

## Box 3

# Low interest rates and households' net interest income

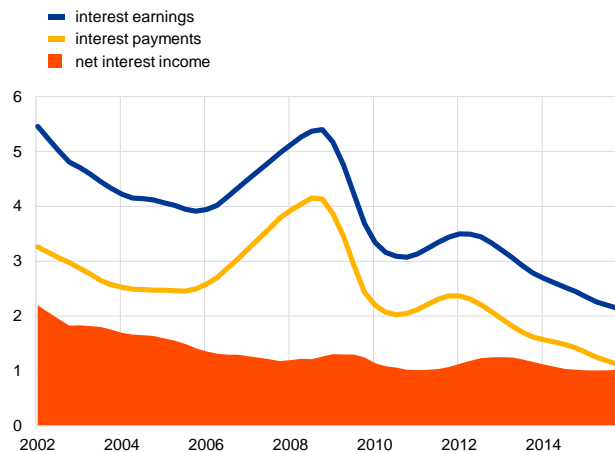
The ECB's accommodative monetary policy stance has substantially lowered borrowing costs for firms and households, while also lowering the returns on savings. As households do not only borrow, but also save, this raises the question about the extent to which lower interest rates have affected households' net interest income. This is particularly relevant when assessing the impact of lower interest rates on aggregate consumption.

Households' interest earnings have decreased by 3.2 percentage points as a share of disposable income since autumn 2008. Chart A shows the evolution of household income from holding interest-bearing assets such as deposits, bonds and loans.<sup>1</sup> However, this excludes the effect of lower interest rates on households' income and wealth via the investments of pension funds and life insurance providers, and the capital gains on long-term bonds and equities.

Chart A

Euro area households' interest payments/earnings

(percentage of gross disposable income)



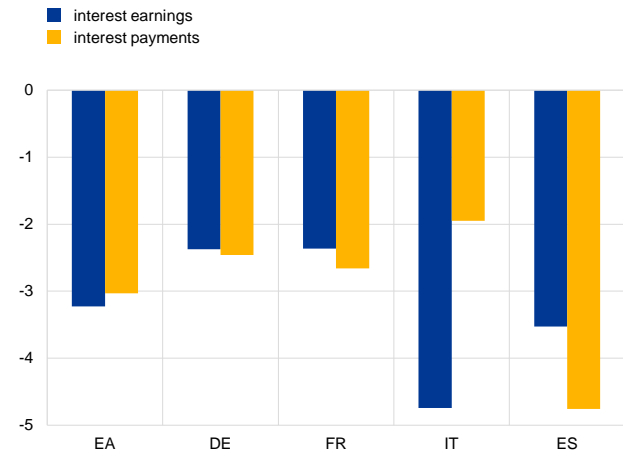
Sources: ECB and Eurostat.

Notes: Interest payments/earnings after allocation of FISIM (financial intermediation services indirectly measured), based on four-quarter sums. The latest observation is for the fourth quarter of 2015.

Chart B

Households' interest payments/earnings  
Q3 2008-Q4 2015

(changes as a percentage of gross disposable income, percentage points)



Sources: ECB and Eurostat.

Note: Interest payments/earnings after allocation of FISIM (financial intermediation services indirectly measured), based on four-quarter sums.

**While interest earnings have declined, interest payments have also decreased considerably.** Between the third quarter of 2008 and the fourth quarter of 2015

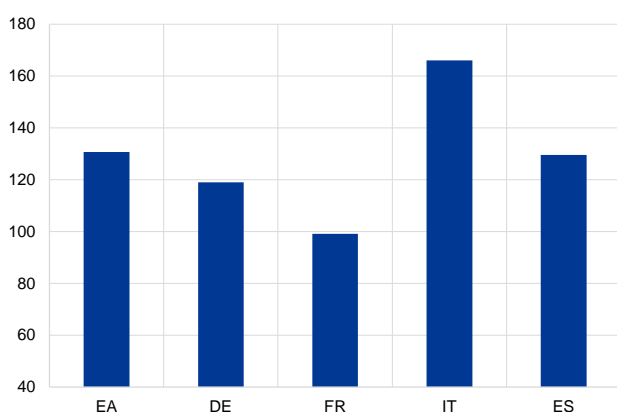
<sup>1</sup> To ensure consistency with the measurement of households' disposable income and consumption, interest payments/earnings are *after* the allocation of the intermediation services for which financial institutions do not charge explicitly, but which are paid for as part of the margin between rates applied to savers and borrowers. This choice does not affect the conclusions of the analysis.

interest payments fell by about 3 percentage points relative to disposable income. The drop in interest earnings is comparable to the drop in interest payments, meaning that the average euro area household's net interest income has been largely unaffected. At the same time, to the extent that individual households are net savers or net borrowers, in terms of net interest income some households have lost from lower interest rates while others have gained.

**The net interest income of the household sector has remained fairly stable in Germany and France, but less so in Italy and Spain.** Chart B shows that, in Germany and France, the drop in interest earnings and payments is comparable, meaning that lower interest rates have had a minimal effect on the net interest income of the household sector as a whole. Conversely, in Italy, the drop in household interest earnings is more than twice as large as the drop in household interest payments, with a negative impact on households' overall net interest income. The reason for this is that Italian households hold a relatively large amount of interest-bearing assets (see Chart C), whereas they are relatively less indebted (see Chart D). In Spain, the drop in interest payments is significantly larger than the fall in interest earnings, with a positive impact on households' overall net interest income. The larger decline in interest payments in Spain is explained by both the high stock of household debt (Chart D) and the fact that the interest rates paid on a large share of mortgages are indexed to money market rates. The stronger impact on interest payments in Spain is also in line with evidence that monetary policy has relatively large effects in countries with adjustable-rate mortgages.<sup>2</sup>

**Chart C**  
Households' interest-bearing assets

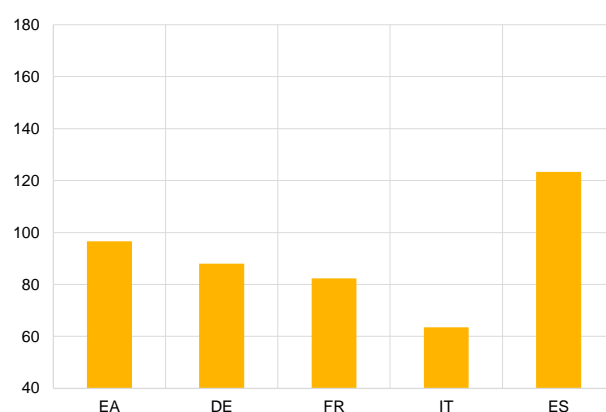
(percentage of gross disposable income)



Sources: ECB and Eurostat.  
Notes: Interest-bearing assets include currency and deposits, debt securities and loans, as recorded in the euro area accounts. Average over the period from the third quarter of 2008 to the fourth quarter of 2015 (from the first quarter of 2012 to the fourth quarter of 2015 for Italy), based on four-quarter sums.

**Chart D**  
Household debt

(percentage of gross disposable income)



Sources: ECB and Eurostat.  
Notes: Household debt corresponds to loans as recorded in the euro area accounts. Average over the period from the third quarter of 2008 to the fourth quarter of 2015 (from the first quarter of 2012 to the fourth quarter of 2015 for Italy), based on four-quarter sums.

<sup>2</sup> See Calza A., Monacelli, T. and Stracca, L., "Housing finance and monetary policy", *Journal of the European Economic Association*, Vol. 11, 2013, pp. 101-122.

**Despite lower interest earnings for net savers, low interest rates continue to support private consumption.** Lower interest rates typically support consumption today through intertemporal substitution for future consumption, as borrowing becomes cheaper and saving becomes less rewarding. In addition, as average euro area household net interest income has been largely unaffected, lower interest rates have mainly redistributed resources from net savers to net borrowers. As net borrowers typically have a higher marginal propensity to consume than net savers, this redistribution channel of lower interest rates further supports aggregate consumption.<sup>3</sup>

**Lower interest rates also support the wealth and income of households through other channels.** Households tend not only to be savers; they also invest in other assets for which they do not necessarily receive interest payments. There is evidence that the positive impact of lower interest rates on the prices of euro area stocks and bonds has been significant.<sup>4</sup> Moreover, lower borrowing costs have not only stimulated investment and consumption; they have also supported households' income through higher employment. By holding interest rates low, the ECB has encouraged the demand that is needed to bring the economy back to potential, so that, ultimately, interest rates can rise again.

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<sup>3</sup> See Jappelli, T. and Pistaferri, L., "Fiscal policy and MPC heterogeneity", *American Economic Journal: Macroeconomics*, Vol. 6, No 4, 2014, pp. 107-136.

<sup>4</sup> See Altavilla, C., Carboni, G. and Motto, R., "Asset purchase programmes and financial markets: lessons from the euro area", *Working Paper Series*, No 1864, ECB, November 2015.