

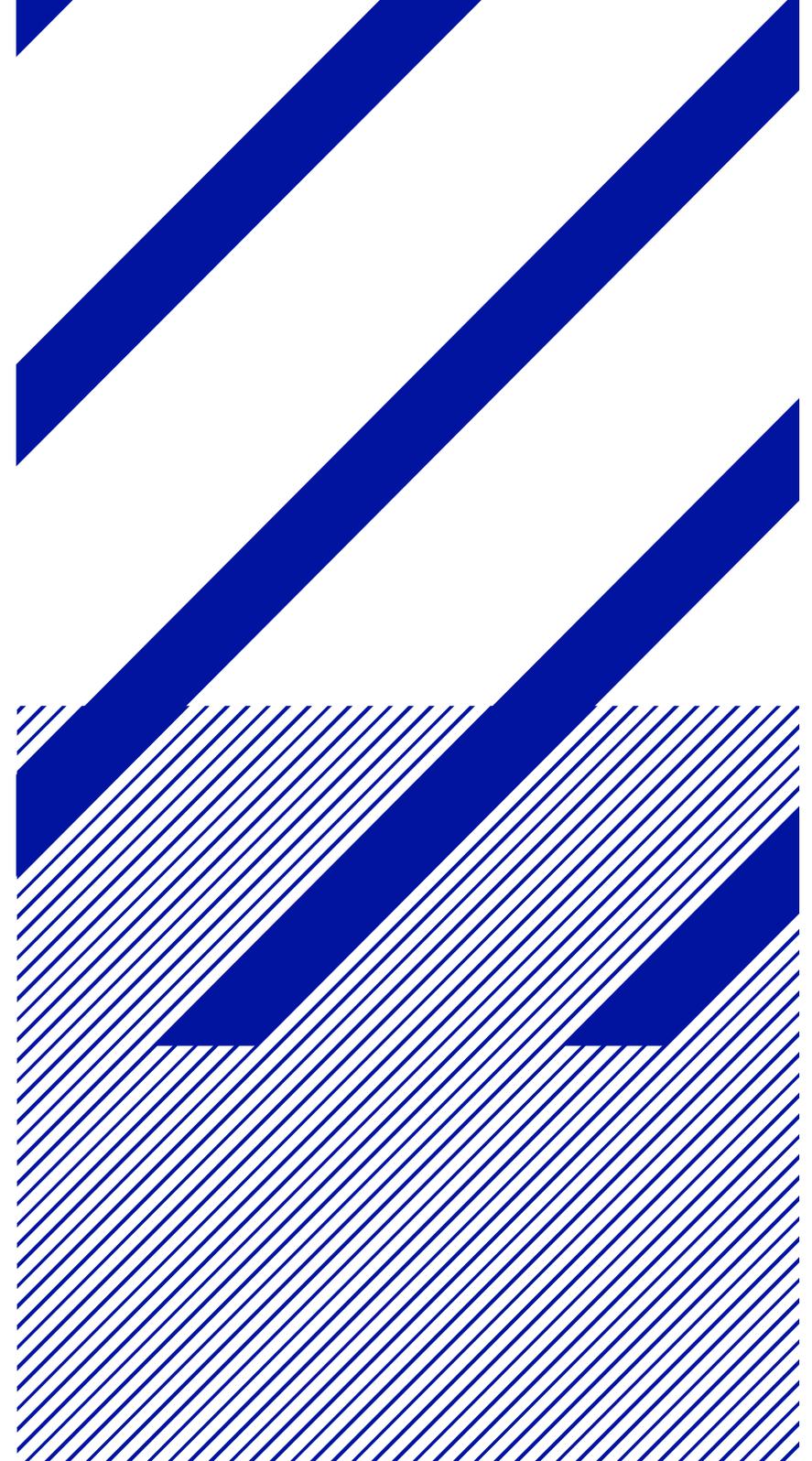
Income and Wealth of Euro Area Households in Times of Ultra- Loose Monetary Policy

Stylised Facts from National and Financial Accounts Data

Banca d'Italia Conference: How Financial Systems
Work: Evidence from Financial Accounts

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Introduction: Discussion on potential side-effects of monetary policy

Two Questions Regarding Income and Wealth of Euro Area Households

Question 1: How did interest income of households develop in times of ultra-loose monetary policy? Potential determinants?

Question 2: Did households change their financial portfolio structure? If so, how?

Conclusion

Motivation & Introduction

Potential side-effects of monetary policy

Savers to suffer most after latest ECB interest rate cut
The Independent, 2015

Mario battles the Wutsparrer
The Economist, 2016

ECB to kill savers with negative rates
The daily economist, 2014

ECB easing hurts German savers
Business times, 2017

Low ECB rates anger savers
Handelsblatt, 2015

ECB expropriate savers
Bloomberg, 2015

Motivation & Introduction

Worries regarding ultra-loose monetary policy

Low, zero or negative interest rates are supposed to...

- (1) ... discourage households from saving** **⇒ mixed evidence**

Attanasio / Weber (1995), Gräf / Rakau (2013) etc. → **positive** correlation

Aron et al. (2012), Geiger et al. (2016) etc. → **negative** correlation

Cohn / Kolluri (2003) etc. → no correlation

Aizenman et al. (2016): Rates below thresholds special? → It depends

} Weak correlation
- (2) ... lower their income from financial assets** **⇒ limited evidence**

Dobbs et al. (2013), Holzhausen / Sikova (2014), Rösl / Tödter (2016) etc.

→ Interest income losses based on hypothetically higher rates
- (3) ... incentivise investments in riskier assets** **⇒ very limited evidence**

Beer et al. (2016), Marek (2017) → HFCS data suggests that low interest rates induced higher risk-taking

Motivation & Introduction

Purpose, datasets and results

Purpose of the paper

Contributes to discussion by providing stylised facts of households' income & wealth

- (1) How did interest income of households develop in times of ultra-loose monetary policy? Potential determinants?
- (2) Did households change their financial portfolio structure? If so, how?

Approach and datasets

Exploit recent extensions of consistent national and financial accounts data

Key results

- (1) Net interest income generally changed with monetary policy stance
→ Extent and shape varies significantly across countries!
- (2) Portfolio developments less diverse
→ From a macro perspective, no increase of risk-taking!

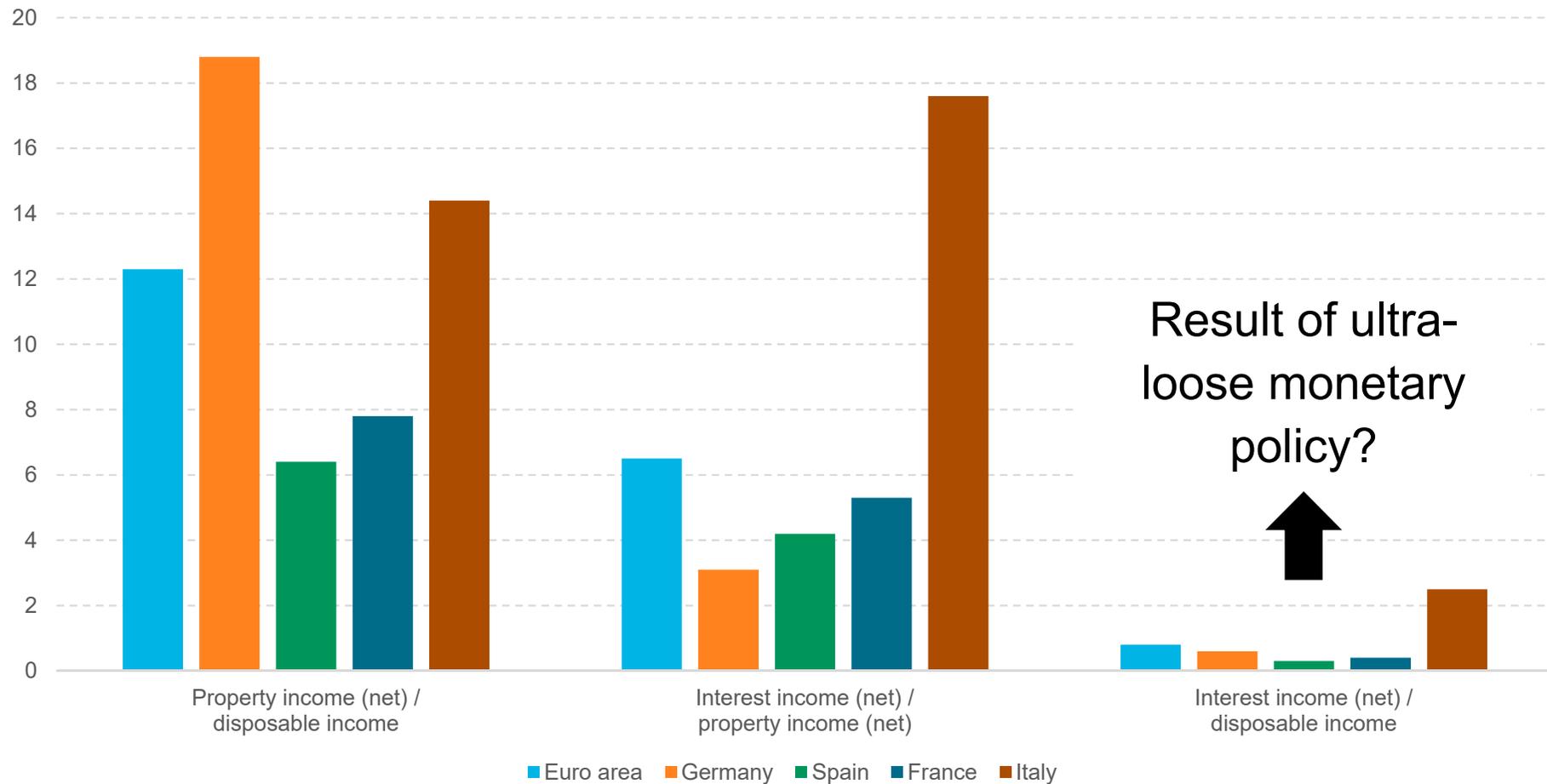
Question 1

How did interest income of households develop in times of ultra-loose monetary policy? Potential determinants?

Question 1: Interest Income of Households

Relevance of interest income

Importance of property income for euro area households as of 2016, in %

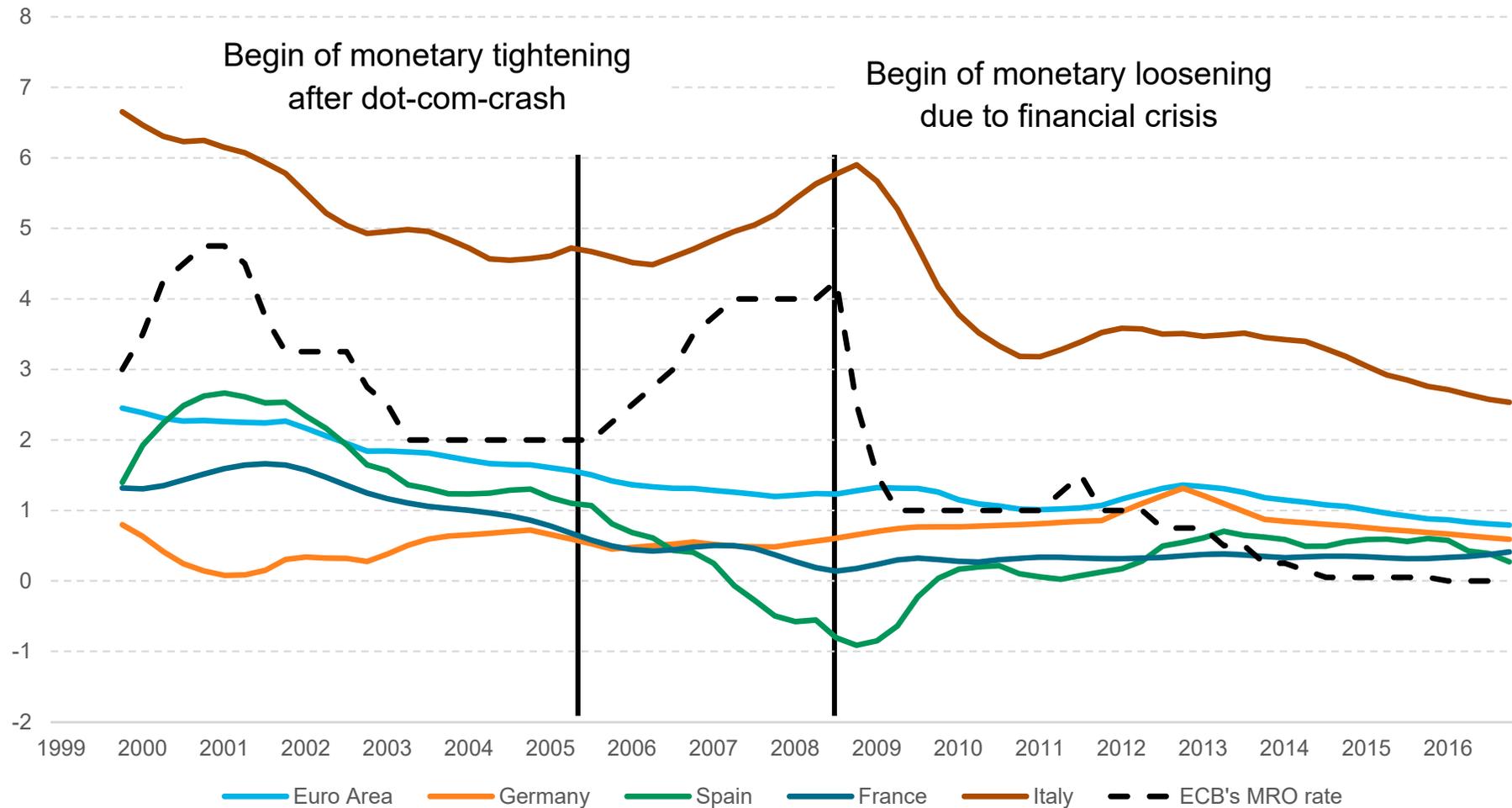


Source: Eurostat and own calculations.

Question 1: Interest Income of Households

Interest income over time

Share of interest income in household disposable income



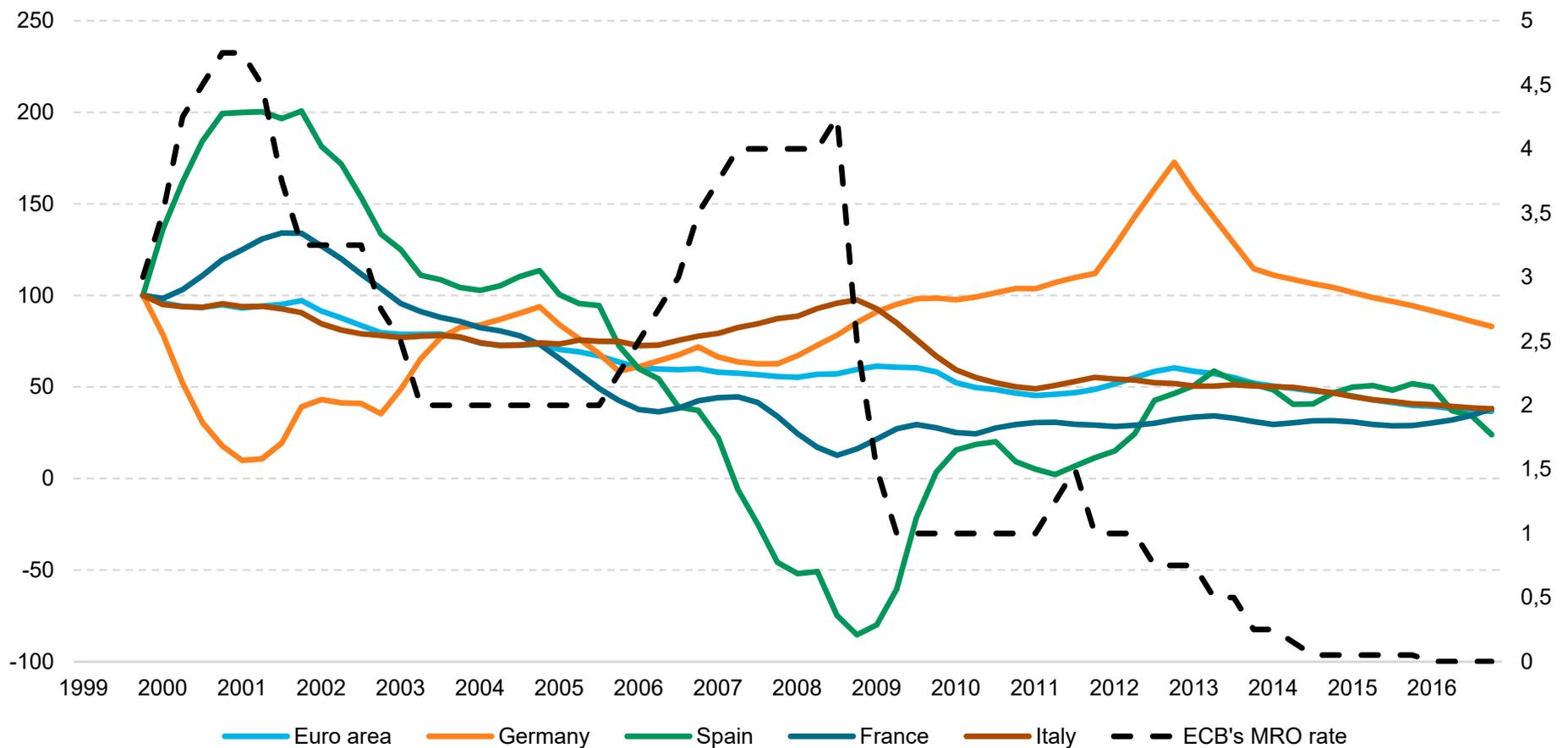
Source: Eurostat, ECB as well as own calculations.

Question 1: Interest Income of Households

Interest income over time

Household real net interest income (lhs) and ECB MRO rate (rhs)

Real net interest income standardised (1999 = 100)



Source: Eurostat, ECB as well as own calculations.

Question 1: Interest Income of Households

Potential determinants

If it's not mainly monetary policy – what is?

Three potential determinants for diverging developments

1. Level / structure of financial wealth and liabilities

Relevance of interest-bearing assets, proportion of long-term deposits, debt level over time, issuers of held debt securities / shares etc.

2. Interest rate fixation of financial liabilities

Fixed vs. variable rate loans, changing modalities, reference rate etc.

3. Transmission of monetary policy

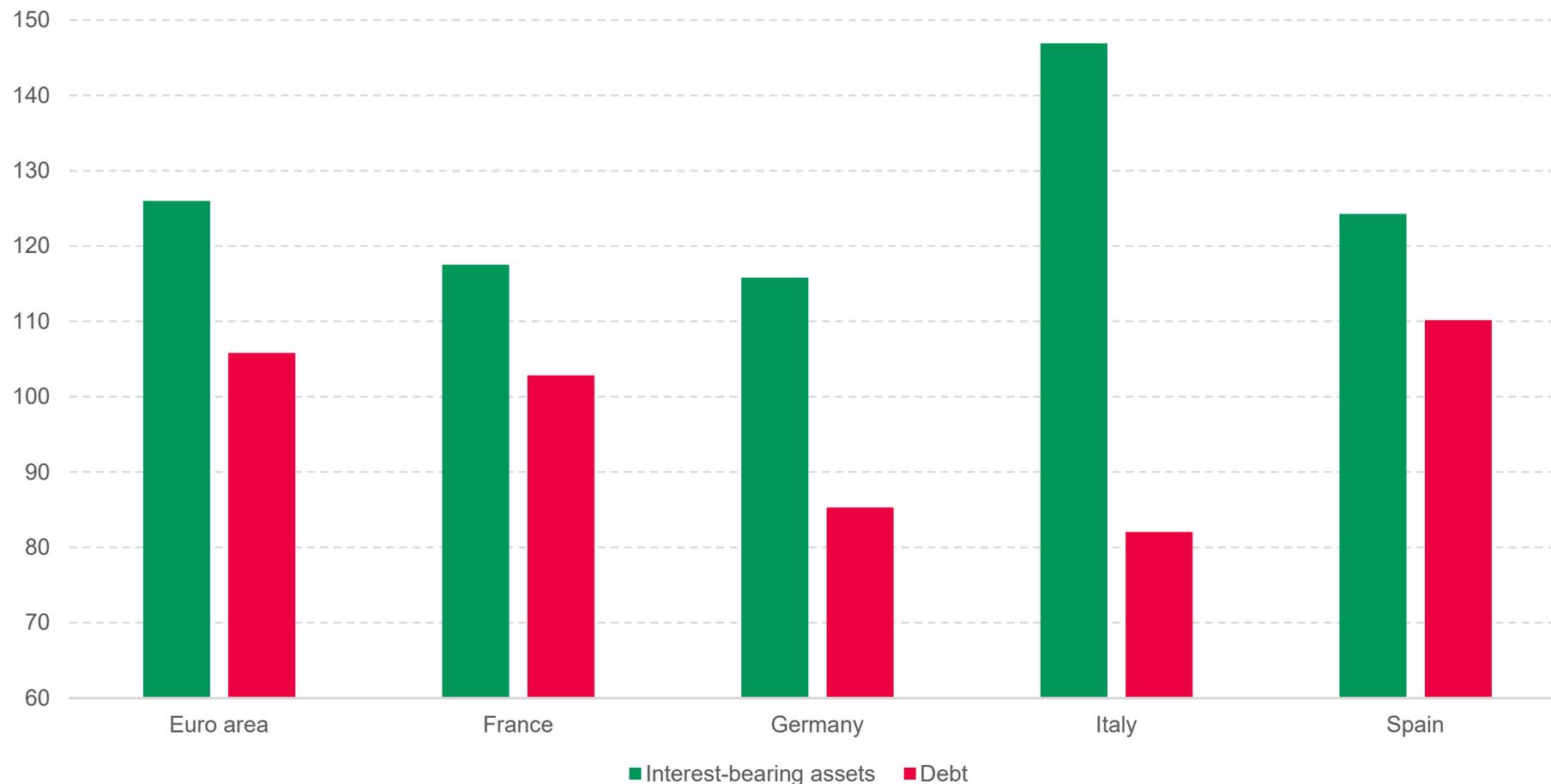
Reaction of banks' interest rates to policy rate changes

Question 1: Interest Income of Households

Potential determinants: (1) assets and liabilities

Interest-bearing assets and debt of euro area households

In % of disposable income, as of 2016



Source: Eurostat, the ECB and own calculations.

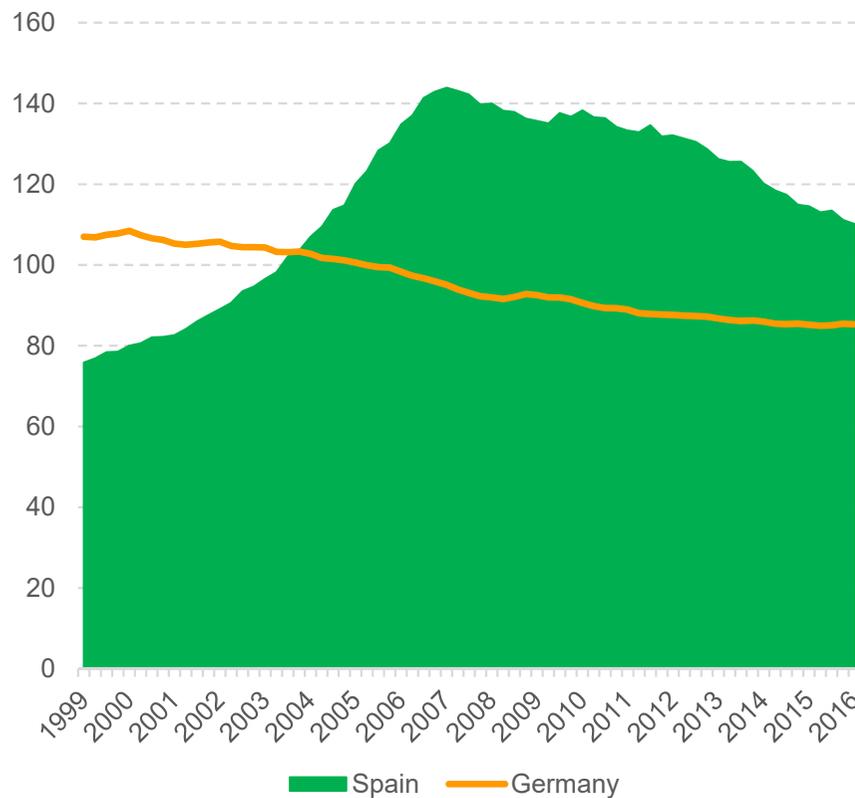
Question 1: Interest Income of Households

Potential determinants: (1) assets and liabilities

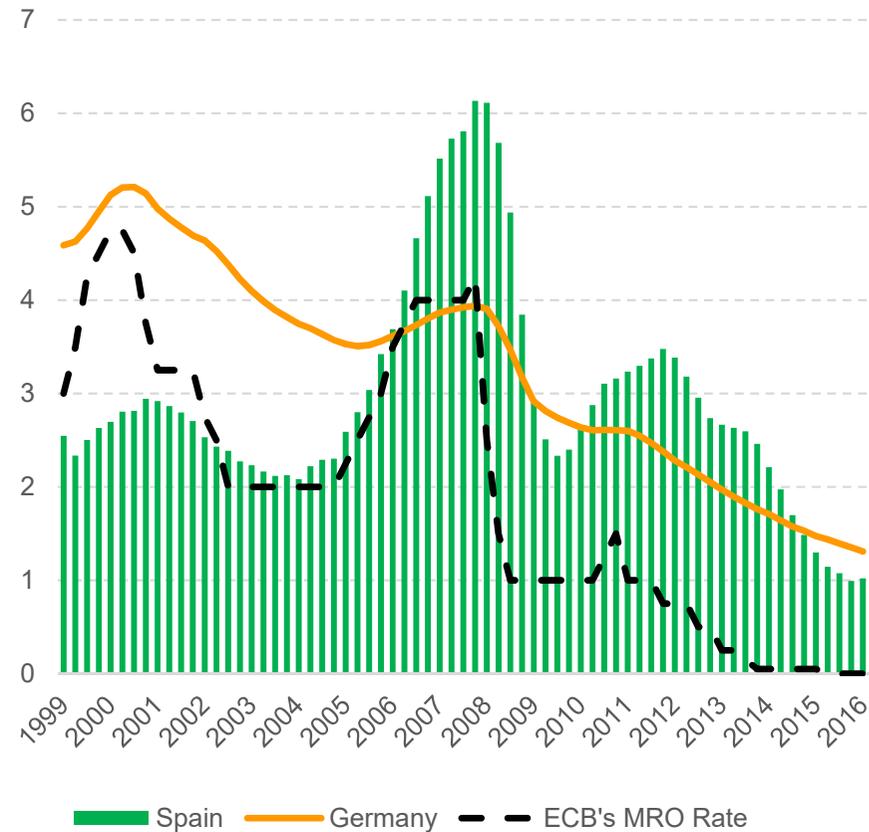
Total debt and interest payments: Spain vs. Germany

In % of disposable income, four-quarter-moving-sums

Total debt



Interest payments



Source: The ECB, Eurostat as well as own calculations.

Question 1: Interest Income of Households

Potential determinants: (2) interest fixation & (3) transmission

2. Interest rate fixation of mortgages varies significantly across countries

	Variable rate loans as a proportion of total new loans (in %)	Typical reference rate for variable interest rate loans	Typical maturity (years)
Euro area	43	-	-
France	15	12-month Euribor	19
Germany	16	Long-term market rates	25-30
Italy	71	3-month Euribor	22
Spain	85	12-month Euribor	30

Source: Badarinza et al. (2017) as well as European Central Bank (2009).

3. Transmission of monetary policy: cross-country differences

Crisis increased cross-country heterogeneity of transmission of policy rate changes (Illes and Lombardi, 2013; Mandler et al., 2016).

Question 2

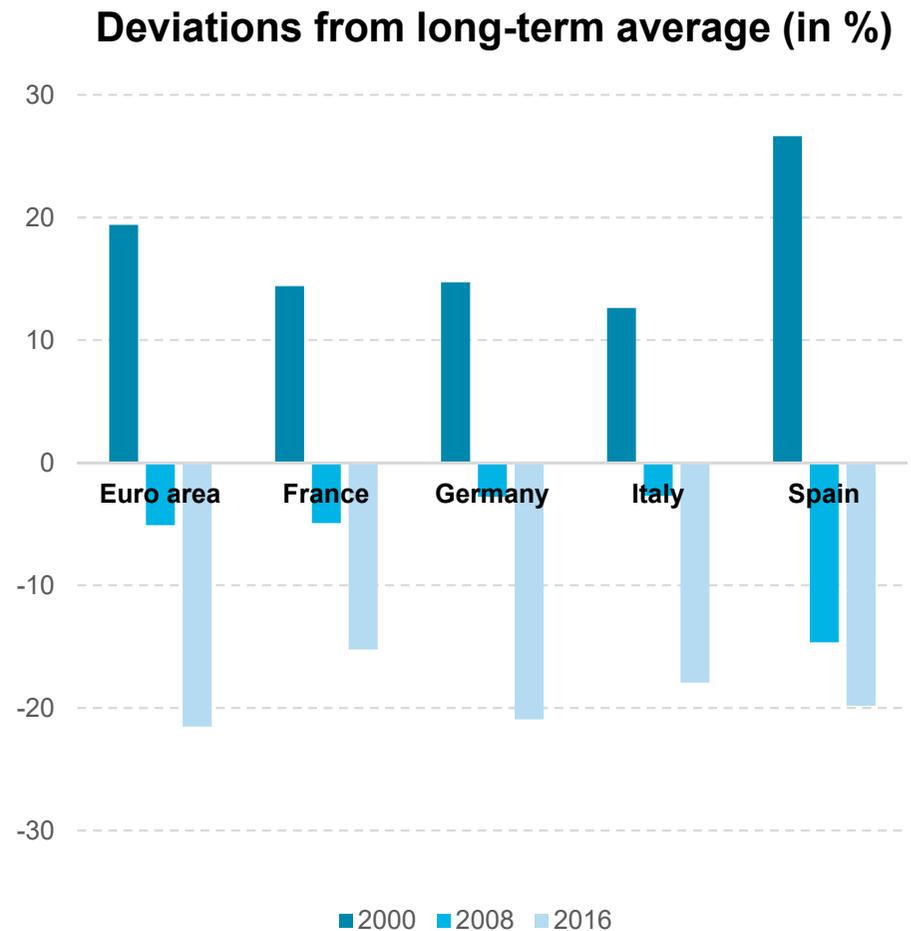
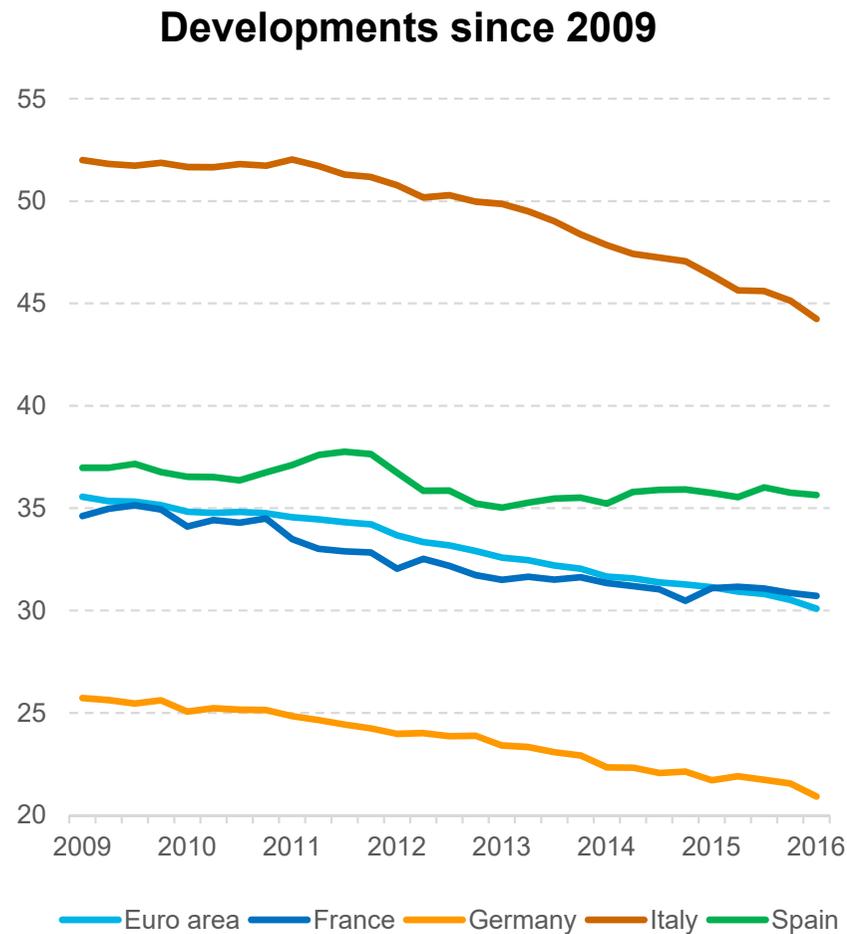
Did households change their financial portfolio structure?

If so, how?

Question 2: Households financial portfolio

Risk profile of financial portfolio

Share of risky assets in the financial portfolio of households

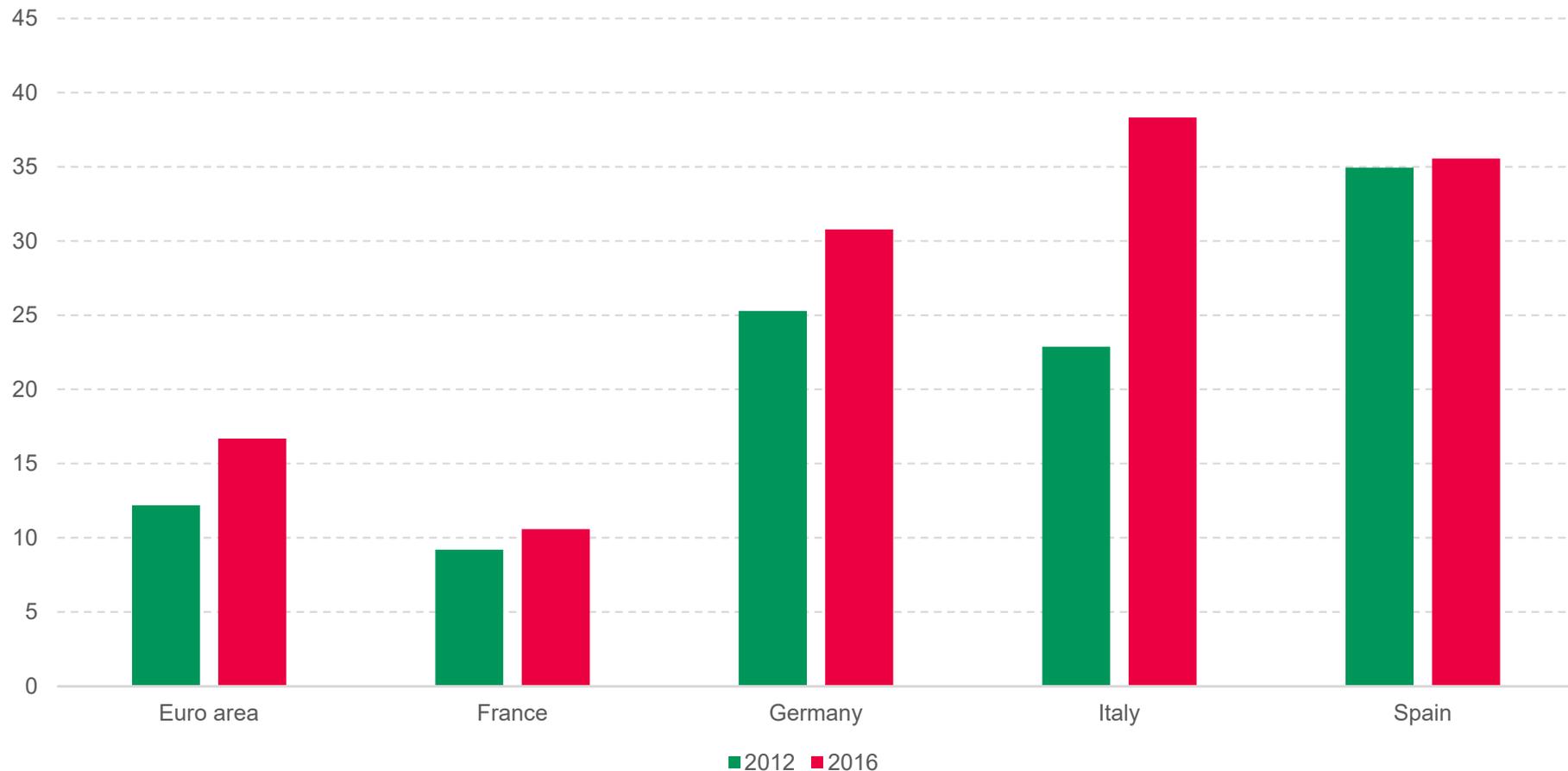


Source: The ECB, Eurostat as well as own calculations.

Question 2: Households financial portfolio

Relevance of foreign issuers

Foreign issuers as a proportion of total share holdings of households



Source: The ECB, Banca d'Italia and own calculations.

Question 2: Households financial portfolio

Conclusion

Motivation: Worries about potential side-effects of monetary policy

Q1: How did interest income of households develop in times of ultra-loose monetary policy? Potential determinants?

- Households interest income (net) not as low as critics suppose
- Diverse developments; in FR, DE and ES, significantly lower in the past
- Data suggest that monetary policy of minor importance
- Balance sheets, interest fixation and transmission likely more important

Q2: Did households change their financial portfolio structure? If so, how?

- Similar developments across countries
- Risk-taking decreased – everywhere

⇒ Data suggest that worries seem to be exaggerated in this regard.

Thank you very much.

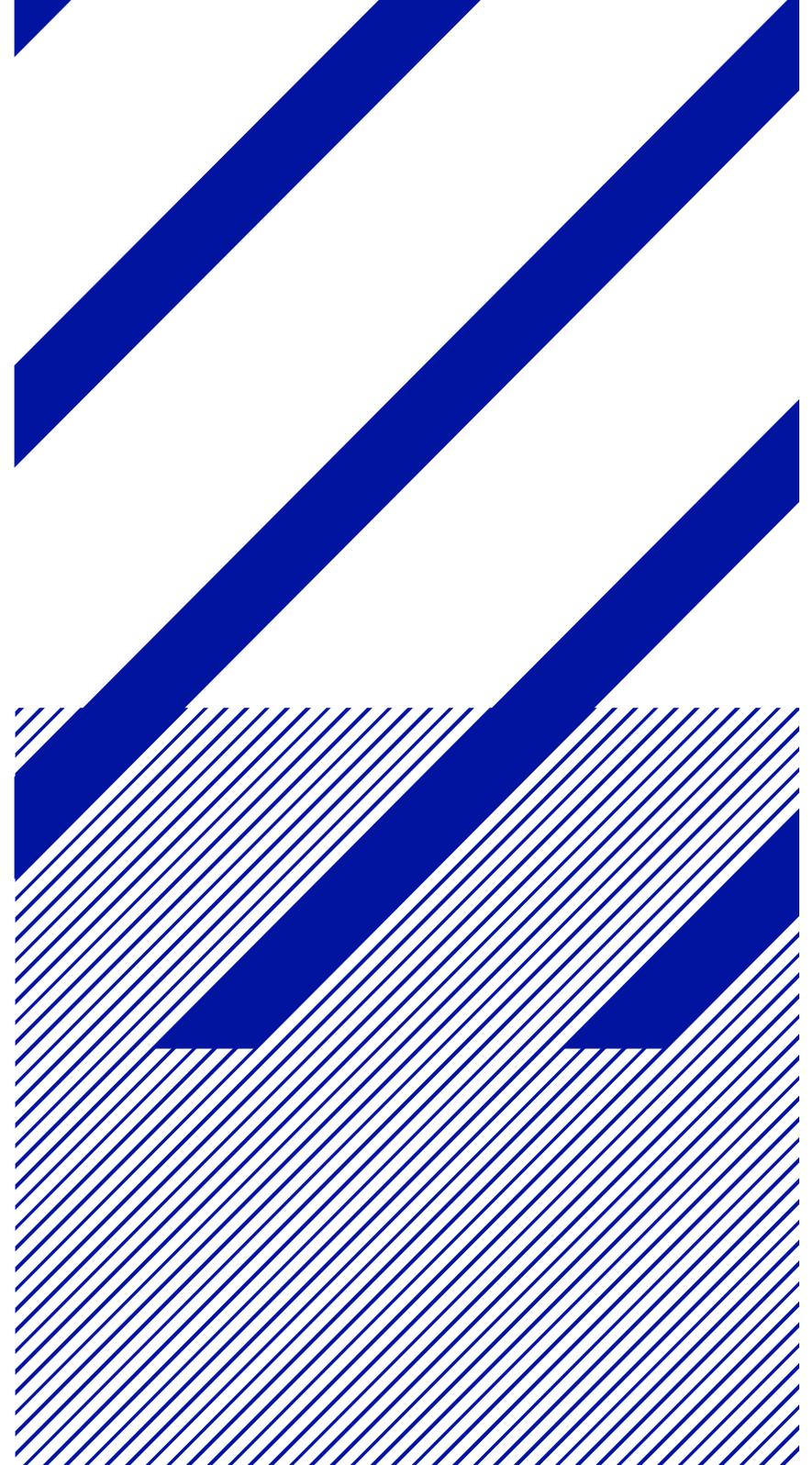


Table 3: Structure of total financial assets of households in 2016

	In billion €				
	Euro area	France	Germany	Italy	Spain
Deposits and cash holdings	7,686.9	1,433.2	2,269.2	1,329.9	859.1
Cash	602.6	72.6	174.4	156.8	66.7
Deposits	7,084.3	1,360.5	2,094.8	1,173.1	792.4
Sight deposits	NA	415.5	1,223.1	709.7	512.1
Other deposits	NA	945.1	871.7	463.3	280.3
Debt securities	764.4	65.1	160.2	362.3	36.2
Loans	69.3	10.2	0.0	14.1	0.0
Equity and investment fund shares	6,208.9	1,345.4	1,186.7	1,397.9	780.2
Equity	4,157.1	1,056.7	604.4	917.9	516.4
Investment fund shares	2,051.8	288.7	582.2	480.0	263.8
Insurance technical reserves	7,858.4	2,007.9	2,111.4	952.0	354.6
Non-life insurance reserves	570.2	86.9	337.8	396.7	20.3
Life insurance and annuity entitlements	3,220.5	1,717.9	963.2	657.2	167.3
Other insurance technical reserves	4,067.6	203.2	810.4	255.1	167.0
Other accounts receivable	459.9	240.7	35.6	111.2	40.7
Total financial assets	23,047.8	5,102.5	5,763.1	4,167.4	2,070.8
	As a % of total financial assets				
	Euro area	France	Germany	Italy	Spain
Deposits and cash holdings	33.4	28.1	39.4	31.9	41.5
Cash	2.6	1.4	3.0	3.8	3.2
Deposits	30.7	26.7	36.3	28.1	38.3
Sight deposits	NA	8.1	21.2	17.0	24.7
Other deposits	NA	18.5	15.1	11.1	13.5
Debt securities	3.3	1.3	2.8	8.7	1.7
Loans	0.3	0.2	0.0	0.3	0.0
Equity and investment fund shares	26.9	26.4	20.6	33.5	37.7
Equity	18.0	20.7	10.5	22.0	24.9
Investment fund shares	8.9	5.7	10.1	11.5	12.7
Insurance technical reserves	34.1	39.4	36.6	22.8	17.1
Non-life insurance reserves	2.5	1.7	5.9	9.5	1.0
Life insurance and annuity entitlements	14.0	33.7	16.7	15.8	8.1
Other insurance technical reserves	17.6	4.0	14.1	6.1	8.1
Other accounts receivable	2.0	4.7	0.6	2.7	2.0
Total financial assets	100.0	100.0	100.0	100.0	100.0

Source: The ECB and own calculations.

Table 1: Structure of interest-bearing assets and debt of households in 2016

	In billion €				
	Euro area	France	Germany	Italy	Spain
Interest-bearing assets (total)	8,377.9	1,676.5	2,290.6	1,660.6	869.3
Deposits	7,084.3	1,360.5	2,094.8	1,173.1	792.4
Sight deposits	NA	415.5	1,223.1	709.7	512.1
Other deposits	NA	945.1	871.7	463.3	280.3
Debt securities	764.4	65.1	160.2	362.3	36.2
Short-term debt securities	42.5	13.8	4.2	2.3	0.4
Long-term debt securities	721.8	51.3	156.0	360.1	35.8
Loans	69.3	10.2	0.0	14.1	0.0
Short-term loans	23.6	1.9	0.0	14.1	0.0
Long-term loans	45.7	8.3	0.0	0.0	0.0
Other accounts receivable	459.9	240.7	35.6	111.2	40.7
Debt	7,034.8	1,475.7	1,687.0	927.2	770.6
Loans	6,292.7	1,275.3	1,671.0	697.9	717.1
Short-term loans	270.0	32.8	57.3	54.2	26.9
Long-term loans	6,022.6	1,242.5	1,613.7	643.7	690.2
Other accounts payable	670.9	191.1	15.6	192.1	53.5
Others*	71.2	0.0	0.4	37.2	0.0
Disposable income	6,649.0	1,426.2	1,977.8	1,130.2	699.5
	As a % of disposable income				
	Euro area	France	Germany	Italy	Spain
Interest-bearing assets	126.0	117.5	115.8	146.9	124.3
Deposits	106.5	95.4	105.9	103.8	113.3
Debt securities	11.5	4.6	8.1	32.1	5.2
Loans	1.0	0.7	0.0	1.2	0.0
Other accounts receivable	6.9	16.9	1.8	9.8	5.8
Debt	105.8	103.5	85.3	82.0	110.2
Loans	94.6	89.4	84.5	61.7	102.5
Other accounts payable	10.1	13.4	0.8	17.0	7.6
Others*	1.1	0.7	0.0	3.3	0.0

Source: Eurostat, the ECB and own calculations. *Others include insurance technical reserves and financial derivatives. NA stands for not available.