GREECE'S CREDIT CYCLE – IMPLICATIONS FOR REGULATION AND POLICY

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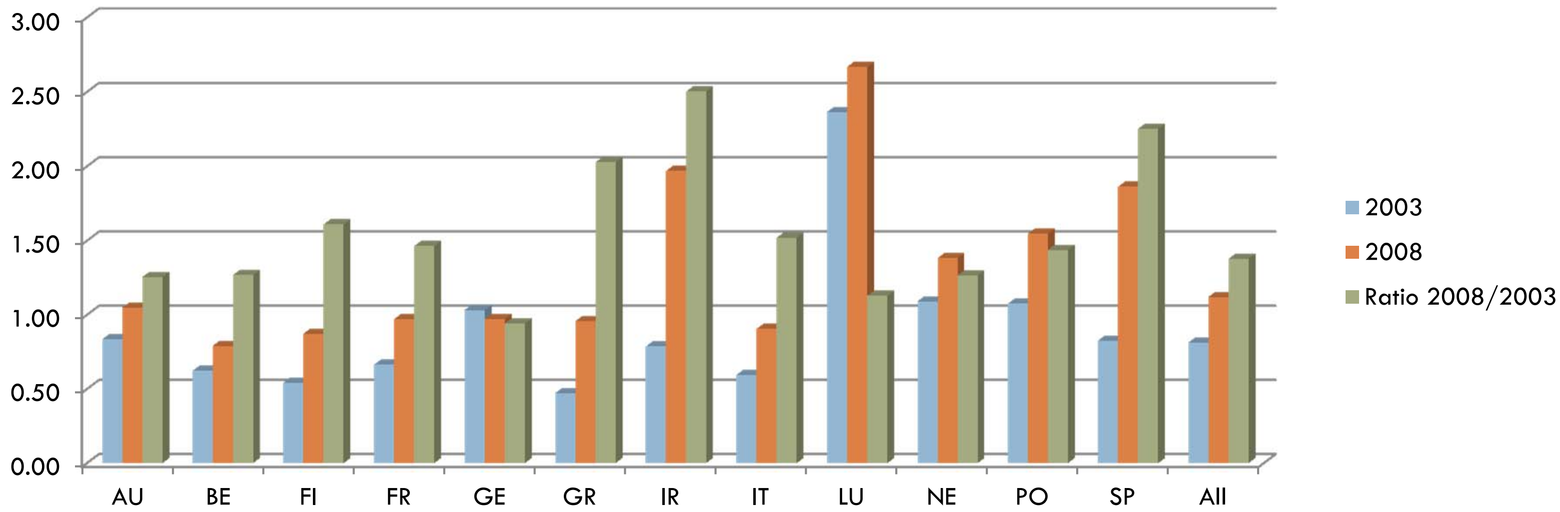
Outline

- Greece's credit boom (2000-2008) and crunch (2009-present).
  - Review of key facts.
  - The credit cycle in an institutionally weak economy.
  - A grim credit outlook.
  - Policies for the short/medium run.
- Greece's financial development.
  - Performance of Greek financial markets and institutions.
  - Policies for the long run.

Credit Boom

Banks' private-sector loans (households and non-financial corporations) to GDP:

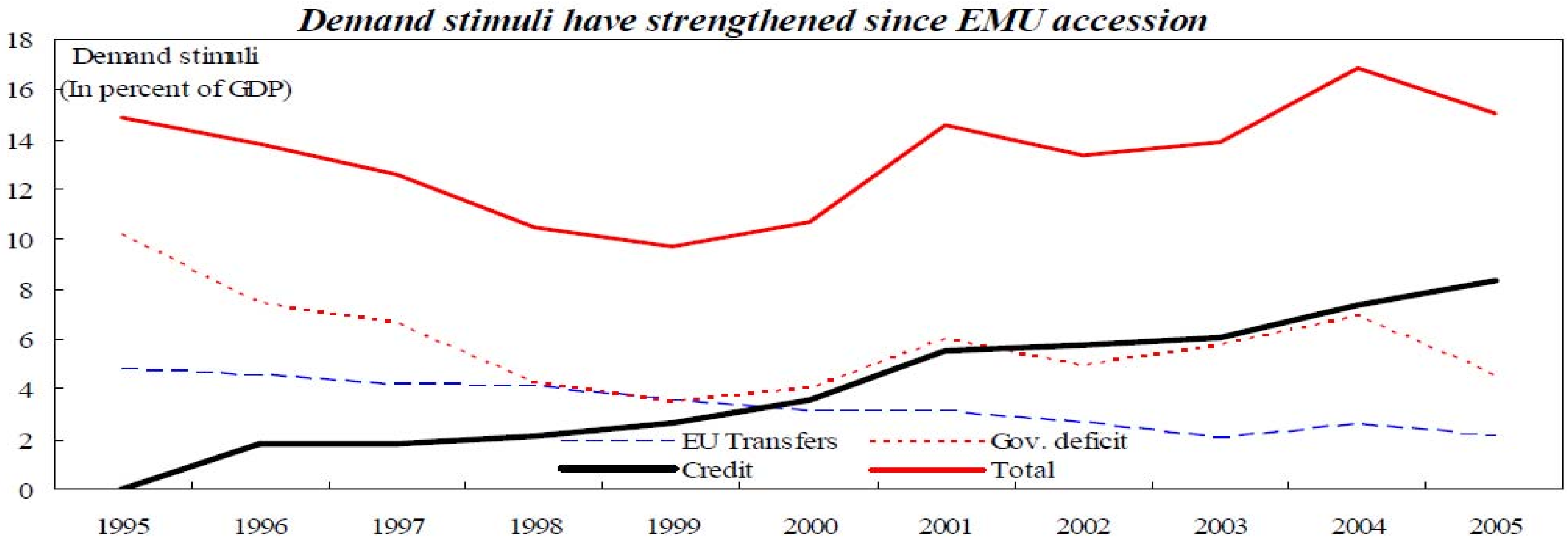


Source: ECB

- Greece:
  - Lowest starting point in EZ.
  - Fastest growth in EZ after Ireland and Spain.
  - Similar to EZ average in 2008.

Credit Boom and the Economy

Drivers of the economic boom after Euro entry:

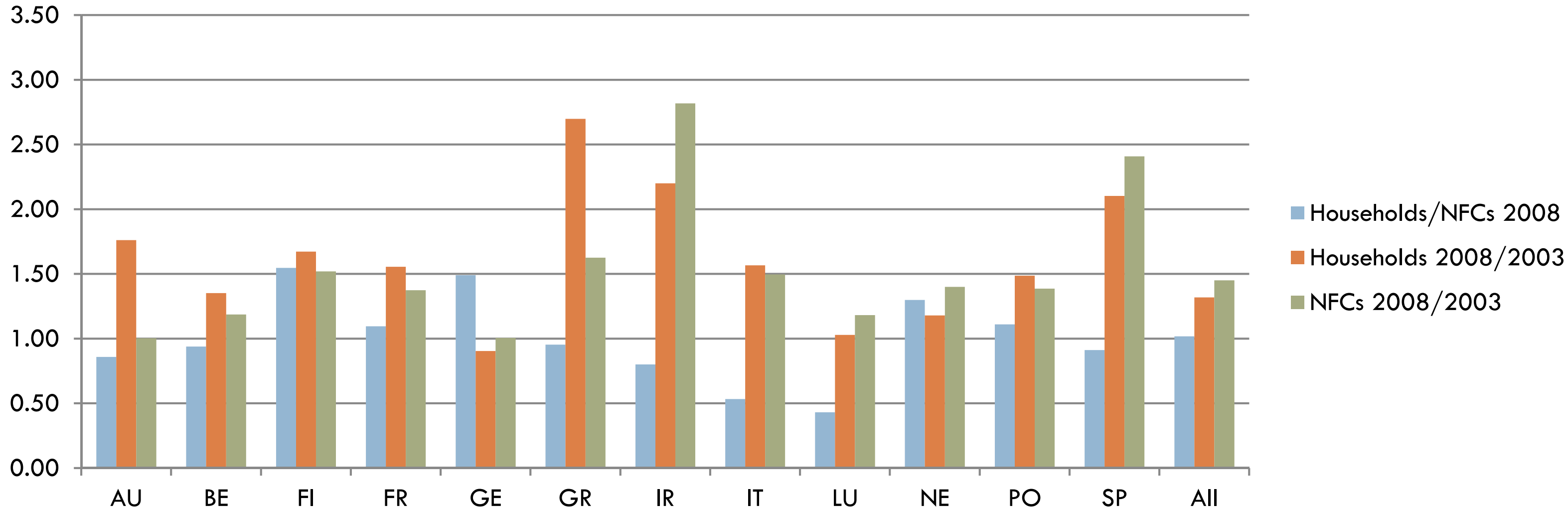


Source: IMF, Country Report, 2007

- Private credit overtook government spending and EU transfers as main driver of the boom.

Composition of Credit Boom

Breakdown of banks' private-sector loans to GDP by category (households vs. non-fin. corp.) and growth of each category:



Source: ECB

- Greece: Breakdown in 2008 same as EZ average.
- Fastest growth in EZ in loans to households (consumption loans and home mortgages).

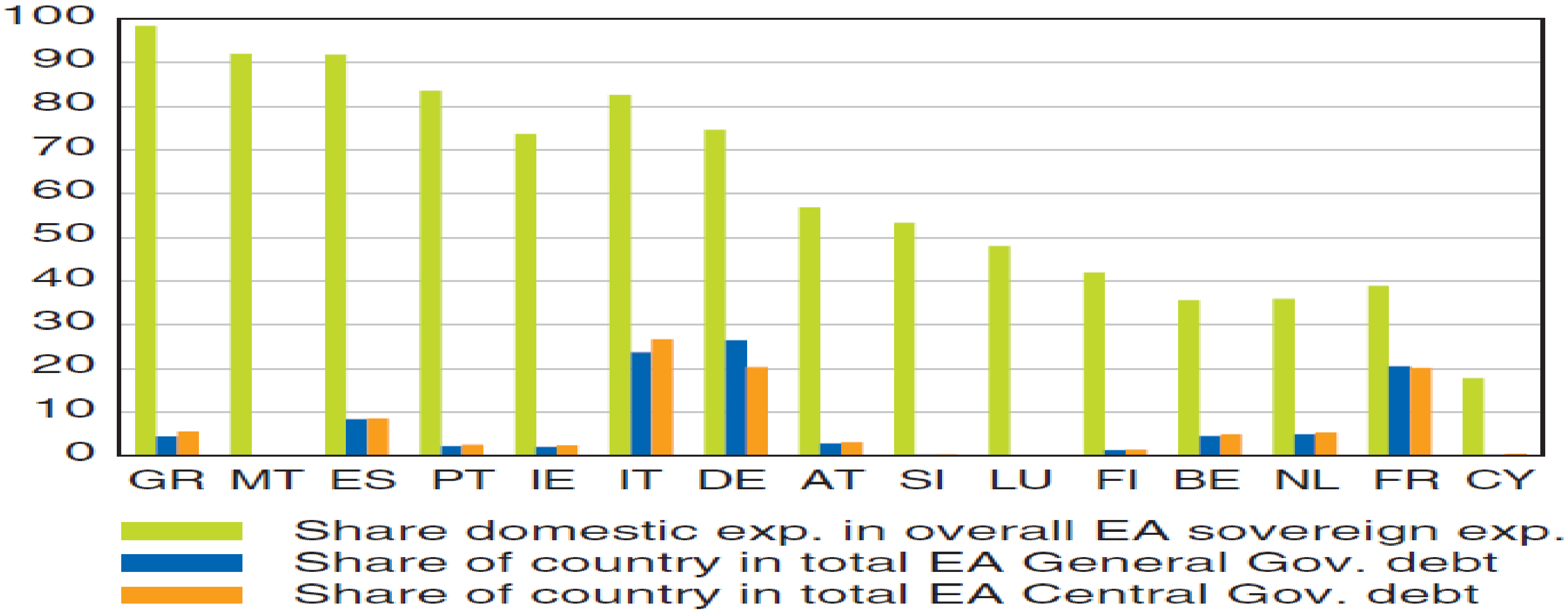
Banks' Risk Exposures

- Private-sector loans:
  - Fast growth in loans to households and SMEs.
  - New borrowers with limited credit histories.

  (IMF, FSSA for Greece, 2006)
- Government bonds:
  - Only Greek bonds – lack of diversification across the EZ.
  - Holdings **increased** in the run-up to the crisis.

Lack of Diversification

Domestic government bonds held by banks as % of EZ government bond holdings:

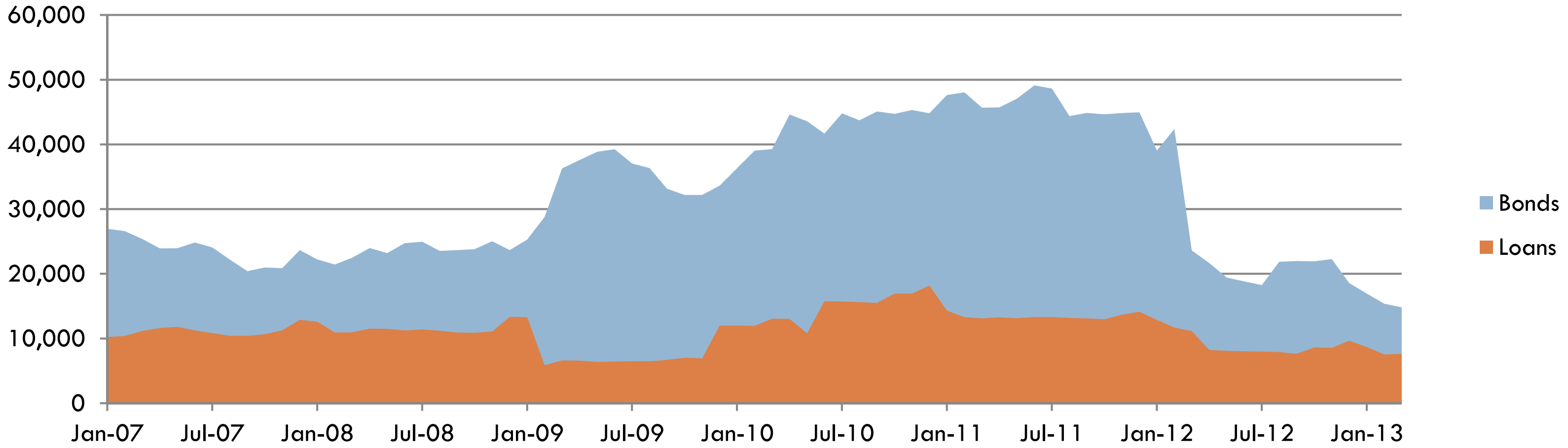


Source: Merler and Pisany-Ferry, BdF FSR, 2012. Data as of 2011.

- Greece: **Least** diversification in EZ.

Credit to Government

Greek banks' holdings of Greek government bonds and loans to the Greek government:



Source: BoG.

- Credit to government increased from 35bn in 01/2008 to 58bn in 04/2010.
- Credit to governments increased for the other GIIPS as well.

PSI Losses and Bank Recaps

- For the aggregate of Greek banks:
  - Core tier 1 capital as of 12/2011 was 22bn.
  - PSI losses were 38bn.
  - ➔ PSI rendered Greek banks insolvent.

Source: BoG, Report on the recapitalization and restructuring of the Greek banking sector, 12/2012.

- If Greek banks had been holding a well-diversified government bond portfolio:
  - Insolvency could have been avoided.
  - ➔ Less severe credit cycle.

Effects of State Control

- Ratio of credit to government to core tier 1 capital:
  - 3.03 for aggregate of state-controlled banks. (NBG, ATEbank, Postbank)
  - 1.71 for aggregate of privately-controlled banks. (Eurobank, Alpha, Piraeus, Emporiki, Millenium, Geniki, Attica, Probank, Proton, FBB, Panellinia)

Source: BoG, Report on the recapitalization and restructuring of the Greek banking sector, 12/2012.

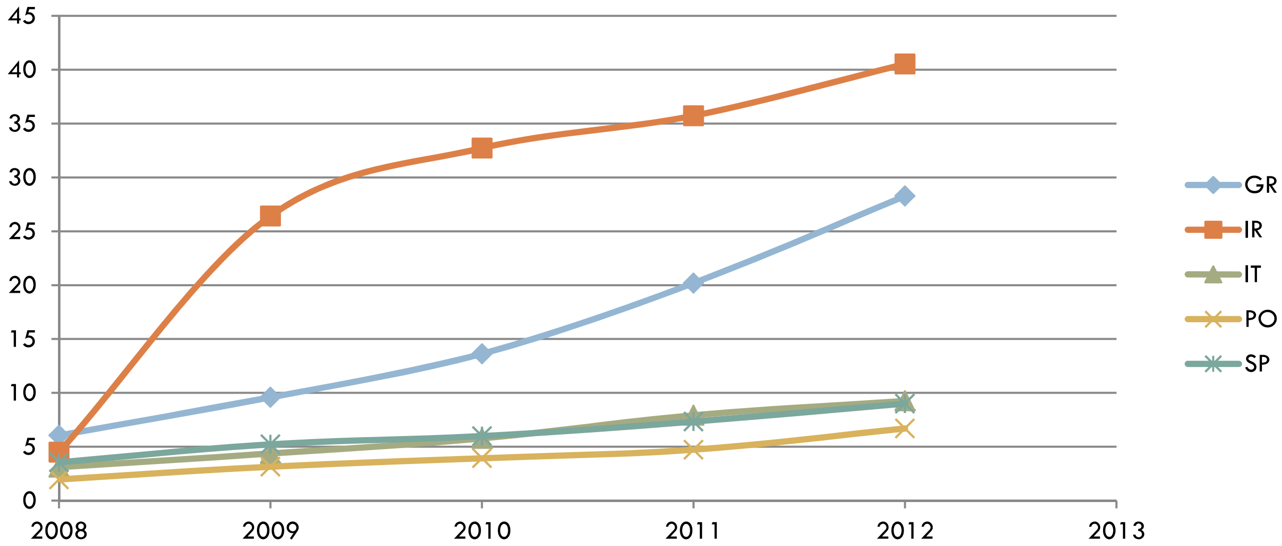
- (Based on this measure) State control:
  - Did not result in more stable banks.
  - Made credit cycle more severe.

Credit Crunch

- How severe is the credit crunch?
  - % of non-performing loans (NPLs).
- How quickly is deleveraging taking place? Are NPLs being resolved quickly, through restructuring or liquidation?
  - Incentives of banks to "extend and pretend".
  - Bankruptcy code.

NPLs

NPLs, expressed as % of banks' private-sector loans in 12/2008:

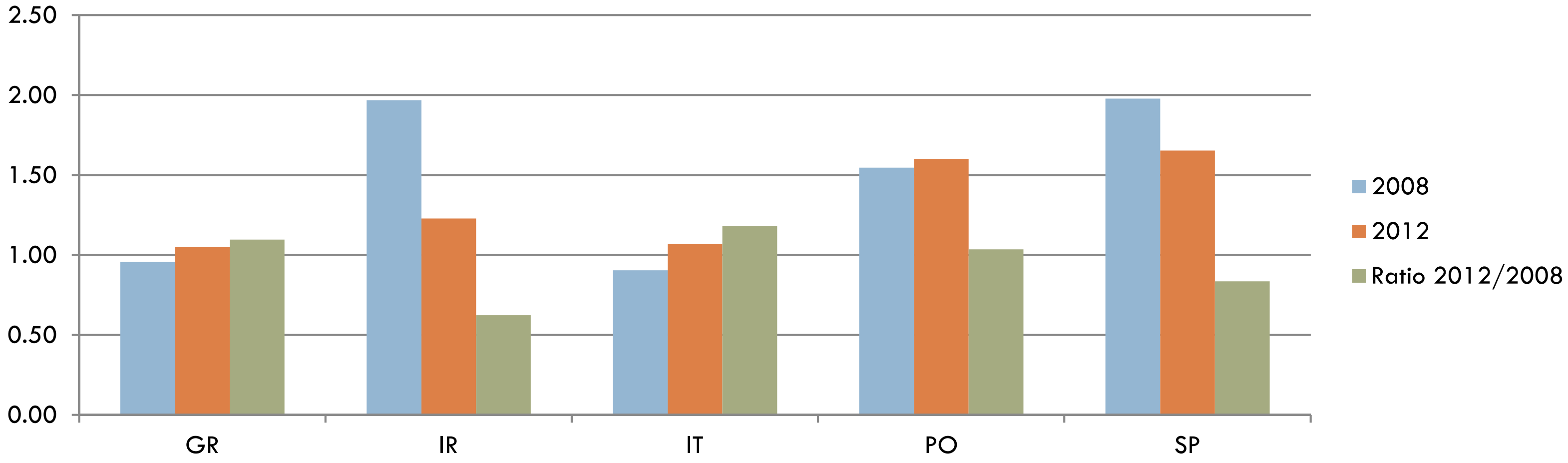


Sources: ECB and PwC, European NPL Outlook, 10/2013.

- Ireland is highest. Greece is next highest and the fastest growing.

Deleveraging

Banks' private-sector loans (households and non-financial corporations) to GDP:



Source: ECB and BoG

- Large reductions in Ireland and Spain, partly because of creation of public "bad bank" (NAMA, 40% of GDP; SAREB, 10% of GDP).
- Small **increases** in Greece, Italy and Portugal.

Advantages of Public Bad Bank

- Better incentives to resolve NPLs.
  - Banks are forced to recognize their losses since NPLs are transferred to bad bank at (or close to) market value.
  - If NPLs remain with the banks, with no forced write-downs, then banks have an incentive to “extend and pretend”, i.e., not restructure or liquidate the NPLs.
    - NPL resolution hurts banks’ regulatory capital and can force them to issue more shares, diluting their shareholders.
    - Bad bank does not have such an incentive: its only mandate is to resolve the NPLs.
- Banks can make new loans.
  - Selling the NPLs to bad bank frees up regulatory capital for new loans.
- Overall:
  - Reduction of debt overhang.
  - Better allocation of credit.

Public Bad Bank in Greece

A public bad bank has not been created in Greece because:

- Market for distressed loans is illiquid.
  - Ireland, Spain: Many homogeneous real-estate loans.
  - Greece: Heterogeneous loans to households and SMEs.
- There was not enough money (from the 50bn aid package to banks) to create bad bank.

(IMF, Greece Selected Issues, 06/2013)

Incentives to "Extend and Pretend"

- Banks' incentives to "extend and pretend" must be addressed.
  - Force write-downs through creation of public bad bank or otherwise.
  - Do this in a uniform and transparent manner across banks. Spain offers a good model (e.g., royal decree of 05/2012).
- This is likely to require extra capital and further dilution of shareholders.
- But the alternative is many years with a non-functioning banking system and no growth.

Bankruptcy Code

- Does bankruptcy code support efficient resolution of NPLs?
- Households: Katseli law (3869/2010).
  - Collateralized loans (home mortgages): Loan amount is reduced to 85% of collateral value.
  - Uncollateralized loans: Borrower's assets, except first home, are used for debt repayment. Borrower is discharged of any remaining debt.

Household Bankruptcy Code: Pros

- Better to reduce principal, than leave it unchanged and reduce interest payments (as per recent laws).
  - Restores positive equity of borrowers, and improves incentives to repay the loan and maintain the collateral.
- Better to discharge borrower of any debt that remains after assets are liquidated, than keep him/her liable until full debt is repaid (as in Spain).
  - Improves incentives to generate future income (e.g., find a new job or start a firm).

Household Bankruptcy Code: Cons

- Long delays to take cases to court. (Court dates currently set to 2023!)
  - No payments due until case goes to court.
  - Strong incentives for strategic default.
  - Weak incentives to maintain the collateral and to invest. (Debt overhang)
- Evaluated by low-level courts, staffed by judges with insufficient training.
  - Huge variation in decisions, especially given that law leaves large discretion to judges.
- Foreclosures of collateral are currently prohibited.
  - Negates basic principle of collateralized lending.
  - Direct cost to the taxpayers since banks are taxpayer-financed.
- Delays and judge training are also key problems with corporate bankruptcies.

Real-Estate Taxes

- Credit-market problems are exacerbated by recent increases in real-estate taxes.
- Collateral values decrease:
  - More loans become distressed, with negative borrower equity.
  - Borrowers will lack collateral to obtain new loans.
- Some of the proceeds of the tax will eventually go to cover the losses that banks will incur because of the reduced collateral values.

Credit Outlook

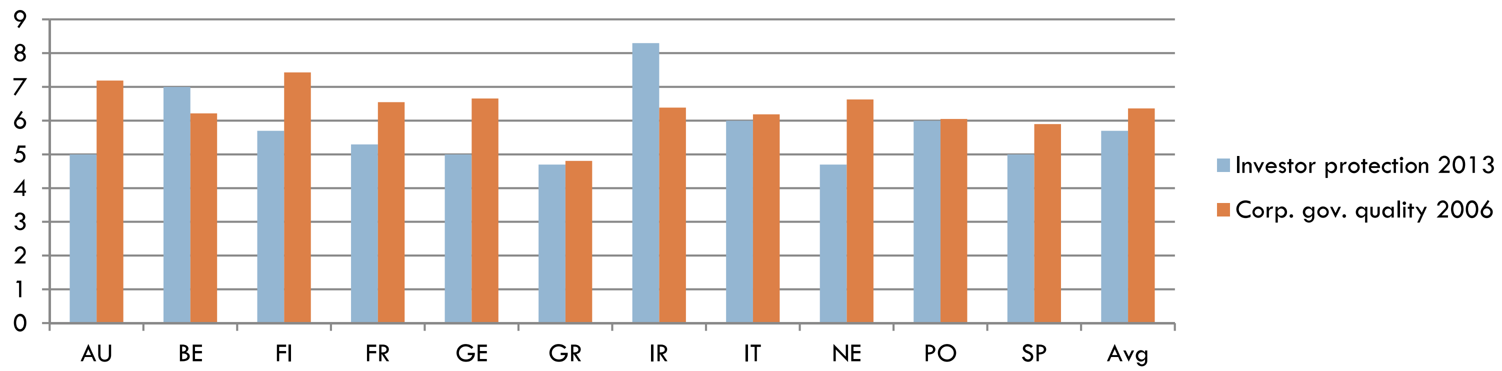
- Large and growing pile of NPLs in Greek banking system.
- Hard to see how this pile will be cleared:
  - Banks prefer (and are pressured) to avoid write-downs.
  - Bankruptcy involves long delays.
  - Home foreclosures are prohibited.
  - Collateral values are being reduced sharply by real-estate taxes.
- Grim outlook for credit (and hence for economic growth), unless above problems are addressed.

Financial Development

- Financial development measures the quality of a country's financial markets and institutions.
  - Laws protecting investors.
  - Financial regulatory agencies.
  - Financial literacy.
  - …
- Large academic literature documents strong link between financial development and economic growth.
  (See, e.g., survey by R. Levine in the Handbook of Economic Growth 2005.)
- Brief overview of some financial development measures for Greece.

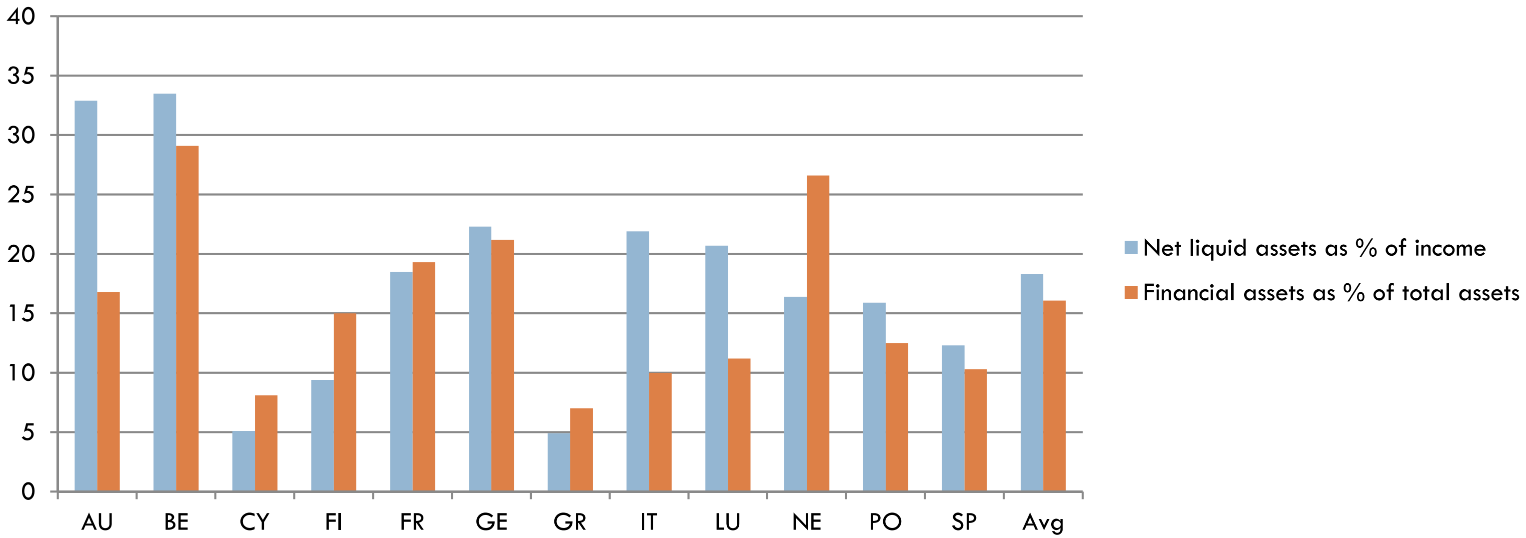
Investor Protection and Corporate Governance

- Investor protection index (World Bank, Doing Business Report 2013).
  - Extent of disclosure.
  - Extent of director liability.
  - Ease of shareholder suits.
- Corporate governance quality index (De Nicolo et al., IMF WP 2006).
  - Disclosure of accounting information.
  - Earnings opacity.
  - Stock price synchronicity.



- Greece scores low (tied bottom with Netherlands on IP, bottom on CGQ).
  - But significant recent rise in IP score (from 3.3 in 2012 to 4.7 in 2013).
- Effects: High cost of capital for firms and high barriers to entry.

Household Portfolios



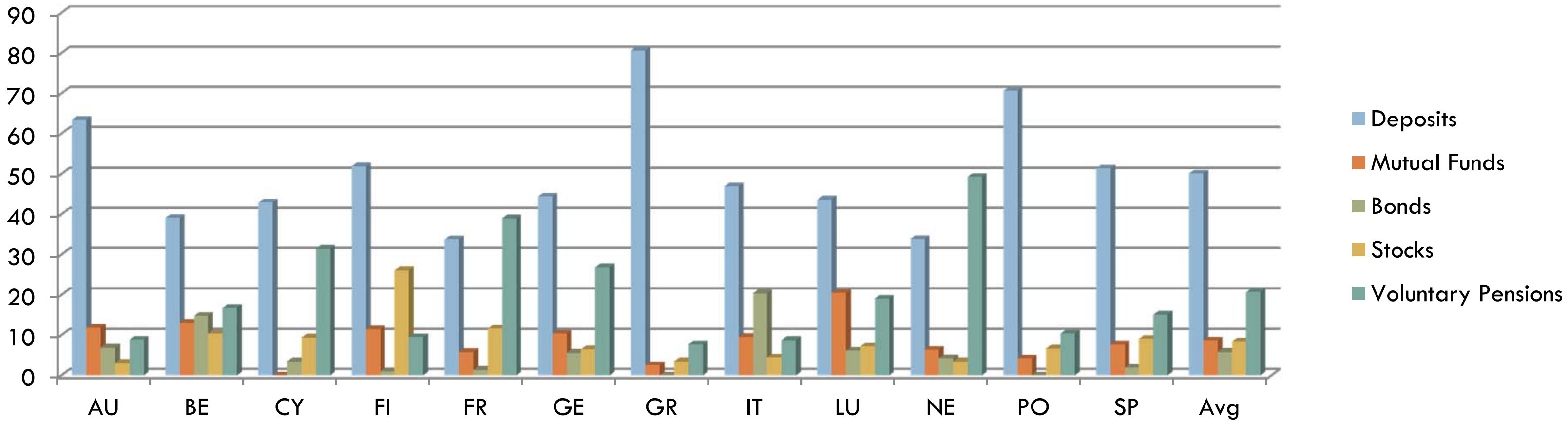
Source: HFCS Analytical Report and Additional Tables. Survey conducted in 2009-2010.

Relative to their EZ counterparts, Greek households:

- Invest the least in financial assets as % of total assets.
- ➔ Invest the most in real assets (mainly real estate).
- Have the smallest holdings of liquid assets relative to income.

Household Portfolios (cont'd)

Composition of households' financial asset portfolio:



Source: HFCS Analytical Report and Additional Tables. Survey conducted in 2009-2010.

- Greece has:
  - Largest share of deposits.
  - Smallest share of mutual funds and stocks (➔ Least trust in financial markets?)
  - Smallest share of voluntary pensions (e.g., individual retirement accounts).

Summary

- Main objective for the short/medium run:
  - Efficient resolution of NPLs.
  - Well-capitalized banking system.
- But should not lose sight of the longer-run issues:
  - Efficient design and enforcement of investor-protection laws.
  - Strengthen financial regulation (transparency, accountability, conflicts of interest, resourcing, etc).
    - Current plans to centralize regulation at EZ level should help.
  - Cut links between politicians and banks.