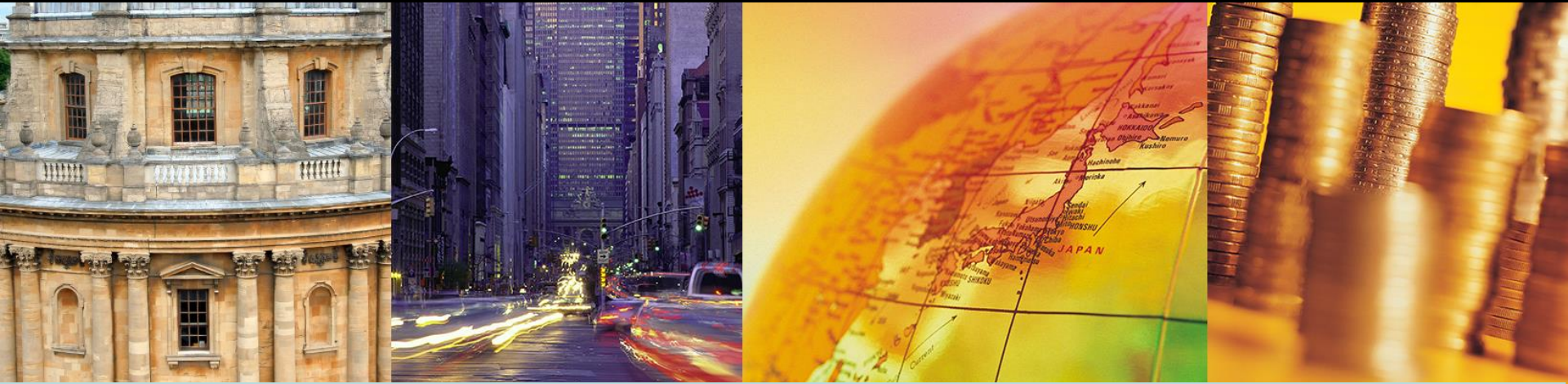




Institute for  
**New Economic Thinking**  
AT THE OXFORD MARTIN SCHOOL



# CONDITIONAL EUROBONDS AND EUROZONE REFORM

**John Muellbauer**, INET at Oxford

OENB workshop 'Towards a genuine economic and monetary union',

Vienna, 10-11 September, 2015

- Reduce the Euro-area policy focus on fiscal austerity.
- Switch to a focus on improving **competitiveness and productivity** (hence growth).
- Simultaneously promote **fiscal decentralisation** and **sensible fiscal policy** with national incentives.
- Achieve all this through **rules-based risk spreads** for individual countries' Eurobonds.
- Early version in 2011 <http://www.voxeu.org/epubs/cepr-reports/resolving-eurozone-crisis-time-conditional-eurobonds>

- Despite spotty improvements, internal imbalances in the common currency area remain a major problem:
  - divergent fiscal discipline;
  - profound differences in labour market, credit, and housing institutions;
  - past failures in financial regulation have left a burden;
- This is visible in divergences in:
  - competitiveness, government, and private debt to GDP ratios, balance of payments deficits, housing market experiences.

- Fundamental issue to resolve:
  - Eurozone lacks the democratic institutions for a fiscal union. Fiscal union without draconian centralisation may pose dangers of perverse incentives.
- Create the right incentives:
  - mixture of carrots/sticks to enable the poorly performing economies to return to economic growth and avoid a future existential crisis;
  - discourage moral hazard;
  - arrive at a fair distribution of burden sharing between taxpayers in different countries and holders of sovereign and bank bonds.



- *Conditional* eurobonds:
  - Eurobonds with a collective underwriting guarantee which eliminates the country risk faced by investors;
  - Administratively set spreads determine the annual side-payments the riskier countries (Ireland, Italy, Portugal, Spain) pay into a common fund.
  - Spreads would compensate the taxpayers in less risky countries for their risk in underwriting the bonds of the riskier countries.

- *Conditional* eurobonds with risk premia based on economic fundamentals could:
- Create the incentives for the fundamental structural reforms still outstanding.
- Limit the country sovereign debt risk faced by investors (other than in the special case of Greece).
- Avoid the ‘transfer union’ feared by Germany.

- *Conditional* eurobonds:
  - All new borrowing would be in the form of eurobonds. Only countries not under a troika –supervised programme permitted to issue eurobonds.
  - The spreads would be set conditional on a set of clear performance targets ratified by a new European monetary and fiscal authority (EMFA).
  - As economic fundamentals improve, fiscal authorities know that borrowing costs will decline.



- Current spreads of 10 year bond yields relative to Germany have been depressed below economic fundamentals by QE programme.
- Market signals also worked badly in previous years:
- Before 2009, markets paid far too little attention to underlying fundamentals.
- Between 2009 and 2013, markets were distorted by panics, fear of euro-area break up and fluctuations in risk appetite.
- Policy makers don't know how to interpret the signals.





- Create strong incentive for ***the right reform priorities*** .
- This makes conditional eurobonds quite different from conventional eurobonds.
- Kopf (2011) and Gros (2011): conventional eurobonds suffer from incentive problems, creating the risk of a future, even larger crisis.



- Model for 10-year yield spreads relative to Germany needs to take account of:
- inattention before 2007
- Growing attention to fundamentals from 2007 to 2010
- Temporary amplification in market panics and falls in risk appetite
- Effect of QE from late 2014
- Model in

<http://www.inet.ox.ac.uk/files/publications/ukmfeat4.pdf>

updates OXREP

<https://ideas.repec.org/a/oup/oxford/v29y2013i3p610-645.html>



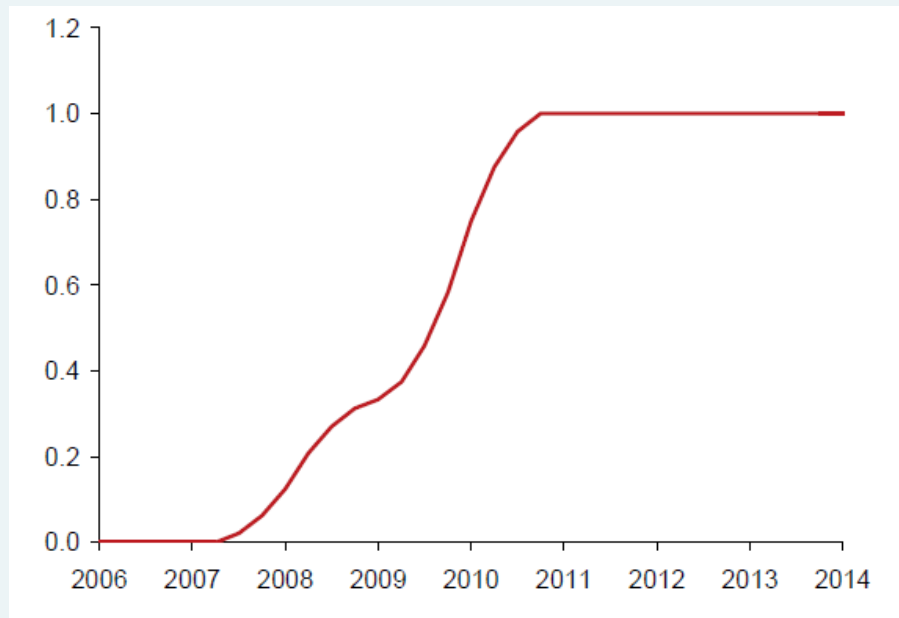
- DATA
  - Economic fundamentals data: quarterly frequencies.
  - Panel model with quarterly data on spreads in 10-year sovereign bond yields relative to Germany for 9 other euro area countries.
  - Omit Greece: market did not have a realistic assessment of its fundamental data until 2010.
  - Include Ireland and Portugal: up to the quarters preceding their bailouts (in 2010Q2 and 2010Q3).
  - Terms of the rescue packages supervised by the ‘troika’ affected spreads. Ireland then included again for 2014Q1 observation.



- STRUCTURAL CHANGE
  - *PHASE 1*: beginning in 2007Q3:
    - Linked with the drying up of money markets, initially triggered by losses in money market funds, partly invested in sub-prime linked securities.
  - *PHASE 2*: beginning in the second half of 2009 with full **'attentiveness'** being reached by the end of 2010.
  - Triggered by increasing worries about sovereign debt and imbalances(dramatised by Greece).



- STRUCTURAL CHANGE
  - The two phases are handled by a linear combination of two dummy variables making a smooth transition from zero to one between mid-2007 and the beginning of 2009 and from then to the last quarter of 2010.
  - Rising attentiveness:





- OVERREACTION OR AMPLIFICATION
  - First: by introducing sensitivity to global risk appetite.
  - Second: by use of dummy variables to capture euro -area specific **'alarm'**.
- The **alarm function** is influenced both by stated policy of the ECB and other euro area policy makers and by ECB interventions in the sovereign bond markets.
- The model thus includes a time-varying scale factor consisting of **'attention'** plus **'alarm'** which amplifies the scalar function of the basic economic drivers of each country's long-run spreads relative to Germany.

- ‘Longterm’ solution for the yield spreads can therefore be defined by

$$y_{it} = f(x_{it})(attention_t + alarm_t) \quad (2)$$

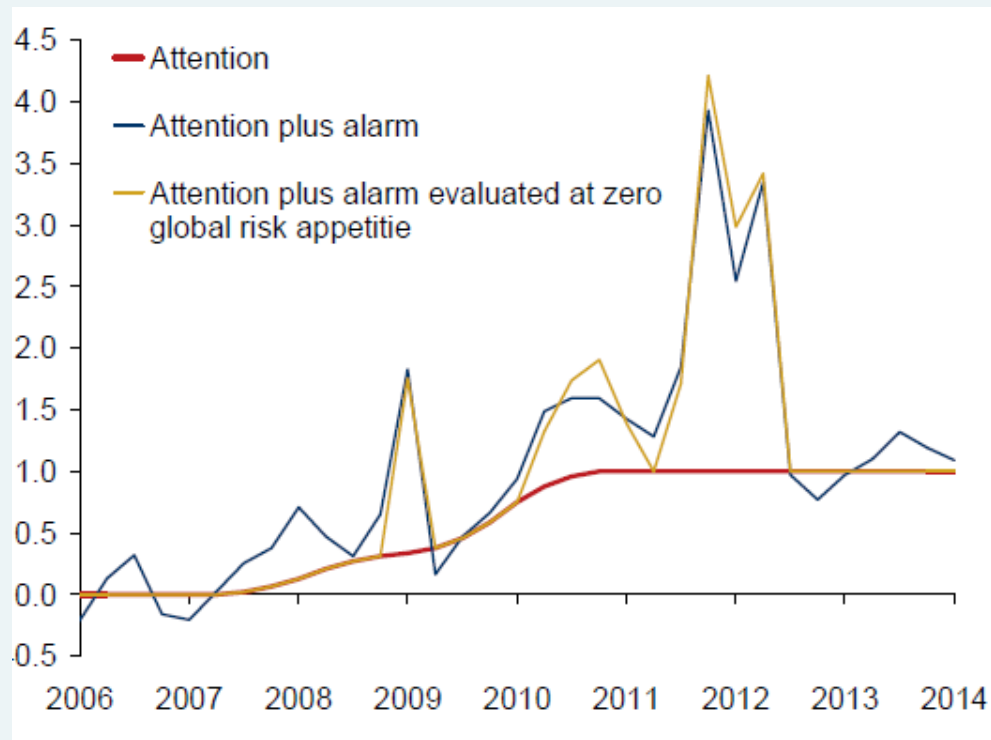
- Attention=1 from 2010Q4; steady state value of alarm=0.
- In a post-2010 steady state, we have

$$y_{it} = f(x_{it})$$

- Slightly augmented partial adjustment model for the quarterly change in spreads captures the dynamics well.
- Speed of adjustment: 25% per quarter; so that around 70% of the adjustment is complete after a year.



- OVERREACTION OR AMPLIFICATION
  - Estimated value of  $(attention_t + alarm_t)$  shown; includes plot evaluated when index of global risk appetite is zero.
  - Scale/volatility of amplification: more than 3-fold exaggeration of the underlying fundamentals, end-2011.



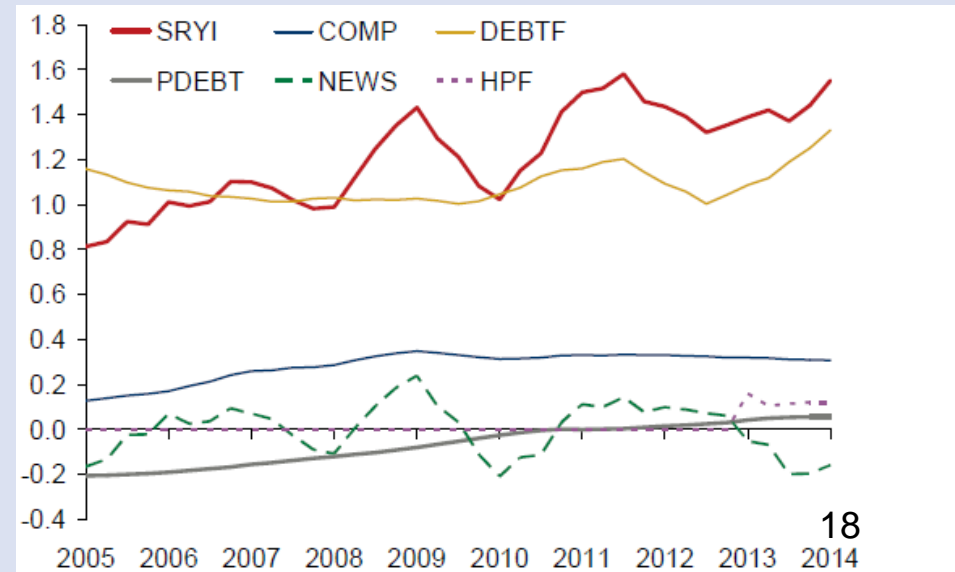
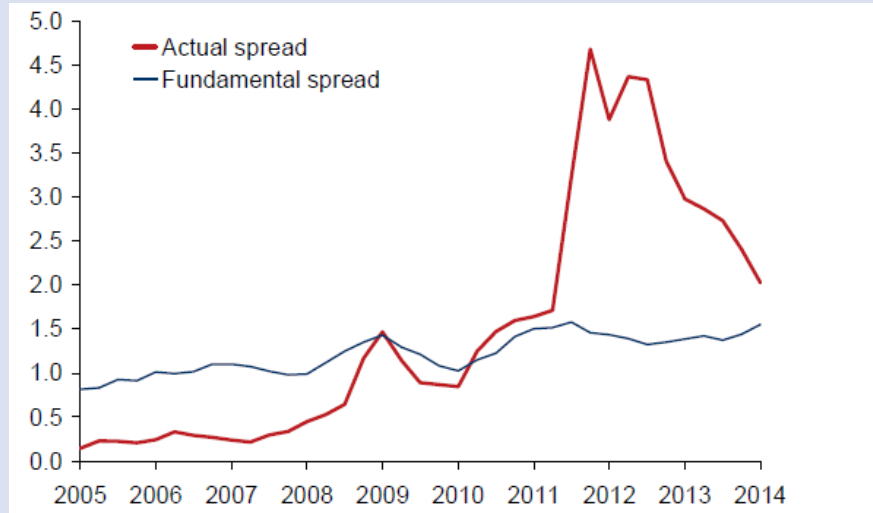




- Competitiveness measured by unit labour costs
- Gov't debt/GDP, linear and non-linear, so very high debt/GDP has larger effects on spreads
- Private debt/GDP
- Fall-out from housing market crises, worse for countries with previously high hp growth
- Short-term news on growth and inflation
  - all relative to Germany.

# Comparing actual & fundamental spreads for Italy

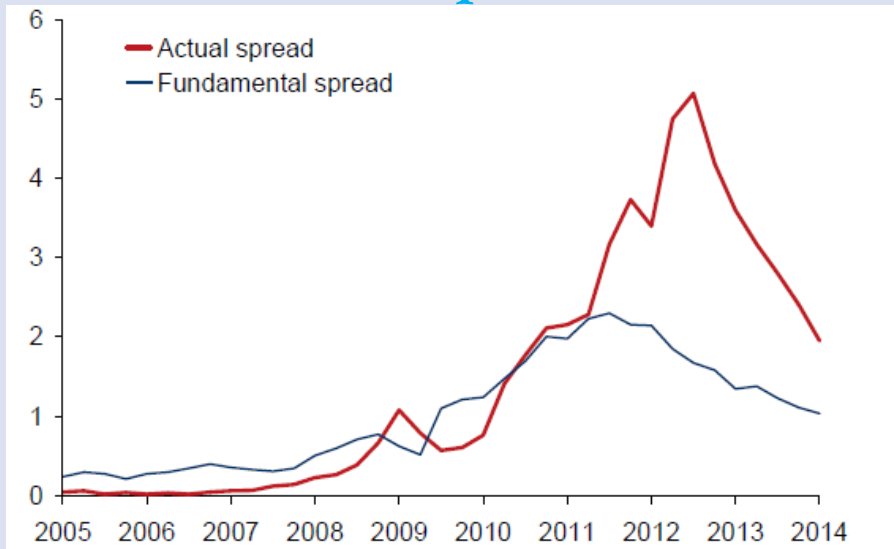
## Composition of fundamental spread for Italy



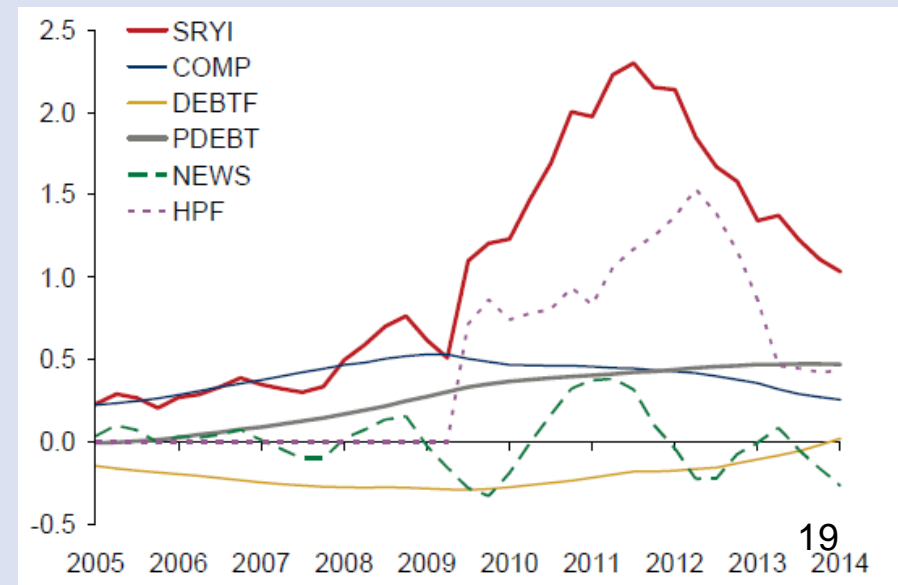
*SRYI – fundamental spread*  
*COMP – competitiveness*  
*DEBT – government debt/GDP*  
*PDEBT – private debt/GDP*  
*NEWS – effects of change in growth and inflation rates*  
*HPF – asymmetric house price dynamics*

# Comparing actual & fundamental spreads for Spain

## Composition of fundamental spread for Spain



*SYRI* – fundamental spread  
*COMP* – competitiveness  
*DEBT* – government debt/GDP  
*PDEBT* – private debt/GDP  
*NEWS* – effects of change in growth and inflation rates  
*HPF* – asymmetric house price dynamics



## How do these fundamentals affect future growth?

- Remarkable findings from a 9-country panel model (with fixed effects) for 2 years ahead growth rate of real GDP relative to Germany:
- Competitiveness, 2-year lag
- Gov't debt/GDP has +ve growth effect for moderate debt, -ve for very high debt, 2-year lag
- Private debt/GDP has -ve effect, 1-year lag
- Current year hp growth has +ve effect but overwhelmed by -ve effects of appreciation in previous 2 years

## .....future growth

- Inflation in previous 3 years has negative effect, reinforcing story about competitiveness
- Tendency for partial reversal of high growth rates in previous 3 years.
- All highly statistically significant effects.

## Policy implications

- Competitiveness and low relative inflation really matter  
:– emphasis on labour and product market reforms, productivity, wage restraint.
- Powerful housing market overshooting effects and negative effects of high private debt/GDP:- good financial regulation and macro-prudential policy are crucial.
- Fiscal austerity is bad for growth except for extreme levels of govt debt/GDP.
- For a growth promoting strategy, the weights on the economic fundamentals driving yield spreads overemphasise govt/debt, except for extreme levels.

## Conclusions

- A new European monetary and fiscal authority (EMFA) could set weights on the four fundamental economic factors driving risk spreads on 10-year bond yields combining econometric evidence from models for spreads and models for relative growth rates.
- These ‘shadow prices’ would incentivise governments (and prudential regulators) to promote reform agendas for improved competitiveness and credit and housing market stability, and avoiding excess govt debt – without a central fiscal authority.

## Change policy, in the absence of eurobonds with risk spreads...

- Current **overemphasis** on fiscal austerity – better a general fiscal expansion (but for the highest govt debt/GDP economies)
- ‘QE for the people’  
(<http://www.voxeu.org/article/combating-eurozone-deflation-qe-people>) or explicit monetary financing of government spending is appropriate in a deflationary world in which the euro-area, with its large trade surpluses, is sucking demand out of the world economy.
- Within the euro-zone, need to reward governments and unions promoting labour and product market reform.