

# COMMENTS on

## Income and wealth of Euro Area Households in Times of Ultra-Loose Monetary Policy

(Manuel Rupprecht)

Bernhard Winkler\*

European Central Bank

***Banca d'Italia conference on financial accounts  
30 Nov – 1 Dec 2017, Rome***

*\* Views should not be attributed to the ECB,  
input by Maarten Dosche and Jirka Slacalek is gratefully acknowledged.*

“Expropriation of savers”?

DIE WELT  
KOMPAKT

Der größte Albtraum  
der Sparer wird wahr



DER SPIEGEL

Nr. 8  
20.2.2016

Ohne Zins und Verstand

Warum die Deutschen ihr  
Geld falsch anlegen – und wie sie  
es vermehren könnten



Pejvida, AfD & Co.  
Was ist mit  
den Sachsen los?

Von der Uno-Sanktion  
Kofi Annan fördert:  
Legalisiert die Drogen?

Kinder  
Weshalb zu viel Erziehung  
unglücklich macht

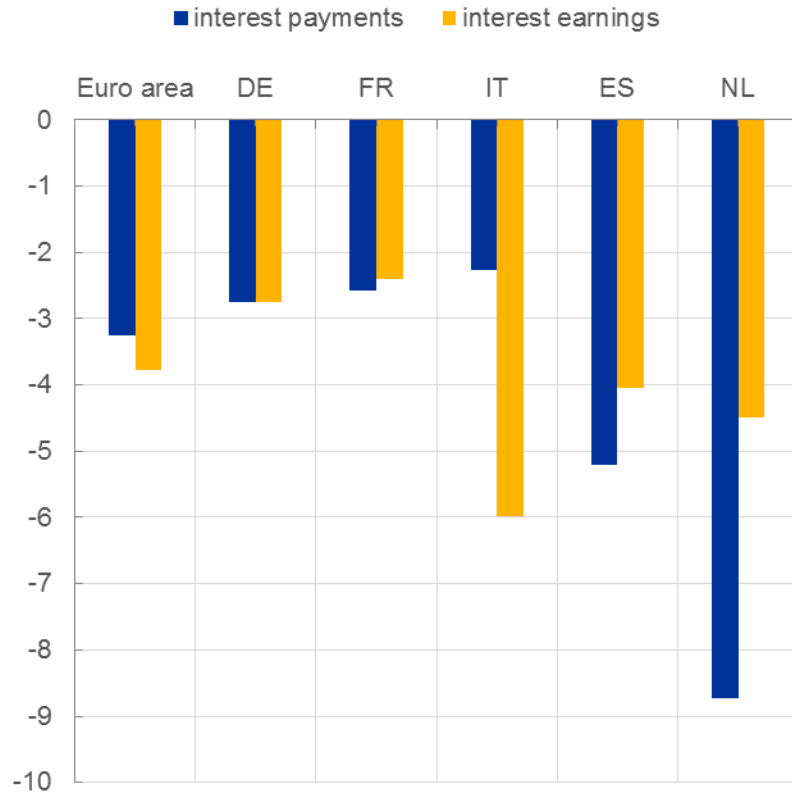
# MR: German “Angst” meets stylized facts

- **Effects of “ultra-loose” monetary policy on HH sector**
  - Using national account and financial account data: stocks and flows
  - Limited impact on HH net interest receipts (greater for IT than DE)
  - Little evidence for HH portfolio adjustments (notional stocks)
- **Suggests ECB less of a “villain”, but also less of a “hero” ?**
  - No major “negative side effects” (income, risk-taking)
  - Limited transmission via rates and portfolio rebalancing
  - Implications for macro-modelling (intertemporal substitution vs. income vs. wealth channels) ?

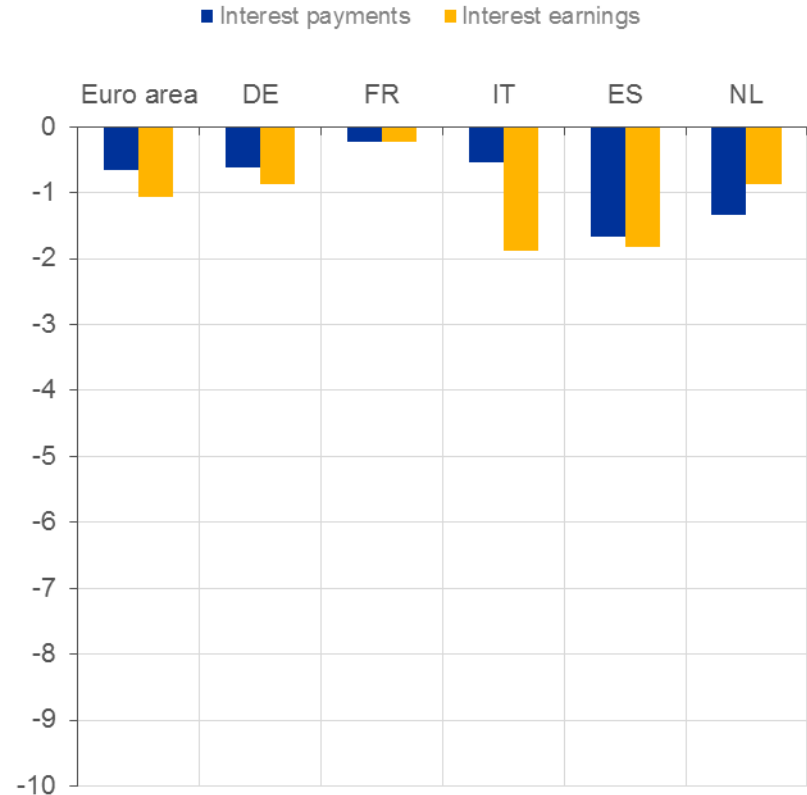
# Role of other assets & sectors & inequality

- **MR may overstate (adverse) impact**
  - HH may benefit from rising non-financial assets (housing)
  - HH may benefit from lower rates as taxpayers and company owners
  - HH may be hurt as holders of insurance and pension claims
  - ... with main income effect via employment and wages
- **MR may understate (beneficial) effects**
  - Different MPCs for savers and debtors (rich and poor) ?
  - “inconvenient truth”: monetary policy always has distributive impact
  - ... but broadly neutral over the cycle
  - Implications for macro-modelling: HANK vs. neo-Wicksellian NKM

## Households' interest flows 2008Q3 - 2017Q2 (percentage points of gross disposable income)



## Households' interest flows 2014Q2 - 2017Q2 (percentage points of gross disposable income)



Sources: Eurostat and ECB.

Note: Changes in household interest payments/earnings are computed as the difference between 2008Q3 and 2017Q2, relative to gross disposable income. Interest payments/earnings are after allocation of FISIM (financial intermediation services indirectly measured). All calculations are based on 4-quarter moving sums.

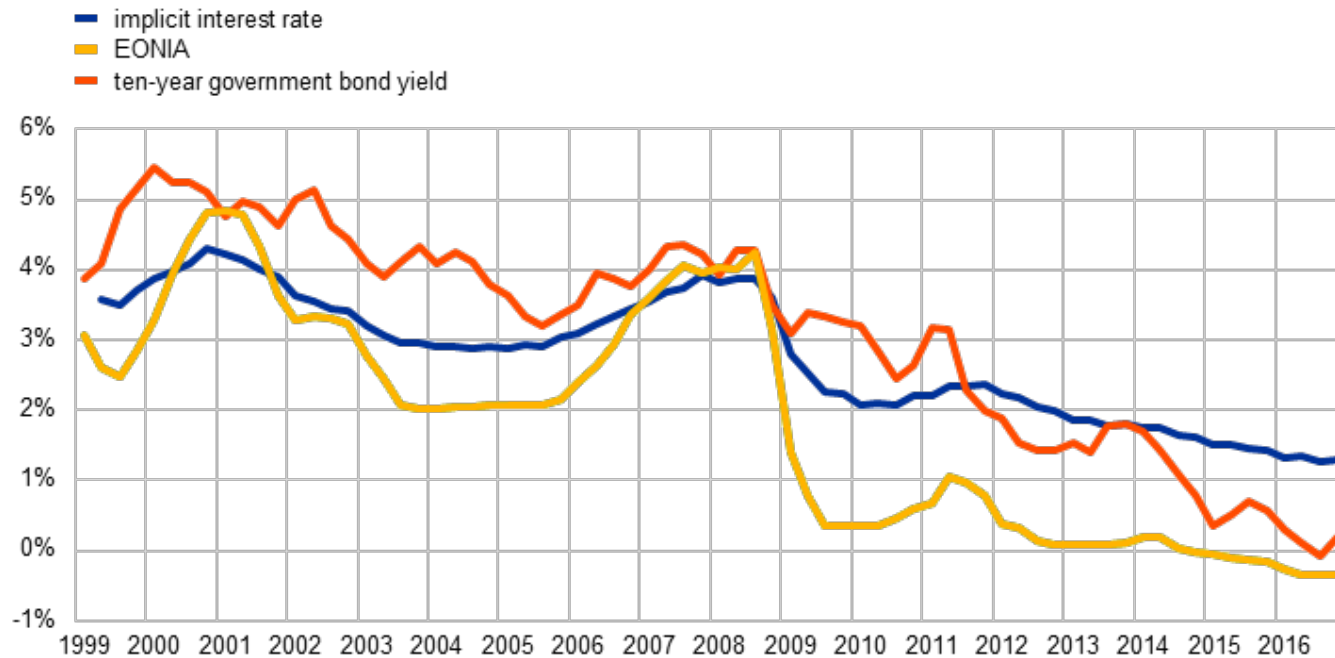
Latest observation: 2017Q2.

Sources: Eurostat and ECB.

Note: Changes in household interest payments/earnings are computed as the difference between 2014Q2 and 2017Q2, relative to gross disposable income. 2014Q3 was the first quarter where Eonia became negative. Interest payments/earnings are after allocation of FISIM (financial intermediation services indirectly measured). All calculations are based on 4-quarter moving sums.

Latest observation: 2017Q2.

## EONIA, long-term government bond yield and an estimate of the implicit interest rate for the total economy (ECB Economic Bulletin, Issue 5 / 2017, August) (percentages per annum)

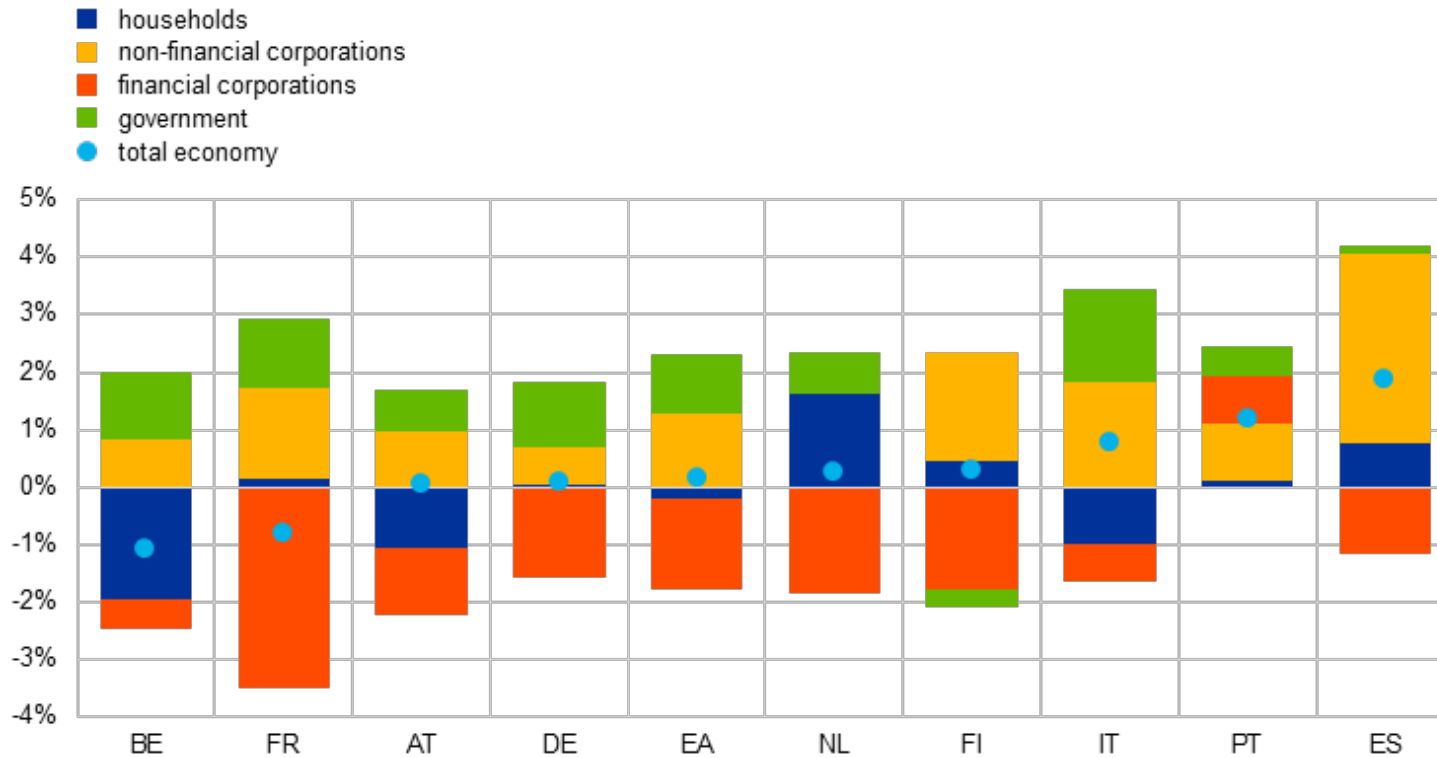


Sources: Thomson Reuters, ECB and ECB calculations.

Notes: The latest observations are for the fourth quarter of 2016. The implicit interest rate shown is on the euro area total economy's assets. The implicit interest rate on the euro area total economy's liabilities coincides with the one on its assets. The ten-year government bond yield refers to the synthetic euro area rate from Thomson Reuters.

## Impact of lower interest rates on net interest income

(percentages of GDP; Q3 2008 to Q4 2016)

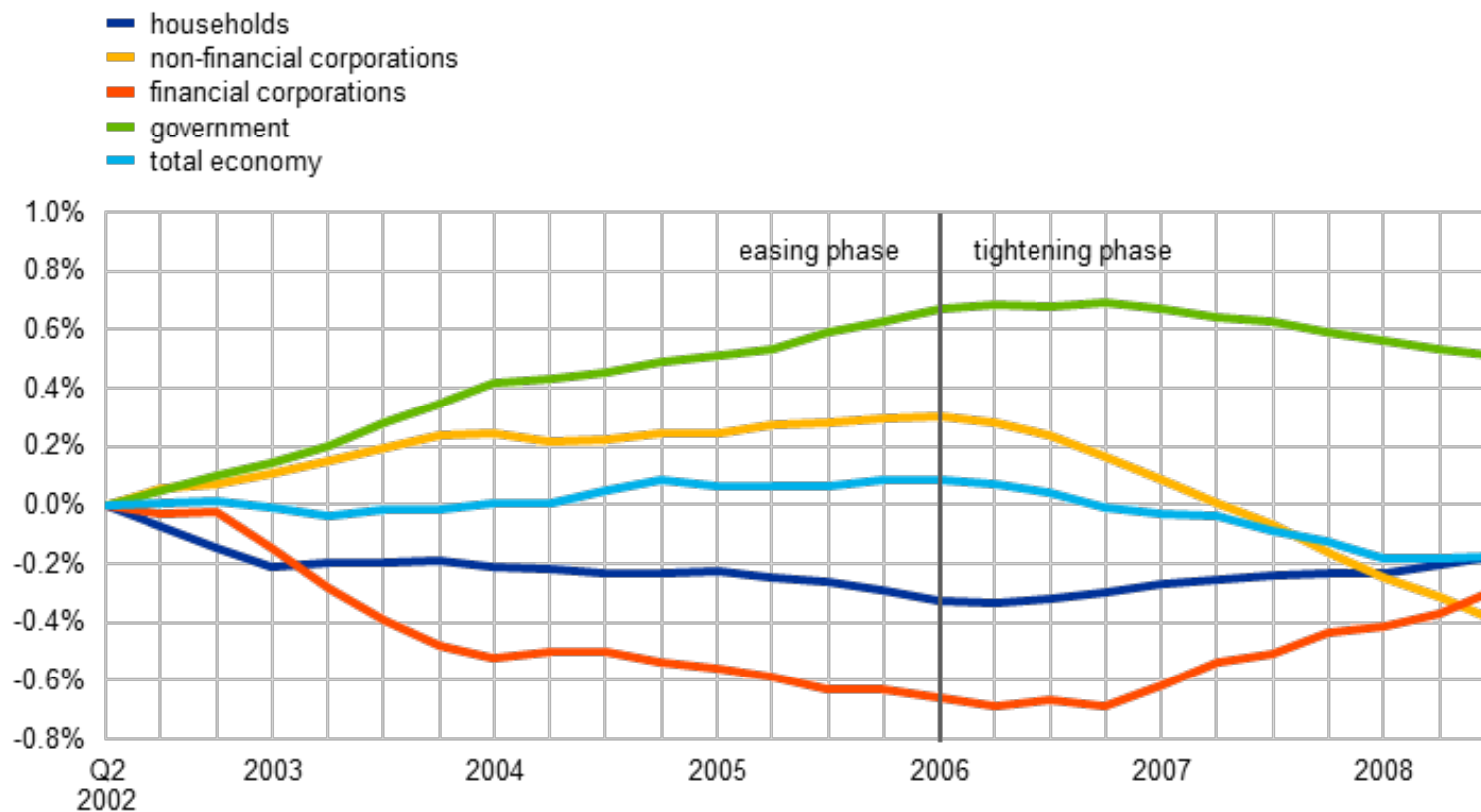


Sources: Eurostat and ECB calculations.

Notes: Countries selected on the basis of availability of quarterly sectoral accounts. The total economy refers to the changes in net interest income with respect to the rest of the world. Owing to different levels of aggregation, the sum of the sectoral changes in net interest income does not add up exactly to the change in net interest income with respect to the rest of the world. Calculations based on four-quarter moving averages.

## Cumulative interest income changes over the business cycle – 2002-2008

(percentages of GDP)

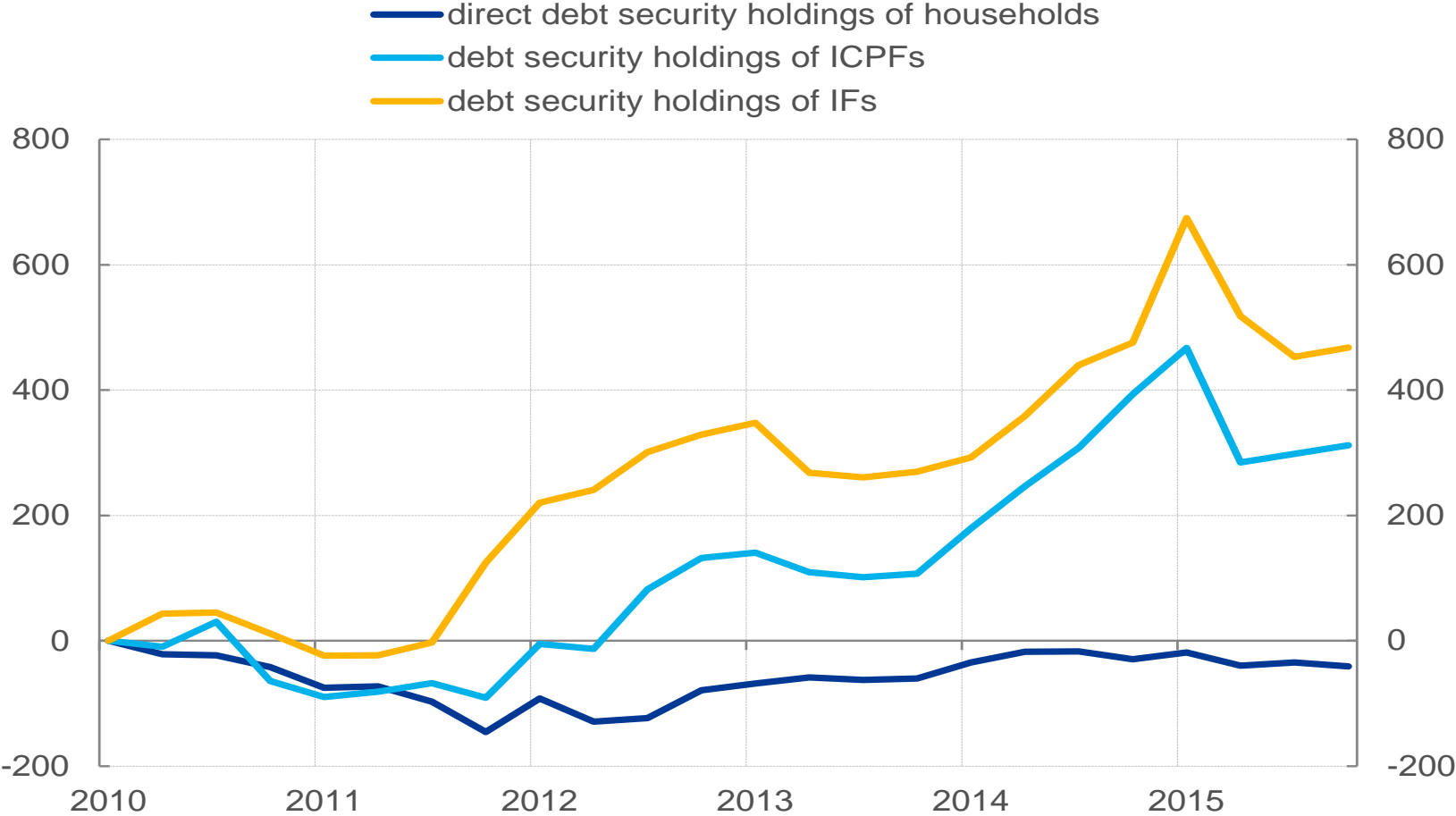


Sources: Eurostat and ECB calculations.

Notes: Cumulative change in the price effect derived from lower interest rates from the second quarter of 2002 to the third quarter of 2008 based on four-quarter moving averages. The total economy refers to the changes in net interest income with respect to the rest of the world. The vertical line separates the easing phase from the tightening phase.



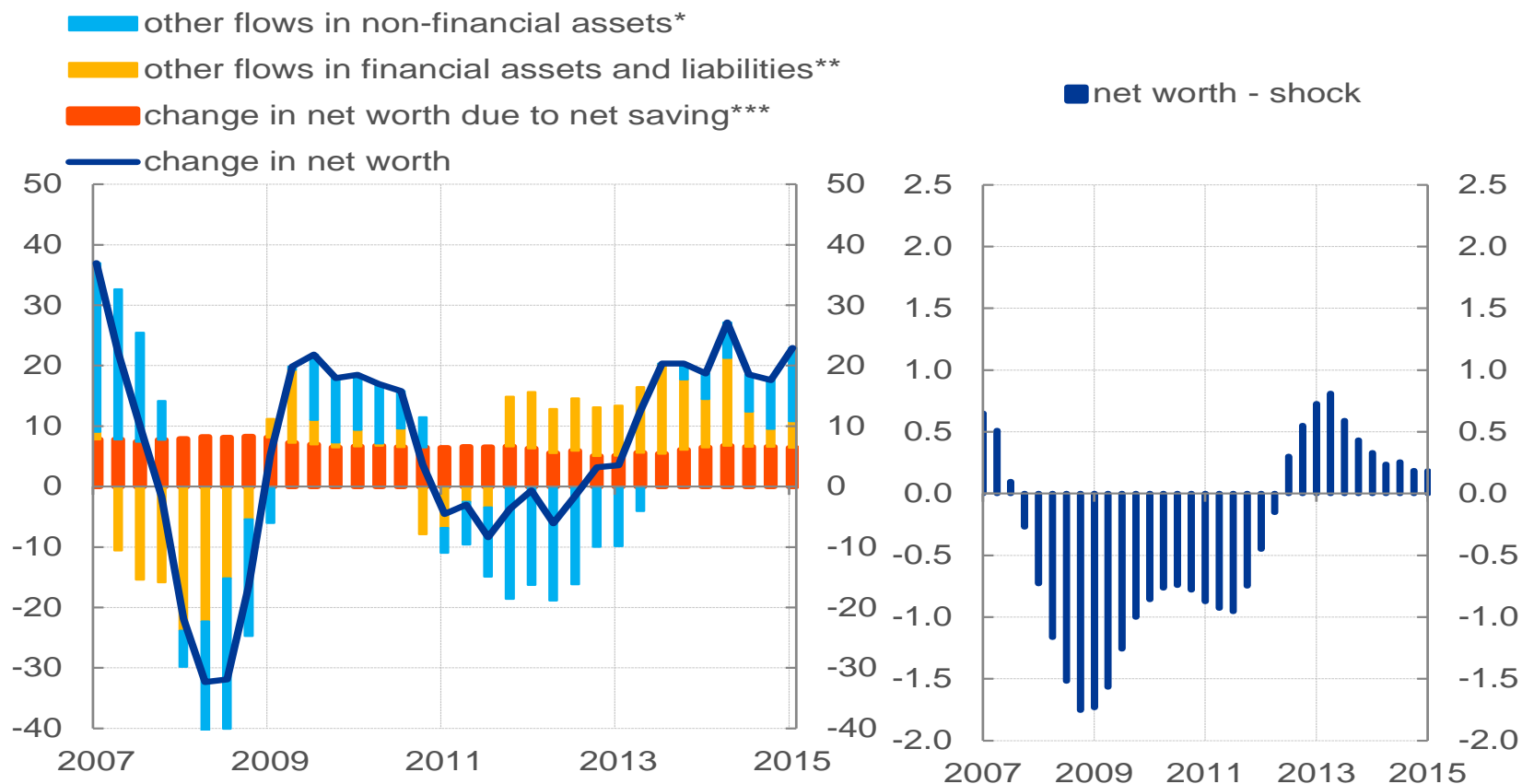
# Valuation gains in debt security holdings of selected institutional sectors in the euro area



Sources: Eurostat, ECB. Latest observation: 2015 Q4.

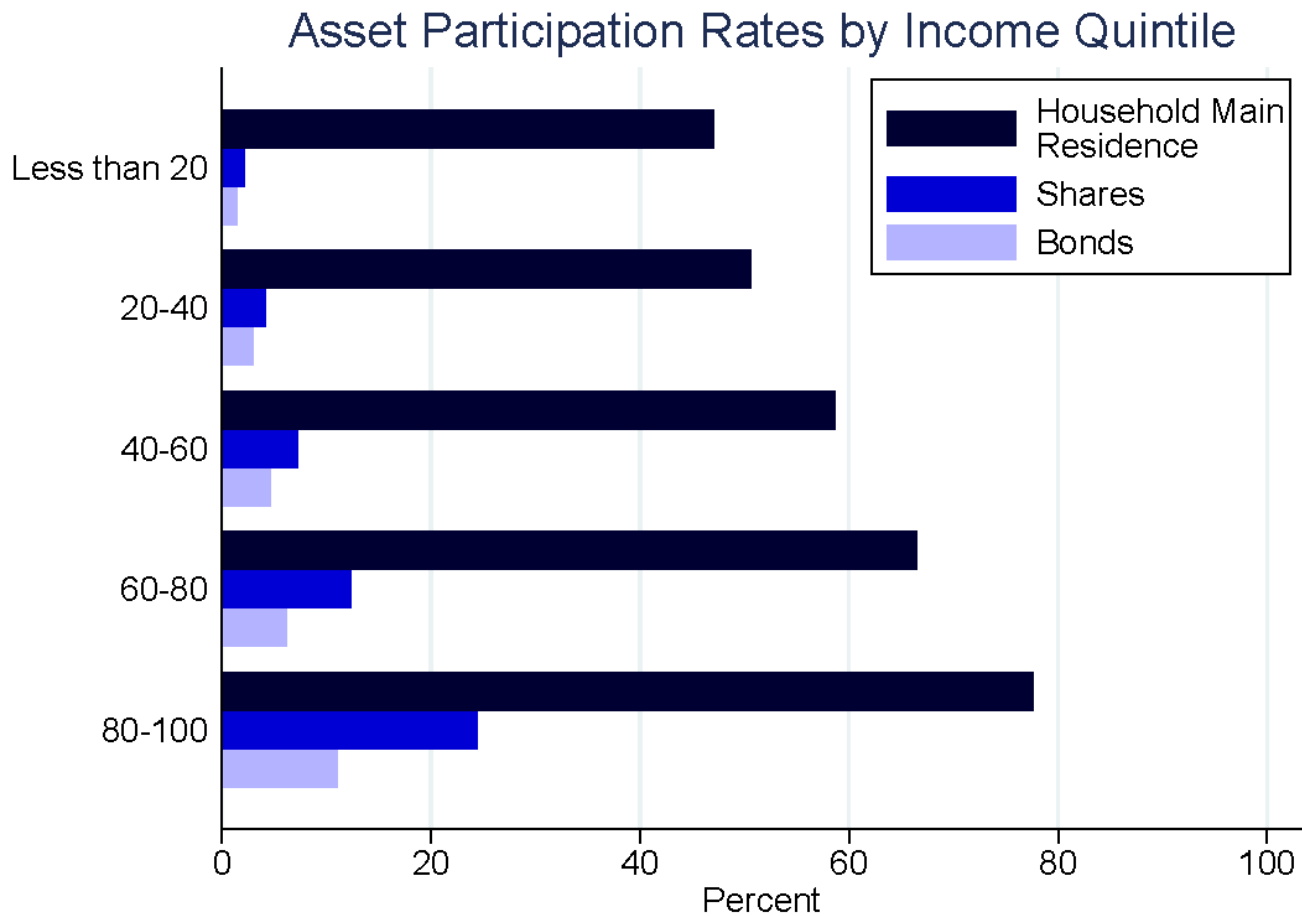
# Household net worth and contribution to private consumption

(lhs: as percent of gross disposable income, annual flows; rhs: percentage point contributions)



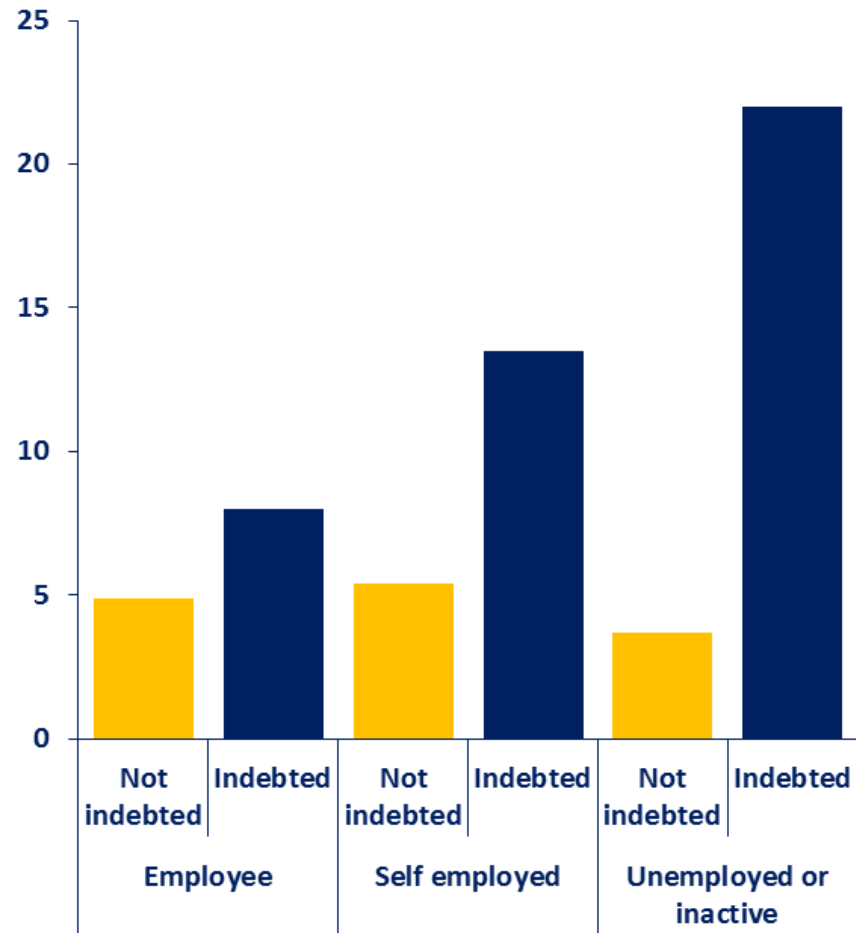
Sources: Eurostat, ECB, ECB estimates. Notes: Based on a VAR relating private consumption to household gross disposable income, term spread and household net worth with shocks identified with a Choleski decomposition. \* Mainly holding gains and losses on real estate (including land). \*\* Mainly holding gains and losses on shares and other equity. \*\*\* This item comprises net saving, net capital transfers received and the discrepancy between the non-financial and the financial accounts. Latest observation: 2015 Q4.

## HFCS evidence on household main asset holdings (euro area)



## Differences in propensities to consume (for Spain)

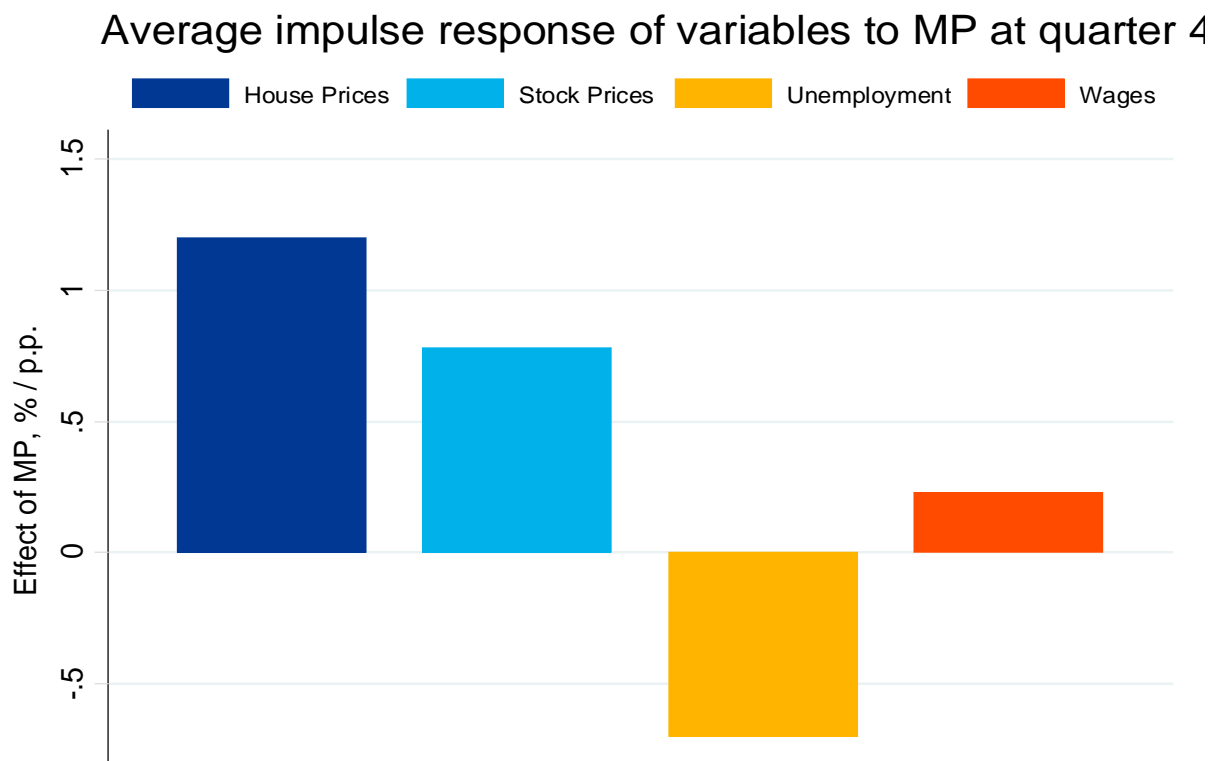
*(differences from baseline, percentage points)*



Source: Casado J.-M. and M. Folch (2016), *The role of leverage for consumption: Evidence from Spanish panel data (HFCS)*, Banco de España, mimeo.

# Macroeconomic effects of APP

- Estimate VAR impulse responses to nonstandard monetary policy identified à la Baumeister and Benati (2013) & Altavilla et al. (2016)
- IRFs rescaled to initial EA drop in term-spread of 34 bps – to match impact of December 2016 APP announcement on 10-year bond rates

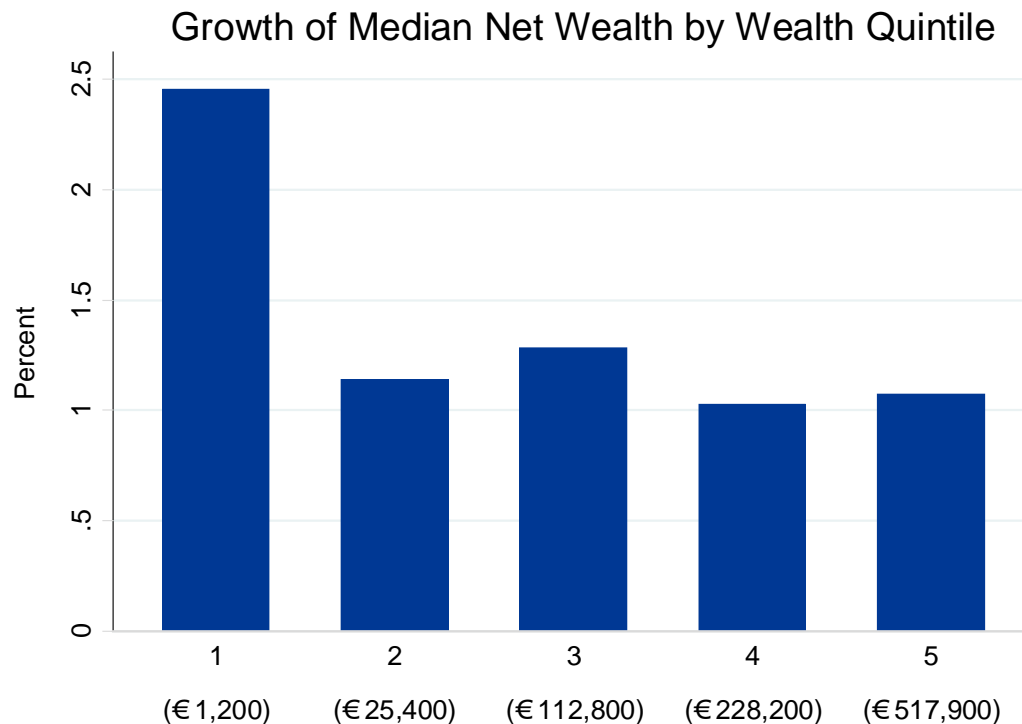


Source: ECB calculations based on Lenza and Slacalek (2017). See Vitor Constancio, “Inequality and macroeconomic policies”, Lisbon 22/8/2017

Note: The chart shows estimated VAR impulse responses 4 quarters after the impact of the Asset Purchase Programme (APP) shock. The bars show average responses across the 4 big euro area countries (DE, ES, FR, IT). Responses are shown in percent for house prices, stock prices and wages; in percentage points for unemployment.

# Effects of APP on wealth inequality very small

- Extrapolate impulse responses to household wealth components – housing, stock prices – in the HFCS data
- Wealth goes up by around 1% across the distribution
- Gini coefficient ticks down from 68.09 to 68.07



Source: ECB calculations based on Lenza and Slacalek (2017), Eurosystem Household Finance and Consumption Survey.

Note: The numbers in brackets show initial net wealth levels. Euro area aggregates are calculated as the total for the four large countries: Germany, Spain, France and Italy.

# Summary and conclusions

- **Very reasonable paper: factual & (unduly) modest**
  - Limited relevance of net interest in HH disposable income ... but role of indirect holdings (ICPF, IF)?
  - Little “active” HH portfolio rebalancing ... but “passive” via valuations?
  - Role of distribution impact across sectors and households?
- **Implications for monetary policy and macro-modelling**
  - Heterogenous sectors & agents (HANK), Adam et al, Schneider & Doepke, ... matching FA with micro data
  - Rates vs. quantities: re-visiting Tobin & Brunner/Meltzer (money, wealth & asset prices, portfolio balance model)
  - Stock and flow effects: balance sheets matter (cycle vs secular crisis)

# Quantitative Easing



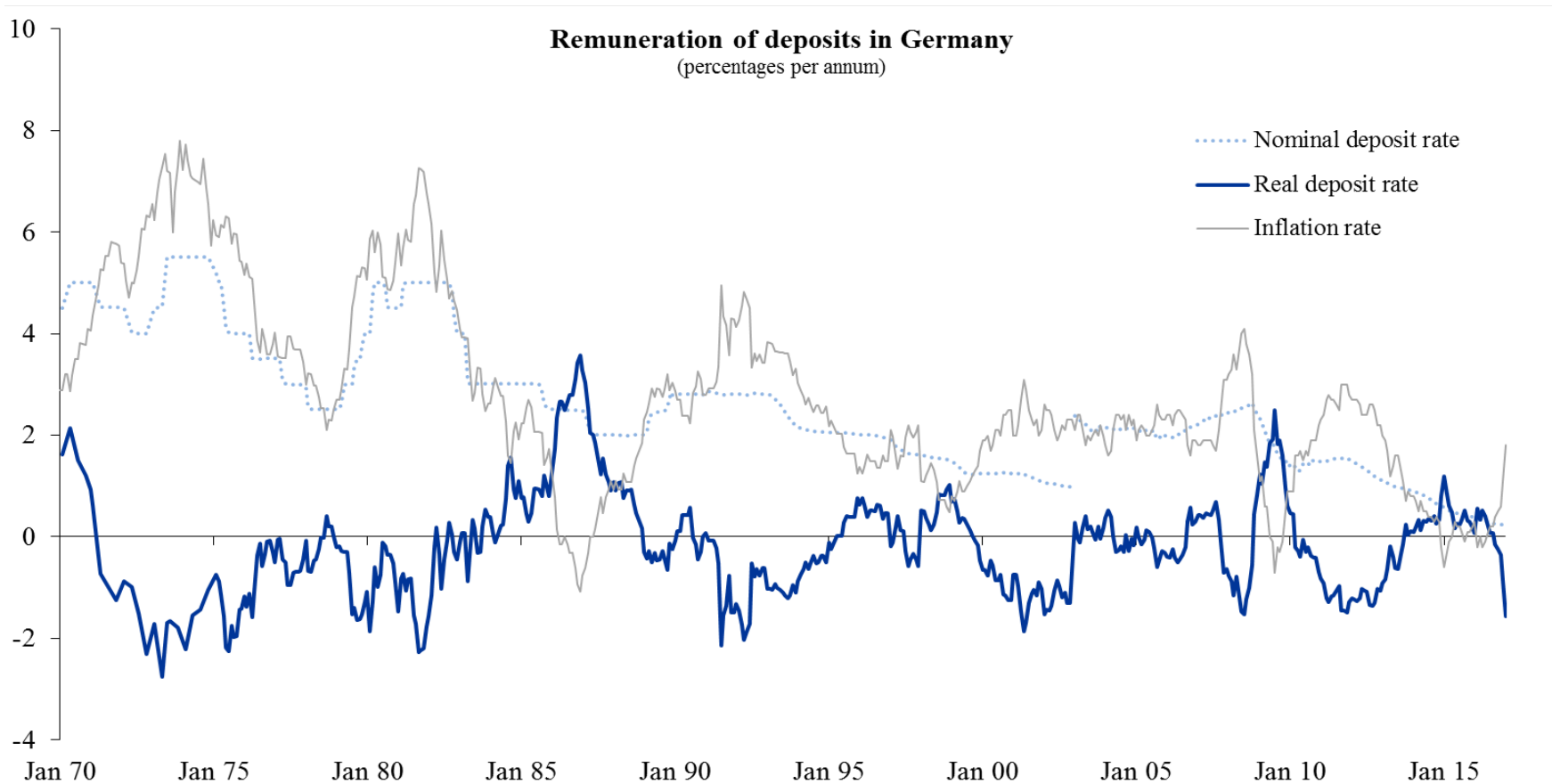


# Related work

- October 2011 ECB Monthly Bulletin article on flow-of-funds perspective on the financial crisis
- February 2012 MB Box 3 & April 2012 and 2013 ECB Financial Integration Reports: Special Features on sectoral balances
- ECB Working Paper No. 1402 (2011) by Riccardo Bonci on transmission of monetary policy via FoF
- Chapter 7 on cross-checking and the flow-of-funds, in Papademos and Stark (eds.): Enhancing Monetary Analysis, ECB October 2010
- “Flow-of-funds perspective on unconventional monetary policy”, The Journal for Money and Banking, Vol. 63, No. 11, Nov. 2014, B. Winkler
- Cour-Thimann and Winkler, “Central banks as balance sheets of last resort: ECB’s monetary policy in a flow of funds perspective” (2016) in David Cobham (ed.): Monetary Analysis at Central Banks.
- ECB Working Paper No. 1528 (April 2013) by Cour-Thimann and Winkler, “The ECB’s non-standard monetary policy measures: the role of institutional factors and financial structure” (cf. OxREP 2012)
- Giron and Rodriguez-Vives (2017), “Leverage interactions: a national accounts approach”, ECB Statistical Working Paper Series, No. 19

# Background slides

# “Expropriating savers”? Real vs nominal returns



Sources: Deutsche Bundesbank and ECB staff calculations.

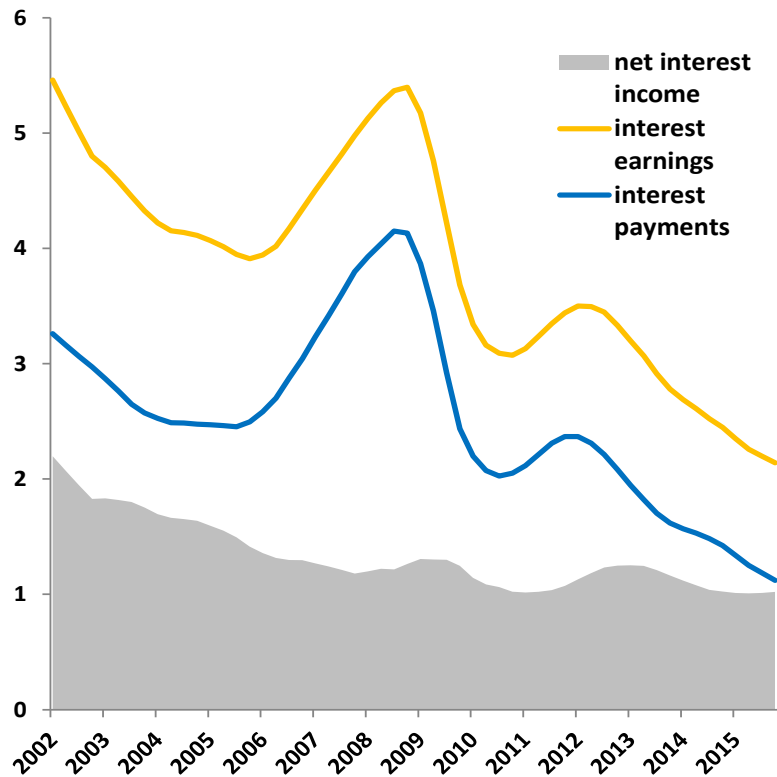
Notes: Deposit rates of banks for savings deposits with minimum rates of return, with agreed notice of 3 months (average interest rate) up to 2003, thereafter effective interest rates of German banks (new business) on households' deposits redeemable at notice of up to 3 months. Deflated with CPI inflation for Germany until January 1999, thereafter euro area (changing composition) overall HICP.

See also: **Bindseil et al, Critique of Accommodating Central Bank Policies and the 'Expropriation of the Saver', ECB Occasional Paper 161** [www.ecb.europa.eu/pub/pdf/scpops/ecbop161.en.pdf](http://www.ecb.europa.eu/pub/pdf/scpops/ecbop161.en.pdf)

[www.ecb.europa.eu](http://www.ecb.europa.eu) ©

# Disincentives for saving?

## Interest payment/earnings of euro area households (% of gross disposable income)

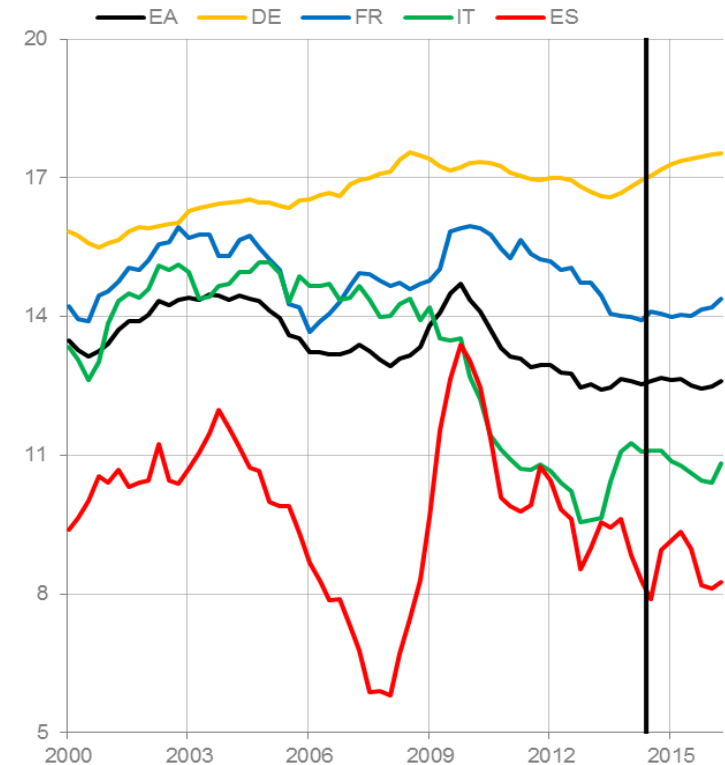


Sources: Eurostat and ECB calculations.

Note: The change has been computed for the period 2008Q3-2015Q4. Interest payments/earnings after FISIM allocation (Financial Intermediation Services Indirectly Measured).

Latest observation: 2015Q4.

## Savings rates (% of disposable income)



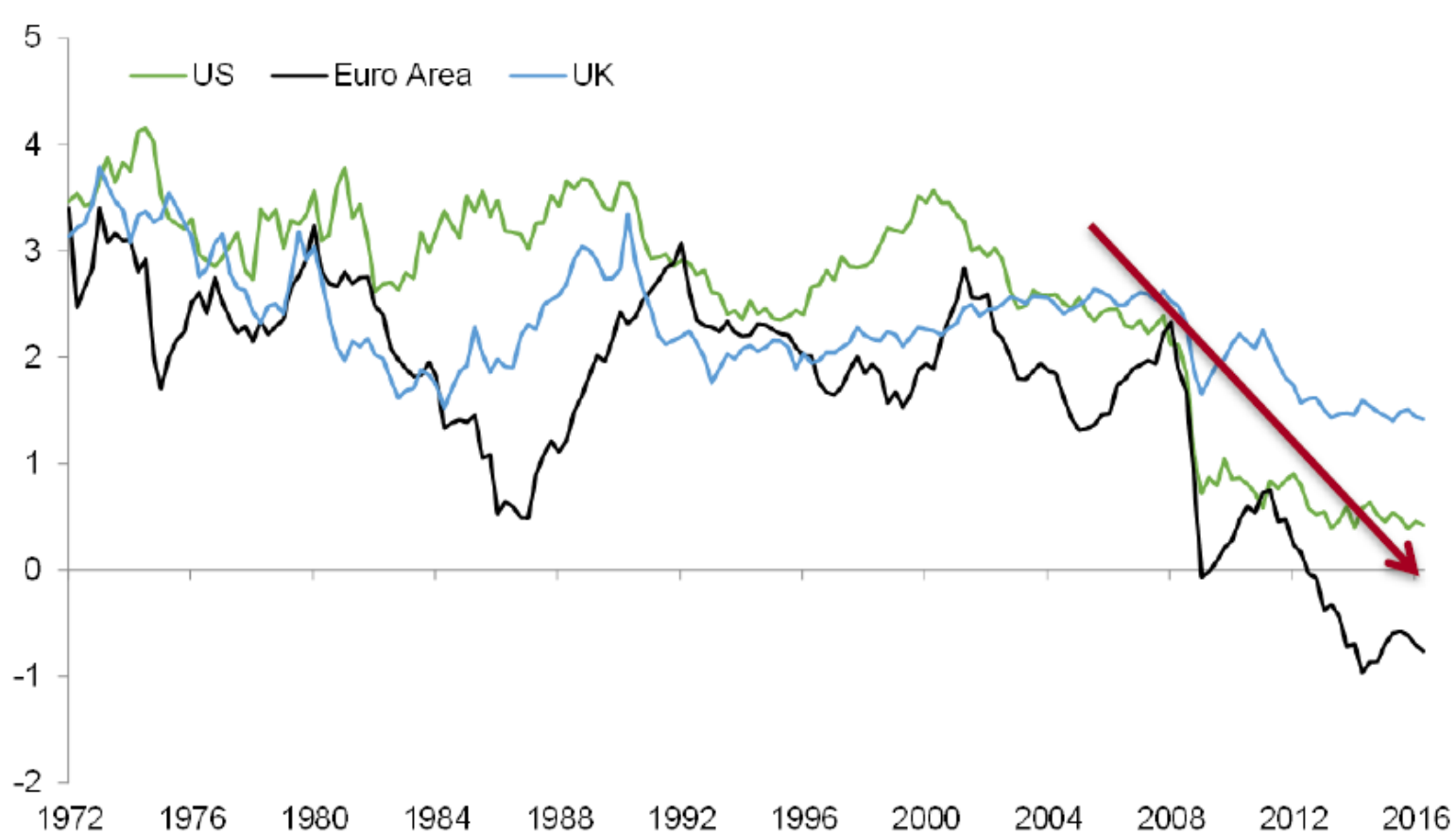
Sources: Eurostat and ECB.

Note: Calculations are based on 4-quarter moving sums. 2014Q3 was the first quarter where Eonia became negative, after the rate on the ECB deposit facility was lowered to -10 bps and -20 bps in June and September 2014, respectively.

Latest observation: 2016Q2.

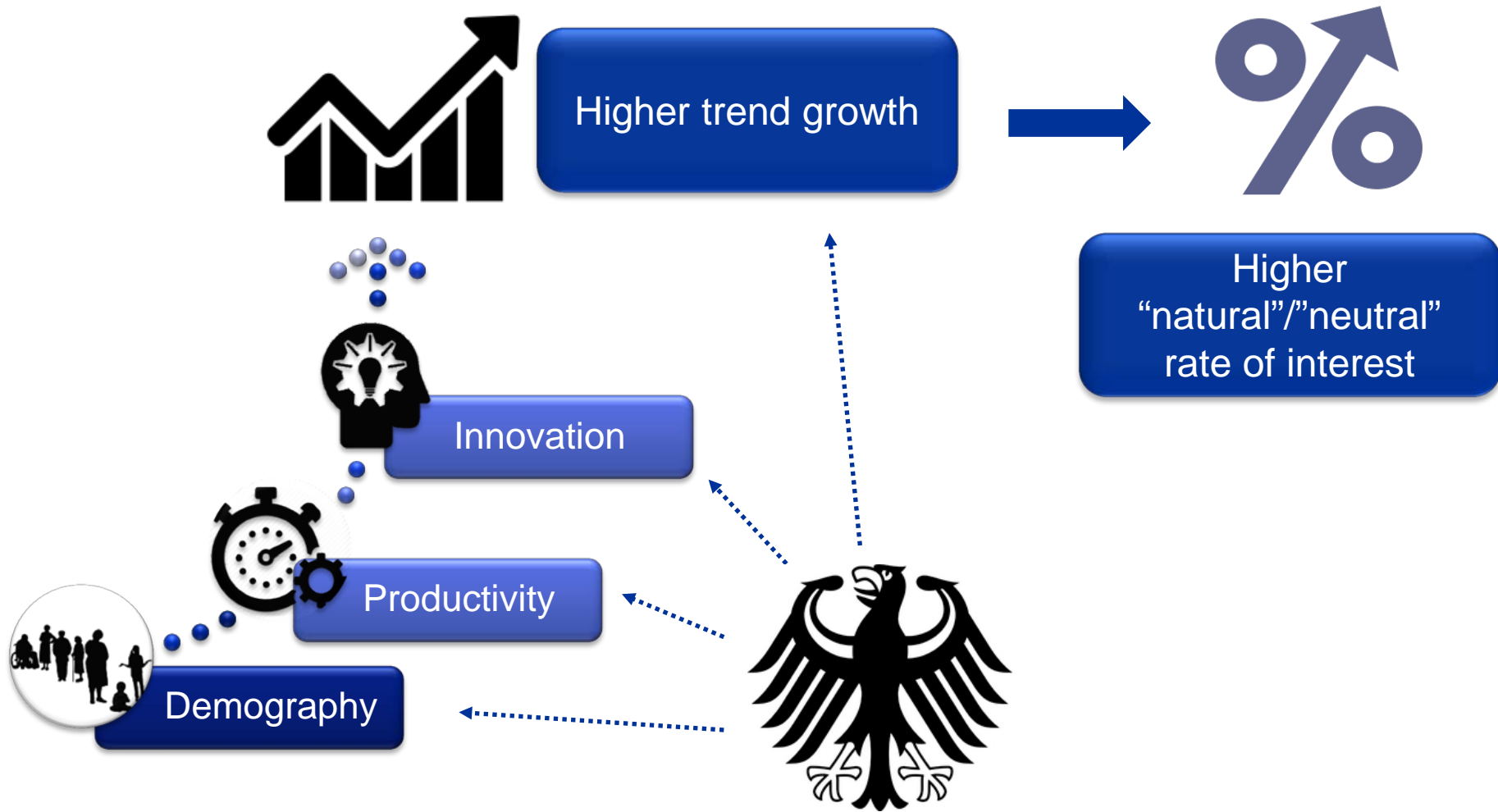
... global phenomenon of decreasing “natural” rates

## Equilibrium real interest rate *yield p.a.*



Note: Estimates from “Measuring the Natural Rate of Interest: International Trends and Determinants” Holston, Laubach and Williams, August 2016.

# Structural factors determine “natural” rate



Siehe: U. Bindseil et al.: [“Critique of accommodating central bank policies and the ‘expropriation of the saver’: A review”](#); ECB Occasional Paper No. 161, Mai 2015

## Redistributive effects (I) – micro effects

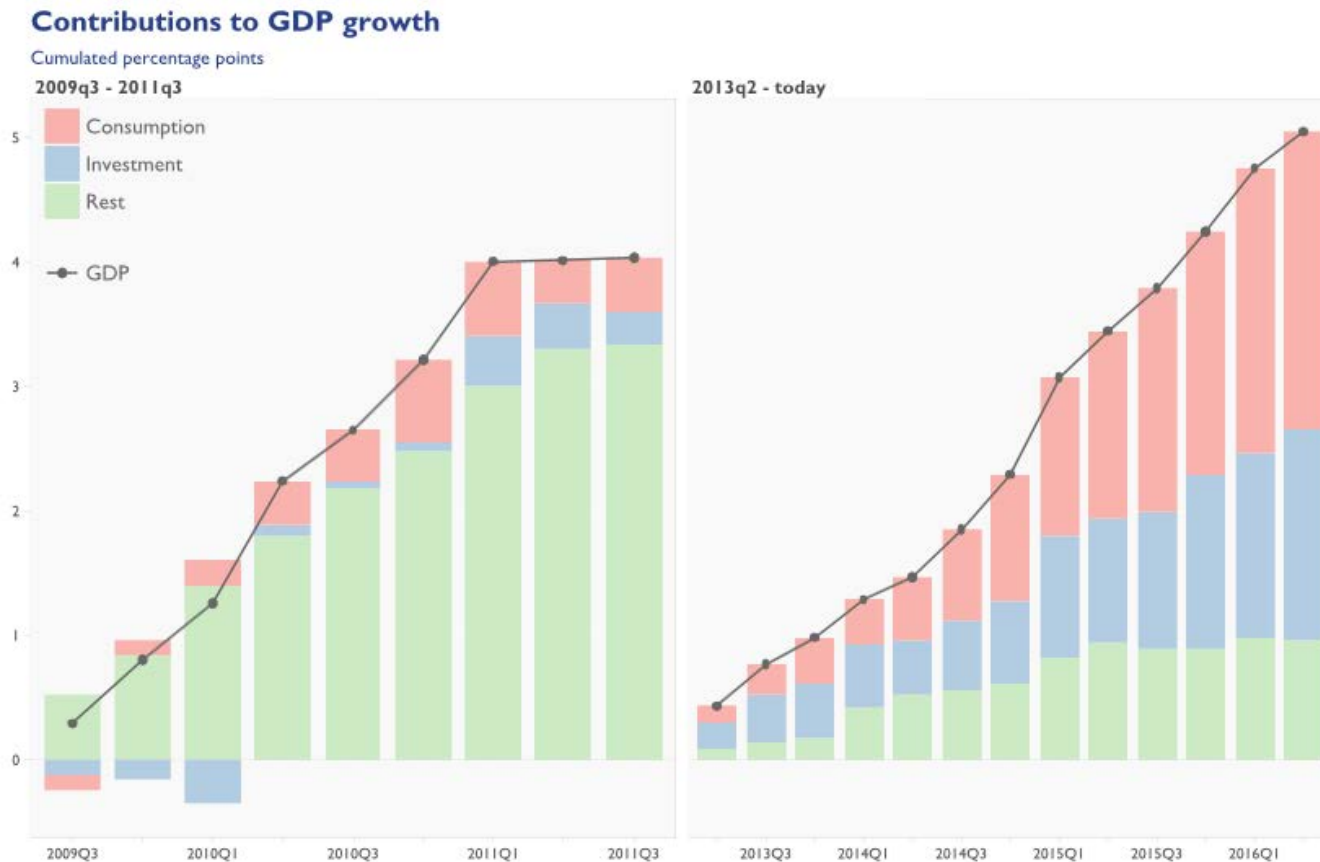
- Beneficial effects on owners of equity/bonds – who tend to be richer
- Negative effects of low rates on savers – mainly hits the wealthy
- Significant effects on **house prices** – spreads positive effects across population, especially in countries with high rates of home ownership;
- Better **access to finance** – reversing negative effects of previous financial fragmentation; more consumption (brought forward)



See: M. Draghi, “Stability, equity and monetary policy” 2nd DIW Europe Lecture, German Institute for Economic Research (DIW), Berlin, 25 October 2016

# Redistributive effects (II) – Macro perspective

- More **balanced** recovery; more **investment**, more **consumption**
- Higher **employment**: having a job ➡ biggest impact on reducing inequality



Source: Eurostat and ECB

Note: "Rest" component comprises net exports, government consumption and changes in inventories