



ECONOMIC POLICY NOTE 22/5/2018

## European Asset Price Rally

Flossbach von Storch Wealth Price Series

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- At end of 2017 asset prices in the Euro Zone went up by 5.7 % year on year. It is the highest inflation rate since 2007.
- The highest asset price inflation rate of the Euro Zone was recorded in Portugal (+9.8 % year on year in Q4) and the lowest in Finland (+1.4 % in Q4).
- After 10 years of deflation, asset prices stabilized in Italy and Greece. The inflation rate remained low but positive.
- The gap in asset price inflation between the northern and southern countries has become smaller but still denotes 2.3 %.

The Flossbach von Storch Wealth Price Series measures the price development of the assets held by private households in key euro area countries (Austria, Belgium, Finland, France, Germany, Greece, Italy, Netherlands, Portugal, and Spain). The price index for the Euro zone, as well as for the single countries, is calculated as the weighted average of the price development of real assets (real estate, business wealth, durable consumer goods, and collectors' items) and financial assets (stocks, bonds, cash equivalents and other financial instruments) owned by private households.

All weights have been updated with help of the latest results of the "Household Finance and Consumption Survey" by the European Central Bank (2016), which uses survey data from the year 2014. In addition, all price series have been indexed to their average of the year 2014 as well. The appendix provides further information on the methodology as well as the index weights and contains tables of all index values and year on year growth rates. Country-specific data on asset prices can be downloaded from our website.<sup>1</sup>

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<sup>1</sup> Data is available on <http://www.fvs-ri.com>.



### Asset price inflation in the Euro area in Q3 and Q4 of 2017

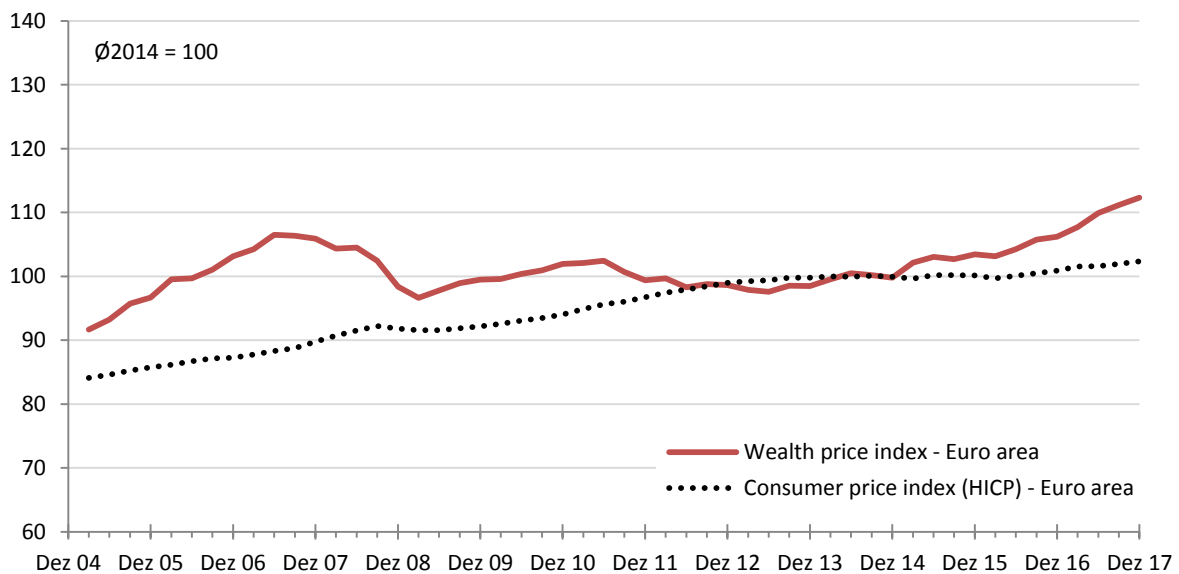
The third and fourth quarter of 2017 were characterized by high asset price inflation. The price index for the Euro zone rose in the third quarter by 5.1 % year on year. Up to the end of the third quarter, this was the second highest inflation rate within the last ten years.

In the fourth quarter, the asset price inflation rose to a new 10 year high, surpassing even the latest record from the second quarter of 2017.

Prices of assets held by European household rose by 5.7 %. Prices have not climbed that fast since 2007.<sup>2</sup>

In contrast to asset price inflation, consumer price inflation remained fairly low. Prices for consumer goods increased year on year by 1.5 % in the third quarter and by 1.4 % in the fourth quarter of 2017. Hence, the difference between the two inflation rates remains fairly high.

Figure 1: Wealth price index and consumer price index (HICP) for the Euro area



Source: Flossbach von Storch Research Institute and Haver Analytics, May 2018.

<sup>2</sup> The latest record high of Q2 2017 amounted to 5.4 % year on year under the updated weighting scheme with all price series indexed to 2014. Under the old weighting scheme and with all price series indexed to 2010, the Q4 inflation rate denoted 7.0 % and the Q2 rate 6.8 %. Hence, the Q4 value surpassed the Q2 value under the old and new scheme.



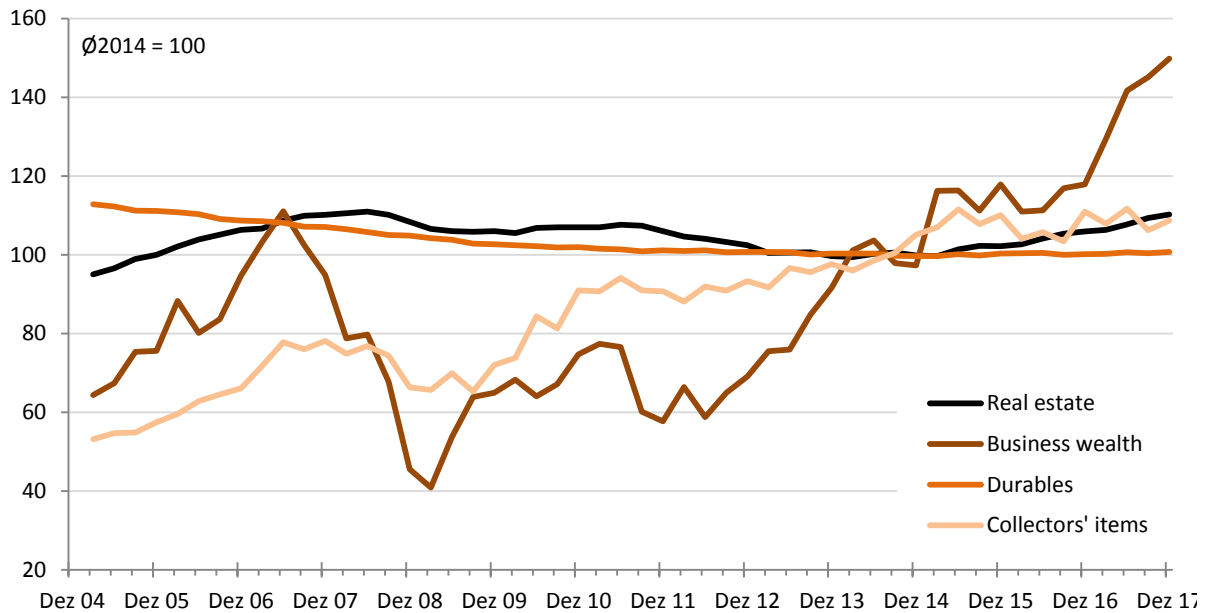
### High inflation on business wealth

Real assets remain the most dominant factor for the inflation figure. Amongst real assets, business wealth and real estate are the most important drivers.

At the end of Q4, prices for business wealth<sup>3</sup> increased by 27.1 % in comparison the same quarter of the previous year. This is the highest

inflation rate of all asset categories in the second half of 2017. Real estate prices increased year on year by 3.8 % and by 4.1 % in the third and fourth quarter, respectively. Durable goods stagnated while collectors' items dropped by 2.1 % in comparison to last year.

Figure 2: Real assets in the Euro area – Price levels



Source: Flossbach von Storch Research Institute, May 2018.

<sup>3</sup> Business wealth corresponds to privately owned businesses held by private households. The price development of these businesses is measured with help of a prices index for publicly owned small businesses in the respective countries (MSCI Small Cap Country Indices).



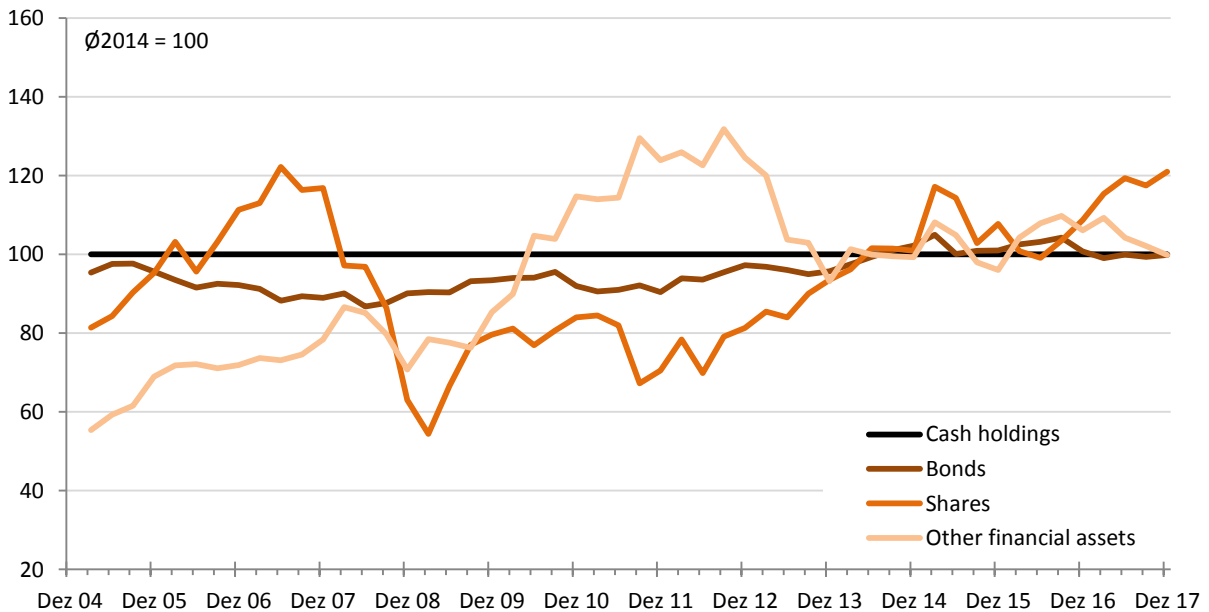
### Financial assets stagnate

While the price for financial assets dropped by 0.3 % in the third quarter of 2017, in the fourth quarter prices increased by 0.6 % year on year.

Among financial assets, bond prices fell by 4.7 % year on year in the third quarter and dropped another 1.0 % in the fourth quarter. Share prices went the other direction and increased by 13.6 % and 11.3 % year on year in the third and fourth quarter, respectively. Other financial

assets, measured by the price of gold and commodities, fell in both quarters. In the third quarter the price fell by 7.0 % which is the strongest price decline of all asset categories in the second half of 2017.

Figure 3: Financial assets in the Euro area – Price levels



Source: Flossbach von Storch Research Institute, May 2018.



### The Southern Countries

Asset prices increased in all southern countries of the Euro area (Italy, Greece, Portugal, and Spain).

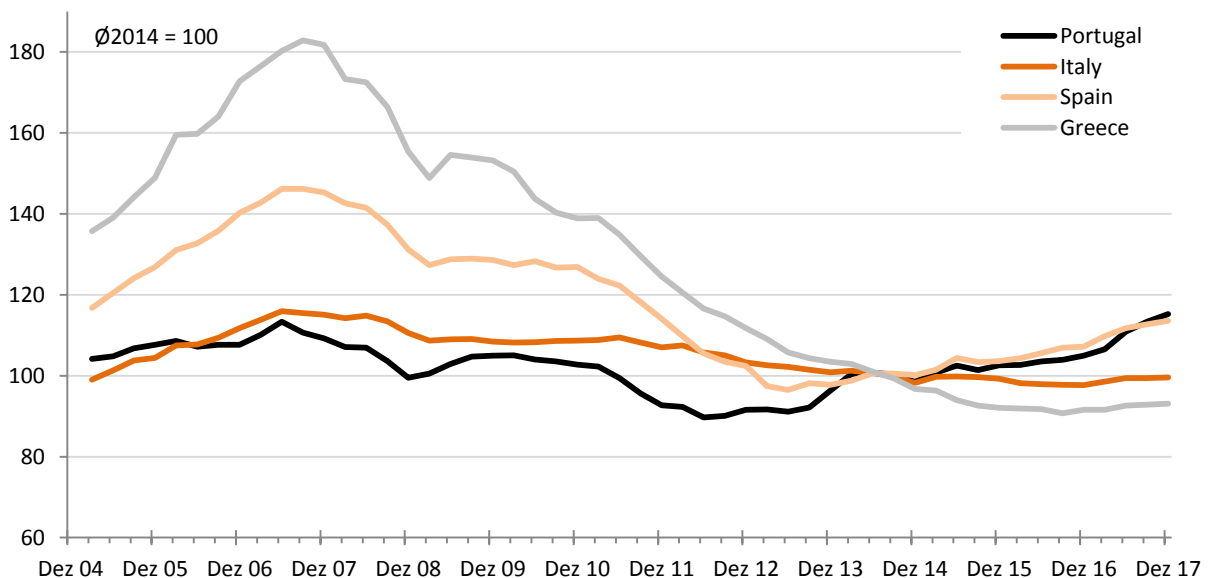
Most notably, prices for assets held by **Portuguese** households increased by 9.8% in the fourth quarter of 2017 in comparison to the prior year. This is the highest price growth rate of all countries in the Euro zone. It rests upon housing prices and business wealth that both increased by more than 10%. Portugal had already been among the countries with the highest asset price inflation in the first and second quarter of 2017.

In **Spain** asset price inflation denoted 5.4% in Q3 and 6.0% in Q4. Given these figures, asset price inflation has been above 5% year on year in each quarter of 2017 driven by high price growth rates for real estate.

Italy and Greece exhibited the lowest asset price inflation rates of all southern countries. In Italy asset prices grew in Q4 by 1.9% year on year. This low growth rate is driven by **Italian** real estate prices that have been falling for six years in a row. However, in 2017 the growth rate is merely below zero percent while it had been as low as -6.0% in 2013.

While prices of **Greek** assets had been falling since 2008, they started to stabilize in 2017. In the third quarter Greek asset price inflation denoted 2.3% and in the fourth quarter 1.6% year on year. The plunge of real estate prices seemed to have come to a stop while Greek bonds and prices for business wealth recovered.

Figure 4: Wealth price indices for the southern countries



Source: Flossbach von Storch Research Institute, May 2018.



### The Northern Countries

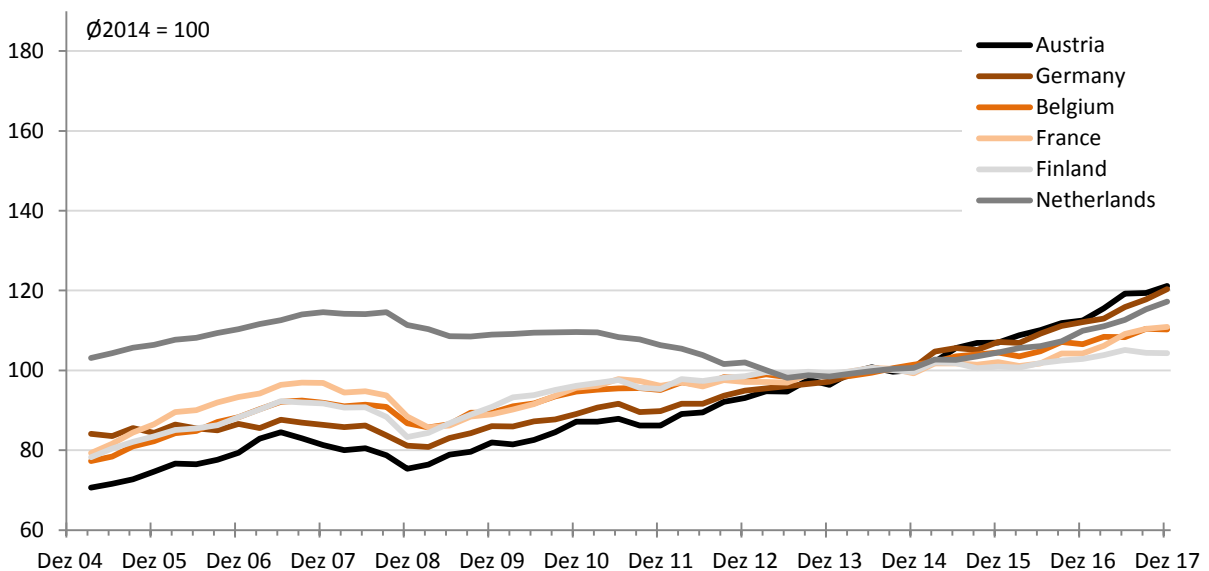
On average, asset prices in the northern countries of the Euro Zone (Austria, Belgium, Finland, France, Germany, and the Netherlands) amounted to 6.5 % year on year in Q4. Hence, the gap in asset price inflation rates between the northern and the southern countries became smaller.

Comparing the northern countries one finds quite diverse inflation figures. In **Finland**, asset price inflation is the lowest of the Euro zone. Most recently, prices were up 1.4 % year on year. Throughout the Finish asset categories, inflation remained below 4 % with the exception of shares prices that rose by 8.3 % year on year. The price of Finish real estate increased year on year by 1.2 % in the fourth quarter.

In **Belgium**, the price of assets held by households increased year on year by 3.1 % in Q3 and by 3.5 % in Q4. **France**, **Germany**, and the **Netherlands** all exhibited fairly high inflation rates (6.3 %, 7.3 %, and 6.7 %, in Q4 year on year, respectively). In all three countries the inflation rate on business wealth was above 20 % in Q3 and Q4. Additionally, in the Netherlands real estate prices climbed up by more than 8 %.

The highest asset price inflation rate is recorded in **Austria**. In comparison to the last year, prices for the assets held by Austrian households were up by 7.7 %. The inflation rate is a result of strongly rising prices for business wealth, real estate, and shares.

Figure 5: Wealth price indices for the northern countries



Source: Flossbach von Storch Research Institute, May 2018.



### Consumer prices

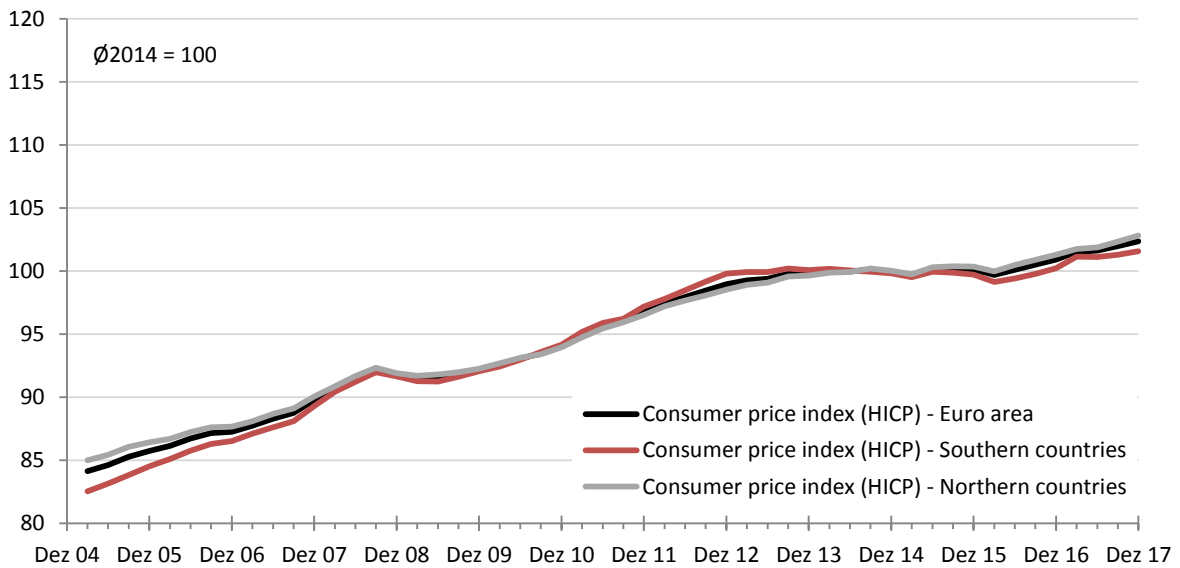
In the second half of 2017, consumer price inflation remained low. In the third quarter, the HICP for the Euro Zone rose by 1.5 % year on year. In the second quarter it was merely lower with 1.4 %. In all countries consumer price inflation is lower than asset price inflation.

Consumer price inflation for the specific countries ranged between 0.8 % and 2.4 % year on year. The highest consumer price inflation was recorded in Austria (2.4 % and 2.3 % year on year in Q1 and Q2, respectively) followed by

Belgium (2.0 % and 2.1 %). For the second time in a row Finland exhibits the lowest HICP growth rate in the Euro zone. The second to the lowest growth consumer price growth rate was recorded in Greece. Prices for Greek consumer goods increased in the third quarter by 0.8 % and by 1.0% in the fourth quarter year on year.

Due to the high asset price inflation in Portugal, the difference between asset and consumer price inflation amounted to 7.9 % which is the largest difference in the Euro area.

Figure 6: Consumer prices (HICP) in the Euro area



Source: Flossbach von Storch Research Institute, May 2018.



## Index levels and year-on-year growth rates

**Table 1: Wealth and consumer prices**

	Euro area				Southern countries				Northern countries			
	Wealth prices		Consumer prices (HICP)		Wealth prices		Consumer prices (HICP)		Wealth prices		Consumer prices (HICP)	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	91.7	-	84.1	-	108.4	-	82.5	-	82.6	-	85.0	-
Q2 2005	93.2	-	84.6	-	111.2	-	83.1	-	83.4	-	85.4	-
Q3 2005	95.7	-	85.3	-	114.3	-	83.8	-	85.6	-	86.1	-
Q4 2005	96.7	-	85.7	-	116.0	-	84.5	-	86.2	-	86.4	-
Q1 2006	99.5	8.6%	86.1	2.4%	119.8	10.5%	85.1	3.1%	88.5	7.2%	86.7	2.0%
Q2 2006	99.7	6.9%	86.7	2.5%	120.5	8.3%	85.8	3.1%	88.4	5.9%	87.2	2.1%
Q3 2006	101.0	5.5%	87.1	2.2%	122.8	7.5%	86.3	3.0%	89.2	4.1%	87.6	1.8%
Q4 2006	103.1	6.7%	87.3	1.8%	126.1	8.7%	86.5	2.4%	90.6	5.2%	87.7	1.5%
Q1 2007	104.2	4.7%	87.7	1.9%	128.5	7.3%	87.1	2.3%	91.0	2.8%	88.1	1.6%
Q2 2007	106.5	6.8%	88.3	1.8%	131.3	9.0%	87.6	2.2%	93.0	5.2%	88.7	1.6%
Q3 2007	106.4	5.3%	88.8	1.8%	131.1	6.7%	88.1	2.1%	92.9	4.2%	89.1	1.7%
Q4 2007	105.9	2.7%	89.8	2.9%	130.4	3.3%	89.3	3.2%	92.6	2.2%	90.0	2.7%
Q1 2008	104.4	0.1%	90.7	3.4%	128.3	-0.2%	90.4	3.8%	91.3	0.3%	90.9	3.1%
Q2 2008	104.5	-1.9%	91.5	3.6%	128.1	-2.4%	91.2	4.1%	91.7	-1.4%	91.7	3.4%
Q3 2008	102.5	-3.7%	92.2	3.9%	125.2	-4.5%	92.0	4.4%	90.1	-3.1%	92.3	3.6%
Q4 2008	98.4	-7.1%	91.8	2.3%	120.6	-7.5%	91.6	2.6%	86.3	-6.8%	91.9	2.1%
Q1 2009	96.6	-7.4%	91.5	0.9%	117.8	-8.2%	91.3	0.9%	85.1	-6.8%	91.7	0.9%
Q2 2009	97.8	-6.4%	91.6	0.1%	118.9	-7.2%	91.2	0.0%	86.3	-5.8%	91.8	0.1%
Q3 2009	98.9	-3.5%	91.8	-0.4%	119.1	-4.8%	91.6	-0.4%	87.9	-2.4%	92.0	-0.4%
Q4 2009	99.5	1.1%	92.2	0.4%	118.7	-1.6%	92.1	0.5%	89.1	3.2%	92.3	0.4%
Q1 2010	99.6	3.1%	92.6	1.1%	117.9	0.1%	92.4	1.3%	89.6	5.3%	92.7	1.1%
Q2 2010	100.4	2.7%	93.1	1.6%	118.0	-0.7%	93.0	1.9%	90.8	5.2%	93.1	1.4%
Q3 2010	100.9	2.0%	93.5	1.7%	117.3	-1.5%	93.6	2.1%	92.0	4.6%	93.4	1.5%
Q4 2010	101.9	2.5%	94.0	2.0%	117.3	-1.1%	94.1	2.3%	93.5	5.0%	94.0	1.8%
Q1 2011	102.1	2.5%	94.9	2.5%	116.1	-1.5%	95.2	3.0%	94.4	5.3%	94.7	2.2%
Q2 2011	102.4	2.0%	95.6	2.7%	115.4	-2.3%	95.9	3.1%	95.4	5.0%	95.5	2.5%
Q3 2011	100.7	-0.2%	96.0	2.8%	112.6	-4.1%	96.2	2.8%	94.2	2.4%	95.9	2.7%
Q4 2011	99.4	-2.5%	96.8	2.9%	109.9	-6.4%	97.2	3.2%	93.7	0.2%	96.5	2.7%
Q1 2012	99.7	-2.4%	97.4	2.7%	108.1	-7.0%	97.8	2.8%	95.1	0.7%	97.2	2.6%
Q2 2012	98.3	-4.1%	97.9	2.4%	105.1	-8.9%	98.5	2.7%	94.5	-0.9%	97.7	2.3%
Q3 2012	98.8	-1.9%	98.5	2.5%	103.8	-7.8%	99.1	3.1%	96.1	2.0%	98.1	2.2%
Q4 2012	98.7	-0.8%	99.0	2.3%	102.6	-6.6%	99.8	2.7%	96.5	3.0%	98.5	2.1%
Q1 2013	97.9	-1.8%	99.3	1.9%	100.0	-7.5%	99.9	2.2%	96.8	1.8%	98.9	1.8%
Q2 2013	97.6	-0.7%	99.4	1.5%	99.2	-5.6%	99.9	1.5%	96.7	2.3%	99.1	1.5%
Q3 2013	98.6	-0.2%	99.8	1.3%	99.6	-4.1%	100.2	1.1%	98.0	2.0%	99.6	1.5%
Q4 2013	98.5	-0.2%	99.8	0.8%	99.3	-3.2%	100.1	0.3%	98.0	1.6%	99.6	1.1%
Q1 2014	99.5	1.7%	100.0	0.7%	100.2	0.2%	100.2	0.3%	99.2	2.5%	99.9	1.0%
Q2 2014	100.5	3.0%	100.0	0.6%	100.7	1.5%	100.0	0.1%	100.4	3.8%	99.9	0.8%
Q3 2014	100.2	1.7%	100.1	0.3%	100.1	0.5%	100.0	-0.2%	100.2	2.3%	100.2	0.6%
Q4 2014	99.8	1.3%	100.0	0.2%	99.0	-0.3%	99.8	-0.3%	100.2	2.2%	100.0	0.4%
Q1 2015	102.2	2.7%	99.7	-0.3%	100.4	0.2%	99.5	-0.7%	103.1	4.0%	99.7	-0.1%
Q2 2015	103.0	2.5%	100.2	0.2%	101.7	1.0%	99.9	-0.1%	103.7	3.3%	100.3	0.4%
Q3 2015	102.7	2.5%	100.2	0.1%	101.1	1.0%	99.9	-0.1%	103.6	3.3%	100.4	0.2%
Q4 2015	103.4	3.7%	100.1	0.2%	101.1	2.1%	99.7	-0.1%	104.7	4.5%	100.3	0.3%
Q1 2016	103.2	1.0%	99.7	0.0%	100.9	0.4%	99.1	-0.4%	104.4	1.2%	100.0	0.3%
Q2 2016	104.3	1.2%	100.1	-0.1%	101.4	-0.3%	99.4	-0.5%	105.9	2.1%	100.5	0.2%
Q3 2016	105.8	3.0%	100.5	0.3%	101.8	0.7%	99.8	-0.1%	107.9	4.2%	100.9	0.5%
Q4 2016	106.2	2.7%	100.9	0.8%	102.0	0.9%	100.2	0.5%	108.5	3.6%	101.3	0.9%
Q1 2017	107.7	4.4%	101.5	1.8%	103.6	2.7%	101.1	2.0%	110.0	5.3%	101.7	1.8%
Q2 2017	110.0	5.4%	101.6	1.5%	105.2	3.8%	101.1	1.7%	112.6	6.3%	101.9	1.4%
Q3 2017	111.2	5.1%	102.0	1.5%	105.7	3.8%	101.3	1.5%	114.2	5.8%	102.3	1.4%
Q4 2017	112.3	5.7%	102.4	1.4%	106.3	4.2%	101.6	1.3%	115.6	6.5%	102.8	1.5%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute and Haver Analytics, May 2018.





**Table 2: Euro area – Real assets**

	Total real assets		Real estate		Business wealth		Durables		Collectors' items	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	91.8	-	95.0	-	64.4	-	112.8	-	53.2	-
Q2 2005	93.5	-	96.6	-	67.4	-	112.2	-	54.7	-
Q3 2005	96.3	-	98.9	-	75.4	-	111.2	-	54.9	-
Q4 2005	97.2	-	100.0	-	75.6	-	111.1	-	57.5	-
Q1 2006	100.5	9.4%	102.1	7.5%	88.3	37.1%	110.8	-1.8%	59.6	12.0%
Q2 2006	101.0	8.0%	103.9	7.5%	80.1	19.0%	110.3	-1.7%	62.8	14.8%
Q3 2006	102.4	6.3%	105.1	6.3%	83.6	10.9%	109.1	-1.9%	64.5	17.5%
Q4 2006	104.7	7.7%	106.3	6.4%	94.7	25.3%	108.7	-2.2%	66.1	15.0%
Q1 2007	106.0	5.5%	106.6	4.4%	103.2	16.9%	108.6	-2.0%	71.8	20.5%
Q2 2007	108.6	7.6%	108.7	4.7%	111.0	38.5%	108.1	-2.0%	77.8	23.8%
Q3 2007	108.6	6.1%	109.9	4.6%	102.5	22.6%	107.1	-1.8%	76.0	17.8%
Q4 2007	107.9	3.0%	110.1	3.6%	94.9	0.2%	107.0	-1.6%	78.1	18.2%
Q1 2008	106.3	0.3%	110.6	3.7%	78.7	-23.7%	106.5	-1.9%	74.8	4.2%
Q2 2008	106.7	-1.8%	110.9	2.0%	79.8	-28.1%	105.8	-2.2%	76.8	-1.3%
Q3 2008	104.6	-3.7%	110.2	0.2%	67.8	-33.9%	105.0	-1.9%	74.3	-2.2%
Q4 2008	100.4	-7.0%	108.4	-1.6%	45.5	-52.1%	104.9	-2.0%	66.4	-15.1%
Q1 2009	98.3	-7.5%	106.5	-3.7%	40.9	-48.1%	104.2	-2.1%	65.7	-12.2%
Q2 2009	99.4	-6.8%	106.0	-4.4%	53.7	-32.7%	103.8	-1.9%	70.0	-8.9%
Q3 2009	100.3	-4.1%	105.8	-3.9%	63.9	-5.7%	102.8	-2.1%	65.3	-12.2%
Q4 2009	100.7	0.3%	106.0	-2.1%	64.9	42.8%	102.7	-2.1%	72.0	8.5%
Q1 2010	100.6	2.4%	105.5	-1.0%	68.3	66.9%	102.5	-1.7%	73.8	12.4%
Q2 2010	101.3	1.9%	106.8	0.7%	64.1	19.3%	102.2	-1.5%	84.4	20.7%
Q3 2010	101.8	1.5%	107.0	1.1%	67.1	5.1%	101.9	-0.9%	81.3	24.5%
Q4 2010	102.8	2.1%	107.0	0.9%	74.7	15.0%	101.9	-0.7%	91.0	26.4%
Q1 2011	103.1	2.4%	107.0	1.4%	77.4	13.4%	101.6	-0.9%	90.7	22.9%
Q2 2011	103.5	2.2%	107.6	0.8%	76.6	19.5%	101.4	-0.8%	94.1	11.5%
Q3 2011	101.3	-0.5%	107.4	0.4%	60.2	-10.4%	100.8	-1.0%	91.0	11.9%
Q4 2011	100.0	-2.8%	106.0	-0.9%	57.7	-22.8%	101.1	-0.8%	90.7	-0.3%
Q1 2012	99.8	-3.2%	104.6	-2.2%	66.4	-14.2%	101.0	-0.6%	88.1	-2.9%
Q2 2012	98.4	-4.9%	104.0	-3.3%	58.8	-23.2%	101.1	-0.3%	91.9	-2.4%
Q3 2012	98.5	-2.8%	103.2	-3.8%	64.9	7.9%	100.6	-0.2%	90.9	-0.1%
Q4 2012	98.3	-1.6%	102.4	-3.4%	69.1	19.8%	100.7	-0.4%	93.3	2.9%
Q1 2013	97.5	-2.3%	100.5	-4.0%	75.6	13.7%	100.7	-0.3%	91.7	4.1%
Q2 2013	97.6	-0.8%	100.6	-3.3%	76.0	29.2%	100.7	-0.4%	96.6	5.2%
Q3 2013	98.7	0.2%	100.6	-2.5%	84.8	30.6%	100.1	-0.5%	95.6	5.2%
Q4 2013	98.8	0.4%	99.7	-2.7%	91.6	32.5%	100.3	-0.3%	97.6	4.6%
Q1 2014	99.6	2.2%	99.4	-1.1%	101.2	33.9%	100.3	-0.3%	96.0	4.7%
Q2 2014	100.6	3.1%	100.2	-0.3%	103.7	36.5%	100.3	-0.4%	98.5	1.9%
Q3 2014	100.2	1.5%	100.5	-0.1%	97.8	15.4%	99.7	-0.4%	100.4	5.0%
Q4 2014	99.6	0.9%	99.9	0.2%	97.3	6.3%	99.7	-0.7%	105.1	7.7%
Q1 2015	101.7	2.1%	99.7	0.3%	116.2	14.9%	99.6	-0.7%	106.9	11.4%
Q2 2015	103.1	2.5%	101.3	1.1%	116.3	12.2%	100.2	-0.1%	111.5	13.2%
Q3 2015	103.2	3.0%	102.2	1.7%	111.2	13.7%	99.8	0.1%	107.8	7.3%
Q4 2015	104.0	4.4%	102.2	2.3%	117.9	21.1%	100.3	0.6%	110.1	4.8%
Q1 2016	103.5	1.8%	102.7	3.1%	111.0	-4.5%	100.4	0.7%	104.1	-2.7%
Q2 2016	104.8	1.7%	104.2	2.8%	111.3	-4.3%	100.4	0.3%	105.8	-5.2%
Q3 2016	106.4	3.1%	105.4	3.1%	116.9	5.1%	100.0	0.1%	103.4	-4.1%
Q4 2016	107.1	3.0%	106.0	3.7%	117.9	0.0%	100.2	-0.1%	111.0	0.8%
Q1 2017	108.7	5.0%	106.3	3.5%	129.4	16.6%	100.2	-0.1%	107.9	3.7%
Q2 2017	111.4	6.3%	107.8	3.4%	141.7	27.4%	100.6	0.2%	111.7	5.6%
Q3 2017	113.0	6.2%	109.4	3.8%	145.1	24.1%	100.4	0.4%	106.2	2.8%
Q4 2017	114.3	6.8%	110.2	4.1%	149.8	27.1%	100.8	0.6%	108.7	-2.1%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute, May 2018.



**Table 3: Euro area– Financial assets**

	Total financial assets		Cash holdings		Bonds		Shares		Other fin. assets	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	90.8	-	100.0	-	95.3	-	81.4	-	55.4	-
Q2 2005	92.2	-	100.0	-	97.5	-	84.3	-	59.3	-
Q3 2005	93.3	-	100.0	-	97.6	-	90.3	-	61.6	-
Q4 2005	94.4	-	100.0	-	95.6	-	95.2	-	68.9	-
Q1 2006	95.3	4.9%	100.0	0.0%	93.5	-1.9%	103.2	26.8%	71.8	29.5%
Q2 2006	93.9	1.9%	100.0	0.0%	91.5	-6.1%	95.6	13.4%	72.1	21.7%
Q3 2006	95.0	1.8%	100.0	0.0%	92.5	-5.2%	103.2	14.2%	71.1	15.5%
Q4 2006	96.1	1.8%	100.0	0.0%	92.2	-3.5%	111.3	16.8%	71.9	4.3%
Q1 2007	96.3	1.0%	100.0	0.0%	91.2	-2.4%	113.0	9.5%	73.6	2.6%
Q2 2007	96.7	3.0%	100.0	0.0%	88.2	-3.6%	122.2	27.9%	73.1	1.4%
Q3 2007	96.4	1.5%	100.0	0.0%	89.3	-3.5%	116.3	12.8%	74.6	4.9%
Q4 2007	96.9	0.8%	100.0	0.0%	88.9	-3.5%	116.8	5.0%	78.4	9.0%
Q1 2008	95.6	-0.7%	100.0	0.0%	90.1	-1.2%	97.1	-14.0%	86.6	17.6%
Q2 2008	94.6	-2.2%	100.0	0.0%	86.7	-1.7%	96.8	-20.8%	85.1	16.4%
Q3 2008	92.8	-3.8%	100.0	0.0%	87.6	-1.9%	86.3	-25.8%	79.6	6.8%
Q4 2008	89.2	-8.0%	100.0	0.0%	90.1	1.3%	63.0	-46.0%	70.8	-9.7%
Q1 2009	89.1	-6.8%	100.0	0.0%	90.4	0.3%	54.4	-44.0%	78.4	-9.4%
Q2 2009	90.6	-4.3%	100.0	0.0%	90.3	4.1%	66.6	-31.3%	77.6	-8.9%
Q3 2009	92.4	-0.4%	100.0	0.0%	93.2	6.3%	77.0	-10.8%	76.2	-4.3%
Q4 2009	93.9	5.3%	100.0	0.0%	93.4	3.6%	79.6	26.3%	85.3	20.6%
Q1 2010	94.9	6.5%	100.0	0.0%	94.0	4.0%	81.1	49.2%	89.9	14.6%
Q2 2010	96.2	6.3%	100.0	0.0%	94.1	4.2%	76.9	15.5%	104.7	35.1%
Q3 2010	96.9	4.9%	100.0	0.0%	95.5	2.5%	80.6	4.7%	103.9	36.3%
Q4 2010	97.9	4.2%	100.0	0.0%	91.9	-1.6%	84.0	5.4%	114.7	34.4%
Q1 2011	97.6	2.8%	100.0	0.0%	90.5	-3.6%	84.5	4.1%	114.0	26.9%
Q2 2011	97.4	1.2%	100.0	0.0%	91.0	-3.3%	82.0	6.6%	114.4	9.2%
Q3 2011	97.6	0.7%	100.0	0.0%	92.1	-3.5%	67.2	-16.6%	129.5	24.7%
Q4 2011	97.0	-0.9%	100.0	0.0%	90.4	-1.6%	70.5	-16.0%	123.9	8.0%
Q1 2012	99.1	1.5%	100.0	0.0%	93.9	3.7%	78.4	-7.2%	125.9	10.5%
Q2 2012	97.4	0.1%	100.0	0.0%	93.6	2.8%	69.8	-14.8%	122.6	7.2%
Q3 2012	100.3	2.7%	100.0	0.0%	95.4	3.6%	79.1	17.7%	131.8	1.8%
Q4 2012	100.0	3.2%	100.0	0.0%	97.2	7.5%	81.3	15.4%	124.6	0.5%
Q1 2013	99.9	0.9%	100.0	0.0%	96.9	3.2%	85.5	9.0%	120.0	-4.7%
Q2 2013	97.5	0.0%	100.0	0.0%	96.0	2.6%	84.0	20.2%	103.7	-15.4%
Q3 2013	97.9	-2.4%	100.0	0.0%	94.9	-0.5%	90.0	13.7%	102.9	-21.9%
Q4 2013	97.3	-2.7%	100.0	0.0%	95.7	-1.6%	93.5	15.0%	93.2	-25.2%
Q1 2014	99.1	-0.8%	100.0	0.0%	97.5	0.7%	96.2	12.5%	101.3	-15.6%
Q2 2014	100.0	2.6%	100.0	0.0%	99.3	3.4%	101.5	20.9%	99.9	-3.7%
Q3 2014	100.4	2.5%	100.0	0.0%	101.0	6.4%	101.4	12.7%	99.5	-3.2%
Q4 2014	100.5	3.3%	100.0	0.0%	102.2	6.7%	100.9	7.9%	99.3	6.5%
Q1 2015	104.4	5.4%	100.0	0.0%	104.9	7.6%	117.1	21.8%	108.1	6.7%
Q2 2015	102.5	2.5%	100.0	0.0%	100.1	0.8%	114.3	12.6%	104.9	5.0%
Q3 2015	100.3	0.0%	100.0	0.0%	100.9	-0.1%	102.9	1.4%	98.0	-1.6%
Q4 2015	100.7	0.2%	100.0	0.0%	101.0	-1.2%	107.7	6.7%	96.0	-3.3%
Q1 2016	101.2	-3.0%	100.0	0.0%	102.5	-2.3%	100.8	-13.9%	104.2	-3.6%
Q2 2016	101.6	-0.9%	100.0	0.0%	103.2	3.1%	99.1	-13.3%	107.9	2.9%
Q3 2016	102.7	2.3%	100.0	0.0%	104.2	3.3%	103.5	0.6%	109.8	12.0%
Q4 2016	102.1	1.4%	100.0	0.0%	100.7	-0.2%	108.7	1.0%	106.1	10.5%
Q1 2017	102.9	1.7%	100.0	0.0%	99.0	-3.5%	115.4	14.4%	109.2	4.8%
Q2 2017	103.0	1.4%	100.0	0.0%	99.9	-3.2%	119.3	20.4%	104.2	-3.4%
Q3 2017	102.4	-0.3%	100.0	0.0%	99.4	-4.7%	117.5	13.6%	102.1	-7.0%
Q4 2017	102.7	0.6%	100.0	0.0%	99.8	-1.0%	120.9	11.3%	99.9	-5.9%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute, May 2018.



**Table 4a: Country specific data**

	Austria				Belgium			
	Wealth price index		Consumer prices (HICP)		Wealth price index		Consumer prices (HICP)	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	70.6	-	90.8	-	77.3	-	88.8	-
Q2 2005	71.6	-	91.0	-	78.4	-	89.5	-
Q3 2005	72.8	-	91.5	-	81.0	-	90.2	-
Q4 2005	74.6	-	91.9	-	82.3	-	90.6	-
Q1 2006	76.7	8.6%	92.2	1.5%	84.2	9.0%	91.1	2.6%
Q2 2006	76.5	6.8%	92.8	2.0%	84.9	8.2%	91.7	2.5%
Q3 2006	77.6	6.7%	93.2	1.8%	87.1	7.6%	92.2	2.2%
Q4 2006	79.4	6.4%	93.2	1.5%	88.3	7.3%	92.4	2.0%
Q1 2007	82.9	8.1%	93.9	1.9%	90.3	7.2%	92.8	1.8%
Q2 2007	84.5	10.4%	94.5	1.8%	92.1	8.5%	93.0	1.4%
Q3 2007	83.0	6.9%	95.0	1.9%	92.4	6.1%	93.4	1.3%
Q4 2007	81.3	2.5%	96.2	3.2%	91.9	4.1%	94.9	2.7%
Q1 2008	80.0	-3.4%	97.0	3.3%	91.0	0.7%	96.3	3.8%
Q2 2008	80.5	-4.7%	97.9	3.7%	91.4	-0.7%	97.6	5.0%
Q3 2008	78.7	-5.1%	98.5	3.7%	90.8	-1.7%	98.7	5.7%
Q4 2008	75.3	-7.3%	98.3	2.2%	86.8	-5.6%	98.3	3.5%
Q1 2009	76.4	-4.6%	98.0	1.1%	85.7	-5.8%	97.7	1.5%
Q2 2009	78.9	-2.1%	98.0	0.1%	86.5	-5.3%	97.4	-0.3%
Q3 2009	79.6	1.2%	98.4	-0.1%	89.4	-1.6%	97.5	-1.2%
Q4 2009	81.9	8.8%	98.9	0.6%	89.4	3.0%	98.1	-0.1%
Q1 2010	81.4	6.6%	99.3	1.3%	91.0	6.2%	98.9	1.2%
Q2 2010	82.6	4.8%	99.7	1.8%	91.7	6.0%	99.8	2.5%
Q3 2010	84.5	6.1%	100.1	1.7%	93.5	4.6%	100.1	2.7%
Q4 2010	87.1	6.3%	100.8	2.0%	94.7	5.9%	101.2	3.1%
Q1 2011	87.2	7.1%	102.3	3.0%	95.2	4.5%	102.2	3.3%
Q2 2011	87.9	6.4%	103.4	3.7%	95.5	4.2%	103.0	3.2%
Q3 2011	86.2	2.0%	104.0	3.9%	95.6	2.3%	103.8	3.6%
Q4 2011	86.2	-1.1%	104.5	3.6%	95.1	0.5%	104.5	3.3%
Q1 2012	89.1	2.2%	105.1	2.7%	97.0	1.9%	105.5	3.3%
Q2 2012	89.4	1.7%	105.8	2.3%	96.3	0.8%	105.6	2.6%
Q3 2012	92.1	6.9%	106.5	2.4%	98.3	2.9%	106.2	2.4%
Q4 2012	93.1	8.1%	107.5	2.8%	98.1	3.1%	106.9	2.3%
Q1 2013	94.8	6.4%	107.9	2.7%	99.0	2.1%	107.0	1.4%
Q2 2013	94.7	5.9%	108.2	2.3%	98.3	2.1%	107.1	1.4%
Q3 2013	97.7	6.0%	108.6	2.0%	99.3	1.0%	107.5	1.2%
Q4 2013	96.4	3.5%	109.2	1.6%	98.8	0.7%	107.8	0.9%
Q1 2014	99.5	4.9%	109.5	1.6%	98.6	-0.5%	108.1	1.0%
Q2 2014	100.8	6.4%	109.9	1.6%	99.4	1.2%	107.8	0.6%
Q3 2014	99.7	2.1%	110.2	1.5%	100.5	1.2%	107.9	0.3%
Q4 2014	100.1	3.8%	110.5	1.2%	101.5	2.7%	107.8	-0.1%
Q1 2015	102.2	2.7%	110.3	0.7%	102.1	3.6%	107.8	-0.3%
Q2 2015	105.6	4.8%	110.9	0.9%	103.5	4.1%	108.5	0.7%
Q3 2015	106.9	7.2%	111.2	0.9%	104.0	3.4%	108.8	0.9%
Q4 2015	106.9	6.8%	111.4	0.7%	104.5	3.0%	109.2	1.3%
Q1 2016	108.8	6.5%	111.4	1.1%	103.5	1.4%	109.4	1.5%
Q2 2016	110.1	4.2%	111.6	0.6%	104.8	1.3%	110.3	1.7%
Q3 2016	111.9	4.7%	112.0	0.7%	107.1	3.0%	110.9	1.9%
Q4 2016	112.5	5.2%	112.9	1.4%	106.6	2.0%	111.4	2.0%
Q1 2017	115.5	6.2%	113.8	2.1%	108.4	4.7%	112.6	2.9%
Q2 2017	119.2	8.3%	114.0	2.2%	108.3	3.3%	112.5	2.0%
Q3 2017	119.4	6.7%	114.7	2.4%	110.4	3.1%	113.1	2.0%
Q4 2017	121.1	7.7%	115.6	2.3%	110.3	3.5%	113.7	2.1%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute and Haver Analytics, May 2018.



**Table 4b: Country specific data**

	Finland				France			
	Wealth price index		Consumer prices (HICP)		Wealth price index		Consumer prices (HICP)	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	78.3	-	90.0	-	79.3	-	91.2	-
Q2 2005	80.5	-	90.3	-	81.6	-	91.6	-
Q3 2005	82.1	-	90.8	-	84.4	-	92.2	-
Q4 2005	83.4	-	91.0	-	86.5	-	92.6	-
Q1 2006	85.0	8.7%	91.2	1.3%	89.6	13.0%	93.1	2.0%
Q2 2006	85.5	6.3%	91.6	1.4%	90.0	10.3%	93.6	2.2%
Q3 2006	86.3	5.1%	91.8	1.1%	92.0	9.0%	94.0	1.9%
Q4 2006	88.3	5.9%	92.1	1.2%	93.3	7.9%	94.0	1.6%
Q1 2007	90.2	6.1%	92.4	1.3%	94.2	5.2%	94.3	1.3%
Q2 2007	92.3	7.9%	92.8	1.4%	96.4	7.1%	94.8	1.2%
Q3 2007	92.0	6.6%	93.1	1.5%	96.9	5.4%	95.3	1.3%
Q4 2007	91.7	3.9%	94.0	2.1%	96.8	3.8%	96.4	2.5%
Q1 2008	90.7	0.5%	95.6	3.5%	94.4	0.3%	97.4	3.3%
Q2 2008	90.7	-1.6%	96.5	3.9%	94.8	-1.7%	98.2	3.7%
Q3 2008	88.4	-3.9%	97.5	4.7%	93.7	-3.3%	98.8	3.7%
Q4 2008	83.3	-9.2%	97.5	3.8%	88.4	-8.7%	98.4	2.0%
Q1 2009	84.4	-7.0%	97.8	2.2%	85.7	-9.2%	98.0	0.7%
Q2 2009	86.7	-4.4%	98.1	1.7%	86.2	-9.1%	98.0	-0.2%
Q3 2009	88.9	0.6%	98.7	1.2%	88.5	-5.6%	98.3	-0.4%
Q4 2009	90.8	9.1%	98.8	1.3%	89.0	0.7%	98.8	0.4%
Q1 2010	93.3	10.6%	99.1	1.4%	90.2	5.2%	99.4	1.4%
Q2 2010	93.8	8.2%	99.5	1.4%	91.5	6.2%	99.8	1.8%
Q3 2010	95.1	6.9%	100.1	1.5%	93.7	5.9%	100.1	1.8%
Q4 2010	96.1	5.9%	101.2	2.5%	95.6	7.5%	100.7	1.9%
Q1 2011	96.9	3.8%	102.4	3.3%	96.2	6.6%	101.4	2.0%
Q2 2011	97.5	4.0%	103.0	3.5%	97.8	6.8%	102.0	2.2%
Q3 2011	95.6	0.6%	103.6	3.5%	97.3	3.9%	102.4	2.3%
Q4 2011	95.3	-0.8%	104.1	2.9%	96.2	0.5%	103.3	2.6%
Q1 2012	97.8	1.0%	105.5	3.0%	97.0	0.9%	104.0	2.6%
Q2 2012	97.3	-0.2%	106.2	3.1%	96.0	-1.9%	104.4	2.3%
Q3 2012	98.2	2.6%	106.9	3.2%	97.6	0.3%	104.7	2.2%
Q4 2012	98.6	3.4%	107.7	3.4%	97.1	1.0%	105.1	1.7%
Q1 2013	99.5	1.7%	108.2	2.6%	97.1	0.1%	105.3	1.2%
Q2 2013	99.2	1.9%	108.8	2.5%	97.0	1.0%	105.4	0.9%
Q3 2013	99.7	1.6%	109.2	2.1%	99.0	1.4%	105.8	1.0%
Q4 2013	99.2	0.7%	109.5	1.7%	98.9	1.8%	105.9	0.8%
Q1 2014	99.7	0.2%	109.9	1.6%	99.7	2.7%	106.2	0.9%
Q2 2014	100.6	1.5%	110.0	1.1%	100.6	3.8%	106.2	0.8%
Q3 2014	100.0	0.3%	110.5	1.2%	100.4	1.5%	106.3	0.5%
Q4 2014	99.6	0.3%	110.5	0.9%	99.2	0.4%	106.2	0.3%
Q1 2015	102.0	2.2%	109.9	0.0%	101.7	2.0%	106.0	-0.2%
Q2 2015	101.8	1.2%	110.0	0.0%	101.7	1.1%	106.5	0.3%
Q3 2015	100.5	0.5%	110.1	-0.4%	101.5	1.0%	106.4	0.1%
Q4 2015	100.9	1.4%	110.2	-0.3%	102.0	2.8%	106.4	0.2%
Q1 2016	100.7	-1.3%	109.9	0.0%	101.1	-0.6%	106.1	0.1%
Q2 2016	101.8	0.0%	110.4	0.3%	101.7	0.0%	106.5	0.1%
Q3 2016	102.5	1.9%	110.7	0.5%	104.3	2.8%	106.8	0.4%
Q4 2016	102.9	1.9%	111.0	0.7%	104.3	2.2%	107.1	0.6%
Q1 2017	103.9	3.2%	111.2	1.1%	106.2	5.0%	107.7	1.5%
Q2 2017	105.1	3.2%	111.4	0.9%	109.1	7.3%	107.6	1.0%
Q3 2017	104.4	1.9%	111.5	0.8%	110.4	5.9%	107.9	1.0%
Q4 2017	104.3	1.4%	111.7	0.7%	110.9	6.3%	108.5	1.3%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute and Haver Analytics, May 2018.



**Table 4c: Country specific data**

	Germany				Greece			
	Wealth price index		Consumer prices (HICP)		Wealth price index		Consumer prices (HICP)	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	84.1	-	91.3	-	135.8	-	84.0	-
Q2 2005	83.5	-	91.9	-	139.0	-	84.5	-
Q3 2005	85.5	-	92.7	-	144.1	-	85.3	-
Q4 2005	84.4	-	93.0	-	149.0	-	86.0	-
Q1 2006	86.4	2.8%	93.2	2.1%	159.6	17.5%	86.7	3.2%
Q2 2006	85.5	2.3%	93.9	2.1%	159.8	14.9%	87.5	3.5%
Q3 2006	85.0	-0.6%	94.2	1.7%	164.1	13.8%	88.2	3.4%
Q4 2006	86.5	2.6%	94.2	1.3%	172.7	16.0%	88.7	3.2%
Q1 2007	85.6	-1.0%	94.9	1.8%	176.5	10.6%	89.3	3.0%
Q2 2007	87.6	2.5%	95.7	2.0%	180.3	12.8%	89.8	2.7%
Q3 2007	86.9	2.3%	96.3	2.2%	182.9	11.5%	90.6	2.7%
Q4 2007	86.4	-0.2%	97.0	3.0%	181.8	5.2%	91.9	3.6%
Q1 2008	85.8	0.2%	97.8	3.1%	173.3	-1.8%	93.2	4.4%
Q2 2008	86.2	-1.6%	98.6	3.0%	172.5	-4.3%	94.1	4.8%
Q3 2008	83.7	-3.7%	99.4	3.2%	166.4	-9.0%	94.9	4.7%
Q4 2008	81.1	-6.1%	98.7	1.7%	155.5	-14.5%	94.7	3.1%
Q1 2009	80.8	-5.8%	98.6	0.8%	148.8	-14.1%	94.9	1.9%
Q2 2009	83.1	-3.6%	98.8	0.2%	154.5	-10.4%	94.9	0.8%
Q3 2009	84.2	0.6%	99.0	-0.4%	153.9	-7.5%	95.6	0.8%
Q4 2009	86.0	6.0%	99.1	0.4%	153.2	-1.5%	96.6	1.9%
Q1 2010	86.0	6.4%	99.4	0.8%	150.4	1.1%	97.9	3.1%
Q2 2010	87.3	5.0%	99.8	1.0%	143.7	-7.0%	99.7	5.1%
Q3 2010	87.7	4.0%	100.2	1.2%	140.3	-8.8%	100.9	5.6%
Q4 2010	89.1	3.6%	100.6	1.6%	138.9	-9.3%	101.4	5.0%
Q1 2011	90.6	5.4%	101.5	2.1%	139.0	-7.6%	102.3	4.5%
Q2 2011	91.6	4.9%	102.3	2.5%	134.9	-6.1%	103.0	3.3%
Q3 2011	89.6	2.2%	102.8	2.7%	129.5	-7.7%	103.1	2.1%
Q4 2011	89.8	0.8%	103.3	2.6%	124.5	-10.4%	104.1	2.6%
Q1 2012	91.6	1.1%	103.9	2.4%	120.5	-13.3%	104.1	1.7%
Q2 2012	91.6	0.0%	104.5	2.1%	116.6	-13.5%	104.2	1.2%
Q3 2012	93.7	4.6%	104.9	2.1%	114.7	-11.4%	103.8	0.7%
Q4 2012	94.9	5.7%	105.3	1.9%	111.7	-10.3%	104.7	0.6%
Q1 2013	95.5	4.2%	105.8	1.8%	109.0	-9.5%	104.1	0.0%
Q2 2013	96.0	4.8%	106.1	1.5%	105.8	-9.3%	103.9	-0.3%
Q3 2013	96.7	3.2%	106.7	1.7%	104.3	-9.0%	102.8	-0.9%
Q4 2013	97.2	2.4%	106.7	1.4%	103.5	-7.4%	102.5	-2.1%
Q1 2014	98.7	3.4%	106.9	1.0%	102.9	-5.6%	102.8	-1.2%
Q2 2014	100.5	4.7%	107.1	0.9%	101.0	-4.5%	102.1	-1.7%
Q3 2014	100.0	3.5%	107.5	0.8%	99.3	-4.8%	102.0	-0.8%
Q4 2014	100.7	3.6%	107.2	0.4%	96.8	-6.5%	100.7	-1.8%
Q1 2015	104.8	6.1%	106.8	-0.1%	96.3	-6.4%	100.6	-2.2%
Q2 2015	105.6	5.0%	107.4	0.4%	94.0	-7.0%	100.6	-1.4%
Q3 2015	105.1	5.1%	107.6	0.0%	92.6	-6.7%	101.0	-0.9%
Q4 2015	107.1	6.3%	107.4	0.2%	92.1	-4.8%	100.8	0.1%
Q1 2016	106.9	2.1%	106.9	0.1%	91.9	-4.5%	100.3	-0.2%
Q2 2016	109.3	3.5%	107.4	0.0%	91.7	-2.4%	100.5	-0.1%
Q3 2016	111.3	5.9%	108.0	0.4%	90.7	-2.1%	101.1	0.1%
Q4 2016	112.2	4.8%	108.5	1.0%	91.6	-0.5%	101.0	0.2%
Q1 2017	113.1	5.8%	109.1	2.1%	91.6	-0.4%	101.9	1.5%
Q2 2017	116.0	6.1%	109.1	1.6%	92.7	1.0%	101.9	1.4%
Q3 2017	117.9	5.9%	109.7	1.6%	92.8	2.3%	102.0	0.8%
Q4 2017	120.4	7.3%	110.2	1.6%	93.1	1.6%	102.0	1.0%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute and Haver Analytics, May 2018.



Table 4d: Country specific data

	Italy				Netherlands			
	Wealth price index		Consumer prices (HICP)		Wealth price index		Consumer prices (HICP)	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	99.0	-	89.7	-	103.1	-	92.4	-
Q2 2005	101.3	-	90.2	-	104.3	-	92.6	-
Q3 2005	103.7	-	90.7	-	105.6	-	93.2	-
Q4 2005	104.4	-	91.3	-	106.4	-	93.6	-
Q1 2006	107.5	8.6%	91.7	2.2%	107.7	4.4%	93.9	1.6%
Q2 2006	107.7	6.3%	92.3	2.3%	108.2	3.6%	94.2	1.7%
Q3 2006	109.4	5.5%	92.9	2.4%	109.4	3.5%	94.8	1.7%
Q4 2006	111.7	7.1%	93.1	2.0%	110.3	3.7%	95.1	1.6%
Q1 2007	113.9	5.9%	93.6	2.1%	111.6	3.7%	95.4	1.5%
Q2 2007	116.0	7.7%	94.0	1.8%	112.6	4.1%	96.0	1.9%
Q3 2007	115.5	5.5%	94.4	1.7%	114.0	4.2%	96.0	1.3%
Q4 2007	115.1	3.0%	95.4	2.4%	114.6	3.9%	96.7	1.7%
Q1 2008	114.2	0.3%	96.7	3.3%	114.2	2.3%	97.2	1.9%
Q2 2008	114.9	-0.9%	97.4	3.7%	114.1	1.3%	97.9	2.0%
Q3 2008	113.4	-1.8%	98.3	4.1%	114.6	0.5%	98.8	2.9%
Q4 2008	110.6	-3.9%	98.2	2.9%	111.4	-2.8%	98.7	2.0%
Q1 2009	108.7	-4.8%	98.0	1.4%	110.4	-3.4%	99.0	1.8%
Q2 2009	109.0	-5.1%	98.2	0.8%	108.5	-4.9%	99.4	1.5%
Q3 2009	109.1	-3.8%	98.5	0.1%	108.5	-5.3%	98.7	-0.1%
Q4 2009	108.4	-2.0%	98.9	0.7%	108.9	-2.2%	99.2	0.6%
Q1 2010	108.2	-0.4%	99.3	1.3%	109.1	-1.1%	99.4	0.4%
Q2 2010	108.2	-0.7%	99.7	1.5%	109.4	0.8%	99.9	0.5%
Q3 2010	108.6	-0.4%	100.2	1.8%	109.6	1.0%	99.9	1.3%
Q4 2010	108.7	0.2%	100.8	1.9%	109.6	0.6%	100.8	1.5%
Q1 2011	108.8	0.6%	101.6	2.4%	109.6	0.4%	101.3	1.9%
Q2 2011	109.4	1.1%	102.6	2.9%	108.3	-1.0%	102.1	2.3%
Q3 2011	108.2	-0.3%	103.0	2.8%	107.8	-1.7%	103.0	3.1%
Q4 2011	107.0	-1.5%	104.5	3.6%	106.3	-3.0%	103.4	2.6%
Q1 2012	107.5	-1.3%	105.2	3.5%	105.5	-3.7%	104.3	2.9%
Q2 2012	105.8	-3.4%	106.2	3.6%	103.8	-4.1%	104.8	2.6%
Q3 2012	105.0	-2.9%	106.6	3.5%	101.6	-5.7%	105.5	2.5%
Q4 2012	103.3	-3.5%	107.2	2.6%	102.0	-4.1%	106.8	3.3%
Q1 2013	102.6	-4.6%	107.4	2.1%	100.1	-5.1%	107.7	3.3%
Q2 2013	102.2	-3.3%	107.5	1.2%	98.1	-5.5%	108.0	3.0%
Q3 2013	101.5	-3.4%	107.8	1.1%	98.8	-2.8%	108.3	2.6%
Q4 2013	100.8	-2.4%	107.8	0.6%	98.5	-3.4%	108.2	1.3%
Q1 2014	101.2	-1.3%	107.9	0.5%	99.2	-0.9%	108.4	0.6%
Q2 2014	100.7	-1.5%	107.9	0.4%	99.8	1.7%	108.3	0.3%
Q3 2014	99.9	-1.6%	107.8	-0.1%	100.4	1.6%	108.5	0.2%
Q4 2014	98.3	-2.5%	107.9	0.1%	100.7	2.2%	108.4	0.2%
Q1 2015	99.7	-1.5%	107.8	-0.1%	102.7	3.6%	108.0	-0.4%
Q2 2015	99.8	-0.8%	108.0	0.1%	102.6	2.8%	108.7	0.4%
Q3 2015	99.6	-0.2%	108.1	0.3%	103.5	3.1%	109.0	0.4%
Q4 2015	99.2	1.0%	108.1	0.1%	104.5	3.8%	108.9	0.4%
Q1 2016	98.2	-1.6%	107.9	0.0%	105.6	2.8%	108.4	0.4%
Q2 2016	97.9	-1.9%	107.7	-0.3%	106.1	3.4%	108.5	-0.2%
Q3 2016	97.8	-1.9%	108.0	-0.1%	107.3	3.6%	108.7	-0.2%
Q4 2016	97.7	-1.6%	108.3	0.2%	109.9	5.2%	109.3	0.3%
Q1 2017	98.5	0.4%	109.2	1.3%	111.1	5.2%	109.8	1.3%
Q2 2017	99.4	1.5%	109.4	1.6%	112.6	6.1%	109.8	1.2%
Q3 2017	99.4	1.6%	109.5	1.3%	115.3	7.5%	110.4	1.5%
Q4 2017	99.5	1.9%	109.6	1.3%	117.3	6.7%	110.7	1.3%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute and Haver Analytics, May 2018.



Table 4e: Country specific data

	Portugal				Spain			
	Wealth price index		Consumer prices (HICP)		Wealth price index		Consumer prices (HICP)	
	Index	Annual change	Index	Annual change	Index	Annual change	Index	Annual change
Q1 2005	104.2	-	90.9	-	116.7	-	87.2	-
Q2 2005	104.8	-	91.3	-	120.4	-	88.1	-
Q3 2005	106.8	-	92.3	-	124.1	-	89.0	-
Q4 2005	107.7	-	93.0	-	126.9	-	89.9	-
Q1 2006	108.6	4.2%	93.8	3.2%	131.1	12.3%	90.8	4.1%
Q2 2006	107.2	2.2%	94.5	3.5%	132.7	10.2%	91.6	4.0%
Q3 2006	107.7	0.8%	95.0	2.9%	135.8	9.4%	92.2	3.6%
Q4 2006	107.7	0.0%	95.4	2.6%	140.2	10.5%	92.3	2.6%
Q1 2007	110.1	1.4%	96.1	2.4%	142.8	8.9%	93.1	2.5%
Q2 2007	113.3	5.8%	96.8	2.5%	146.2	10.1%	93.8	2.4%
Q3 2007	110.6	2.7%	96.9	2.1%	146.2	7.7%	94.4	2.4%
Q4 2007	109.2	1.4%	98.0	2.7%	145.3	3.6%	96.0	4.0%
Q1 2008	107.1	-2.7%	98.9	2.9%	142.6	-0.1%	97.3	4.5%
Q2 2008	106.9	-5.7%	99.7	3.0%	141.5	-3.2%	98.2	4.7%
Q3 2008	103.6	-6.4%	100.0	3.1%	137.3	-6.1%	99.1	5.0%
Q4 2008	99.5	-8.9%	99.6	1.6%	131.2	-9.7%	98.4	2.5%
Q1 2009	100.5	-6.2%	98.8	-0.1%	127.4	-10.7%	97.7	0.5%
Q2 2009	102.9	-3.7%	98.5	-1.2%	128.7	-9.0%	97.5	-0.7%
Q3 2009	104.7	1.1%	98.5	-1.5%	128.9	-6.1%	98.1	-1.0%
Q4 2009	105.0	5.5%	98.7	-0.8%	128.6	-2.0%	98.6	0.2%
Q1 2010	105.0	4.5%	99.0	0.3%	127.3	-0.1%	99.0	1.3%
Q2 2010	104.0	1.0%	99.5	1.0%	128.3	-0.3%	99.7	2.2%
Q3 2010	103.6	-1.1%	100.4	2.0%	126.7	-1.7%	100.3	2.2%
Q4 2010	102.7	-2.2%	101.0	2.3%	126.9	-1.4%	101.0	2.4%
Q1 2011	102.3	-2.6%	102.7	3.6%	124.0	-2.6%	102.3	3.3%
Q2 2011	99.4	-4.4%	103.2	3.7%	122.3	-4.7%	103.0	3.2%
Q3 2011	95.6	-7.6%	103.6	3.1%	118.2	-6.7%	103.2	2.9%
Q4 2011	92.7	-9.7%	104.7	3.7%	114.0	-10.1%	103.7	2.7%
Q1 2012	92.3	-9.7%	106.1	3.4%	109.8	-11.4%	104.3	1.9%
Q2 2012	89.7	-9.8%	106.1	2.8%	105.5	-13.7%	104.9	1.9%
Q3 2012	90.1	-5.8%	106.6	2.9%	103.4	-12.5%	106.0	2.7%
Q4 2012	91.6	-1.2%	106.8	2.0%	102.4	-10.2%	107.0	3.1%
Q1 2013	91.7	-0.7%	106.7	0.5%	97.5	-11.2%	107.2	2.8%
Q2 2013	91.1	1.6%	107.0	0.9%	96.5	-8.6%	107.0	1.9%
Q3 2013	92.1	2.3%	107.0	0.4%	98.1	-5.1%	107.4	1.3%
Q4 2013	96.4	5.2%	106.8	0.0%	97.7	-4.6%	107.2	0.2%
Q1 2014	100.5	9.6%	106.7	0.0%	98.8	1.3%	107.4	0.3%
Q2 2014	100.8	10.6%	106.7	-0.3%	100.6	4.3%	107.0	0.1%
Q3 2014	100.3	8.8%	106.7	-0.3%	100.5	2.4%	106.9	-0.4%
Q4 2014	98.5	2.2%	106.8	0.0%	100.1	2.4%	106.5	-0.6%
Q1 2015	100.7	0.3%	106.8	0.1%	101.5	2.7%	106.3	-1.1%
Q2 2015	102.5	1.7%	107.4	0.7%	104.4	3.7%	106.7	-0.3%
Q3 2015	101.4	1.2%	107.4	0.7%	103.4	2.9%	106.2	-0.6%
Q4 2015	102.6	4.2%	107.4	0.5%	103.6	3.5%	106.0	-0.5%
Q1 2016	102.7	1.9%	107.3	0.5%	104.3	2.8%	105.4	-0.8%
Q2 2016	103.5	1.0%	108.0	0.6%	105.6	1.2%	105.6	-1.0%
Q3 2016	103.9	2.5%	108.2	0.7%	106.9	3.4%	105.9	-0.3%
Q4 2016	105.0	2.3%	108.3	0.9%	107.1	3.4%	106.9	0.8%
Q1 2017	106.5	3.8%	109.1	1.6%	109.7	5.2%	108.1	2.5%
Q2 2017	110.9	7.1%	109.6	1.5%	111.7	5.8%	107.8	2.1%
Q3 2017	113.3	9.0%	109.6	1.3%	112.7	5.4%	108.1	2.1%
Q4 2017	115.3	9.8%	110.3	1.9%	113.6	6.0%	108.5	1.5%

All series are indexed in 2014. Source: Flossbach von Storch Research Institute and Haver Analytics, May 2018.



## Methodology and data sources

This study covers the southern Euro area countries Greece, Italy, Portugal, and Spain as well as the northern countries Austria, Belgium, Finland, France, Germany, and the Netherlands. For each country, the asset composition of the average household is calculated based on “The Household Finance and Consumption Survey: Results from the Second Wave 2” (HFCS, European Central Bank, Statistics Paper Series No.18, December 2016). The assets of a household are split up into real assets and financial assets. Real assets consist of real estate, business capital, durable goods, and collectors’ items. Financial assets are broken down into cash equivalents, bonds, stocks and other types of financial assets. Table 5 reports the overall and country-specific weights. Mutual funds, pension funds and life insurances are broken down into their respective asset classes and allocated to these classes accordingly.

For each asset class, we calculate the country-specific quarterly price change. We use wealth prices and not asset valuation indicators and we exclude cash flows from assets, such as interest, dividends or rental yields. For real asset prices, such as real estate or consumer durables, we use data adjusted for quality changes. Thus, our wealth price indices correspond conceptually to consumer price indices.

The index is calculated as a Laspeyres price index. All of the time series are indexed to 100 in 2014 which is the year that the results of the HFCS refer to. For time series available on a daily or weekly frequency, the quarterly index value is based on the average price within the last month of the quarter. For monthly time series, the last month of the quarter determines the index value.

Real estate prices are measured with the help of time series of real estate prices provided by Eurostat, national statistics offices, and Oxford

Table 5: Weighting schemes

	all	Southern countries				Northern countries					
		IT	GR	PT	ES	AT	BE	FI	FR	DE	NL
<b>Country weight in the overall index</b>	-	16,5%	1,4%	2,1%	15,2%	3,0%	5,0%	1,8%	22,9%	27,0%	5,0%
<b>average household wealth (in 1.000 €)</b>	256	236	112	185	308	276	370	239	279	240	233
<b>Weights</b>											
<b>Total real assets</b>	<b>82,1%</b>	<b>88,6%</b>	<b>93,4%</b>	<b>88,1%</b>	<b>85,1%</b>	<b>86,0%</b>	<b>76,7%</b>	<b>83,1%</b>	<b>81,2%</b>	<b>77,7%</b>	<b>75,2%</b>
Real estate	67,7%	77,6%	82,2%	70,1%	74,1%	64,5%	66,3%	73,6%	61,8%	61,9%	69,7%
Business wealth	9,7%	6,9%	6,6%	13,6%	7,8%	17,4%	7,5%	4,5%	11,9%	11,7%	1,2%
Consumer durables	3,9%	3,4%	3,8%	3,6%	2,7%	3,4%	2,4%	4,1%	6,2%	3,4%	3,5%
Collector's items	0,8%	0,7%	0,8%	0,8%	0,6%	0,7%	0,5%	0,9%	1,3%	0,7%	0,7%
<b>Financial assets</b>	<b>17,9%</b>	<b>11,4%</b>	<b>6,6%</b>	<b>11,9%</b>	<b>14,9%</b>	<b>14,0%</b>	<b>23,3%</b>	<b>16,9%</b>	<b>18,8%</b>	<b>22,3%</b>	<b>24,8%</b>
Cash equivalents	9,2%	5,7%	5,3%	9,3%	7,7%	9,9%	10,6%	8,6%	7,6%	12,9%	11,5%
Bonds	4,2%	4,0%	0,5%	1,4%	2,3%	2,0%	5,8%	1,5%	6,1%	3,7%	6,8%
Shares	2,3%	0,7%	0,5%	0,6%	1,9%	1,1%	4,5%	5,3%	3,1%	2,3%	4,0%
Other fin. assets	2,3%	1,0%	0,4%	0,6%	3,0%	0,9%	2,3%	1,5%	2,0%	3,3%	2,5%

Source: HFCS, European Central Bank, 2016.





Economics, all obtained via Haver Analytics. Business wealth is measured through MSCI Small Cap price indices of the respective country provided by ThomsonReuters. The price development of durable consumer goods is captured through the HICP time series for the respective country provided by Eurostat.

The price series for collectors' items and objects for speculation consists of the four representative subcategories jewellery, art, fine wines and historic automobiles. While jewellery prices are measured with help of the respective national or HICP time series, the three other categories consist of the same price series for every country. The Artprice Global Index by artprice.com provides information on art prices, the Liv-ex Fine Wine 100 by Liv-ex Ltd. denotes prices of fine wine, and the HAGI Top Index by the Historic Automobile Group International measures the price development of historic cars.

The geographical distribution of stock and bond investments is captured with help of the coordinated portfolio investment survey (CPIS) by the International Monetary Fund (IMF). The price development of the resulting investments is measured with help of Barclays bond indices and MSCI stock price indices. Other financial instruments are measured with help of the London Bullion gold price and ThomsonReuters Continuous Commodity Index, both provided by ThomsonReuters.

Due to data availability, the methodology of the Flossbach von Storch Wealth Price Series for the Euro countries differs slightly from the Flossbach von Storch Vermögenspreisindex, which is published separately on a quarterly basis.<sup>4</sup>

#### **List of data sources**

artprice.com  
Barclays  
Eurostat  
European Central Bank (ECB)  
Oxford Economics  
HAGI (Historic Automobile Group)  
Haver Analytics  
International Monetary Fund (IMF)  
Liv-ex Ltd.  
MSCI  
ThomsonReuters

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<sup>4</sup> For further details on the FvS Vermögenspreisindex see <http://www.fvs-ri.com/>.



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