Office for
Budget
Responsibility

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Household debt in the *Economic and fiscal outlook*

1. In this supplementary release we set out how the household debt projection in our Economic and fiscal outlook is put together and how it has changed over recent forecasts. We will be publishing a briefing note in the summer that will set out our overall approach to economic forecasting in more detail.

Deriving the household debt forecast

2. Our forecasts for household debt are driven by projections of the difference over time between household disposable income and the uses it is put to. Where uses exceed disposable income the difference is made up by borrowing, which increases the level of debt.

3. Within the OBR's economic model, projections of disposable income and its uses are derived bottom-up through forecasts of a number of underlying components:

   - household disposable income consists of earnings, income from property, benefit payments and other transfers, less direct taxation and employee pension contributions; and

   - uses are consumption, investment in physical assets and the acquisition of financial assets.

4. This means that a number of underlying economic factors can drive the path of the household debt forecast and change it between forecasts. The annex to this note sets these out in detail.

The March 2011 household debt forecast

5. Our March forecast shows household debt rising from £1.6 trillion in 2011 to £2.1 trillion in 2015, or from 160 per cent of disposable income to 175 per cent. Essentially, this reflects our expectation that household consumption and investment

will rise more quickly than household disposable income over this period. We forecast that income growth will be constrained by a relatively weak wage response to higher-than-expected inflation. But we expect households to seek to protect their standard of living, relative to their earlier expectations, so that growth in household spending is not as weak as growth in household income. This requires households to borrow throughout the forecast period.

6. Households' ability to borrow will depend on the availability of credit. In terms of both price and availability, credit conditions faced by households showed some improvement in 2010[1] and we forecast that this gradual easing will continue. Our expectations of greater credit availability also reflect our expectations of stronger housing and asset markets, because rising asset prices support lending by increasing the value of borrowers' collateral. To the extent that the recovery in housing and asset markets exceeds or falls short of our expectations, the availability of and appetite for credit would imply a household debt projection higher or lower respectively than in our central forecast. In the event that credit conditions turn out to be tighter or looser than we project, we expect households would adjust their plans.

7. As some of the forecast increase in borrowing will be used by households to acquire assets (such as housing), rather than to finance consumption, it is also useful to consider the path of household assets alongside household debt. This gives a more complete picture of the household balance sheet. Chart 1 and Table 1 show our forecasts for total household debt and total assets as a proportion of disposable income on an end of calendar year basis. Total assets are also shown divided up into financial assets (e.g. shares) and physical assets (e.g. houses). It can be seen that household assets are expected to remain at considerably higher levels than household debt across the forecast period. This means that household net worth – a measure of households' net holding of assets and liabilities – is positive, and growing, over the forecast period. This is shown in Table 2.

8. However, net worth is forecast to decline as a percentage of income as the household debt ratio is expected to rise and the household assets ratio is expected to fall. The fall in household assets as a proportion of income occurs primarily because we forecast disposable income will rise a little faster than house prices over the coming years.

[1] Bank credit conditions survey

Chart 1: Household assets and liabilities as a proportion of disposable income

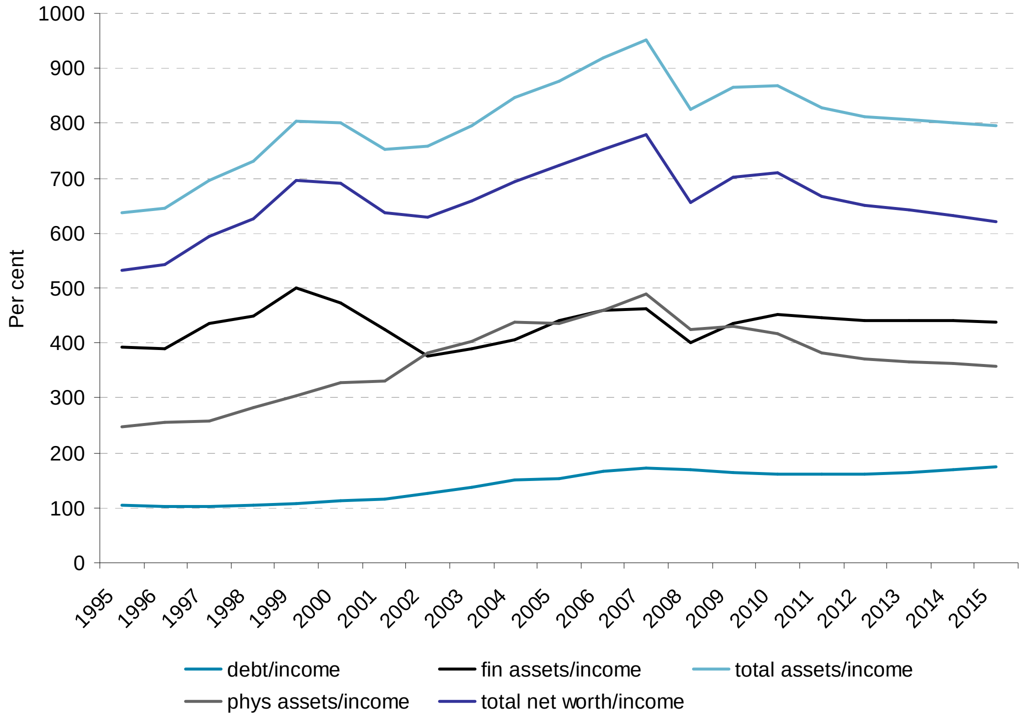


Table 1: Household assets and liabilities as a percentage of disposable income (end calendar year)

	debt	physical assets	financial assets	total assets	net worth
2010	160%	417%	452%	869%	709%
2011	160%	382%	445%	827%	667%
2012	162%	370%	442%	812%	650%
2013	165%	366%	441%	807%	642%
2014	170%	362%	440%	802%	632%
2015	175%	358%	439%	797%	622%

Table 2: Household assets and liabilities (£billion, end calendar year)

	debt	physical assets	financial assets	total assets	net worth
2010	1560	4066	4406	8471	6911
2011	1628	3878	4525	8403	6774
2012	1712	3920	4686	8606	6893
2013	1826	4050	4877	8927	7101
2014	1963	4191	5091	9282	7319
2015	2126	4343	5329	9672	7546

Summary of changes in the household debt forecast since June 2010

9. As set out in Table 3, our household debt projection has risen between recent forecasts, with the majority of the change falling between the post-measures June 2010 forecast and the November 2010 forecast.

Table 3: Household debt forecasts

	pre-measures June 2010	post-measures June 2010	November 2011	March 2011
2010	1531	1532	1566	1560
2011	1561	1564	1629	1628
2012	1606	1610	1714	1712
2013	1661	1670	1823	1826
2014	1718	1735	1956	1963
2015		1823	2113	2126
Total Change	-	17*	290**	13**

* by end 2014

** by end 2015

10. There are a number of different reasons for these changes, which the annex sets out in more detail. In summary the key changes have been:

- Household debt was projected to rise by £17 billion more by the end of 2015 in the June post-measures forecast than in the June pre-measures forecast. This primarily reflected the expectation that the Budget 2010 policy announcements would reduce disposable income, relative to the pre-measures forecast, but that households, seeking to protect their standard of living, would not reduce their consumption plans by the same amount;

- the largest change occurred between the June 2010 post-measures forecast and the November 2010 forecast, with household debt projected to rise by £290 billion more by the end of 2015. The majority of this change was due to a more detailed treatment of households' balance sheets in our forecast. This included improving the link between pension contributions and the accumulation of pension assets, and the introduction of better models for projecting financial asset accumulation and household net property income. Our judgement is that these improvements better capture the likely path of household debt over the forecast.

- the remainder of the change between the June 2010 post-measures forecast and the November 2010 forecast was primarily due to the reductions in social security payments announced in the October Spending Review, which act to reduce household disposable income; and

- finally, we expected debt to rise by £13 billion more between 2010 and the end of 2015 in the March 2011 forecast than we did in our November 2010 forecast. This is primarily due to the higher-than-expected inflation reducing real disposable income. However, this was partially offset by increased forecasts of benefits payments due to higher inflation and by revisions to pension contributions data.

A Detailed derivation of household debt

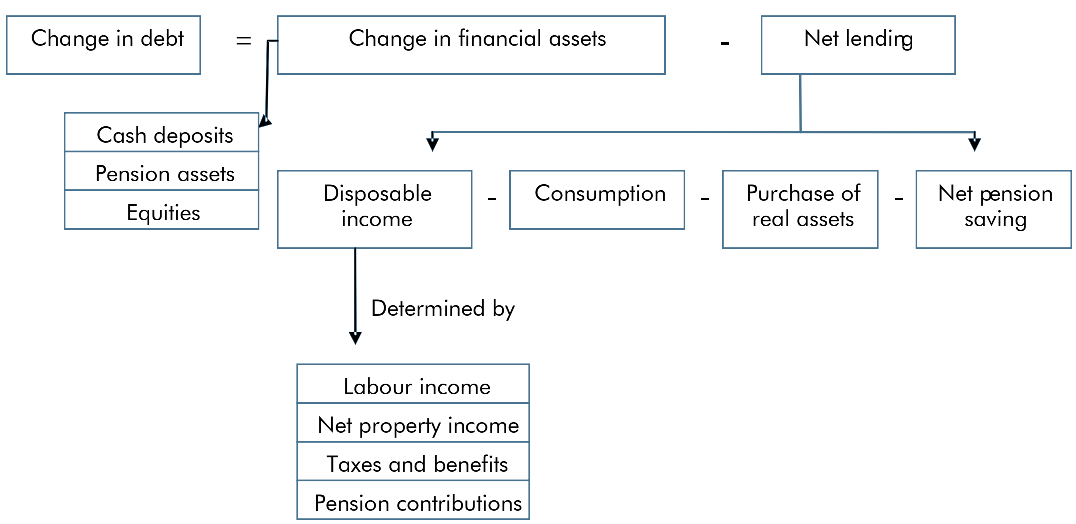
A.1 Formally in our model, household debt is constrained by the accounting identity:

Change in debt = change in financial assets – net lending

A.2 This states that households take on more debt when they acquire more financial assets than they can finance from their cash flow (net lending).
Therefore, changes in debt can be decomposed into changes in the acquisition of financial assets and changes in the determinants of households' cash flows.

A.3 Net lending is whatever households have left from their disposable income once consumption, their purchases of real assets (such as investment in housing) and pension-related saving are taken into account. Our household disposable income forecast is determined by our forecast for labour income, net property income, taxes and benefits and pension contributions. In our model, households hold three main types of financial assets - cash deposits, pension assets and equities. We model demand for these as functions of nominal consumption, labour income and net lending respectively.

A.4 The household debt projection has risen over recent forecasts, with the majority of the change falling between the post-measures June 2010 forecast and the November 2010 forecast.



Pre-measures June 2010 forecast to post-measure June 2010 forecast

A.5 Household debt was projected to be higher in the post-Budget measures June 2010 forecast than in the pre-Budget measures June 2010 forecast. This reflected the expectation that the Budget measures would weigh on disposable income but that households, seeking to protect their standard of living, would not reduce their consumption plans by the same amount. This fed through to a higher projection for household borrowing and debt. Table A.1 sets out the contributions to the change in the debt forecast in more detail.

Table A.1: Change in the household debt projection between pre- and post- measures June 2010 forecast[2]

	Contributions (£bn)	
Resources	Earnings	25
	Property income	0
	Benefits + transfers	6
	Direct taxation	-17
	Other	5
	Pension-related	13
Uses	Consumption	17
	Residential investment	0
	Financial asset aquis.	-32
	Total	**17**

A.6 Table A.1 shows that we expected earnings to be lower across the forecast period, summing to around £25 billion. Absent any behavioural response from households, this would have left the stock of debt £25 billion higher by the final quarter of 2015. We can see that this was partly offset by lower direct taxation and weaker acquisition of financial assets. The net pension contributions of employers and employees also pushed up the household debt projection.[3]

Post-measures June 2010 forecast to November 2010 forecast

A.7 Between June 2010 and November 2010 we improved the enumeration of the household balance sheet in our model to capture better the effect of changes in the forecasts for deposit rates and consumption on the accumulation of bank

[2] The sign convention is that any positive number in the table indicates a positive contribution to debt and vice versa

[3] The 'other' category contains variables such as household operating surplus (a resource), change in inventories and capital transfers (uses). Pension-related refers to employee and employer contributions to pension funds.

deposits. The improved level of detail also allowed us explicitly to link employer and employee pension contributions to the accumulation of pension assets and define equities as a discretionary asset, the accumulation of which moves in line with households' cash flows. These changes led us to revise up our forecast for household acquisition of financial assets. We also reassessed and adjusted our forecast for household net property income, in light of recent over-estimates of near-term data. The lower starting point for the property income forecast persists throughout the forecast and the accumulated effect of lower flows results in a large change in the projected stock of debt. Taken together, these changes accounted for the majority of the change in the household debt projection, implying a significantly stronger profile.

A.8 Between the post-measures June 2010 forecast and the November 2010 forecast, we also incorporated the effects of the Government's Spending Review, which announced a shift in the burden of deficit reduction from Departmental Expenditure Limits to Annually Managed Expenditure. The latter has a more direct impact on household disposable income through tax and benefit changes and we expected that households would, again, protect some of their expected consumption at the expense of saving. This also had a positive effect on the household borrowing projection.

A.9 Spending Review measures were forecast to reduce household disposable income by £66 billion over the forecast period. All else equal, this would have reduced both nominal and real consumption. At the time of the November forecast, higher-than-expected inflation also put downward pressure on real consumption but exerted significant upward pressure on nominal spending. Therefore, at the time of the November forecast, we revised the real consumption forecast down and the nominal consumption forecast up. The latter is what is what feeds through to the household debt projection. Table A.2 sets out the changes to the forecast in more detail.

Table A.2: Change in the household debt projection between November 2010 and post-measures June 2010 forecasts

	Contributions (£bn)	
Resources	Earnings	-51
Resources	Property income	143
Resources	Benefits + transfers	59
Resources	Direct taxation	7
	Other	-13
	Pension-related	-22
Uses	Consumption	67
Uses	Residential investment	-1
Uses	Financial asset aquis.	100
Uses	**Total**	**290**

November 2010 forecast to March 2010 Budget forecast

A.10 The comparatively small change in the household debt projection since November mainly reflects the effect of higher-than-expected inflation on households' real incomes. However, revisions to pension contributions data, back to 2009, led us to revise our pension contributions forecast, weighing down on household debt. The effect of higher inflation is also evident in the forecast for benefits and transfers which rose relative to November due to uplift from inflation indexation. Table A.3 sets out the changes in more detail.

Table A.3: Change in the household debt projection between March 2011 and November 2010 forecasts.

	Contributions (£bn)	
Resources	Earnings	40
	Property income	-3
	Benefits + transfers	-26
	Direct taxation	-12
	Other	3
	Pension-related	-42
Uses	Consumption	21
	Residential investment	-11
	Financial asset aquis.	42
	Total	**13**