



Knowledge Exchange Seminar Series (KESS)

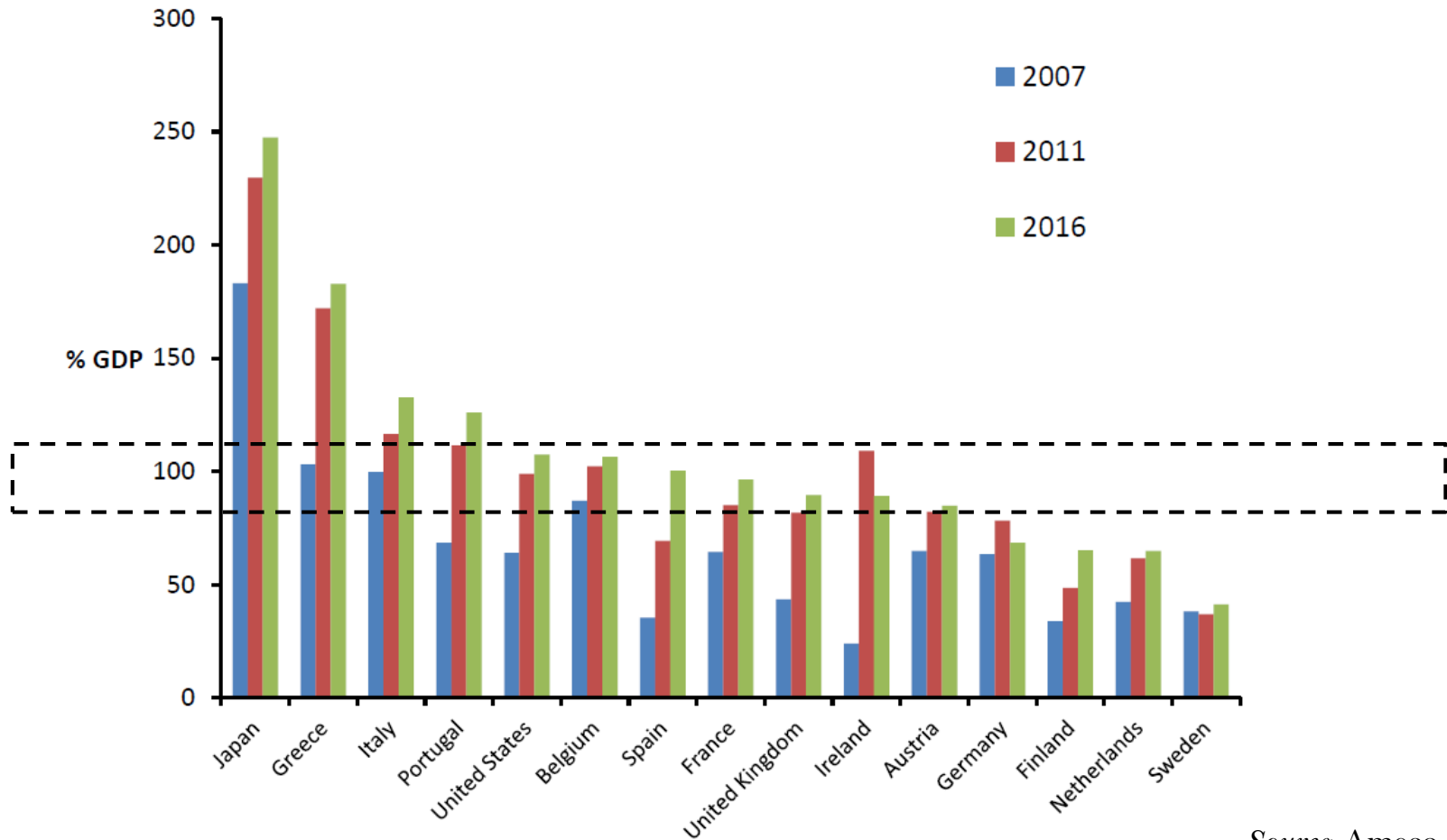
...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-based policy and law-making within Northern Ireland



Options for public debt management

Dr Dimitris Sotiropoulos
The Open University Business School

Sovereign debt overhang



Source: Ameco database

Decomposing the big picture

increase of sovereign debt

$$\Delta d = -s + \left(\frac{r - \gamma}{1 + \gamma} \right) \cdot d + sf - \Delta h$$

Diagram illustrating the decomposition of the change in sovereign debt (Δd) into four components:

- $-s$: fiscal consolidation
- $\left(\frac{r - \gamma}{1 + \gamma} \right) \cdot d$: growth in relation to debt servicing
- sf : stock-flow adjustments
- $-\Delta h$: inflation

The overall result is an increase of sovereign debt.

All variables are ratios to GDP:

s: primary surplus

r: real effective interest rate corresponding to the already-accumulated debt

γ : the growth rate of real GDP

Δd : the change in the public debt

sf: the stock-flow adjustments

Δh : the change of the monetary base

A simple illustration

$$\Delta d = 0 \Rightarrow s_{\min} = \left(\frac{r - \gamma}{1 + \gamma} \right) \cdot d$$



A hypothetical economy:

- with sovereign debt at the level of 100% of GDP ($d=1$),
- anticipated real growth 2% ($\gamma=0.02$; this is definitely optimistic for the short term), and,
- a real effective interest rate 3% ($r=0.03$),
- must have as a long-term target primary surpluses of 1% as a share of GDP ($s=0.01$) to avoid any further increase of sovereign debt (without any change in the monetary base causing inflation).

The financial aspect of sovereign debt

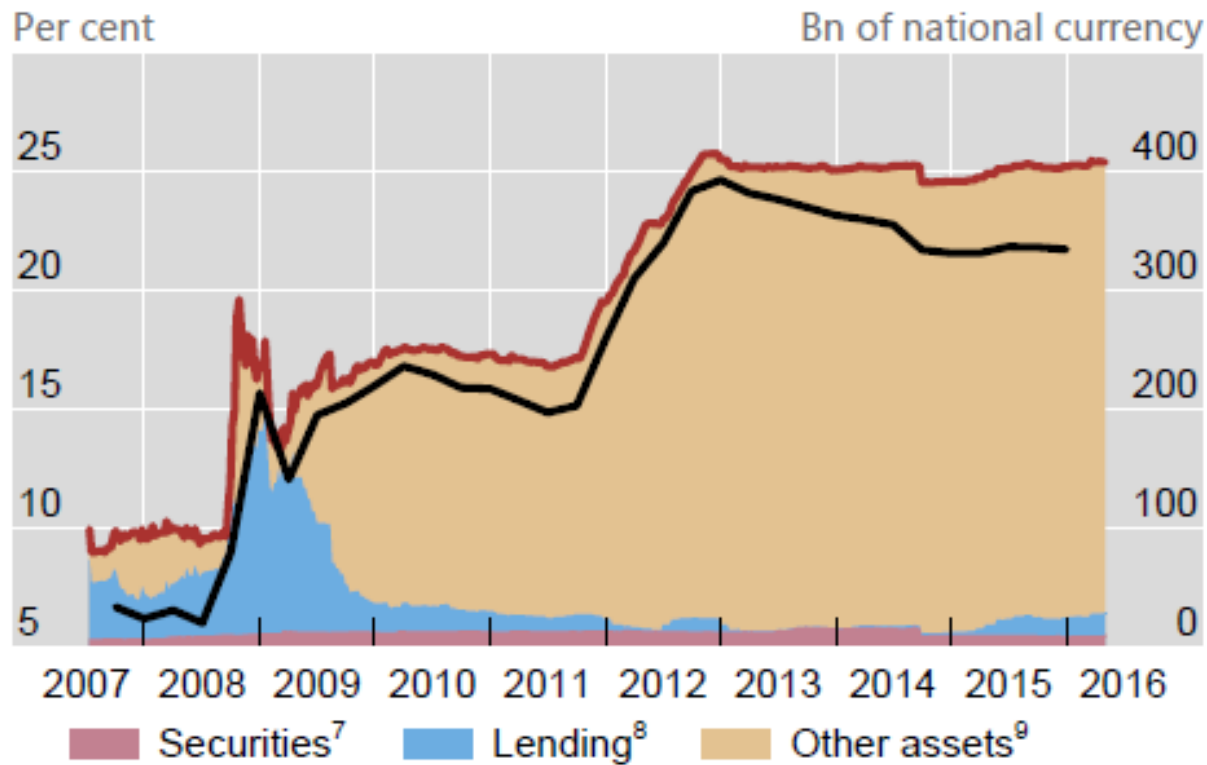
- Sovereign debt is a financial asset.
- Financial markets price these securities, quantifying the anticipated results of future fiscal policies.
- Every quantification is also a representation of economic/social/political events.
- (Small) Countries with weak currencies have very little room to resist market supervision/disciplining and develop independent fiscal and social policies.
- (Big) Countries or monetary unions with strong currencies have the power to interfere with market supervision, that's why they translate the moral hazard into a political issue.

The limitations

1. Deflationary fiscal adjustment cannot reduce a high sovereign debt.
2. Persistent primary surpluses and/or privatizations are self-defeating strategies; historical evidence shows that it is very hard to sustain for a long time.
3. Future growth prospects are not so optimistic.
4. **Dilemma: unorthodox/unconventional solutions of public debt management *or* prolonged austerity and retreat of the welfare state.**
5. In the wake of 2008 global financial crisis, unconventional monetary policies became standard and seem to be permanent (quasi-debt management; negative policy rates).

Central bank balance sheets

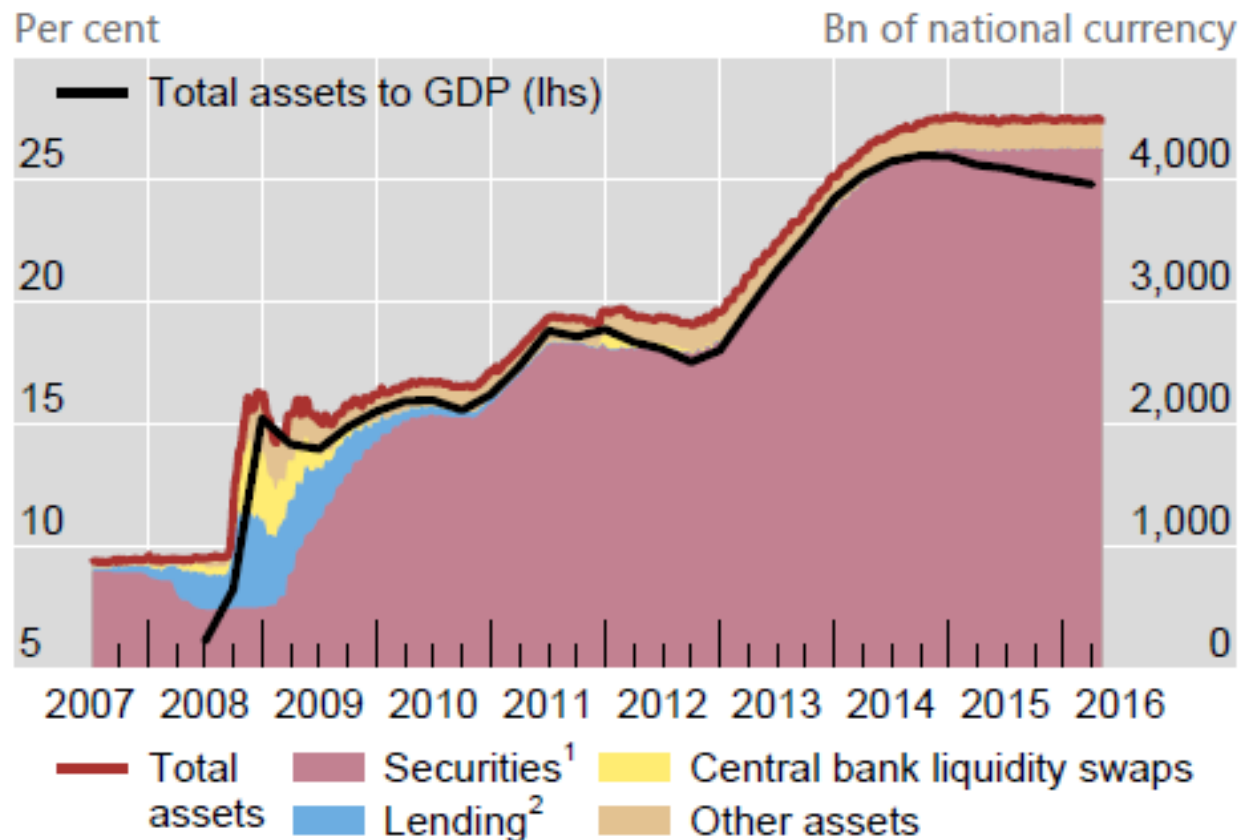
Bank of England⁶



Source: BIS calculations

Central bank balance sheets

Federal Reserve



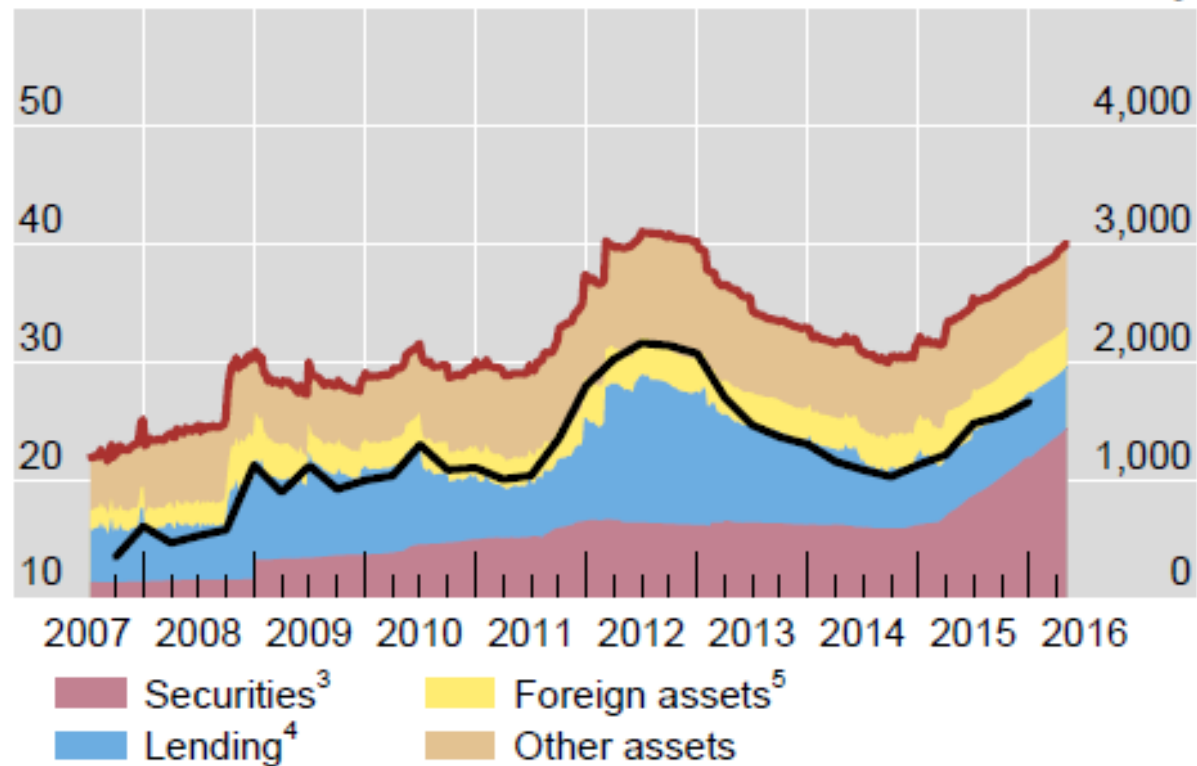
Source: BIS calculations

Central bank balance sheets

Eurosystem

Per cent

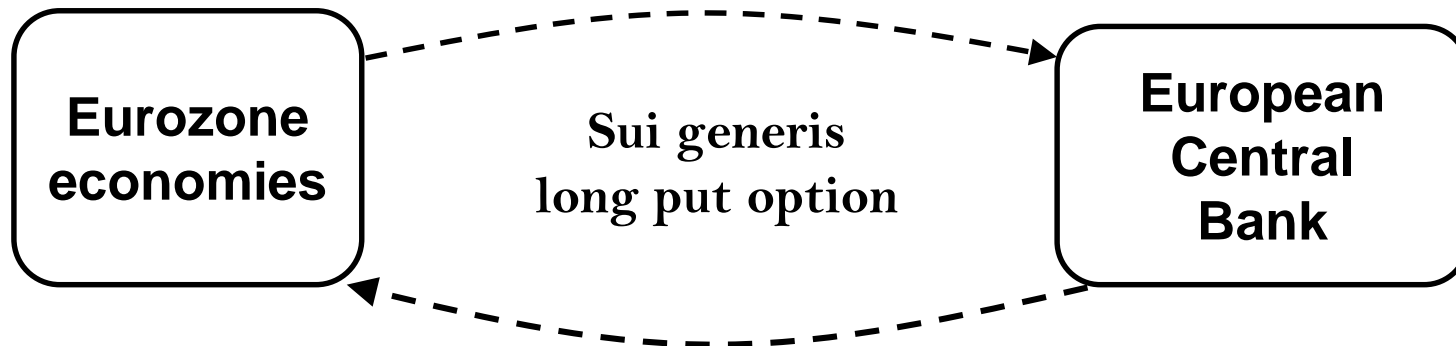
Bn of national currency



Source: BIS calculations

An illustration

Moment 1: The ECB acquires and capitalizes in the form of zero-coupon bonds :(i) debt maturing in the years 2016–2020 and (ii) all interest payments of the same period (approximately this amounts to 55% of outstanding debt for an average country). **In other words, the debt burden will be suspended for five years.**



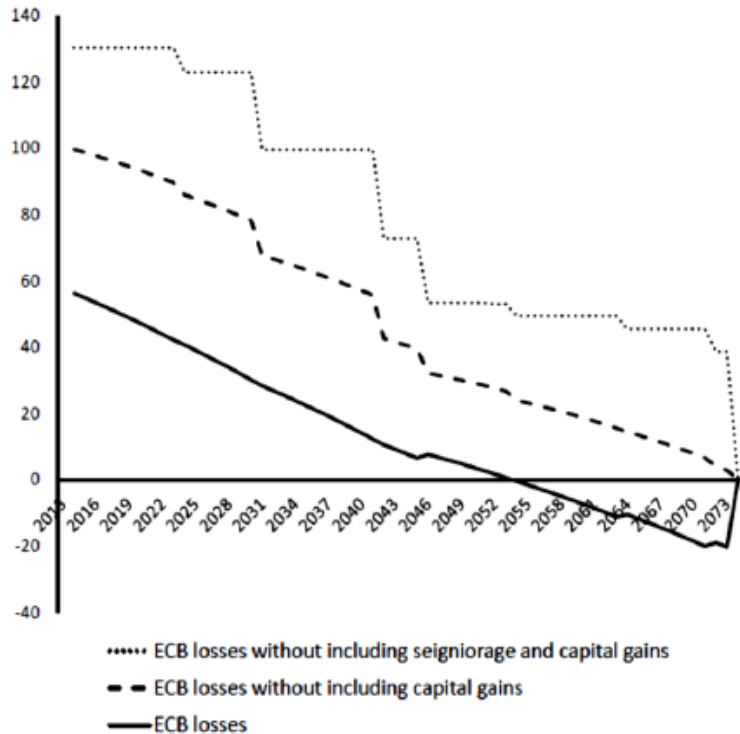
Moment 2: Each Eurozone country agrees to **buy back** from the ECB the zero-coupon bonds when their values will have been reduced to 20% of GDP, jointly accepting a (nominal) discounting rate of 1%.

An illustration

1. No debt forgiveness; no direct fiscal transfers and no additional tax burden for any EA economy.
2. **Capital gains** and **seigniorage profits** but also **sterilization costs**.
3. The overall cost of the program is lower than the ordinary actions of the ECB.
4. A rising number of mainstream economists and advisors have started talking about the elephant in the room: central banks (ECB); good timing for a proposal like this one.

An illustration

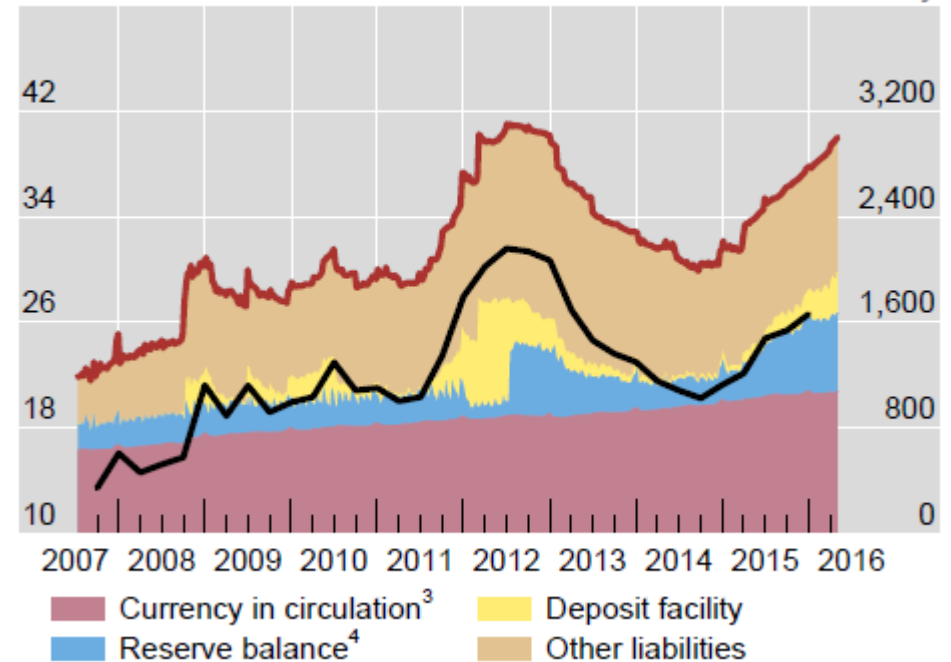
Figure 1 ECB Annual Estimated Losses in our Basic Scenario
in Billion Euros (Losses with Positive Sign)

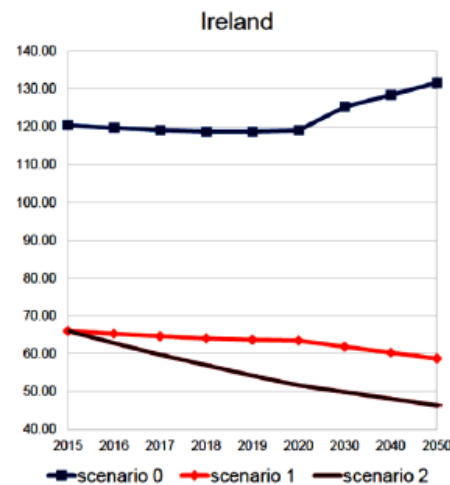
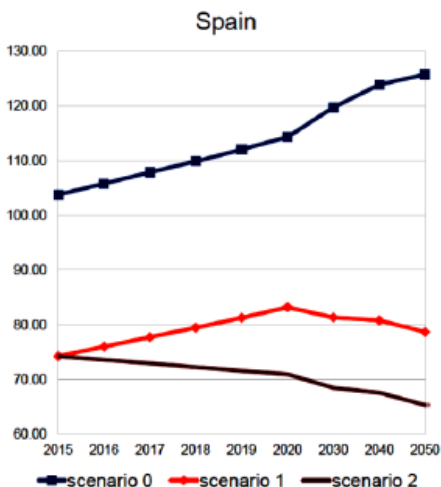
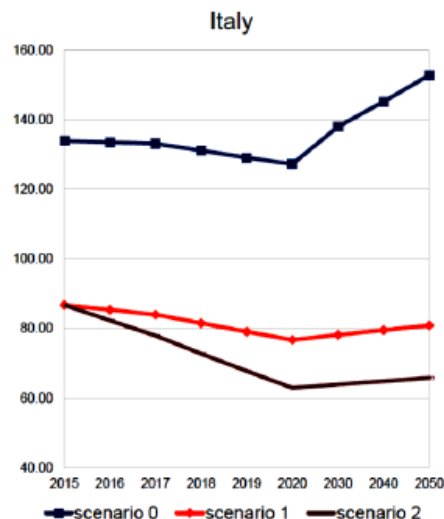
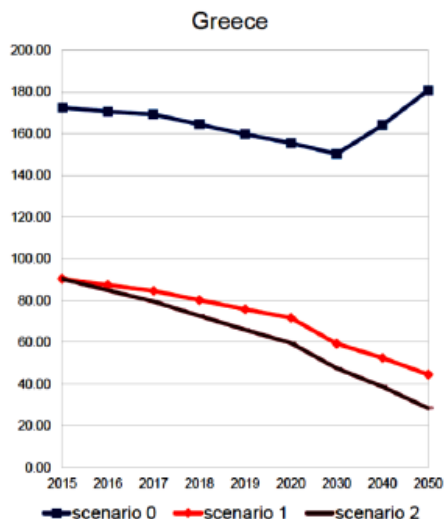


Eurosystem²

Per cent

Bn of national currency

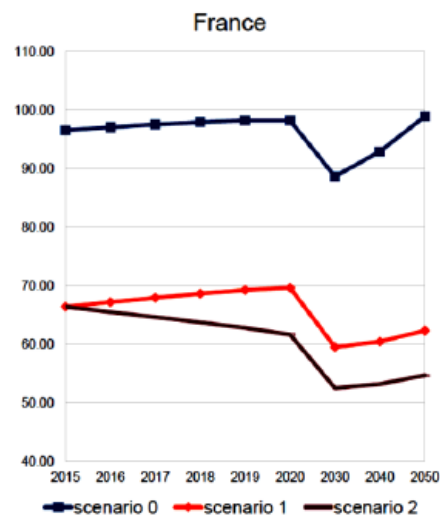
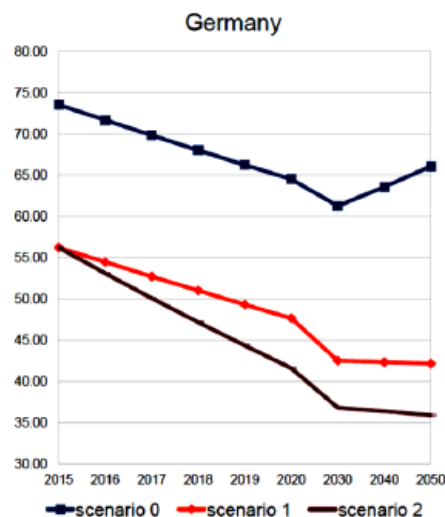
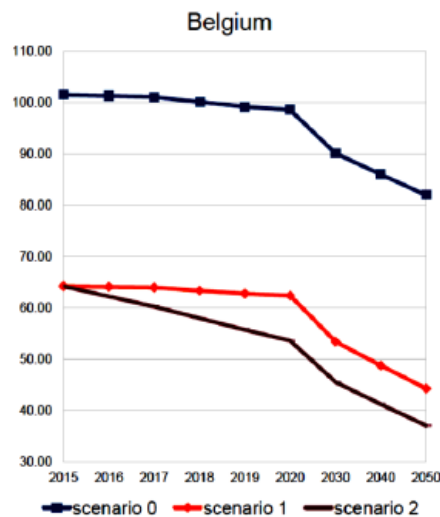
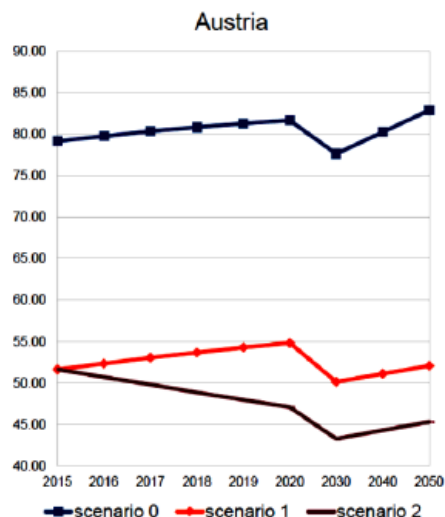




Scenario 0: austerity

Scenario 1: capitalization of debt maturing within the next five years and related interest payments

Scenario 2: capitalization of debt maturing within the next five years and all interest payments



Scenario 0: austerity

Scenario 1: capitalization of debt maturing within the next five years and related interest payments

Scenario 2: capitalization of debt maturing within the next five years and all interest payments

Conclusion



Karl Polanyi, 1886-1964

- Polanyi, K. (1944) *The Great Transformation*, Beacon Press.
- During the turbulent 1920s, governments had to intervene to support a failing international order. They thus established policy mechanisms, which could potentially be used for different aims under proper democratic control.
- The policy responses to the crisis have shown the firepower of central banks. Perhaps it is time to start the debate of how we could utilize them for wider economic and social aims.



Northern Ireland
Assembly



The Open
University



Knowledge Exchange Seminar Series (KESS)

...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-based policy and law-making within Northern Ireland