

Slow Moving Debt Crises

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The contribution

- New model of dynamic default crisis driven by non fundamental change in expectations (SSE) about future repayment
- Argue recent episodes of turbulence in sovereign markets (Euro 2011) explained by this mechanism
- Elegant paper on a topic important policy relevant

Outline

- The paper in context (SunSpotsEquilibria in international macro)
- A brief summary
- Was the Euro crisis Slow Moving Debt Crisis?

Currency v/s Sovereign debt crises

	Currency	Sovereign Debt
The actor	Monet. authority	Fiscal Authority
The crisis	Abandon of peg	Default on debt

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2nd Generation SSE	Obstfeld	Calvo, Cole and Kehoe, Lorenzoni and Werning ... Aguiar et al. (macro handbook chpt. Bocola and Dovis

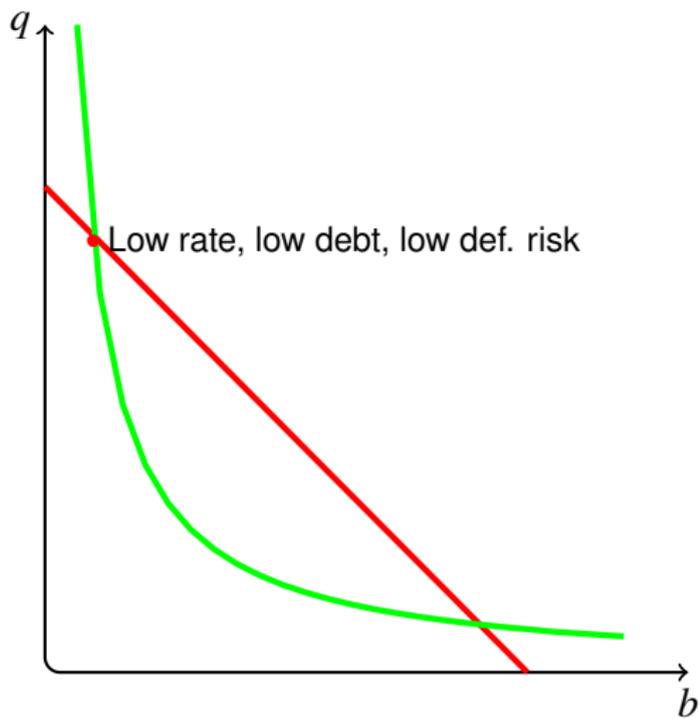
The key elements

- Government today needs to borrow g facing debt price q
- Financing equation: $g = bq$
- Default pricing equation $q = f(b), f' < 0$
- Example: future surplus $s \sim U[0, 1]$, defaults if $s < b$

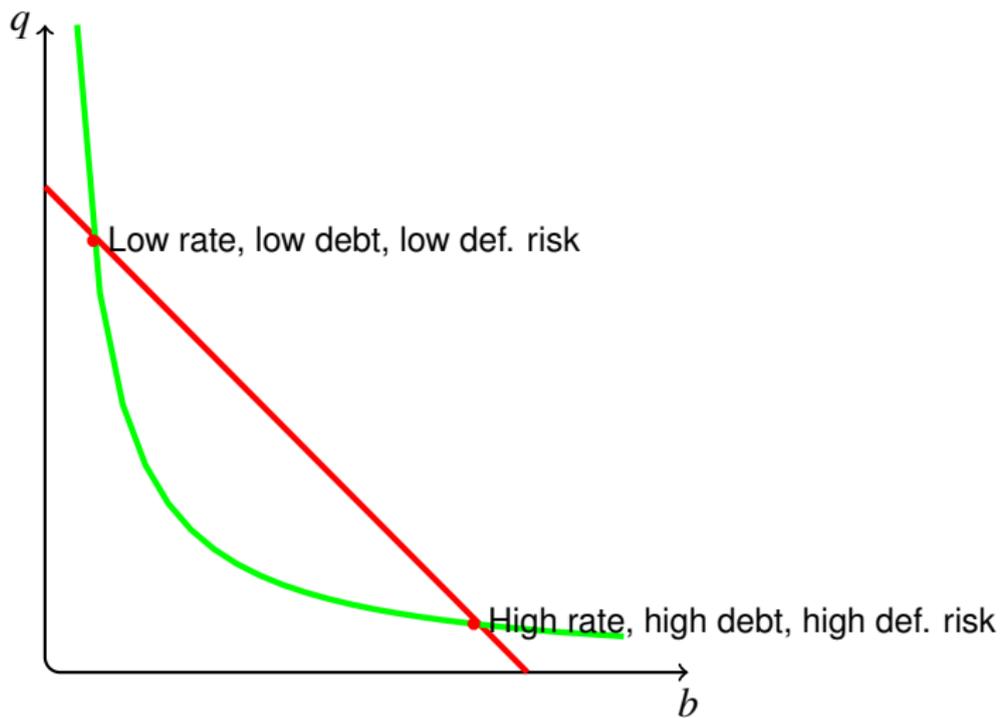
$$q = 1 - b$$

$$q = \frac{g}{b}$$

A Calvo debt crisis



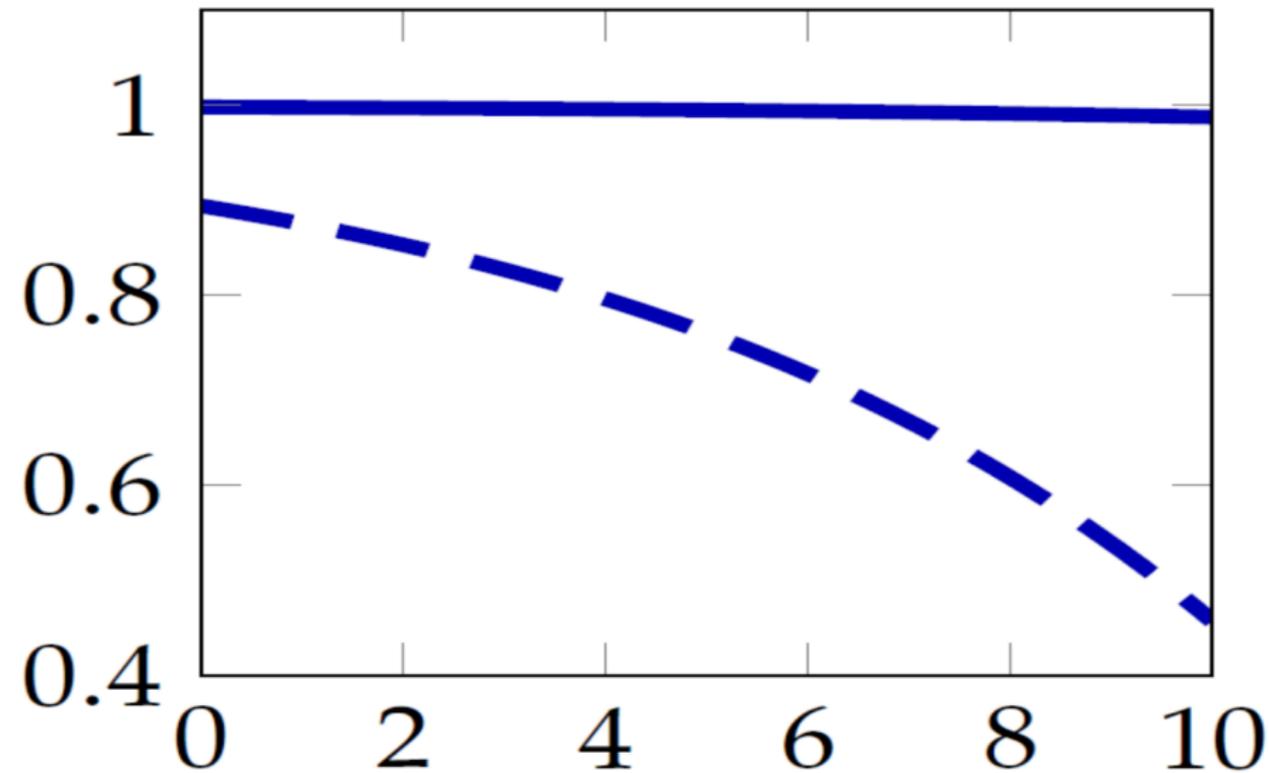
A Calvo debt crisis



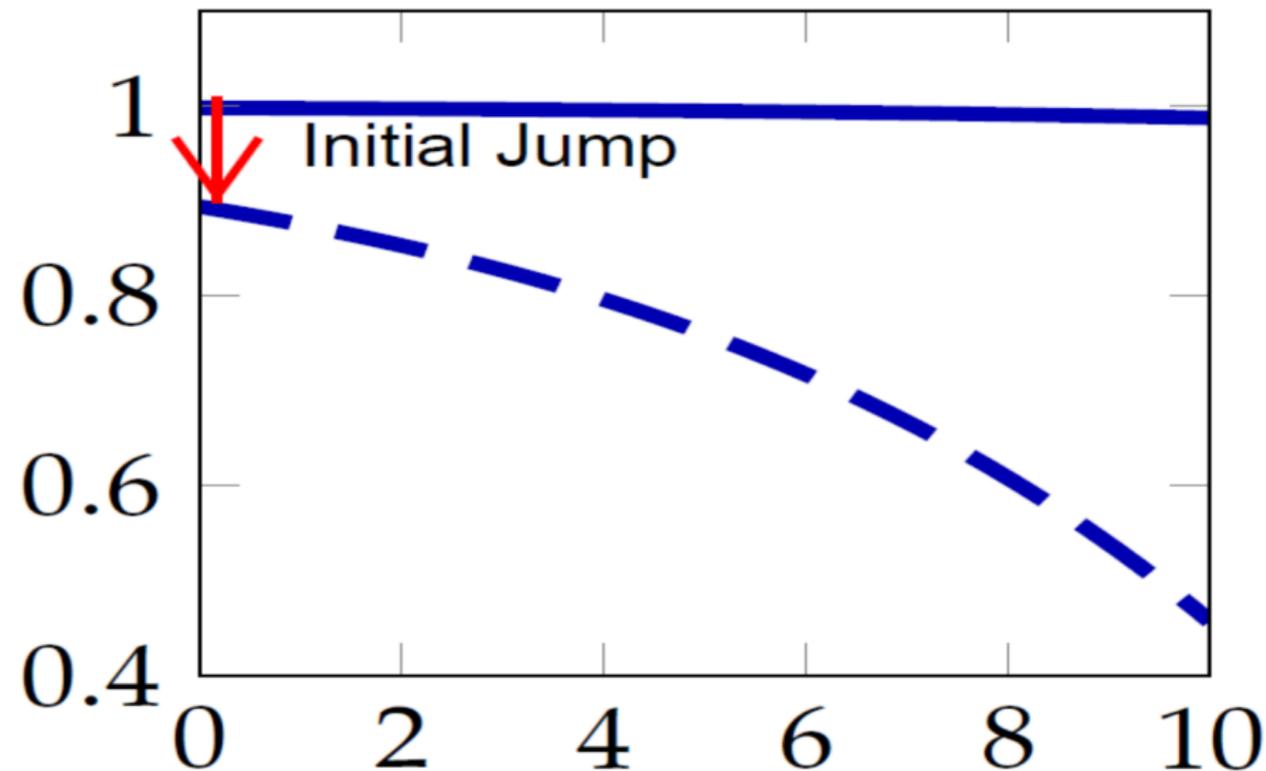
A slow moving Calvo debt crisis

- Long term debt
- Expectations of default at some future date T
- Expectations reduces prices of new debt issuances, leading to faster debt accumulation
- Increase in debt validates the initial default expectations

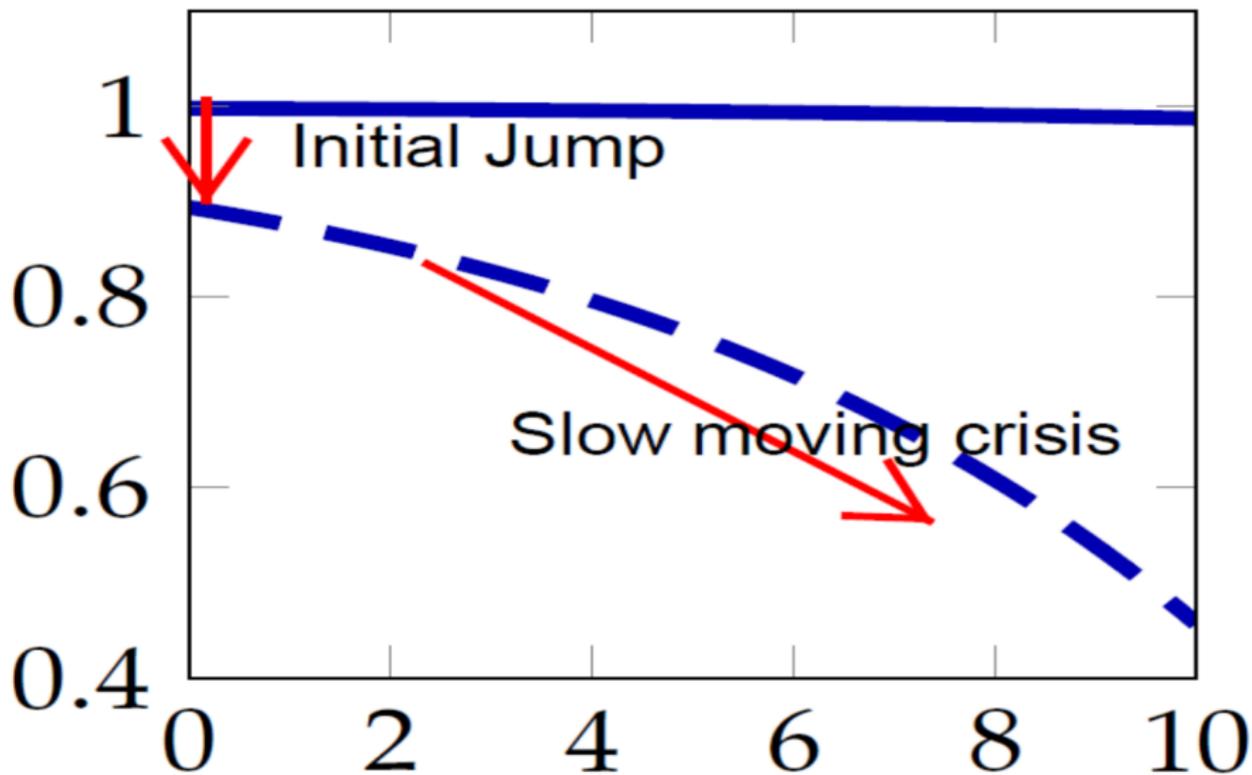
Long bond price dynamics in crisis



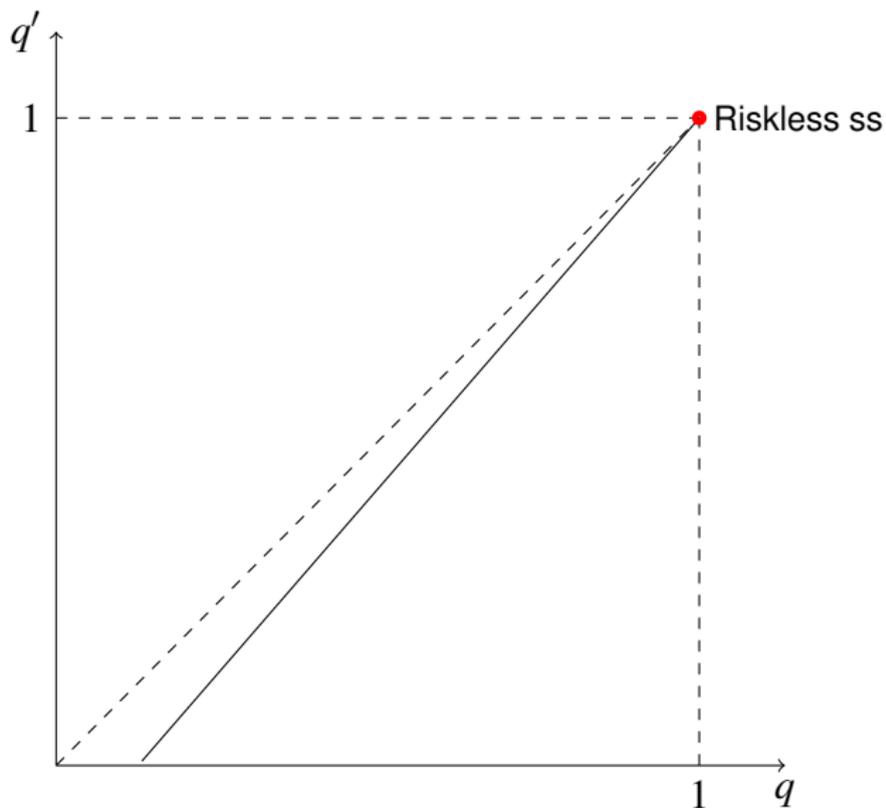
Long bond price dynamics in crisis



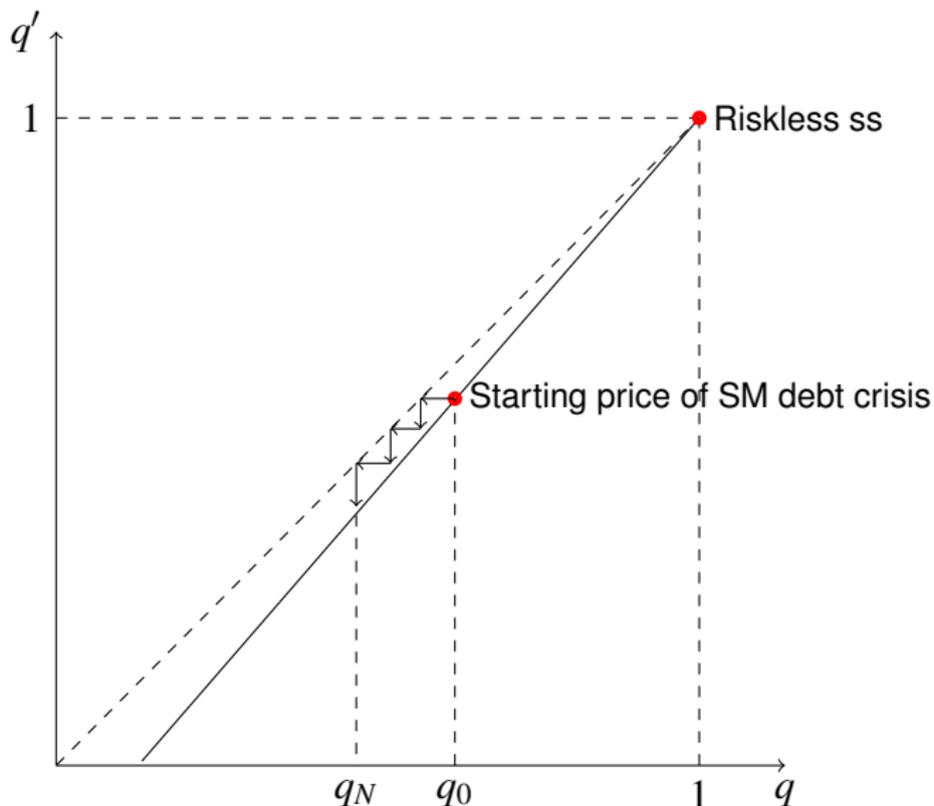
Long bond price dynamics in crisis



Dynamics of long term debt pricing (eq. 8)



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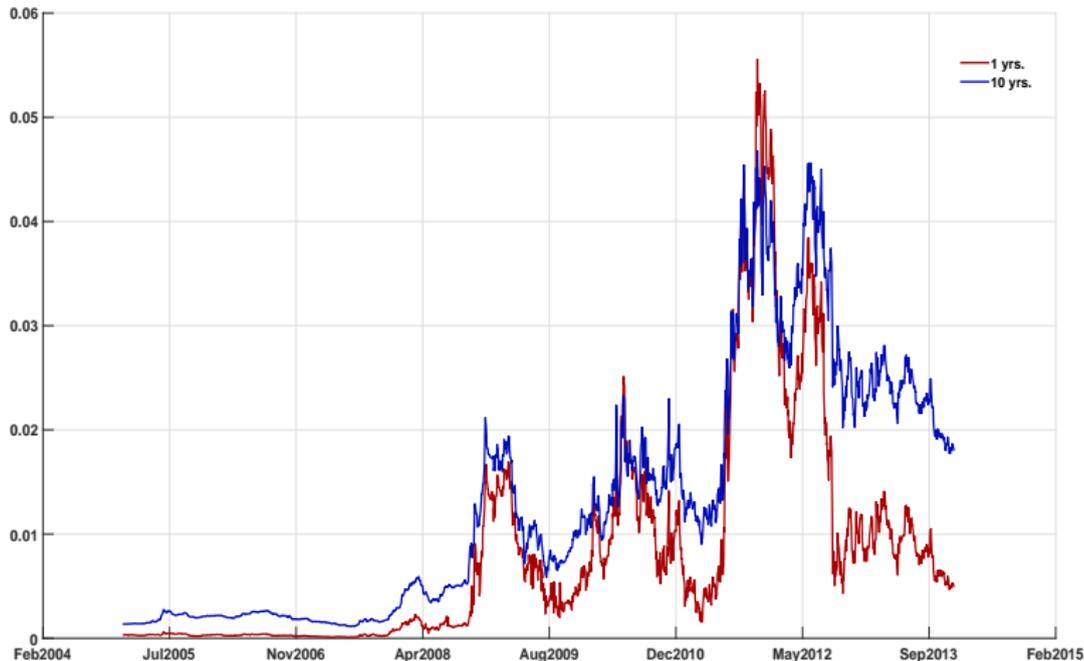
Why do interest rates go up along the crisis?

- At the risky equilibrium, prob. of (terminal) default unchanged
- Interest rates climb due to the structure of long term debt.
- Long term debt with future default has two parts:
- Safe(early) coupon part, risky(final) payment.
- As t increases the safe part shrinks, interest rates increase, price falls, but short term risk not changed

Implications

- Increase in risk concentrated in long term debt:
- Progressive steepening of the yield curve at the onset and during the crisis

Italian Spreads at different maturities



- Short rates increase (and fall) as much (if not more) as long rates!

Slow moving debt crisis?

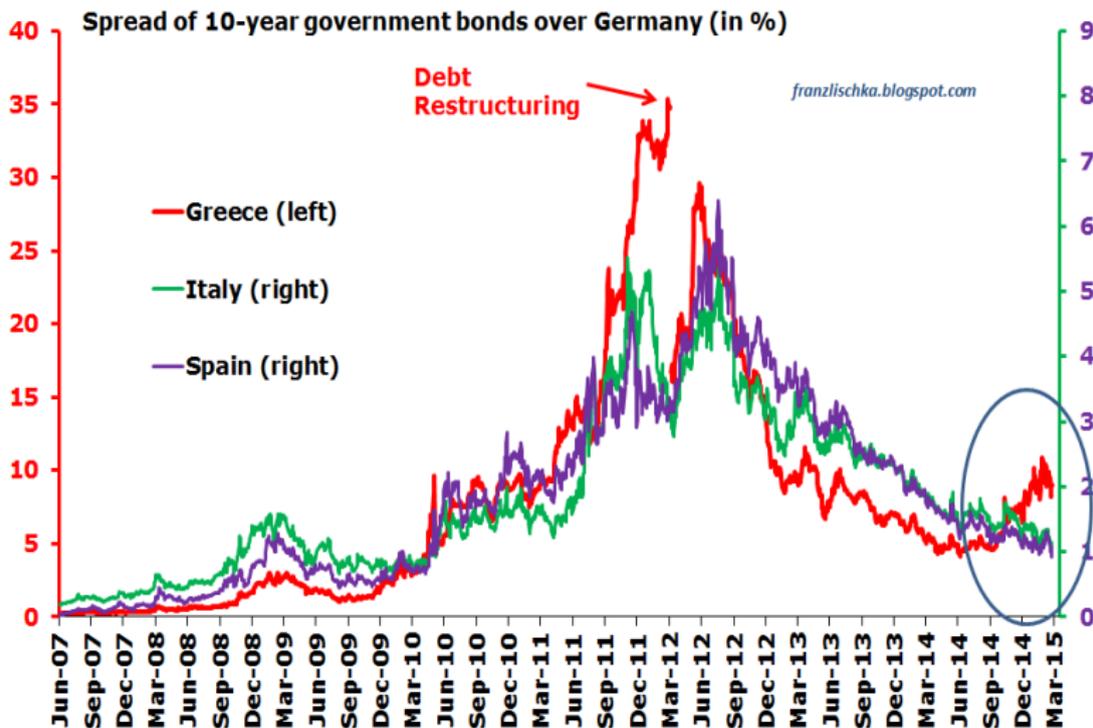
- Large increase of short run spreads hard to reconcile with the idea that the bulk of crisis driven by expectation of future default risk
- Alternative/complementary explanations
- Rollover risk?
- Currency crisis: expectation of collapse of the Euro?
- Fundamentals?

In favor of a currency crisis: 1



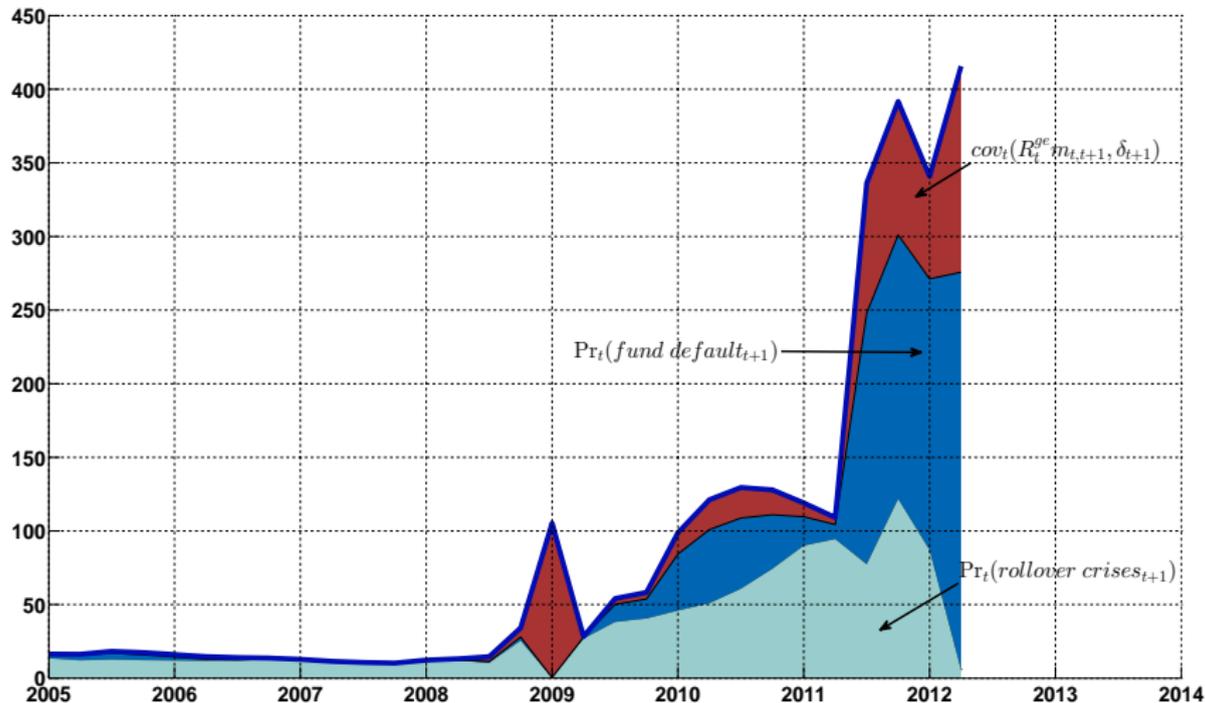
- Economist cover, November 2011

In favor of a currency crisis: 2



- Very similar spreads in 2 countries with very different fiscal positions

Fundamentals



- Bocola and DAVIS, 2015

Conclusions

- Elegant model of a dynamic slow moving self-fulfilling debt crisis
- Not yet clear whether this mechanism is the leading cause of the Euro crisis