

Saving rates in Europe

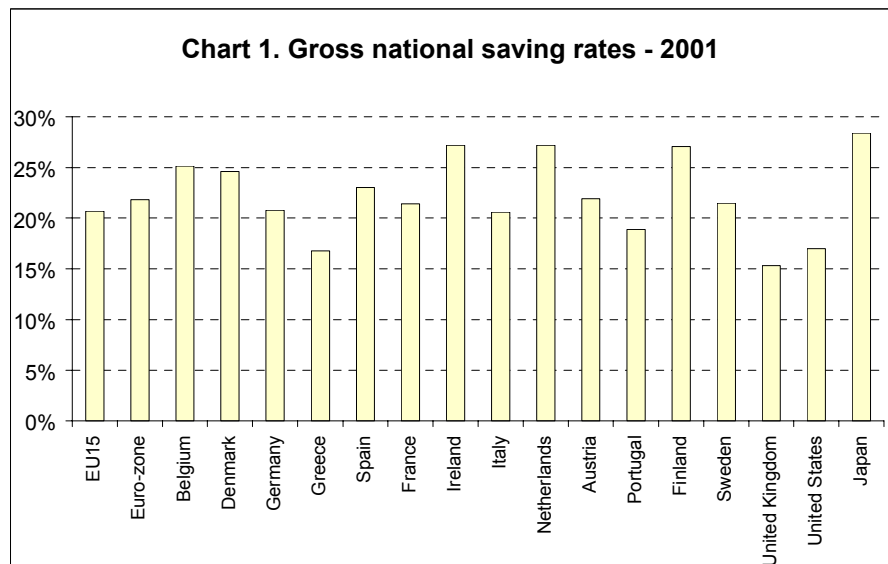
John Verrinder

National accounts data allow the estimation of aggregate saving rates, which are considered to be very useful indicators for economic analysis, and which are constructed by dividing saving by disposable income. In this Statistics in Focus we look specifically at national saving rates for the whole economy and at household saving rates.

Saving rates vary significantly between EU member states, although there are a number of methodological reasons which may explain, at least partly, the differences seen. This Statistics in Focus investigates some of these issues.

Saving rates can be considered either gross or net of consumption of fixed capital (both the saving and disposable income figures must of course be measured on the same basis). The net measure takes into account the consumption of capital assets during the production process, thereby reducing saving by the amount required to replace capital consumed. However there is probably a certain lack of harmonisation between countries' measurement of consumption of fixed capital (at least at sectoral level), and therefore this Statistics in Focus concentrates on gross measures.

National economy gross saving rates



Note: Data for Ireland and Japan are forecasts.

There are significant differences between the gross saving rates for the national economies. Japanese national saving rates were significantly higher than those for the EU15 and the euro-zone, whereas the US rates were somewhat below. Within the EU, the highest saving rates were observed in Ireland, the Netherlands and Finland. The lowest rates were observed in the United Kingdom and Greece.

Statistics in focus

ECONOMY AND FINANCE

THEME 2 – 33/2002

NATIONAL ACCOUNTS

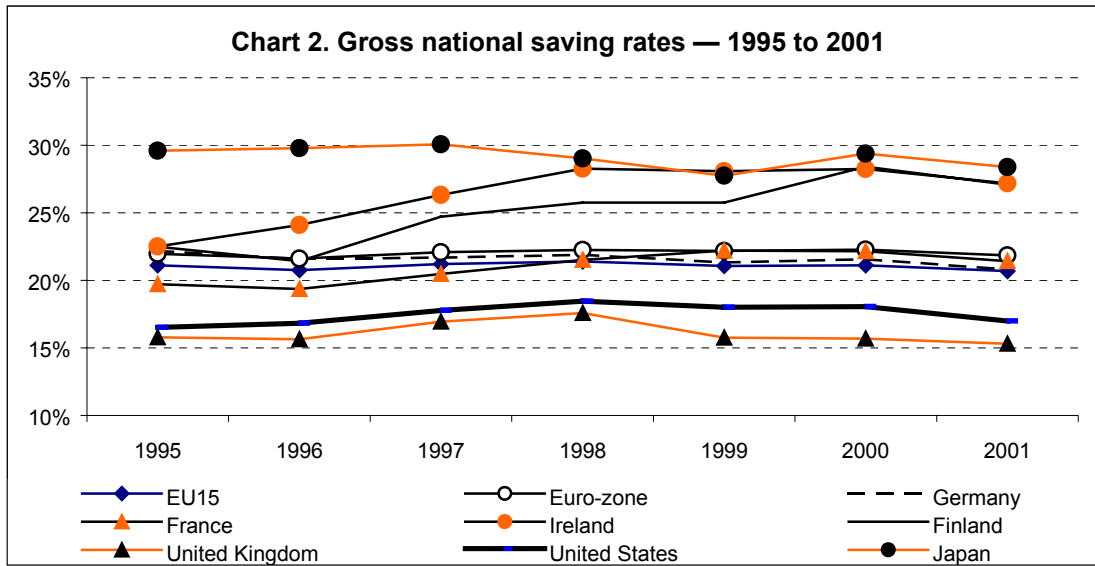
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It is interesting to note that the gross national saving rates for both EU15 and euro-zone have remained rather stable over the period. Chart 2 shows the two

exceptions — in both Finland and Ireland the gross national saving rates have grown significantly over the period.

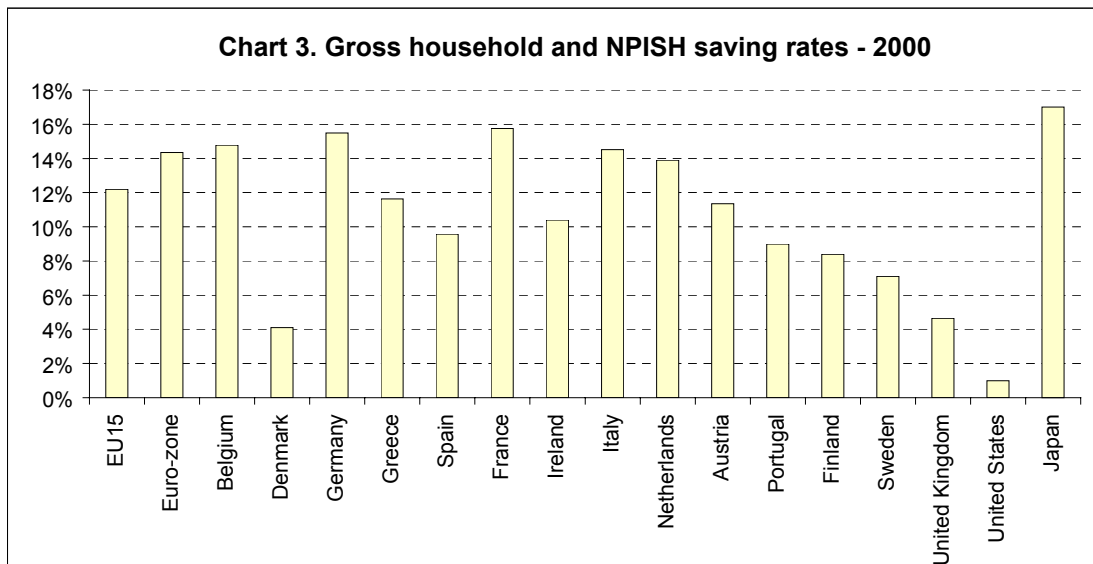


Note: Data for Ireland and Japan in 2001 are forecasts.

Household gross saving rates

A number of European member states do not produce separate sectoral data for households, so the data

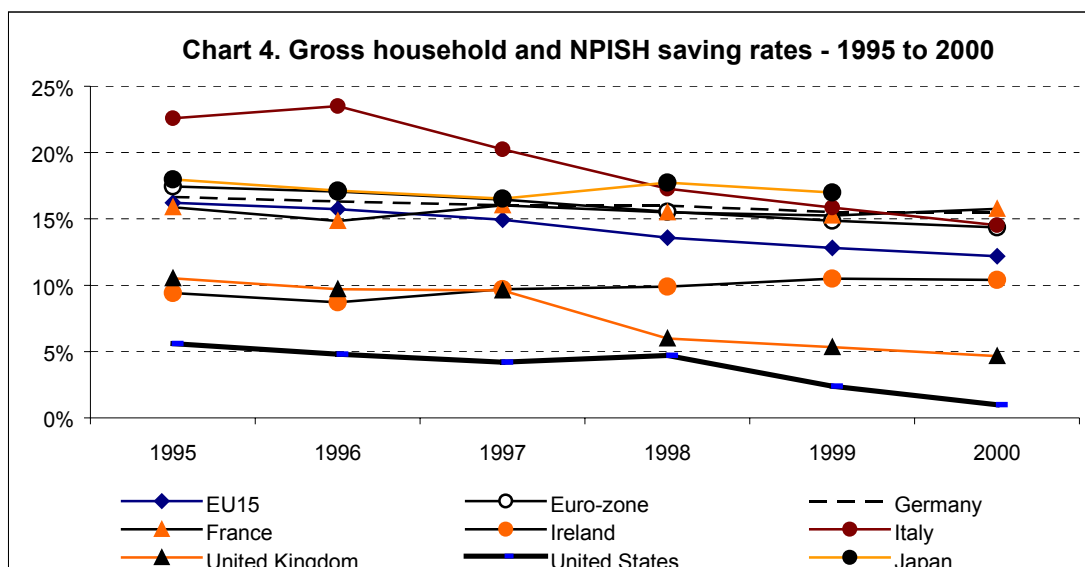
presented here is for both households and non-profit institutions serving households (NPISH; this sector includes such bodies as charities, trade unions and churches).



Note: EU15 and euro-zone figures exclude Luxembourg, Ireland and Portugal. Data for Ireland based on national sources; 2000 is an estimate. The figure for Portugal refers to 1998. Data for the US and Japan are taken from national statistical sources.

Once again there are significant differences across countries. Japan has a higher household saving rate than any European country whilst the US household saving rate is below that of any EU country. Amongst

EU countries, the unusually low level of saving in UK and Denmark is notable, whilst the highest rates are observed in Italy, France, Germany and Belgium.



Note: EU15 and euro-zone exclude Luxembourg and Ireland in all years, and Portugal in 1999-2000. Data for Ireland based on national sources; 2000 is an estimate.

Over the period 1995-2000 there was a general fall in the household saving rates of most countries. In particular Italy moved from a very high rate in 1995 to join the level of Germany and France in 2000.

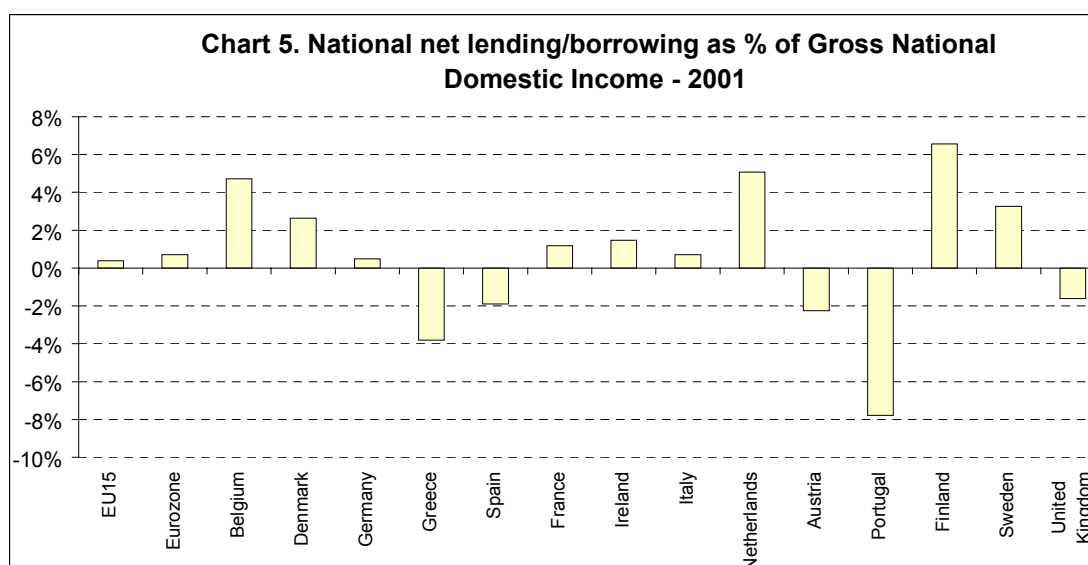
The balance of saving in the national accounts, by sector and for the economy as a whole, is defined to reflect the impact of the balance of **current transactions** (income – consumption). This has two immediate consequences for the analysis of saving rates:

Methodological issues

The differences identified in the preceding two sections, both between countries and over the period within the same country, are striking and raise immediate questions. But the most pressing issue to consider is to what extent the differences are caused by real behavioural divergence, as opposed to the way in which these rates are measured.

a) *The rates do not reflect capital acquisitions and disposals:*

In the national accounts the balance of the capital account is known as net lending (or net borrowing), and this takes account of expenditure on non-financial assets and capital transfers. Chart 5 presents this data for the whole economy for the year 2001, as a percentage of gross national disposable income.



Note: Figure for Ireland is for 1999. EU15 and euro-zone figures exclude Ireland and Luxembourg.

When compared with Chart 1 for gross national saving rates, the relative positions of many countries remain broadly the same. The large negative rate for Portugal is however striking and illustrates the relatively high level of national capital investment compared with other countries. Other countries with negative net lending/borrowing at national level include Greece, Spain, Austria and the United Kingdom.

b) *The rates also do not reflect the effects of holding gains or losses on financial and non-financial assets and liabilities.*

One example of this is the realised and unrealised gains/losses of some households through the major fluctuations in the value of equity. We know (see the recent Eurostat SIF 'The European and eurozone financial structure') that households are major holders of financial assets, and that the levels as a proportion of GDP vary significantly between countries. The reasons for these differences are largely institutional (in particular the importance of funded pension schemes).

Table 1. Households' financial assets and liabilities at end-2000

Country or area	Financial assets		Financial liabilities	
	Outstanding values (billion euro)	Proportion of GDP (%)	Outstanding values (billion euro)	Proportion of GDP (%)
Belgium	781	314	111	45
Denmark	256	147	171	98
Germany	3 642	180	1 500	74
Spain	1 157	190	360	59
France	3 320	236	648	46
Italy	2 649	227	349	30
Netherlands	1 191	297	342	85
Austria	277	135	82	40
Portugal	229	199	89	78
Finland	197	150	43	32
Sweden	397	160	130	52
United Kingdom	4 635	299	1 192	77
Euro-zone	13 445	213	3 525	56
EU15	18 732	226	5 018	61
United States	35 572	338	7 959	76

Note: figures for the US are taken from the Federal Reserve Flow of Funds publication, table B.100.

The EU15 and euro-zone figures exclude Greece, Luxembourg and Ireland, who do not currently compile financial accounts.

Holding gains can have an impact on household's saving behaviour in three potential ways:

- i) Through realised holding gains, which provide liquid financial assets for consumption expenditure in the current period (but which are not classified as income in the national accounts).
- ii) Through the increased ability to take out loans to meet consumption expenditure in the current period, particularly on consumer durables.
- iii) Through the impact on saving behaviour for longer term projects. A household experiencing substantial

unrealised holding gains, and having a longer term target, may save less from disposable income in the expectation that holding gains will make up the difference.

Eurostat has no comparable data on the level of holding gains and losses in **non-financial assets**. However, it is possible to calculate the levels of holding gains and losses in **financial assets** by using data on balance sheets and transactions in financial assets. Table 2 expresses nominal holding gains or losses as a percentage of gross household disposable income.

Table 2. Unrealised holding gains and losses on financial assets as % of gross household disposable income

	1996	1997	1998	1999	2000
B	-0.9%	17.5%	30.0%	15.7%	15.6%
DK	8.9%	19.1%	-2.3%	13.9%	7.4%
D	-4.3%	2.4%	6.9%	11.0%	-3.2%
E	7.3%	12.3%	24.9%	31.6%	-6.5%
F	12.6%	13.3%	24.6%	49.5%	-0.5%
I	25.4%	7.3%	20.6%	21.2%	3.7%
NL	12.7%	27.7%	29.3%	45.7%	-11.2%
A	:	:	:	:	1.4%
P	-0.7%	0.0%	9.3%	:	:
FIN	14.0%	14.3%	18.0%	35.2%	1.2%
S	22.5%	21.8%	-11.5%	73.1%	-19.7%
UK	74.9%	98.3%	-7.6%	120.0%	-41.0%

The table shows that, for some countries at least, the unrealised holding gains on assets have been substantial, though variable, across the period. Particularly notable is the very high level of gains in the UK during 1996, 1997 and 1999.

There are three other major methodological points to take into account when analysing household saving rates:

1. Treatment of unincorporated enterprises and Non-profit institutions serving households

The household sector includes unincorporated enterprises, that is small businesses and some partnerships. In addition, many countries do not yet separate out non-profit institutions serving households from households. The importance and activity of these institutions varies between countries. For example the Mediterranean countries have a relatively high proportion of small enterprises whilst the Scandinavian countries have a rather lower proportion.

One way to show the importance of unincorporated enterprises and non-profit institutions in the household sector is to examine value added recorded in the household sector accounts, and to express this as a proportion of total value added. The analysis is corrected for the value added arising from the imputed services of owner-occupied dwellings.

Table 3. Gross value added of households and NPISH sectors as a % of total gross value added in the economy⁽¹⁾

	Year	%
B	2000	13.1%
DK	2000	9.6%
D	2000	19.9%
EL	2000	44.2%
E	1999	22.9%
F	2000	14.6%
I	2000	20.1%
NL	2000	12.7%
A	2000	19.7%
P	1998	18.4%
FIN	2000	7.5%
UK	1998	10.9%

⁽¹⁾ Adjusted for owner-occupied housing.

Given that companies show close to 100% saving rates, since by definition they have no final consumption expenditure, it is therefore possible that those countries with a high proportion of unincorporated enterprises classified to the household sector will show correspondingly higher household saving rates.

2. Treatment of pensions

Contributions to pension schemes and to life insurance schemes are often the most important form of 'saving' that private households undertake. Unfortunately, national accounts treats different kinds of pensions in different ways, and this can lead to distortions in cross-country comparisons.

All pension schemes are registered in the national accounts with contributions paid into the schemes recorded as an expense for households in the accounts (therefore reducing saving), and all pensions paid by the schemes recorded as a receipt for households in the accounts (thereby increasing saving). Compensation of employees for households will include any contributions paid by employers on behalf of the households. For unfunded schemes (sometimes called 'defined benefit' schemes), these three flows are the only entries made for households ⁽¹⁾.

⁽¹⁾ For unfunded pension schemes operated by employers where there are no employee contributions, the national accounts convention is to assume that contributions match benefits.

However for funded schemes (commonly 'defined contribution' schemes), the national accounts introduces a further correction factor into household saving (known as the 'adjustment for the change in net equity of households in pension funds'). The aim of this correction is to recognise that households are the owners of the pension funds, and therefore any net additions to the funds are part of their saving, but not part of their current income and expenditure.

One implication of this correction is that any excess of contributions over benefits paid for unfunded pension schemes (which some people would consider a form of saving) are not reflected in the household saving rate. Unfortunately, it is not straightforward to measure the overall impact of this effect, owing to the different importance that taxpayer-funded pension schemes play in different countries.

A second implication of this correction is that, arguably, disposable income should be adjusted for the correction so that numerator and denominator in the saving rate calculation are on the same basis. The impact of this can be straightforwardly investigated.

Table 4 shows the adjustment for the change in net equity of households in pension funds, expressed as a proportion of gross household disposable income. One can see that in certain countries (notably the Netherlands, the Sweden and the UK) the excess of contributions over benefits for funded pension schemes is relatively important, whereas for many others it represents a small proportion of gross disposable income.

Table 4. Adjustment for the change in net equity of households in pension funds as a % of gross disposable income in households and NPISHs

	1995	1996	1997	1998	1999	2000
B	0.8%	1.0%	1.1%	0.9%	0.9%	0.9%
DK	1.2%	1.9%	2.1%	2.6%	2.3%	1.4%
D	0.9%	0.6%	0.7%	0.7%	0.7%	0.7%
E	0.5%	0.5%	0.5%	0.4%	0.6%	0.9%
F	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I	0.5%	0.6%	0.5%	0.6%	0.8%	0.9%
NL	9.3%	8.7%	8.7%	9.3%	8.3%	9.4%
A	0.1%	0.3%	0.2%	0.3%	0.5%	0.1%
P	0.9%	1.0%	1.2%	0.8%	:	:
FIN	0.3%	0.5%	0.6%	0.7%	0.8%	1.0%
S	3.7%	3.8%	3.2%	3.2%	3.7%	4.2%
UK	2.4%	2.8%	2.8%	2.9%	3.0%	2.9%

Given that the correction would be to the denominator of the saving rate calculation, the downward impact on saving rates is not particularly large in most countries (of the order 0.1-0.3%). Nevertheless for the Netherlands, the household and NPISH saving rate in 2000 would have been 12.7% instead of 13.9%.

3. Treatment of consumer durables

The national accounts, by definition, include most consumer durables (that is, products with a life of more than one year) as current expenditure of households. Examples include cars and household appliances. Some analysts prefer to treat consumer durables more as capital expenditure. The importance of durables varies by country, and the table 5 shows the gross household and NPISH saving rates calculated **before** expenditure on consumer durables for those countries where sufficient data is available.

Table 5. Gross saving rates for households and NPISH with correction for consumer durables

	1995	1996	1997	1998	1999	2000
B	27.2%	25.6%	24.6%	24.0%	24.6%	23.3%
DK	18.3%	17.3%	15.6%	17.2%	13.3%	13.9%
D	26.7%	26.4%	26.0%	26.2%	25.7%	25.0%
EL	20.4%	18.2%	18.8%	18.5%	18.3%	16.5%
E	21.9%	21.9%	21.7%	21.2%	20.4%	18.9%
F	23.7%	22.8%	23.3%	23.1%	23.2%	23.6%
I	30.6%	31.3%	29.2%	26.6%	25.4%	24.1%
NL	31.2%	29.4%	29.6%	29.8%	27.0%	:
A	26.3%	25.1%	22.7%	23.5%	23.6%	22.5%
P	21.9%	21.3%	20.4%	20.7%	:	:
FIN	19.0%	16.3%	18.4%	17.8%	18.7%	17.6%
S	19.8%	18.3%	16.4%	15.7%	16.9%	16.0%
UK	21.2%	20.8%	21.1%	17.9%	17.2%	16.3%

There are other reasons why national and household saving rates may not be directly comparable between countries. For example, the balance between direct and indirect taxes and the relative importance of the public sector could both impact on the saving rate (the former through the measure of disposable income). For the sake of brevity, this publication does not explore these issues further.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

The definition of saving used in this publication is in line with that of ESA95 (European Commission, 1996). Saving rates in all cases are calculated as gross saving (B.8g) divided by disposable income (B.6g); disposable income is defined by ESA95 as the balance of primary incomes plus or minus current transfers. The NewCronos database stores these values in net terms, therefore it is necessary to add back consumption of fixed capital (K.1) to both measures before calculating the gross rates.

Where the 'Euro-zone' is identified in this publication, unless otherwise stated, this refers to the 12 countries of the Euro-zone, namely Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland.

This publication concentrates on the saving rates of households and non-profit institutions serving households (NPISHs) combined. The households sector (S14) is defined in ESA95 paragraph 2.75 as covering 'individuals or groups of individuals as consumers and possibly also as entrepreneurs producing market goods and ... services provided that, in the latter case, the corresponding activities are not those of separate entities treated as ... corporations'. The NPISH sector (S15) is defined in ESA95 paragraph 2.87 as 'non-profit institutions which are separate legal entities, which serve households, and which are private other non-market producers'. Examples of NPISHs include trade unions, political parties, churches, sports clubs and charitable organisations.

Unrealised holding gains are not separately identified in the NewCronos database. The method adopted for this publication has been to take the difference between the opening and closing balance sheets for a single year, and then to subtract transactions undertaken during that year. The analysis has been restricted to assets since it is not clear that holding gains/losses on liabilities for households are relevant for this analysis. There is a possibility that this residual includes certain 'other changes in volume of assets' (for example the accidental destruction of financial assets), but these are likely to be minor, and can also be considered as affecting household wealth. A more serious problem could be the impact of major reclassifications, for example when a financial firm is reclassified from the household to the financial corporations sector.

The adjustment for the changes in net equity of households in pension funds (D.8) is defined in accordance with ESA95 paragraph 4.142 as:

The total value of actual social contributions in respect of pensions paid into private funded pension schemes

Plus the total value of contribution supplements payable out of property income attributed to insurance policy holders

Minus the value of the associated service charge

Minus the total value of the pensions paid out as social insurance benefits by privately funded schemes.

There is no internationally agreed definition of 'consumer durables'. For the purposes of this publication, a rather narrow definition has been made based on the COICOP classification of final household consumption expenditure, as follows:

CP051 - Furniture and Fittings

CP053 - Household appliances

CP055 - Tools and Equipment for House and Garden

CP071 - Vehicles

CP091 - Audio-visual equipment

CP092 - Other major durables for recreation and culture

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