Slow Moving Debt Crises

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Multiple Equilibria and Financial Crises Conference
Federal Reserve Bank of San Francisco, May 2015

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 (SSE in international macro)
- A brief summary
- Was the Euro crisis mostly a SMDC?

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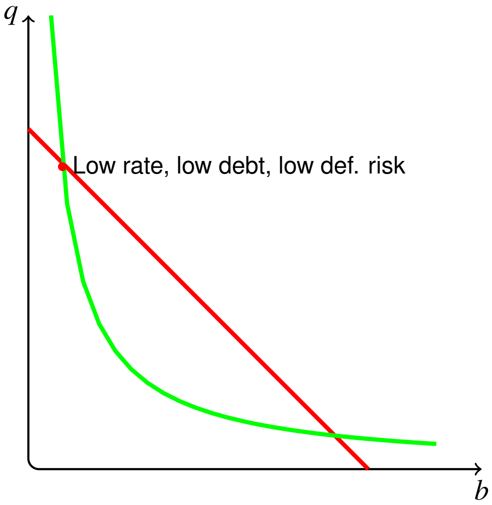
2nd Generation SSE	Obstfeld	Calvo, Cole and Kehoe, Lorenzoni and Werning ... Aguiar et al. (macro handbook chpt. Bocola and Dovis

The key elements

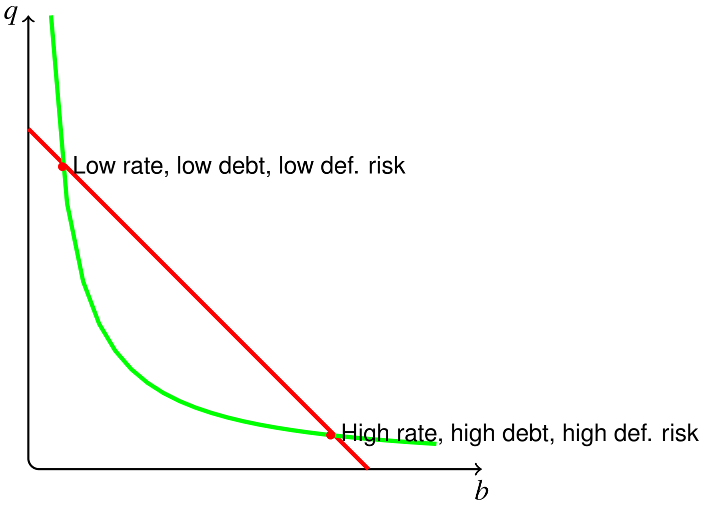
- Government today needs to borrow g facing debt price q
- Financing equation: $g = bq$
- Default pricing equation $q = f(b), f' < 0$
- Example: future surplus $s \sim U[0, 1]$, defaults if $s < b$

$$
\begin{aligned}
q &= 1 - b \\
q &= \frac{g}{b}
\end{aligned}
$$

A Calvo debt crisis



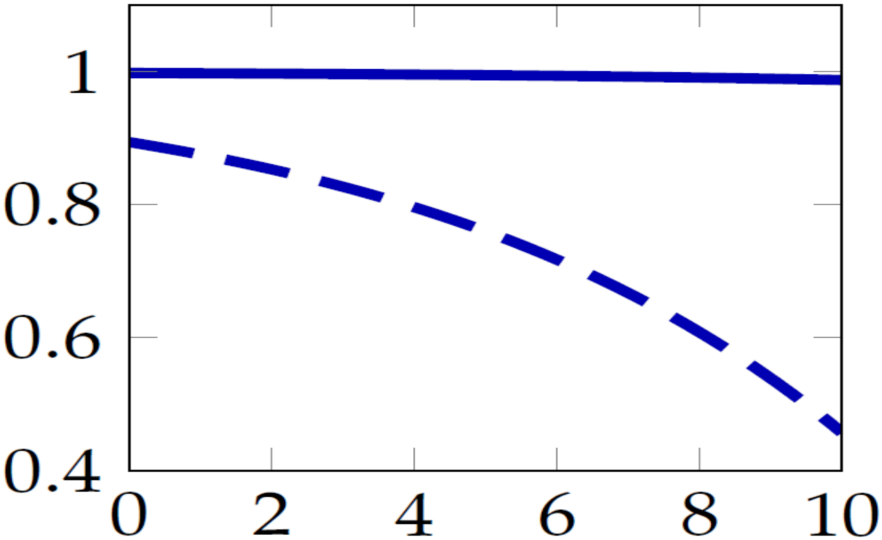
A Calvo debt crisis



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



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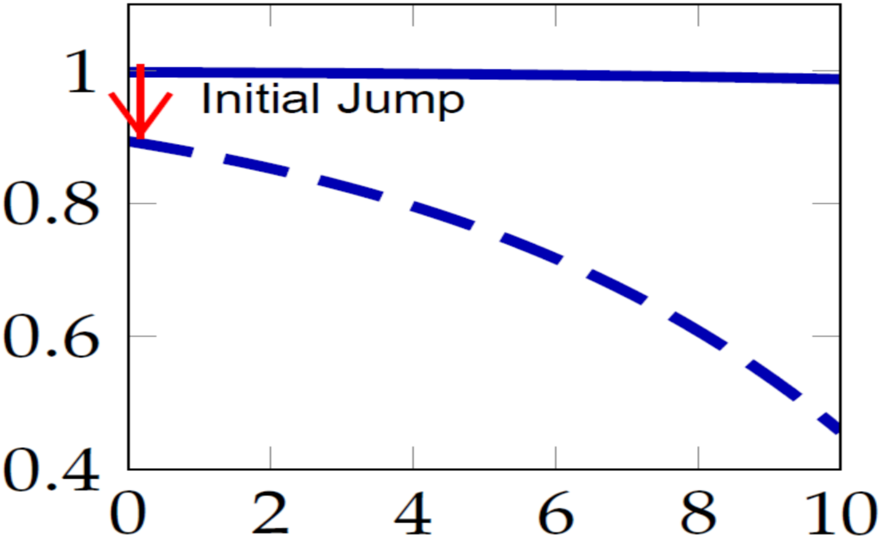

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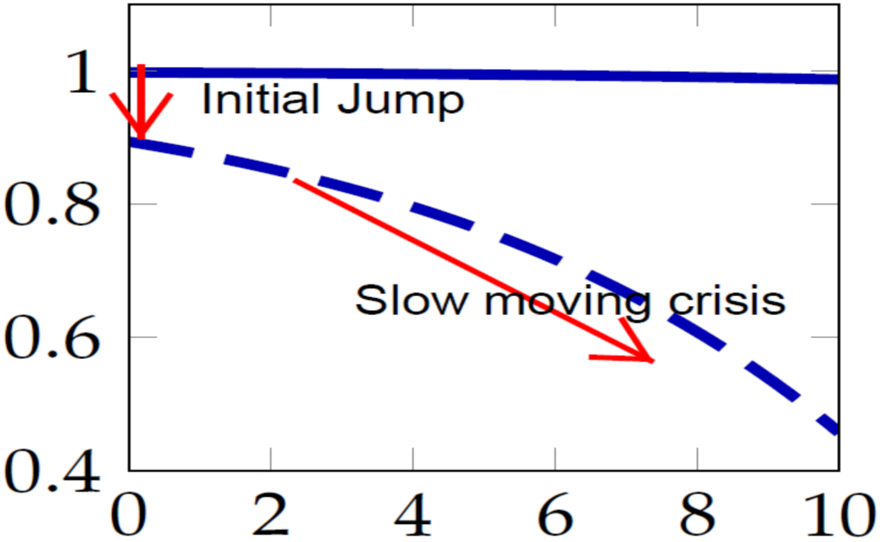
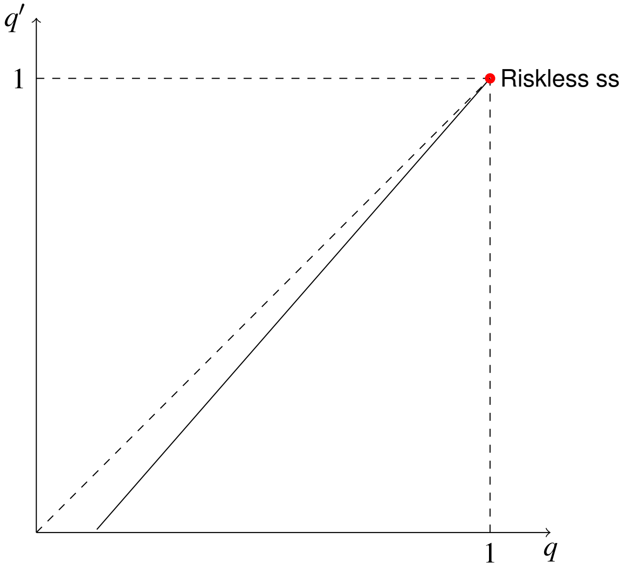


Dynamics of long term debt pricing (eq. 8)



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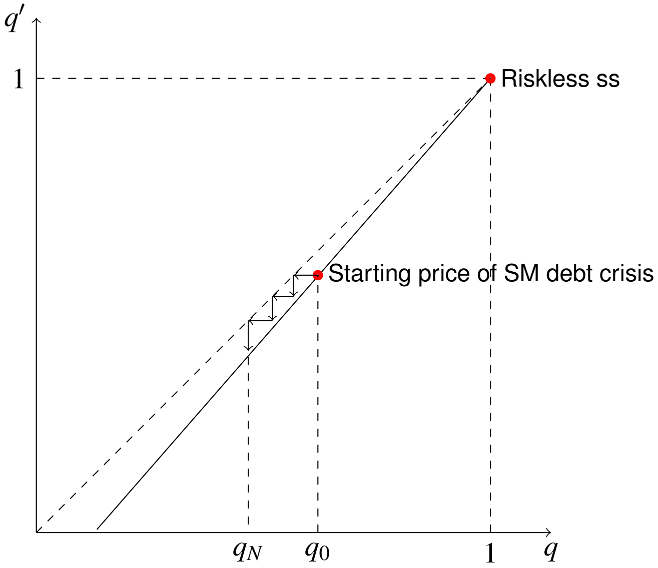


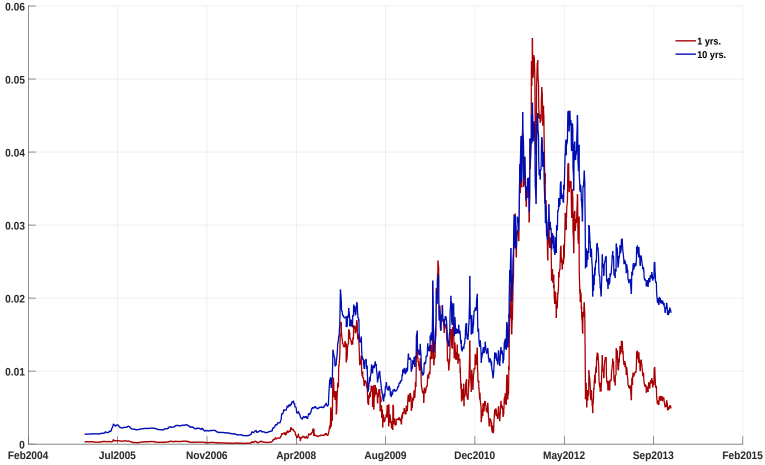
Why do interest rates go up along the crisis?

- 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!

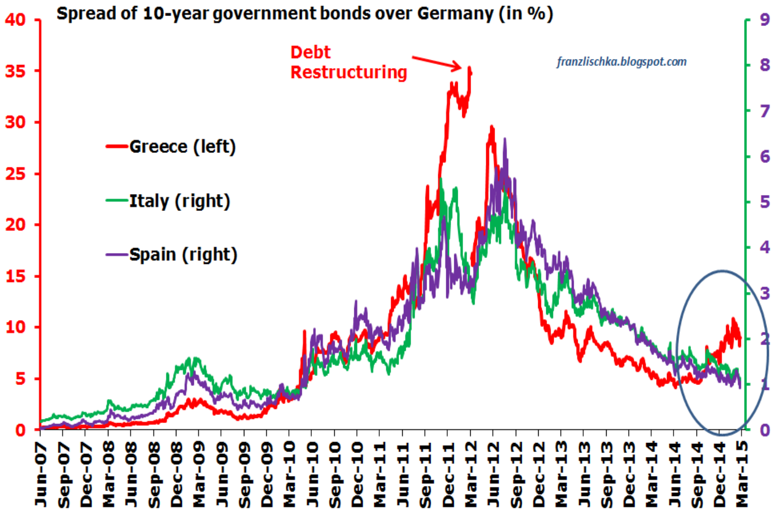
Slow moving debt crisis?

- 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/complentary explanations
- Rollover risk?
- Currency crisis: expectation of collapse of the Euro?
- Fundamentals?

In favor of a currency crisis: 1

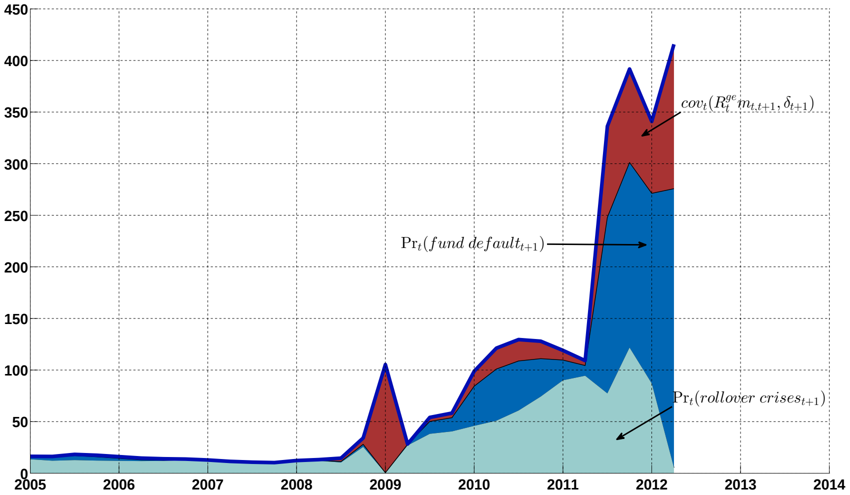
- Economist cover, November 2011

In favor of a currency crisis: 2



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

Fundamentals



- Bocola and Dovis, 2015

Conclusions

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