

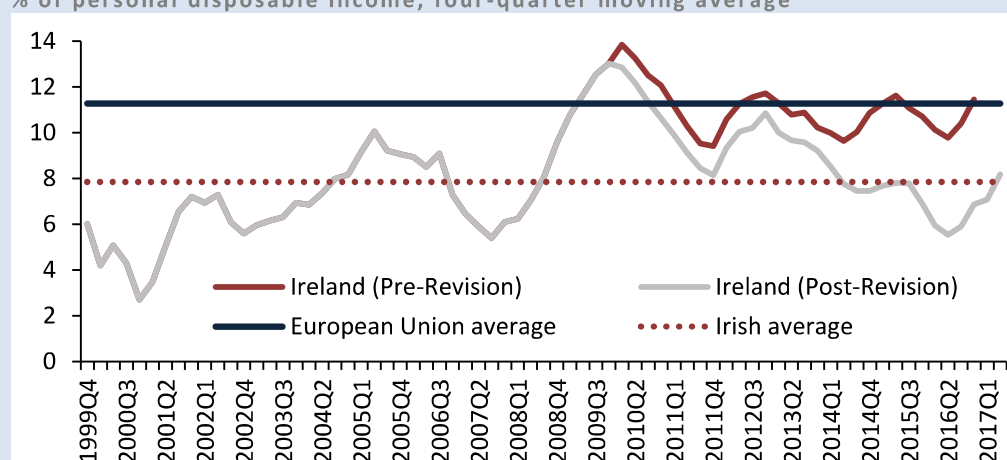
### Box C: Challenges in assessing the equilibrium household savings rate in Ireland

This box shows how different data sources give a strikingly different picture of the household savings rate in Ireland and, hence, have very different implications for future consumer-spending developments.

Savings rates of the household sector are a key indicator for examination when forecasting consumption, particularly in the medium term. If the savings rate is low (relative to an estimated/assumed equilibrium), then one might expect consumption to grow more slowly than income, hence leading to an increased savings rate. By contrast, if the savings rate is very high, this would suggest that there is scope for consumption growth to outstrip income growth for a period.<sup>33</sup> In addition, significant departures in the savings rate from expected norms may point towards temporary imbalances that could be expected to correct over time.

**Figure C1: Savings Rate**

% of personal disposable income, four-quarter moving average



Sources: CSO, Eurostat.

Notes: The pre-revision data are from the 2016Q4 release of the Institutional Sector Accounts (12/4/17). The post-revision data uses the latest release (2017Q2, released on 13/10/17). Irish and European Union averages are calculated using data from 1999Q1 to 2007Q4 and 2013Q1 to 2016Q4.

Different data sources can be used to look at the savings behaviour of Irish households. The CSO's Non-Financial Institutional Sector Accounts (ISA) provide both quarterly and annual data on the income, consumption and savings of the household sector.<sup>34</sup> Estimates are prone to change as new data becomes available. For example the series for, gross disposable income of households was revised down significantly for the period 2014 – 2016.<sup>35</sup> This in turn reduced savings (as consumption was not significantly revised) and hence reduces the savings rate. From Figure C1 above, it is evident that without the recent revision to the CSO data, Ireland would be quite close to the EU average savings rate and above the Irish historical average (both averages

<sup>33</sup> This would be consistent with the permanent income hypothesis. If consumers believe income will grow strongly in future they will increase consumption now (in anticipation of these increases), hence the savings rate is low now, but increases in future as income grows at a faster pace than consumption.

<sup>34</sup> This refers to sectors S.14 + S.15 in the ISA accounts. This includes Households and Non-Profit Institutions Serving Households (NPISH). The NPISH sector is quite small and hence should not have a material impact. A fully integrated set of annual financial accounts are produced by CSO. These financial accounts are balanced with the non-financial ones to produce a more comprehensive picture of the macroeconomy.

<sup>35</sup> The 2017Q1 release (2/8/17) first reflected the revised disposable income figures. Most of the decrease in gross disposable income is attributable to a downward revision of value added by the household sector of almost €4bn.

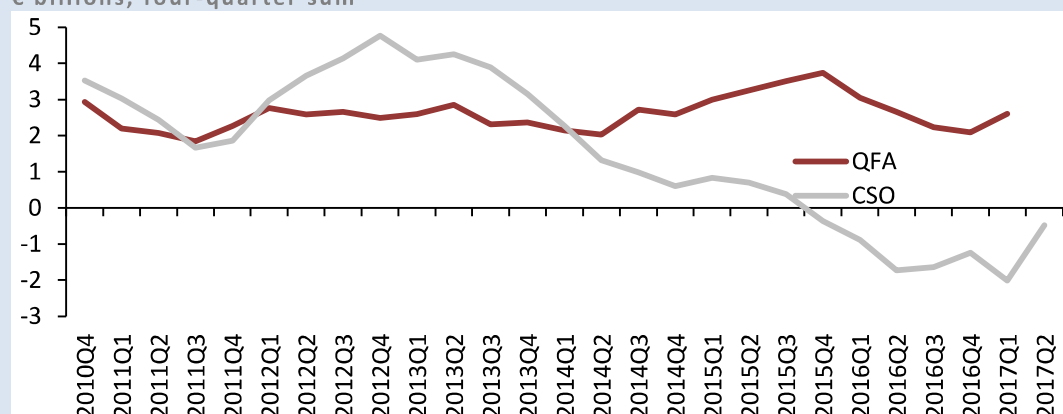
are calculated over the sample 1999Q1 to 2016Q4, excluding the period most affected by the financial crisis: 2008 to 2012). The revised CSO data paints a much different picture, with the savings rate trending downwards for much of the last four years and now lying around 8 per cent, slightly above Irish historical norms but below the EU historical average.

Irish and EU historical averages here are shown to give some sense of an equilibrium savings rate.<sup>36</sup> However, there may be good reason to believe that the Irish equilibrium savings rate has changed recently. In particular, the introduction of macroprudential regulations by the Central Bank of Ireland may have led to an upward structural shift in savings rates of households to reflect changes in deposit requirements for home purchases.

Given the differing implications of the revised and unrevised savings rate estimates, it is worth examining which pattern fits with other data sources available. The Quarterly Financial Accounts (QFA) are produced by the Central Bank of Ireland and provide information on the assets and liabilities of the household sector. Using this dataset one can calculate an estimate of net lending/borrowing of the household sector. A somewhat comparable net lending/borrowing series is also available from the non-financial sector accounts produced by CSO. Figure C2 shows the two series. From the QFA series, it would appear that the household sector is a net lender (adding to net assets) and has been a net saver of €2–€3 billion in annualised terms since 2011. By contrast, looking at the revised ISA series, this would suggest that the household sector has become a net borrower in recent times. Indeed the trend in household investment, mainly in property has increased in the period 2014–2016. Such an increase would normally be associated with an increase in borrowing by the household sector.<sup>37</sup>

**Figure C2: Net Lending (+)/Borrowing (-) of the Household Sector**

€ billions, four-quarter sum



Sources: CSO, Central Bank of Ireland and Internal IFAC calculations.

Two contrasting pictures are presented. The QFA data would appear to be more in line with the unrevised ISA data and the higher savings rate shown in Figure C1. Using the QFA data from the Central Bank of Ireland, the household sector would appear to be a net lender. Furthermore, these data would suggest that savings rates are closer to European averages and well above Irish historical norms. By contrast, the integrated financial and non-financial data produced by the CSO would suggest that the household sector has been a net borrower since 2015Q4, with a savings rate that has been broadly trending downwards and is below European averages.

If the savings rate is indeed low and the household sector is a net borrower, then any further fall in the savings rate could be interpreted as a warning indicator of potential imbalances. A lower savings rate may also imply that weaker consumption growth could be expected in future

<sup>36</sup> These averages are merely shown as a rough guide. Demographics, pension contributions/enrolment, rates of home ownership and interest rates all affect savings rates and vary substantially both over time and across countries.

<sup>37</sup> More generally, the annual financial and non-financial sector accounts produced by the CSO draw on all of the current available data to produce a coherent and consistent set of accounts for Ireland.

years, if the savings rate moves back towards historical norms. If the QFA data are correct, however, stronger consumption growth might be expected in future years, should the savings rate revert to historical norms.

Recent data on headline **investment** growth have been subject to large movements related to intangible assets. These investments are mostly imported and hence have little impact on overall GDP. With this in mind, underlying investment, which excludes investment in aircraft and intangible assets, is a more informative indicator. Underlying investment grew strongly last year, with underlying machinery and equipment, and building and construction both contributing significantly. *Budget 2018* forecasts that underlying investment will grow by just under 10 per cent in both 2017 and 2018. This strong growth is forecast to be driven mainly by the building and construction sector. Investment in underlying machinery and equipment has been quite volatile in recent times, with a number of large projects thought to be responsible.

**Table 2.1: Budget 2018 Macroeconomic Forecasts (to 2018)**

Percentage Change in Volumes Unless Otherwise Stated

	2016*	2017**	2018**
GDP	5.1	4.3	3.5
GDP Deflator	0.0	0.5	0.9
Nominal GDP	5.2	4.9	4.4
GNP	9.6	0.0	3.3
Nominal GNI*	9.4	0.6	4.5
Personal Consumption	3.3	2.3	2.3
Investment	61.2	-3.7	6.1
Underlying Investment	13.6	9.6	10.0
Government Expenditure on Goods and Services	5.3	2.0	2.0
Exports	4.6	3.5	4.8
Imports	16.4	-1.0	5.5
Stock Changes (p.p. Contribution)	0.1	-0.6	0.1
Current Account (% of GDP)	3.3	3.0	2.0
Trade Balance (% of GDP)	22.0	25.3	24.2
Employment	2.9	2.8	2.3
Unemployment Rate (%)	7.9	6.3	5.7
Inflation (HICP, %)	-0.2	0.2	0.8
Nominal GDP (€ billions)	275.6	289.1	301.8

Sources: CSO and *Budget 2018*.

Notes: \* Denotes latest outturns from the CSO. \*\* Denotes *Budget 2018* forecasts.

In previous *Fiscal Assessment Reports* (IFAC 2016a), the underlying investment to GDP or GNP ratio was examined as a yardstick for current investment levels, relative to historical standards. Using GDP or GNP has become less informative, due to the developments that led to the step change in the National Accounts for 2015. With this in mind, Figure 2.3 shows underlying investment as a