Conference on

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CREDIT AND LIQUIDITY RISKS IN EURO-AREA SOVEREIGN YIELD CURVES

by Alain Monfort and Jean-Paul Renne

COMMENTS BY

John Fender (University of Birmingham)

DISCUSSANT

THIS IS A VERY GOOD, INTERESTING AND WELL DONE PAPER. BUT IT IS NOT REALLY WITHIN MY AREAS OF EXPERTISE (I AM A THEORETICAL MACROECONOMIST), AND IT IS WRITTEN IN A FAIRLY 'TERSE' WAY.

HERE ARE A FEW POINTS/QUESTIONS:

(1) HOW CAN THERE BE NEGATIVE DEFAULT PROBABILITIES?

In Fig. 7, for example, every country's default probability (PD) is sometimes negative! Footnote 39 states that 'the outputs are PDs with respect to Germany', but since German bonds are safe (see p. 9), it seems there are some genuinely negative PDs.

But I don't see how this can be the case even within the model estimated by the authors – equation (16) would seem to imply that the PDs are positive, provided the λs are positive. (And as defined the λs surely must be positive, or at least non-negative.) Also, isn't it possible to choose a functional form to avoid a negative PD (i.e. choose $\log\pi$ as the LHS variable rather than π.)?

(2) HOW SHOULD WE INTERPRET LIQUIDITY SHOCKS?

German KfW bonds are perfectly safe but less liquid than German *Bunds*. But why are they less liquid? If they are perfectly safe shouldn't there be a ready market? What would be the equivalent in the UK? (I can't think of anything.) Could transactions costs be part of the explanation why they might have a higher return? But then transactions costs would define a 'band' within which the return on these bonds (relative to the yield on *Bunds*) would fluctuate without inducing arbitrage, and the return on these bonds could increase because of an increase in their supply (very different to a liquidity shock).

Not entirely clear why at a time of financial crisis, the liquidity premium on *safe* bonds should increase. (Of course, some assets that were considered relatively safe become much riskier during a financial crisis, but we are considering the relative returns on safe bonds.)

(3) RISK PREMIA ON SOVEREIGN DEBT.

Interesting that risk premia on sovereign debt have been calculated.

But I'm really unclear how this has been done.

If we have the relationship

RISKY I.R. = SAFE I.R. + DEFAULT PREMIUM = SAFE I.R. + 'RISK-NEUTRAL' PREMIUM + RISK PREMIUM. (Is there a better terminology?)

Then I don't see how one can divide the difference between the risky and safe rates into a 'risk-neutral' premium on the one hand (the premium that would just induce risk-neutral agents to hold the risky asset) and a risk premium on the basis of the information used by the authors. (Of course, if we had hundreds of years of data and many observed defaults, then we might be able to do this, but we don't have this much data.)

How do the results on risk premia differ from other studies and what might be considered reasonable on the basis of risk aversion (etc.)?

Interesting that sovereign default risk cannot be completely diversified – presumably some can be?

Risk premia calculated assuming a recovery rate of 50%; how sensitive are they to different assumptions about the recovery rate?

(4) INTERPRETATION OF REGIME CHANGES (WHAT IS THE DIFFERENCE BETWEEN CRISIS AND NON-CRISIS REGIMES?)

Crisis periods:

(i) September 2008 – August 2009 (12 months)

(ii) December 2009 – January 2010 (2 months)

(iii) April 2010 – March 2011 (12 months).

The financial crisis involved a number of distinct stages, and I'm not too happy about lumping them all together as a 'crisis'. And what about the period August 2007 to September 2008? The period immediately after the collapse of Lehmann Brothers in September 2008 was characterised by huge panic and uncertainty with the interbank market effectively freezing – isn't this rather different from the more recent periods when the sovereign debt crises of some EU countries have been the main concerns?

Also, why and how does a crisis change the relationship between variables in the VAR estimated? A 'regime change' as I understand it

is where, say, the CB becomes an inflation targeter so that it raises its policy rate more than proportionately with an increase in expected inflation rather than whatever it did beforehand. So the relationship between expected inflation and the interest rate changes. What is the analogous change in the relationship between interest rates a change in regime means in the current paper?

Isn't a crisis more a large negative (demand?) shock rather than a change in regime?

(5) WHY DON'T DEFAULT PROBABILITIES (ETC) DEPEND ON GOVERNMENT DEBT, DEFICITS, ETC.?

Surely the level and prospective growth of government debt (relative to GDP) are the main factors explaining default premia? But these things are hardly mentioned in the paper.

(6) ARE THERE TERM PREMIA? IF SO, WHAT DO THEY DEPEND ON, AND HOW LARGE ARE THEY?

(7) ARE THE EFFECTS OF (THE ECB EQUIVALENT OF) QUANTITATIVE EASING CONSIDERED ANYWHERE WITHIN THE FRAMEWORK?