

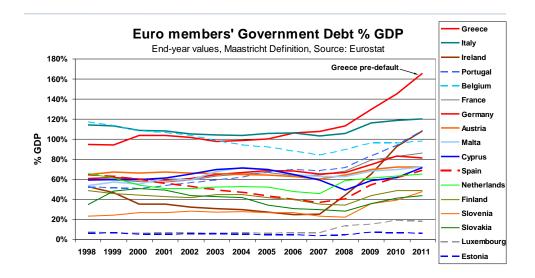
Are intra-Eurozone tensions fiscal?

- Conventional wisdom has it that the 'South' and Ireland have over-spent and over-borrowed, hence the current crisis
- The solutions proposed are:
 - Maintain the Euro intact
 - Euro-wide 'banking union'
 - Mutualised Euro-wide sovereign borrowing (within limits)
 but most controversially:
 - Stiff fiscal targets for delinquent countries.

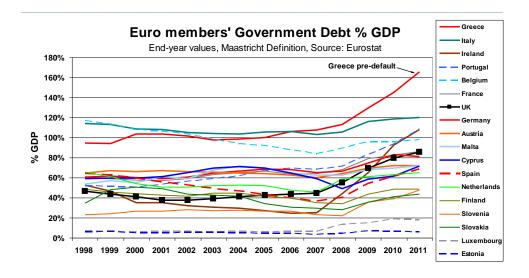
Over-borrowed?

- It is true that most Southern Euro member-states over-borrowed
 but so did many Northern states and are still doing so
- Greece in particular lied about its public finances to gain entry to the Euro, and then borrowed way more than it could ever repay...
 - ...but no other member state has behaved quite this badly
- Ireland and Spain had runaway property booms now bust, along with their banks
- But most member states' fiscal behaviour has been very similar to US and UK.

Government Debt



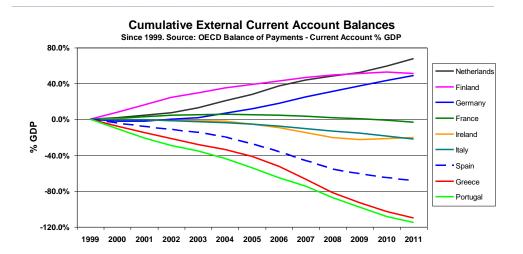
Government Debt including UK



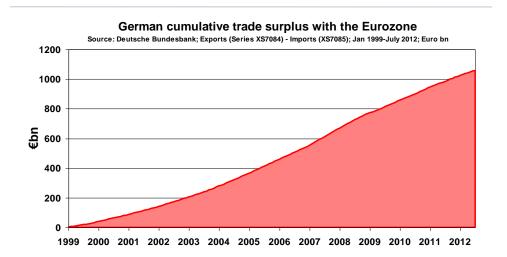
2008-12 Government debt rise

- All 17 Euro member states have seen rises in Government debt as % GDP since 2008
- Most are the result of automatic stabilisers in a serious recession
- Two (Ireland; Spain in 2012) also include major recapitalisation of their banking systems, and a further two have seen a catastrophic collapse in revenues (Greece; Portugal)
- Until 2008, Government finances across the Eurozone looked OK
- So what has made this crisis so intractable?

Eurozone trade imbalances



German Intra-Eurozone trade Surplus



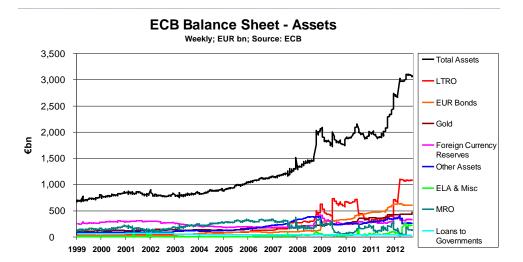
Funding the trade imbalances

- A trade surplus for Germany and the North, and a trade deficit for the Southern states means continuous funding requirement
- This was provided by the private sector until 2007
 - But now this private capital has flown, and only the public sector (via the ECB, EFSF, ESM, ELA) is providing funding
- These are a series of mechanisms to provide the funding and the default mechanism of Target2 balances when all others fail
 - Target2 allows Euros in each country to be fully fungible.

ECB/Eurosystem and its role in Southern funding

- The ECB/Eurosystem has massively increased its balance sheet since 2008 to over €3trn (30% of Eurozone GDP)
- The ECB is the default conduit for capital flight
 - Southerners withdraw deposits in the South, and re-deposit in Germany
 - German banks place money on deposit with ECB
 - ECB re-lends to Southern banks, via MRO, LTRO, ELA
 - Southern banks buy Southern Government debt...
 - ...which finances public deficits, which replace lost net export aggregate demand.

ECB Assets since inception



Target2

- Target2 is the intra-Eurozone Euro-clearing system
- It was designed to clear flows not build balances
- But it requires a broad balance between in- and out-flows for each country
 - and normally these will naturally occur through private/voluntary funding
- Large balances have appeared because normal funding routes have broken down
 - Even official (ECB/EFSF/ESM) funding is not enough to keep Target2 in balance.

Target2 balances

Target 2 Balances EUR bn, Italy+ Spain+Greece vs. Germany; Sources: NCBs; Monthly Jan 99-Aug 12 1000 800 600 Germany 400 Italy+Spain+Greece 200 EUR bn 0 -200 -400 -600 -800 -1000 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

Inflation or deflation?

- Inflation in the North (but not in the South) is one solution to the competitiveness problem
 - The Germans have been consistently allergic to inflation and likely to remain so
- · Deflation in the South already happening to a modest degree
 - But nominal wage reductions have to be severe and prolonged to really create an export-led recovery
 - Deflation worsens the debt position.

Current Eurozone Policy

- Current policy supports further banking and fiscal integration, and continuous official funding of Southern fiscal deficits
- This allows the status quo to continue, albeit with continuous painful contraction in the South
- But this policy mainly addresses trade imbalances with the sledge-hammer of reduced incomes reducing imports
 - And trade balances are the result of millions of microdecisions, not policy levers.

What about departures from the Euro?

- Franco/German group may just about accept that in theory Greece could leave
 - Although they are worried about contagion
- Greece may move to leave itself disorder/violence?
- Euro exit for Greece might revitalise its economy after a period of painful adjustment (cp. Argentina?)
 - But if that works, political pressure for exit might build elsewhere
- The European elite believe that the break-up of the Euro would herald the end of the European Project (i.e. the EU).

What about the longer-term?

- Can the Eurozone provide a long-term sustainable European economic system?
- Without full political integration (one President; one Parliament; member states surrendering sovereignty) – in my opinion – NO
- How will the longer-term (1-5 years) evolve?
- My guesses
 - at least one member state will leave in the next year or two (but it is a bit like predicting the demise of the Soviet Union)
 - until the Euro is comprised only of compatible Northern states, or disappears, there will be serial financial crises.

What can private sector investors do?

- Use all free options (capital flight)
- Encourage banks (particularly non-Euro banks) to introduce new intra-Euro hedging products
- Avoid holding Southern assets and Northern liabilities
 - Avoid if possible Euro-denominated assets, liabilities and derivatives with no clear domicile
- If you have to hold Southern assets, then match them with Southern debt, or currency-hedge them.

'Legal Tender' forward FX contracts

- At least one non-Eurozone investment bank is now making a market in 'Legal Tender' forward FX contracts
- These require delivery of the legal tender from time to time of a country's currency (Germany), rather than a specified currency (Euro)
- This means that there are now 'country-specific' currency contracts which could protect investors against depreciation in a break-up
 - And pay them to take Southern currency risk
- If there is one Eurozone exit, I predict that the market in these contracts would rapidly develop.

Conclusion

- The Eurozone situation continues to present very serious risks to investors
- A continuation of the current crisis containment is likely to lead to low/zero European growth rates for a long time
 - But a highly competitive German economy
- A failure of crisis containment (i.e. Euro exit/break-up) would herald a new and very difficult period
- Investors have opportunities today to position themselves to minimise the negative impact of a break-up at low cost.

Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.

The views expressed in this presentation are those of the presenter.