



Are *new* monetary and fiscal policies required in the euro area?

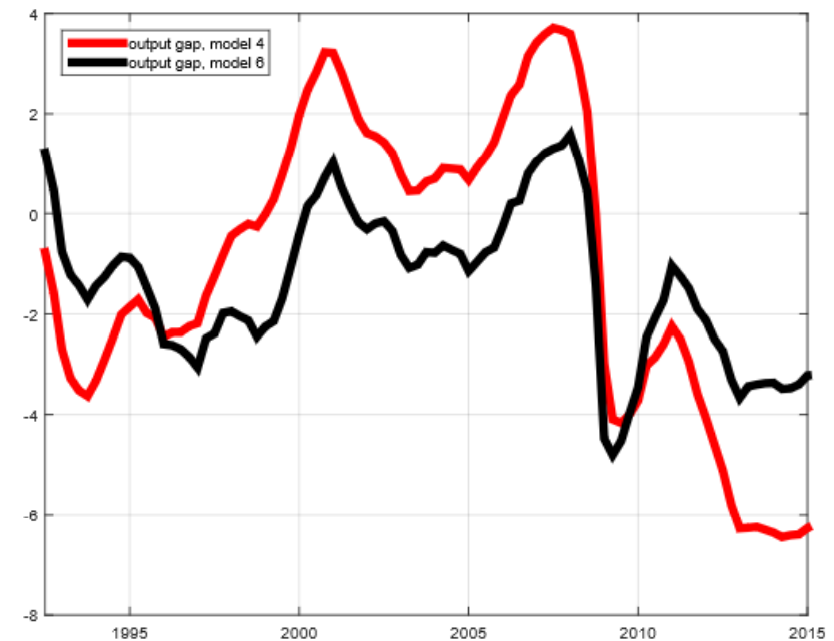
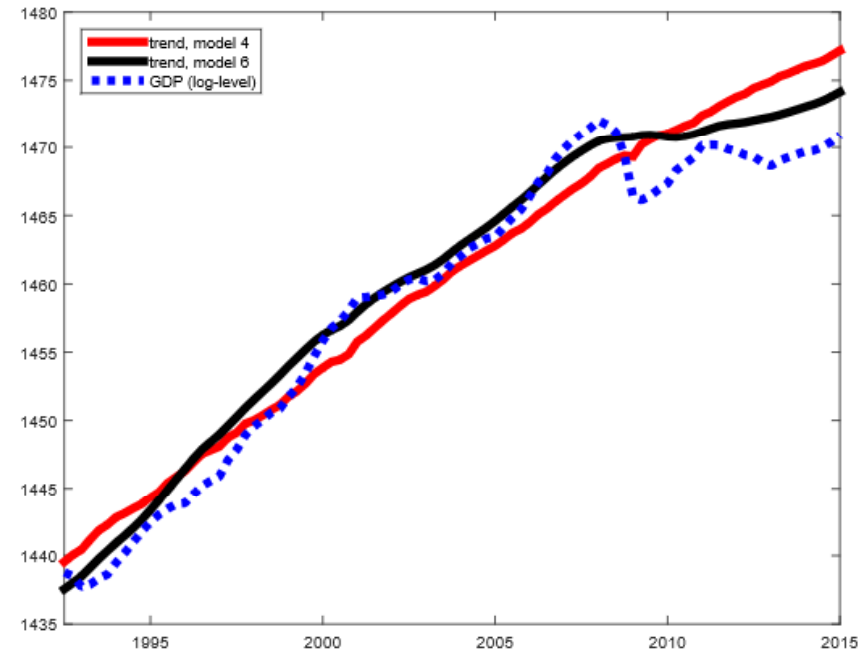
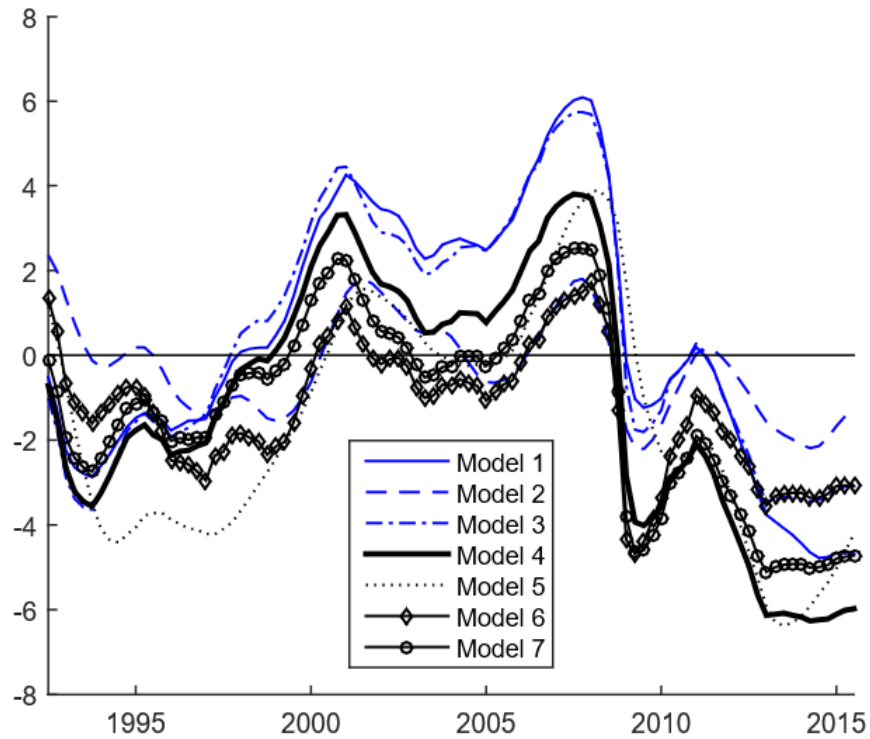
Jérôme Creel
OFCE & ESCP Europe

Franco-German Conference, Paris, 7 July 2016

Outline

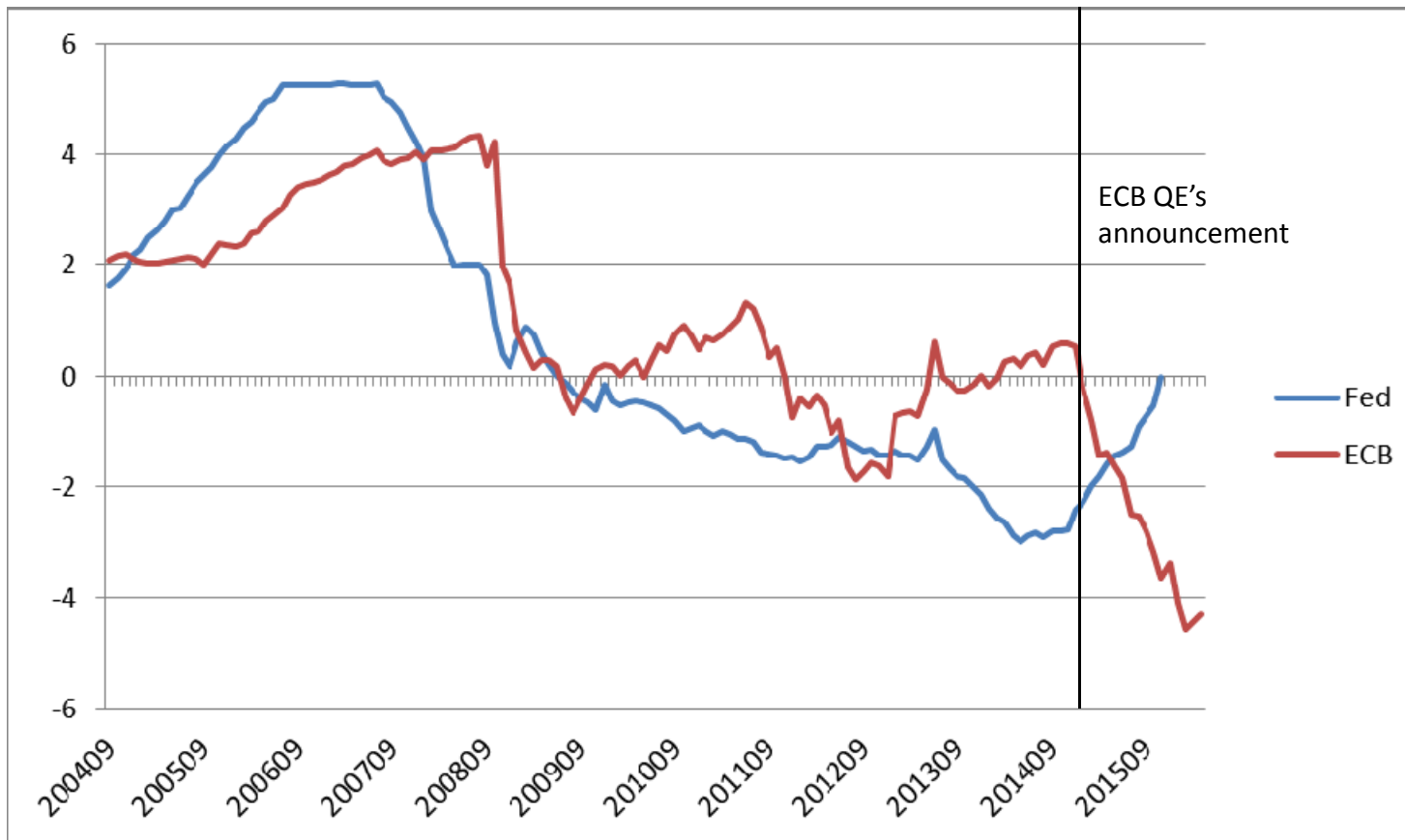
- Secular stagnation, on the demand side
- *New* monetary policy? Why?
 - QE has begun
 - Impact of QE on investment, not so low
 - Impact of QE on stock prices, not so high, if any
- *New* fiscal policy? Yes, please
 - Fiscal leeway
 - Adopting a golden rule of public finance

Shocking!



“(T)he results suggest that reconciling the secular stagnation hypothesis with the core inflation data is a challenge and may imply that policies aimed at stimulating demand should complement supply side policies in the economic policy mix.” (Jarocinski & Lenza, 2016, ECB WP)

Monetary policy: what has happened?



Source: Wu & Xia (JMCB, 2016)

Many risks associated with QE

- Lack of liquidity for highly-demanded assets
- Lack of safe assets (for collateral purposes)
- Risks to financial stability
- Excess volatility on emerging markets
- Size of CB's balance sheet makes it hard to reverse the monetary stance
- CB independence & credibility undermined
- Delayed fiscal consolidation
- Distributional effects

Consensus on the macro effects in the US and UK

Table 1: Impact of QE in the United States

Impact of LSAP programs	Total size (US\$ billions)	Impact	Impact per US\$100 billion	Number of studies
Treasury yields		Basis points	Basis points	
QE1				
Range	1,700	13 to 107	2.9 to 6.3	8 ^a
Bernanke (2012)	1,700	40 to 110	2.4 to 6.5	
QE2				
Range	600	15 to 33	2.5 to 5.5	3 ^b
Bernanke (2012)	600	15 to 45	2.5 to 7.5	
QE1 + QE2 + Maturity Extension Program				
Range	2,300	65 to 100	2.8 to 4.4	4 ^c
Bernanke (2012)	2,300	80 to 120	2.9 to 4.4	
GDP		Level of GDP	Level of GDP	
QE1		(per cent)	(per cent)	
Range	1,700	0.9 to 2	0.05 to 0.12	2 ^d
QE2				
Range	600	0.1 to 0.78	0.07 to 0.13	5 ^e
QE1 + QE2				
Bernanke (2012)	2,300	3.00	0.13	
a. Bauer and Rudebusch (2014), Christensen and Rudebusch (2012), Chung et al. (2012), Gagnon et al. (2011), Hamilton and Wu (2012), Krishnamurthy and Vissing-Jorgensen (2011), Meyer and Bofmim (2010) and Neely (2015)				
b. Chung et al. (2012), Krishnamurthy and Vissing-Jorgensen (2011) and Swanson (2011)				
c. Meyer and Bofmim (2012), Dahlhaus, Hess and Reza (2014), Ihrig et al. (2012) and Li and Wei (2013)				
d. Baumeister and Benati (2013) and Chung et al. (2012)				
e. Chen et al. (2012), Chung et al. (2012), Deutsche Bank (2010), Fuhrer and Olivei (2011) and Meyer and Bofmim (2011)				

Table 2: Impact of QE in the United Kingdom

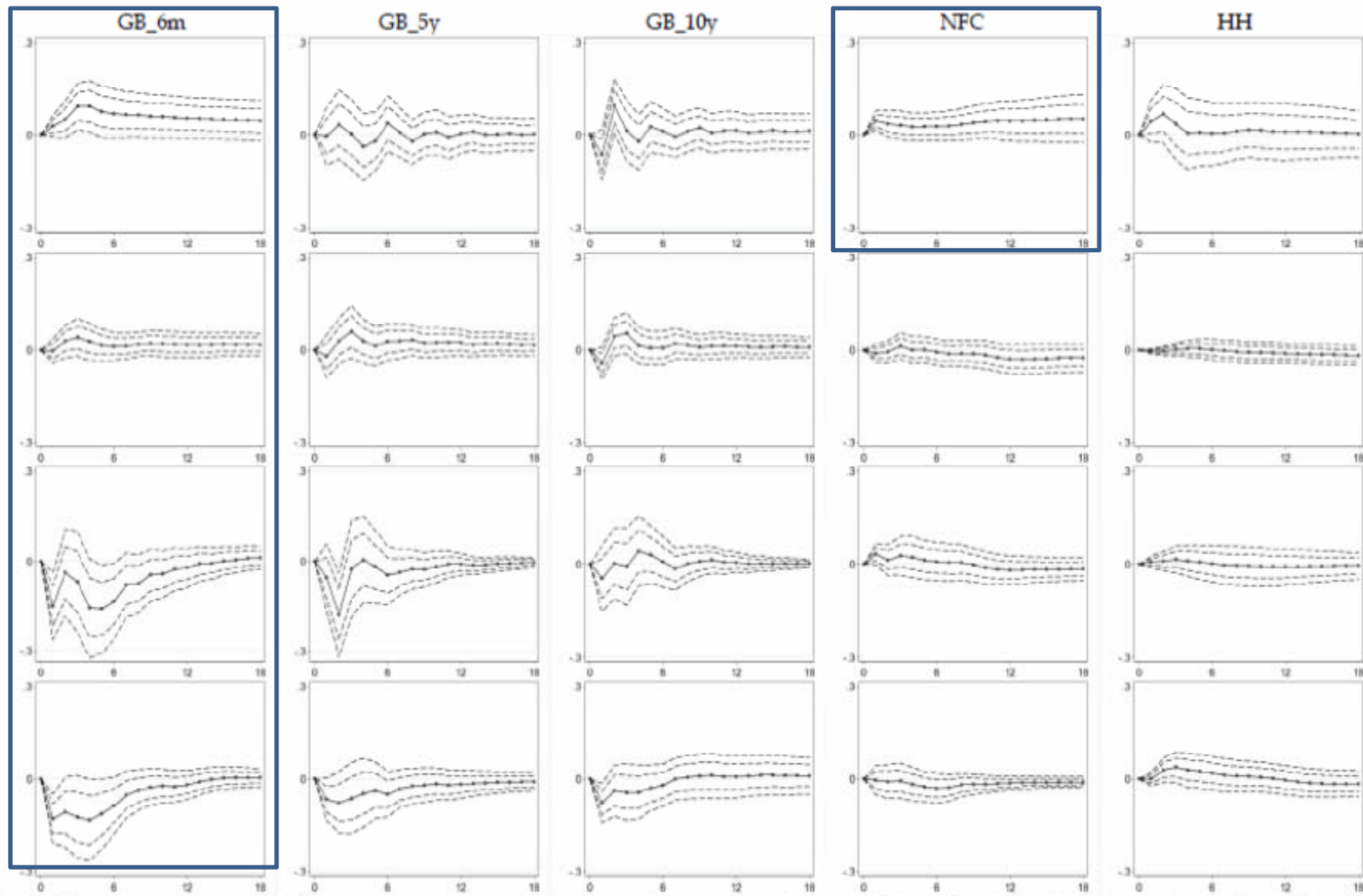
Impact of QE	Total size (£ billions)	Impact	Impact per £100 billion	Number of studies
Gilt yields		Basis points	Basis points	
APP1	200	48-150	21-75	9 ^a
APP2	175	45-56	26-32	2 ^b
GDP		Level of GDP (per cent)	Level of GDP (per cent)	
APP1	200	1.5-1.75	0.75-0.88	2 ^c
APP2	175	0.65	0.37	1 ^d
APP1+APP2	375	5.50	1.47	1 ^e
GDP		Growth of GDP (per cent)	Growth of GDP (per cent)	
APP1	200	0.8-3.3	0.44-1.65	4 ^f
a. Breedon et al. (2012), Caglar et al. (2011), Bridges and Thomas (2012), Christensen and Rudebusch (2012), Joyce et al. (2011a), Joyce and Tong (2012), Kapetanios et al. (2012), McLaren et al. (2014), and Meier (2009)				
b. Churm et al. (2015) and McLaren et al. (2014)				
c. Kapetanios et al. (2012) and Joyce et al. (2011a)				
d. Churm et al. (2015)				
e. Cloyne et al. (2015)				
f. Baumeister and Benati (2013), Bridges and Thomas (2012), Caglar et al. (2011) and Pesaran and Smith (2012)				

Source: Reza, Santor & Suchanek, Bk of Canada WP, 2015

Effects in the euro area before 2015

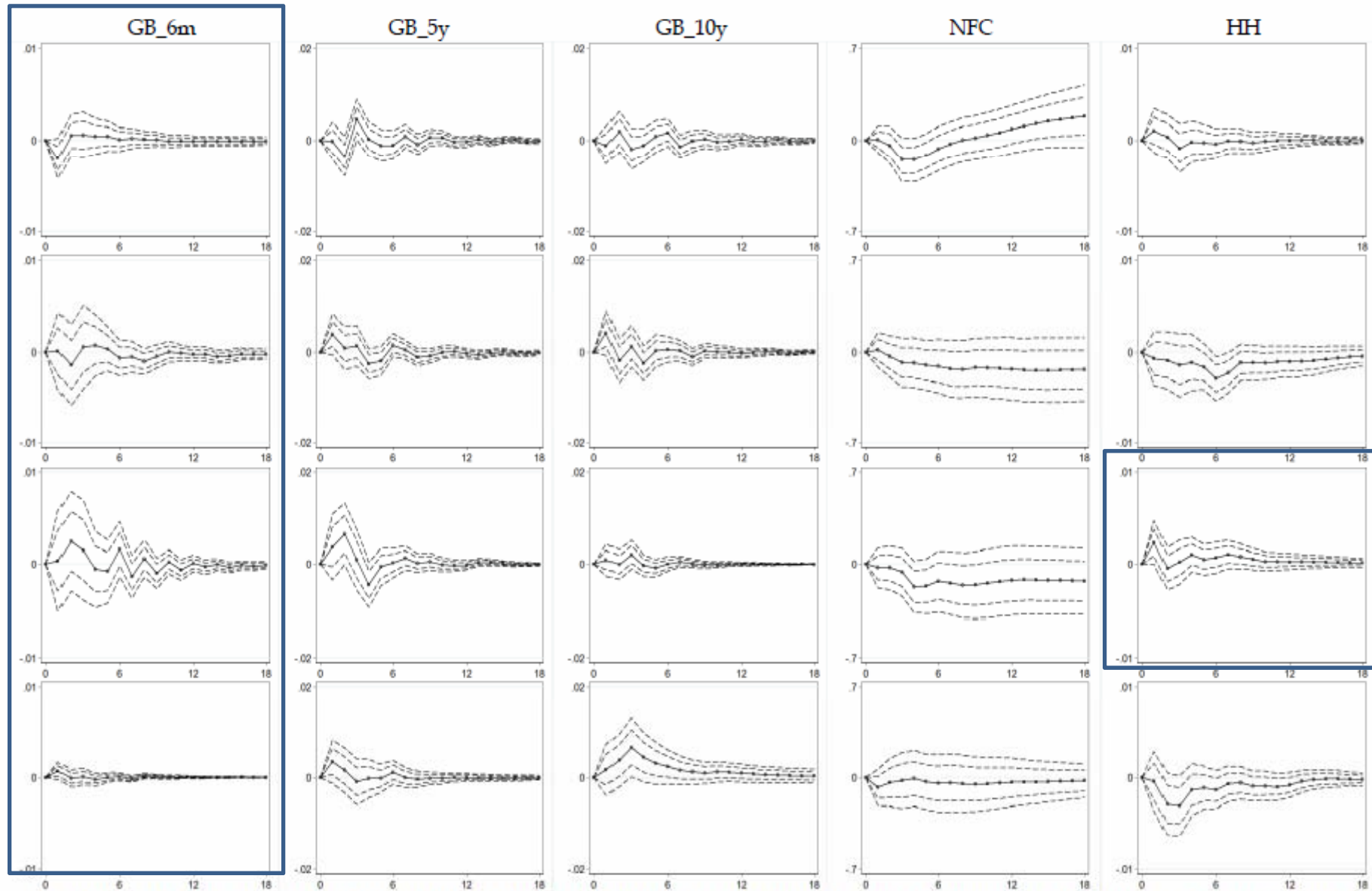
- Drawing on conventional & unconventional measures before QE, Creel, Hubert & Viennot (AE, forthc.) show that
 - the interest rate channel has worked in France, Germany, Italy & Spain
 - The argument of the impairment of this channel to promote QE is misleading
 - the effectiveness of unconventional measures depends on the instrument (EL, LTRO, SHMPP), the market (sovereign at different maturities, credit to NFC, housing) and the targeted variable (interest rate or new volumes)

Figure 9: Response of interest rates to a positive SHMPP shock in Germany (1st row), France (2nd), Italy (3rd) & Spain (4th)



The impulse response corresponds to the percentage point change in interest rates, in response to a one-S.D. innovation in the ECB interest rate, together with 1 and 2 S.E. confidence band intervals.

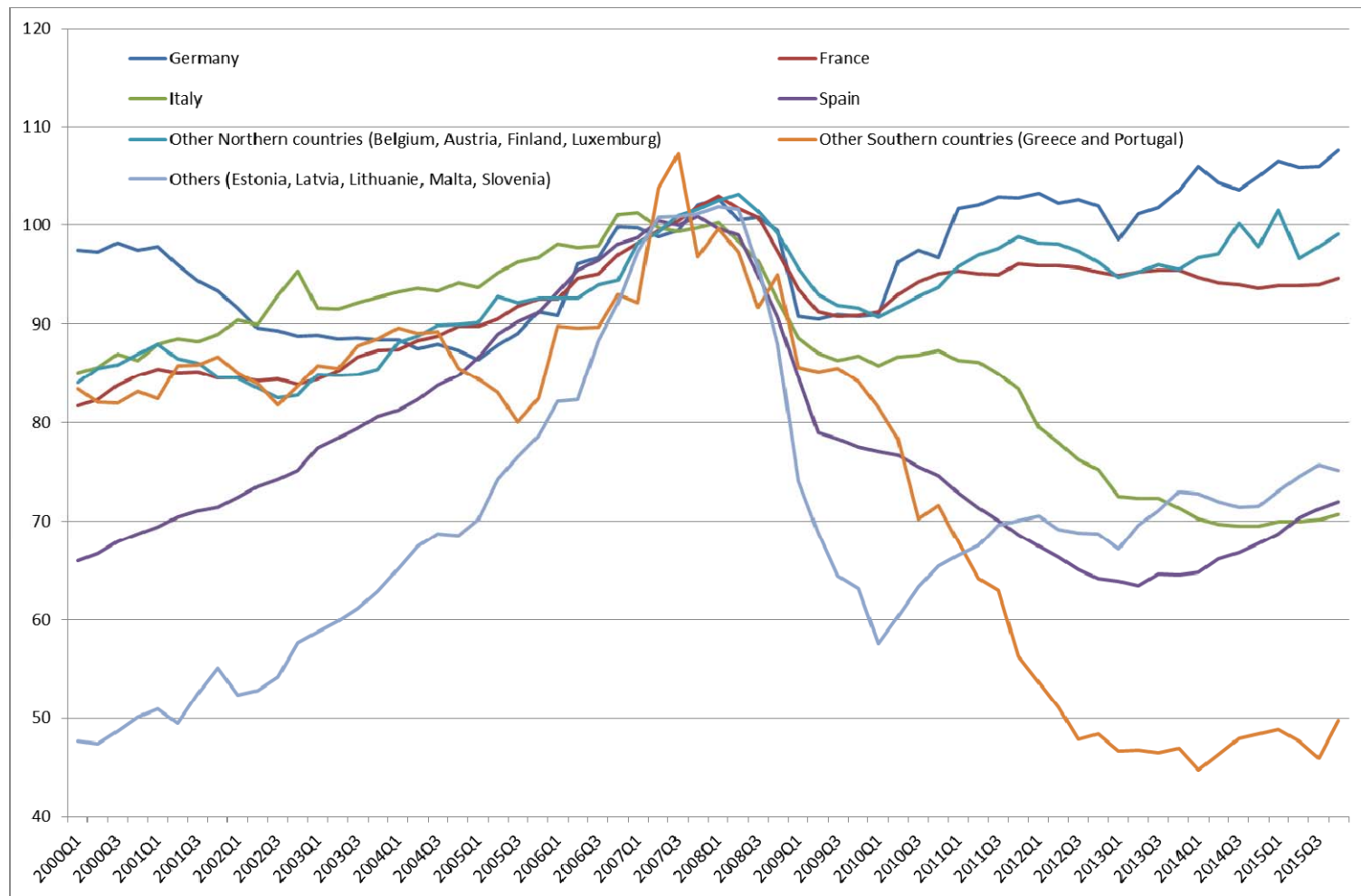
Figure 10: Response of volumes to a positive SHMPP shock in Germany (1st row), France (2nd), Italy (3rd) & Spain (4th)



The impulse response corresponds to the percentage point change in interest rates, in response to a one-S.D. innovation in the ECB interest rate, together with 1 and 2 S.E. confidence band intervals.

Effects in the euro area, including QE

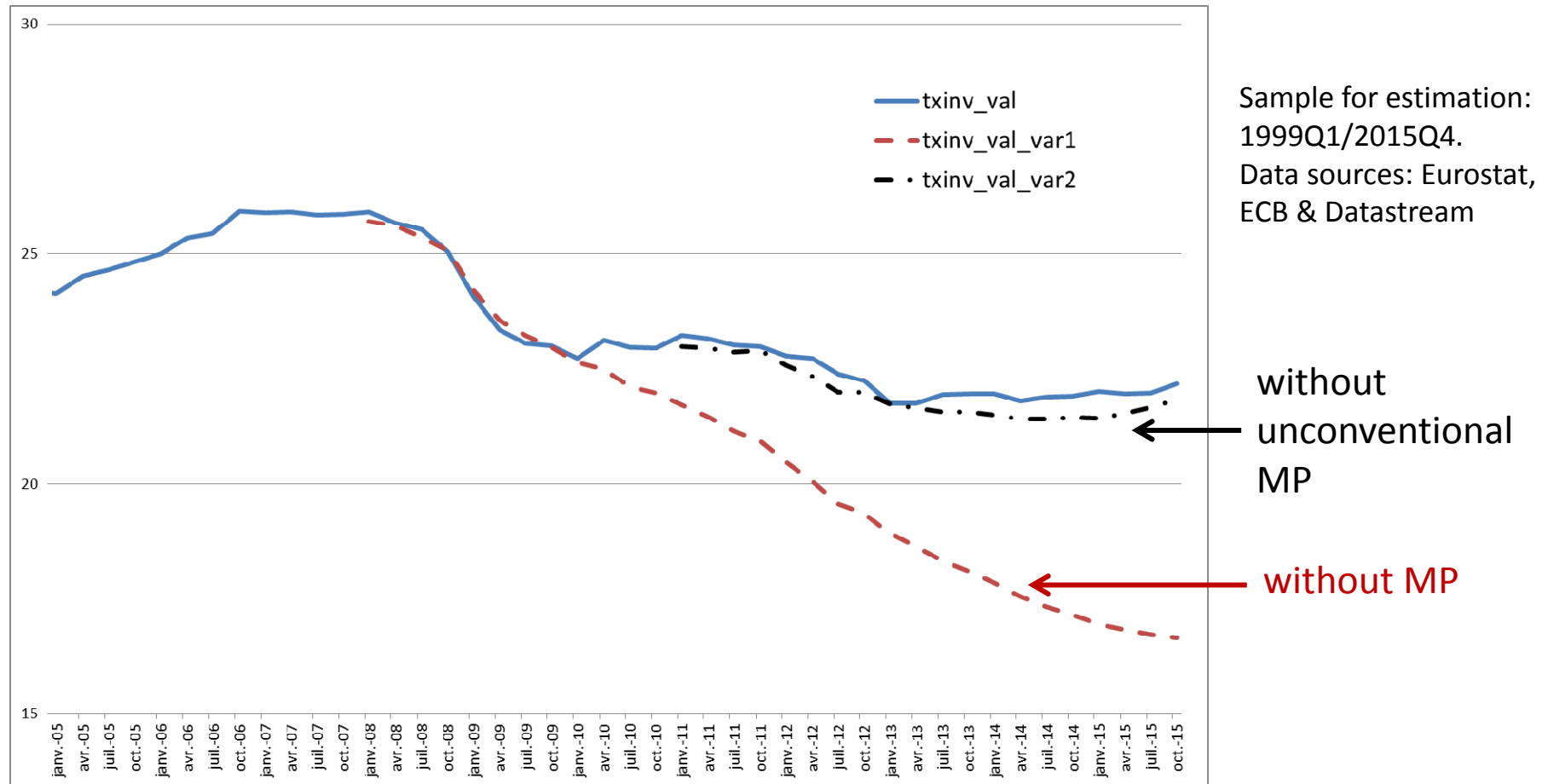
- A foreword: uneven investment paths in the euro area



Source: Eurostat

Effects in the euro area (c'nd)

- Impact of ECB MP on investment (counterfactual)



$$\Delta\left(\frac{I_t}{VA_t}\right) = \frac{-0.086}{0.04} + \left(\left(\frac{I_{t-1}}{VA_{t-1}} \right) - \frac{0.023}{0.00} \cdot \text{Marge}_{t-1} - \frac{0.035}{0.00} \cdot \text{Shadow}_{t-1} - \frac{0.151}{0.00} \cdot \text{BankSpread}_{t-1} + \frac{2.09}{0.07} \right) - \frac{0.214}{0.14} \Delta I_{t-1} + \frac{0.138}{0.08} \Delta I_{t-2} + \frac{1.108}{0.31} \Delta VA_{t-1} - \frac{0.006}{0.00} \Delta CUR_{t-1} + \frac{0.03}{0.00} \cdot \Delta \text{Shadow}_{t-1} + \frac{0.006}{0.00} \cdot \Delta \text{Shadow}_{t-2}$$

Source: Blot, Creel, Hubert & Labondance, 2016, EP Monetary Dialogue

Effects in the euro area (c'nd)

- ER

a. Taux de change euro / dollar

	dollar-euro	dollar-euro	dollar-euro	dollar-euro	dollar-euro	dollar-euro	dollar-euro
FRA1M-EUZ	-0,055*** [0,00]						
FRA1M-USA	0,033*** [0,00]						
FRA1M-USA – FRA1M-EUZ		0,029*** [0,00]					
FRA9M-EUZ			-0,069*** [0,00]		-0,068*** [0,00]		
FRA9M-USA			0,050*** [0,00]		0,049*** [0,00]		
FRA9M-USA – FRA9M-EUZ				0,051*** [0,00]	0,050*** [0,00]	0,050*** [0,00]	
UnConv-EUZ					0,281 [0,22]	0,310 [0,21]	
UnConv-USA					-0,196 [0,14]	-0,292* [0,12]	
UnConv-USA – UnConv-EUZ							-0,300* [0,15]
VIX	0,006 [0,01]	-0,010 [0,01]	0,014** [0,01]	0,013* [0,01]	0,013* [0,01]	0,013* [0,01]	0,013* [0,01]
Constante	-0,241*** [0,02]	-0,229*** [0,03]	-0,269*** [0,02]	-0,302*** [0,02]	-0,268*** [0,02]	-0,301*** [0,02]	-0,302*** [0,02]
N	681	681	681	681	680	680	680
r2	0,273	0,142	0,373	0,270	0,373	0,272	0,272

- Stock prices

b. Cours boursiers dans la zone euro

	stock_ze	stock_ze	stock_ze	stock_ze	stock_ze	stock_ze	stock_ze
FRA1M-EUZ	0,015 [0,01]						
FRA1M-USA	0,051*** [0,00]						
FRA1M-USA – FRA1M-EUZ		0,062*** [0,01]					
FRA9M-EUZ			0,027 [0,01]		0,027 [0,01]		
FRA9M-USA			0,040*** [0,01]		0,039*** [0,01]		
FRA9M-USA – FRA9M-EUZ				0,035** [0,01]		0,035** [0,01]	0,036** [0,01]
UnConv-EUZ					0,311 [0,33]	0,207 [0,39]	
UnConv-USA					0,229 [0,20]	0,569 [0,33]	
UnConv-USA – UnConv-EUZ							0,221 [0,30]
VIX	-0,194*** [0,01]	-0,143*** [0,02]	-0,195*** [0,01]	-0,192*** [0,02]	-0,198*** [0,01]	-0,198*** [0,02]	-0,192*** [0,02]
Constante	8,454*** [0,04]	8,419*** [0,06]	8,442*** [0,04]	8,558*** [0,05]	8,452*** [0,04]	8,572*** [0,05]	8,558*** [0,05]
N	681	681	681	681	680	680	680
r2	0,576	0,307	0,522	0,244	0,524	0,248	0,245

Note : Erreur-standard entre parenthèses, calculée avec la correction Newey-West, * p < 0,1, ** p < 0,05, *** p < 0,01
Source : Estimations OFCE.

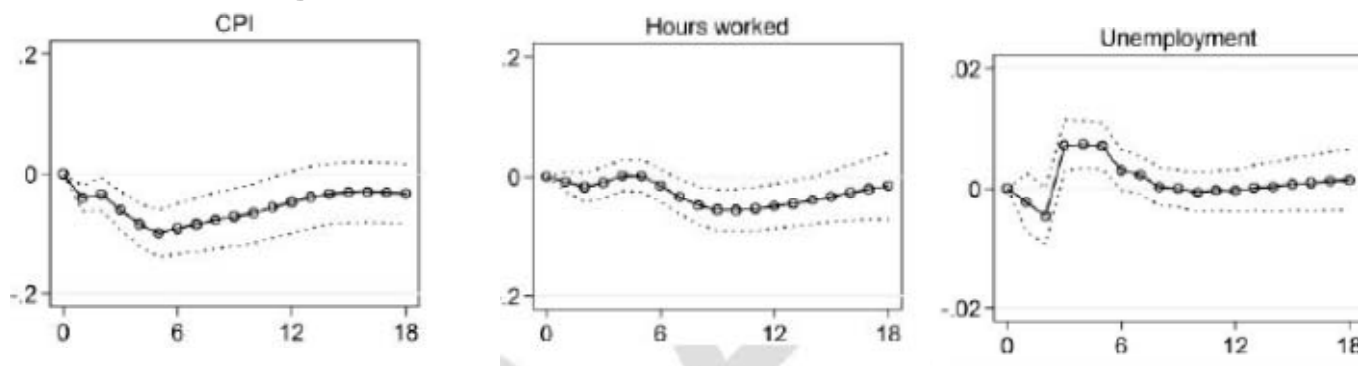
Data sample: Mar03 - Mar16

Source: Blot, Hubert & Riffart (Revue de l'OFCE, 2016)

NB: with a large EA current account surplus, not surprising that UnConv-EUZ does not impinge on €/ \$ ER – neutral effect, at best, could be expected

Effects in the euro area (c'nd)

- Distributional effects of MP
 - Literature: inconclusive so far
 - Doepke & Schneider (JPE, 2006) report that higher inflation reduces income inequality in the US (debtors vs. savers)
 - Saiki & Frost (AE, 2014) report that unconventional MP increases income inequality in Japan (portfolio channel)
- Using a VAR on euro area data, IRF of a restrictive MP shock gives:



VAR [UR, hours, IP, new credits, CPI, IR, CISS, €/\$, Oil, 2-y inf, 5-y inf, shadow rate], sep 04 – jan 15

Source: Blot, Creel, Hubert, Labondance & Ragot, 2015, EP Monetary Dialogue

Fiscal policy

- It has been back!
- Many questions, still
 - On-going discussion about the value of fiscal multiplier over the cycle
 - Barnichon & Matthes (CEPR WP, 2016): multiplier larger in recessions only because *contractionary* multiplier larger during recessions
 - High deficits since GFC have produced large debts
 - Crowding-out or crowding-in?
 - Ricardian or non-Ricardian consumers?
 - Should fiscal austerity continue?
 - Should another set of fiscal rules be applied?

Dealing with austerity with iAGS model

- iAGS for independent Annual Growth Survey
- Reduced-form model
 - Multi-country model (currently 11 EZ members)
 - Interdependencies are captured by external (intra)trade and by common monetary policy
 - Prices are represented by a Phillips curve
 - A Taylor rule defines the stance of monetary policy
 - Non-linear (time-varying) fiscal multiplier: high in recessions, low in booms
 - Hysteresis effects

The costs of further consolidation

Baseline scenario: no risk premium, no fiscal impulse beyond 2017

	Public debt (in % of GDP)	Cumulative fiscal impulse	Average output gap
	2035	2015-2035	2016-2035
DEU	24	0.7	0.2
FRA	97	-1.1	0.0
EA	65	-0.3	0.0

Scenario 2: baseline except +/- 0.5 fiscal impulse depending on debt threshold

	Public debt (in % of GDP)	Cumulative fiscal impulse	Average output gap
	2035	2015-2035	2016-2035
DEU	59	3.1	0.4
FRA	60	-4.0	-0.5
EA	61	-0.5	-0.2

Scenario 3: scenario 2 with permanent risk premia

	Public debt (in % of GDP)	Cumulative fiscal impulse	Average output gap
	2035	2015-2035	2016-2035
DEU	60	3.5	0.6
FRA	60	-4.0	-0.4
EA	62	-1.4	-0.3

NB: remember the risks with QE. Here (with iAGS) delayed consolidation is better (lowest output gap)

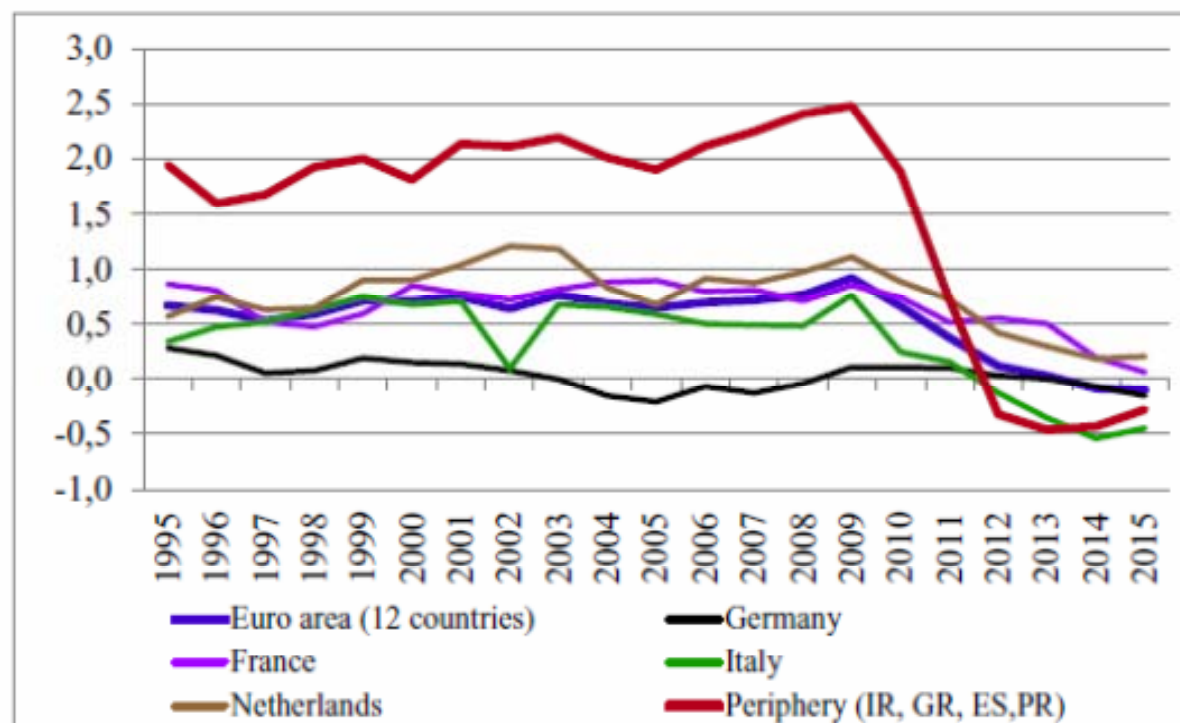
Source: iAGS 2016

A golden rule of public finance?

- Net public investment exempted from SGP rules and the Fiscal compact
- The pros:
 - economically sensible;
 - fiscal leeway;
 - end of sharp net investment decrease;
 - potentially positive for potential output
- The cons:
 - crowding-out;
 - incentivising tangible assets at the expense of intangible assets;
 - creative accounting bias;
 - debt increase

Net investment in the euro area

Figure 2: General government net fixed capital formation (ESA 2010) in the euro area, the European Periphery and selected countries in per cent of GDP, 1995-2015

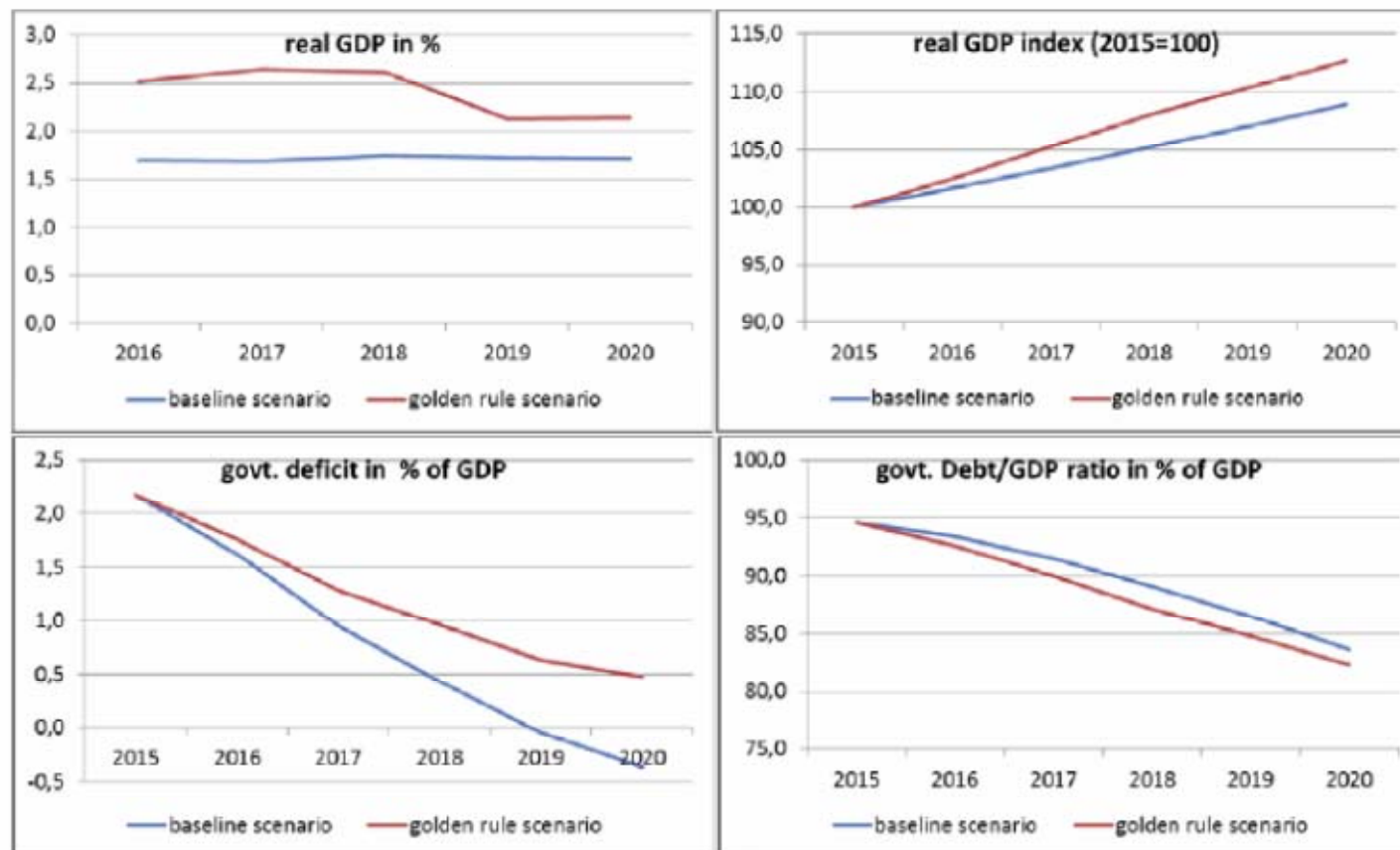


Sources: European Commission & Truger (IMK WP 2016)

Impact of a golden rule

- Truger (2016) argues that the golden rule would quite substantially improve the real economy

Figure 8: selected macroeconomic indicators for baseline and golden rule scenarios for the euro area- 12 average, 2015-2020.



Source: European Commission (2016a); author's calculations.

Impact of a golden rule (c'nd)

- In an augmented New Keynesian model, Creel, Hubert & Saraceno (JEDC 2013) show that the golden rule performs (significantly) better than the fiscal compact or the 3%-rule (status quo)

Table 8
Monte Carlo simulation.

	Output gap			Inflation		
	Status quo	Inv. rule	Fiscal compact	Status quo	Inv. rule	Fiscal compact
<i>mean</i>	-0.037	-0.035	-0.059	0.819	0.826	0.658
<i>s.d.</i>	0.040	0.039	0.052	0.256	0.253	0.349
<i>min</i>	-0.407	-0.399	-0.500	0.132	0.133	-0.278
<i>max</i>	0.000	0.000	0.000	1.246	1.246	1.246

Average over the 10,591 simulations of the discounted sum of output gap and inflation.

Conclusion

- No new MP required, but the pursuit of QE
- Change of fiscal rule (pro-investment) to:
 - benefit potential output
 - boost demand and prices under low inflation
 - increase public bond's supply under high demand (or finance new public investment with eurobonds?)
 - increase (future) interest rates under ZLB
- Possible?
 - Under close cooperation btw gvts & the ECB
 - The theoretical background exists: Leeper (1991)
 - The most challenging issue would be to target public inv. impacting potential output
 - Micro issue and political economy issue