

# ECONOMY AND FINANCE

THEME 2 - 24/2003

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# Recent developments in flows and capital accounts of households and non-financial corporations

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A number of developments have taken place in the economies of EU Member States in 2000 and 2001. Here we will focus on households and non-financial corporations. Using data both from capital accounts and from financial accounts, we will explore for both sectors the following topics: the preference given to acquisition of financial assets or non-financial assets; the need to be financed, or ability to provide means of finance; the financial instruments through which financing took place.

#### Financial and non-financial investments

For a given sector, using both capital accounts and financial accounts we can look at the differences in the investment patterns, and to the overall need of external finance. We will define two basic ratios.

The first ratio is the share of financial investment to total investment:

#### Share of financial investment =

Net acquisition of financial assets / Net acquisition of financial assets + Investment.

This ratio gives the relative importance of financial investment, in items like bonds and shares, to investment in buildings and production equipment, machinery, transportation. For households non-financial investment is mostly houses.

The second ratio is savings over investment:

#### Ratio of savings to investment = Savings / Investment

This ratio tells us to what extent investment in equipment is financed by savings internal to a sector. When the ratio is smaller than one, the sector has to borrow. When the ratio is above one, the sector has a surplus in means of finance.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Financial accounts and non-financial accounts by institutional sector are now available for most EU countries in a comparable framework. Greece, Ireland and Luxembourg are under derogation until 2005. The remaining, few, missing values are due to delays in the transmission of data.

<sup>&</sup>lt;sup>2</sup> For Savings and Investment we use gross concepts. The precise definitions of Savings and Investment are given in the box Essential Information below. For reasons of brevity, we refer to households to mean both households and non-profit institutions serving households. One has also to take into account that the sector households contains some forms of small production activities

#### Financial and non-financial investments of households

We will discuss at first the preference for financial assets in total investment of households. In 2000 the share of financial investment ranged between 36% in Denmark and 72% in Sweden. Other Member States with low values were Germany and Finland, at 43% and 44% respectively.

This means that Danish, German and Finnish households invested mostly in houses rather than in financial instruments. A slight preference for financial investments is however the general pattern in the EU. In Sweden the preponderance given to financial investment could be strengthened by the consideration

that Swedish households are now allowed to decide the allocation of part of their pension fund, by choosing a specific mutual fund.

There were not major changes in 2001, except for Denmark where the ratio increased steeply from 36% in 2000 to 57% in 2001. For most other countries the share of financial investment is somewhat higher in 2001, and the overall ratio for the euro-zone rose from 52% in 2000 to 54% in 2001. Germany recorded in 2001 the lowest value, at 45%, while Sweden was again the highest, at 75%.

Country or area	Share of financial investment (percentage)		Ratio of savings to investment	
	2000	2001	2000	2001
Belgium	59.7	54.9	1.6	1.6
Germany	42.6	45.2	1.5	1.7
Spain	57.2	53.4	1.2	1.0
France	51.3	56.0	1.8	1.8
Italy	59.9	61.1	1.5	1.5
Netherlands	58.2	59.6	0.8	1.1
Austria	55.9	48.9	1.5	1.7
Finland	43.8	56.8	0.7	0.8
Euro-zone	51.9	53.9	1.4	1.6
Denmark	36.1	57.0	0.3	0.7
Sweden	72.2	75.2	1.6	NA
United Kingdom	62.0	NA	0.8	NA
EU	53.9	54.5	1.3	1.5

Table 1: Households' investment ratios

The ratio of saving to investment was below one in Denmark, Finland, the Netherlands and the United Kingdom. This means that households in these four Member States were not saving enough to finance their non-financial investment. So they had to borrow from other sectors.

This ratio was especially low in Denmark in 2000, at 0.3. France had the highest ratio, 1.8. In other Member States the ratio varied between 0.8 and 1.6. The picture in 2001 is similar to that in the previous year, except for Denmark which saw an important increase, up to 0.7.



#### Financial and non-financial investments of non-financial corporations

Important changes were seen appear in 2000 for non-financial corporations, showing a departure from the traditional operations of non-financial corporations. The share of financial investment of non-financial corporations was in fact high in 2000, with the EU average well above 50% and the euro-zone average just below 50%. The share varied from 22 % in Austria to 77% in Sweden.

Companies invested mostly in production equipment and buildings in Austria, Italy and Germany. In all other

Member States non-financial corporations placed more than half of their investments in financial assets.

In 2001 the behaviour of non-financial corporations showed a reversal. There was in fact a general reduction of the share of financial investment, down to 45% in the euro-zone. Still companies invested more than 50% of their total investments in financial assets in many Member States of the euro-zone (Spain, France, the Netherlands, Finland) as well as outside it (Denmark and Sweden).

Country or area	Share of financial investment (percentage)		Ratio of savings to investment	
	2000	2001	2000	2001
Belgium	53.7	47.3	1.1	1.1
Germany	41.2	35.8	0.6	0.8
Spain	64.2	54.1	0.8	0.7
France	53.6	52.3	0.8	0.8
Italy	23.8	33.8	0.7	0.8
Netherlands	66.8	55.0	1.1	1.1
Austria	22.3	19.2	0.7	0.6
Finland	71.4	58.4	1.3	1.3
Euro-zone	49.3	45.0	0.8	0.8
Denmark	54.5	57.0	1.2	0.7
Sweden	76.8	75.2	1.0	NA
United Kingdom	74.4	NA	0.9	NA
EU	58.0	44.8	0.8	0.8

Table 2: Non-financial corporations' investment ratios

The ratio of savings to investment was above one in 2000 in some Member States. It was highest in Finland, at 1.3. It was above one also in Belgium, the Netherlands and Denmark. Non-financial corporations in these Member Sates had thus a surplus in savings compared to investments. This is a fairly uncommon situation, that seems to be linked to very high profits

accompanied by poor expectations about the future, so there was little spur to invest. For the rest of the Member States, the ratio of savings to investment was between 0.6 and 1.0. In 2001 the ratio of savings to investment remained fairly stable in most Member States, except Denmark where it fell from 1.2 in 2000 to 0.7 in 2001.

#### Financial imbalance of households and non-financial corporations

We will now consider the ability of a sector to provide financial resources to other sectors from a different perspective. We will concentrate only on the information in financial accounts and will deal with absolute

amounts of money, instead of ratios as in the previous sections. This will allow us to notice some other important phenomena.



We define the *financial imbalance* of a sector as the difference between its net acquisition of financial assets and its net incurrence of liabilities. If the financial imbalance has a positive value, it means that the sector has been providing resources to some other sector in the economy. It if has a negative value, the sector has been drawing resources from other sectors. The concept of financial imbalance will also be used at the level of a single financial instrument.

The financial imbalance for both households and non-financial corporations is shown in Table 3, for the years 2000 and 2001. The information related to these two years allows us to make a number of remarks on households. The first thing we note is that households provide large amounts of money to other sectors in just three Member States: France, Germany and Italy. When added together, households in these three Member States provided more than 80 per cent of financing extended by households in 2000 and 2001.

A second thing to note is that the sums of money provided are not necessarily related to the size of the economy of the Member States. This is indicated by the almost nil value in the United Kingdom, in 2000. Or compare the higher amounts of money provided by households in Belgium than in the Netherlands, in both years

Moving from 2000 to 2001, the positive financial imbalance of households increased in the euro-zone, from 257 billion euro to 341 billion euro. This tendency took place in most Member States. It was extremely strong in Italy, where it grew from 85 billion euro in 2000 to 115 billion euro in 2001. In both years Italian households recorded the highest positive imbalance.

Table 3 shows a number of features of non-financial corporations in 2000 and 2001. Total borrowing of non-financial corporations was very different in the two years. For the euro-zone it decreased from 273 billion euro in 2000 to 162 billion euro in 2001. The biggest contractions took place in the borrowing of Germany, from 157 billion euro to 38 billion euro, and Italy, from 61 billion euro to 35 billion euro. On the other hand financing required by French non-financial corporations increased considerably, from 9 billion euro in 2000 to 34 billion euro in 2001.

In 2000 German non-financial corporations drew more than half of the resources of non-financial corporations of the whole euro-zone. It may also be noted that the use of borrowed resources by non-financial corporations does not match the supply of financial means by households of the same country.

Country or area	Households		Non-financial corporations	
	2000	2001	2000	2001
Belgium	19209	18779	-8163	-7627
Germany	75370	98950	-156796	-37972
Spain	5651	8338	-22972	-28340
France	52570	78278	-8599	-34314
Italy	84690	115048	-61083	-35272
Netherlands	-4192	4976	3695	-310
Austria	9375	7059	-11981	-11140
Portugal	11515	3864	-8985	-9632
Finland	2682	5488	1450	2360
Euro-zone	256870	340781	-273433	-162247
Denmark	-7466	-3268	5491	4688
Sweden	3284	6387	5639	-6143
United Kingdom	1027	NA	-15124	NA
EU	253715	NA	-277428	NA
Norway	687	175	-1181	-3815

Table 3: Financial imbalance of households and non-financial corporations (flows; million euro)



### Financial imbalance by instrument

The information available in financial accounts allows us to go deeper into the analysis of financial imbalances that we started in Table 3. We can, in fact, analyse what happened by single financial instrument. For the sake of brevity, we will consider only the financial instruments that have seen the most important developments. So we will restrict our attention to 'loans' and 'shares and other equity'. Some information will also be given on 'securities other than shares'.

In 2000 the households that used most loans were those of

the United Kingdom, the Netherlands, Germany and Spain. The values for these countries range between 43 billion euro, in Spain and Germany, and 111 billion euro, in the United Kingdom. In 2001 there was in general a decrease in new loans, as a reaction to the deteriorating economic climate. The decrease in some Member States was modest, like for example the Netherlands (from 45 billion euro to 40 billion euro). In other Member States it was much greater. The reduction was very strong in Germany, from 43 billion euro to 21 billion euro.

Country or area	Households		Non-financial corporations	
	2000	2001	2000	2001
Belgium	-2523	750	14034	18087
Germany	-43142	-21354	-169127	-62765
Spain	-42765	-35963	-61208	-61040
France	-27384	-25052	-53807	-15552
Italy	-27358	-16653	-76020	-38717
Netherlands	-45401	-40439	6385	9971
Austria	-4503	-3850	-15827	-9654
Portugal	-12381	-9265	-16236	-14303
Finland	-2906	-3075	-2926	6450
Euro-zone	-208363	-154901	-374732	-167523
Denmark	-10102	-11914	-17122	-18283
Sweden	-11344	-10484	-3503	-10843
United Kingdom	-110570	NA	-78899	NA
EU	-340379	NA	-474255	NA
Norway	-9478	-11130	-10675	-8803

Table 4: Financial imbalance by instrument: loans (flows; million euro)

The non-financial corporations that required the highest loans in 2000 were those of Germany (169 billion euro), the United Kingdom (79 billion euro), Italy (76 billion euro) and Spain (61 billion euro). The exceptionally high value in Germany is connected to UMTS licenses.

In 2001 there was a general contraction of new loans to

non-financial corporations. This can immediately be seen for the euro-zone as a whole. Loans were 375 billion euro in 2000 and decreased to 168 billion euro in 2001. A large part of the reduction is due to Germany (from 169 to 63 billion euro), with considerable reductions in Italy (from 76 to 39 billion) and France (from 54 to 16 billion euro) as well.



Shares have been the financial instrument to which most attention has been devoted in recent years, especially quoted shares and mutual fund shares. The acquisition of equity of all types by households declined in recent years: for the euro-zone from 200 billion euro in 1999 to 128 billion in 2000; for the EU from 182 to 105 billion euro in the same years. The decline in the acquisition of equity continued in 2001, down to 71 billion euro in the euro-zone.

In 2000 the acquisition of shares and other equity remained high in Germany (75 billion euro). In 2001 a decrease in the acquisition of shares took place in most Member States. The decrease was very strong in Germany (down to 25 billion euro).

In the United Kingdom and Spain households sold shares in 2000. This happened in 2001 in the Netherlands and, to a very small extent, in Denmark.

Country or area	Households		Non-financial corporations	
	2000	2001	2000	2001
Belgium	14143	11268	-10153	-24695
Germany	75471	24756	-26266	-36279
Spain	-17382	2107	10986	1982
France	22826	15799	410	-18189
Italy	20047	12211	4599	22264
Netherlands	4277	-5936	5982	-21119
Austria	5672	3874	1777	-2489
Portugal	486	3744	-1181	1137
Finland	2255	3177	8797	-7172
Euro-zone	127795	70999	-5049	-84560
Denmark	200	-200	13521	10791
Sweden	3615	2519	8762	-7330
United Kingdom	-26890	NA	24797	NA
EU	104720	NA	42031	NA
Norway	1939	1187	5920	-433

Table 5: Financial imbalance by instrument: shares and other equity (flows; million euro)

In the euro-zone the financing of non-financial corporations through equity was very modest in 2000, at 5 billion euro. However financing through equity went up again in 2001, reaching 85 billion euro. The increase in financing through equity was very strong in some Member States. France moved up from an almost nil value in 2000 to 18 billion euro in 2001. Finnish corporations went from acquisition of equity outside the sector of 9 billion euro in 2000 to financing by other sectors of 7 billion euro in 2001. Important increases in financing of non-financial corporations through equity

took place also in Belgium and Germany.

To complete the overall picture of acquisition of financial assets by households, we note that most acquisition of 'securities other than shares' took place in Italy: 48 billion euro in 2000, 61 billion euro in 2001. These values constituted more than three quarters of the acquisitions of 'securities other than shares' by households in the euro-zone. Households in all the other Member States undertook either small acquisitions or small sales of bonds, in those two years.



#### > ESSENTIAL INFORMATION - METHODOLOGICAL NOTES

#### Sources and uses

Capital accounts and financial accounts by institutional sectors are integrated parts of national accounts. A basic principle underlying capital accounts and financial accounts taken together is that total sources of funds must equal total uses of funds. That is, all funds supplied by sectors in the economy become uses of funds by sectors.

Sources of funds are both internal (funds saved from current production or *savings*) and external (funds raised outside the sector or *net incurrence of liabilities*). The sector uses its resources to either invest in tangible assets (real estate, equipment, software, etc, or *investment*) or to acquire financial assets (deposits, shares, money market mutual funds, etc, or *net acquisition of financial assets*).

The equality of sources and uses can be summed up, for each institutional sector, in the following equation

Investment + Net acquisition of financial assets = Savings + Net incurrence of financial liabilities

In theory there is no room for a statistical discrepancy in the above equation. In practice, such a result is very difficult to achieve.

#### Savings and Investment

The concepts of savings and investment used in the present study are given below, in terms of the ESA95 terminology and classifications.

Savings = B.10.1 (Changes in net worth due to saving and capital transfers)

= B.8.n (Saving, net) + K.1 (Consumption of fixed capital) + D.9 (Capital transfers, receivable)

- D.9 (Capital transfers, payable)

Investment = P.51 (Gross fixed capital formation) + P.52 (Changes in inventories)

+ P.53 (Acquisitions less disposals of valuables)

+ K.2 (Acquisitions less disposals of non-produced non-financial assets)



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