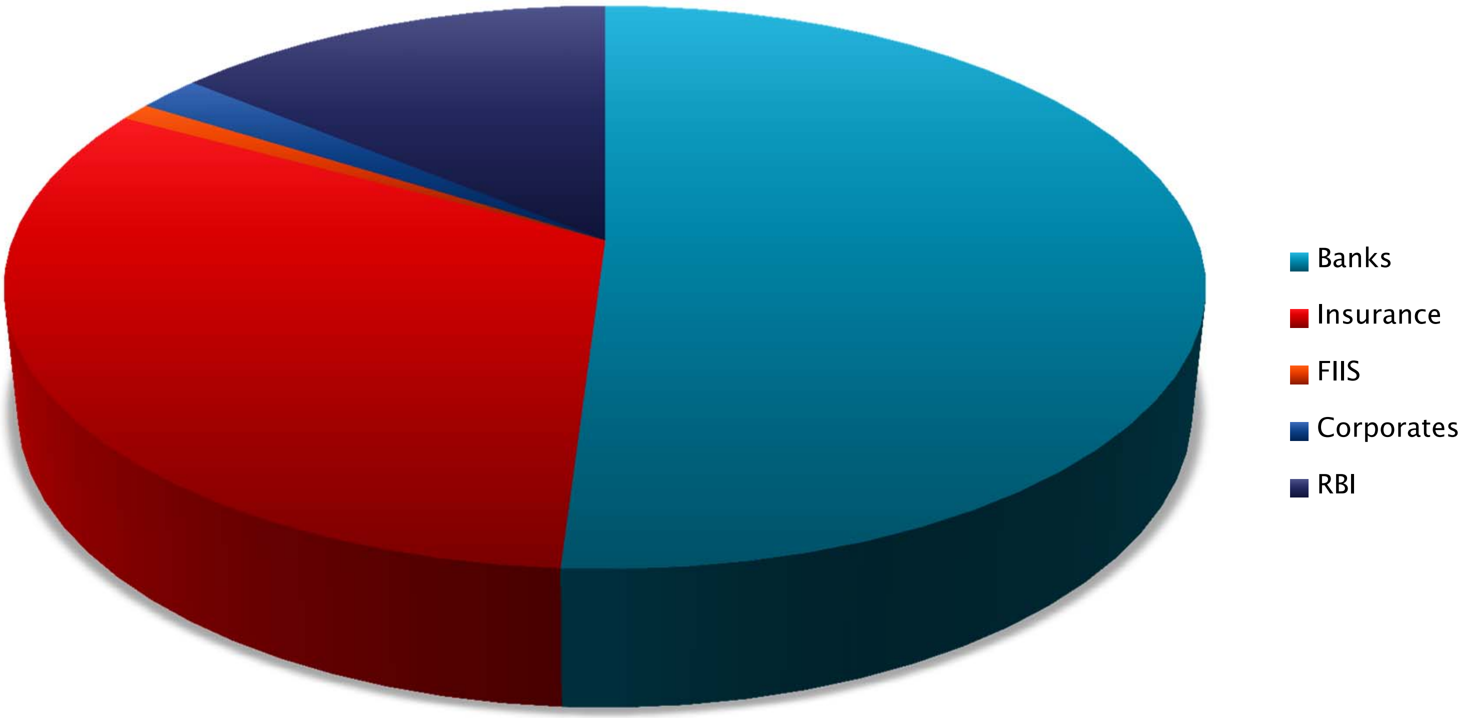
How to develop secondary bond market: Reduce the role of banks

- Banks currently hold over 50% of GOI debt
  - This is partly due to high liquidity requirements
  - This is also due to lack of institutional depth

Holding pattern of GoI debt-2011 (MoF)

- Banks and Bank-PDs - 51%
- Insurance Companies + PFs + MFs- 32%
- FIIs - 1%
- Corporates - 1.6%
- RBI and others - 14%

Holding pattern of GoI debt-2011 (MoF)



How to develop secondary bond market: Reduce the role of banks

- Banks currently hold over 50% of GOI debt
  - This is partly due to high liquidity requirements
  - This is also due to lack of institutional depth
- India faces a chicken-and-egg problem
  - Markets won't develop with such bank presence
  - Banks irreplaceable till markets develop
- A focused effort to develop secondary trading in government (and corporate/infra) debt
- Japan, a case of caution: Banks own 45% of government debt; recession could be a double whammy?