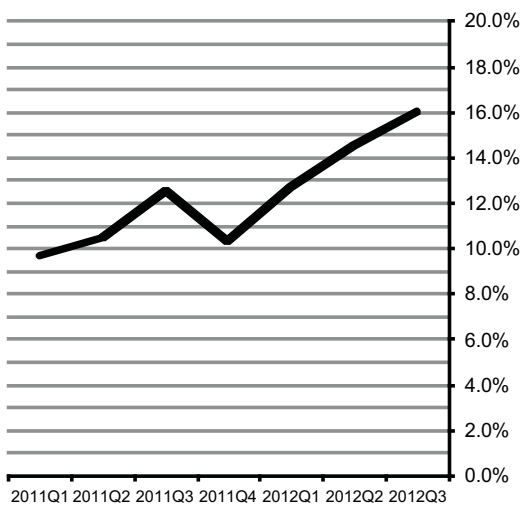




**Gross Household Saving Ratio**  
Seasonally adjusted Q1 2011 - Q3 2012



## Quarterly Institutional Sector Accounts

### Non-Financial

### Quarter 3 2012

Seasonally adjusted  
Gross Household Savings by component

Quarter	Gross Disposable Income (B.6g+D.8)	Final Consumption Expenditure (P.3)	Gross Savings (B.8g)
	€m		
Q2 2012	22,515	19,255	3,261
Q3 2012	23,002	19,319	3,684

### Increase in household savings ratio between Q2 and Q3 2012

On a seasonally adjusted basis the quarterly gross disposable income of households (B.6g) was €23,002m in Q3 2012 – an increase of €487m or 2.2 per cent compared with Q2 2012. Quarterly household expenditure (P.3) rose by €64m over the same period (€19,319m in Q3 2012 compared with €19,255m in Q2 2012). Overall, gross household savings increased by €423m from €3,261m in Q2 2012 to €3,684m in Q3 2012.

The derived gross savings ratio, which expresses savings as a percentage of gross disposable income, increased from 14.5 per cent in Q2 2012 to 16 per cent in Q3 2012 (*see Background Notes - definitions*).

### Annual gross savings for the overall economy in Q3 2012 rise

Gross savings for the total economy (S.1) increased by €1,747m, from €5,573m in Q3 2011 to €7,320m in Q3 2012 (*see Summary Table*). This is explained largely by increases in the gross savings of both households (€1,022m) and non-financial corporations (€1,215m).

The seasonally adjusted data series which includes *Gross Disposable income, Personal Consumption of Goods and Services and Gross Savings of the Household and NPISH sector* is available at [www.cso.ie/shorturl.aspx/99](http://www.cso.ie/shorturl.aspx/99). The entire unadjusted series for all variables published in this release are also available there.

*For more information contact Michael Connolly at 01 498 4006 or Mary Brew at 01 498 4365.*

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Ardee Road  
Dublin 6  
Ireland

Skehard Road  
Cork  
Ireland

LoCall: 1890 313 414 (ROI)  
0870 876 0256 (UK/NI)

Tel: +353 1 498 4000  
Fax: +353 1 498 4229

Tel: +353 21 453 5000  
Fax: +353 21 453 5555

Both offices may be contacted through any of these telephone numbers.

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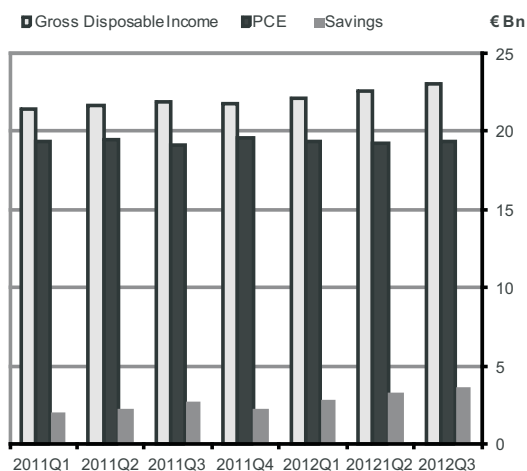
Enquiries:

National Accounts    National Accounts, ext 4371  
nat\_acc@cso.ie

General queries      Information Section, ext 5021  
information@cso.ie

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**Total Gross Disposable Income v's PCE and Savings**  
Seasonally adjusted Q1 2011 - Q3 2012



### Net borrowing of Government falls sharply

The savings deficit of Government totalled €4,364m in Q3 2012, a small deterioration on the Q3 2011 deficit of €3,988m. This change is explained by increased net current transfers payments of €603m compared with €192m for the third quarter of the previous year.

Net capital transfers reduced sharply from a net payment of €5,760m in Q3 2011 to a net receipt of €12m in the current quarter. This change is explained by the high level of capital transfer payments (D.9) by Government for bank recapitalization in Q3 2011. Overall, the net borrowing (B.9) of Government has fallen by €5,412m from €10,365m in Q3 2011 to €4,953m in the current quarter.

### Non-financial (S.11) and Financial (S.12) Corporations

The gross savings of non-financial corporations of €4,930m in Q3 2012 increased by €1,215m compared to €3,715m in Q3 2011. Net property income (D.4) increased by €718m together with an increase of €331m in gross operating surplus (B.2g/B.3g). Net lending (B.9) by this sector increased by almost €1bn in the current quarter for the same reasons.

Financial corporations had gross savings of €2,154m in Q3 2012 a decrease of €104m on the same period of the previous year. Net lending (B.9) of the sector declined sharply from €7,923m in Q3 2011 to €2,066m this quarter on account of bank recapitalization capital transfers from Government in Q3 2011.

### Rest of the World Sector (S.2)

The net borrowing (B.9) by the rest of the world from Ireland amounted to €3,034m in Q3 2012 compared to €1,475m in Q3 2011. This increase is explained by the higher levels of gross savings in the economy.

**Institutional Sector Accounts  
Non-Financial Tables**

**Quarter 3 2012**

Summary Table - Quarterly Accounts by Institutional Sector, Q1 2011 - Q3 2012

€ million

Key Variables		Quarter	S.2 Rest of World	S.1 Total economy	S.IN Not sectorized	S.11 Non-financial corporations	S.12 Financial corporations	S.13 General government	S.14+S.15 Households including NPISH
(a) B.1*g	Gross domestic product	Q1 2011		38,093	3,379	19,727	3,631	5,552	5,803
		Q2 2011		41,024	3,493	21,576	3,991	5,315	6,650
		Q3 2011		40,006	3,604	20,844	3,803	5,363	6,392
		Q4 2011		39,870	3,607	21,024	4,031	5,481	5,727
		Q1 2012		39,902	3,380	20,667	3,798	5,512	6,545
		Q2 2012		41,926	3,418	22,175	4,061	5,226	7,047
		Q3 2012		41,471	3,699	21,606	4,044	5,350	6,774
(b) B.2g/B.3g	Gross operating surplus / Mixed income	Q1 2011		17,293	-244	10,640	2,129	723	4,046
		Q2 2011		19,748	-263	12,237	2,469	687	4,618
		Q3 2011		18,625	-257	11,512	2,312	694	4,363
		Q4 2011		19,213	-256	11,891	2,403	695	4,479
		Q1 2012		18,927	-256	11,467	2,378	623	4,716
		Q2 2012		20,752	-269	12,621	2,645	609	5,146
		Q3 2012		19,595	-266	11,843	2,465	697	4,856
(c) D.1_D.4	Net Primary Income	Q1 2011		12,760	0	-7,528	3	3,174	17,111
		Q2 2011		12,648	0	-7,528	-1,104	3,980	17,300
		Q3 2011		13,475	0	-7,271	163	3,194	17,388
		Q4 2011		14,540	0	-6,242	-672	3,652	17,802
		Q1 2012		12,292	0	-7,482	-499	2,993	17,280
		Q2 2012		13,583	0	-8,212	80	4,004	17,712
		Q3 2012		14,470	0	-6,553	-162	3,212	17,973
(d) B.5g	Gross national income = (b + c)	Q1 2011		30,053	-244	3,112	2,132	3,897	21,157
		Q2 2011		32,395	-263	4,709	1,365	4,667	21,917
		Q3 2011		32,100	-257	4,242	2,475	3,889	21,751
		Q4 2011		33,753	-256	5,649	1,732	4,347	22,281
		Q1 2012		31,220	-256	3,985	1,878	3,616	21,996
		Q2 2012		34,335	-269	4,409	2,725	4,613	22,858
		Q3 2012		34,065	-266	5,290	2,303	3,909	22,829
(e) D.5_D.7	Net Current Transfers	Q1 2011		-764	0	-250	559	-339	-734
		Q2 2011		-477	0	-931	260	192	2
		Q3 2011		-587	0	-526	425	-192	-295
		Q4 2011		-613	0	-1,330	127	2,473	-1,883
		Q1 2012		-734	0	-209	607	-216	-916
		Q2 2012		-566	0	-1,085	201	504	-186
		Q3 2012		-604	0	-360	541	-603	-182
(f) B.6g	Gross disposable income = (d + e)	Q1 2011		29,289	-244	2,861	2,691	3,558	20,423
		Q2 2011		31,918	-263	3,778	1,625	4,859	21,919
		Q3 2011		31,512	-257	3,715	2,901	3,697	21,456
		Q4 2011		33,140	-256	4,319	1,858	6,820	20,398
		Q1 2012		30,485	-256	3,776	2,485	3,400	21,080
		Q2 2012		33,770	-269	3,324	2,926	5,117	22,672
		Q3 2012		33,461	-266	4,930	2,844	3,306	22,647

**Summary Table - Quarterly Accounts by Institutional Sector, Q1 2011 - Q3 2012**
**€ million**

Key Variables	Year	S.2	S.1	S.IN	S.11	S.12	S.13	S.14+S.15
		Rest of World	Total economy	Not sectorized	Non-financial corporations	Financial corporations	General government	Households including NPISH
(g) P.3 + D.8 Use of disposable income	Q1 2011		-26,403	0	0	-651	-7,030	-18,722
	Q2 2011		-26,238	0	0	-653	-7,315	-18,271
	Q3 2011		-25,940	0	0	-643	-7,685	-17,612
	Q4 2011		-28,136	0	0	-669	-7,189	-20,279
	Q1 2012		-26,303	0	0	-677	-7,002	-18,624
	Q2 2012		-25,891	0	0	-665	-7,150	-18,076
	Q3 2012		-26,141	0	0	-690	-7,670	-17,781
(h) B.8g Gross saving = (f + g)	Q1 2011		2,886	-244	2,861	2,041	-3,472	1,701
	Q2 2011		5,680	-263	3,778	972	-2,456	3,648
	Q3 2011		5,573	-257	3,715	2,258	-3,988	3,844
	Q4 2011		5,003	-256	4,319	1,190	-369	119
	Q1 2012		4,182	-256	3,776	1,808	-3,602	2,456
	Q2 2012		7,879	-269	3,324	2,261	-2,033	4,595
	Q3 2012		7,320	-266	4,930	2,154	-4,364	4,866
(i) Changes in Capital Accounts	Q1 2011		-971	-244	-270	7	-175	-290
	Q2 2011		-1,150	-263	-473	27	-338	-102
	Q3 2011		-107	-257	226	5,834	-5,760	-150
	Q4 2011		416	-256	1,091	51	-951	482
	Q1 2012		-1,347	-256	-612	40	-175	-344
	Q2 2012		-2,901	-269	-2,181	69	-308	-212
	Q3 2012		-456	-266	-111	72	12	-163
(j) K.1 Consumption of fixed capital	Q1 2011		3,825		1,923	161	617	1,124
	Q2 2011		4,071		2,070	173	617	1,210
	Q3 2011		3,991		2,022	169	617	1,182
	Q4 2011		3,922		1,981	166	617	1,158
	Q1 2012		3,831		1,909	160	601	1,161
	Q2 2012		3,837		1,913	160	601	1,163
	Q3 2012		3,831		1,910	160	601	1,161
(k) B.9 Net lending (+) / Net borrowing (-) = (h + i) - j	Q1 2011	1,909	-1,910	-489	668	1,887	-4,263	287
	Q2 2011	-454	459	-526	1,234	826	-3,411	2,335
	Q3 2011	-1,475	1,475	-513	1,918	7,923	-10,365	2,512
	Q4 2011	-1,502	1,498	-512	3,429	1,075	-1,937	-558
	Q1 2012	994	-995	-512	1,254	1,688	-4,378	952
	Q2 2012	-1,142	1,141	-538	-769	2,170	-2,941	3,220
	Q3 2012	-3,034	3,032	-532	2,910	2,066	-4,953	3,542

Quarterly Accounts by Institutional Sector, Q3 2012

€million

Uses								CURRENT ACCOUNTS	Resources							
S.14+S.15 Households including NPISH	S.13 General government	S.12 Financial corporations	S.11 Non-financial corporations	S.IN Not sectorized	S.1 Total economy	S.2 Rest of World	S.1+S.2 Sum over sectors		S.1+S.2 Sum over sectors	S.2 Rest of World	S.1 Total economy	S.IN Not sectorized	S.11 Non-financial corporations	S.12 Financial corporations	S.13 General government	S.14+S.15 Households including NPISH
<b>1.2 GENERATION OF INCOME ACCOUNT</b>																
								<b>B.1*g</b>	<b>Gross domestic product</b>		<b>41,471</b>	<b>3,699</b>	<b>21,606</b>	<b>4,044</b>	<b>5,350</b>	<b>6,774</b>
1,957	4,653	1,553	9,382		17,544	136	17,680	D.1	Compensation of employees							
112	0	26	411	4,055	4,603		4,603	D.2	Taxes on production and imports, paid							
								D.3	Subsidies, received	271	271	90	30	0	0	151
<b>4,856</b>	<b>697</b>	<b>2,465</b>	<b>11,843</b>	<b>-266</b>	<b>19,595</b>			<b>B.2g/ B.3g</b>	<b>Gross operating surplus/ Mixed income</b>							
<b>1.3 ALLOCATION OF PRIMARY INCOME ACCOUNT</b>																
								<b>B.2g/ B.3g</b>	<b>Gross operating surplus/ Mixed income</b>		<b>19,595</b>	<b>-266</b>	<b>11,843</b>	<b>2,465</b>	<b>697</b>	<b>4,856</b>
								D.1	Compensation of employees	17,680	199	17,481				17,481
								D.2	Taxes on production and imports, received	4,603	93	4,510			4,510	
	141				141	130	271	D.3	Subsidies, paid							
378	1,492	13,033	9,579		24,483	14,183	38,666	D.4	Property income	38,665	21,562	17,103	3,027	12,871	335	870
328	1,492	6,207	1,239		9,266	9,375	18,641	D.41	Interest	18,640	7,055	11,585	49	11,049	203	284
0	0	4,160	4,911		9,071	*	*	D.42	Distributed income of corporations	*	*	3,938	1,831	1,674	132	301
0	0	1,935	3,430		5,365	*	*	D.43	Reinvested earnings on direct foreign investment	*	*	1,295	1,147	148	0	0
0	0	731	0		731	0	731	D.44	Property income attributed to insurance policy holders	731	497	234	0	0	0	234
50	0	0	0		50		50	D.45	Rent	50		50	0	0	0	50
<b>22,829</b>	<b>3,909</b>	<b>2,303</b>	<b>5,290</b>	<b>-266</b>	<b>34,065</b>			<b>B.5g</b>	<b>Gross national income</b>							

\* Suppressed for confidentiality reasons

## Quarterly Accounts by Institutional Sector, Q3 2012

€million

Uses								CURRENT ACCOUNTS	Resources								
S.14+S.15 Households including NPISH	S.13 General government	S.12 Financial corporations	S.11 Non-financial corporations	S.IN Not sectorized	S.1 Total economy	S.2 Rest of World	S.1+S.2 Sum over sectors		S.1+S.2 Sum over sectors	S.2 Rest of World	S.1 Total economy	S.IN Not sectorized	S.11 Non-financial corporations	S.12 Financial corporations	S.13 General government	S.14+S.15 Households including NPISH	
<b>1.5 SECONDARY DISTRIBUTION OF INCOME ACCOUNT</b>																	
								<b>B.5g</b>	<b>Gross national income</b>			<b>34,065</b>	<b>-266</b>	<b>5,290</b>	<b>2,303</b>	<b>3,909</b>	<b>22,829</b>
3,504	0	145	333		3,982	25	4,007	D.5	Current taxes on income, wealth, etc.	4,007	20	3,987				3,987	
3,464					3,464	0	3,464	D.61	Social contributions	3,464	0	3,464		0	1,064	2,295	105
172	6,362	374	0		6,908	73	6,981	D.62	Social benefits other than social transfers in kind	6,981	87	6,894					6,894
1,210	530	1,893	148		3,780	946	4,726	D.7	Other current transfers	4,726	1,541	3,185		121	1,889	6	1,169
<b>22,647</b>	<b>3,306</b>	<b>2,844</b>	<b>4,930</b>	<b>-266</b>	<b>33,461</b>			<b>B.6g</b>	<b>Gross disposable income</b>			<b>33,461</b>	<b>-266</b>	<b>4,930</b>	<b>2,844</b>	<b>3,306</b>	<b>22,647</b>
<b>1.6 USE OF DISPOSABLE INCOME ACCOUNT</b>																	
								<b>B.6g</b>	<b>Gross disposable income</b>			<b>33,461</b>	<b>-266</b>	<b>4,930</b>	<b>2,844</b>	<b>3,306</b>	<b>22,647</b>
18,471	7,670				26,141			P.3	Final consumption expenditure								
			690		690	0	690	D.8	Adjustment for the change in net equity of households in pension funds reserves	690	0	690					690
<b>4,866</b>	<b>-4,364</b>	<b>2,154</b>	<b>4,930</b>	<b>-266</b>	<b>7,320</b>			<b>B.8g</b>	<b>Gross saving</b>								
<b>1.7 EXTERNAL ACCOUNT</b>																	
						44,342		P.6	Exports of goods and services								
								P.7	Imports of goods and services		33,284						
					<b>-11,058</b>			<b>B.11</b>	<b>External balance of goods &amp; services</b>								
					65,596	15,493	81,089	D.1 to D.8	Primary incomes and current transfers	81,088	23,502	57,586					
					<b>-3,049</b>			<b>B.12</b>	<b>Current external balance</b>								





## Background Notes

**Description of institutional sectors** In the sector accounts, institutional sectors are distinguished not in terms of the nature of their production activity (such as agriculture, industry, services etc) but rather in terms primarily of the institutional form of the units that make them up. Thus companies, whether engaged in commercial non-financial or financial business, are grouped in a different sector from households, even though the latter are in many cases also engaged in commercial production, and from government or other non-market producers such as voluntary agencies.

**Institutional Sectors** The classification system is that of the European System of Accounts 1995 (ESA95). The sectors and sub-sectors distinguished in the present publication are as follows:

**S.1 Resident Economy** is the sum of all the sectors of the domestic economy.

**S.11 Non-Financial Corporations** are corporate bodies producing goods and non-financial services on a commercial basis. They include public limited companies, private companies and other corporate forms of business, whether owned by residents (including the government) or non-residents or both. In particular, therefore, Irish subsidiaries of foreign companies and the Irish branches of foreign companies operating in Ireland on a branch basis are included; while the foreign subsidiaries of Irish companies and the foreign branches of Irish companies operating abroad are excluded (they form part of the Rest of the World sector S.2). The business activities of self-employed persons (quasi-corporations) are in principle to be included here if separate accounts are available for statistical purposes.

**S.12 Financial Corporations** are corporate bodies producing financial services on a commercial basis. As with S.11, they can take various legal forms, with a range of ownership arrangements. They include monetary financial institutions, other financial intermediaries, financial auxiliaries and insurance corporations and pension funds.

**S.13 General Government** consists of central and local government and the social security fund. Central government includes the National Pension Reserve Fund, and non-commercial agencies owned and funded by government, but does not include commercial state-owned companies (which are proper to S.11 or S.12 as appropriate).

**S.14 + S.15 Households (S.14) and Non-Profit Institutions Serving Households (S.15).** S.14 consists of persons in their capacity as holders of financial assets or as borrowers. The business assets and liabilities of unincorporated self-employed persons are also mainly reflected in this sector. S.15 consists of non-profit institutions such as charities and non-commercial agencies not owned by the government, such as some schools and hospitals.

**S.2 Rest of the World.**

The figures represent the economy's transactions with non-residents. The conceptual definition is the same as in the balance of payments (BOP) statistics. In particular, non-residents include foreign subsidiaries of Irish companies, the foreign branches of Irish companies that operate abroad on a branch basis, and the head offices of foreign companies that operate in Ireland on a branch basis.

**S.1N Not Sectorised.**

In the non-financial accounts an additional residual sector is used to report taxes and subsidies in the Generation of Income Account (*Account 1.2*) as it is not possible to allocate these amounts to Institutional Sectors. In addition throughout these accounts S.1N is used to report the amounts that appear as the statistical discrepancy in the National Income and Expenditure GDP accounts, arising from the use of two independent estimates of GDP (from the Income and Expenditure approaches). In the Annual National Accounts NIE tables 3 and 5, the official estimate of GDP is reported as the average of the two measures, and the discrepancy is therefore displayed as half the difference between the two independent estimates (and thus with different signs in the two tables). The discrepancy is projected forward on a quarterly basis in line with the trends in the Expenditure components and is presented in Table 2 of the Quarterly National Accounts. In the sector accounts it appears as the first balancing item in the sequence (in the gross value added item in the production account), and is then carried through successive accounts via the balancing item. In the final non-financial account, the full amount of the discrepancy then emerges as the unallocated net lending or borrowing in the economy.

**Description of detailed non-financial accounts** Sector accounts present a coherent overview of all economic processes and the roles played by the various sectors. Each economic process is described in a separate account. The accounts describe successively generation of income, primary and secondary income distribution, final consumption, redistribution by means of capital transfers and capital formation. Note that the *Production Account (1.1)* from the Annual Accounts is not included in these quarterly accounts as the data is not available on a quarterly basis. The accounts record economic transactions, distinguishing between uses and resources, (e.g. the *resources* side of the transaction category *D.41 Interest* records the amounts of interest receivable by the different sectors of the economy and the *uses* side shows interest payable) with a special item to **balance** the two sides of each account. By passing on the balancing item from one account to the next a connection is created between successive accounts.

The accounts are compiled for the total economy and include accounts for separate domestic sectors and the Rest of the World sector. In this way the sector accounts describe:

- for each economic process the role of each sector, for instance General Government in income redistribution and Financial Corporations in financing.
- for each sector all economic transactions and their relation with other domestic sectors and the Rest of the World.

The successive accounts are explained in more detail below.

#### **Current Accounts 1.1 Production Account**

This Account is not presented in the Quarterly Non-Financial Accounts as quarterly data is not available.

#### **1.2 Generation of Income Account**

This account displays the transactions through which Gross Domestic Product at market prices is distributed to labour (compensation of employees), capital (operating surplus) and government (the balance of taxes and subsidies on production). The balancing item for the Household and NPISH sector in this account is called mixed income, because apart from operating surplus it also contains compensation for work by self-employed persons and their family members. B.2g/B.3g Gross Operating Surplus / Gross Mixed Income is the balancing item for the entire account.

#### **1.3 Allocation of Primary Income Account**

This account records, as resources, the income from direct participation in the production process, as well as property income received in exchange for the use of land, financial resources and other intangible assets. In addition, this account records the taxes on production and imports received by the government. On the uses side, property income is recorded as well as the subsidies paid by the government.

On this account the interest paid and received are recorded excluding imputed bank services (financial intermediation services indirectly measured -FISIM). In the national accounts insurance technical reserves are seen as a liability of insurance enterprises and pension funds to policyholders. Therefore, the receipts from investing these reserves are recorded as payments from insurance enterprises and pension funds to households, in the form of property income attributed to insurance policy holders and pension scheme members. The balancing item of this account for each sector is B.5g Gross National Income. The Primary Income for the total economy is the National Income.

#### **1.4 Memorandum - Entrepreneurial Income Account**

This account is not presented in the Quarterly series.

#### **1.5 Secondary Distribution of Income Account**

The secondary distribution of income account shows how primary income is redistributed by means of current taxes on income and wealth, social contributions (including contributions to pension schemes), social benefits (including pension benefits) and other current transfers. The balancing item of this account is B.6g Gross Disposable Income. For the consuming sectors (Households, NPISH and General Government) this item is passed on to 1.6 Use of Disposable Income Account. For the other sectors the disposable income is generally equal to savings. This is then passed on to the capital account.

### 1.6 Use of Disposable Income Account

This account shows the element of disposable income that is spent on final consumption and also the element that is saved. As mentioned above final consumption only exists for Households, NPISH and General Government. The net equity of Households in pension funds and life insurance reserves are seen as financial assets that belong to Households. Changes in these reserves need to be included in the savings of Households. However, contributions to pension schemes and pension benefits have already been recorded on 1.5 Secondary Distribution of Income Account (as social contributions and social benefits). Therefore, an adjustment is needed to include in the savings of Households the change in pension funds reserves on which they have a definite claim. This adjustment is called D.8 'Adjustment for the change in net equity in pension funds reserves'. There is no need for a similar adjustment concerning life insurance because life insurance premiums and benefits are not recorded as current transactions. The balancing item for this account is B.8g Gross Saving.

### 1.7 External account

This account records the summarised transactions of S.2 the Rest of the World sector, including on the uses side exports of goods and services, primary incomes and current transfers receivable. The resources side of this account includes imports of goods and services together with primary incomes and transfers payable. The balancing item is B.12 Current External Balance, which records the balance on current accounts with the Rest of the World.

### Capital accounts 1.8 Change in Net Worth due to Saving and Capital Transfers

On this account the capital transfers are recorded and combined with gross saving and the current external balance. The resulting balancing item is B.10.1 Changes in Net Worth due to Saving and Capital Transfers.

### 1.9 Acquisition of Non-Financial Assets Account

On this account gross fixed capital formation, changes in inventories, acquisitions less disposals of valuables and non-produced non-financial assets are recorded among the uses. The decline in the value of fixed capital goods caused by consumption of fixed capital goods is recorded among the resources. The balancing item is Net Lending (+) or Borrowing (-). It shows the amount a sector can lend / invest or has to borrow as a result of its current and capital transactions.

### Seasonal Adjustment

Seasonally adjusted estimates of Household Savings are done using the indirect seasonal adjustment approach. Under this approach the two main aggregates Household Disposable Income and Final Consumption Expenditure of Households are independently adjusted. In the case of Household Savings, however, this estimate is derived by taking the difference between the two adjusted series of Household Disposable Income and Final Expenditure of Households. This method for estimating the seasonally adjusted value for a small net residual of two large aggregates, such as Household Savings is considered a more appropriate estimation procedure.

As part of the seasonal adjustment process, ARIMA models are identified for each series based on unadjusted data spanning Q1 2002 to Q2 2012. These models are then applied to the entire series (Q1 2002 to Q3 2012). Seasonal factors and the parameters of the ARIMA models are updated each quarter.

The adjustments are completed by applying the X-12-ARIMA model, developed by the U.S. Census Bureau to the unadjusted data. This methodology estimates seasonal factors while also taking into consideration factors that impact on the quality of the seasonal adjustment such as, for example:

- Calendar effects, e.g. the timing of Easter
- Outliers, temporary changes and level shifts in the series

For additional information on the use of X-12-ARIMA see (Findley, D.F., B.C. Monsell, W.R. Bell, M.C. Otto, and B. Chen (1998), "New Capabilities and Methods of the X-12-Arima Seasonal Adjustment Program", *Journal of Business & Economic Statistics*, 16, pp. 127-177.)

### Definitions

#### Household Savings Ratio

The household saving ratio is Gross Household Saving expressed as a percentage of total resources i.e. the sum of Gross Household Disposable income and the adjustment for the change in net equity of households in pension funds.