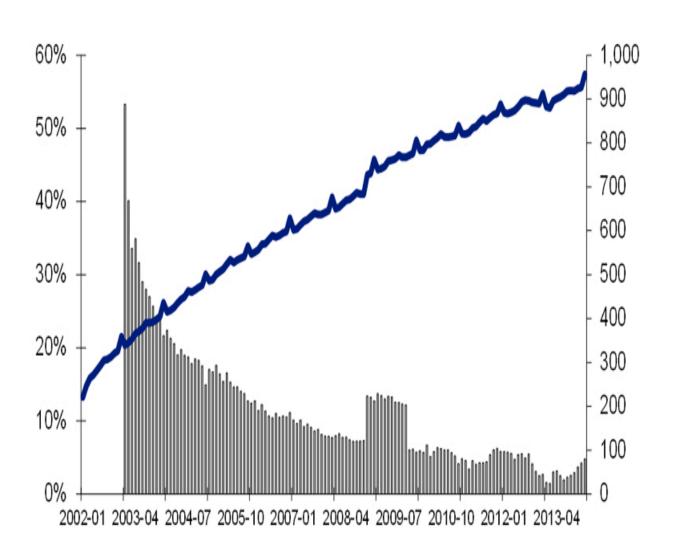
future of the Euro

may 2015

for ten first years, euro is a big success:

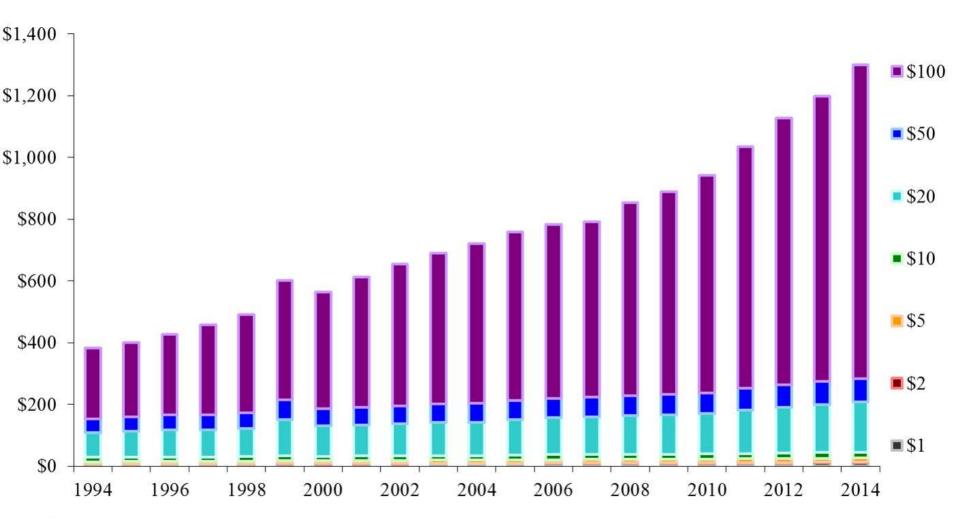
- 1st currency in the world for banknotes' use (value)
- 2nd reserve currency in the world for foreign exchange reserves
- "strong" exchange rate
- 2nd biggest financial market in the world
- an area of price stability

Euro bank notes



Value of Currency in Circulation

(Billions of dollars, as of December 31 of each year)

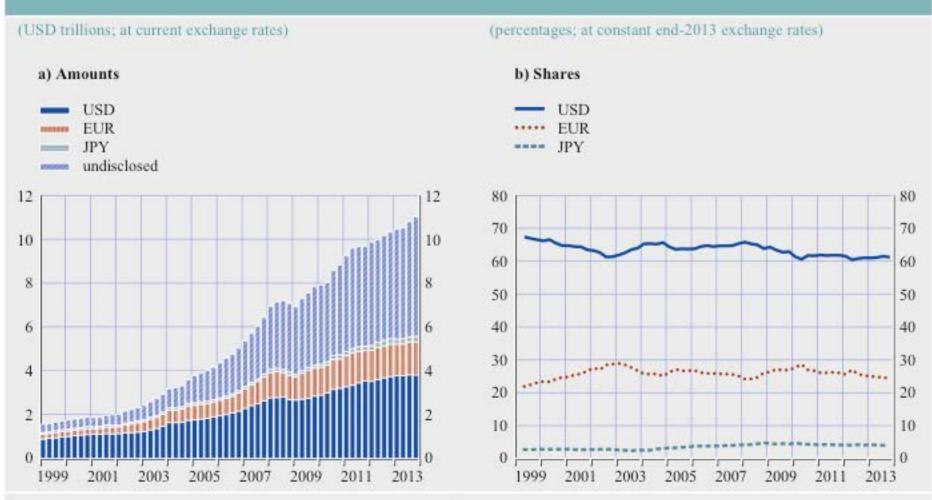


Includes Federal Reserve notes, U.S. notes, and currency no longer issued.

Excludes the dollar value of denominations larger than the \$100 note.

jpl/may 2015

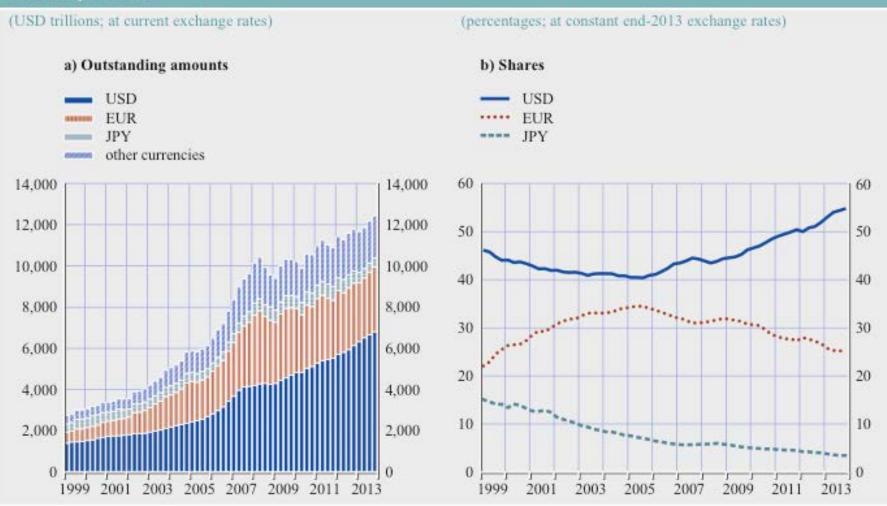
Chart II Currency composition of global foreign exchange reserves



Sources: IMF and ECB calculations.

Note: The latest observation is for the final quarter of 2013.

Chart 12 Stock of international debt securities (narrow measures): outstanding amounts and currency shares



Sources: BIS and ECB calculations.

Note: The latest observation is for December 2013.

then the crisis

• first phase (2010): Greece's unsustainable finances

- second phase (2011-2012): peripheral "divergences" and internal convertibility doubts
- third phase (2013 2015): doubts on growth and deflation risk

Three points of view

The project was flawed from the start

The crisis was poorly managed

A "redesign" is necessary

three points

1. does the project make (economic) sense?

2. what are the weaknesses revealed by the crisis?

3. Progress and challenges ahead

Currency union

Sharing the same currency

The same monetary policy

No exchange rate between participating countries

the "theory"

- A currency union must rest upon :
 - Either full capital or labor mobility
 - Or a fiscal union as well

Euro has neither

Therefore it must fail

asymetric real shocks

Can be demand or supply

An asymmetric shock needs either

- 1. a change in the (real) exchange rate
- 2. or a move in the supply schedule: factor mobility
- 3. or a move in the demand schedule: factor mobility and/or fiscal transfers

an optimum currency area

- needs:
 - either full factor mobility
 - and/ or fiscal transfers
- but geographical area does not necessarily coincide with nations' borders

Mundell "father of the Euro"

the response

 Some benefits not captured by the theory (financial stability)

The capital market will do the job

 A good framework for fiscal policy: the Growth and Stability Pact

convergence criteria and GSP

- Convergence criteria
 - Inflation
 - LT interest rates
 - Budget balance
- GSP
 - Deficit(3%) and debt(60%) criteria
 - Attempts to refine (structural balance)
 - Attempts to enforce (the procedure, the majorities)

It worked for ten years

 Capital markets looked as of they did the job: no instability; and capital flew from "north" to "south" fostering convergence and development

 Fiscal framework was not respected but debt was under control

2. what are the weaknesses revealed by the crisis

- Pre crisis
 - Imbalances were accumulating
 - Financial relationships were fragile

- During the crisis
 - Disagreements between countries
 - Perverse political dynamics

Imbalances were accumulating

Euro Area Household Debt Ratios

Percentage of Disposable Income

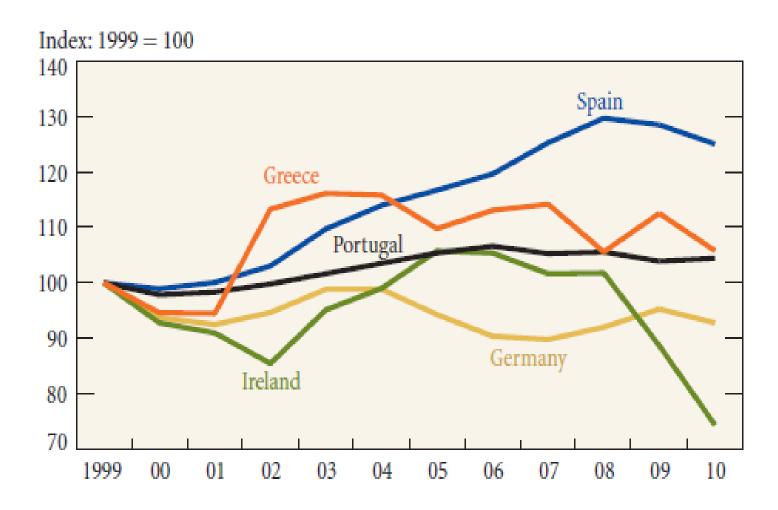
	1999	2007	Change
Greece ^a	26	75	49
Ireland ^b	113	205	93
Portugal	95	143	48
Spain	66	118	52
Germany	107	95	-12
Memo:			
United States	88	122	33

Sources: Eurostat; Haver Analytics; Board of Governors of the Federal Reserve System.

Note: To ensure comparability across countries, we measure disposable income

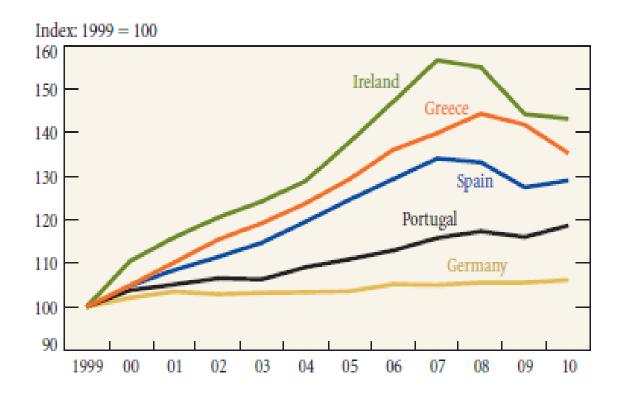
Chart 7

Relative Unit Labor Costs in Manufacturing



Source: Organisation for Economic Conoperation and Development.

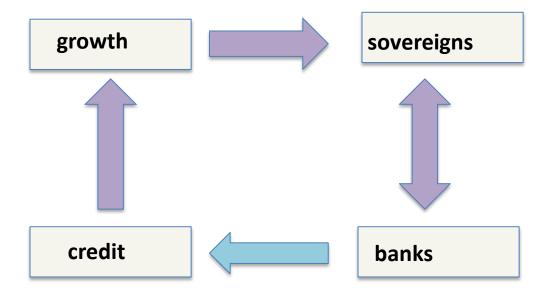
Chart 5
Private Real Consumption Spending



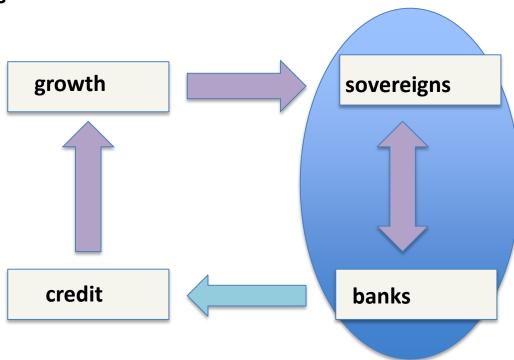
source: Higgins and Klitgaard

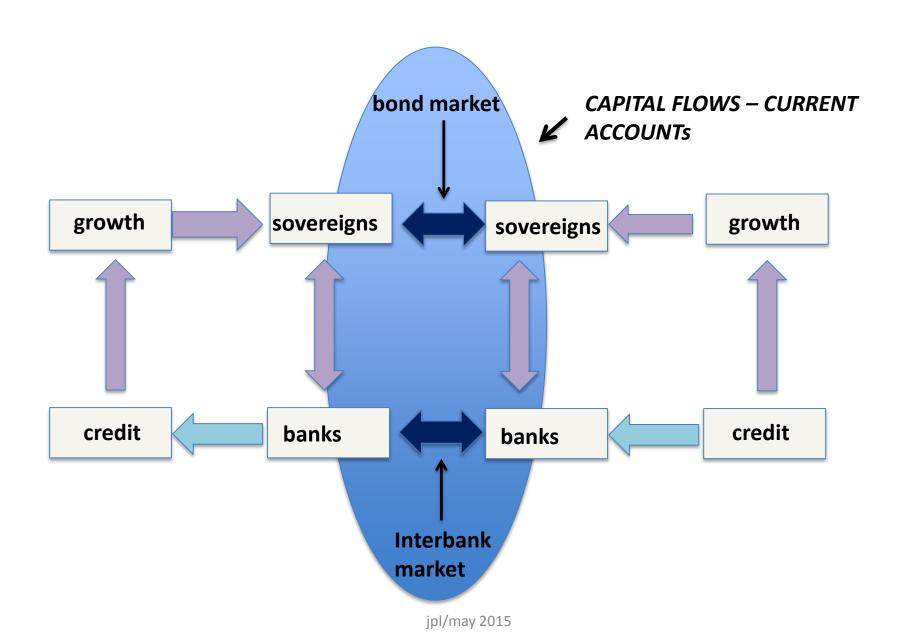
Financial relationships were fragile

feedback loop



we did not see that: the link between sovereigns and banks





cross border capital flows were fragile

mainly interbank and short term

Fueled expansion of credit and bubbles

Euro Area Household Debt Ratios

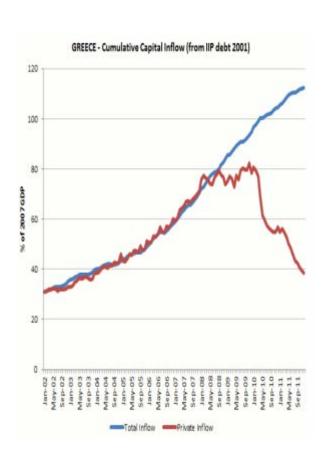
Percentage of Disposable Income

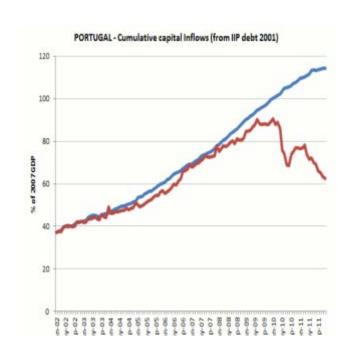
	1999	2007	Change
Greece ^a	26	75	49
Ireland ^b	113	205	93
Portugal	95	143	48
Spain	66	118	52
Germany	107	95	-12
Memo:			
United States	88	122	33

source: Higgins and Klitgaard

jpl/may 2015

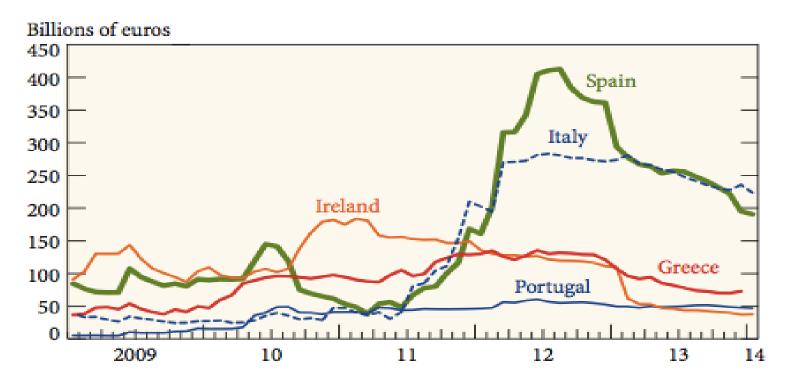
the crisis: a collapse of cross border financial intermediation





source: Merler and Pisani Ferry

Chart 5
Periphery Banks: Use of Central Bank Credit



Sources: European Central Bank; national central banks.

Note: The values plotted for Greece include funding from the European Central Bank and estimated emergency liquidity assistance from the national central bank.

during the crisis

- initial shock
 - usually small when compared to ultimate consequences
 - total Greek public debt < 1.5% of euro area GDP
- amplification mechanisms
- possibly aggravated by misguided policy responses
- revealing underlying vulnerabilities

Financial feedback loop

doubts on solvency

worse solvency

higher risk premia

Slower growth

Increase interest rates

political feedback loop

disagreements - delays

nationalism

situation worsens

political difficulties

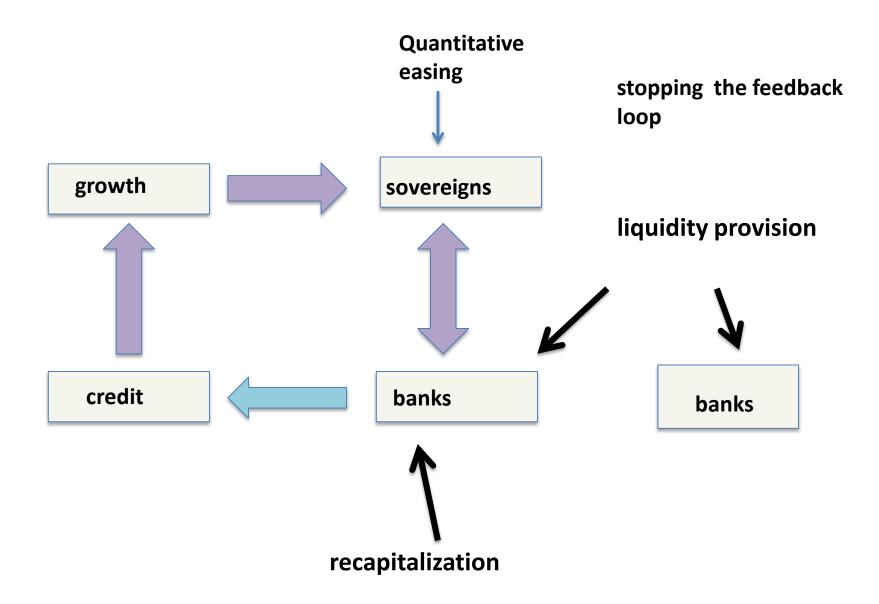
larger financial effort necessary

3. Progress and challenges ahead

Stopping the feed back loops

Looking at the future

stopping the feedback loop



Looking at the future

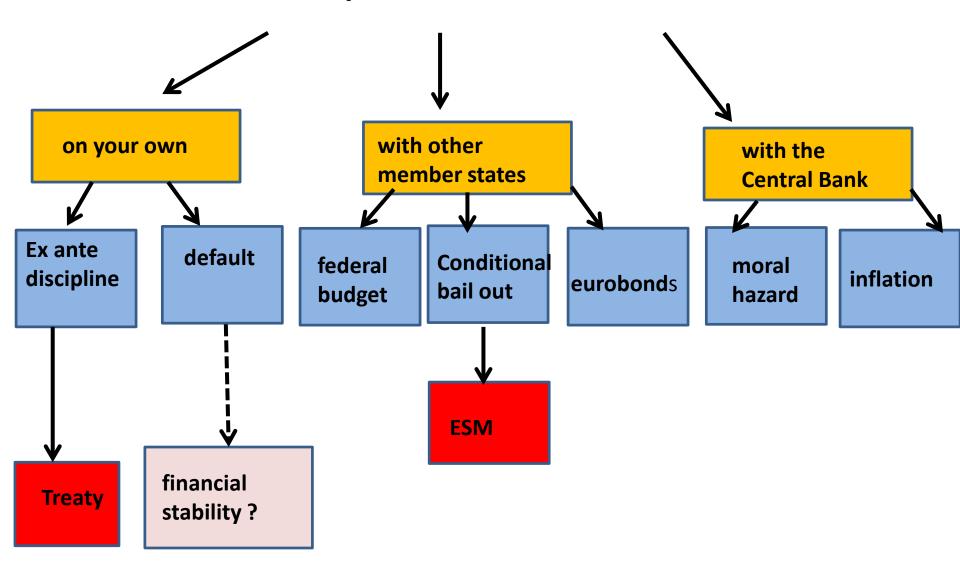
currency unions and fiscal policies

- the theory : fiscal coordination
 - to absorb asymetric shocks and mimic the federal budget
 - To get the right policy mix

The policy

- Skepticism towards keynesian based fiscal policies
- The risk of free riding and implicit transfers: no bail out
- The threat to monetary policy independance and effectiveness

how do you absorb a fiscal shock?



conclusion: the misguided search for clarity

- "extreme" scenarios unlikely
 - No miraculous agreement on fundamental issues
 - No fiscal federalism
 - No general break up ECB won't allow it

Long period of "muddle through "