The Net Worth of Irish Households — An Update

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ABSTRACT

The recent publication of *Institutional Sector Accounts* by the CSO has made it possible to produce a more comprehensive measure of households' financial assets and liabilities than was previously possible for the period 2001 to 2005. In this article, the newly available data are used to update estimates of household net worth published last year. While the emphasis is on financial assets and liabilities and trends in 'net financial assets', housing assets are included to give an overall measure of the net worth of Irish households. The rate of growth in households' financial liabilities has exceeded that of assets over the period, driven by a strong increase in residential mortgages. The result is a decline in net financial assets as a percentage of GDP. This deterioration, however, has been more than offset by the increase in the value of housing, reflecting rising house prices and record levels of new house building. As a result, the ratios of net assets to GDP and to net disposable income have risen. An examination of trends in the main asset classes of household financial assets reveals that insurance technical reserves have increased in importance at the expense of shares and other equity. The article also compares the financial balance sheet of Irish households with those of fifteen other European countries. This reveals considerable diversity between countries in the distribution of financial assets. It also shows that the ratios of Irish households' net financial assets to GDP, GNP or net disposable income are considerably lower than the average.

1. Introduction

While the rapid rise in personal indebtedness in Ireland has been the subject of significant comment, considerably less attention has been paid to developments on the asset side of the household balance sheet. In order to redress this imbalance, an attempt was made last year to measure household wealth, in terms of both financial assets and housing wealth (Kelly, 2006). Although work in progress on Financial Accounts for Ireland within the CBFSAI made it possible to produce a more complete balance sheet for the household sector than had been previously possible, it was pointed out that estimates for some of the components were tentative. In addition, the household balance sheet was incomplete in a number of ways: loans and deposits with credit unions were omitted; credit from hire purchase and leasing companies, non-resident banks and sub-prime mortgage lenders were not included; and no direct account was taken of the personal sector's currency holdings or assets held abroad.

The recent publication, by the Central Statistics Office (CSO), of *'Institutional Sector Accounts — Financial and Non-Financial'*

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(CSO, 2007) makes it possible to remedy most of these deficiencies. In particular, it is possible to derive a financial balance sheet for the household sector[1] which includes estimates for currency holdings, loans and deposits with non-resident banks, foreign property held by Irish residents and dealings with financial intermediaries other than credit institutions.

The main focus of this update is on developments in the 'net financial assets' of Irish households for the period 2001 to 2005. In this context, the measures of credit and deposits broaden from dealings with credit institutions to the more comprehensive figures in the CSO Accounts (CSO, 2007). This results in a general increase in net financial assets compared to the previous estimates, especially in 2004 and 2005. The Financial Accounts framework also makes it possible to examine the separate contributions of transactions and valuation effects to changes in asset and liability positions. A further advantage of the Financial Accounts framework is that it enables international comparisons to be made on a more homogeneous basis. In Section 4, total financial assets, loans and the net financial asset position of Irish households in 2005 are looked at relative to fifteen other European countries.

2. Financial Accounting Data for the Irish Household Sector

The Irish household financial balance sheet and transactions data used in this article are derived from the CSO's *Institutional Sector Accounts*, published for the first time in April 2007 (CSO, 2007). These accounts make an important contribution to Irish National Accounts publications, providing for the first time fully integrated balance sheet and transaction data for Ireland for each of the main institutional sectors, including households. These accounts have been compiled by incorporating data from a variety of sources, including some unpublished Central Bank Financial Accounts data.

The balance sheet in Table 1 summarises the results for the Irish household sector. It shows that while Irish households' net financial assets increased over the period, they fell as a percentage of GDP — from 98 per cent in 2001 to 79 per cent in 2005. Households' total net asset position (i.e. including housing assets) grew as a percentage of GDP over the five years, however, from 352 per cent to 418 per cent.

Housing-related activity explains both of these developments. The decline in net financial assets as a percentage of GDP is largely due to the rapid expansion of loans. These, in turn, were driven by borrowing for residential mortgages, which increased

1 In the CSO Accounts and in this article 'households' includes non-profit institutions serving households.

Table 1: Balance Sheet of the Household Sector, 2001-2005

€ million

	2001	2002	2003	2004	2005
Financial Assets:					
Currency and deposits	53,576	58,345	63,446	70,249	82,907
Securities other than shares	735	727	613	414	370
Shares and other equity	54,678	58,974	65,021	68,299	74,332
Insurance technical reserves	67,103	63,650	81,078	94,912	112,974
Other accounts receivable	762	926	1,119	1,245	2,317
Total Financial Assets	176,854	182,622	211,277	235,119	272,900
Financial Liabilities:					
Loans	60,930	73,052	87,886	109,709	141,886
of which residential mortgages	*38,343*	*47,212*	*59,242*	*77,029*	*98,956*
Other accounts payable	1,909	2,158	2,560	2,794	3,332
Total Financial Liabilities	62,839	75,209	90,445	112,503	145,218
Net Financial Assets	**114,015**	**107,412**	**120,832**	**122,617**	**127,682**
as a % of GDP	97.7	82.7	87.0	83.1	79.2
as a % of Net Disposable Income[a]	n.a.	169·6	180·8	174·9	164·0
Housing Assets	297,302	338,948	408,808	473,671	546,096
Net Asset Position	**411,317**	**446,360**	**529,640**	**596,288**	**673,778**
as a % of GDP	352.3	343.5	381.2	404.1	418.1
as a % of Net Disposable Income[a]	n.a.	704.8	792.3	850.6	865.6

[a] This ratio is based on households' net disposable income from the CSO *Institutional Sector Accounts* — item B.6n in Table 1.5.

Sources: CSO Institutional Sector Accounts and CBFSAI calculations of housing assets.

from 63 per cent to 70 per cent of total loans over the period. Mortgage borrowing also financed record levels of new house building which, together with rises in house prices, boosted the value of housing assets. The improvement in households' net asset position as a percentage of GDP is entirely due to the 84 per cent growth in the value of housing assets between 2001 and 2005.

Two factors have contributed to the increase in the net assets/disposable income ratios compared with earlier estimates[2]. First, the higher absolute values for net financial assets in most years and, second, the fact that the net disposable income data from the *Institutional Sector Accounts* are lower than those used in Kelly (2006), which were based on *National Income and Expenditure Accounts*.

The data published by the CSO have the effect of removing some of the caveats associated with earlier data contained in Table 3 of Kelly (2006), namely:

- Households' loans and savings with credit unions are now included in the results. Household savings with these

2 The net assets/net disposable income ratio of 866 per cent for 2005 in Table 1 compares with a ratio of 757 per cent in Table 4 of Kelly (2006).

institutions are primarily treated as shares and other equity rather than deposits, as technically members hold most of their savings with credit unions in the form of shares.

- On the liabilities side, estimates have been made for all types of household borrowing, including credit advanced by hire purchase and leasing companies, sub-prime mortgage lenders and non-resident banks.

- In terms of the assets side, estimates have been made for the personal sector's currency holdings and assets held abroad. These assets include the purchase of residential properties abroad by Irish residents, which are treated as financial assets and are included in the shares and other equity category.

This is the first publication of an integrated set of sectoral accounts and further developmental work is required in a number of areas. The CSO and the Bank will work closely together to address these issues, which include:

- No direct data are available at present on Irish households' holdings of currency or on deposits located abroad. Consequently, these data had to be estimated in the context of limited data sources. It is likely that the figure for deposits is significant, given the number of households that own foreign property[3] and the many high net worth individuals who hold bank accounts abroad.

- It is also difficult to estimate accurately Irish households' holdings of quoted and unquoted equity. This is a significant issue for financial accountants throughout Europe. A number of ECB working groups are in the process of addressing this problem.

- Data published for insurance technical reserves were derived from the CSO Balance of Payments and Financial Sector surveys[4]. The published results do not include an estimate of the underfunding of household pensions, estimated by the Central Bank as approximately €16 billion in 2005. International guidelines and practice on how to treat this item in Financial Accounts are somewhat mixed at present, and most EU countries do not currently include an estimate of pension underfunding in their official results.

3 Frequently, households paying a mortgage on a foreign property must have an account in that country. With the introduction of the Single Euro Payments Area (SEPA) initiative, this will no longer be necessary. This initiative aims to create an integrated system for euro-denominated retail payments throughout the EU and the EEA, so that from one account it will be possible to reach all accounts SEPA-wide, as if the payments were being made domestically.

4 Respondents to these surveys report in general on their positions and transactions *vis-à-vis* residents as well as non-residents.

- The estimation of household borrowing from abroad is problematic. While there has been significant investment by households in property abroad, it is difficult to obtain accurate information on borrowing associated with this. Central Bank calculations suggest that the estimate included in the Financial Accounts for borrowing from abroad may be a lower bound figure.

- Finally, the estimates of loans to households by financial institutions other than credit institutions are made by the CSO by grossing up the results of a relatively small sample, and are subject to a margin of error. The underlying amounts involved, however, are not thought to be large.

3. Features of Households' Financial Assets and Liabilities

While net financial assets of the household sector have increased by 12 per cent over the five-year period 2001 to 2005, some asset classes have grown faster than others, leading to changes in the composition of the financial balance sheet.

Table 2: Distribution of Household Financial Assets, 2001-2005

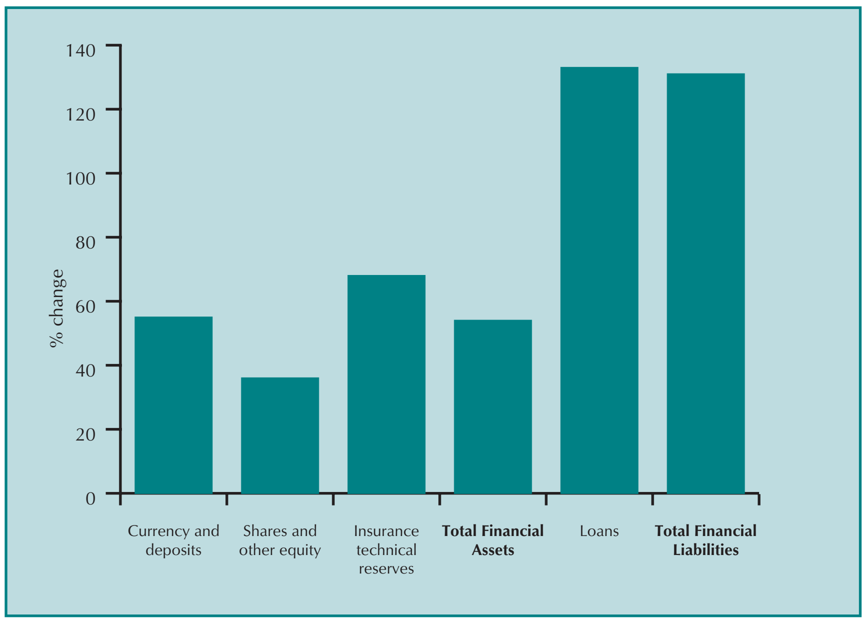
% of total financial assets	Currency and deposits	Securities other than shares	Shares and other equity	Insurance technical reserves	Other accounts receivable
2001	30.3	0.4	30.9	37.9	0.4
2002	31.9	0.4	32.3	34.9	0.5
2003	30.0	0.3	30.8	38.4	0.5
2004	29.9	0.2	29.0	40.4	0.5
2005	30.4	0.1	27.2	41.4	0.8

Irish households hold three main classes of financial asset, as Table 2 illustrates; namely, currency and deposits; shares and other equity; and insurance technical reserves. From this table, and from Chart 1, it can be seen that the growth rates of these asset classes have diverged, resulting in some changes in their relative importance.

Changes in the composition of the household balance sheet are driven by two main forces: households' portfolio decisions and revaluations of their assets/liabilities. Revaluations, in turn, can be due to exchange-rate movements (for items denominated in foreign currencies) or changes in market prices (for securities, for example). The share of households' financial assets consisting of currency and deposits was relatively stable at around 30 per cent. For currency and deposits, changes in market prices are not relevant and, since only a small proportion of Irish households' holdings of currency and deposits are denominated in foreign currency, the overall effect of revaluations is small. Movements in the stock of currency and deposits, therefore, are largely due to transactions and these have moved in line with growth in total financial assets — increasing by about 55 per cent over the period, as shown in Chart 1. This chart also shows the increase in households' total financial liabilities, of which loans are the predominant component.

Unlike currency and deposits, shares and other equity are susceptible to revaluations, due both to changes in market prices and to exchange-rate movements. This is true in particular for quoted shares and to a lesser extent for unquoted shares and for property held abroad by Irish residents. Consequently, annual growth in this asset is likely to be relatively volatile. The unquoted element of shares and other equity includes shares held by credit union members, which accounted for about 13 per cent of the asset class, on average, between 2001 and 2005. Although it is difficult to obtain accurate measures for property held abroad by Irish residents, estimates suggest that such assets represent a considerable proportion of households' shares and other equity holdings. Chart 1 shows that the overall growth rate of total financial assets of households outstripped that of shares and other equity between 2001 and 2005. This led to the decline in the proportion of the total accounted for by shares and other equity as seen in Table 2.

Chart 1: Change in Household Financial Assets and Liabilities from 2001 to 2005



Insurance technical reserves (ITR) describe a) the net equity of households in life insurance and pension funds; and b) prepayments of premiums[5] and reserves against outstanding

5 Prepayments of premiums results from the fact that, in general, insurance premiums are paid in advance.

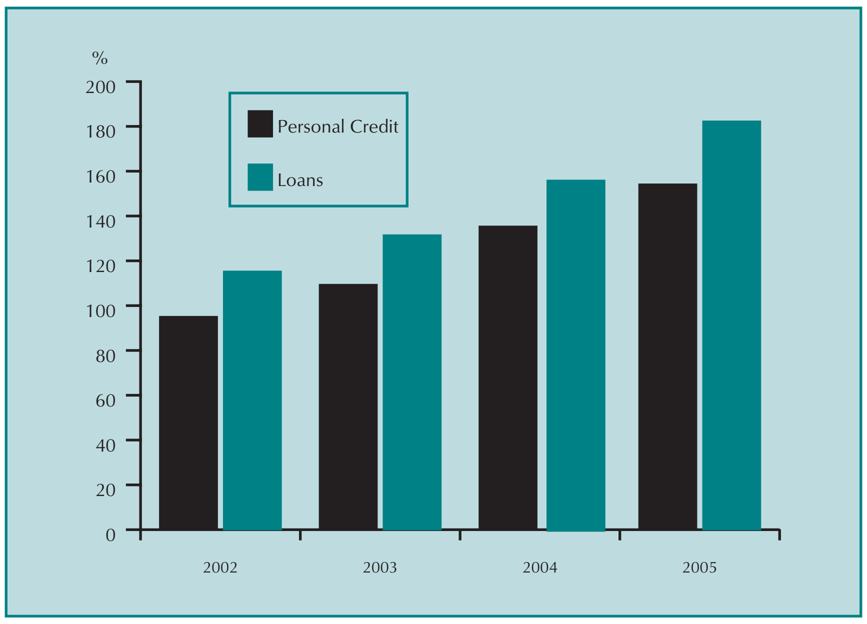
claims[6]. Pension funds form the largest component of household ITR. The Bank estimates that they represented approximately 77 per cent of the total in 2005. ITR are a relatively illiquid asset, but nevertheless represent a significant and increasingly important store of wealth for the sector. This was the fastest growing asset class; as Chart 1 illustrates, household holdings of assets in the form of ITR have increased by 68 per cent over the period, rising from 38 per cent of the total in 2001 to 41 per cent in 2005. The relative increase in ITR as a percentage of the household balance sheet is primarily the result of revaluation gains in the ICPF sector, which in each year have exceeded net inflows of funds — i.e. pension contributions, life insurance premiums and investment income, less pension payments, life insurance claims and estimated service charges. As the population ages, it is likely that assets held in this form will continue to grow. In this context, it is notable that a recent survey by the Irish Banking Federation found that 26 per cent of consumers surveyed had no provision for future sources of retirement income (IBF, 2007).

The liabilities of the household sector consist almost entirely of loans. By far the largest proportion of these come from credit institutions, but also included in this figure are loans from credit unions, sub-prime mortgage lenders and other financial intermediaries, local government and loans from abroad. The other financial intermediaries element of the calculation includes securitised mortgages which, though no longer on the books of credit institutions, are still a liability of the household sector [see Box 1 in Kelly and Menton (2007) for a full description of the treatment of securitised mortgages]. Household borrowing from the local government sector is relatively small and relates primarily to social housing schemes. The level of borrowing from abroad by Irish households is significant but, as noted earlier, is difficult to measure accurately.

In view of the very rapid rise in personal indebtedness since 2001, driven by the expansion in borrowing for residential mortgages, it is not surprising that household loans have grown significantly faster than any of the asset categories in Chart 1. Trends in the ratio of ‘loans’ (from Table 1) and ‘personal credit’ from credit institutions[7] to net disposable income are shown in Chart 2. Both ratios display similar trends until 2005, when the more comprehensive measure of indebtedness represented by ‘loans’ increased somewhat faster. Given developments in personal credit, it is likely that the ratio will approach 190 per cent of net disposable income in 2006.

6 Reserves against outstanding claims are held by insurance companies to cover the amount they expect to pay out in respect of claims that are not yet settled.
7 Item 15 from Table C8 of the Statistical Appendix, plus securitised mortgages.

Chart 2: Loans and Personal Credit as a Percentage of Net Disposable Income, 2002-2005



The net financial transactions figures in Table 3 represent the difference between transactions in financial assets and liabilities in each year. A negative figure for a sector indicates that it must borrow from other sectors to fund its activities. Given that strong demand for credit by the household sector has led to faster growth in their financial liabilities relative to their financial assets over the period (Chart 1), it is not surprising that the sector's net financial transactions have become progressively more negative.

Table 3: Net Financial Transactions of the Household Sector, 2002-2005

€ million		
	2002	−669
	2003	−1,157
	2004	−8,225
	2005	−9,914

Source: CSO Institutional Sector Accounts.

The net financial transactions in Table 3 do not take account of investment in housing or the capital gains arising from this. The value of housing assets increased by 84 per cent between 2001 and 2005. This more than offset the impact of the increase in loans and resulted in the significant improvement in households' net asset position as a percentage of GDP and net disposable income as seen in Table 1.

4. International Comparisons

In addition to developments over time, it is informative to look at the asset composition and net financial position of Irish households in a European context. Financial accounting results from Eurostat's *New Cronos* databank facilitate such a comparison. The tables below show the results for Ireland and fifteen other European countries — all of the countries in the EU, other than Luxembourg[8] before the May 2004 expansion, plus Norway and Switzerland.

Table 4: Composition of Household Financial Assets; Selected European Countries, 2005

% of total financial assets

	Currency and deposits	Securities other than shares	Shares and other equity	Insurance technical reserves	Other accounts receivable
Austria	50.9	7.9	19.4	21.1	0.7
Belgium	29.3	11.1	36.1	23.1	0.3
Denmark	19.9	5.0	29.6	44.2	1.4
Finland	29.6	1.3	45.8	20.6	2.2
France	30.8	1.6	28.0	35.1	3.9
Germany	35.0	9.7	23.7	30.2	1.4
Greece	49.2	11.3	33.0	2.7	3.7
Ireland	**30.4**	**0.1**	**27.2**	**41.4**	**0.8**
Italy	26.7	20.3	34.8	17.7	0.5
Netherlands	20.5	3.4	17.0	58.8	0.0
Norway	31.0	1.8	16.8	36.2	10.5
Portugal	37.8	6.9	35.2	18.6	1.4
Spain	38.1	2.3	41.8	14.8	3.0
Sweden	15.9	2.3	43.0	38.4	0.2
Switzerland[a]	25.9	8.3	23.3	42.5	0.0
United Kingdom	25.7	1.2	16.3	53.8	2.8
Average	**31.0**	**5.9**	**29.4**	**31.2**	**2.1**

[a] 2005 figures were not available for Switzerland, therefore 2004 figures were used.
Note: Percentage shares may not add to 100 per cent for some countries due to a small proportion of assets being in the form of loans receivable, which are omitted from this table.
Source: Eurostat.

The composition of households' financial assets by asset class in 2005 is shown in Table 4. The table shows a wide dispersion in the proportion of financial assets held as currency and deposits by these sixteen countries, ranging from 16 per cent in Sweden to 51 per cent in Austria. The Irish figure of over 30 per cent was close to the average of 31 per cent.

The proportion of financial assets held in the form of securities other than shares also varied significantly from country to country. Italy had the highest share in this category with 20 per cent, while Ireland had the lowest share, with households here holding only 0.1 per cent of their total financial assets in this form in 2005. The proportion of the total financial assets held as shares and other equity by Ireland's household sector was 27 per cent, slightly below the average of the sixteen countries represented in Table 4.

The extent to which households held financial assets in the form of ITR varied considerably among the sixteen countries, ranging from almost 3 per cent of total financial assets in Greece to 59 per cent in the Netherlands. The percentage of assets Irish

8 Luxembourg does not yet have full financial accounts.

Table 5: Household Financial Assets per Capita; Selected European Countries, 2005

€ per capita

	Currency and deposits	Securities other than shares	Shares and other equity	Insurance technical reserves	Other accounts receivable	Total financial assets
Switzerland[a]	35,671	11,401	32,051	58,464	0	137,587
Netherlands	18,740	3,150	15,537	53,857	0	91,523
Denmark	17,918	4,498	26,678	39,846	1,231	90,176
United Kingdom	22,327	1,035	14,200	46,807	2,472	87,012
Belgium	21,309	8,080	26,233	16,793	242	72,657
Ireland	**19,982**	**89**	**17,916**	**27,229**	**558**	**65,775**
Italy	14,907	11,325	19,425	9,855	267	55,778
Sweden	8,712	1,261	23,519	21,026	112	54,756
Norway	16,849	996	9,133	19,674	5,701	54,323
Germany	18,096	4,988	12,250	15,604	719	51,657
France	15,807	805	14,392	17,994	2,003	51,339
Austria	22,059	3,421	8,425	9,145	321	43,372
Finland	10,677	478	16,512	7,435	810	36,092
Spain	13,629	812	14,937	5,287	1,088	35,752
Portugal	10,949	2,007	10,197	5,388	403	28,944
Greece	12,868	2,954	8,623	718	980	26,143
Average	**17,531**	**3,581**	**16,877**	**22,195**	**1,057**	**61,430**

[a] 2005 figures were not available for Switzerland, therefore 2004 figures were used.
Note: Figures may not add to total for some countries due to a small proportion of assets being in the form of loans receivable, which are omitted from this table.
Source: Eurostat.

households held in ITR was over 41 per cent, significantly above the average of 31 per cent. Households in only four other countries held a higher proportion of their financial assets in this form.

Household financial assets per capita in Ireland and the fifteen other European countries in 2005 are compared in Table 5. The table is structured in descending order by total financial assets per capita, with Switzerland having significantly higher per capita holdings than the other countries. The breakdown by asset class shows that, for both currency and deposits and ITR, Irish households held considerably more per capita than the average reported in the table. Irish holdings per capita of shares and other equity were a little above the average. Overall, Ireland's household sector ranked sixth highest in terms of holdings of total financial assets per capita.

Household financial assets as a percentage of GDP are summarised in Table 6. Because of the large difference between GDP and GNP for Ireland, mainly due to Ireland's high net factor income outflows, the table presents Irish households' financial assets as a percentage of both output measures. When Ireland's total household financial assets are taken as a percentage of GNP, the results are close to the average of the sixteen countries. However, expressed as a percentage of GDP, Irish households' holdings of financial assets are lower than the averages across all instrument categories except ITR. There are a number of possible explanations for this. First, the relatively strong growth in GDP in

Table 6: Household Financial Assets as a Percentage of GDP; Selected European Countries, 2005

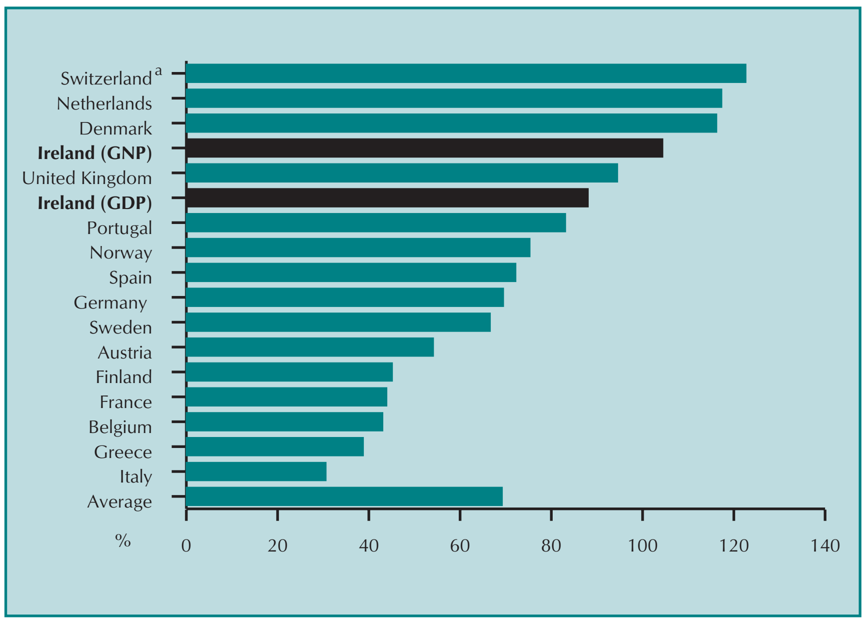
% of GDP	Currency and deposits	Securities other than shares	Shares and other equity	Insurance technical reserves	Other accounts receivable	Total financial assets
Switzerland[a]	91.7	29.3	82.4	150.3	0.0	353.7
Netherlands	60.9	10.2	50.5	175.1	0.0	297.5
United Kingdom	75.2	3.5	47.8	157.6	8.3	292.9
Belgium	74.8	28.4	92.0	58.9	0.9	254.9
Denmark	46.7	11.7	69.5	103.8	3.2	234.9
Italy	61.6	46.8	80.3	40.8	1.1	230.7
Portugal	77.5	14.2	72.2	38.1	2.9	204.9
Ireland (GNP)	**61.0**	**0.3**	**54.7**	**83.1**	**1.7**	**200.8**
Germany	66.6	18.4	45.1	57.4	2.7	190.1
France	57.8	2.9	52.6	65.8	7.3	187.7
Sweden	27.7	4.0	74.7	66.8	0.4	173.8
Spain	65.3	3.9	71.6	25.3	5.2	171.4
Ireland (GDP)	**51.4**	**0.2**	**46.1**	**70.1**	**1.4**	**169.3**
Greece	78.8	18.1	52.8	4.4	6.0	160.0
Austria	74.1	11.5	28.3	30.7	1.1	145.7
Finland	36.1	1.6	55.8	25.1	2.7	121.9
Norway	32.7	1.9	17.7	38.1	11.1	105.3
Average	**61.2**	**12.9**	**58.7**	**69.3**	**3.5**	**205.9**

[a] 2005 figures were not available for Switzerland, therefore 2004 figures were used.
Note: Figures may not add to total for some countries due to a small proportion of assets being in the form of loans receivable, which are omitted from this table.
Source: Eurostat.

recent years has given Ireland one of the highest levels of GDP per capita, but wealth levels are still higher in many other European countries. In 2005, only two of the countries listed in Table 6 had a higher per capita GDP than Ireland. Second, household holdings of property are not taken into account in this table. According to Table 1, 67 per cent of Irish households' total assets were held in this form in 2005. This is notably higher than the euro-area average of housing wealth as a percentage of total assets of around 60 per cent (ECB, 2006). It is also consistent with an OECD study, which found that out of fifteen OECD countries Ireland had the third highest level of net non-financial wealth as a percentage of disposable income in 2005 (OECD, 2006). Third, the age structure of the Irish population means that a relatively high proportion are at the stage of the life cycle where most borrowing and least saving takes place (Kelly, 2006).

In an environment of strongly rising house prices and record levels of new house building, loan liabilities of Irish households have shown a marked increase of almost 135 per cent between 2001 and 2005 (Chart 1). The increase in personal credit here has been well above the euro-area average and this has propelled Ireland up the rankings in terms of the ratio of household loans to GDP. The relative position in 2005 is shown in Chart 3. In terms of the GNP ratio, Ireland was in fourth position in 2005, with the Netherlands being the only euro-area country with a higher ratio. Financial Accounts loans data are not available for 2006, but Ireland has now surpassed the Netherlands in terms of the ratio of personal credit to GNP (CBFSAI, 2007).

Chart 3: Household Loans as a Percentage of GDP; Selected European Countries, 2005



[a]2005 figures were not avaiblabe for Switzerland, therefore 2004 figures were used.
Source: Eurostat.

Chart 3 also shows that household borrowing as a percentage of GDP differed greatly across the sixteen countries, with Ireland (GNP), Denmark, the Netherlands and Switzerland having ratios greater than 100 per cent and Greece and Italy having ratios below 40 per cent. This is in line with OECD findings that household debt as a proportion of GDP grew rapidly in a number of OECD countries between 1995 and 2005 due, in particular, to buoyant housing markets, financial liberalisation and increased home ownership rates (OECD, 2006).

Table 7: Household Net Financial Assets as a Percentage of GDP and of Net Disposable Income (NDI); Selected European Countries, 2005

	% of GDP	% of NDI
Switzerland	229.0[a]	n.a.
Belgium	209.2	366.3
Italy	192.3	288.6
United Kingdom	191.0	306.5
Netherlands	183.4	384.0
France	132.8	205·9
Germany	120.1	184·3
Greece	115.7	n.a.
Portugal	109.5	n.a.
Sweden	106.4	210.6
Denmark	106.2	240.8
Ireland	**93.9 (GNP)**	**164.0**
Spain	93.9	156.3
Austria	91.5	149.0
Ireland	**79.2 (GDP)**	
Finland	71.9	137.4
Norway	22.5	n.a.
Average	**128.4**	**232.8**

[a]2005 figures were not available for Switzerland, therefore 2004 figures were used.
Source: Eurostat.

The final comparison, household net financial assets as a percentage of both GDP and net disposable income for Ireland and the fifteen other European countries, is displayed in Table 7, structured by percentage of GDP in descending order. Irish households' net financial assets as a percentage of GDP, GNP and net disposable income rank towards the lower end of the table. The main factors contributing to this are Ireland's high borrowings by the household sector to fund investment in property and the high proportion of Irish household wealth invested in housing assets, as well as our relatively high GDP and GNP per capita. In addition, Ireland's relatively fast net disposable income growth, led to a higher net disposable income per capita than any other country[9] listed in the table.

5. Conclusions

The *Institutional Sector Accounts* results published by the CSO make it possible to get a more complete measure of household net worth and remove some of the caveats associated with earlier net worth calculations. Further significant development work is envisaged in this area. The Central Bank and CSO will work together to further develop the Financial Accounts results for the household sector.

While growth in personal sector credit has attracted significant attention, the balance sheet for Irish households shows that assets have also increased, albeit at a slower rate. The outcome is that net financial assets have risen at a slower pace than GDP and their ratio to GDP has declined from 98 per cent in 2001 to 79 per cent in 2005. With up to 70 per cent of loans invested in property, however, the increase in the value of households' housing assets has been sufficient to lead to a rise in the total net asset/GDP ratio over the period.

A comparison of household balance sheets for Ireland and fifteen other European countries reveals above average holdings of ITR as a proportion of total financial assets here. Irish households are also above average with respect to financial assets per capita but are somewhat below the average for financial assets as a percentage of GDP.

The overall position of Irish households in terms of the net financial assets/GDP ratio is towards the lower end of the European ranking. This is perhaps not surprising in view of the age structure of the Irish population, which means that a relatively high proportion are at the life cycle stage of borrowing to acquire real assets. Ireland's strong GDP growth since the early 1990s is also relevant. This has resulted in a high GDP per capita but has not persisted for long enough to bring wealth here up to levels in core European economies.

9 Net disposable income figures were not available for Greece, Norway, Portugal and Switzerland.

Although aggregate balance sheet measures provide useful information about the financial position of the household sector as a whole, they give no indication of how assets and liabilities are distributed across the sector. An overall improvement in net assets may therefore mask disparities in financial conditions between different segments of the population. In this respect, micro data derived from household surveys can provide valuable insights. For instance, survey evidence from a number of countries suggests that most debt is held by higher income households who are better able to service it (OECD, 2006). Some euro-area countries have household surveys already in place but a euro-area wide household survey, in which the Bank will participate, is currently being planned. In addition to helping to identify areas of potential fragility within the household sector in Ireland, this will facilitate more detailed cross-country comparisons.

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