Possible Questions from a small open economy crisis in the Eurozone

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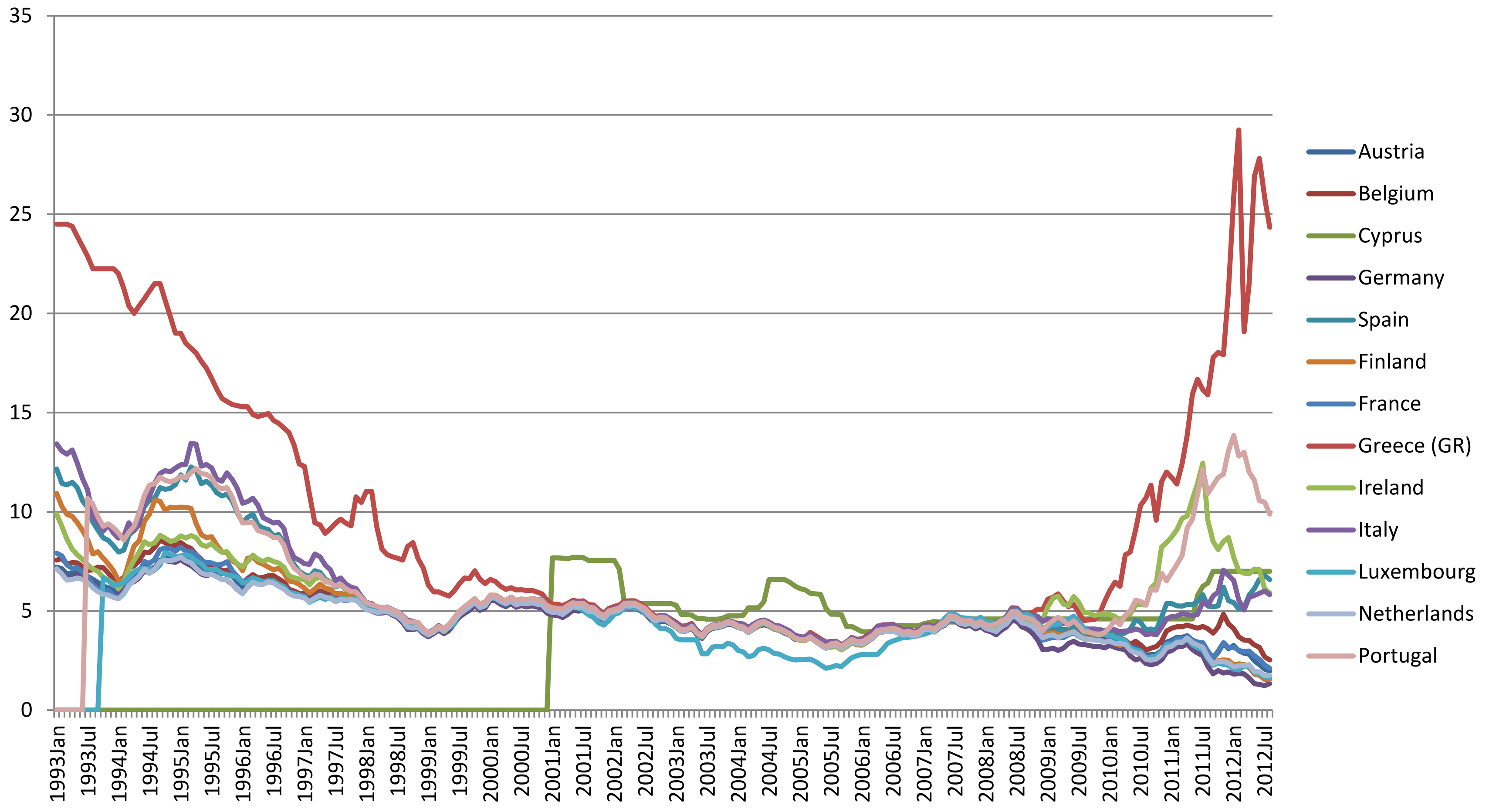
Plan

- Case study of the crisis in a small open economy in the Eurozone (Cyprus)
- Crisis: bailout (18 billion euros) might be 100% of GDP (54% for banks and 46% for expiring debt plus budget deficit in 2013)
- Crisis indicates open academic questions that policy makers might need answer to
- Questions apply to other countries

Ten Year Government Bond Yields



Country Ordering

- Sequence of countries in July 1993 is almost the same as the one in July 2012:
- August 1993: Greece, Portugal, Italy, Spain, Ireland
- August 2012: Greece, Portugal, Cyprus, Slovenia, Spain, Ireland, Italy
- I will discuss the macroeconomic events in Cyprus in the Eurozone after 2008 using the lens provided by recent macro-banking papers

Cyprus

- Cyprus in Eurozone on Jan 1st 2008, EU on May 1st 2004
- Increase in private debt partly through lower interest rates and external demand (first UK then Russia) for holiday residences
- How does debt compare with other Eurozone countries?

Debt to GDP in 2010

	Household Debt	Corporate Debt	Government Debt	Total Debt
Germany	61.6	66.5	81.5	209.6
Italy	45	80.9	**121.1**	**247**
Greece	60.7	62.9	**165.6**	**289.2**
Portugla	95.5	**152.5**	106	**354**
Ireland	**118.9**	**222**	**109.3**	**450.2**
Spain	85.7	**140.7**	70.1	**296.5**
Cyprus	**159.2**	**144.5**	61.5	**365.2**

Question about Debt

- Kiyotaki, Michaelides, Nikolov (JMCB, 2011): land restrictions make debt to GDP higher in countries with tight “land constraints”
- Larger housing price response to interest rate falls
- Japan/UK higher ratio of tangibles to GDP than US, same in coastal cities in US vs non-coastal cities
- When is private debt to GDP “dangerous”?

Public Debt to GDP

- After 2008, increase in social transfers as well (Debt/GDP=48% in 2008 to 90% in 2012, 10% from bank bailout)
- From 3% budget surplus in 2008, to 6% budget deficit every year in the next four (2009-2012)
- “Debt/GDP lower than EU average, do not worry”
- Downgrades of sovereign debt starting in 2010, citing bad public finances, large banking sector and low competitiveness

Large Banking Sector

- Large banking system with balance sheet “financially integrated” but with substantial exposure to Greece
- Large here means 800% banking assets to GDP, concentrated mostly in three largest local banks

Exposure to Greece: Sep 2012

	GREECE			Group	
	Gross Loans	Deposits	Total Assets	Total Assets	Non performing Loans
Hellenic	937	599	705	8,725	959
Laiki	12,000	6,032	12,101	30,376	7,023
BOC	9,472	6,511		36,235	4,826
	22,409	13,142		75,336	12,808
GDP	17,000	17,000		17,000	17,000
% of GDP	132%	77%		443%	75%

Greek Exposure

- Expansion financed through deposits flowing to Cyprus for low tax rate
- Role of banking regulation across borders and activities of global banks (Cetorelli and Goldberg, JF, 2012)
- "Financial integration" turns into "unbalanced balance sheet" (deposits < loans): what happens if Grexit takes place?
- How does mere uncertainty about Grexit affect economy?

Unintended Consequences from PSI

- How should sovereign debt be forgiven?
- PSI haircut of GGB
- October 2011: 4 billion euros or 25% of Cypriot GDP in bank capital was wiped out by Greek PSI
- How seriously should one take Basel requirements about “zero risk” for government bonds?
- “Zero risk” investments and the “greatest” carry trade ever? (Acharya and Steffen, 2012)

Procyclical Regulation

- One of the factors is relationship between banking problems and sovereign debt
- Sovereign debt increases through bank bailouts
- Banking problems made worse with higher funding costs through sovereign debt downgrades
- Goodhart (2009): “procyclical regulation”

Banks vs State

- Legal status of a banking unit: distinction between branches and subsidiaries
- As a branch, regulation responsibility lies with originating country
- As a subsidiary, regulation lies with host country
- What are the pros and cons of each decision?
- How should this be viewed by a central bank?
- Should EBA running stress tests at holding group or at subsidiary level?

Bank Flows

- Regulatory Arbitrage? (Houston, JF 2012)
- March 2011: second biggest bank in Cyprus was given permission by central bank to change its status in Greece from subsidiary to branch
- Does this have practical implications? Reputational capital issues, EBA stress tests, short term funding from ECB…

Bank Capital Requirements (or Procyclical Regulation)

- Original Troika requirement in Cyprus: core tier I to 10% within one year
- «10% makes banks more careful»
- «10% reduces uncertainty from evaluating uncertain loan portfolios»
- BUT: Bank of England Financial Policy Committee, for example, on countercyclical capital requirements
- Issue extremely important for countries in recession
- What should this number be? Over time and across countries?
- Kashyap and Stein (2004), Hanson, Kashyap and Stein (2011), Repullo and Saurina (2011)

Debt Sustainability

- Economy has signs of both Ireland and Spain (property loans through banking sector) and also Greece (large increase in government debt to GDP in short period of time (4 years))
- 80% + 60% bailout = 140% debt to GDP: how does IMF view this number?
- How can this be resolved?

Conclusion/Questions

- What level of debt is dangerous?
- How should public debt be forgiven to limit collateral damage?
- How does one regulate/monitor cross-border banking activities?
- How can banking regulation become less procyclical?
- How does on alleviate the sovereign debt – bank balance sheet vicious circle?
- What should the monetary policy instruments be in such an environment?
- What are the central government's policy options in such an environment?

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