**Discussion of:**

**Cristina Checherita-Westphal and
Pascal Jacquinot**

**Economic consequences of high public debt and
lessons learned from past episodes**

**By Werner Roeger**

**European Commission/DG ECFIN**

**DG ECFIN Workshop: Fiscal Policy in an
Environment of high Debt**

The paper starts from the observation that sovereign debt has increased in many EA countries during the crisis.

This is a problem, also given pressures from ageing, especially for high debt countries.

These countries face various risks:
Lower resilience to shocks: higher output loss in crisis, more time spent at the ZLB, more negative spillover effects etc.

With respect to the discussion on risk reduction vs. risk sharing it argues that risk/debt reduction should not be overlooked.

Risk reduction is even more important, since we are likely to face a longer period of low growth (secular stagnation), importantly because of ageing.

Broad assessment+ Outline of Discussion :

Agree with the main point in the paper:
- Countries with high debt subject to larger risks.
- Possibility of bad equilibria emerging more easily.

I would like to concentrate on the following aspects.

Point 1: Risk reduction and risk sharing

Just like the paper wants to complement risk sharing with benefits risk reduction, I would like to complement this paper by a discussion of the benefits of risk sharing.

Risk reduction is probably a long lasting process (consolidation, structural reforms) and is likely interrupted by adverse shocks.

Especially when discussing higher risk exposure of high debt countries it is even more necessary to devise risk sharing mechanisms such that negative effects are mitigated.

Point 2: Risk sharing with  secular stagnation

With EBU and CMU, the EA could probably increase the supply of save assets. This would reduce the likelihood of being stuck in a ZLB (safety trap).

If this would work, governments could possibly benefit from ageing and the implied reduction of r.

Point 1:

The transmission of the negative feedback of a shock on sovereign and private rates is based on a calibration of Corsetti et al. (2013). Which aims at capturing the pre-OMT announcement episode.

If the calibration is trying to replicate the period around 2011/12 then one should be clear that one is looking at a scenario, with little risk sharing mechanism (incl. monetary or fiscal backstop).

G. Corsetti et al. / Journal of Monetary Economics 61 (2014) 53–73

Rest of the euro area

Stressed economies

OMT announced

—Nonfinancial corporates

-- Sovereigns

Draghi speech foreshadowing OMT

The negative feedback loop was also emphasised in a recent paper by Gilchrist an Mojon (2017) They show that banks have been much more affected than NFCs
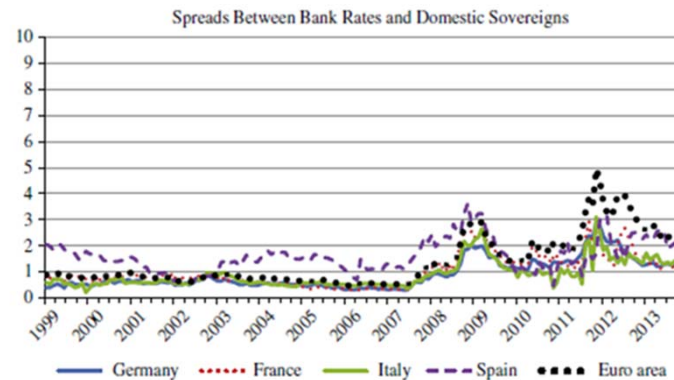
Spreads Between Bank Rates and Domestic Sovereigns

Germany ....... France ——— Italy – – – Spain ●●● Euro area

Fig. 1. *Euro Area Corporate Credit Spreads for Banks*

Spreads Between NFC Rates and Domestic Sovereigns

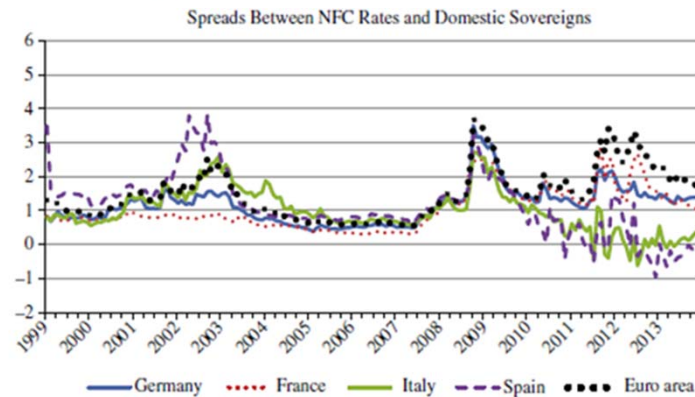Germany ....... France ——— Italy – – –Spain ●●●● Euro area

Fig. 2. *Euro Area Corporate Credit Spreads for NFCs*

Further justification for putting EBU/CMU Type risk sharing mechanisms in place in order to mitigate those doom loops between banks and sovereigns.

How strongly sovereign debt premia affect the private sector in EMU will depend on the financial market architecture (EBU and CMU arrangements as well as lender of last resort issues).

It is therefore necessary to more precisely model the institutional environment.

Here I show results, using the QUEST model augmented with a banking sector, where we try to look how different risk sharing mechanisms affect stabilisation.

Policy Scenario:

**Baseline:**

Limited domestic risk sharing: segmentation  of savers into risk averse (deposits, gov. debt) and risk taking (bank and NFC equity) households.

Limited international (across EA countries) risk sharing: no cross holding of bank equity, domestic banks only hold domestic sovereign bonds, No EA wide deposit insurance.

**EBU- Risk sharing scenario**:

Common deposit insurance fund of commercial banks to covers bank losses (partially).
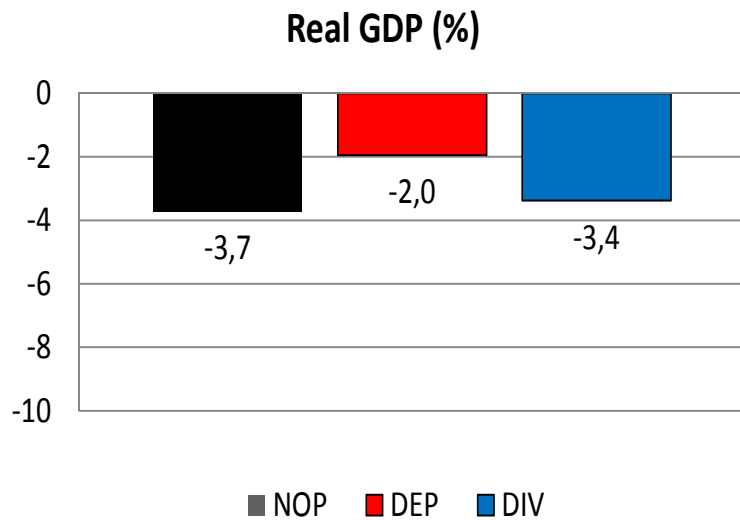
**CMU-Risk sharing scenario**:
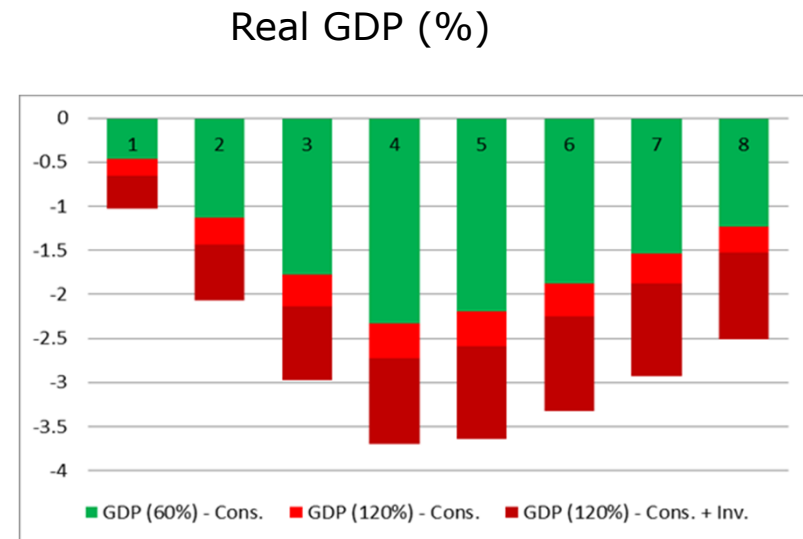
Banks diversify sovereign bond holdings

Note:
The gains from wider risk sharing are most likely underestimated, since we exclude negative equilibria under the no risk sharing scenario.

# Recession under the alternative policy scenarios

## EC-QUEST:

**Real GDP (%)**



Bars: -3,7 (NOP, black), -2,0 (DEP, red), -3,4 (DIV, blue)

Legend: ■ NOP   ■ DEP   ■ DIV

## ECB-EAGLE:

Real GDP (%)



Legend: ■ GDP (60%) - Cons.   ■ GDP (120%) - Cons.   ■ GDP (120%) - Cons. + Inv.

Recession:  Mortgage loan losses; Collapse of house prices

DEP=EDIS: EDIS partly takes over bank losses, reduces first round effects.
DIV=sov.  bond diversification: less stabilising, mitigates second round effects.

Point 2:

What is currently special about government debt and economic activity?
Countries which are regarded as save can borrow at very favourable conditions (r<g)

Concerning a possible secular stagnation scenario (low growth, ageing safety trap), there is an important literature suggesting a different fiscal strategy.

Eggertson et al. (2017) as well as Fed economists (Gagnon et al. (2016)) have set up models which suggest that ageing is associated with a period of low/negative real rates, because of high (for retirement) saving of working age population in an environment with rising life expectancy. Because of r<g they suggest that there should be fiscal impulses provided.
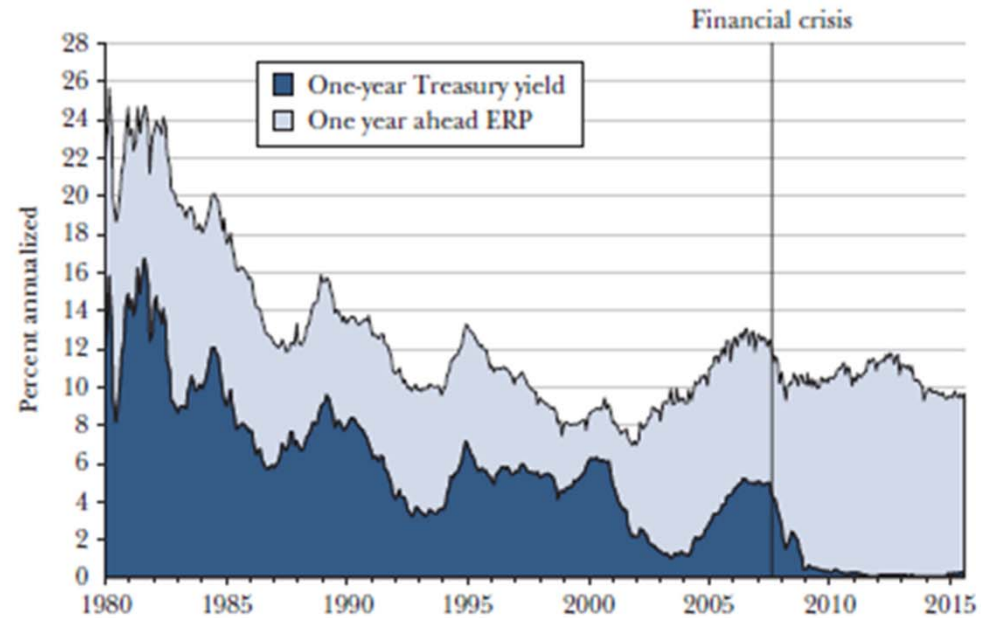
Caballero, Farhi and Gourinchas (2017) stress high demand for save assets as a possible reason for low interest rates on government bonds.

**Figure 1:** Short and long term interest rates
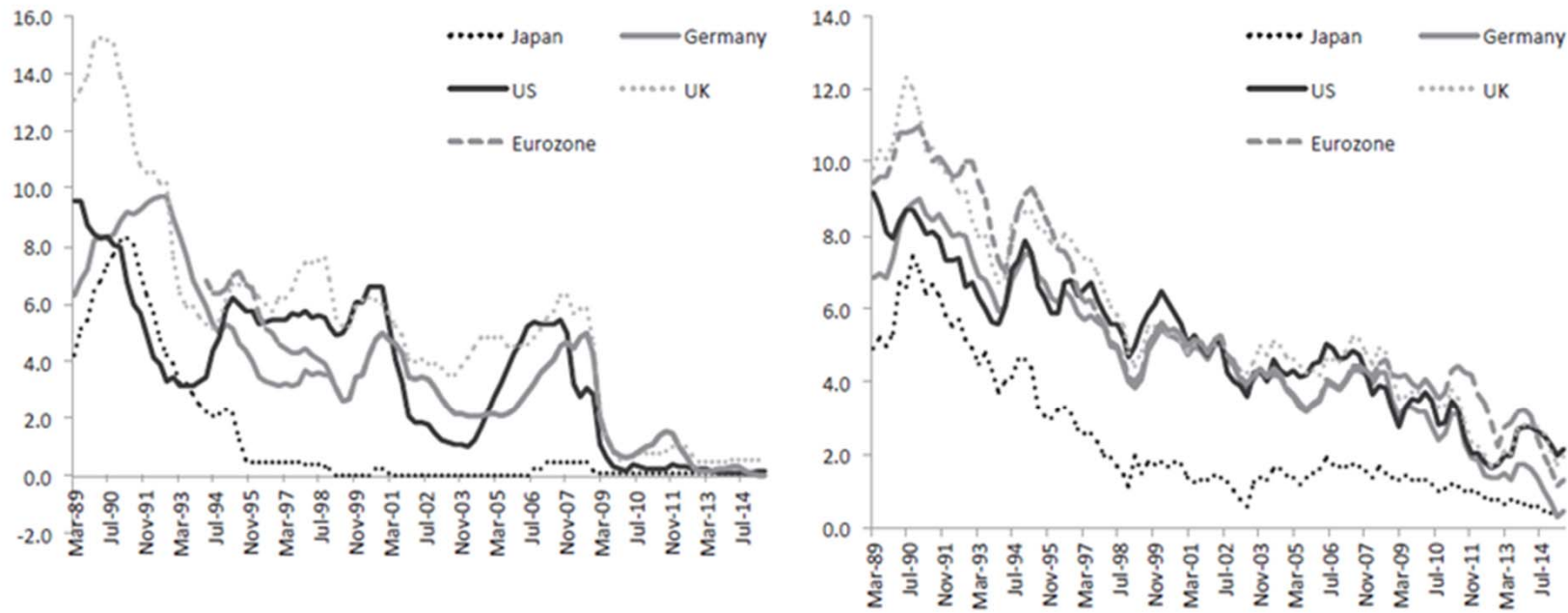
Source Eggertson et al.

Source Caballero et al (2017)

Save asset discussion:

Despite rising levels of government debt, the interest rate on government debt has declined steadily for save asset providers (DE, US). E. g. due to increased demand for foreign exchange reserves, life insurance companies etc.

Another interesting phenomenon occurred recently, namely r<g and even more importantly the ZLB on save assets.

According to these authors, debt reduction for countries with limited fiscal space should be complemented by an increase of public debt for save asset providers.

As emphasized by Caballero et al., the current situation (safety trap ) is different in the following sense:

In a very stylised way we can think of rate of return on equity (*re*) and the rate of return on save assets (*rb*) in the following way

$$re = rb + SA_d - SA_s$$

$SA_d$ : save asset demand

$SA_s$ : save asset supply

Normal times:
As long as the save real rate can adjust downwards to an increase in save asset demand, the increased demand for save assets has no consequences for *re*, since *rb* can decline as a response to higher demand for government bonds

$(SA_d \uparrow, rb \downarrow => re \rightarrow)$

$$re = rb + SA_d - SA_s$$

Safety trap:
Difference: $rb$ cannot fall, an increase in the demand for save assets increases $re$.

$(SA_d \uparrow, rb \rightarrow => re \uparrow)$


This is a paradox of thrift type mechanism:
 Interest rate response does not equilibrate S and I.
The only way to establish a S-I balance is a decline in income.

Caution:
Of course this does not mean that save assets can be increased without limits, but it appears that the most save way of increasing save assets is to invest them productively.