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PORTUGUESE ECONOMY IN 2003

1. INTRODUCTION

In 2003, the Portuguese Gross Domestic Product (GDP) is expected to decline, in real terms, between -1½ and -¾ per cent, compared with a growth of 0.4 per cent in 2002 (Table 1.1). In intra-annual terms, the second half of 2002 had already recorded a negative year-on-year change, which was more pronounced in the first half of 2003. Annual projections of the Banco de Portugal imply a less marked fall in GDP in the second half of the year. The still relatively wide interval in the projections for 2003 is due to the uncertainty as to the size of such lower fall in the second half of the year, which is, to a large extent, related to the evaluation on the behaviour of Portuguese exports during that period.

The projections now published point to a very negative contribution of domestic demand to GDP growth, of approximately -3 percentage points (p.p), which stresses the trend already observed in the previous year (-0.7 p.p.), particularly in the second half. Gross Fixed Capital Formation (GFCF), as usual in periods of economic recession, is the component of domestic demand showing the more pronounced fall, of around 10 per cent, despite the reduction shown also by private consumption. It should be stressed that the fall in domestic demand reflects only the decline in final private expenditure, since final expenditure of the general government, public consumption and investment are expected to remain relatively stable, if the special effect of the sales of real assets at the end of 2002 is not taken into account[(1)].

The behaviour of domestic demand is accompanied by a decline in imports, which together

Table 1.1

MAIN ECONOMIC INDICATORS

Percentage rates of change

	2002	2003	*Memo:* 2003 *EB* June 2003
Private consumption	0.4	-1 ¼ ;- ¼	-¾ ; ¼
Public consumption	2.3	0.0	-1.6
GFCF	-5.7	-11 ;-9	-5 ¾ ; -3 ¾
Domestic demand	-0.6	-3 ¼ ; -2 ¼	-2; -1
Exports	3.3	2 ½ ; 3 ½	2 ¼ ; 3 ¾
Overall demand	0.2	-2 ; -1	-1 ; 0
Imports	-0.3	-2 ¾ ; -1 ¾	-1 ¾; ¼
GDP	0.4	-1 ½ ; -¾	-1 ; 0
Current account + capital account (% of GDP)	-5.6	-3 ¼ ; -2¼	-3 ¾ ; -1 ¾
Harmonised Index of Consumer Prices	3.7	3.3 ; 3.5	2.5 ; 3.5

with the sustained real growth of exports, lead to an increase in the contribution of net exports to GDP growth to nearly 2 p.p. in 2003.

The current GDP growth interval for 2003 shows a downward revision of the forecast presented in the June issue of the Economic Bulletin, which stood between -1 and 0 per cent. This revision was exclusively the result of the marked downward change in the forecast implicit for the increase in private domestic demand, since exports and final expenditure of the general government were revised upwards, slightly in the former case but more significantly in the latter. Despite stronger declines in private consumption and investment than expected in spring forecasts, the analysis then presented still applies.

In 2003, developments in real activity reflect the continued process of endogenous adjustment of the private sector in the Portuguese economy, against the background of slow growth in the European economy. The sharp decline in interest rates in the second half of the 1990s, together with an inappropriate fiscal policy, led to a very significant increase in private consumption and investment that gave rise to a large increase in indebtedness of resident economic agents and, as a result, to a strong deterioration of the external deficit. The imbalance in the private sector borrowing requirements (households and corporations)(2) reached its peak in 1999/2000, and it is being corrected since then. The real decrease in investment by households and corporations, in parallel with the gradual recovery of the savings rate of households after the trough attained in 1999, and more recently corporations', have made it possible to reduce foreign borrowing requirements. The figure projected for the joint deficit of the current and capital accounts in 2003, between -3¼ and -2¼ per cent of GDP, compares with -5.6 per cent in 2002 and a maximum of -8.9 per cent in 2000.

The magnitude of such decrease of the external deficit is more significant as an evidence of the endogenous adjustment process of the private sector, when taking into account that it occurred without the contribution of a decline in borrowing requirements of the general government. In 2003, in particular, it should be noted that the external and public deficits had a similar size, which means that, for the first time since 1997, the private sector as a whole does not present net borrowing requirements. On the contrary, this sector actually shows some net lending if, for the purpose of recording general government borrowing requirements, the effects of two special operations, expected to reach, as a whole, a value very close to or even above 2 p.p. of GDP are considered: the transfer of the accounting reserves for pension funds of the Post Office (a fully state-owned corporation) to the civil servants pension system (*Caixa Geral de Aposentações — CGA*) and the sale and securitisation of fiscal and social security arrears. Taking into account the national accounting principles, this last operation in 2003 should be recorded as a fictitious payment of taxes and social contributions by households and corporations (reducing their net lending), having as a counterpart the registration (also fictitious) of a loan granted to these sectors by the entity responsible for the securitisation.

Adjusted for the above special effects, and adding the share of proceeds from the settlement of tax arrears in 2002 that was allocated to 2003 on a national accounts basis(3), the public deficit in 2003 will likely be higher than the 4.2 per cent of GDP registered in 2002, also excluding the extraordinary measures in that year. The deterioration of the deficit excluding the effect of extraordinary measures is chiefly explained by the cyclical effect that is determining a very unfavourable trend of

(1) According to the rules of the national accounts, the sale of a real asset is not recorded as an increase in capital receipts of the seller. Therefore, whenever institutions belonging to the general government sector sell real assets, the value of those sales is deducted from this sector's expenditure in gross fixed capital formation.The sale of the physical infrastructure of the fixed telecommunications network and the concession of the Lisbon outer ring motorway were deducted from expenditure in GFCF of the general government in 2002, thus affecting positively, to some extent, the rate of change of GFCF of the general government in 2003. If this effect is excluded, the general government's gross fixed capital formation broadly stabilized in real terms.

(2) The "private sector" is defined here in broad terms, in a residual manner vis-à-vis the general government. In other words, any resident economic agent that does not belong to the general government is included in this definition of private sector, even if it is a fully state-owned corporation.

(3) In Portuguese national accounts, financial operations resulting from the settlement of tax arrears carried out up to 2 January 2003, within the scope of Decreto-Lei no. 248-A2002, were registered in 2002. Revenue collected on January 3rd was allocated to the 2003 accounts.

tax receipts, particularly of income and wealth taxes and VAT, and a significant increase in unemployment benefits.

Despite the increase in expenditure with unemployment benefits, when evaluated by the Employment Survey of the National Statistical Office (*INE*), in the first half of 2003 unemployment increased more moderately than foreseeable vis-à-vis the contraction in economic activity. From a dual perspective, in the first half of the year, employment fell less than output, implying a drop in productivity for total economy. For the year as a whole, Banco de Portugal projections imply a stagnation of productivity. This means accepting that productivity will not drop further in the second half of the year, wherefore the expected less negative year-on-year rates of change of output in this half-year will not be followed by similar developments in employment, which is expected to continue to fall at rates similar to or above those recorded in the first half of the year.

In an environment of stagnation of productivity, both in the economy as a whole and in the private sector, wages seem to have decelerated significantly in 2003, albeit less than expected from economic developments. In spite of a slight slowdown, unit labour costs will nevertheless increase by approximately 3 per cent in 2003 (5.9 and 4.7 per cent in 2001 and 2002, respectively), 1 p.p. above the average for the euro area. Excluding the general government, this growth differential in labour costs is bigger, due to the moderating effect for the economy as a whole, arising from a close-to-zero growth in wage scales of civil servants.

In 2003, annual average inflation, as measured by the Harmonised Index of Consumer Prices (HICP), is expected to stand between 3.3 and 3.5 per cent (3.7 per cent in 2002). The same forecast interval for 2003 is applied to the annual average change of the Consumer Price Index (CPI) (3.6 per cent in 2002). This slight decrease in the annual average is associated with a sharp decline, in year-on-year terms, in consumer prices over the year. In December 2002, the year-on-year rate of change of the CPI stood at 4.0 per cent, or 4.6 per cent excluding energy and unprocessed food prices. By September 2003, these year-on-year increases had declined to 3.1 and 2.7 per cent, respectively. Part of the decrease was the result of the unwinding of base effects, such as those due to the conversion of prices in Portuguese escudos into euros in early 2002, and of the increase from 17 to 19 per cent in the standard Value Added Tax (VAT) rate implemented in June 2002. Conversely, however, there was a strong increase in unprocessed food prices, with the rate of change moving from -0.1 per cent in December 2002 to 5.1 per cent in September 2003.

Taking into account the current stage of the business cycle of the Portuguese economy and the international environment that are relatively favourable to price moderation, the decline in inflation seems to have fallen short of expectations. It should be noted, for instance, that in spite of the recent decline, the spread in the year-on-year growth of prices in services between Portugal and the euro area as a whole still reached 2.0 p.p. in the third quarter of 2003, a clearly excessive level.

2. INTERNATIONAL FRAMEWORK OF PORTUGUESE ECONOMY AND MONETARY POLICY IN THE EURO AREA

2.1. Major international economic developments

In the first half of 2003, world economic activity had a moderate growth, prolonging the trend observed at the end of 2002. Activity was negatively affected by the uncertainty surrounding the military conflict in Iraq and the Severe Acute Respiratory Syndrome (SARS), that affected several Asian developing economies and Canada, and by the adjustment process of imbalances accumulated in the second half of the 1990s, particularly at the level of the financial situation of corporations in the United States and in the euro area. Most recent data, however, seem to point to an improvement of world growth prospects as of the second half of 2003, chiefly in the United States, where macroeconomic policies have assumed an expansionary nature, but also in Asian emerging markets and in Japan. Nevertheless, against a background of prevailing relevant macroeconomic imbalances in the United States, particularly at the level of the current account and the situation of public finances, uncertainty remains high as to the sustainability of a recovery scenario led by the North-American economy.

Table 2.1

WORLD — GDP AND CONSUMER PRICES

Percentage change

	GDP				Consumer prices			
	2001	2002	2003	*2003 (rev. against Apr. 03)*	2001	2002	2003	*2003 (rev. against Apr. 03)*
World economy	2.4	3.0	3.2	*0.0*	-	-	-	-
Countries in transition	5.1	4.2	4.9	*0.9*	16.2	11.1	9.7	*0.3*
Russia	5.0	4.3	6.0	*2.0*	20.6	16.0	14.4	*1.0*
Developing countries	4.1	4.6	5.0	*0.0*	5.8	5.3	5.9	*0.1*
Developing countries in Asia	5.8	6.4	6.4	*0.1*	2.7	2.0	2.5	*0.2*
ASEAN-4[(a)]	2.9	4.3	4.1	*0.2*	6.6	5.9	3.9	*-1.4*
Latin America	0.7	-0.1	1.1	*-0.4*	6.4	8.7	10.9	*-0.1*
Brazil	1.4	1.5	1.5	*-1.3*	6.8	8.4	15.0	*1.0*
Advanced economies	1.0	1.8	1.8	*-0.1*	2.2	1.5	1.8	*-0.1*
New industrialized economies in Asia[(b)]	0.8	4.8	2.3	*-1.8*	1.9	1.0	1.5	*-0.3*
USA	0.3	2.4	2.6	*0.4*	2.8	1.6	2.1	*-0.2*
Japan	0.4	0.2	2.0	*1.2*	-0.7	-0.9	-0.3	*0.4*
United Kingdom[(c)]	2.1	1.9	1.7	*-0.3*	2.1	2.2	2.8	*0.0*
Euro area	1.5	0.9	0.5	*-0.6*	2.4	2.3	2.0	*0.0*

Source: IMF, World Economic Outlook (April 2003 and September 2003).
Notes:
(a) Indonesia, Malaysia, Philippines e Thailand.
(b) Korea, Hong-Kong, Taiwan and Singapore.
(c) Consumer prices excluding mortgage interest payments.

Most recent forecasts of the International Monetary Fund (IMF) published in September continue to point, as in April, to a slight acceleration of world GDP in 2003 (3.2 per cent, after 3.0 per cent in 2002). This behaviour was determined by the higher buoyancy of activity in countries with transition economies and in the developing economies as a whole, where growth rates are expected to attain approximately 5 per cent (Table 2.1). In 2003 GDP growth is expected to stand at 1.8 per cent in advanced economies, reflecting an acceleration of activity in the United States and in Japan, particularly marked in the latter, in contrast with a further deceleration of activity in the euro area and, to a lesser degree, in the United Kingdom. Compared with April forecasts, GDP growth in advanced economies as a whole was only revised slightly downwards, reflecting upward revisions in Japan and the United States and downward revisions in the euro area and the United Kingdom.

Turning to the inflation rate in advanced economies, the September IMF forecasts point to an increase from 1.5 per cent in 2002 to 1.8 per cent in 2003. Inflation rate increases are expected in the United States and in the United Kingdom, while a smaller price decline is expected in Japan, more than offsetting the inflation rate decrease in the euro area. The slight acceleration in prices in the advanced economies as a whole is partly associated with the behaviour of energy prices, particularly at the beginning of the year. In effect, due to concerns regarding supply, the oil (*Brent*) price maintained up to mid-March the strong growth trend observed since mid-November 2002, to stand, on average, at approximately 31 USD/barrel in the first quarter (27 USD/barrel in the fourth quarter of 2002). From mid-March to the end of April, there was a strong downward correction in the oil price, associated with prospects that the military conflict in Iraq would end soon, with an increase in production by OPEC and with the resuming of production in Venezuela. In the following months, the oil price trended upwards again against a background of delays in the resuming of production in Iraq, of the low level of stocks in OECD countries and, more recently, of production cuts announced by OPEC. On average, the oil price stood at 26 and 28 USD/barrel in the second and third quarters of 2003 respectively. At the end of October, this price stood at approximately 27 USD/barrel. Excluding the energy component, and given the moderate growth of activity, inflationary pressures remained low.

The weak growth of demand and the absence of inflationary pressures led a large part of central banks in developed economies to make additional cuts in their key interest rates in 2003. In the United States, given the already rather low level of the interest rate target for the fed funds, the Federal Reserve decided to leave it unchanged up to the end of the first half of the year. However, on 25 June, this rate was reduced further by 25 basis points (b.p.) to 1.00 per cent. This drop occurred in a context in which, in spite of the end of war in Iraq, there were still no signs of sustained growth. In this regard, it should be mentioned that, on 6 May, the Federal Reserve announced a higher probability of an unwanted decline rather than an increase in the inflation rate(4). In the euro area, after a 50 b.p. decline in key interest rates in early December 2002, the Governing Council of the European Central Bank (ECB) lowered the minimum bid rate on the main refinancing operations from 2.75 to 2.5 per cent on 6 March and to 2.0 per cent on 5 June. In February and July, the Bank of England lowered its repo rate by 25 b.p. to 3.5 per cent. In turn, the Bank of Japan maintained the policy of increasing liquidity supplied, raising on several occasions the target for the current accounts held by monetary financial institutions with the Central Bank.

Pursuing the trend observed since 2001, the situation of public finances in advanced economies continued to deteriorate in 2003. The upward trend of public debt ratios in GDP, within the framework of an upward trend in public expenses related to population ageing, made the recent development of public finances distressing and unsustainable. According to IFM September 2003 forecasts, the budget deficit may register a rather significant increase in the United States, reaching 6.0 per cent of GDP in 2003. Budget deficits are also expected to increase, albeit to a lesser degree, in the United Kingdom and in the euro area to 2.5 and 3.0 per cent of GDP respectively, in 2003. IFM estimations suggest that the cyclical situation should, in general, account for the deterioration of the deficit in the euro area and, only marginally, in the United States(5). In the case of Japan, the IMF foresees for 2003 the maintenance of the budget deficit at a level close to 7.5 per cent of GDP.

In 2003, the financial markets were constrained by the military conflict in Iraq, by doubts as to the strength and sustainability of world economic recovery and by expectations that the key interest rates in major industrialised countries would be maintained at historically low levels (Table 2.2). Early in the year, major international stock exchanges witnessed a downward movement, and government bond yields pursued the downward trend, while stock market volatility remained at high levels (Chart 2.1). As of mid-March, with the prospect that the military conflict in Iraq would soon come to an end, and, more recently, in the context of the gradual improvement of prospects as to the recovery of the world economy, stock markets have experienced some recovery, followed by a significant decrease in implied volatility to levels below the average for the last 5 years (Chart 2.2). In public debt markets, in turn, yields maintained the downward trend, to reach in June historically low levels (Chart 2.3). This trend seems to have reflected a downward revision both of economic growth prospects and of medium/long term inflation expectations in the USA and in the euro area, as is shown by data implied in inflation-indexed bonds. In effect, the low inflation levels observed in some economies, together with the

(4) On 6 May, the Federal Reserve changed its evaluation as to the balance of risks for economic activity and inflation in the United States. Short-term risks for sustained economic growth continued to be balanced, but in the case of prices, the monetary authority considered that the probability, albeit small, of a substantial decline in inflation, would exceed the probability of an increase from its current low level.

(5) According to IMF forecasts for 2003, the cyclically adjusted budget deficit is expected to increase by 1.9 and 0.9 p.p. of GDP in the United States and in the United Kingdom respectively (to 5.1 and 2.1 per cent of GDP). In the euro area, forecasts point to a reduction of 0.3 p.p. to 1.7 per cent of GDP. Since 2000, when the first two mentioned countries recorded budget surpluses, the cyclically adjusted balance seems to have deteriorated by 5.7 p.p. in the United States, by 3.8 p.p. in the United Kingdom and by just 0.2 p.p. in the euro area.

Table 2.2

FINANCIAL MARKETS

Daily data

	Average			End-of-period		
	2001	2002	2003(a)	2001	2002	2003(a)
Stock market indices (changes in percentage)						
S&P 500	-16	-17	-9	-13	-23	20
Nasdaq	-46	-24	3	-21	-32	45
Nikkei 225	-30	-16	-10	-24	-19	23
FTSE 100	-13	-17	-13	-16	-24	10
Dow Jones Euro Stoxx	-21	-23	-20	-20	-35	12
10-year interest rates - public debt (per cent)						
United States	5.0	4.6	3.9	5.1	3.8	4.3
Japan	1.3	1.3	0.9	1.4	0.9	1.5
United Kingdom	4.9	4.9	4.3	5.1	4.4	5.0
Euro area	5.0	4.9	4.1	5.1	4.3	4.3
Nominal effective exchange rates (changes in percentage)						
US dollar	6.8	-1.1	-9.5	7.5	-9.4	-9.2
JPY	-8.2	-5.2	-0.8	-9.3	1.8	3.6
Sterling pound	-1.2	0.5	-4.9	2.4	-2.7	-3.1
Euro	1.9	3.1	10.9	-1.0	8.8	6.0
Spreads between private and government bond yields at 7 to 10 years (basis points)						
Euro area						
AAA	32	25	20	22	22	23
BBB	205	209	142	182	194	93
United States						
AAA	60	64	45	42	70	18
BBB	193	224	138	182	209	80
Spreads between government bond yields issued in dollars by emerging market economies vis-à-vis US Treasury bonds (basis points)						
JP Morgan EMBI Global	796	728	552	728	725	455
JP Morgan EMBI Latin America	865	966	726	888	981	589

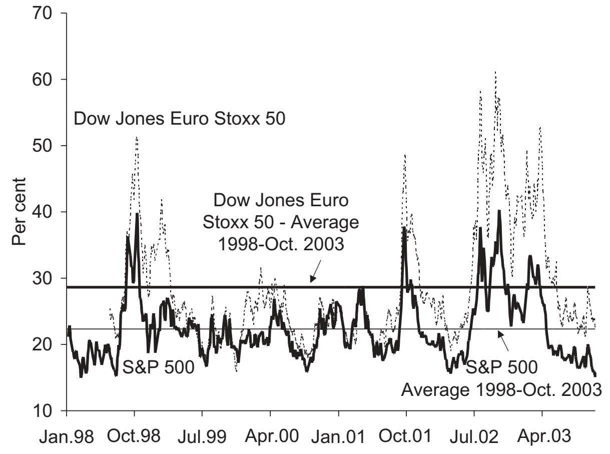
Sources: European Central Bank, Banco de Portugal, Bank for International Settlements, Bloomberg and JP Morgan.
Note:
(a) Until the end of October.

low level of available capacity utilisation, led to fears of possible deflation risks, which grew after the FED statement in the meeting held on 6 May. As of mid-year, the most favourable signs of recovery in the USA and the fading of fears as to a possible deflation situation, against a background of high budget deficits and the ensuing expansion in the supply of government bonds, have contributed to a downward revision of government bond prices. In private debt markets, the spreads vis-à-vis government bonds have maintained a downward trend as of the fourth quarter of 2002, partly reflecting the increase in demand for higher yielding assets and the very low interest rate levels. In the same vein, there was a narrowing of the spreads between government bond yields in emerging market economies and US treasury bonds.

In foreign exchange markets, the dollar pursued the depreciating trend vis-à-vis major currencies (Chart 2.4). From early 2003 to the end of October, the dollar depreciated by 9.4 per cent in nominal effective terms, which corresponds to depreciations of 10.1 per cent vis-à-vis the euro, 16.2 per cent vis-à-vis the Canadian dollar, and 8.4 per cent vis-à-vis the Japanese yen. According to the IFM, this movement seems to have reflected just a partial adjustment of the dollar overvaluation from its medium-term equilibrium value[6]. In effect, the United States has shown a deterioration of

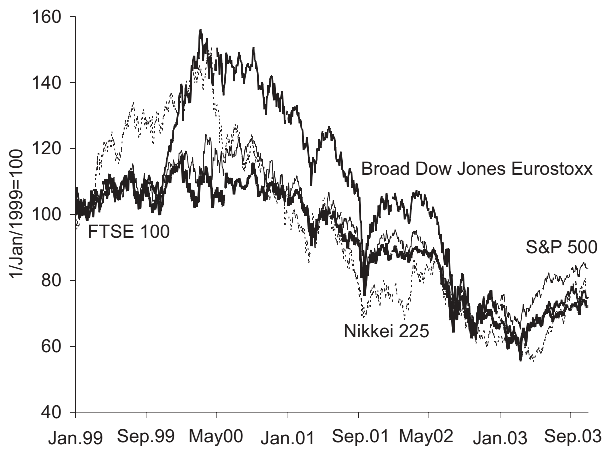
(6) World Economic Outlook, September 2003.

Chart 2.1
IMPLIED STOCK MARKET VOLATILITY[(a)]
5-day moving average



Source: Bloomberg
Nota: Volatilities implied in futures contracts with closest delivery date on stock price indices.

Chart 2.2
STOCK MARKET

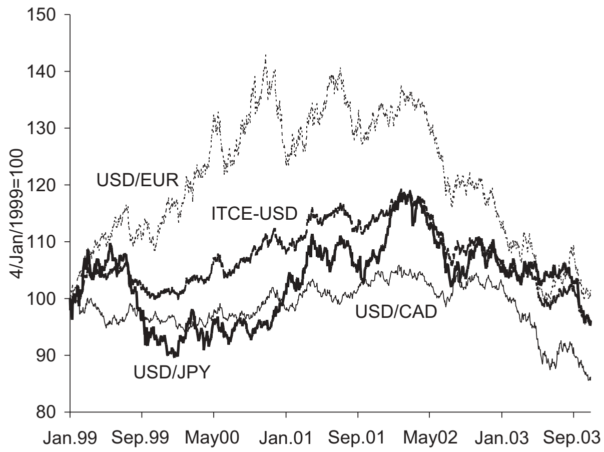


Source: Bloomberg.

Chart 2.3
10-YEAR GOVERNMENT BOND YIELDS

Sources: European Central Bank and Bloomberg.

Chart 2.4
US DOLLAR EXCHANGE RATES[(a)]



Sources: Europe an Central Bank, Banco de Portugal and Bank for International Settlements.
Note:
(a) An increase corresponds to an appreciation of the dollar.

the current account deficit since the start of the 1990s (IFM forecasts point to a deficit of 4.6 and 5.1 per cent of GDP in 2002 and 2003 respectively).

2.2. Monetary conditions in the euro area

As mentioned above, the Governing Council of the , after having lowered the key interest rates by 50 b.p. in early December 2002, decided to maintain them unchanged in the first two months of 2003, and to lower them further by 25 b.p. on 6 March, when the minimum bid rate in the main refinancing operations was fixed at 2.5 per cent (Table 2.3). This decision was driven by an improvement in prospects for price stability in the medium term in the euro area[(7)], chiefly determined by the moderate pace of economic growth and by the ap-

(7) On 8 May, the Governing Council of the ECB clarified its intention to maintain the inflation rate at a level below but close to 2 per cent in the medium term, with a view to achieving price stability (see Box: "ECB's evaluation of its monetary policy strategy").

Table 2.3

EUROPEAN CENTRAL BANK INTEREST RATES

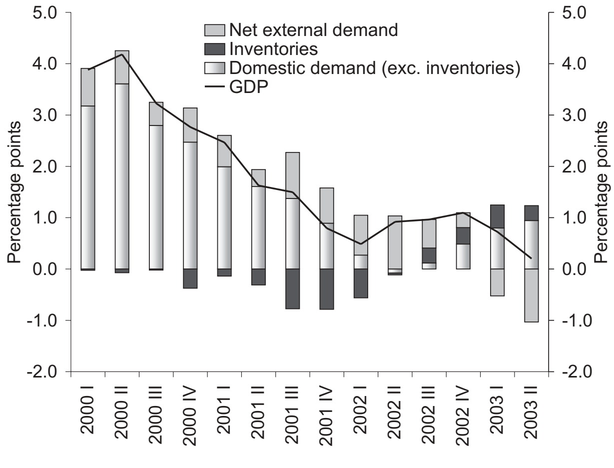
Per cent

Date of the decision	Deposit facility	Main refinancing operations (minimum bid rate)	Marginal lending facility
5 Oct. 2000	3.75	4.75	5.75
10 May 2001. . . .	3.50	4.50	5.50
30 Aug. 2001 . . .	3.25	4.25	5.25
17 Sep. 2001	2.75	3.75	4.75
8 Nov. 2001	2.25	3.25	4.25
5 Dec. 2002.	1.75	2.75	3.75
6 Mar. 2003	1.50	2.50	3.50
5 Jun. 2003	1.00	2.00	3.00

Source: European Central Bank

Chart 2.5

EURO AREA – CONTRIBUTIONS TO THE YEAR-ON-YEAR GROSS DOMESTIC PRODUCT GROWTH



Source: Eurostat.

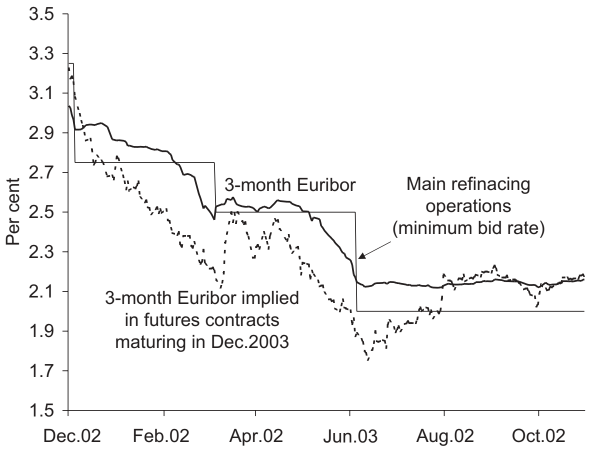
preciating trend of the euro. Data for the first months of the year pointed to weak growth in the euro area in the first quarter, which, together with geopolitical tensions and the consequent increase in oil prices, indicated a deterioration of growth prospects for 2003, making it less probable that GDP would reach rates of change close to potential growth during the second half of the year, as projected at the end of 2002. Despite the end of the military conflict in Iraq, data on the second quarter still did not suggest any acceleration in demand (Chart 2.5) and, although uncertainty has decreased, downward risks on economic activity continued to prevail, due to the external environment and to adjustment requirements in the euro area corporate sector, intended to improve productivity and profitability. The prospects of more moderate domestic pressures on consumer prices, together with the reduction in oil prices and the appreciation of the euro interest rate, reinforced the improvement of prospects for price stability in the medium term[8]. In this context, interest rates were lowered by 50 b.p. on 5 June. Since then, the Governing Council of the ECB has not changed its key interest rates, considering that, in a context in which the outlook for price stability in the medium term remain favourable, the historically low level of the interest rates is appropriate to support economic activity.

In general, monetary policy decisions taken by the Governing Council of the ECB were in line with market expectations. Up to June, excluding the period of the military conflict in Iraq, markets revised successively downwards the levels expected for short-term interest rates in the forthcoming months (Chart 2.6). After mid-June, interest rate expectations underwent an upward revision, and ceased to include additional declines in ECB interest rates as of mid-July. Reflecting this trend, spot money market interest rates maintained a downward trend up to mid-June. Subsequently, these rates remained relatively stable in shorter maturities and increased in longer maturities. At the end of October 2003, Euribor interest rates for three months and one year stood at 2.2

(8) Projections published by the ECB in June (produced jointly by experts from the ECB and the NCB) suggested that the average rate of change of the HICP in the euro area as a whole would stand at 1.8-2.2 per cent and 0.7-1.9 per cent in 2003 and 2004 respectively (1.3-2.3 per cent and 1.0-2.2 per cent in the December 2002 projections). As regards activity, the ECB published in June growth ranges of 0.4-1.0 per cent and 1.1-2.1 per cent for 2003 and 2004, respectively (1.1-2.1 per cent and 1.9-2.9 per cent in the December 2002 projections).

Chart 2.6

EURO AREA – MONETARY MARKET



Source: European Central Bank and Bloomberg.

and 2.4 per cent respectively, representing decreases of 71 b.p. and 36 b.p. from the end of 2002.

Up to the end of May, the euro maintained a strong appreciating trend in effective nominal terms, standing for the first time at levels marginally above those observed at the start of the third stage of Economic and Monetary Union. This movement was slightly reversed in July and August, in a context in which data published on the economies of major euro area trading partners were more favourable than data on the euro area and in which there was a narrowing of the long-term interest rate differential between the euro area and the United States (with even negative figures for the first time since early 2002). The nominal effective exchange rate of the euro appreciated again in early September, to stand at the end of October 6.1 per cent above the level recorded in early 2003, as a result of appreciations of 11.3, 5.3, 6.7 and 1.9 per cent, vis-à-vis the US-dollar, the pound sterling, the Swiss franc and the Japanese yen respectively.

Euro area capital markets experienced developments similar to those in the other major international markets. Against a background of declining risk premium associated with the military conflict in Iraq and, more recently, of improving prospects for the cyclical situation in major economies, the stock market started a recovery trend as of mid-March. At the end of October, the broad Eurostoxx index stood approximately 39 per cent above the trough observed in mid-March 2003 and 12.0 per cent above the level recorded at the end of 2002, but nonetheless 50 per cent below the peak reached in March 2000. In turn, ten-year government bond yields decreased by approximately 4.3 per cent at the end of 2002 to a though of approximately 3.5 per cent in mid-June. These rates recovered subsequently, to stand at 4.3 per cent at the end of October.

3. MONETARY AND FINANCIAL CONDITIONS OF PORTUGUESE ECONOMY

3.1. Monetary conditions

The declining pattern of bank interest rates over the past years seems to have continued in 2003, implying less restrictive monetary conditions in the Portuguese economy. However, in the most recent period, exchange rate developments seem to be partly countering this trend. In effect, the effective exchange rate index for Portugal increased 2.3 per cent in the first three quarters of the year, after more moderate appreciations of 0.6 and 0.5 per cent in 2001 and 2002 respectively.

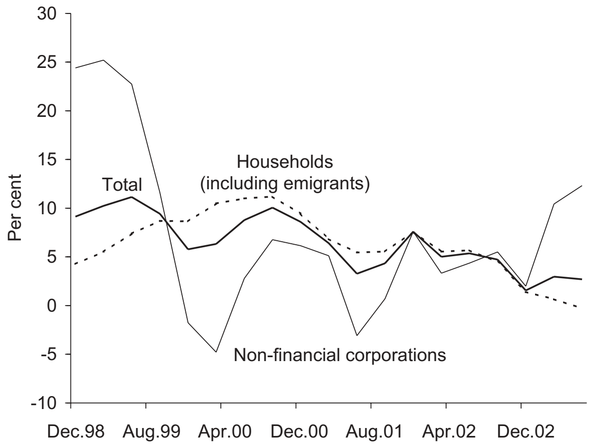
Turning to interest rates on new banking operations, it should be noted that the analysis is hampered by the temporary discontinuance of the publication of these rates by the Banco de Portugal in December 2002. In January 2003, data started to be collected according to a new reporting system, in line with ECB Regulation no. 63/2002. Due to difficulties in the validation of such new information in Portugal and other countries, it has not been possible, as yet, to resume the publication of average bank interest rates on new operations. Anyway, since most loans granted to residents are negotiated at a variable rate, usually indexed to money market interest rates, the decline in Euribor rates during 2003 has probably been reflected, at least in part, in the trend of bank interest rates in borrowing operations, lowering these to new historical troughs.

Despite the downward trend of nominal interest rates, the decrease in the year-on-year rate of change of the CPI was slightly higher, leading to an increase of approximately 0.2 p.p. in money market real interest rates in the first three quarters of 2003[9]. Nonetheless, it should be stressed that real interbank interest rates continued to record negative figures. In September 2003, for instance, the real three-month and six-month Euribor rates stood at -1.0 and -0.9 per cent, respectively.

The evolution of real interest rates, combined with the deceleration of activity since 2000, made a decisive contribution to the gradual weakening of the growth of bank deposits held in Portugal by the non-financial private sector. In addition, the trend of deposits of the non-financial private sector in 2002 seems to have also been affected by two one-off factors: the settlement of tax debts within the scope of Decree-Law no.248-A-2002, that reached € 1366.1 million, and the issue of securities by a monetary financial institution, chiefly placed with customers. As a result, in December 2002, the year-on-year rate of change of deposits held by the non-financial private sector reached -1.3 or 0.2 per cent, depending on whether emigrants' deposits (which had an year-on-year rate of change of -12.5 per cent in the same month) are included or excluded. The decline in deposits held by emigrants has largely been associated with the delocation of savings of these economic agents to non-resident banking institutions. However, it should be noted that the latter are included within the consolidation perimeter of Portuguese banking groups. In order to include deposits held by emigrants in non-resident credit institutions, the analysis of deposits held by the non-financial private sector will include all deposits of the non-financial private sector in Portugal and abroad[10].

In the first half of 2003, deposits held by the non-financial private sector in Portugal and abroad exhibited some recovery, countering, to some extent, the trend observed in recent years. However, the recovery was relatively moderate, since it was conditional on the recessive juncture and the historically low levels of interest rates on

Chart 3.1
DEPOSITS OF THE NON-FINANCIAL PRIVATE SECTOR IN THE RESIDENT BANKING SYSTEM AND ABROAD
Year-on-year rate of change



deposits. In June 2003, the year-on-year rate of change stood at 2.7 per cent, which compares with 1.6 per cent at the end of 2002 (Chart 3.1). It should be noted, however, that the contribution to these developments of deposits held by households and non-financial corporations was rather mixed. In June, deposits held by households had decreased by 0.3 per cent, year-on-year, compared with a positive rate of change of 1.4 per cent in December 2002. In turn, deposits held by non-financial corporations, which had recorded a moderate growth since the last quarter of 2001, increased significantly in the course of 2003. From December 2002 to June 2003, the year-on-year rate of change of deposits held by non-financial corporations increased 10.3 p.p., from 2.0 to 12.3 per cent. Over this period, the reinforcement of time deposits held by non-financial corporations was particularly significant. This trend of deposits of non-financial corporations is in line with the estimated recovery of this sector's savings in 2003, together with a marked slowdown in business investment.

In 2003, credit granted to the non-financial private sector pursued the decelerating trend started in mid-1999. In August 2003, the year-on-year rate of change of loans granted to the non-financial private sector[11] stood at 7.4 per cent, 2.6 p.p. less than at the end of 2002 (Table 3.1 and Chart 3.2)[12].

Loans granted to non-financial corporations maintained a slowdown trend. Their year-on-year

(9) Real interest rates are calculated as the difference between nominal interest rates and the year-on-year rate of change of the CPI. Despite the recognised limitations associated with this procedure, the difficulty in accurately determining the economic agents' expectations regarding the inflation rate in the relevant period justifies its use in the estimation of real interest rates.

(10) This aggregate includes deposits held by the non-financial private sector with the resident banking system, based on information reported in Monetary and Financial Statistics, as well as deposits held by the non-financial private sector abroad. Data on these deposits abroad is reported in the International Investment Position Statistics, made available on a quarterly basis.

Table 3.1

ANNUAL RATES OF CHANGE OF BANK LOANS TO THE RESIDENT NON-FINANCIAL PRIVATE SECTOR[(a)]

	Annual percentage change				
	Households			Non-financial corporations	Non-financial private sector
	Housing	Other purposes	Total		
2001					
Jan.	19.8	26.7	21.6	23.9	22.7
Feb.	18.5	24.7	20.1	23.9	21.9
Mar.	17.7	23.5	19.2	23.4	21.2
Apr.	18.2	24.2	19.8	18.8	19.3
May	16.9	21.6	18.1	18.7	18.4
Jun.	16.6	20.0	17.5	20.6	19.0
Jul.	16.3	19.9	17.3	18.8	18.0
Aug.	16.1	17.0	16.4	18.8	17.5
Sep.	16.0	14.2	15.6	18.2	16.8
Oct.	16.2	9.4	14.5	15.3	14.8
Nov.	16.1	8.8	14.2	15.5	14.8
Dec.	15.5	6.2	12.9	14.7	13.8
2002					
Jan.	15.4	4.7	12.6	14.6	13.5
Feb.	15.7	6.5	13.3	13.3	13.3
Mar.	15.9	5.9	13.2	11.7	12.5
Apr.	15.4	5.6	12.8	11.7	12.3
May	15.8	7.1	13.6	10.7	12.2
Jun.	15.7	5.4	13.0	9.5	11.3
Jul.	15.7	3.7	12.6	9.3	11.0
Aug.	15.6	3.6	12.5	8.1	10.4
Sep.	16.2	4.6	13.3	7.0	10.3
Oct.	15.7	4.9	13.0	6.9	10.1
Nov.	15.5	3.7	12.6	7.1	9.9
Dec.	15.4	2.4	12.1	7.5	9.9
2003					
Jan.	15.2	4.8	12.6	5.9	9.4
Feb.	14.9	3.7	12.1	6.6	9.5
Mar.	14.1	2.2	11.1	6.1	8.7
Apr.	13.4	2.1	10.6	5.9	8.4
May	12.9	1.0	10.0	6.1	8.1
Jun.	12.9	2.3	10.3	4.9	7.8
Jul.	12.6	2.2	10.1	4.4	7.4
Aug.	12.2	2.6	9.9	4.5	7.4

Note:

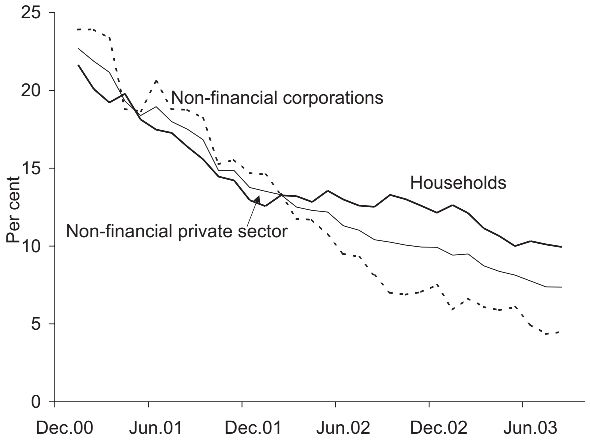
(a) This aggregate includes bank loans adjusted for securitisation and corrected of reclassifications and write-offs/write-downs. Annual rates of change calculated from the index of adjusted stocks (Jan.2000=100).

rate of change decreased from 7.5 per cent in December 2002 to 4.5 per cent in August 2003. This moderation of credit demand is in line with the strong decrease in private investment in 2003 and with the high indebtedness levels attained in the meantime. In addition, there may also have been some contraction in the supply of credit to non-financial corporations, associated with a perception of higher credit risk. The qualitative results of the Bank Lending Survey[(13)] for the first three quarters of 2003 suggest that the five responding Portuguese banking groups maintained relatively tight credit standards on loans to enterprises, in line with the maintenance of pessimistic expectations as to overall economic developments. As a result, banks have increased collateral re-

(11) This aggregate includes banking loans adjusted for securitisation operations and corrected of reclassifications and write-offs/write-downs.

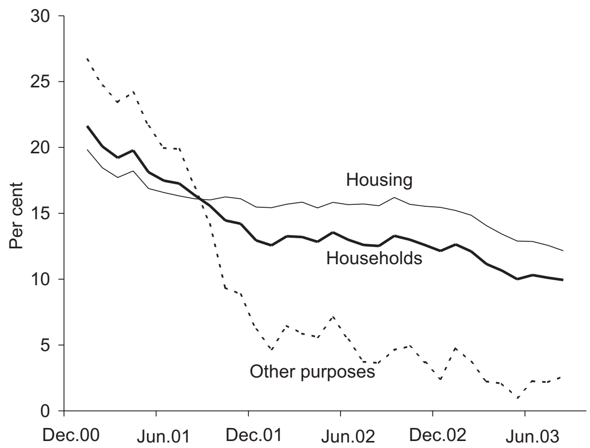
(12) Considering figures corrected of reclassifications and write-offs/write-downs (i.e., excluding any adjustment for securitisation operations), the year-on-year rate of change of loans to the non-financial private sector was 6.7 per cent in August 2003, what represents a decrease of 3.4 p.p. from December 2002.

Chart 3.2
ANNUAL RATES OF CHANGE IN BANK LOANS GRANTED TO THE NON-FINANCIAL PRIVATE SECTOR



Note: Bank loans adjusted for securitisations and corrected of reclassifications and write-offs/write-downs. Annual rates of change are calculated from an index of adjusted stocks (Jan.2000=100).

Chart 3.3
ANNUAL RATES OF CHANGE IN BANK LOANS GRANTED TO HOUSEHOLDS

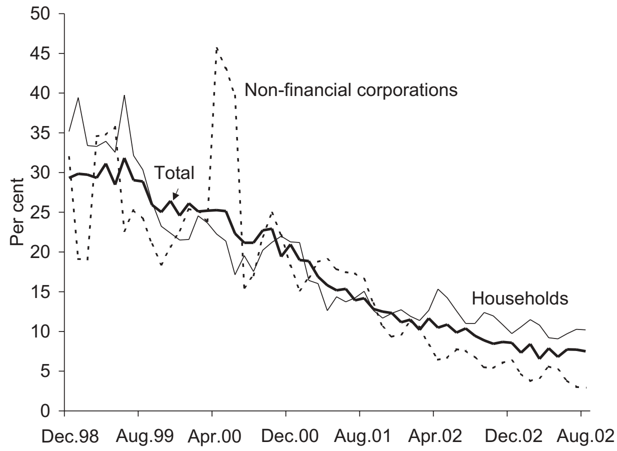


Note: Bank loans adjusted for securitisations and corrected of reclassifications and write-offs/write-downs. Annual rates of change are calculated from an index of adjusted stocks (Jan.2000=100).

quirements and applied higher interest rate spreads in loans to enterprises.

In turn, the year-on-year rate of change of loans to households decreased from 12.1 per cent in December 2002 (13.3 per cent in September 2002), to 9.9 per cent in August 2003 (Chart 3.3). Despite this deceleration, the ratio of gross indebtedness to

Chart 3.4
LOANS GRANTED TO THE NON-FINANCIAL PRIVATE SECTOR
Annualised quarterly growth rates adjusted for seasonal effects and credit securitisation operations



Note: From January 2000 onwards, the series were adjusted for reclassifications and write-off/write-downs.

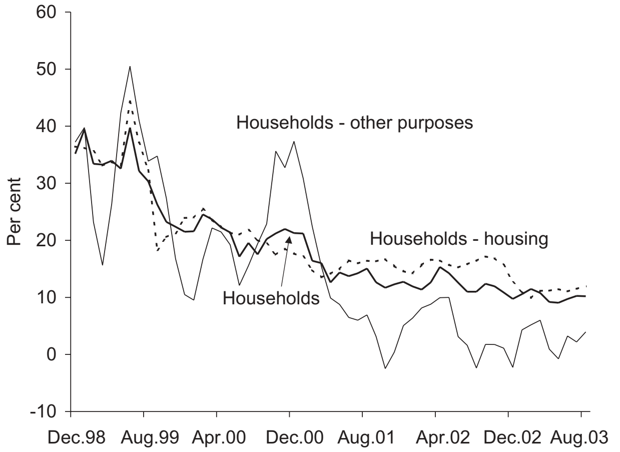
disposable income of Portuguese households, which stood at approximately 103 per cent at the end of 2002, is expected to increase further, to nearly 110 per cent at the end of 2003. It should be noted, however, that the decline in interest rates has offset the increase in capital redemptions, leading to a stabilisation of the debt service of households as a percentage of disposable income.

The deceleration of loans to households was chiefly associated with the behaviour of loans for house purchase, which resumed, as of September 2002, the previous slowdown trend, after a temporary interruption[14]. In August 2003, loans to households for house purchase recorded a year-on-year rate of change of 12.2 per cent, that compares with 15.4 per cent in December 2002 (and with 16.2 per cent in September of the same year).

(13) In early 2003, the ECB launched a new quarterly survey to a sample of euro area banks, with the purpose of evaluating some qualitative issues related with developments in the euro area credit market. The results for Portugal are available on the website *www.bportugal.pt/publish/bls*.

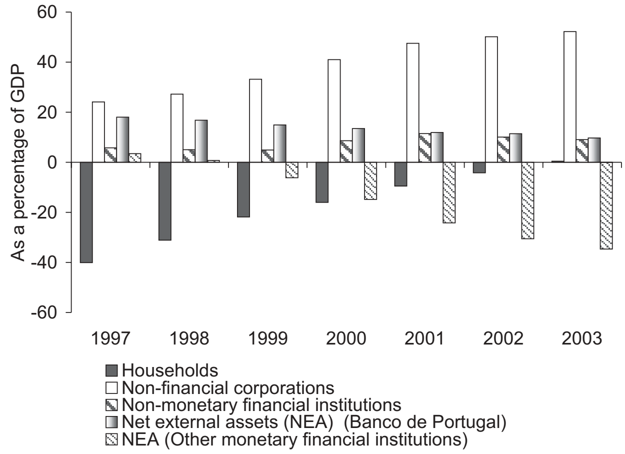
(14) In September 2002, the subsidised regime for new mortgage loans came to an end, which may have given rise to some anticipation of decisions regarding house purchases by a significant number of households.

Chart 3.5
LOANS GRANTED TO THE NON-FINANCIAL PRIVATE SECTOR
Annualised quarterly growth rates adjusted for seasonal effects and credit securitisation operations



Note: From January 2000 onwards, the series were adjusted for reclassifications and write-off/write-downs.

Chart 3.6
NET POSITION OF THE MONETARY SECTOR(a) (INSTITUTIONAL BREAKDOWN)
As a percentage of GDP



Note:
(a) Net claims of the monetary sector on each sector defined as the difference between the monetary sector's assets and liabilities vis-à-vis that sector.

Thus, and notwithstanding the historically low levels of interest rates in lending operations, the moderation in the pace of growth of house prices[15] and the changes introduced in taxes on real estate[16], loans for house purchase have recorded a sustained deceleration trend since the last quarter of 2002, albeit still maintaining relatively high growth rates. Note, however, that the evolution of loans for house purchase has been associated, in 2003, with a negative growth of net flows of these loans (a fall of 19.8 per cent between January and August 2003, vis-à-vis the same period in the previous year).

The year-on-year rate of change of loans to households for purposes other than house purchase showed a somewhat irregular behaviour in the course of 2003, but always keeping moderate rates of change. In August 2003, this rate stood at 2.6 per cent, compared with 2.4 per cent in December 2002.

During the first three quarters of 2003, according to the results of the Bank Lending Survey, there was a significant tightening of credit standards applied on loans to households for other purposes than house purchase. However, credit standards on loans for house purchase seem to have tightened more significantly only in the third quarter of 2003. The results of the survey also point to a recovery in demand for loans for house purchase in the third quarter of 2003, vis-à-vis the previous quarters. For the reporting banking groups, the increase in demand for this segment seems to be chiefly related to some recent recovery in consumer confidence levels. Demand for loans for other purposes than house purchase, which was rather moderate in the first half of 2003, also increased slightly in the course of the third quarter. Nonetheless, the very high levels of household indebtedness make such recovery in demand for credit unsustainable, and the tightening of credit

(15) In September 2003, according to *Confidencial Imobiliário*, house prices were increasing at a year-on-year rate of change of 1.6 per cent. In real terms, house prices have recorded negative year-on-year growth rates since mid-2001.

(16) Whereas the major measures of the reform of taxes on real estate will come into force only in 2004, it was adopted a transitory system in June 2003, in order to avoid the postponing of a significant number of house purchase decisions. Therefore, as of June 2003, new rates were applied in the tax on property transfers. Such rates are significantly lower than those previously applied, corresponding to the rates applicable by the new Municipal Transfer Tax, to be introduced in early 2004 (to replace the existing tax on property transfers).

Table 3.2

MONETARY SURVEY

€ million

	1999 Dec.	2000 Dec.	2001 Dec.	2002 Aug.	2002 Dec.	2003 Aug.	Absolute changes 1999 Dec.	2000 Dec.	2001 Dec.	Dec.2001 to Aug.2002	2002 Dec.	Dec.2002 to Aug.2003
Net external assets	8 985	-6 788	-19 270	-25 310	-27 444	-33 014	-5 974	-15 773	-12 483	-6 040	-8 174	-5 570
Banco de Portugal	18 623	14 985	16 050	14 501	15 521	12 574	1 852	-3 638	1 065	-1 550	-529	-2 947
Other monetary financial institutions	-9 637	-21 773	-35 321	-39 811	-42 965	-45 589	-7 827	-12 136	-13 548	-4 490	-7 644	-2 624
of which:												
Vis-à-vis the head office and subsidiaries abroad	n.d.	n.a.	n.a.	n.a.	n.a.	-36 176	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vis-à-vis other non-resident MFIs (with close links)	n.a.	n.a.	n.a.	n.a.	n.a.	-7 990	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vis-à-vis other non-resident MFIs (without close links)	n.a.	n.a.	n.a.	n.a.	n.a.	-2 910	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Credit to the general government	8 764	8 496	9 082	7 327	8 069	7 560	-3 758	-268	585	-1 755	-1 013	-509
Domestic credit (except general government)	129 577	160 783	179 401	186 962	191 038	196 304	26 840	31 206	18 618	7 561	11 637	5 266
Households	56 859	68 921	76 063	81 443	83 363	86 951	12 268	12 062	7 142	5 380	7 300	3 589
Non-financial corporations	56 500	70 667	80 085	82 274	86 352	87 559	10 962	14 167	9 418	2 189	6 267	1 208
Non-monetary financial institutions	16 217	21 194	23 253	23 244	21 324	21 793	3 611	4 977	2 059	-9	-1 929	469
Currency in circulation	5 620	5 392	4 451	6 080	7 025	7 517	1 059	-228	-941	1 629	2 575	491
Deposits and deposit-like instruments - total	114 507	120 125	123 236	119 506	122 667	119 402	11 480	5 618	3 111	-3 731	-569	-3 265
Non-monetary financial institutions	9 661	9 843	10 360	10 019	9 641	10 104	2 038	182	517	-341	-719	464
General government	8 872	8 181	6 329	6 540	7 866	4 944	695	-690	-1 852	211	1 536	-2 921
Non-financial corporations and households	95 974	102 100	106 547	102 947	105 161	104 353	8 747	6 126	4 447	-3 600	-1 386	-808
Securities other than capital	13 319	17 476	22 514	23 428	23 168	21 930	2 550	4 157	5 037	915	655	-1 238
Money market fund shares	0	115	166	335	665	801	0	115	51	169	499	136
Capital and reserves	20 827	25 920	27 867	28 597	28 726	32 625	4 921	5 093	1 947	730	859	3 900
Sundry (net)	-6 947	-6 537	-9 021	-8 967	-10 588	-11 425	-2 903	411	-2 484	54	-1 567	-837
Memo:												
Net external assets of other MFIs denominated in euro	-10 741	-19 559	-34 518	-37 718	-39 524	-40 257	-8 377	-8 818	-14 959	-3 201	-5 006	-734
							Year-on-year growth rates					
Contribution to the euro area M1 aggregate	45 537	47 723	51 219	51 936	53 225	54 279	19.3	4.8	7.3	8.9	3.9	4.5
Contribution to the euro area M3 aggregate	113 135	119 822	126 770	131 361	127 607	131 259	9.2	5.9	5.8	5.5	0.7	-0.1

standards reported by banks should be reflected in the maintenance of an overall deceleration trend of loans to households.

3.2 Developments of the monetary survey[17]

Over the last few years, the maintenance of the credit growth rates persistently above those of deposits has resulted in an increase in the net creditor position of resident other monetary financial institutions vis-à-vis the non-financial private sector[18] (Chart 3.6), which has been reflected in some changes in the Monetary Survey structure (Table 3.2). In effect, resident other monetary financial institutions have obtained abroad the resources necessary for the expansion of their assets, resulting in a deterioration of their net external debt position. Financing has been obtained, to a large extent, through bond issuance by subsidiaries of Portuguese banks having their head-office abroad[19]. In 2002, particularly in the second half of the year, there was a significant fall in flows associated to this type of financing, in line with the broadly based decline in the volume of gross issues of bonds in international financial markets. However, in the first three quarters of 2003, and with the easing of the situation in financial markets, Portuguese banks have resorted again significantly to this type of financing (for further details, see the article "*The banking system in the first half of 2003*" in this Bulletin).

4. FISCAL POLICY

According to the Excessive Deficit Procedure notification of August 2003, the general government deficit will reach 2.9 per cent of GDP in 2003 (2.7 per cent of GDP in 2002). This value was confirmed in the 2004 State Budget report released by the Government on 15 October. The estimate for the deficit included in the Excessive Deficit Procedure notification of February, which corresponded to 2.4 per cent of GDP, was thus revised upwards by 0.5 p.p. The estimate for the primary balance had a more significant change, from a primary surplus of 0.8 per cent of GDP in the February notification to a primary deficit of 0.1 per cent of GDP in August. Indeed, the forecast for interest expenditure is now considerably lower, given that the interest rate developments were more favourable than forecast by the Ministry of Finance.

Also according to the second Excessive Deficit Procedure notification of 2003, the general government debt ratio is expected to increase by 1.4 p.p between 2002 and 2003 to 59.5 per cent of GDP. This outcome is chiefly the result of the low nominal growth of GDP, significantly lower than the implicit interest rate of public debt. In contrast to the two previous years, the deficit-debt adjustments will have a negligible effect on the change of the general government debt ratio (-0.3 per cent of GDP).

The target of 2.9 per cent of GDP for the deficit in 2003 will only be achieved with the implementation of a set of temporary measures[20] amounting to more than 2 per cent of GDP[21]. The general government deficit reported in August by the Ministry of Finance reached 4.7 per cent of GDP, when excluding the temporary measures implicit therein (that represented 1.8 per cent of GDP). In 2002, the comparable value for the deficit stood at 4.2 per cent of GDP (after deducting 1.5 per cent of GDP of temporary measures). This deterioration of the deficit excluding the effect of temporary measures is chiefly explained by the cyclical position determining a very unfavourable development of tax revenue, in particular of taxes on income and wealth (for which the Ministry of Finance envisages a fall of 4.2 per cent[22]), as well as a substan-

(17) Credit aggregates considered in this section were not adjusted for securitisation operations and corrected of reclassifications and write-offs/write-downs.

(18) The net position of the monetary sector vis-à-vis each sector is defined as the difference between assets and liabilities of the monetary sector vis-à-vis that sector.

(19) The Monetary Survey, which only reflects the balance sheets of resident monetary financial institutions, considering subsidiaries as non-resident entities, is not the most appropriate source of information to analyse the financing of Portuguese banking groups. For the purpose, use should be made of the consolidated accounts of such banking groups.

(20) The major temporary measures which have been announced for 2003 are: the transfer of accounting reserves from the Post Office to the *Caixa Geral de Aposentações* (CGA) and the proceeds from the programme of securitisation of tax and social security arrears. These measures also include that part of the proceeds from the tax arrears settlement programme implemented at the end of 2002 to be recorded in 2003, on a national accounts basis.

(21) This assumption is made namely in the European Commission Autumn projections.

(22) Adjusted for the effect of the tax arrears settlement programme.

tial increase in unemployment benefits which, according to the State Budget report for 2004, may attain 38.2 per cent.

In addition to the recession the revenue developments in 2003 are also reflecting the effect of discretionary tax measures, some supporting fiscal consolidation but others having the opposite effect. Among the former, reference should be made to the VAT rate increase from 17 to 19 per cent (in the course of 2002, but still impacting 2003 figures[23]) and the increase in the average rate of the tax on oil products, on petrol and diesel. Among the discretionary measures that decrease revenue, it is worth mentioning the cut in the corporate income tax from 32 per cent to 30 per cent in 2002[24] and the cut in the rates and change in the tax brackets of the tax on the sale of buildings and land as of mid-year. It is also possible that the end-2002 tax arrears settlement programme has changed the usual pattern of tax arrears payments, leading to the collection in advance of some that, otherwise, would have been collected only in 2003.

Turning to primary expenditure, stress should be laid on the deceleration in compensation of employees (excluding government transfers to the CGA), chiefly reflecting the low wage scale update of civil servants in 2003 and an increased control in hiring[25]. Likewise, expenditure in goods and services seems to be decelerating. On the contrary, in addition to the above-mentioned high growth of expenditure in unemployment benefits, old-age and survival pensions of both the general system and the CGA continue to show a strong structural growth, explained by the increase in the number of pensioners and the magnitude of the composition effect[26].

It should be noted that in 2003 the rates of change of transfers to households, compensation of employees, intermediate consumption and sales of goods and services are affected by the reclassification of a number of hospitals of the National Health Service, previously inside the general government, as public corporations. As a result of this reclassification, the costs incurred by the mentioned hospitals ceased to be included in compensation of employees and in intermediate consumption (as well as the proceeds in sales of goods and services). The services supplied by them are now recorded as transfers (in kind) to households[27].

Information available, in particular as far as the budget outturn of the State and Social Security are concerned, points to the existence of important risks. On the revenue side, the deterioration of the macroeconomic scenario may imply an evolution of tax and social contributions revenue even more unfavourable than assumed in the projection for 2003 included in the 2004 State Budget Report. While the latter envisages an increase in tax receipts of 1.0 per cent[28], the results of the budget outturn in the January-September period show a fall of 4.9 per cent in tax receipts of the State subsector[29], which make up the bulk of this item of revenue for the general government as a whole. Still on the revenue side, the growth of capital transfers relative to the co-financing of investment by the European Community implies an equivalent increase of capital expenditure co-financed. However, given the development of capital expenditure as a whole in the projections of the Ministry of Finance, that can only occur in case of a further marked decline in the capital expenditure component non-associated with projects co-financed by the European Union, which is not possible to confirm from the data available. On the expenditure side, the risks are centred on the trend of transfers to households. On the one hand, expenditure with CGA pensions is expected to record an exceptionally high increase in the course of the present year, in line with prospects of changes in the retirement

(23) The increase in the VAT rate came into force in June 2002, and therefore, as far as the growth of receipts is concerned, it still impacts the 2003 figures.

(24) The decline in the rate impacts chiefly the final settlement made in 2003 relating to 2002.

(25) Banco de Portugal's projections, based on the net changes in the number of beneficiaries of the CGA in the January-August period presented in the 2004 State Budget Report, point to an average rate of change close to zero in 2003.

(26) The composition effect is due to the replacement of deceased old pensioners by new ones, that increases the expenditure with pensions, since new pensioners receive higher pensions on average.

(27) The services provided by hospitals which are now public corporations to households cease to be production of the general government, although financed by the latter. In national accounts, health care services taken up by households and financed by the general government, either through direct acquisition, or through reimbursements, are registered as transfers in kind.

(28) Adjusted for the effect of the tax arrears settlement programme.

(29) Including the part of VAT that accrues to Social Security.

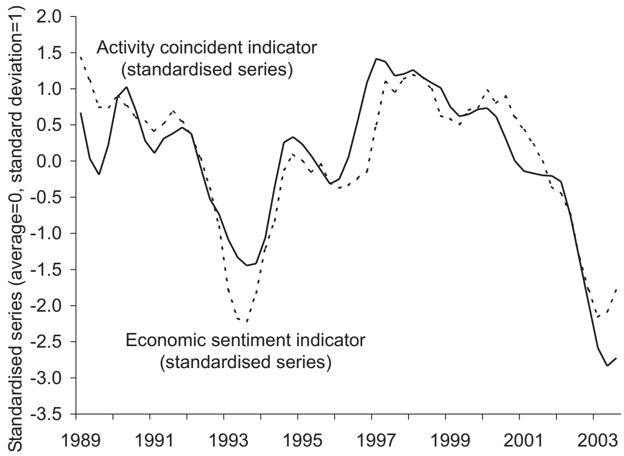
rules and in the calculation of initial pensions of civil servants (which led to a sizeable increase in retirement applications before the coming into force of those changes). In turn, the exclusion of a number of hospitals from the general government, as mentioned above, does not seem to have been fully neutral for the expenditure forecast, since the decrease in compensation of employees and intermediate consumption was not completely matched by an increase in transfers in kind to households. This implies that the accounts for 2003 already envisage ambitious efficiency gains that may not entirely materialise as soon as in 2003.

5. EXPENDITURE AND OUTPUT

According to the estimates of the Banco de Portugal shown in this *Bulletin* (Table 1.1), the GDP is expected to decline, in volume, between ¾ and 1 ½ per cent in 2003, compared with an increase of 0.4 per cent in 2002. The current estimate for the GDP change represents a downward revision from the previous projection presented in the June 2003 issue of the *Economic Bulletin*[30] (between -1 and 0 per cent). This revision is the result of a sharper decline in domestic expenditure of the private sector than previously envisaged, only partly offset by a higher than expected decrease in imports. The major revisions were made for private investment, although private consumption has also been revised downwards from previous forecasts. On the contrary, the hypothesis assumed for final expenditure of the general government were revised upwards, while the increase in exports of goods and services is expected to stand close to or slightly above that projected in Spring.

The decline in economic activity in 2003 is confirmed by the coincident indicator of the Banco de Portugal that synthesises the behaviour of trade, industry and construction sectors (Chart 5.1). The same indication is supplied by the economic sentiment indicator for Portugal published by the European Commission. In intra-annual terms, both indicators suggest a lower reduction in Portuguese economic activity as from the second half of the year, as a result of the less negative behaviour of

Chart 5.1
ACTIVITY COINCIDENT INDICATOR AND ECONOMIC SENTIMENT INDICATOR



Sources: European Commission and Banco de Portugal.

domestic demand. The lower year-on-year reduction in domestic demand in the second half of the year is partly related with the intra-annual behaviour during 2002, which showed a strong slowdown in domestic demand from the first to the second half of the year, especially marked in the evolution of private investment[31].

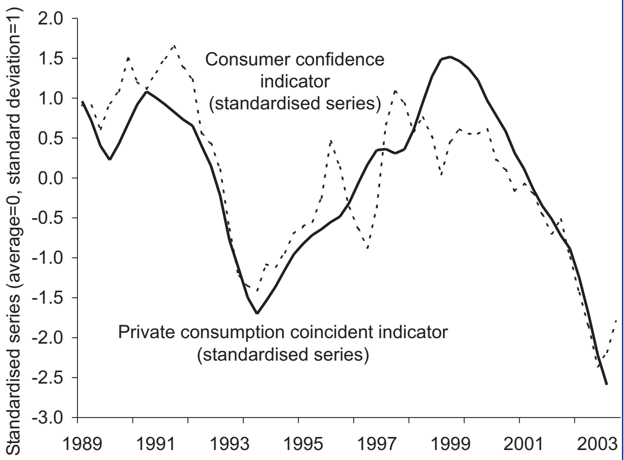
Private consumption is likely to show a real decrease in 2003, after an increase of only 0.4 per cent in 2002. This behaviour continues to reflect the necessary process of adjustment of consumption decisions, after real growth rates above 5 per cent in the late 1990s. Financial restrictions associated with the significant indebtedness levels of households, with the consequent moderation of credit growth, are now influencing the behaviour of consumption expenditure, in particular of durable goods.

The decline in private consumption in 2003 is also the result of the sharp deceleration of disposable income of households[32], which may even show a slight decrease in real terms. The marked slowdown of disposable income in 2003 is the result of a similar trend of labour and corporate and property income. In particular, real wages per

(30) See "Prospects for the Portuguese economy: 2003-2004", in the June 2003 issue of the *Economic Bulletin* of the Banco de Portugal.

(31) For an analysis of the intra-annual behaviour of activity in 2002, see Box "Trend of the intra-annual economic activity in 2002" in the March 2003 issue of the *Economic bulletin* of the Banco de Portugal.

Chart 5.2
PRIVATE CONSUMPTION COINCIDENT INDICATOR AND CONSUMER CONFIDENCE INDICATOR



Sources: European Commission and Banco de Portugal.

worker in the economy as a whole will decrease slightly in 2003, in a context of an increase in unemployment and of the need for budgetary consolidation. In turn, the growth of domestic transfers to households continue to be high in 2003, reflecting the significant increase in social contributions paid by the general government, in particular as regards unemployment benefits and pensions. While the acceleration of transfers associated with unemployment benefits is related to the unfavourable trend of economic activity, the high growth of transfers associated with pensions is a structural phenomenon resulting from population ageing and from the maturing of social security systems.

In nominal terms, and although both have decelerated from the previous year, private consumption continues to show lower growth than disposable income, which reflects a further increase in the savings rate of households in 2003, albeit less marked than in previous years. The increase in the savings rate continues to be associated with precautionary reasons, due to the deterioration of labour market conditions and the low levels of consumer confidence. It should also be noted that in 2002 a share of disposable income of households was allocated to the settlement of tax debts at the end of the year. Since it will not happen again in 2003, this has also contributed to an increase in savings, vis-à-vis the previous year, as registered in national accounts.

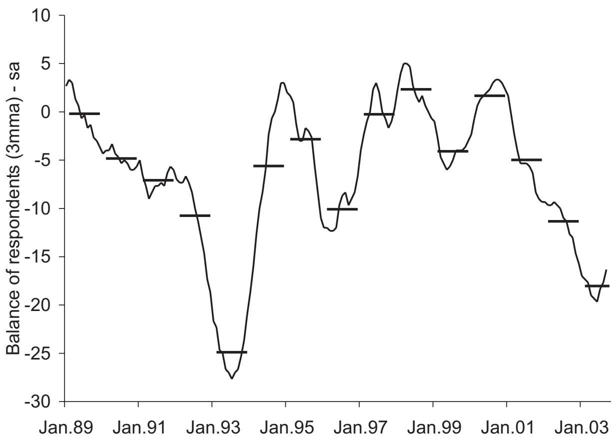
The consumer confidence indicator, which is the result of the average of different qualitative issues, continued to present very low levels in 2003, reaching even its historical trough at the end of the first quarter of the year (Chart 5.2.). As of that date, this indicator recovered somewhat, but at rather low levels. The slowdown in private consumption, especially strong in the first half of the year, is also illustrated by the pace of the private consumption coincident indicator calculated by the Banco de Portugal.

The deceleration of private consumption in 2003 also extends to most classes, but is more marked in the acquisition of durable goods, particularly vehicles. Consumption of durable goods, traditionally more sensitive to the economic cycle, is likely to decrease more than 10 per cent, in real terms, after a reduction of approximately 6 per cent in 2002. The durable goods component of the turnover index in retail trade (which does not include vehicles) decreased by 7.7 per cent in nominal terms up to September (1.8 per cent increase in 2002). Consumption expenditure in the acquisition of vehicles decreased more markedly than in other durable goods: the number of passenger vehicles sold decreased by 21.1 per cent up to September 2003, after a decrease of 11.4 per cent in the previous year as a whole.

According to Banco de Portugal estimates, public consumption is expected to record a nearly nil change in volume in 2003, after an increase of 2.3 per cent in 2002. The corporatisation of a significant number of hospitals in December 2002, determining their transfer in national accounts from the general government sector to the non-financial corporate sector, has significantly affected the accounting of the major components of public consumption[33]. In particular, this reclassification hinders the reading of the trend of compensation of

(32) The analysis presented in this Bulletin on the behaviour of disposable income and of household savings does not take into account the accounting impact that the sale and securitisation of social security and tax debts may have on these variables. As mentioned in the introduction, the amount received by the general government as a result of this securitisation will be accounted as tax payments by households and corporations. The share concerning to households, if not excluded, would disrupt the analysis, given that, in effect, households will not pay such taxes in 2003.

Chart 5.3
CONFIDENCE INDICATOR IN THE MANUFACTURING INDUSTRY



Source. European Commission.

employees and intermediate consumption, which show a fall in nominal terms in 2003. In turn, such reclassification also affects transfers in kind to households, which evince a strong increase. This, per se, would not bring about a distortion of the trend of public consumption. However, given that the 2003 account seems to have considered gains in efficiency as a result of the corporatisation process, the increase in transfers to households might have been lower than the decline in compensation of employees and intermediate consumption, being one of the major factors explaining the noticeable deceleration in public consumption as a whole. It should also be noted that, according to estimates, excluding the effects of the reclassification of corporate-hospitals, compensation of employees should register a virtually nil real change, in line with the projection for the average number of subscribers of the *Caixa Geral de Aposentações* (CGA) in 2003.

Gross Fixed Capital Formation (GFCF) is expected to decrease in 2003 more markedly than in 2002, confirming the high sensitivity of this component to the cyclical situation of the economy. This variable is estimated to decrease between 9 and 11 per cent (5.7 per cent reduction in 2002), which corresponds to a central estimate much more negative than that presented in the June issue of the *Economic Bulletin*. GFCF will probably decline across all its components: construction, transport material, machinery and equipment. In intra-annual terms, contrary to 2002, a less sharp reduction is expected for the different components of investment in the second half of the year.

By institutional sectors, stress should be laid on the significant decrease above 10 per cent in volume in investment by corporations and households, given that public sector investment, excluding extraordinary sales of property, is likely to have remained practically stable in volume. The behaviour of private sector investment emphasizes the adjustment process in course in Portuguese economy. Indeed, financial restrictions associated with the high indebtedness levels reached in the meantime, despite the low level of the interest rates, continue to constrain the trend of private investment, after the strong increases observed in the recent past. The sharp slowdown in investment in the private sector seems to have been reinforced by the deterioration of expectations of entrepreneurs, apparent in the trend of confidence indicators, associated with the strong deceleration of domestic demand and some uncertainty as to the trend of external demand. Therefore, the weak perspectives for the development of demand, associated with relatively low rates of capacity utilisation, continue to discourage the increase in capacity utilisation, in spite of the continuing low level of the interest rates.

Among the different components of GFCF, investment in construction is likely to record the sharpest reduction, in spite of the continuing low level of the interest rates. The decline will be especially significant in housing private investment, in the context of the slowdown in loans for house purchase after increases above 30 per cent observed in the late 1990s. Equipment investment is likely to show a strong decline in 2003, associated with the low levels of confidence in industry seen since the previous year (Chart 5.3), in spite of some improvement in the second half of 2003. Investment in transport material is also expected to decrease further in 2003, albeit less markedly than in the previous year. Sales of light commercial vehicles declined by 16.0 per cent up to September 2003, compared with a decrease of 19.6 per cent in the previous year as a whole (Table 5.1). In the same period, sales of heavy commercial vehicles

(33) See section 4. *Fiscal Policy*.

Table 5.1

GROSS FIXED CAPITAL FORMATION

	2001	2002	2003 c.r.c.	Until the month	2002 I	2002 II	2002 III	2002 IV	2003 I	2003 II	2003 III
Transport equipment											
Sales of commercial vehicles (y-o-y. r.c.)											
Light (under 3.5 ton - excluding 4x4)	-18.2	-19.6	-16.0	Sep	18.7	-20.6	-31.1	-35.5	-27.5	-12.8	-2.0
Heavy (above 3.5 ton)	-9.3	-28.2	-25.2	Sep	-28.2	-36.1	-29.1	-15.4	-35.9	-15.2	-21.1
Machinery											
Gross Trade Monthly Survey - Machinery - b.o.r.. (n-s.a.)											
Turnover	-1	-3	-38	Sep	13	2	-7	-20	-35	-29	-50
Current activity	-14	-12	-23	Sep	-4	-12	-16	-17	-20	-21	-27
Expected activity	24	19	3	Sep	37	32	10	-3	9	-3	3
Manufacturing Industry Monthly Survey - Other equipment goods - b.o.r.											
Domestic order books (n-s.a.)	-26	-20	-33	Sep	-14	-20	-21	-26	-31	-35	-33
Current production (s.a.)	4	-15	-24	Sep	0	-21	-15	-25	-22	-29	-22
Expected production (s.a.)	10	-10	-18	Sep	-1	-4	-17	-18	-22	-18	-14
Stocks of finished products (n-s.a.)	2	5	-13	Sep	0	11	6	3	-6	-9	-24
Construction											
Construction confidence indicator in - b.o.r. (s.a.)											
European Commission Opinion Survey	-6	-34	-48	Sep	-18	-28	-41	-48	-53	-45	-47
Construction and Public Works Monthly Survey	-12	-35	-55	Sep	-24	-33	-35	-50	-54	-56	-56
Cement sales (y-o-y. r.c.)	0.0	-6.7	-18.7	Sep	5.1	-2.9	-8.5	-19.3	-18.9	-20.5	-16.5
Total sector											
Construction and Public Works Monthly Survey - b.o.r. (n-s.a.)											
Assessment of activity	-1	-20	-34	Sep	-13	-13	-20	-35	-39	-31	-30
Order books	-24	-47	-71	Sep	-39	-46	-47	-56	-68	-74	-72
AECOPS - Monthly Survey (n-s.a.)											
Activity - b.o.r..	-3	-19	-31	Sep	-13	-16	-18	-28	-35	-30	-28
Order books - months	11.0	11.5	9.7	Sep	11.7	12.4	11.2	10.6	10.0	10.0	9.1

Sources: *INE*, *ACAP*, *Cimpor*, *Secil*, *AECOPS*, European Commission and Banco de Portugal.
y-o-y. r.c. - year-on-year rate of change.
c.r.c. - cumulative rate of change.
b.o.r. - balance of respondents.
s.a. - seasonally adjusted.
n-s.a. - not seasonally adjusted.

decreased by 25.2 per cent, after a reduction of 28.2 per cent in 2002.

Banco de Portugal estimates point to a decline in imports of goods and services between 1 ¾ and 2 ¾ per cent, compared with a change of -0.3 per cent in the previous year. This estimate corresponds to a downward revision from the projections presented in the June issue of the *Economic Bulletin*, in line with the latest estimate of a sharper reduction in private sector domestic demand. Therefore, the decrease in imports of goods continue to reflect the development of different components of overall demand, in particular those presenting a higher import content, such as consumption of durable goods and investment in equipment goods. Imports of services are likely to decline more sharply than imports of goods. In particular, the decrease in imports of tourism services in 2003 is likely to reflect the development of the major determinant factors behind private consumption, such as the strong deceleration of disposable income and the low levels of consumer confidence.

According to Banco de Portugal estimates, imports of goods seem to have decreased by approximately 2.8 per cent in real terms[34] in the first half of the year (change of -0.5 per cent in 2002 as a whole). Imports are expected to show a smaller reduction in the second half of 2003, in line with the less favourable behaviour of domestic demand in that period.

Exports of goods and services will likely show an increase slightly below that observed in the previous year (3.3 per cent in volume). Exports of services are expected to decelerate in 2003, chiefly reflecting the strong slowdown in exports of other services, particularly transport and insurance services. Tourism real revenue will likely record a virtually nil growth in 2003, compared with a fall of approximately 3 per cent in 2002. Exports of goods are likely to accelerate slightly, in line with the improvement in external demand, despite the reduction in exports of a large production unit in car industry. In any case, the development of exports in 2003 is expected to allow for some market share gains, albeit below those observed in 2002, in the context of improvement of the euro and the ensuing increase in competition of third countries in exporting markets.

The marked reduction in domestic demand, in contrast with the less favourable development of external demand, is taking some companies to redirect their sales towards external markets, as has happened in similar circumstances in the past, even if with a decline in their profit margins. The Banco de Portugal estimates point to a decline of approximately 3 per cent in goods export prices in 2003 (a change of -0.6 per cent in 2002), which is expected to extend to most exported products. This decrease in prices will likely lead to a further contraction in profit margins in the exporting sector, notwithstanding the estimated decline in import prices of intermediate goods and the deceleration in wage costs.

In the first half of 2003, according to Banco de Portugal estimates, exports of goods have increased by 4.5 per cent in volume[35], which compares with 3.6 per cent in 2002 as a whole. Under the assumption of gains in market share similar to those observed in the first half of the year, exports of goods are estimated to decelerate somewhat in the second half of 2003, following the lower growth envisaged for relevant external demand. The intra-annual behaviour of external demand for Portuguese economy is the result of lower growth estimated for imports in the euro area as a whole in the second half of 2003, for which some of Portugal's major trading partners have especially contributed.

6. EMPLOYMENT AND WAGES

After a marginally positive change in 2002 (0.2 per cent), total employment is expected to register a negative change in 2003, with a magnitude identical to that envisaged for output, which implies a near stagnation of productivity, following two years of very modest growth. In the first half of the year, labour productivity has decreased slightly, but is expected to recover in the second half, as a

(34) In the first half of 2003, imports of goods decreased by 3.3 per cent in nominal terms, according to data published by *INE* in the July issue on external trade. Banco de Portugal estimate for the import deflator in this period is -0.5 per cent, based on data made available by *INE*.

(35) This estimate took into account the nominal rate of change of exports in the first half of the year, implicit in the July issue on external trade (2.0 per cent). Banco de Portugal estimate for the deflator in this period is -2.3 per cent, based on data made available by *INE*.

Table 6.1

TOTAL EMPLOYMENT BY SECTORS

Year-on-year rates of change in a constant sample, as a percentage[(a)]

	2002				2003	
	I	II	III	IV	I	II
Agriculture and fishing	-1.6	-2.4	-1.8	-3.3	-2.4	-1.9
Mining	-19.3	-13.2	-9.3	3.8	16.7	8.8
Manufacturing	-2.0	-2.4	-2.6	-1.8	-3.0	-1.0
Electricity, gas and water	0.1	-4.7	-6.8	-9.3	-9.9	-7.6
Construction	4.2	4.3	1.4	-2.1	-5.5	-5.1
General government, education and health	2.7	2.3	1.0	0.8	0.5	-0.3
Other services	0.6	0.9	2.1	1.4	1.4	0.7
Total	0.4	0.2	0.2	-0.5	-1.1	-0.9
Memo:						
Total (Growth rate in a simple sample)	0.5	0.9	0.5	-1.2	-0.9	-1.3

Sources: *INE* and Banco de Portugal.

Notes:

(a) The estimate in a constant sample does not take into account the partial rotation of the sample in each quarter, i.e. it uses only the component of the Employment Survey's sample that is identical in two consecutive quarters.

result of less negative rates of change of output and a similar or even more intense pace of employment decline.

According to data obtained from the Employment Survey of *INE*, total employment decreased -1.1 per cent in the first half of the year. That development was the result of similar changes in wage earners and in other forms of employment, unlike in 2002 when self-employment had shown some growth. As regards wage earners, its most buoyant component in the first half of 2003 continued to be fixed-term contracts, with a positive change of 0.3 per cent, but decelerating sharply from the second half of 2002, when it had grown by 4.4 per cent. In the first half of the year, the number of employees with permanent contracts recorded a decline (-0.4 per cent) similar to that observed in the second half of 2002, but above the one recorded in the first half of 2002 (-1.3 per cent). Thus, according to the *INE* Employment Survey, the largest contribution to the decline in the number of wage earners was made by the sharp decline in the number of employees with a contract as services supplier or as seasonal worker without a written contract (-14 per cent).

In sectoral terms, the first half of 2003 saw a development of employment qualitatively similar to that observed in 2002, when analysing the information obtained in a constant sample, i.e., not taking into account the partial rotation of the sample in each quarter (Table 6.1). Stressing only the most important sectors, employment growth was positive in Services, albeit decelerating from 2002, but was negative in Manufacturing Industry and, mainly, in Construction. Public Administration, Education and Health saw a near stagnation of employment, which is consistent with information on the trend of the number of beneficiaries of the CGA.

The unemployment rate is expected to increase significantly in 2003 vis-à-vis the average value recorded in 2002 (5.1 per cent). In the first half of 2003, according to the *INE* Employment Survey, the unemployment rate stood at 6.3 per cent, 1.8 p.p. above the figure recorded in the same period of 2002. The number of unemployed increased by 41.9 per cent from the first half of 2002 to the first half of 2003. However, this year-on-year rate of change did not increase much when compared with the year-on-year change observed in the second half of 2002 (39.7 per cent), a period of strong increase in unemployment. This information suggests that, in the first half of 2003, the growth of unemployment does not seem to have been as strong as could be expected in view of the magnitude of the contraction in activity. This might have been the result of a strong wage adjustment that could have led the trend of unit labour costs in

Table 6.2

LABOUR MARKET INFLOWS AND OUTFLOWS(a)

As a percentage of the labour market

	2001			2002				2003	
	II	III	IV	I	II	III	IV	I	II
Flows between employment and inactivity									
Employment – Inactivity	1.43	1.42	1.57	1.33	1.50	1.34	2.62	1.75	1.59
Inactivity – Employment	1.44	1.49	1.49	1.31	1.40	1.45	2.16	1.64	1.37
Inflows into unemployment	1.36	1.75	1.80	1.72	1.72	2.17	2.93	2.68	2.15
Employment => Unemployment	0.67	0.72	0.86	0.84	0.81	0.95	1.46	1.36	1.02
Permanent	0.18	0.27	0.29	0.28	0.27	0.25	0.48	0.55	0.46
Fixed-term	0.31	0.26	0.41	0.37	0.29	0.43	0.63	0.56	0.37
Other	0.17	0.19	0.16	0.19	0.26	0.26	0.35	0.25	0.19
Inactivity => Unemployment	0.69	1.03	0.94	0.88	0.91	1.22	1.47	1.33	1.13
Outflows from unemployment	1.70	1.61	1.73	1.66	1.87	1.76	2.31	2.27	2.51
Unemployment => Employment	0.86	0.90	0.89	0.97	1.02	0.96	1.17	1.06	1.50
Permanent	0.14	0.12	0.11	0.17	0.14	0.11	0.24	0.17	0.24
Fixed-term	0.40	0.55	0.43	0.36	0.57	0.52	0.64	0.59	0.82
Other	0.31	0.22	0.35	0.44	0.31	0.33	0.29	0.29	0.44
Employment => Inactivity	0.84	0.71	0.83	0.70	0.84	0.80	1.13	1.21	1.01
Net inflows into unemployment	-0.35	0.15	0.07	0.06	-0.14	0.42	0.62	0.41	-0.37
Other factors(b)		0.05	-0.13	-0.20	0.20	0.17	0.43	-0.17	0.17
Change in the unemployment rate		0.10	0.20	0.26	0.06	0.59	1.05	0.24	-0.20
Memo:									
Unemployment rate	3.9	4.0	4.2	4.5	4.5	5.1	6.2	6.4	6.2

Sources: *INE* and Banco de Portugal.

Notes:

(a) Considering the common component of the samples in quarters *t* and *t*-1, using quarter *t* weights.

(b) Obtained as residual. It includes, in particular, the effects of sampling irregularities.

Portugal to evolve in line with the more moderate development observed in major international counterparties. According to data available, this is not what actually happened. In fact, despite a deceleration in nominal wages for the economy as a whole, unit labour costs are nevertheless expected to increase above 3 per cent in 2003 (5.9 and 4.7 per cent in 2001 and 2002 respectively), 1 p.p. above the euro area average. Excluding the general government, this growth differential in labour costs is widened by approximately ½ p.p., due to the moderating effect on the indicator for the economy as a whole of a close-to-zero growth in the wage scales of civil servants in 2003.

The analysis of quarterly flows among the different labour market situations permits to perceive which are the major factors behind the recent trend of the unemployment rate (Table 6.2). These flows are affected by seasonal changes, but their analysis shows that the moderation observed in the unemployment rate rise seems to be associated with an increase in the net flow of the direct move from employment to inactivity and a decline in the net flow from inactivity to unemployment. It is therefore possible to understand the reason why the participation rate in the first half of 2003 increased on average by only 0.1 p.p., 0.2 p.p. less than in the same period of the previous year. This increase in the participation rate is lower than the contribution of demographic factors to the growth of the labour force, calculating the hypothesis of rates of participation by age group (0.3 p.p. for 2003 as a whole). It should be noted that this "unencouraging" phenomenon of the labour force, more frequent in cases of loss of permanent employment, does not necessarily mean a financial easing for the State. It only means that the individuals in question are classified as ceasing to actively seek employment, although continuing to receive unemployment benefits.

7. INFLATION

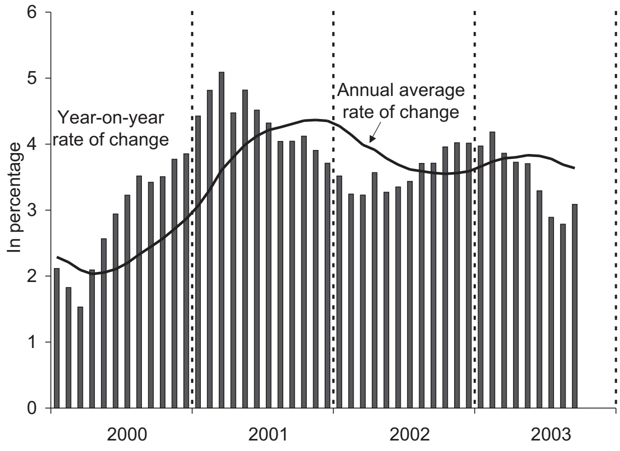
The annual average rates of change of the Consumer Price Index[36] (CPI) and of the Harmonised Index of Consumer Prices (HICP) should stand between 3.3 and 3.5 per cent in 2003, which corresponds to slight declines compared with the values recorded in 2002 (3.6 and 3.7 per cent respectively). The year-on-year decline in inflation is more marked. The year-on-year rate of change of the CPI moved from 4.0 per cent in December 2002 to 2.8 per cent in August, increasing slightly to 3.1 per cent in September (Chart 7.1).

Several factors, domestic and external ones, were behind the year-on-year slowdown in prices in 2003. Firstly, the contraction in the economic activity contributed to the decrease in demand pressures on prices, in particular in the services sector. Wages both in the public sector and in the private sector decelerated significantly in 2003, in a context of deterioration of the labour market situation, also contributing to a reduction in Portuguese inflation.

Developments in prices of imported goods also continued to favour the decline in inflation in 2003. According to the Banco de Portugal estimates based on data disclosed by *INE*, import prices of goods had a change of -0.5 per cent in the first half of 2003, after a reduction of 3.0 per cent in 2002 as a whole. In the first half of 2003 import prices of consumer goods decreased by 1.6 per cent (reduction of 1.2 per cent in the previous year as a whole).

In addition, the downward trend in inflation in 2003 was intensified by the ending of some temporary factors that affect price developments in 2002, such as the conversion of prices in escudos into euros in early 2002 and the increase in the standard VAT rate from 17 to 19 per cent implemented in mid-2002[37].

Chart 7.1
CONSUMER PRICE INDEX
Year-on-year and average rates of change



Source: *INE*.

Note: Up to December 2002, rates of change were calculated using the CPI basis 1997. From January 2003, rates of change are calculated using the new CPI basis 2002.

The effect of favourable developments on the main determinants of inflation is reflected on the behaviour of inflation trend measures usually used by the Banco of Portugal. In 2003 these indicators showed a downward path. This contrasts with developments in 2002, when these trend measures pointed to a significant resilience to a decrease in inflation (Table 7.1).

The reduction in inflation in the course of the first three quarters of 2003 was broadly based across all the main aggregates comprising the CPI, with the exception of unprocessed food (Table 7.1 and Chart 7.2). These goods prices tend to present large swings caused by temporary factors, leading to significant base effects. Thus, in 2003 unprocessed food prices[38] accelerated from the unusually low levels registered in 2002. Given the significant weight of these goods in the basket of the CPI (around 12 per cent), its evolution prevented

(36) In January 2003, *INE* started to disclose a new series of the CPI, calculated on the basis of a more recent structure of consumption expenditure (Household Budget Survey of 2000). The new CPI series takes 2002 as its basis year, hence replacing the 1997 based CPI (see Annex 1 of the January 2003 *Monthly Economic Indicator* of the Banco de Portugal for an explanation of main methodological changes). Until December 2002, the rates of change of the CPI comprised in this text were derived using the 1997 based CPI. From January 2003 onwards, the year-on-year rates of change of the CPI were derived consistently with the new 2002 based index.

(37) The increase in the standard VAT rate in June 2002 is estimated to have contributed progressively by around 0.7 percentage points to the increase in the annual inflation rate. That contribution will tend to end over the second half of 2003.

(38) In particular, prices of the components "meat" and "fruit" accelerated markedly in the course of the first three quarters, while prices of "vegetables, potatoes and other root tubers" accelerated significantly only in the third quarter of 2003.

Table 7.1

CPI – MAIN CATEGORIES AND AGGREGATES

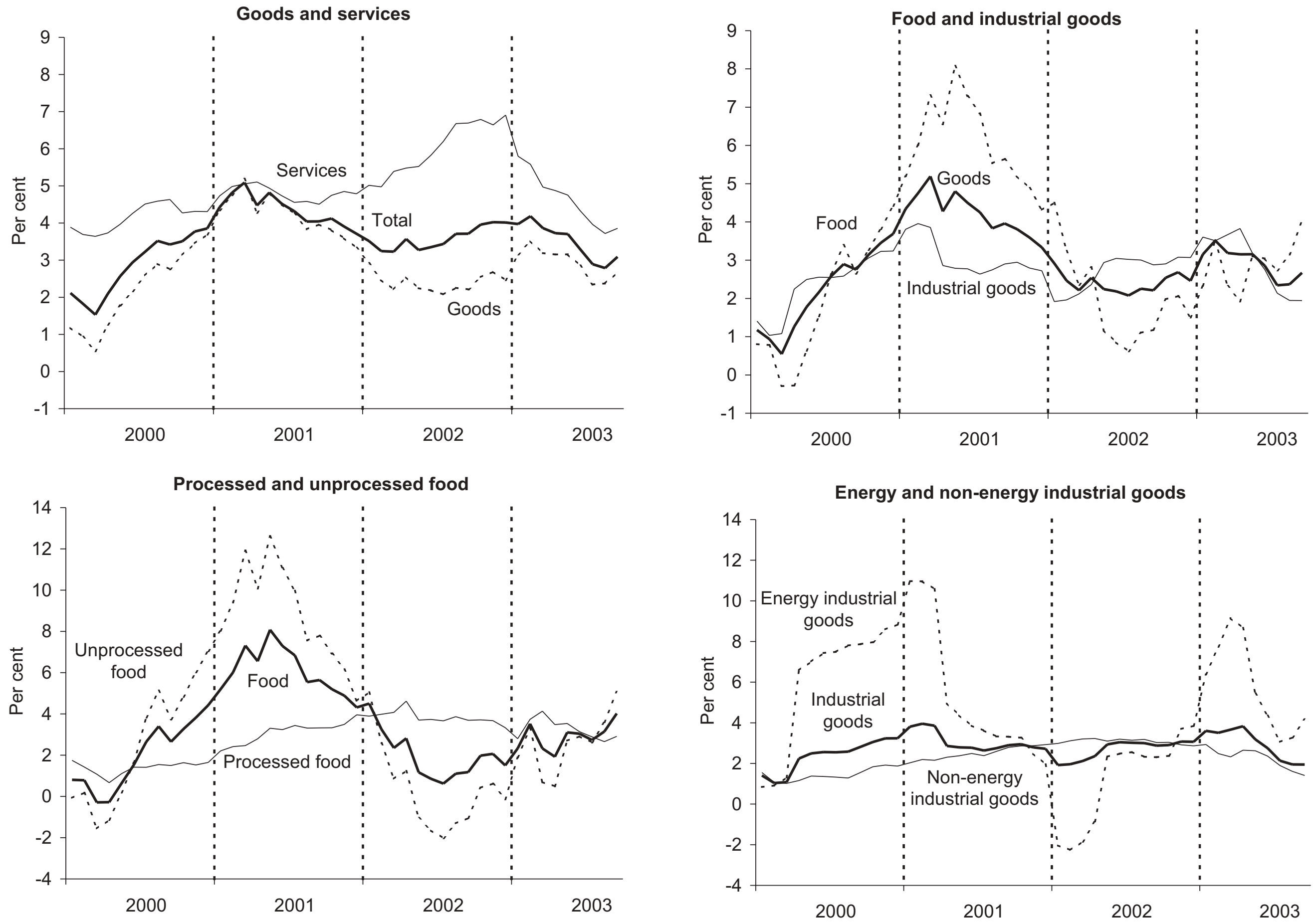
Average and year-on-year rates of change, in percentage

	Weights basis 2002	Average rate of change				Year-on-year monthly rates of change			
		2000	2001	2002	2003 until September	2002	2003		
						Dec.	Mar.	Jun.	Sep.
Total	100	2.9	4.4	3.6	3.6	4.0	3.9	3.3	3.1
Total excluding unprocessed food and energy	79.6	2.5	3.6	4.4	3.7	4.6	3.8	3.3	2.7
Aggregates									
Goods	65.8	2.2	4.2	2.4	2.9	2.5	3.2	2.9	2.7
Food	23.1	1.9	6.1	1.9	2.7	1.5	2.3	3.0	4.0
Unprocessed	12.0	2.5	8.8	0.3	2.2	-0.1	0.7	2.9	5.1
Processed	11.1	1.4	3.1	3.8	3.3	3.3	4.1	3.1	2.9
Industrial	42.7	2.4	3.1	2.7	3.0	3.1	3.7	2.8	1.9
Non-energy	34.2	1.4	2.5	3.1	2.5	2.9	2.3	2.4	1.4
Energy	8.4	6.1	5.2	1.2	5.1	3.9	9.1	4.4	4.2
Services	34.2	4.2	4.8	6.0	5.1	6.9	5.0	4.3	3.9
Categories									
I - Food and non-alcoholic beverages	20.1	2.1	6.5	1.5	2.4	1.0	1.6	2.8	4.0
II - Alcoholic beverages and tobacco	3.0	0.8	3.2	4.8	5.0	5.5	7.4	4.7	3.8
III - Clothing and footwear	7.0	0.8	1.5	2.5	1.5	2.1	0.5	1.7	0.8
IV - Housing, water, electricity, gas and other fuels	10.0	3.7	3.9	2.9	3.9	3.6	4.1	4.6	3.7
V - Accessories, housing equipment, and current dwelling expenses	8.1	2.0	3.2	3.1	2.9	3.0	3.0	2.9	2.2
VI - Health	5.6	3.1	3.6	4.8	2.6	4.6	2.2	1.8	1.4
VII - Transports	19.1	4.8	4.8	5.0	5.4	6.3	7.2	4.2	3.1
VIII - Communications	3.4	-4.8	-2.2	0.8	-0.4	1.6	-1.4	-1.2	-1.8
IX - Recreation and culture	5.0	0.8	2.2	2.2	1.8	2.1	1.4	0.9	1.9
X - Education	1.5	5.0	5.2	5.8	3.9	4.8	3.6	3.7	4.1
XI - Restaurants and hotels	10.8	3.6	4.2	5.7	6.3	7.3	6.7	5.6	5.3
XII - Miscellaneous goods and services	6.3	4.3	5.5	5.8	4.7	6.1	4.4	4.2	3.4
Memo:									
Trend measures									
10 per cent trimmed mean		2.8	3.9	3.9	3.6	4.0	3.8	3.2	2.8
Main component		2.7	3.4	3.8	3.7	4.0	3.8	3.5	3.4

Sources: *INE* and Banco de Portugal.

Note: Up to December 2002, rates of change were calculated using the CPI basis 1997. From January 2003, rates of change are calculated using the new CPI basis 2002.

Chart 7.2
CPI – MAIN AGGREGATES
Year-on-year rates of change



Sources: *INE* and Banco de Portugal.
Nota: Up to December 2002, rates of change were calculated using the CPI basis 1997. From January 2003, rates of change are calculated using the new CPI basis 2002.

an even more pronounced decline in the Portuguese inflation in 2003.

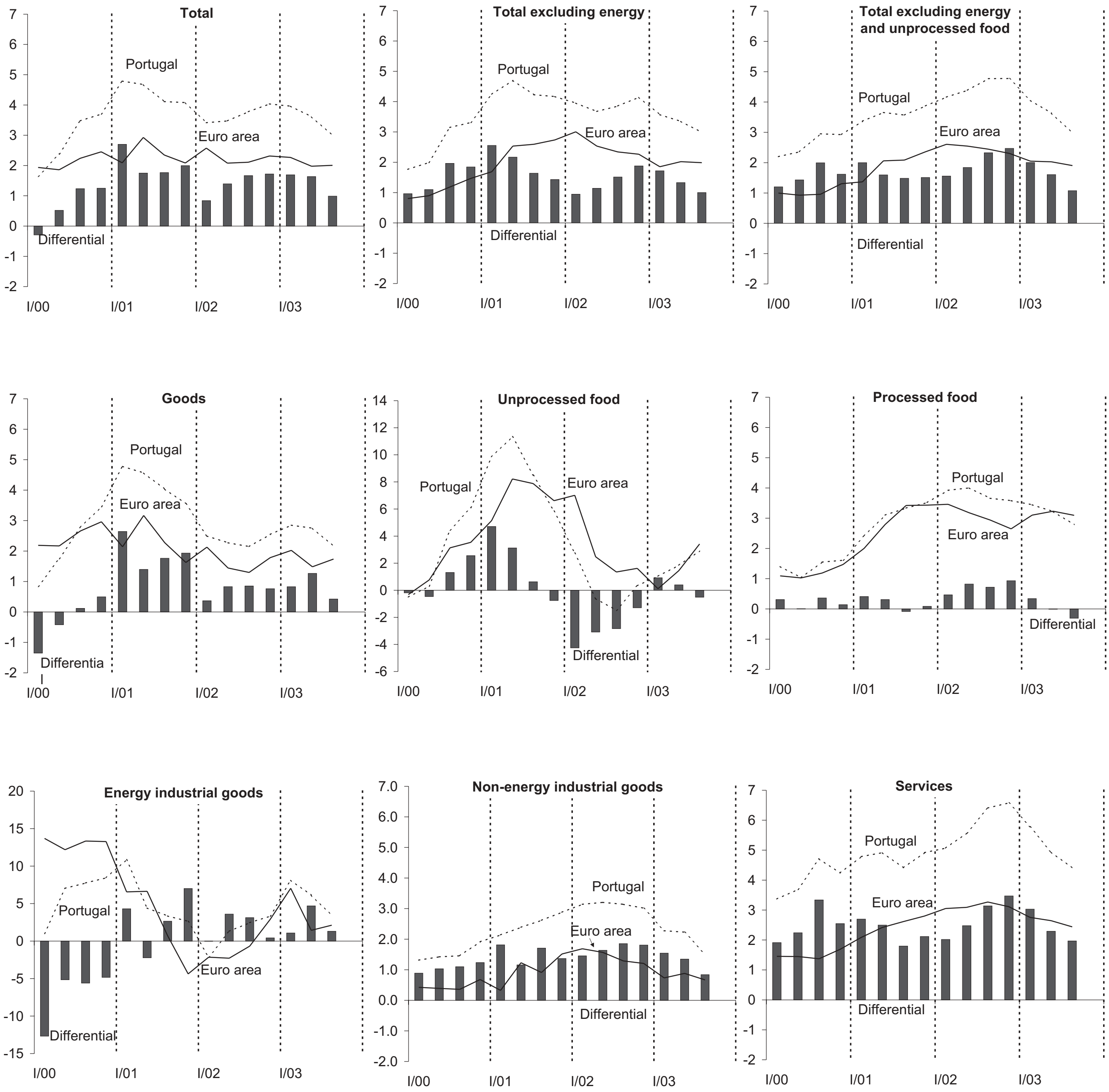
Within the scope of the Eurosystem Spring projections[39], an annual average change of the Harmonised Index of Consumer Prices[40] (HICP) in the range of 2.5 to 3.5 per cent was projected for 2003. The current range of estimates of 3.3 to 3.5 per cent falls within this range, but it is close to its upper boundary. This upward revision reflected mainly the higher than expected significant growth of some unprocessed food and energy prices in the third quarter. Besides, the deceleration in services prices has been slower than expected.

The decrease in Portuguese inflation occurred in a context of slight deceleration in the euro area consumer prices, albeit less pronounced than in Portugal. Hence, the differential[41] between year-on-year rates of change of the HICP in Portugal and in the euro area narrowed in the course of the first nine months of 2003. The inflation differential

(39) For the presentation of the projections for the Portuguese economy, see the text "Prospects for the Portuguese economy: 2003-2004" in the June 2003 *Economic Bulletin* of the Banco de Portugal.

(40) As mentioned in the June 2003 *Economic Bulletin*, the projections then disclosed were part of a joint projection of the Eurosystem. Within the framework of these periodical projections, the relevant price index is the HICP, as the Council of the ECB announced the quantitative definition of price stability on the basis of this price index. This index is based on the same monthly data that support the calculation of the CPI, diverging from the latter mainly by the relative weights used to aggregate the elementary price indices. However, the annual average change of the two indices is very similar.

Chart 7.3
HARMONISED INDEX OF CONSUMER PRICES – TOTAL AND AGGREGATES
Year-on-year rates of change and differentials

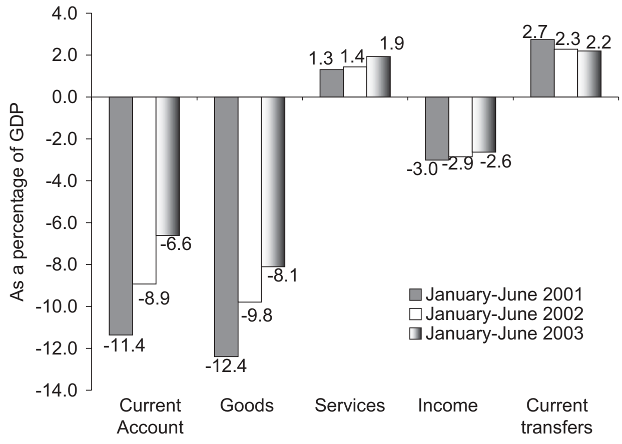


Source: Eurostat.

(41) With the adoption of the single currency by Greece on 1 January 2001, this country has since then been included in the HICP disclosed for the euro area. For analytical reasons, from 1995 onwards the Eurostat started to disclose also a series including Greece. The analysis of the evolution of the differential made in this *Bulletin* refers to this series.

between Portugal and the euro area was 1.7 p.p. in the first quarter of 2003, narrowing subsequently to 1.6 p.p. and 1.0 p.p. in the second and third quarters respectively (Chart 7.3). Excluding unprocessed food and energy prices, the differential between growth rates of the HICP in Portugal and in euro area narrowed even more markedly: from 2.5 p.p. in the fourth quarter of 2002 to 2.0 p.p. in the first quarter of 2003, 1.6 p.p. in the second and 1.1 p.p. in the third quarter of this year. The differential of the year-on-year growth of services prices also narrowed significantly throughout 2003, despite standing at 2.0 p.p. in the third quarter (3.5 p.p. in the last quarter of 2002). Notwithstanding the recent decrease, partly explained by the ending of the effect of the increase in the standard VAT rate, this differential of services prices is still too wide, considering the recessive juncture and the stagnation in productivity of the Portuguese economy.

Chart 8.1
BALANCE OF PAYMENTS BREAKDOWN
Balances



8. BALANCE OF PAYMENTS

In 2003, according to the Banco of Portugal projections, the joint deficit of the current plus capital accounts is expected to stand between 2¼ and 3¼ per cent of GDP (Table 1.1), compared with 5.6 per cent in 2002. The range now presented corresponds to a slight improvement vis-à-vis the range disclosed in the June *Economic Bulletin*. The narrowing of the deficit in 2003 is chiefly due to the significant reduction in the trade account deficit, although the remaining components of the current account, as well as the capital account, also show a favourable behaviour. The improvement in the trade deficit reflects the joint effect of a real decline in goods imports, above that recorded in the previous year, and of a slight acceleration in the volume of exports. Conversely, the gain in terms of trade observed in 2002 is not likely to occur in 2003. Indeed, developments in prices of exports and imports of goods and services should result in a virtually nil terms of trade effect in 2003. Available data point to a more marked reduction in export prices than in import prices of goods in 2003. This loss in terms of trade in goods is offset by a gain in terms of trade in services. As mentioned in section 5, this should be related to the increased effort of resident companies to place their products on the external market, in a context of strong reduction in domestic demand and strengthening of the euro.

The joint balance of the current and capital accounts reflects, in aggregate terms, the net external financing capacity (borrowing requirements, if negative, which has been the case) of resident economic agents. Thus, in 2003, there was a significant reduction in net borrowing requirements of the Portuguese economy, for which the private sector contributed exclusively. In fact, general government borrowing requirements didn't decrease in 2003. In turn, they increased considerably if the two special operations mentioned in the introduction and in section 4 are not taken into account (transfer of reserves from and sale and securitisation of tax and social security credits), which registration in national accounts affects – from an accounting perspective – the financing capacity of other institutional sectors but has no real effect on 2003. Deducted from the effect of these two operations, the private sector net financing capacity should reach values above 2 per cent of GDP, which is unprecedented since mid-1990s. The improvement of this balance reflects a net financing capacity effort from households, and a marked correction in net borrowing requirements of private companies, in a context of increased savings by households and companies, and mainly of a marked reduction in investment.

In the first half of 2003 the deficit resulting from the sum of the current and capital account narrowed to 4.7 per cent of GDP[42] (7.6 per cent of GDP in the first half of 2002) (Table 8.1). This reflects favourable behaviours of both the current account and the capital account. The improvement of the current account deficit from 8.9 to 6.6 per cent of GDP resulted from a new reduction of the goods account deficit, an increase in the services

Table 8.1

BALANCE OF PAYMENTS

EUR million

	Jan.-Dec. 2002	January-June 2002			January-June 2003			Balance as a percentage of GDP		
	Balance	Debit	Credit	Balance	Debit	Credit	Balance	Jan.-Dec.02	Jan.-Jun. 02	Jan.-Jun. 03
Current Account	**-9 261.5**	**30 784.1**	**25 116.1**	**-5 668.0**	**29 344.1**	**25 091.3**	**-4 252.8**	**-7.1**	**-8.9**	**-6.6**
Goods	-12 579.2	20 923.7	14 707.7	-6 216.1	20 235.0	15 023.1	-5 211.9	-9.7	-9.8	-8.1
Services	3 162.5	3 556.1	4 469.3	913.2	3 383.0	4 623.0	1 240.0	2.4	1.4	1.9
Transport	-394.1	1 118.3	907.7	-210.6	1 086.8	931.9	-154.9	-0.3	-0.3	-0.2
Travel and tourism	3 783.4	1 151.5	2 530.7	1 379.2	1 123.1	2 616.5	1 493.4	2.9	2.2	2.3
Insurance services	-71.3	77.7	42.3	-35.4	78.2	34.4	-43.8	-0.1	-0.1	-0.1
Royalties and license fees	-278.4	164.3	14.8	-149.5	120.5	17.5	-103.0	-0.2	-0.2	-0.2
Other services	145.9	950.1	896.7	-53.4	893.3	955.6	62.3	0.1	-0.1	0.1
Government services	-23.0	94.2	77.1	-17.1	81.0	67.0	-14.0	0.0	0.0	0.0
Income	-3 327.8	4 849.6	3 037.6	-1 812.0	4 364.9	2 672.6	-1 692.3	-2.6	-2.9	-2.6
Compensation per employees	-36.1	84.9	69.4	-15.5	82.9	67.4	-15.5	0.0	0.0	0.0
Investment income	-3 291.8	4 764.7	2 968.2	-1 796.5	4 282.0	2 605.2	-1 676.8	-2.5	-2.8	-2.6
Current transfers	3 483.0	1 454.7	2 901.6	1 446.9	1 361.2	2 772.6	1 411.4	2.7	2.3	2.2
Official transfers	343.5	841.0	852.4	11.4	844.8	826.4	-18.4	0.3	0.0	0.0
Private transfers	3 139.6	613.7	2 049.1	1 435.4	516.4	1 946.1	1 429.7	2.4	2.3	2.2
Capital Account	**1 978.7**	**103.4**	**937.5**	**834.1**	**88.4**	**1 321.9**	**1 233.5**	**1.5**	**1.3**	**1.9**
Capital transfers	1 974.1	90.0	925.5	835.5	77.3	1 302.2	1 224.9	1.5	1.3	1.9
Official transfers	2 008.8	30.4	870.0	839.5	15.8	1 265.4	1 249.7	1.5	1.3	1.9
Private transfers	-34.7	59.6	55.5	-4.1	61.5	36.8	-24.7	0.0	0.0	0.0
Acquisition/disposable of non-produced non-financial assets	4.6	13.4	12.0	-1.4	11.1	19.7	8.6	0.0	0.0	0.0
Financial Account	**8 690.3**	**319 186.2**	**325 058.5**	**5 872.3**	**1 055 068.3**	**1 059 165.0**	**4 096.7**	**6.7**	**9.2**	**6.4**
Direct investment	796.6	10 766.7	13 096.5	2 329.8	12 945.4	13 728.6	783.2	0.6	3.7	1.2
Portuguese investment abroad	-3 725.9	1 909.0	1 787.2	-121.8	1 588.6	2 215.3	626.7	-2.9	-0.2	1.0
Foreign investment in Portugal	4 522.4	8 857.7	11 309.3	2 451.6	11 356.8	11 513.3	156.5	3.5	3.9	0.2
Portfolio investment	3 112.9	92 828.3	92 687.1	-141.3	137 652.9	129 765.1	-7 887.8	2.4	-0.2	-12.3
Assets	-7 476.8	43 124.6	39 275.7	-3 848.9	72 592.8	64 189.7	-8 403.1	-5.8	-6.1	-13.1
Liabilities	10 589.7	49 703.7	53 411.3	3 707.6	65 060.1	65 575.4	515.3	8.2	5.8	0.8
Financial derivatives	-11.8	1 692.5	1 618.8	-73.7	1 889.8	1 946.0	56.2	0.0	-0.1	0.1
Other investment	5 907.4	187 893.7	192 557.8	4 664.1	873 946.7	881 104.2	7 157.6	4.6	7.3	11.1
Assets	-3 582.0	99 983.2	91 130.2	-8 853.0	300 812.7	294 355.0	-6 457.8	-2.8	-13.9	-10.0
Liabilities	9 489.5	87 910.5	101 427.6	13 517.1	573 133.9	586 749.3	13 615.3	7.3	21.3	21.2
Reserve assets	-1 114.9	26 005.0	25 098.4	-906.7	28 633.5	32 621.0	3 987.5	-0.9	-1.4	6.2
Errors and omissions	**-1 407.4**			**-1 038.4**			**-1 077.4**	**-1.1**	**-1.6**	**-1.7**
Memo:										
Current Account + Capital Account	**-7 282.9**	**30 887.5**	**26 053.6**	**-4 833.9**	**29 432.5**	**26 413.2**	**-3 019.3**	**-5.6**	**-7.6**	**-4.7**

account surplus and a narrowing of the income account deficit. Conversely, there was a slight reduction in the current transfers surplus (Chart 8.1).

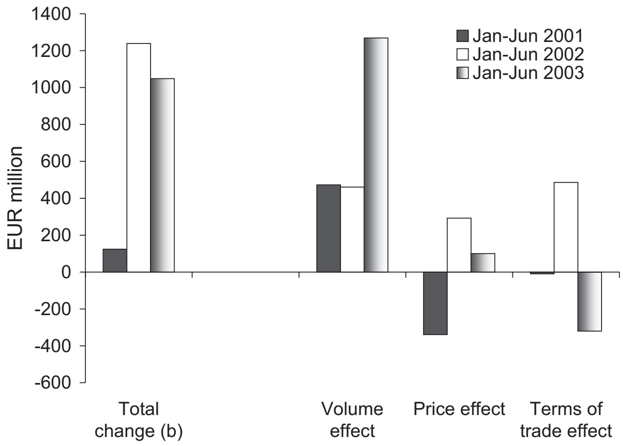
The goods account deficit narrowed from 9.8 per cent of GDP in the first six months of 2002 to 8.1 per cent of GDP in the first half of 2003. Behind this was mainly a favourable volume effect, since, in real terms, exports grew by around 4.5 per cent, while imports decreased by 2.8 per cent (Chart 8.2)[43]. Conversely, developments in the differential of export and import prices had a negative impact on the trade of goods balance with abroad[44].

In the first half of 2003, the services account surplus amounted to 1.9 per cent of GDP, 0.5 p.p. above the level recorded in the same period of 2002. This surplus continued to be basically determined by the travel and tourism balance. The surplus of this item increased from 2.2 to 2.3 per cent of GDP in the first half of 2003. Nominal tourism receipts increased by 3.4 per cent from the same period last year, accelerating when compared with the previous year (0.5 per cent in the first half of 2002[45]). This behaviour is in line with developments in nights spent by foreigners in Portuguese hotels and similar establishments. Travel and tourism expenditure abroad by residents decreased by 2.5 per cent (an increase of 1.4 per cent in the first half of 2002), in line with developments in activity and disposable income and with the low level of household confidence in the first half of 2003, taking into account that tourism abroad is surely one of the consumer components with higher revenue elasticity.

In the first half of 2003 the income account deficit decreased from 2.9 to 2.6 per cent of GDP vis-à-vis the same period in the previous year, as a result of developments in the investment income deficit. By type of investment, the direct investment income deficit narrowed from 1.2 to 0.9 per cent of GDP and the portfolio investment deficit from 0.4 to 0.3 per cent of GDP, while the other investment income deficit remained unchanged at 1.3 per cent of GDP. The net debtor position of the Portuguese economy in this last type of investment has been increasing, while the decline in interest rates has allowed for the stabilisation of the interest burden.

Chart 8.2

CHANGE IN THE TRADE ACCOUNT BREAKDOWN[(a)]



Notes:

(a) The change in the trade balance can be broken down into:

- volume effect – effect of the change of exported and imported volumes
  $[X_{t-1}.Vx_t.(1+Px_t)]-[M_{t-1}.Vm_t.(1+Pm_t)]$
- price effect – effect of the average growth of external trade prices
  $(X_{t-1}.P_t)-(M_{t-1}.P_t)$
- terms of trade effect – effect of the relative change in export and import prices
  $[X_{t-1}.(Px_t-P_t)]-[M_{t-1}.(Pm_t-P_t)]$

  where:

  X_{t-1} and M_{t-1} – exports and imports in year *t-1*, at current prices

  Vx_t e Vm_t – growth of exports and imports, in volume terms, in year *t*

  Px_t e Pm_t – growth of export and import prices, in year *t*

  Pt – average growth of external trade prices, in year t $[(Px_t+Pm_t)/2]$

  Note that the volume effect includes the price-volume cross effect, so that the sum of the three effects adds up to the total change. This cross-effect, however, is not significant.

(b) A negative change means an increase in the trade deficit.

(42) For the calculation of the ratios of the different components of the Balance of Payments as a percentage of GDP in the first halves of 2002 and 2003, use was made of half-yearly estimates of nominal GDP, calculated by the Banco de Portugal.

(43) See section 5. *Expenditure and Output.*

(44) According to the Banco de Portugal estimates, based on data provided by the *INE*, the year-on-year rates of change of deflators of goods exports and imports were -2.3 and -0.5 per cent, respectively in the first half of 2003 (which compare with -2.1 and -4.7 per cent in the first half of 2002).

(45) It should be noted that, over this period, nominal tourism receipts seem to have been affected by concerns of terrorist attacks in the wake of the events of 11 September 2001.

Table 8.2

FINANCIAL ACCOUNT[(a)]

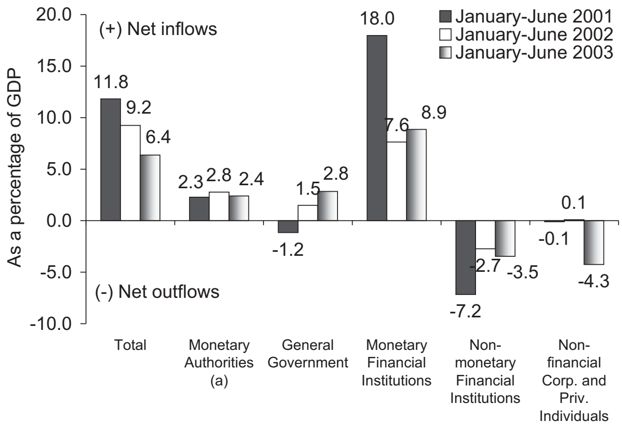
As a percentage of GDP

	Jan.-Dec. 2002	January-June 2002			January-June 2003		
	Net change	Change in liabilities	Change in assets	Net change	Change in liabilities	Change in assets	Net change
Financial Account	6.7	28.3	-19.1	9.2	19.3	-12.9	6.4
Direct investment	0.6	3.9	-0.2	3.7	0.2	1.0	1.2
Portfolio investment	2.4	5.8	-6.1	-0.2	0.8	-13.1	-12.3
Financial derivatives	0.0	-2.7	2.5	-0.1	-2.9	3.0	0.1
Other investment	4.6	21.3	-13.9	7.3	21.2	-10.0	11.1
Reserve assets	-0.9	-	-1.4	-1.4	-	6.2	6.2
By institutional sector of the resident investor:							
Monetary Authorities	0.1	3.7	-0.9	2.8	2.0	0.4	2.4
Portfolio investment	0.4	-	0.2	0.2	-	-6.6	-6.6
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment	0.6	3.7	0.2	4.0	2.0	0.8	2.8
Reserve assets	-0.9	-	-1.4	-1.4	-	6.2	6.2
General government	3.1	1.5	0.0	1.5	2.5	0.3	2.8
Direct investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portfolio investment	2.7	1.9	-0.4	1.5	3.4	-0.2	3.2
Financial derivatives	0.2	-0.5	0.4	-0.1	-0.8	0.6	-0.3
Other investment	0.2	0.0	0.0	0.1	-0.1	0.0	-0.1
Monetary Financial Institutions	6.0	17.5	-9.9	7.6	18.7	-9.8	8.9
Direct investment	0.3	0.1	0.2	0.4	0.0	-0.2	-0.2
Portfolio investment	-1.0	1.7	-0.4	1.4	-0.4	-2.2	-2.6
Financial derivatives	-0.1	-2.0	1.9	-0.1	-1.5	1.9	0.3
Other investment	6.8	17.7	-11.6	6.0	20.5	-9.3	11.3
Non-Monetary Financial Institutions	-1.0	1.6	-4.4	-2.7	-1.2	-2.2	-3.5
Direct investment	0.5	0.8	0.4	1.2	-1.6	1.0	-0.7
Portfolio investment	-1.3	0.9	-4.8	-3.9	0.9	-3.6	-2.7
Financial derivatives	0.0	-0.1	0.1	0.0	-0.5	0.4	0.0
Other investment	-0.2	0.0	-0.1	-0.1	0.0	-0.1	-0.1
Non-financial Corporations and Private Individuals	-1.5	4.0	-3.9	0.1	-2.7	-1.6	-4.3
Direct investment	-0.2	3.0	-0.9	2.1	1.8	0.2	2.1
Portfolio investment	1.6	1.3	-0.8	0.5	-3.1	-0.4	-3.6
Financial derivatives	0.0	-0.1	0.2	0.1	-0.1	0.1	0.0
Other investment	-2.8	-0.2	-2.4	-2.6	-1.3	-1.5	-2.8

(a) A (+) sign means an increase in foreign liabilities or a decrease in foreign assets, i.e. a financial inflow.
A (-) sign means a decrease in foreign liabilities or an increase in foreign assets, i.e. a financial outflow.

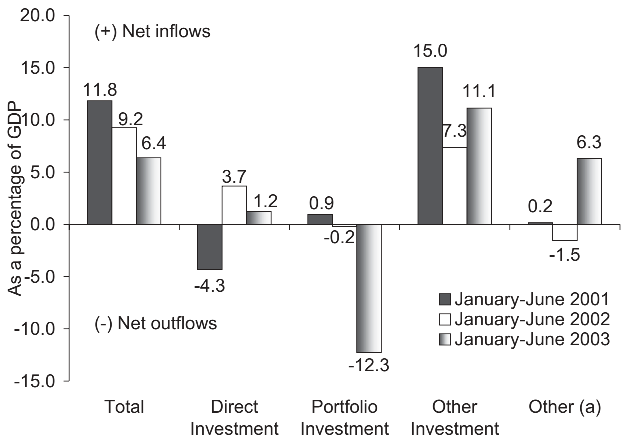
The current transfers surplus decreased slightly from 2.3 to 2.2 per cent of GDP in the first half of 2003 vis-à-vis the same period of 2002. The public transfers component recorded a further virtually nil balance, while private transfers surplus, comprised mainly of emigrant and immigrant remittances, narrowed slightly. Emigrant remittances, which are registered in the balance of payments as credits, fell by 7.9 per cent, for which contributed in particular remittances from France. On the debit side, immigrant remittances fell sharply (-26.5 per cent), as a result of a base effect (they had grown by 116.3 per cent in the first half of 2002).

Chart 8.3
FINANCIAL ACCOUNT
Balances



Note:
(a) Includes international payments made by resident monetary financial institutions through the *TARGET* system as of January 1999.

Chart 8.4
FINANCIAL ACCOUNT
Balances



Note:
(a) Includes Reserve Assets and Financial Derivatives.

The capital account surplus increased from 1.3 to 1.9 per cent of GDP from the first half of 2002 to the same period of 2003, due to an increase in public transfers from the European Union to Portugal. It should be noted that receipts within the scope of ERDF grew significantly in the first half of the year (94.1 per cent compared with the same period in the previous year).

The financial account recorded a net inflow equivalent to 6.4 per cent of GDP, compared with 9.2 per cent of GDP in the first six months of 2002 (Table 8.2). With regard to financial flows by resident institutional sector (Chart 8.3), monetary financial institutions continued to be the sector with the highest contribution to net financial inflows into the Portuguese economy in the first half of 2003 (8.9 per cent of GDP, 1.2 p.p. above the value in the same period of 2002). The financial transactions on general government assets and liabilities were also behind financial inflows into the Portuguese economy (2.8 per cent of GDP, 1.3 p.p. above the value recorded in the first half of 2002). Operations conducted by monetary authorities (2.4 per cent of GDP) also contributed to net financial inflows into the Portuguese economy, albeit to a lesser extent than in the same period in the previous year. Conversely, financial transactions with abroad by the remaining resident institutional sectors resulted in net outflows.

By type of investment (Chart 8.4), transactions included in other investment continued to be the main source of net financial inflows (7.3 and 11.1 per cent of GDP in the first six months of 2002 and 2003, respectively). These inflows resulted mainly from operations with abroad conducted by monetary financial institutions. As in the previous year, the raising of resources by these institutions was mainly associated with long-term loans and deposits (10.0 per cent of GDP, against 7.5 per cent of GDP in the first half of 2002), related to the channelling to resident banks of funds raised through the issuance of medium and long-term debt securities in international markets, by subsidiaries abroad of those banks. In the first half of 2003, the outstanding amounts of loans and deposits conducted via the TARGET system reached 3.1 per cent of GDP (3.2 per cent in the first six months of 2002), also contributing to a net inflow over this period. Conversely, operations comprised in the item other investment by non-financial corporations and private individuals, mostly deposits abroad, resulted in a net outflow (2.6 and 2.8 per cent of GDP in the first halves of 2002 and 2003 respectively).

Portfolio investment operations corresponded to a net outflow equivalent to 12.3 per cent of GDP, significantly above that recorded in the first half of 2002 (0.2 per cent of GDP). This reflects both an increase in net investment by residents in foreign securities and a reduction in investment by non-residents in Portuguese securities. With regard to foreign portfolio investment in Portugal, there was a net inflow equivalent to 0.8 per cent of GDP, significantly below that registered in the first six months of 2002 (5.8 per cent of GDP), to which chiefly contributed lower investment in bonds and other long-term debt securities (2.4 per cent of GDP in the first half of 2003, compared with 7.6 per cent in the first half of 2002). In turn, Portuguese portfolio investments abroad corresponded to a net outflow equivalent to 13.1 per cent of GDP, clearly above that recorded in the first six months of the previous year (6.1 per cent), though there are reasons of merely methodological nature behind this evolution. In fact, the increase in portfolio investment abroad resulted, to a large extent, from the recomposition of external portfolio assets of the Banco de Portugal. Even though there were no additional applications outside Portugal, this recomposition lead to an accounting reclassification, which implied a shift in the foreign assets of the Banco from the item "reserve assets" to "portfolio assets".

In the first half of 2003, resident investors re-oriented most of their investment abroad to bonds and other long-term debt securities (7.7 per cent of GDP, compared with 4.5 per cent in the first six months of the previous year), despite a significant increase in net investment in money market instruments (4.5 per cent of GDP, against 0.4 per cent of GDP in the same period of the previous year).

Finally, direct investment operations in the first six months of 2003 resulted in a net inflow into the Portuguese economy equivalent to 1.2 per cent of GDP, clearly below that recorded in the same period of the previous year (3.7 per cent of GDP). Stress should be laid on the reduction in foreign direct investment in Portugal (0.2 per cent of GDP, compared with 3.9 per cent of GDP in the first six months of 2002), partly offset by Portuguese direct disinvestment abroad, which corresponded to a net inflow equivalent to 1.0 per cent of GDP (outflow of 0.2 per cent of GDP in the first half of 2002).

9. CONCLUSION

Developments in the Portuguese economy in 2003 were broadly characterised by a decline in output, associated with a strong fall in private domestic demand. This represents a strengthening of the adjustment process of economic agents, against the background of the strong increase in indebtedness in recent years. For the first time since 1997, the private sector shows net lending in 2003, when adjusted for effects resulting from special operations substantially reducing the value of the general government deficit and giving rise, correspondently and without real expression this year, to borrowing requirements of households and enterprises.

The intensification of the endogenous adjustment of the private sector financial situation is a favourable development, albeit associated with a negative contribution to output growth. It should have occurred in a more favourable external environment, but it was impossible to sustain domestic demand growth financed by an increase in household and corporation indebtedness as in the past.

The length and the pace of the ongoing adjustment process will be determined by three factors. The first factor is the external environment of the Portuguese economy. In the current circumstances, a recovery of growth in Portugal can only be fostered in a sustained manner by a strong recovery in the main Portuguese export markets, mainly European markets. It should be taken into account that this external recovery will, to some extent, be associated with a rise in interest rates, which will moderate the upward effect of the external recovery on domestic demand, through increased liquidity constrains of the most indebted households and corporations.

The second factor is the consolidation of Portuguese public finances, which will be inevitable in the coming years and will need to translate into a reduction in the general government primary current expenditure and into an efficiency gain in the tax collection system, namely through reduced tax evasion. In 2002 and 2003 the first steps were taken in that direction, but they were largely countered by cyclical and structural effects of social expenditure growth. Indeed, on the one hand, cyclical developments led to an increase in expenditure with unemployment benefits, while, on the other hand, pension expenditure (both from the social security system of the private sector and the civil servants system), continues to grow at rates clearly above those of nominal GDP to a large extent due to structural reasons.

Given the current magnitude of the fiscal deficit, when adjusted for the effects of temporary special measures, the effort of fiscal consolidation will have to be intensified, inevitably conditioning the expansion of output and private expenditure over the coming years. Despite its negative effects on growth over the short/medium run, the effort of fiscal consolidation should not be postponed, because otherwise it would increase the probability of a future sharper and much more painful correction, with serious consequences for the Portuguese economy.

The third factor decisively conditioning the adjustment of the Portuguese economy and the pace of recovery of economic activity is wage developments. In 2003, as in the two previous years, labour productivity growth is expected to remain virtually nil. In the first half of the year productivity growth was negative. Despite their significant deceleration, private sector wages maintained a high average growth, taking into account the current business cycle conditions of the Portuguese economy. Unit labour costs continued to increase considerably more in the Portuguese economy than in most trading partners, causing a loss of competitiveness in the sectors that are more exposed to competition (which has been partly absorbed by a reduction in the profit margins of these sectors). A more realistic wage growth will be a moderating factor of households' disposable income, and one of the core elements leading to a delayed and subdued response of private domestic demand to the upturn in external demand. However, private sector wages do not have to necessarily accompany the degree of wage moderation in the public sector.

The alternative scenario, much less favourable, would be that of real wages growth persistently above productivity growth which would induce a strong fall in employment and a corresponding increase in structural unemployment, generating domestic conditions in the Portuguese economy leading to a protracted recession and to a significant worsening of social costs. It is clearly preferable that wages continue to show, also during the slowdown, the flexibility to cyclical conditions as in the past, which made it possible to overcome, without structural unemployment increases, the previous recessive periods of the Portuguese economy.

Completed with information available at end-October 2003

Box: ECB'S EVALUATION OF ITS MONETARY POLICY STRATEGY

On 8 May, the Governing Council of the ECB completed an evaluation of the ECB's monetary policy strategy. As a result of this evaluation, and albeit confirming the main elements of the strategy announced in 1998, the Governing Council announced a clarification of the definition of price stability and introduced a number of changes in the communication policy.

The Governing Council confirmed the definition of price stability announced in 1998[1] *and made it clear that it aims to maintain the inflation rate below, but close to, 2 per cent over the medium term. The assessment of the quantitative specification of the objective to be pursued by the ECB over the medium term was based on a review of the costs of inflation and arguments for tolerating small positive inflation rates. Inflation, even if moderate, entails welfare costs, which are associated with, for example, distortions in relative prices, rises in risk premia, distortionary effects of taxation, costs incurred due to a high frequency of price changes, and changes in the distribution of income and wealth. However, there are other factors that caution against aiming at zero inflation, such as the higher probability of nominal interest rates falling close to zero, limiting the room for manoeuvre of the central bank against risks of deflation, the existence of a positive measurement bias in the price index and the persistence of "equilibrium" inflation differentials across the members of a monetary union, which would force some of these members to maintain a negative inflation in order for the union average to be zero.*

The definition of price stability announced in October 1998 included an upper bound of 2 per cent, but it did not specify a lower bound, reflecting the uncertainty surrounding the size of a potential bias in HICP inflation. The clarification of 8 May that the Governing Council aims to maintain inflation rates below, but close to, the upper bound of the definition, shows the ECB's commitment in providing a sufficient safety margin to guard against the risks of deflation and also addresses the issue of the possible presence of a measurement bias in the HICP and the implication of equilibrium inflation differentials within the euro area.

With regard to changes to the format of public communication, the Governing Council wished to clarify some aspects of the communication on the overall judgement on the risks to price stability. First, the two-pillar approach is now referred to as "monetary analysis" and "economic analysis". Second, the ECB President's Introductory Statement to the ECB's monthly press conference was restructured in order to better demonstrate that the monetary analysis mainly serves as a means of cross-checking, from a medium to long-term perspective, the indications of short to medium-term risks to price stability coming from economic analysis. Thus, from 8 May onwards, the President's Introductory Statement, which started with the analysis of the first pillar followed by the analysis of the second pillar, starts with a broadly based economic analysis, followed by the monetary analysis. Moreover, the end of the statement now provides a cross-check of the information from these two complementary perspectives, followed by an overall conclusion on the risks to price stability. Finally, the Governing Council decided to no longer conduct a review, on an annual basis, of the reference value for monetary growth, in order to underscore the longer-term nature of the reference value with regard to the assessment of monetary developments.

(1) "Price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2 per cent. Price stability is to be maintained over the medium term."

THE BANKING SYSTEM IN THE FIRST HALF OF 2003

1. INTRODUCTION

In the first half of 2003, the activity of the Portuguese banking system[1] recovered somewhat, mainly when compared with the second half of 2002[2]. This recovery was consistent with the improved situation in international financial markets, although credit continued to decelerate in line with the current position of the economy in the business cycle.

Thus, partly reflecting the valuation of the stock market, there was a recovery in the value of the portfolio of securities and equities to levels close to those recorded a year earlier. In turn, in view of the stagnation that continued to characterise developments in deposits from customers, the Portuguese banking system resumed the issuance of debt securities in these markets, boosted by the improved access conditions to international financial markets.

In view of the persistence of national and international unfavourable economic environment, the internationalisation effort of Portuguese banks continued suspended, in the first half of 2003, having some banking groups even announced sales of non-strategic positions. Nevertheless, banks continued with their internal processes of reorganisation and technological modernisation, aimed at further efficiency gains. In parallel with the ongoing restructuring programmes, the introduction of more sophisticated risk management systems is also contributing to the improvement of the competitive conditions of the Portuguese banking system.

In the course of 2003, credit granted by the banking sector to the non-financial private sector continued to decelerate. This trend was seen in loans to non-financial firms and to households. The deceleration in loans to households was associated with developments on loans for house purchase, albeit the significant rates of change still recorded by this aggregate. Loans to households for other purposes have shown a close to zero growth rate. In addition and similarly to past years, banking institutions have reduced their credit portfolio by means of loan securitisation operations.

In line with the position in the business cycle of the Portuguese economy, the quality of the credit

(1) The analysis of the banking system made in this section is chiefly based on data on consolidated activity. When it is not possible to obtain the necessary disaggregation by sector or instrument for the analysis, aggregates on an individual basis or from the Monetary and Financial Statistics (MFS) are used (for details, see Box II.8.1, entitled "Information used in the analysis of the Portuguese banking system", in the 2002 issue of the *Annual Report* of the Banco de Portugal). Unless otherwise stated, the aggregate "Portuguese banking system" refers to banks (including Caixa Económica Montepio Geral), other savings banks and mutual agricultural credit banks, being excluded banks having their head office or carrying on their activity exclusively in the Madeira off-shore and/or carrying on their predominant activity with non-residents. Branches of credit institutions having their head office in another Member State of the European Union are considered as banks and included in the above said aggregate (except those that cannot be classified as Monetary Financial Institutions) as well as branches of credit institutions originating from third countries.
In the text, there are references to the consolidated accounts of the banking system as a whole and of a subset of domestic institutions. This latter aggregate corresponds to the institutions with management controlled by resident entities, thus excluding institutions incorporated under the Portuguese law that are subsidiaries of non resident banking groups (under the supervision of the Banco de Portugal) and branches of credit institutions having their head office in the European Union (not under the supervision of the Banco de Portugal). This distinction is of interest because these non-domestic institutions can obtain financing abroad from entities with which they have a close relationship, and therefore the type of funding and its maturity have a minor relevance (as compared to domestic institutions), since it is typically intra-group financing.

portfolio of the Portuguese banking system continued to deteriorate. This was reflected in the increase in delinquency rates. Credit overdue increased sharply in the first half of 2003. Nevertheless, the impact on the delinquency rates was cushioned by the increasing and significant amount of credit write-offs/ write-downs.

Mainly reflecting the negative contribution of the financial margin, the profitability indicators of the Portuguese banking system declined in the first half of 2003 as compared with the corresponding period in 2002. However, given the performance in the second half of 2002, both the return on assets and the return on equity were clearly more favourable. Behind this development are the positive trend of net commissions and net income from investee companies and the reduction in net provisions set up in the half year under review (the latter, however, having a neutral contribution to the change in income over the period).

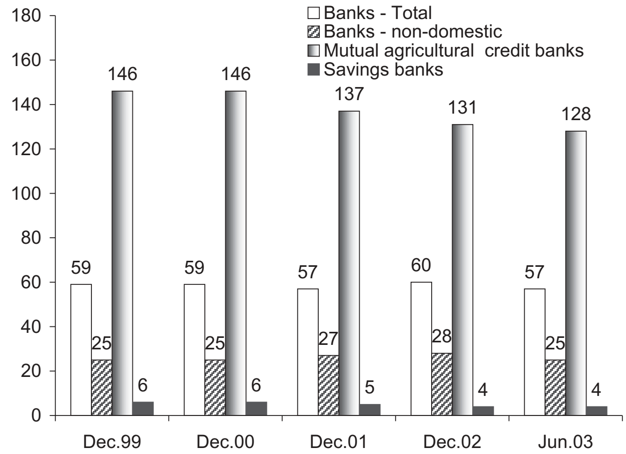
Although there was a rise in total equity (which reflected a capital increase in one of the banking groups), it was offset by an increase in market and credit risk coverage requirements. This rise resulted exclusively from the widening of the consolidation boundary of the banking system, given the persistence of the downward trend of credit in most segments. Thus, at the end of June, the capital adequacy ratio of the Portuguese banking system remained unchanged at 9.8 per cent from end-2002 (Table 1).

2. MARKET STRUCTURE

At the end of June 2003 there were 57 banks operating in Portugal, 25 of which were non-domestic banks[3]. On that date, the Portuguese banking system still included 4 savings banks and 128 mutual agricultural credit banks (Chart 1). In the course of the first half of the year, 3 non-domestic institutions ceased their activity as banks.

Chart 1

NUMBER OF BANKS IN THE BANKING SYSTEM



Note: "Banks" includes *Caixa Económica Montepio Geral* and excludes banks having their head office and carrying on their activity chiefly in Madeira's off-shore and/or carrying on their activity chiefly with non-residents.

Compared with end-2002, the structure of the banking system remained virtually unchanged. Banks continued to dominate the activity of the Portuguese banking system, accounting for more than 95 per cent in terms of net assets, credit to customers and resources from customers (Table 2).

The market share of the five major groups as a whole continued to exceed 75 per cent, persisting however a slight declining trend in the overall market share after 2000 (Table 3). Unlike in 2002, the market share of non-domestic banks declined slightly in the first half of 2003 (Table 4), remaining however around 17 per cent in terms of assets and credit to customers, and 14 per cent in terms of resources from customers and number of branches.

In the first half of the year, the number of branches declined (by approximately 50, since the beginning of the year), with a reduction of around 1.0 per cent in employment of the banking system, compared with the same period in 2002 (Table 1)[4].

(2) Developments in the Portuguese banking system on a consolidated basis in 2003 are influenced by the widening of the consolidation boundary of one of the domestic banking groups, which included another subsidiary abroad, in the first quarter of the year. This was reflected in most items of the balance sheet and of the profit and loss account, on a consolidated basis. Whenever developments in the indicators analysed in the text are significantly affected by this change, a reference is made either in the text (if that change determines the trend of the indicator in question), or in a footnote.

(3) This subset includes subsidiaries (meaning institutions having their head office in Portugal, with the majority of their capital held by banking groups having their head office in other countries) and branches of foreign banks, including branches of banks having their head office in European Union countries.

Table 1

SUMMARY TABLE

On a consolidated basis

	1999	2000		2001		2002		2003
	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.
As a percentage of total average assets:								
Financial margin	2.45	2.30	2.21	2.26	2.24	2.10	2.12	2.04
Other current income	1.33	1.45	1.30	1.21	1.17	1.25	1.14	1.31
Banking margin	3.77	3.75	3.51	3.47	3.41	3.35	3.26	3.35
Administrative costs[(a)]	2.07	1.90	1.79	1.70	1.73	1.66	1.69	1.68
Extraordinary gains	0.40	0.12	0.27	0.01	0.01	0.09	0.06	0.03
Depreciation for the year	0.31	0.26	0.25	0.23	0.24	0.22	0.24	0.23
Net provisioning	0.66	0.56	0.63	0.38	0.45	0.54	0.61	0.54
Taxes on profit for the year	0.20	0.24	0.19	0.22	0.16	0.17	0.13	0.14
Income before minority interest	0.92	0.91	0.91	0.95	0.85	0.85	0.65	0.79
Net income for the year	0.70	0.59	0.70	0.78	0.69	0.73	0.53	0.66
Return on equity (ROE)[(b)]	14.7	14.7	15.1	16.5	14.9	15.3	11.7	14.1
Return on equity (ROE)[(c)]	16.1	13.8	16.6	19.1	17.2	18.8	13.7	16.7
Administrative expenses (as a percentage of banking margin)[(d)]	63.1	50.7	58.2	49.1	57.6	49.6	59.1	56.9
Coverage of interbank liabilities by highly liquid assets (percentage)	101.4	91.8	88.7	89.0	91.5	94.2	87.4	88.1
Credit and interest overdue (as a percentage of gross credit)	n.a.	n.a.	2.18	2.11	2.12	2.21	2.26	2.53
Specific provisioning of credit (as a percentage of gross credit)	1.78	1.67	1.48	1.41	1.42	1.44	1.42	1.61
Credit and interest overdue, net of specific provisions (as a percentage of credit net of specific provisions)	n.a.	n.a.	0.72	0.71	0.71	0.78	0.85	0.93
Rates of change:								
Income before minority interest	17.4	n.a.	14.9	18.6	3.4	-3.4	-18.4	-4.4
Net income for the year	15.4	n.a.	16.8	48.2	9.4	0.3	-18.7	-5.6
Credit to customers (gross)	25.9	0.0	21.7	17.5	13.2	9.6	7.0	6.3
Resources from customers	9.3	0.0	9.9	4.6	7.0	7.4	1.4	0.7
Capital adequacy ratio (percentage)[(e)]	10.8	9.5	9.2	9.7	9.5	9.8	9.8	9.8
Employees (number)	61 969	61 489	58 485	58 454	56 134	55 100	54 894	54 574
Branches (number)	5 477	5 606	5 649	5 582	5 586	5 486	5 547	5 496
Average total assets (€ million)	204 773	229 298	237 223	259 915	264 622	278 558	280 717	288 365
Average equity capital (€ million)	12 819	14 124	14 311	14 970	15 001	15 548	15 644	16 105

Notes:

(a) Including staff costs and other administrative costs.

(b) Results before deduction of minority interest as a percentage of equity capital.

(c) Results after deduction of minority interest as a percentage of equity capital.

(d) Including staff costs, other administrative costs and depreciation.

(e) Own funds/(Total requirements*12.5)

Table 2

BANKING SYSTEM STRUCTURE[(a)]

30 June 2003

Number; € million

	Banks[(b)]	%	of which: non-domestic	%	Saving banks	%	Mutual agricultural credit banks	%
Number of institutions	57	30.2	25	13.2	4	2.1	128	67.7
Net assets	294 649	97.1	50 473	16.6	218	0.1	8 683	2.9
Credit to customers	199 724	97.0	34 028	16.5	136	0.1	5 938	2.9
Resources from customers	152 089	95.2	21 783	13.6	195	0.1	7 455	4.7
Branches	4 781	87.0	805	14.6	13	0.2	702	12.8
Employees	51 541	94.4	8 695	15.9	80	0.1	2 953	5.4

Notes:
(a) On a consolidated basis for balance sheet variables (assets, credit and resources) and individual data for the number of employees and branches. Excludes banks having their head office and carrying on their activity exclusively in Madeira's off-shore and/or carrying on their activities chiefly with non-residents.
(b) Including *Caixa Económica Montepio Geral.*

These developments seem to continue to reflect the internal reorganisation processes carried on by banks, namely in terms of rationalisation of labour and technological modernisation in the provision of services.

3. BANKING ACTIVITY

In the first half of 2003, banking activity, on a consolidated basis and measured in terms of total assets, increased 4.7 per cent, year-on-year, accelerating sharply from 2002 as a whole (1.6 per cent) (Tables 5 and 6)[(5)]. It should be noted that in 2002, developments in the Portuguese banking system, throughout the whole year, were characterised by a clear slowdown in activity, broadly based across all asset items, and by a virtual stagnation in resources from customers. Despite the slowdown in credit and the significant amount of credit securitisation operations carried out by several banking groups — creating room for some improvement in the liquidity of the banking system — it was necessary to resort to other financing sources of banking activity. In the first half of the year, this fact

Table 3

MARKET SHARE OF THE FIVE MAJOR BANKING GROUPS

On a consolidated basis

Per cent

	2000 Dec.	2001 Dec.	2002 Dec.	2003 Jun.
Credit to customers	81.6	80.1	79.0	78.8
Resources from customers	80.9	79.0	77.8	76.2
Assets	81.8	79.6	78.8	78.8
Branches	71.4	69.5	67.5	66.4

Note: Banks having their head office and carrying on activity exclusively in Madeira's off-shore are not taken into account.

Table 4

MARKET SHARE OF NON-DOMESTIC BANKS

On a consolidated basis

Per cent

	2000 Dec.	2001 Dec.	2002 Dec.	2003 Jun.
Credit to customers (gross)	15.9	16.8	17.3	17.0
Resources from customers	14.9	15.7	14.8	14.3
Assets	16.0	17.8	17.4	17.1
Branches	14.0	15.6	14.8	14.6

Note: Banks having their head office and carrying on activity exclusively in Madeira's off-shore are not taken into account.

translated into the continuation of market debt issuance. In the second half of the year, the turbulence in international financial markets brought about a significant decline in the recourse to these markets by the Portuguese banks. Temporarily this gave rise to an increased importance of financing in interbank markets, as well as to the sale of part of the portfolio of fixed-income securities and equities considered less strategic (also as part of the restructuring process of some banking groups).

In the first half of 2003, the growth pace of credit to customers continued moderated, and the share of this aggregate in total assets of the banking system was reduced. In contrast, the slowdown in credit granting to customers was cushioned by the positive contribution of investments, both in the interbank market (mainly abroad) and in securities and financial fixed assets (net of provisions) (Table 6).

Turning to the liabilities side, both borrowing from credit institutions abroad and issuance debt securities increased (as in the same period in 2002). In turn, resources from customers kept on a downward trend and in June 2003 they were virtually unchanged from their level at the end of 2002. In particular, the year-on-year rate of change of customers' deposits declined further.

(4) The aggregates relating to the number of workers and the number of branches do not cover subsidiaries abroad of the Portuguese banks.

(5) The widening of the consolidation boundary of the banking system contributed around 1.5 percentage points to the total year-on-year change.

(6) Unless otherwise specified, the credit aggregate referred to in this section is the stock of claims on customers, net of specific provisioning, shown in the balance sheet of the banking system, on a consolidated basis. When there is a reference to credit granted by the banking sector, according to the monetary and financial statistics, the analysis will be based on the amounts recorded in the balance sheets of MFI — which do not include loans originally granted by these institutions and securitisated which are withdrawn from the balance sheet. Whenever justified by the analysis, reference shall be made in a footnote to aggregates of bank loans adjusted for securitisation operations and for reclassifications and write-offs/write-downs. In this case, the rates of change referred to above are calculated on the basis of adjusted balances (January 2000=100).

3.1. Credit

In the first half of 2003, the growth rate of credit granted by the banking system[6] continued on a downward trend. Thus, the year-on-year rate of change in claims on customers stood at 6.1 per cent at the end of June 2003, i.e. 0.9 percentage points below the figure recorded in December 2002 (9.6 per cent in June 2002)[7].

In the first half of 2003, securitisation operations of loans originally granted by resident credit institutions to the non-financial private sector continued to be made. These operations have moderated growth in the aggregates of credit granted by the Portuguese banking system, since the corresponding loans are withdrawn from the balance sheet of the institutions that originally granted them. At the end of the first half of 2003, the amount of securitised loans to non-financial firms and households accounted for around 3.4 per cent of total credit originally granted by credit institutions to this sector[8] (2.4 per cent in June and 3.4 per cent in December 2002) (Chart 2).

The decrease in the growth pace of credit to customers, in the first half-year, translated into a slight reduction in the respective share in total assets of the banking system, dropping from 68.6 per cent at the end of 2002, to 67.8 per cent in June 2003 (Table 6).

Based on the Monetary and Financial Statistics, it can be seen that in the first half of 2003 the path of credit granted by the Portuguese banking system reflected the slowdown in loans both to non-financial firms and to households, in line with subdued developments in economic activity. In June 2003 the year-on-year growth rate of loans to the non-financial private sector[9] was of 7.3 per cent (6.2 per cent in August), 2.1 percentage points below the figure recorded in December 2002 (Table 7).

(7) This slowdown (to approximately 4.8 per cent) is more marked, if the aggregate is adjusted for the impact of the change in the consolidation boundary of the banking system, referred to above.

(8) This figure was derived from the amount of credit securitisated by MFI and non-monetary financial institutions, vis-à-vis total credit recorded on the balance sheets of these sectors plus the amount of credit acquired by non-residents in securitisation operations.

(9) Households, including emigrants, and non-financial corporations.

Table 5

BALANCE SHEET OF THE BANKING SYSTEM

On a consolidated basis

€ million

	1999 Dec.	2000 Dec.	2001 Dec.	2002 Jun.	2002 Dec.	2003 Jun.
Cash and assets	10 829	9 642	10 063	8 121	8 762	8 408
of which: cash and assets in the Banco de Portugal	10 026	8 592	8 987	7 371	7 857	7 684
Credit to other credit institutions	27 254	28 596	33 887	33 425	30 293	33 584
In the country	n.a.	10 952	12 768	10 185	9 570	7 777
Abroad	n.a.	17 644	21 119	23 240	20 723	25 807
Credit to customers (net of provisions)	131 213	160 235	181 468	188 288	194 219	199 730
Credit overdue	n.a.	3 553	3 903	4 222	4 462	5 127
Provisions	2 377	2 406	2 609	2 754	2 802	3 278
Securities and financial fixed assets (net of provisions)	31 843	36 984	35 950	33 593	32 148	33 530
of which: (Gross) public issuers' securities	n.a.	10 793	10 742	9 417	9 697	9 865
Non-financial fixed assets	4 631	4 600	4 735	4 562	4 578	4 617
Other assets	13 249	10 661	12 362	13 431	12 996	14 788
Total assets	219 019	250 719	278 464	281 419	282 996	294 658
Resources from central banks	3 158	3 462	2 766	2 149	1 284	2 755
of which: Banco de Portugal	2 658	3 300	2 258	1 934	1 031	2 546
Resources from other credit institutions	44 920	51 834	57 017	51 930	54 503	56 131
In the country	n.a.	10 024	11 099	9 420	7 767	6 685
Abroad	n.a.	41 810	45 918	42 511	46 736	49 447
Resources from customers	127 606	140 205	150 033	151 086	152 136	152 096
of which:						
Deposits of residents customers	n.a.	109 976	113 870	110 520	116 484	112 506
Deposits of non-residents customers	n.a.	30 181	36 101	40 464	35 538	39 464
Liabilities represented by securities	13 225	23 106	32 973	39 042	38 686	44 928
of which: bonds	10 181	18 214	27 309	31 199	30 921	33 848
Subordinated debt	4 521	5 392	8 076	8 305	8 721	8 705
Provisions	2 263	3 119	3 354	3 382	3 510	3 523
Other liabilities	9 487	9 015	8 810	9 986	8 326	10 167
Equity capital	13 840	14 587	15 436	15 539	15 830	16 353
Net income for the year	1 431	1 672	1 829	1 011	1 488	955
Total liabilities and equity capital	219 019	250 719	278 464	281 419	282 996	294 658
Memo:						
Demand deposits	44 363	47 188	53 033	51 195	54 649	52 110
Time and savings deposits	83 195	92 969	96 938	99 789	97 374	99 860
Credit to other credit institutions net of resources	-17 666	-23 237	-23 130	-18 505	-24 210	-22 547
In the country	n.a.	928	1 669	765	1 804	1 093
Abroad	n.a.	-24 165	-24 799	-19 271	-26 014	-23 640
Resources from customers (including securities issued)	n.a.	149 047	160 565	162 243	164 076	163 359
of which:						
Resources from customers (deposits and deposit-like)	n.a.	140 205	150 033	151 086	152 136	152 096
Securities issued held by resident customers (estimate)	n.a.	8 842	10 532	11 157	11 940	11 263
In the subgroup domestic institutions						
Credit to other credit institutions net of resources	*-14 023*	*-19 770*	*-18 510*	*-16 393*	*-15 378*	*-14 191*
In the country	*n.a.*	*710*	*257*	*-64*	*981*	*592*
Abroad	*n.a.*	*-20 480*	*-18 768*	*-16 329*	*-16 359*	*-14 783*
Resources from customers (including securities issued)	*n.a.*	*127 008*	*135 130*	*134 464*	*139 517*	*139 606*
of which:						
Resources from customers (deposits and deposit-like)	*n.a.*	*119 381*	*126 449*	*125 242*	*129 669*	*130 313*
Securities issued held by resident customers (estimate)	*n.a.*	*7 627*	*8 681*	*9 223*	*9 849*	*9 293*

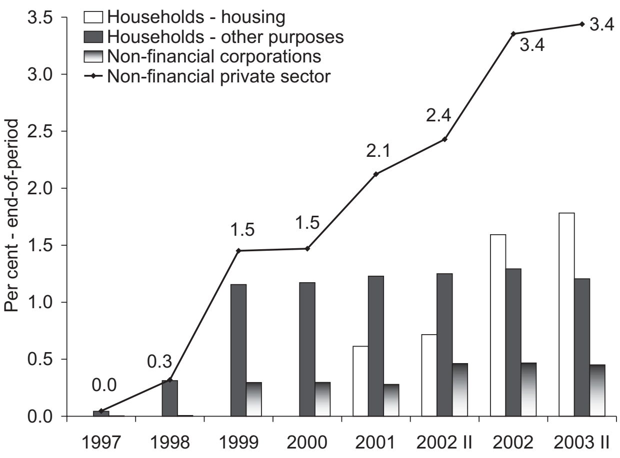
Table 6

BALANCE SHEET

On a consolidated basis

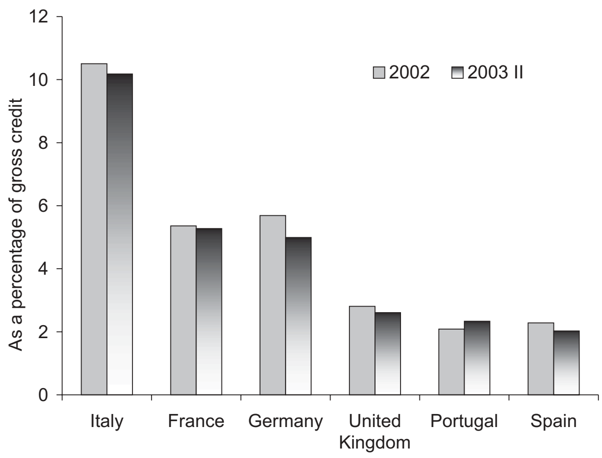
	Structure as a percentage of assets						Year-on-year rate of change				
	1999	2000	2001	2002	2002	2003	2000	2001	2002	2002	2003
	Dec.	Dec.	Dec.	Jun.	Dec.	Jun.	Dec.	Dec.	Jun.	Dec.	Jun.
Cash and assets in central banks	4.9	3.8	3.6	2.9	3.1	2.9	-11.0	4.4	2.9	-12.9	3.5
of which: cash and assets in the Banco de Portugal	4.6	3.4	3.2	2.6	2.8	2.6	-14.3	4.6	6.9	-12.6	4.3
Credit to other credit institutions	12.4	11.4	12.2	11.9	10.7	11.4	4.9	18.5	3.4	-10.6	0.5
In the country	n.d.	4.4	4.6	3.6	3.4	2.6	n.d.	16.6	-1.0	-25.0	-23.6
Abroad	n.d.	7.0	7.6	8.3	7.3	8.8	n.d.	19.7	5.5	-1.9	11.0
Credit to customers (net of provisions)	59.9	63.9	65.2	66.9	68.6	67.8	22.1	13.3	9.6	7.0	6.1
Credit overdue	n.d.	1.4	1.4	1.5	1.6	1.7	n.d.	9.8	14.8	14.3	21.5
Provisions	1.1	1.0	0.9	1.0	1.0	1.1	1.2	8.4	12.0	7.4	19.0
Securities and financial fixed assets (net of provisions)	14.5	14.8	12.9	11.9	11.4	11.4	16.1	-2.8	-10.2	-10.6	-0.2
of which: (Gross) public issuers' securities	n.d.	4.3	3.9	3.3	3.4	3.3	n.d.	-0.5	-21.4	-9.7	4.8
Non-financial fixed assets	2.1	1.8	1.7	1.6	1.6	1.6	-0.7	2.9	-1.2	-3.3	1.2
Other assets	6.0	4.3	4.4	4.8	4.6	5.0	-19.5	15.9	14.9	5.1	10.1
Total assets	100.0	100.0	100.0	100.0	100.0	100.0	14.5	11.1	5.9	1.6	4.7
Resources from central banks	1.4	1.4	1.0	0.8	0.5	0.9	9.6	-20.1	-29.8	-53.6	28.2
of which: do Banco de Portugal	1.2	1.3	0.8	0.7	0.4	0.9	24.2	-31.6	-31.4	-54.3	31.7
Resources from other credit institutions	20.5	20.7	20.5	18.5	19.3	19.0	15.4	10.0	-6.6	-4.4	8.1
In the country	n.d.	4.0	4.0	3.3	2.7	2.3	n.d.	10.7	10.7	-30.0	-29.0
Abroad	n.d.	16.7	16.5	15.1	16.5	16.8	n.d.	9.8	-9.7	1.8	16.3
Resources from customers	58.3	55.9	53.9	53.7	53.8	51.6	9.9	7.0	7.4	1.4	0.7
of which:											
Deposits of residents customers	n.d.	43.9	40.9	39.3	41.2	38.2	n.d.	3.5	5.1	2.3	1.8
Deposits of non-residents customers	n.d.	12.0	13.0	14.4	12.6	13.4	n.d.	19.6	14.1	-1.6	-2.5
Liabilities represented by securities	6.0	9.2	11.8	13.9	13.7	15.2	74.7	42.7	27.6	17.3	15.1
of which: bonds	4.6	7.3	9.8	11.1	10.9	11.5	78.9	49.9	27.7	13.2	8.5
Subordinated debt	2.1	2.2	2.9	3.0	3.1	3.0	19.3	49.8	15.3	8.0	4.8
Provisions	1.0	1.2	1.2	1.2	1.2	1.2	37.8	7.5	-1.2	4.7	4.2
Other liabilities	4.3	3.6	3.2	3.5	2.9	3.5	-5.0	-2.3	-3.2	-5.5	1.8
Equity capital	6.3	5.8	5.5	5.5	5.6	5.5	5.4	5.8	4.0	2.5	5.2
Net income for the year	0.7	0.7	0.7	0.4	0.5	0.3	16.8	9.4	0.3	-18.7	-5.6
Total liabilities and equity capital	100.0	100.0	100.0	100.0	100.0	100.0	14.5	11.1	5.9	1.6	4.7
Memo:											
Demand deposits	20.3	18.8	19.0	18.2	19.3	17.7	6.4	12.4	12.9	3.0	1.8
Time and savings deposits	38.0	37.1	34.8	35.5	34.4	33.9	11.7	4.3	4.8	0.4	0.1

Chart 2
SECURITISATION
Weight of operations in total loans originally granted by credit institutions to the non-financial private sector



Source: Monetary and Financial Statistics.

Chart 3
CREDIT OVERDUE



Sources: Bankscope and Banco de Portugal. The sample includes five banks in Portugal, four in Italy, three in the United Kingdom and two in France, Spain and Germany.
Note: Country aggregates are average weighted by total average assets of banks included in the sample.

In line with the position of the economy in the business cycle, credit overdue increased significantly in the first half of 2003, as well as specific provisioning. The high and increasing amount of credit write-offs/write-downs has cushioned the impact of this deterioration in the credit portfolio on the delinquency rates, in particular in the case of non-financial firms and, to a lesser extent, of households. Despite the increasing share of credit overdue in total credit granted, the situation faced by the Portuguese banks is also observed in most European countries, with which they compare favourably: delinquency rates in Portugal remain at one of the lowest levels in the euro area, next to Spain (Chart 3)[10].

3.1.1. Households

According to the Monetary and Financial Statistics, the rate of change in credit to households stood at 8.4 per cent in June 2003, falling to 6.8 per cent at the end of August (9.6 per cent in December 2002). Loans for house purchase continued to record a high growth rate, while showing a downward trend since the beginning of the year: in June the year-on-year growth rate was of 10.6 per cent (13.0 per cent in December 2002), dropping to 9.2 per cent in August[11] (Chart 4).

The maintenance of a high growth rate of credit for house purchase has been boosted by the improvement of the accessibility conditions of households to the housing market, through this type of financing, since the beginning of 2001 (Charts 5 and 6). This improvement — which reflects the low level of interest rates on housing credit op-

(10) International comparisons made in this section are based on a sample of European banks for which data are available. Selection criteria were based on their size – covering the largest banks in each country – and on the availability of data for the periods covered by the comparison. In some cases, for a specific indicator, it was not possible to guarantee that the sample covered the criteria set for all countries taken into consideration. In such cases, the country in question was not included in the comparison.

(11) The year-on-year rate of change in bank loans granted to households, adjusted for securitisation operations and for reclassifications and credits write-offs/write-downs, stood at 10.3 per cent in June 2003 (12.1 per cent in December 2002), dropping to 9.9 per cent at the end of August. Taking the same basis, credit for house purchase increased by 12.9 per cent in June, decelerating to 12.2 per cent in August (15.4 per cent at the end of 2002).

Table 7

BANK LOANS TO THE NON-FINANCIAL PRIVATE SECTOR

Year-on-year percentage rate of change

	Households			Non-financial corporations	Total households and non-financial corporations
	Total	By purpose			
		House purchase	Other credit (a)		
1998					
Dec.	31.4	34.7	23.5	22.9	27.3
1999					
Dec.	27.6	30.1	20.9	26.6	27.1
2000					
Mar.	27.3	28.4	23.9	27.2	27.2
Jun.	20.4	22.2	15.0	26.6	23.2
Sep.	20.3	22.2	15.1	26.3	23.1
Dec.	21.2	20.3	24.1	24.1	22.6
2001					
Mar.	17.9	17.5	19.0	23.0	20.3
Jun.	16.5	16.4	16.9	22.7	19.4
Sep.	14.7	15.9	11.4	20.3	17.4
Dec.	10.4	13.1	2.8	16.4	13.2
2002					
Jan.	10.5	13.4	2.0	15.8	13.0
Feb.	11.2	13.7	4.0	14.5	12.8
Mar.	11.5	13.7	5.0	11.5	11.5
Apr.	10.9	13.3	3.6	11.6	11.2
May	11.2	13.7	3.7	10.6	10.9
June	10.3	13.1	1.8	9.4	9.9
July	10.0	13.2	0.4	9.2	9.6
Aug.	10.2	13.1	1.3	7.7	9.0
Sep.	11.0	13.9	1.8	6.6	8.8
Oct.	10.7	13.7	1.1	6.5	8.7
Nov	10.3	13.9	-1.2	6.7	8.6
Dec.	9.6	13.0	-1.0	9.1	9.4
2003					
Jan.	10.2	13.1	1.0	7.4	8.9
Feb.	9.0	11.9	-0.3	8.1	8.6
Mar.	8.0	11.3	-2.5	7.6	7.8
Apr.	7.8	10.8	-1.9	7.3	7.6
May.	7.5	10.1	-1.0	7.5	7.5
June	8.4	10.6	0.9	6.3	7.3
July	7.1	9.5	-1.1	5.2	6.2
Aug.	6.8	9.2	-1.5	5.6	6.2
Memo:					
As a percentage of credit to the non-financial private sector in December 2002	51.6	40.2	11.4	48.4	100.0

Source: Monetary and Financial Statistics.

Note: (a) Includes all credit granted to households other than housing credit, namely consumer credit.

erations — was significant in the first half of 2003, despite the fall in real compensation per employee (estimated at 0.5 per cent, year-on-year). The downward trend of interest rates on loans for house purchase remained broadly unchanged in the first half of 2003, reflecting the fall in money market rates.

According to the qualitative data from the Bank Lending Survey, strong competition has persisted in this segment of the credit market. This fact prevented the differential between the rate on housing loans and money market rates from widening significantly (as in other segments of the credit market), despite the perception by banking institutions of higher risks associated with the overall economic situation and the high indebtedness level attained by Portuguese households (in an environment of higher unemployment). It should be noted however that the latest survey pointed to a stabilisation of the competitive pressure in this

Chart 4
BANK LOANS TO HOUSEHOLDS
Year-on-year rate of change

Source: Monetary and Financial Statistics.
Note: Rates of change calculated on outstanding amounts in the MFI balance sheet, and, as such, not adjusted for securitisation, reclassifications and write-offs/ write-downs.

segment in the third quarter of the year. At the same time, the differential of the interest rates on housing credit seems to have widened, albeit very slightly.

Net flows of credit for house purchase fell sharply by 22.2 per cent in the first half of 2003, from a year earlier[12] (-19.8 per cent in the period January to August). These developments contrast with the significant net increases in these flows in 2002 (18.0 and 12.7 per cent respectively in the first and second half years), when the trend of more moderate growth observed in the previous year was interrupted. This trend towards moderation in flows of credit granted is also denoted by a reduction in the number of contracts on housing loans agreed since the beginning of the year (Chart 7).

During the first half of the year, credit to households for other purposes than house purchase continued to increase moderately. In June 2003 this

Chart 5
ACCESSIBILITY INDICATOR AND ITS COMPONENTS
Chain rate of change

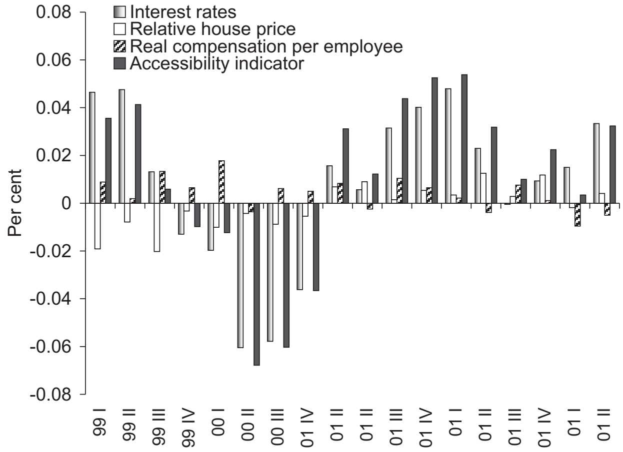
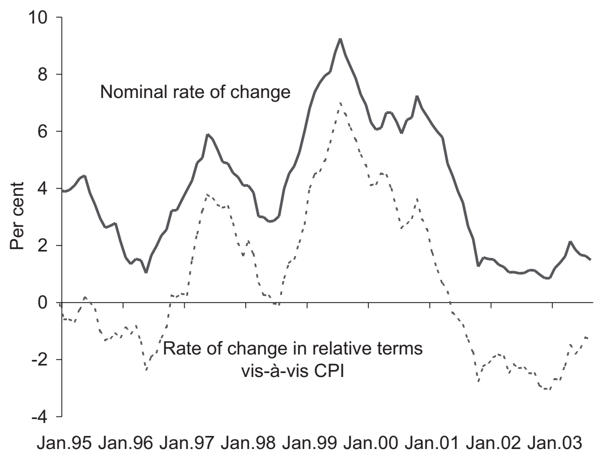


Chart 6
HOUSE PRICES
Year-on-year rate of change



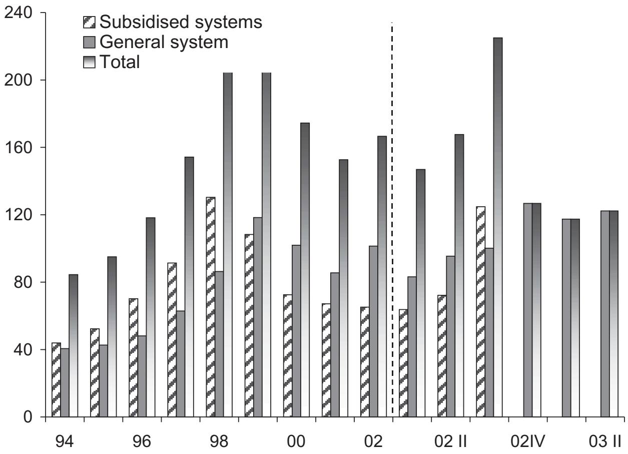
Source: Newsletter *Confidencial Imobiliário*; Last observation: August 2003.

type of credit recorded a year-on-year growth of 0.9 per cent (-1.5 per cent in August), after a negative change of 1.0 per cent at the end of 2002 (Chart 4)[13]. Developments in this credit segment are in line with those in private consumption, reflecting the deterioration in consumer confidence. In parallel with an unfavourable sentiment concerning economic developments and pessimistic expectations about the situation in the labour market, the high indebtedness level attained by Portuguese households (and the consequent debt servicing burden) are limiting demand in this segment

(12) Net flows of loans granted during the period by MFI, adjusted for securitisation operations and for reclassifications and credits write-offs/write-downs.

(13) The rate of change in credit to households for other purposes, adjusted for securitisation operations and for reclassifications and credits write-offs/write-downs, was of 2.3 per cent in June 2003 (2.4 per cent in December 2002), rising to 2.6 per cent in August.

Chart 7
NUMBER OF CREDIT CONTRACTS FOR HOUSE PURCHASE
Mainland



Note: Quarterly figures have been annualised.

Table 8

AGGREGATE EXPOSURE OF THE PORTUGUESE BANKING SYSTEM TO EMERGING MARKETS

On a consolidated basis

	As a percentage of total assets			
	2001	2002	2002	2003 E
	Dec.	Jun.	Dec.	Jun.
Total.	1.5	1.2	1.1	1.0
of which: Brazil . .	1.0	0.9	0.8	0.7

Note: The group of emerging markets includes the following geographical areas: Easter Europe, Latin America and Caribbean, Asia and Pacific and Africa and Middle East.
E: Estimate.

of credit market. In addition, more restrictive criteria and tight conditions applied by banking institutions to this type of credit (usually with no real guarantees) contributed significantly to these developments.

3.1.2. Non-financial corporations

The rate of change in loans to non-financial corporations stood at 6.3 per cent in June 2003 (5.6 per cent in August), continuing on the downward trend started in the beginning of the year (9.1 per cent growth in December 2002) (Table 7)(14). This performance seems to reflect, on the one hand, the slowdown in credit demand by corporations; this fact reflects the unfavourable economic environment and low levels of business confidence. On the other hand, it may result from more restrictive conditions of credit supply in this segment, in line with the perception of higher risks (namely taking into account the current level of corporate indebtedness).

3.1.3. Exposure to emerging markets

At the end of June 2003, the exposure of the Portuguese banking system to emerging markets accounted nearly for 1.0 per cent of total assets, reflecting a slight decline (of approximately 0.2 percentage points) from June 2002 (Table 8). These developments resulted from the decline in the exposure to Latin America and to a lesser extent to the Asia and Pacific geographical area, with a slight increase in the exposure to East European countries. In particular, the exposure of the Portuguese banking system to Brazil, on a consolidated basis, declined to 0.7 per cent of total assets (0.9 per cent at the end of the first half of 2002).

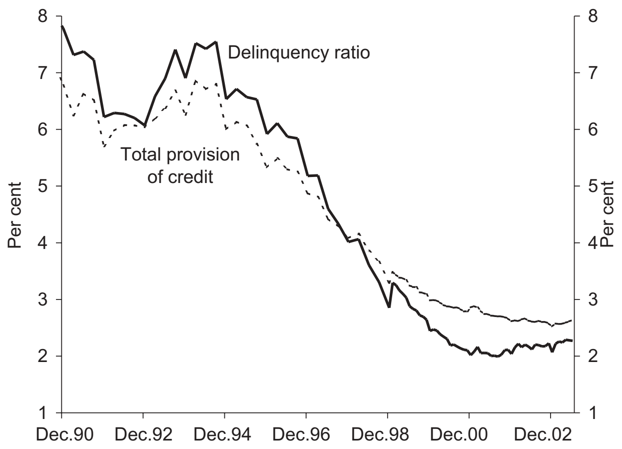
3.1.4. Delinquency rates and credit provisioning

In the first half of 2003 indicators point to a rise in delinquencies associated with bank credit. These developments continued to reflect the current downward phase of the business cycle. In consolidated terms, the year-on-year growth rate of the stock of credit and interest overdue was of 21.5 per cent in June 2003, compared with 14.3 per cent in December 2002 (Table 6)(15). The deterioration in the quality of the banks' credit portfolio

(14) Considering banking credit, adjusted for securitisation operations and for reclassifications and credits write-offs/ write-downs, growth rates stood at 4.9 per cent in June and 4.5 per cent in August (7.5 per cent in December 2002).

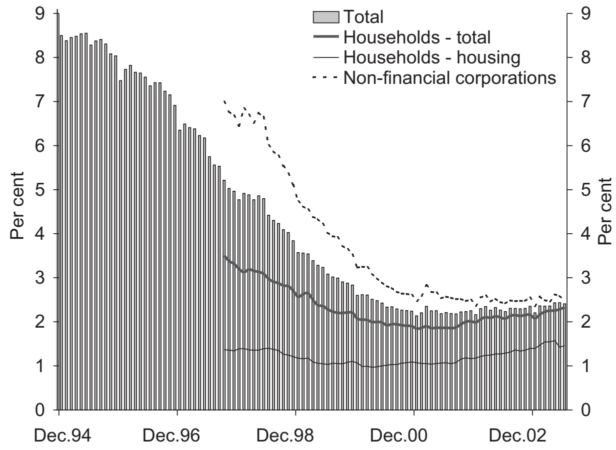
(15) Adjusting data for the effect of the change in the consolidation boundary of the banking system, the year-on-year rate of change in credit and interest overdue is 12.5 per cent in June 2003.

Chart 8
DELINQUENCY RATIO IN CREDIT TO CUSTOMERS AND TOTAL PROVISIONING OF CREDIT
As a percentage of gross credit granted
On an individual basis



Note: Series break in January 1999; Last observation: June 2003.

Chart 9
DELINQUENCY RATIO IN CREDIT TO RESIDENT CUSTOMERS



Source: Monetary and Financial Statistics; Last observation: August 2003.

was reflected in an increase in the ratio of credit and interest overdue to total (gross) credit, which reached 2.53 per cent at the end of June (2.26 per cent at the end of 2002 and 2.21 per cent in the corresponding month a year earlier) (Table 1)[16].

Considering data on an individual basis, the overall delinquency rate of credit to customers — as measured by the ratio of the stock of credit and interest overdue to the level of (gross) credit granted — stood at 2.27 per cent in June 2003, reflecting a deterioration from end-December 2002 (2.07 per cent) and from the corresponding month a year earlier (2.12 per cent) (Chart 8).

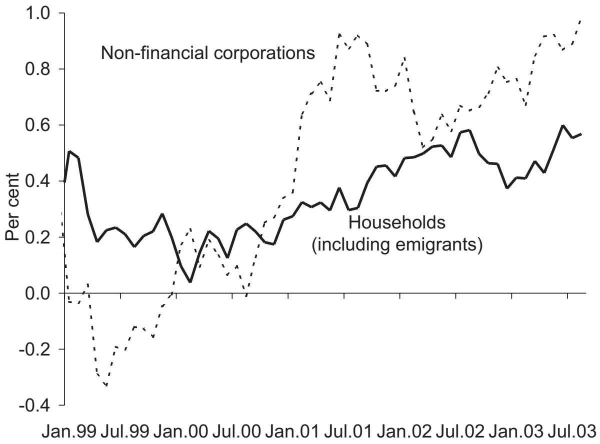
On the basis of the Monetary and Financial Statistics, it can be seen that in the first half of 2003 there was an increase in delinquencies of both non-financial corporations and households (Chart 9). It should be noted that credit write-offs/write-downs, to significant and increasing amounts, have mitigated the impact of the deterioration in the quality of the credit portfolio on the trend of the delinquency ratio. Credit write-offs/write-downs are made whenever claims in default are considered fully unrecoverable (and as such they are fully provisioned). These claims were previously registered in the balance sheet of the institutions under credit overdue. Thus, the net flow of credit in default in a given period corresponds to the increase (or reduction if that is the case) in the stock of credit overdue plus the stock of credit previously recorded under credit overdue which, in that period, had been written-off/written-down for having been considered fully unrecoverable.

In the case of non-financial corporations, the rate of change in credit in default was of 9.7 per cent in June 2003 (8.9 per cent in August), accounting for an acceleration from end-2002 (9.0 per cent). The delinquency ratio of non-financial corporations stood at 2.50 per cent (2.54 per cent in August), compared with 2.36 per cent at the end of 2002 (2.42 per cent in June 2002).

In addition, the annual flow of credit to this sector written-off/written-down in the first half of 2003 was approximately 35.0 per cent higher than a year earlier. The deterioration in the quality of credit to this sector can also be perceived by the increase in the ratio of (an estimate of) the annual flow of new credit overdue (adjusted for credit write-offs/write-downs) to the stock of loans granted to the sector (adjusted for securitisation), from 0.75 per cent at the end of 2002, to 0.87 per cent in June (0.98 per cent in August) (Chart 10).

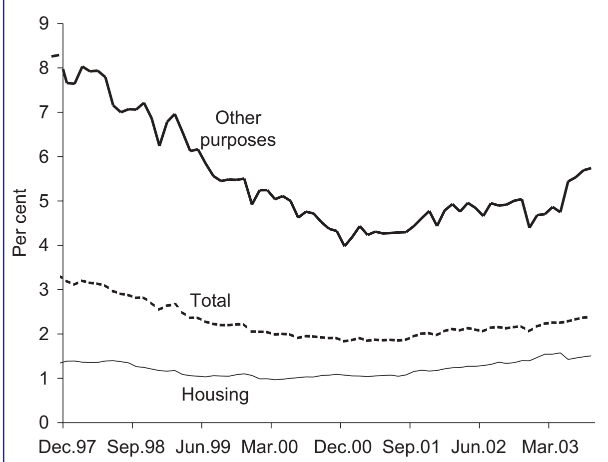
(16) The impact of the change in the of consolidation boundary of the banking system on the rise in this indicator would be around 15 basis points.

Chart 10
ESTIMATE OF THE ANNUAL FLOW OF NEW CREDIT OVERDUE (ADJUSTED FOR WRITE-OFFS) AS A PERCENTAGE OF BANK LOANS (ADJUSTED FOR SECURITISATION)



Source: Monetary and Financial Statistics; Last observation: August 2003.

Chart 11
DELINQUENCY RATIOS IN BANK CREDIT TO HOUSEHOLDS



Source: Monetary and Financial Statistics; Last observation: August 2003.

In turn, the rate of change in credit to households in default rose to 22.4 per cent at the end of the first half of 2003 (18.1 per cent in August) (Chart 11). The delinquency ratio in this segment of credit increased from 2.06 per cent in December 2002, to 2.33 per cent at the end of June (2.39 per cent at the end of August). This indicator has showed a rising trend since the end of December 2000, when it recorded an historical low (1.84 per cent). Similarly to non-financial corporations, credits write-offs/write-downs also contributed to mitigate the deterioration of the delinquency rates of credit to households. In this case, the annual flow of credits write-offs/write-downs grew by 80 per cent, from June 2002, increasing the ratio of flows of new credit overdue (adjusted for credits write-offs/write-downs) to the stock of loans to the sector (adjusted for securitisation), from 0.37 per cent at the end of 2002, to 0.60 per cent in June (0.57 per cent in August).

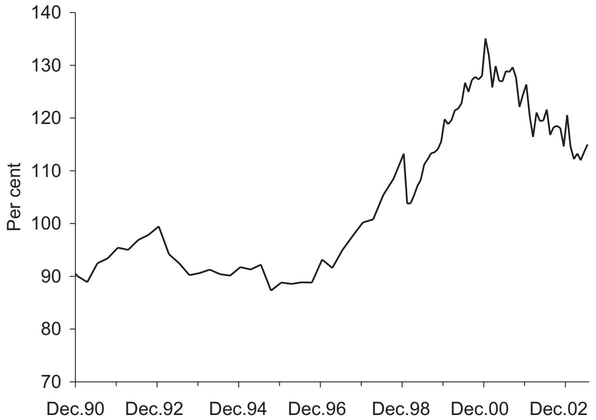
The path of the delinquency ratio of credit to households in the first half of the year was chiefly due to the rise in default of loans for purposes other than house purchase. In this segment, the delinquency ratio increased from 4.39 per cent at the end of December 2002, to 5.53 per cent in June (5.74 per cent at the end of August). This rise was particularly marked in the second quarter of the year, with the respective year-on-year rate of change reaching 19.8 per cent in June (15.6 per cent in August).

The delinquency ratio of credit for house purchase also increased (albeit more slightly) in the course of the first six months of the year from 1.40 per cent in December, to 1.46 per cent in June (1.51 per cent in August). This path, however, reflected a slowdown in the growth of credit overdue in this segment (25.2 per cent in June, after 34.1 per cent at the end of 2002).

At the end of February 2003, several changes to the credit provisioning regimes entered into force, introduced by the Notice No. 8/2003. Overall, the new regime implies an increase in specific provisioning (of credit overdue and non-performing loans) and a reduction in the component of provisions for general credit risks guaranteed by mortgage on owner-occupied residential property. Increased obligations are imposed in the reassessment of the real guarantees of credit, an important factor in determining the amount of provisioning. The short-term impact of the changes should be an increase in bank provisioning (in particular, provisions for non-performing loans, given the changes in the classification criteria of credit falling within this category)[(17)], since provisions (for general credit risks) made available due to the reduction in the provisioning coefficient (referred to above) are compulsorily earmarked for the setting up or increase in provisions for specific credit risk. The effect of this change in the regime was not particularly visible in the first half of 2003, given that a transitional regime was established for their implementation. However, it is expected that in the course of the second half of the year the pattern of provisions will reflect the effects of the new regime.

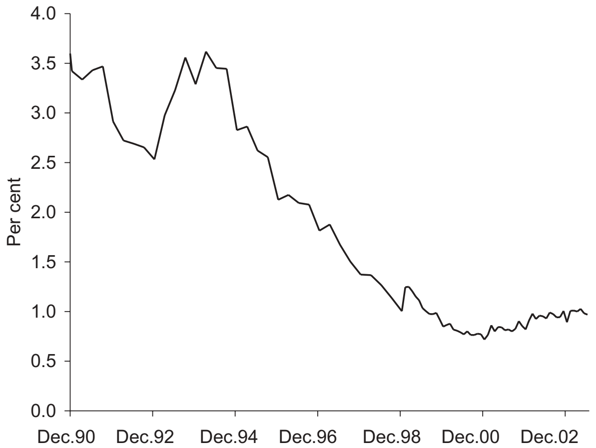
On a consolidated basis, the specific credit provisioning ratio — which considers specific provisions for credit as a percentage of total gross credit — increased to 1.61 per cent at the end of the first half year (1.42 per cent in December 2002)[(18)]. In turn, the coverage ratio of credit overdue to credit provisions, calculated on the basis of individual data in the period under review dropped to 115.0 per cent in June 2003 (compared with 120.6 per cent in December and 121.6 per cent in June 2002) (Chart 12). The ratio of credit and interest fallen due (net of specific credit provisions) to total credit granted (also net of specific provisions) went up from 0.85 per cent at the end of 2002 (0.78 per cent in June 2002) to 0.93 per cent in June 2003 (Chart 13).

Chart 12
TOTAL CREDIT PROVISIONING OF CREDIT OVERDUE
On an individual basis



Note: Series break in January 1999; Last observation: June 2003.

Chart 13
CREDIT OVERDUE* AS A PERCENTAGE OF TOTAL CREDIT*
On an individual basis



Note: Series break in January 1999; Last observation: June 2003.
* Net of provisioning for credit overdue.

3.1.5. Securities portfolio

In June 2003, the value of the portfolio the securities and financial fixed assets of the total banking system, on a consolidated basis (net of provisioning), remained virtually unchanged, as compared to the level at the end of the first half of the previous year. However, taking into consideration the subgroup of domestic institutions, this figure is slightly lower (1.5 per cent)[(19)]. In both cases, the flow for the half-year had a similar path: the value of the portfolio for the total banking system increased by 4.3 per cent while for the subgroup of domestic banks increased by 4.7 per cent, after having fallen in the second half of 2002 (Table 6).

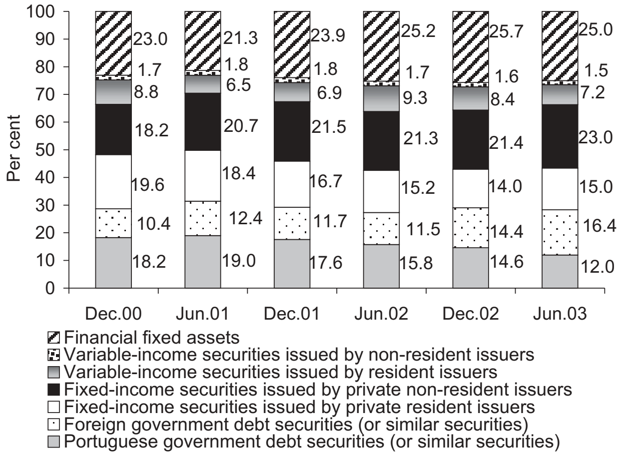
This pattern seems to reflect, in part, valuation gains associated with the recovery in stock mar-

(17) In particular, it should be noted the changes introduced in the reclassification as credit overdue (only for provisioning purposes) of the part of credit falling due, with repayment in arrears, when it exceeds a certain amount of the capital in default or when they have been in default for a given period of time, differing according to the initial (contractual) maturity of the loan.

(18) The change in the consolidation boundary of the banking system accounted for an increase of approximately 10 basis points in this indicator.

(19) These developments would reflect in part the change in the consolidation boundary of the Portuguese banking system, seeing that financial participation in the institution that started to be included in the consolidation of the system in 2003 was included in the consolidated balance sheet exclusively as a financial fixed asset until December 2002.

Chart 14
SECURITIES AND FINANCIAL FIXED ASSETS OF THE PORTUGUESE BANKING SYSTEM
Structure – on a consolidated basis



kets. As a matter of fact, the amount of income from financial operations due to reevaluations in investments was significant in the first half of 2003 (Chart 30).

Financial fixed assets, which accounted for 25.7 per cent of the securities portfolio at the end of June 2003, have recorded a slight increase since the beginning of the year (0.5 per cent). In terms of annual flows, these assets decreased by 3.5 per cent, against -5.1 per cent in December. In gross terms (i.e. without deducting specific provisioning) there was a slight increase of 1.6 per cent in the half year under review; this growth differential reflected mainly the still high growth of provisions (26.1 per cent in the half year under review) which was partially due to the new provisioning regime of capital losses inherent in financial holdings, albeit to a significantly lesser extent than in the second half of 2002 (Chart 14).

In turn, the fixed-income securities portfolio increased by 8.4 per cent in the half year under review (4.4 per cent in terms of annual flows, compared with -14.9 per cent in 2002), reflecting, in particular, an increase in the portfolio of securities issued by non-residents.

3.2. Resources

In June 2003, the year-on-year rate of change in resources from customers of the Portuguese banking system, on a consolidated basis (of which around 75 per cent are residents' deposits) was of 0.7 per cent, slowing significantly from the first half of 2002 (7.4 per cent), as already seen at the end of that year (1.4 per cent). Excluding the effect from the change in the consolidation boundary of the system, the growth in resources from customers from the corresponding month a year earlier was negative (-0.9 per cent).

The weakness of deposits of resident customers (2.0 per cent, compared with 2.6 per cent in 2002) was the main factor underlying these developments, since deposits of non-resident customers (which will include a large share of emigrants deposits with the Portuguese banking system) increased 15.0 per cent from the end of the corresponding half year in 2002 (9.1 per cent growth in December 2002)[20].

The slowdown in customers' deposits — chiefly households' deposits — seems to reflect, on the one hand, the low level of interest rates on deposits and, on the other, the increasingly diversified supply of instruments for savings' investment (as for instance the so-called "structured products"). Some of these instruments may involve institutions excluded from the consolidation boundary of the Portuguese banking system. Given the significant increase in the indebtedness level of households, in the last years, an increasing share of households disposable income would be earmarked for debt repayment, limiting the margin of this sector for the accumulation of financial assets, such as bank deposits.

Despite the deceleration in credit granted by banks in the first half of the year, this type of credit continued to grow significantly above the pace than that of resources from customers. As a consequence, the ratio of utilisation of these resources in credit rose again in the first half of the year, in both the total banking system, and the subgroup of domestic institutions. The ratio between credit (net of provisioning) and resources from customers increased from 127.7 per cent in December 2002, to 131.3 per cent at the end of June 2003 for the total banking system. For the subgroup of do-

(20) The development pattern of this part of resources from customers, on a consolidated basis, is significantly marked by the change in the consolidation boundary of the Portuguese banking system.

Chart 15A
RATIO OF CREDIT (NET OF PROVISIONING) TO RESOURCES FROM CUSTOMERS (EXCLUDING SECURITIES)
On a consolidated basis

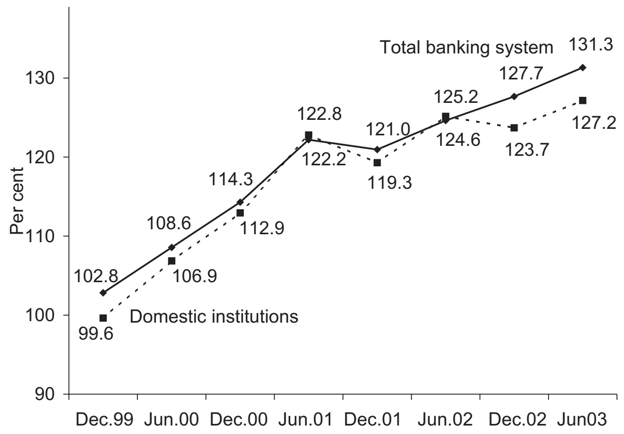
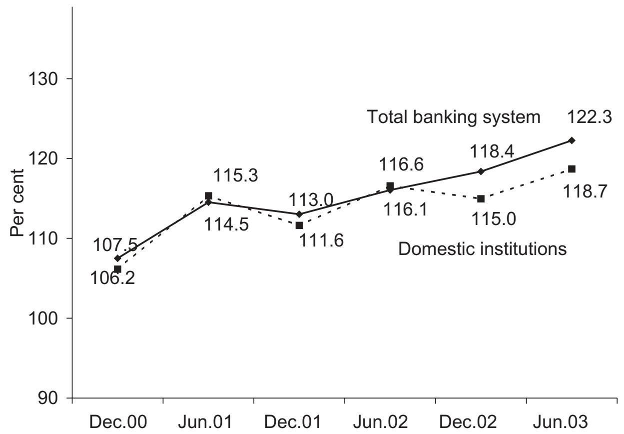


Chart 15B
RATIO OF CREDIT (NET OF PROVISIONING) TO TOTAL RESOURCES FROM CUSTOMERS
On a consolidated basis



Note: Total resources from customers include deposits and deposit-like instruments with resident and non-resident customers, and debt securities issued by banks held by the resident non-monetary sector. In chart 15A these latter are not included.

mestic institutions the ratio increased from 123.7 to 127.2 per cent (Chart 15). Developments are similar when the amount of debt securities issued by banks in the portfolios of the resident non-monetary sector is added to resources from customers under the form of deposits and deposit-like instruments: the ratio increases from 118.4 per cent in December 2002, to 122.3 per cent

Chart 16
FINANCING SOURCES OF THE BANKING SYSTEM
On a consolidated basis

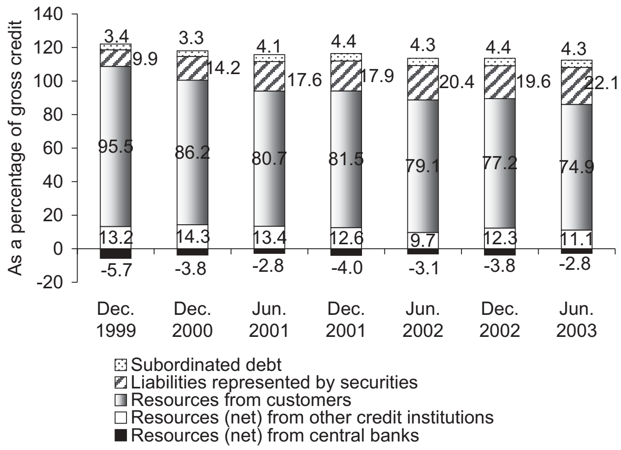
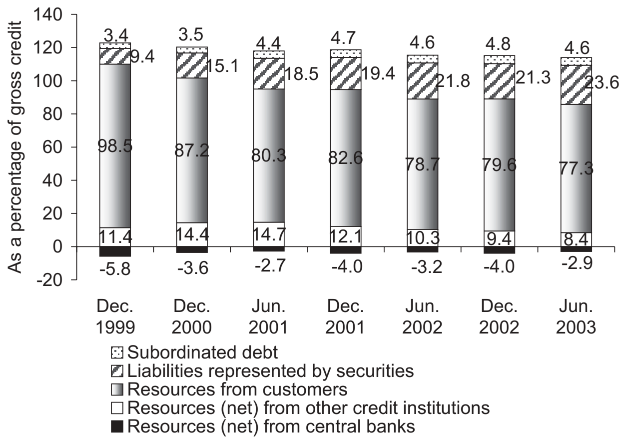


Chart 17
FINANCING SOURCES OF DOMESTIC BANKING INSTITUTIONS
On a consolidated basis



at the end of the first half of 2003 for the all system (from 115.0 to 118.7 per cent in the case of domestic institutions).

The gap between the growth pace of credit and that of resources from customers has been filled through the use of alternative financing instruments, in particular, to the issuance of debt securities (Charts 16 to 19). This behaviour was evident in the first half of 2003, when resources from customers contributed negatively to the financing of the new credit granted over the period (-0.7 per cent) (in the corresponding quarter of 2002, re-

Chart 18
FINANCING SOURCES OF THE BANKING SYSTEM
On a consolidated basis

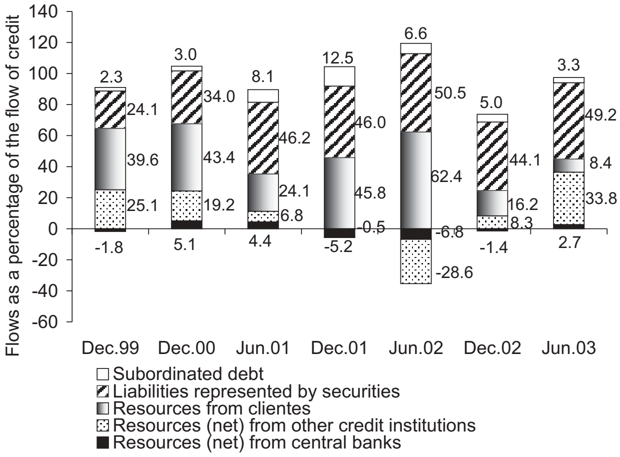
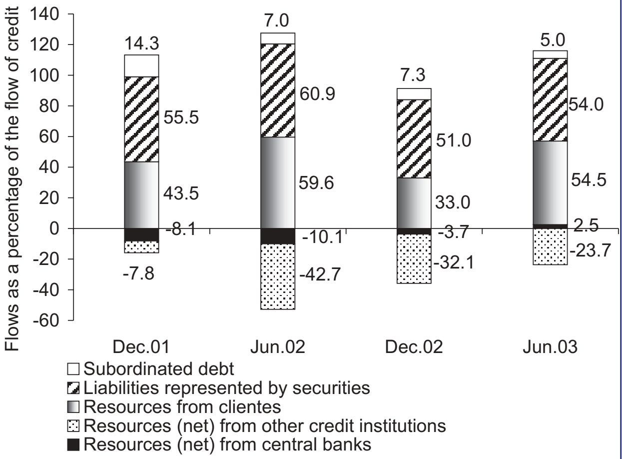


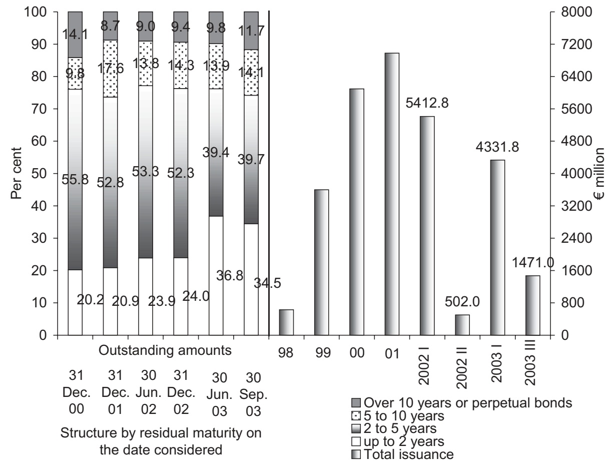
Chart 19
FINANCING SOURCES OF DOMESTIC BANKING INSTITUTIONS
On a consolidated basis



Note: In 2000, owing to significant changes in the universe of domestic institutions over the year (due to takeovers), the values regarding balance sheet flows in the group of domestic institutions are not used for analytical purposes and, as such, only values from 2001 onwards are presented.

sources from customers had accounted for 15.4 per cent of the net credit flow). Thus, the flow of credit granted by the total banking system, on a consolidated basis, in the first half year, was fully financed through the issuance of debt securities, while net interbank financing continued to decline.

Chart 20
INTERNATIONAL ISSUES OF BONDS BY SUBSIDIARIES ABROAD OF PORTUGUESE BANKING GROUPS



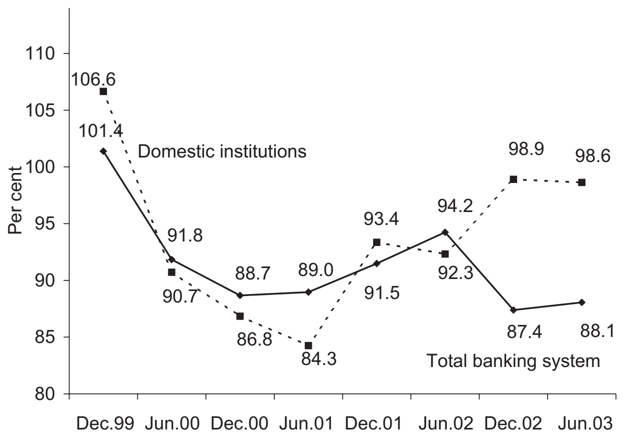
Sources: Dealogic and Bloomberg.

In terms of annual flows, the amount of funding through the issuance of debt securities, accounted for 49.2 per cent of the flow of credit granted in the year ended in June 2003, i.e. close to the figure a year earlier and higher than that for the year as a whole (44.1 per cent).

In the first half of 2003, the Portuguese banking groups resumed the significant issuance of bonds abroad, through their subsidiaries (Chart 20)[21]. The recourse to this type of issuance has not brought about an increase in exchange rate and interest rate risks, in so far as, issuance has been largely denominated in euro and at a variable rate. This type of financing has also enabled an increase in the average maturity of liabilities, adding to an improvement in the liquidity position of institutions. As a matter of fact, for the subgroup of domestic institutions (thus, excluding the institutions with management controlled by non residents), the ratio of highly liquid assets (interbank claims and securities issued by public issuers) to interbank liabilities developed favourably, rising to 98.6 per cent in June 2003 (92.3 per cent a year earlier and 98.9 per cent at the end of 2002) (Chart 21). This figure represents a clear improvement from

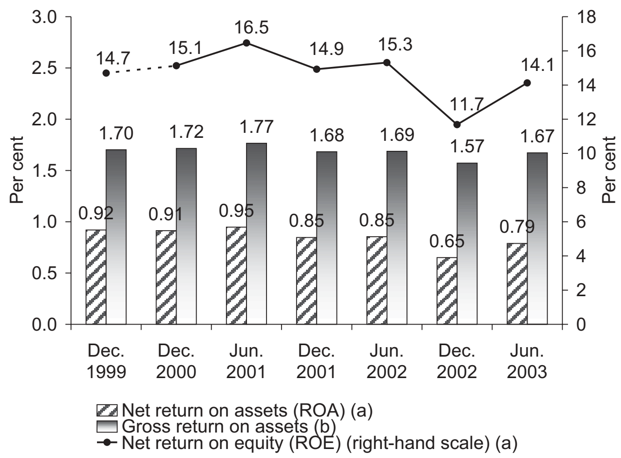
(21) In the second half of 2002, financing obtained through these means declined abruptly, as a result of the deterioration of the financing conditions in private debt international markets.

Chart 21
RATIO OF COVERAGE OF INTERBANK LIABILITIES BY HIGHLY LIQUID ASSETS
On a consolidated basis



Note: Highly liquid assets are defined as the sum of interbank assets (including assets in central banks) and public (and similar) entities securities. Interbank liabilities include liabilities to central banks and other credit institutions.

Chart 22
PROFITABILITY RATIOS
On a consolidated basis



Notes:
(a) Income before minority interests have been considered in the calculation of return on assets and on equity.
(b) Ratio of the overall gross income to total average assets.

June 2001, when the coverage ratio of interbank liabilities by highly liquid assets for domestic banks, on a consolidated basis, recorded a low, 84.3 per cent. The path of this ratio, in June 2003, reflected year-on year increases of 13.9 per cent and 5.6 per cent, respectively, in interbank claims and in the portfolio of securities issued by public and similar entities, partially offset by the (4.8 per cent) rise in interbank liabilities. However, for the total banking system, this liquidity ratio decreased from 94.2 per cent, in June 2002 (87.4 per cent in December) to 88.1 per cent at the end of the first half of 2003. This trend reflected a 8.9 per cent year-on-year increase in interbank liabilities, partially offset by the increase in both interbank claims and securities issued by public entities (1.1 per cent and 4.8 per cent respectively). It should be noted that concerning the subgroup of domestic institutions and relative to the total banking system, resources from customers continued to be more important as financing the stock of credit. On the contrary this subgroup shows a smaller net recourse to the interbank market. Nevertheless it should be noted that the latest developments points to a reduction of the residual maturity of the outstanding amount of international bonds issued. This fact would imply higher recourse to refinancing by institutions, in order to preserve the current levels of bank liquidity.

4. PROFITABILITY

In the first half of 2003, the profitability of the Portuguese banking system, on a consolidated basis, decreased when compared with the corresponding half year in 2002. Net income fell by 5.6 per cent in the first half of the year, while income before minority interests[22] was smaller (4.4 per cent) (Tables 9 and 10). Thus, the net return on equity (ROE), before minority interests, declined from 15.3 per cent in the first half of 2002, to 14.1 per cent in the first half of 2003 (Chart 22). However this figure represented an improvement as compared to the ROE in 2002 as a whole (11.7 per cent), which was significantly influenced by the

(22) Income before minority interests correspond to results generated by institutions that are part of the consolidated groups, regardless of whether they are fully held by the parent undertaking of the respective group or not. Thus, through this item it is possible to have a measure of the results generated by the total consolidated assets.

Table 9

PROFIT AND LOSS ACCOUNT

On a consolidated basis

€ million

	2001	2002	2003	Year-on-year rate of change 2001	2002	2003
	Jun.	Jun.	Jun.	Jun.	Jun.	Jun.
1. Interest income	8666	7382	7437	20.5	-14.8	0.7
2. Interest expenses	5727	4459	4491	25.7	-22.1	0.7
3. Financial margin (1-2)	2939	2923	2945	11.6	-0.5	0.7
4. Income from securities	152	153	127	22.4	0.3	-16.9
5. Net commissions	802	857	955	-8.6	6.8	11.5
6. Income from financial operations	158	285	259	-58.7	80.4	-9.3
7. Income from affiliated companies and branches exc. from consolidation (net)[(a)]	107	103	182	-5.0	-3.5	77.0
8. Other operational profits (net)	350	341	368	111.8	-2.5	7.9
9. Other current income (4+5+6+7+8)	1569	1738	1890	-5.6	10.8	8.8
10. Banking margin (3+9)	4508	4662	4836	4.9	3.4	3.7
11. Labour costs	1358	1383	1461	-1.5	1.8	5.7
12. Other administrative costs	856	928	963	7.2	8.5	3.8
13. Administrative costs (11+12)	2214	2311	2424	1.7	4.4	4.9
14. Overall gross income (10-13)	2295	2351	2411	8.3	2.4	2.6
15. Extraordinary gains	8	124	36	-94.2	1453.4	-70.6
16. Depreciation for the year	297	300	326	-1.7	0.9	8.6
17. Net provisioning	492	747	776	-22.9	51.6	3.9
18. Income before minority interests (14+15-16-17)	1513	1428	1346	15.1	-5.6	-5.7
19. Taxes on profit for the year	281	237	209	1.8	-15.5	-12.0
20. Income from minority interests[(b)] (18-19)	1232	1190	1138	18.6	-3.4	-4.4
21. Minority interests (net)	224	179	183	-37.5	-19.9	2.1
22. Profit/loss for the year (20-21)	1008	1011	955	48.2	0.3	-5.6
Memo:						
Year-on-year rate of change of the total average assets				13.4	7.2	3.5

Notes:

(a) The item "income from affiliated companies and subsidiaries excluded from consolidation" records income generated by investee companies and subsidiaries excluded from consolidation, which is attributable to the group according to the percentage of shares held in these companies. Affiliated companies are companies whose management is under significant influence, assuming that this situation occurs when shares held correspond to, at least, 20 per cent of the voting rights. In addition, affiliated companies excluded from consolidation are companies whose activities are incompatible with the objective of consolidated accounts, namely commercial, industrial, agricultural and insurance corporations.

(b) Income before minority interest enables a more accurate measure of income generated by all consolidated assets and, therefore, it should be used in order to compare income with profitability on an individual basis.

unfavourable developments in the second half of the year.

In fact, developments in 2002 were marked by a significant reduction in profitability ratios of the Portuguese banking system, in line with the majority of European countries. This was due to the downward trend of the financial margin and to a significant increase in specific provisions, in the context of a deterioration of the quality of the credit portfolio. In the second half of 2002, the situation worsened due to the significant losses in the securities portfolio and in income from financial fixed assets. As a consequence, the net return on assets (ROA) fell by 20 basis points in 2002 (to 0.65 per cent), chiefly reflecting the weak performance of results towards the end of the year.This path was reflected in ROE, despite the increase still recorded in 2002 by the level of utilization of equity (albeit to a lesser extent than in previous years).

In the first half of 2003, the level of utilization of equity decreased slightly, keeping the trend already seen in the second half of 2002. In parallel with less financial leverage, the ROA also declined by 6 basis points, from the corresponding half year

Table 10

PROFIT AND LOSS ACCOUNT

On a consolidated basis

As a percentage of average assets

	2000 Dec.	2001 Dec.	2002 Jun.	2002 Dec.	2003 Jun.
1. Interest income	6.17	6.49	5.30	5.35	5.16
2. Interest expenses	3.96	4.25	3.20	3.23	3.12
3. Financial margin (1-2)	2.21	2.24	2.10	2.12	2.04
4. Income from securities	0.07	0.08	0.11	0.07	0.09
5. Net commissions	0.70	0.63	0.61	0.63	0.66
6. Income from financial operations	0.26	0.16	0.20	0.16	0.18
7. Income from affiliated companies and subsidiaries exc. from consolidation (net) [(a)]	0.10	0.06	0.07	0.04	0.13
8. Other operation income (net)	0.17	0.24	0.24	0.25	0.26
9. Other current income (4+5+6+7+8)	1.30	1.17	1.25	1.14	1.31
10. Banking margin (3+9)	3.51	3.41	3.35	3.26	3.35
11. Labour costs	1.11	1.03	0.99	1.00	1.01
12. Other administrative costs	0.69	0.70	0.67	0.69	0.67
13. Administrative costs (11+12)	1.79	1.73	1.66	1.69	1.68
14. Overall gross income (10-13)	1.72	1.68	1.69	1.57	1.67
15. Extraordinary	0.27	0.01	0.09	0.06	0.03
16. Depreciation for the year	0.25	0.24	0.22	0.24	0.23
17. Net provisioning	0.63	0.45	0.54	0.61	0.54
18. Income before minority interests (14+15-16-17)	1.11	1.01	1.02	0.78	0.93
19. Taxes on profit for the year	0.19	0.16	0.17	0.13	0.14
20. Income before minority interests[(b)] (18-19)	0.91	0.85	0.85	0.65	0.79
21. Minority interests (net)	0.21	0.16	0.13	0.12	0.13
22. Profit/loss for the year (20-21)	0.70	0.69	0.73	0.53	0.66
Total average assets (€ million)	237 223	264 622	278 558	280 717	288 365

Notes:

(a) The item "income from affiliated companies and subsidiaries excluded from consolidation" records income generated by investee companies and subsidiaries excluded from consolidation, which is attributable to the group according to the percentage of shares held in these companies. Affiliated companies are companies whose management is under significant influence, assuming that this situation occurs when shares held correspond to, at least, 20 per cent of the voting rights. In addition, affiliated companies excluded from consolidation are companies whose activities are incompatible with the objective of consolidated accounts, namely commercial, industrial, agricultural and insurance corporations.

(b) Income before minority interest enables a more accurate measure of income generated by all consolidated assets and, therefore, it should be used in order to compare income with profitability on an individual basis.

in 2002, to 0.79 per cent. However, when compared with the end of the second half of the year, ROA increased sizably by 14 basis points. Despite these developments, the profitability of the Portuguese banking system continued to compare favourably to most of the other euro area banking systems[(23)] (Chart 23).

The reduction in ROA from the first half of 2002 reflected negative contributions from the financial margin (-6 basis points), administrative costs[(24)] (-2 basis points) and residual items[(25)] (-4 basis points). Contributions to an improvement came from other current income (6 basis points), in particular, from net commission income and from results of affiliated companies and subsidiaries excluded from consolidation (Chart 24).

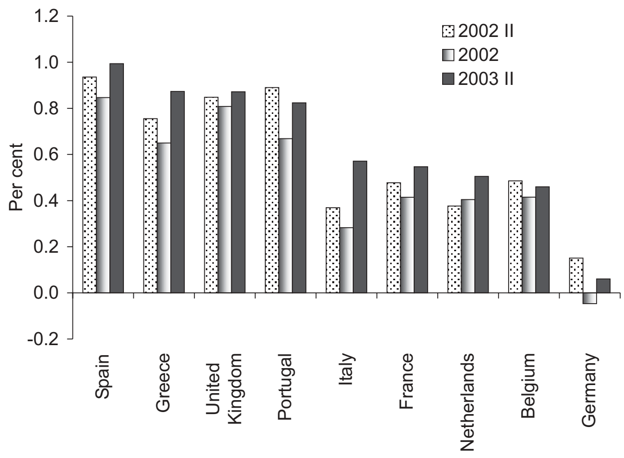
Reflecting a far lower increase (0.7 per cent) than that of average assets (3.5 per cent), the weight of the financial margin in total assets fell from 2.10 per cent in the first half of 2002, to 2.04 per cent in the first half of 2003 (Chart 25)[(26)]. In

(23) For further details, see the article entitled "The Portuguese banking system: developments and international comparison", in the March 2003 issue of the *Economic Bulletin* of the Banco de Portugal.

(24) Labour costs and supplies and services from third parties.

(25) Extraordinary (net) gains, depreciation for the year and taxes on profit.

Chart 23
NET RETURN ON ASSETS (ROA)



Sources Bankscope and Banco de Portugal. The sample includes eight banks in Italy, six in the United and Spain, five in Portugal, three in Germany and Greece and two in the Netherlands, France and Belgium.

Note: Country aggregates are averages weighted by total average assets of banks included in the sample.

Chart 24
CHANGE IN RETURN ON EQUITY
Breakdown of effects

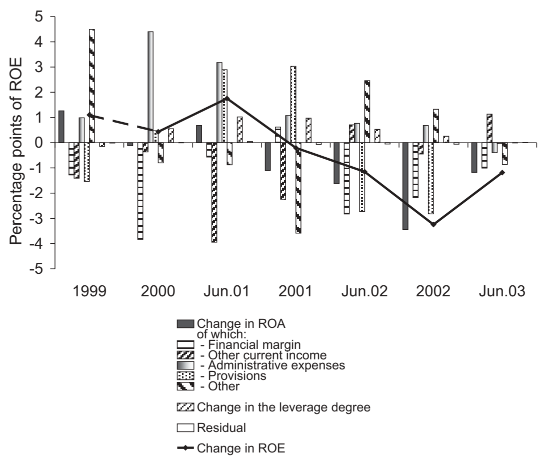
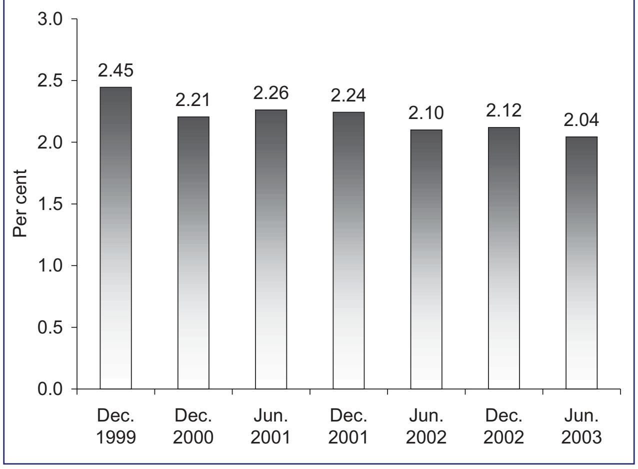


Chart 25
FINANCIAL MARGIN
As a percentage of total average assets
On a consolidated basis

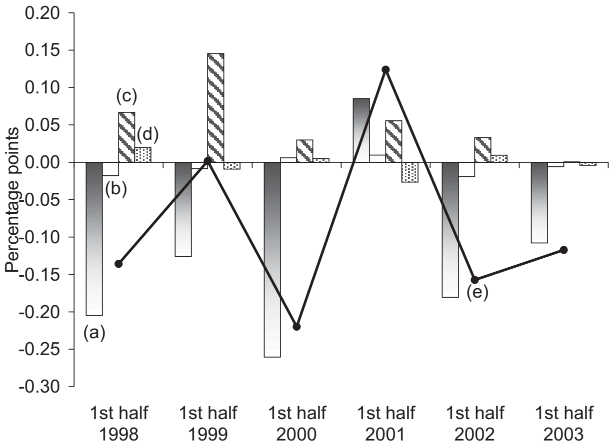


parallel with the slowdown in credit to customers (which is the asset with higher return of the banking system), the significant deceleration in resources from customers (more marked in this half year) and the increasing weight of funds obtained through the issue of debt (at a significantly higher cost than other liabilities), have been important factors behind the reduction of the financial margin contribution to the assets return (Chart 26 and Table 11). However, it should be noted that the move towards an increasing share of debt securities in total market funding by banks is a positive development, since it reflects higher diversification of financing sources, and results in the extension of the maturity of liabilities (and hence in its stability). With this change in the financing structure, the liquidity position of the banking system is improved as compared to an alternative solution of higher recourse to interbank financing, less costly, but clearly more volatile and sensitive to adverse market developments.

It should be noted that there was a reduction in the financial margin in most banking systems of the euro area countries (as compared with the corresponding half-year and the whole 2002); exceptions were France and Greece. Thus, the Portuguese banking system kept a favourable relative position, in terms of the financial margin, in the first half of 2003 (Chart 27).

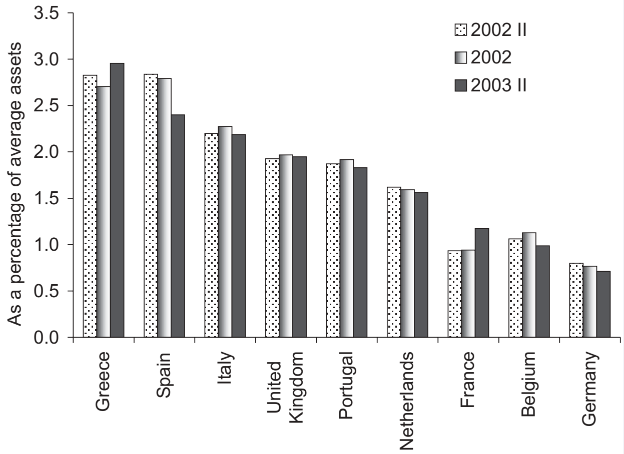
(26) In January 2003 there was a significant change in the reporting of data on interest rates applied by monetary financial institutions to deposits and loans vis-à-vis households and non-financial corporations, as a result of the entry into force of Regulation (EC) No. 63/2002 of the European Central Bank of 20 December 2001. As a consequence, the former interest rate series on new business with these sectors was discontinued at the beginning of the year. The Banco de Portugal has been analysing the data received through the new reporting in order to disclose the new series in the near future. In view of this interruption, the analysis and the charts usually presented on interest rate differentials are not included in this section.

Chart 26
BREAKDOWN OF THE FINANCIAL MARGIN
As a percentage of total average assets
On an individual basis



(a) Effect of the change in the differential between average lending and deposits rates.
(b) Effect of the change in the interest rate level.
(c) Effect of the change in the balance-sheet structure.
(d) Effect arising from off-balance-sheet operations.
(e) Total change in the financial margin as a percentage of average assets.

Chart 27
FINANCIAL MARGIN



Sources: Bankscope and Banco de Portugal. The sample includes eight banks in Italy, six in the United and Spain, five in Portugal, three in Germany and Greece and two in the Netherlands, France and Belgium.
Note: Country aggregates are averages weighted by total average assets of banks included in the sample.

Also, administrative costs contributed negatively to the change in the ROA, increasing by 4.9 per cent in the half year under review. However, these developments were chiefly due to the widening in the consolidation boundary of the banking system(27). Turning to these costs, a mention should be made concerning the 5.7 per cent rise in labour costs(28). As a consequence, the weight of this item in total average assets went up from 1.66 per cent in the first half of 2002 (1.69 per cent in 2002 as a whole), to 1.68 per cent in the first half of 2003. Likewise, the ratio of administrative costs to income increased to 50.1 per cent (49.6 and 51.8 per cent respectively in June and December 2002), reflecting the change in labour costs (Chart 28)(29). Note however that the ratio of administrative costs to income of the main Portuguese banking groups, continued to compare favourably with the other European countries, remaining close to the one in the United Kingdom and Spain (Chart 29).

The negative change in ROA, was also due to changes in extraordinary gains (whose weight in total average assets decreased from 0.09 per cent in June 2002, to 0.03 per cent at the end of the first half of 2003). The same for depreciation in the year, which increased 8.6 per cent, year-on-year, having their weight in total average assets slightly risen to 0.23 per cent (0.22 per cent in the first half of 2002).

In turn, the year-on-year change in net provisions set up in the half year under review (3.9 per cent) was significantly more moderate than a year earlier (51.6 per cent). The respective weight in total average assets returned to the same level as in the first half of 2002 (0.54 per cent), after 0.61 per cent in 2002 as a whole(30).

The significant growth recorded by net commissions (of 11.5 per cent) and by income from companies not included in the consolidation (77

(27) Excluding this effect, the growth rate of administrative costs would have been slightly below 1 per cent.
(28) Although the total is influenced by the change in the consolidation boundary of the banking system, the increase in labour costs per employee (calculated after the adjustment for the change in the composition) was around 3.5 per cent, in year-on-year terms.
(29) Excluding the effect of the change in the composition of consolidation of the banking system, this indicator seems to have continued to show the downward trend recorded since the first half of 2003, standing at 49.3 per cent.

Table 11

IMPLICIT AVERAGE RATES OF RETURN OF THE MAIN BALANCE SHEET ITEMS[(a)]

Per cent

	1999 1st half	2000 1st half	2001 1st half	2002 1st half	2003 1st half
Interbank assets [(b)]	3.45	3.60	4.46	3.00	2.46
Non-interbank assets	5.74	5.42	6.25	5.08	4.63
Credit (gross)	6.23	5.71	6.64	5.36	4.82
Securities (gross)	4.68	4.96	5.43	4.31	4.07
Other assets	1.15	0.84	1.02	1.35	1.52
Interest-bearing assets	4.96	4.85	5.78	4.56	4.11
Interbank liabilities	3.70	3.91	4.77	3.19	2.63
Non-interbank liabilities	2.49	2.59	3.36	2.58	2.33
Deposits	2.34	2.28	3.03	2.27	1.97
Demand deposits	0.90	1.00	1.27	0.92	0.74
Time deposits	3.11	3.02	4.01	3.05	2.68
Other	1.87	1.40	1.57	1.26	2.37
Securities	3.30	4.18	4.51	3.41	3.12
Equity and subordinated liabilities	4.56	5.23	5.75	4.70	4.34
Other liabilities	1.74	1.79	1.99	2.04	2.37
Interest-bearing liabilities	2.95	3.08	3.86	2.79	2.44
Differentials (percentage points):					
Interest-bearing assets-liabilities	2.01	1.77	1.92	1.77	1.67
Non-interbank assets - non-interbank liabilities	3.25	2.84	2.89	2.50	2.30
Credit-deposits	3.89	3.44	3.61	3.09	2.85
Interbank assets - interbank liabilities	-0.24	-0.31	-0.31	-0.19	-0.17

Notes:
(a) Implicit average rates of return calculated as the ratio of annual interest flows to the average annual stock of the corresponding item in the balance sheet.
(b) Includes: cash, demand deposits with the Banco de Portugal, liquid assets held in credit institutions and other claims on these institutions.

per cent compared with the corresponding period in 2002) had a positive contribution to the change in ROA, offsetting the negative contributions of both income from securities and from financial operations (declining significantly in the first half of 2003, respectively, -16.9 and -9.3 per cent). It should be noted that commissions related to the capital market, with a negative contribution to income growth in 2002, had a neutral impact on net income in the first half of 2003. In turn, the change in income from investee companies was largely due to one of the domestic banking groups. Income from financial operations reflected a base effect in results associated with the foreign exchange position (which recorded a high level in the first half of 2002). Towards the upside, there were the favourable developments in the stock market in the first half of 2003 (Chart 30).

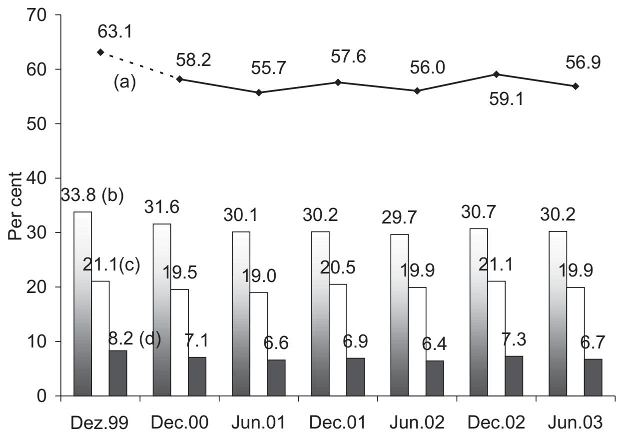
Although the reduction in the financial margin, the positive path of other current income allowed for an increase in the banking margin of 3.7 per cent in June 2003, year-on-year, accelerating from December (1.4 per cent) and June 2002 (3.4 per cent) (Chart 31)[(31)]. Thus the weight of banking margin in total average assets returned to the level in the first half of 2002 (3.35 per cent), rising from the end of the year (3.26 per cent). As a result of the higher weight of administrative costs in total average assets, the gross return of the Portuguese banking system decreased from 1.69 per cent of total average assets in June 2002 (1.57 per cent in De-

(30) The increase in both provisioning and depreciation (referred to above) was naturally influenced by the change in the consolidation boundary of the banking system. If this change in institutions that are consolidated in the system had not occurred, the year-on-year rates of change in these two items, would have been of approximately 2.4 and 4.1 per cent (respectively for provisioning and depreciation).

Chart 28

RATIO OF ADMINISTRATIVE EXPENSES (ADMINISTRATIVE COSTS AND DEPRECIATION) TO INCOME

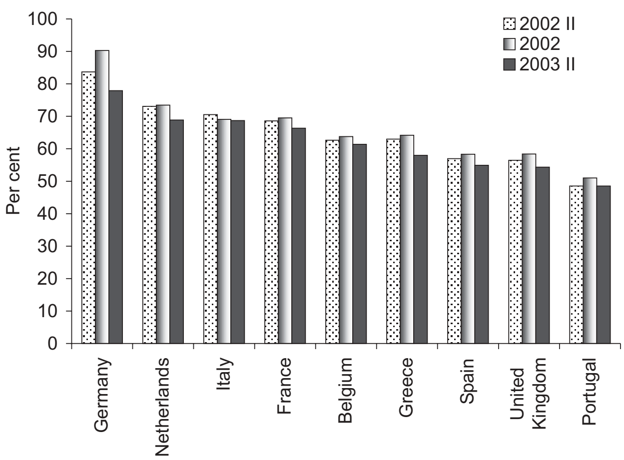
On a consolidated basis



(a) Administrative expenses as a percentage of banking margin.
(b) Staff expenses as a percentage of banking margin.
(c) Other administrative costs as a percentage of banking margin..
(d) Depreciation as a percentage of banking margin..

Chart 29

RATIO OF ADMINISTRATIVE EXPENSES TO BANKING INCOME



Sources: Bankscope and Banco de Portugal. The sample includes eight banks in Italy, six in the United and Spain, five in Portugal, three in Germany and Greece and two in the Netherlands, France and Belgium.

Note: Country aggregates are averages weighted by total average assets of banks included in the sample.

Chart 30

INCOME FROM FINANCIAL OPERATIONS – BREAKDOWN

On a consolidated basis

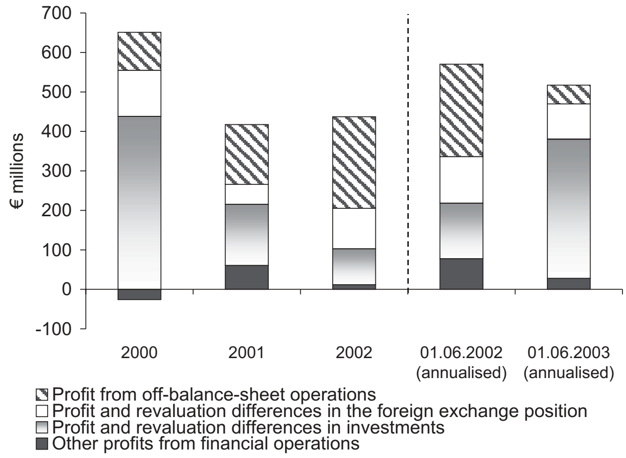
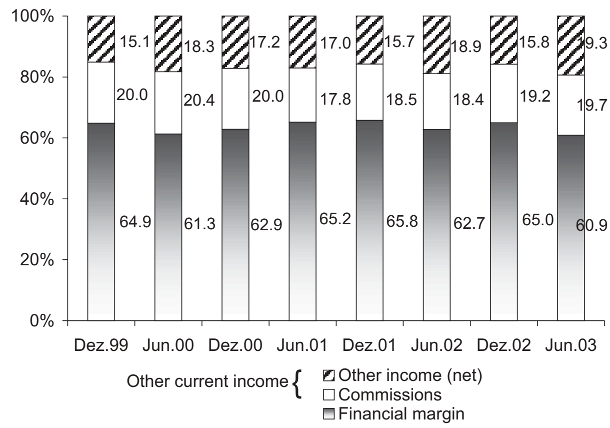


Chart 31

COMPOSITION OF BANKING MARGIN

On a consolidated basis



cember), to 1.67 per cent, at the end of the first half of 2003.

5. SOLVENCY

In 2002 the growth pace of own funds requirements for coverage of credit and market risks had fallen largely driven by the slowdown in credit. In turn, own funds (chiefly, complementary own funds associated with the issuance of subordinated debt) had risen, both factors enabling a rise in the overall capital adequacy ratio of the banking system to 9.8 per cent at the end of the first half of

(31) If the consolidation boundary of the banking system remained unchanged from 2002, the year-on-year rate of change in the banking margin would have been 1.2 per cent in June 2003.

the year. The capital adequacy ratio remained at this level until the end of the year, with no major changes in its composition (Table 12). At the end of June 2003, the capital adequacy ratio still remained at 9.8 per cent.

Concerning this ratio, the Portuguese banking system kept its relative position, in international terms, virtually unchanged in the first half-year. The Portuguese banks are amongst those with lower capital adequacy ratios in the euro area, despite capital increases in some banking groups (contributing to the improvement in their solvency situation) (Chart 32).

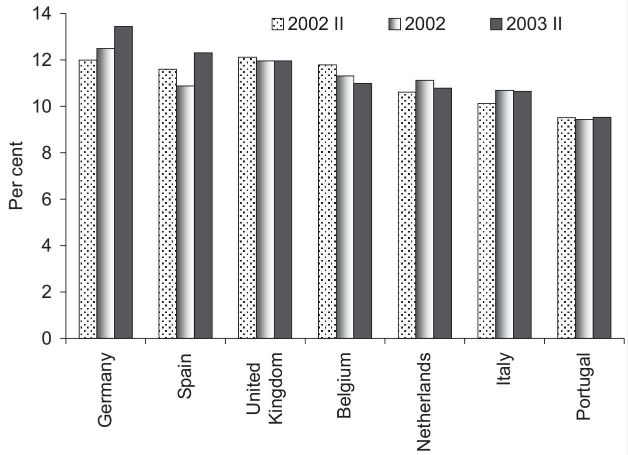
At the end of the first half of 2003, total own funds increased by 5.2 per cent, year-on-year, chiefly as a result of the positive contributions of base own funds (2.5 p.p.) and complementary own funds (3.7 p.p.). By contrast, deductions (which increased 6.5 per cent) contributed by -1.0 p.p. to the change in the capital adequacy ratio.

Base own funds increased by 3.3 per cent in June 2003 (year-on-year), accelerating from December (0.9 per cent); since the beginning of the year, the rise in base own funds was of 4.0 per cent. These developments were due to an equity increase in one of the five major banking groups. It should be noted that in 2002 developments in total own funds were conditioned (chiefly in the second half of the year) by the entry into force of a new provisioning regime of capital losses inherent in financial participations (laid down in Notice of the Banco de Portugal No. 4/2002[32]).

The rise in base own funds was offset by an increase in own funds requirements (5.3 per cent) and in deductions, as mentioned above. In particular, the requirements associated with the solvency ratio increased by 5.2 per cent in June 2003, above the pace in both the corresponding half-year and

Chart 32

SOLVENCY RATIOS



Sources: Bankscope and Banco de Portugal. The sample includes eight banks in Italy, six in the United and Spain, five in Portugal, three in Germany and Greece and two in the Netherlands, France and Belgium.

Note: Country aggregates are averages weighted by total average assets of banks included in the sample.

December 2002 (respectively 4.6 and 4.2 per cent). These developments were chiefly due to the widening of the consolidation boundary of the banking system. Excluding this effect, the requirements associated with the solvency ratio continued to show a downward trend, reflecting the slowdown in credit granted. It should be noted that there has been a downward trend in the weighted average of credit risk since June 2003, reflecting a reduction in the relative weight of higher risk credit in total credit granted (chiefly, credit to non-financial corporations with no guarantee and credit to households for consumption and purposes other than house purchase).

(32) In the former regime, the participations considered to be strategic by banks were only subject to the setting up of provisions if the investee companies were in a difficult financial situation or their financial situation showed persistent signs of deterioration. The new regime lays down that in addition to the setting up of provisions, losses from financial participations shall be deducted from own funds, when they exceed certain levels.

(33) See "The Portuguese economy in 2003" in this Bulletin.

Table 12

CAPITAL ADEQUACY

On a consolidated basis

	€ million						Year-on-year change (per cent)				
	1999	2000	2001	2002		2003	2000	2001	2002		2003
	Dec.	Dec.	Dec.	Jun.	Dec.	Jun.	Dec.	Dec.	Jun.	Dec.	Jun.
1. Own funds											
1.1. Base own funds	11 025.9	12 991.0	13 237.7	13 446.4	13 351.2	13 889.1	17.8	1.9	0.2	0.9	3.3
1.2. Complementary	4 268.9	5 026.3	7 030.1	7 278.9	7 808.6	7 952.7	17.7	39.9	11.0	11.1	9.3
1.3. Deductions	512.7	2 272.6	2 998.8	2 685.8	2 829.1	2 860.6	343.3	32.0	-6.7	-5.7	6.5
1.4. Supplementary own funds	27.3	0.4	1.2	0.7	0.0	0.1	-98.6	225.0	-56.2	-100.0	-90.2
Total own funds	14 809.5	15 745.1	17 270.1	18 040.2	18 330.7	18 981.2	6.3	9.7	5.5	6.1	5.2
2. Own funds requirements											
2.1. Credit risks	10 651.8	13 184.5	14 094.3	14 373.4	14 687.0	15 126.7	23.8	6.9	4.6	4.2	5.2
2.2. Position risks	180.6	284.2	289.1	254.1	219.6	261.5	57.3	1.7	-18.0	-24.0	2.9
2.3. Settlement and counterparty risks	47.8	30.7	40.8	30.0	41.3	51.3	-35.7	32.9	-27.1	1.0	70.8
2.4. Foreign exchange risks	79.2	134.9	87.3	67.0	87.2	71.4	70.4	-35.3	-11.3	-0.1	6.6
2.5. Other requirements	0.0	20.7	1.5	0.1	0.1	0.0	-	-92.8	-93.6	-92.7	-60.7
Total own funds requirements	10 959.4	13 655.1	14 513.1	14 724.6	15 035.1	15 510.9	24.6	6.3	3.9	3.6	5.3
							Year-on-year change (percentage points)				
3. Ratios											
3.1. Own funds/total requirements	135.1	115.3	119.0	122.5	121.9	122.4	-19.8	3.7	1.8	2.9	-0.1
3.2. Own funds/(total requirements x 12.5)	10.8	9.2	9.5	9.8	9.8	9.8	-1.6	0.3	0.1	0.2	0.0
3.3. Base own funds/(total requirements x 12.5)	8.0	7.6	7.3	7.3	7.1	7.2	-0.4	-0.3	-0.3	-0.2	-0.1

6. CONCLUSION

According to the latest estimates of the Banco de Portugal[33], the endogenous process of adjustment of the private sector was intensified in 2003, giving rise to a more marked reduction in private domestic demand than forecast. In fact, for the first time since 1997, the private sector as a whole (corporations and households) do not show net lending requirements. These sectors would have even denoted net borrowing capacity if the effects of special operations were not recognised in general government borrowing requirements. This adjustment process, started in 1999/2000 in the case of households and more recently in the case of corporations, translated into an increase in the savings ratio and in particular, to a significant drop in investment. Also the rebalancing of growth between the tradable and the non-tradable sectors is associated with this adjustment process. In particular, following developments in 2002, a mention shall be made on the fall estimated for the construction sector in 2003, as well as some gains in export market shares, contrasting with the accumulated losses in the period from 1997 to 2000.

Taking into account the central role played by the banking system in the financing of the Portuguese economy, the adjustment process of the private sector, referred to above, albeit inevitable, had negative repercussions on the banking system. These repercussions were translated namely into a fall in profitability and a rise in delinquencies. However, reflecting an environment characterised by historically low levels of interest rates, a relatively favourable starting position of banks, as well as their adjustment capacity to the downside position in the business cycle, the effects have been subdued and do not compare unfavourably at the international level. In turn, banks (in particular, domestic banks) have progressively reduced their vulnerability to the international interbank market. In fact, there has been a net reduction in banks financing in this market. After the interruption seen in the second half of 2002, banks resumed the issuance of medium and long-term securities in international financial markets in the first half of 2003, thus taking advantage of more favourable financing conditions in these markets.

In sum, the Portuguese banking system has been able to absorb the negative shocks coming from both the business cycle and the international financial markets. Nevertheless, it should be stressed that the recovery of the Portuguese economy will be slow and possibly weaker than that of the euro area. Thus, taking into account the lagged effect of the business cycle on the situation of the banking sector, an accurate analysis of risks continues to be crucial to mitigate the vulnerability of the banking system to the business cycle.

MAIN DEVELOPMENTS IN THE PORTUGUESE FOREIGN EXCHANGE AND DERIVATIVES MARKETS IN 2003

1. INTRODUCTION

In 2003, the Banco de Portugal continued to carry the foreign exchange and derivatives markets survey, collecting information on transactions carried out in April and on the amounts outstanding of derivatives held by banks on the last working day of March.

Following, in general, the model adopted in previous years[(1)], the survey continued to cover foreign exchange spot transactions and foreign exchange and interest rate derivatives transactions. As regards amounts outstanding, in addition to the amounts of foreign exchange and interest rate derivatives, it also covers the amounts outstanding of equity, commodity and credit derivatives. Similarly to previous surveys, participating entities correspond to all banking institutions resident in Portugal.

The overall analysis of the data collected underlines the growth recorded vis-à-vis 2002 both in transactions and in amounts outstanding. However, it should be noted that these developments were strongly influenced by the trend of the US dollar from April 2002 to April 2003. In effect, given that the results of the survey are expressed in US dollars (while the reference currencies are often different), the broadly based depreciation of this currency in the above period has significantly widened the expansion of total aggregates of both transactions and amounts outstanding.

The aim of this text is to identify some changes in the structure of transactions and amounts outstanding reported by financial institutions operating in the Portuguese market, also taking as a reference basis developments at an international level[(2)]. This analysis is carried out for operations both over-the-counter (OTC) (point 2) and in organized markets (point 3). The last point aims at identifying the development of the degree of concentration of operations carried out in the Portuguese derivative market.

Summarising, it is possible to identify some of the most significant developments between 2002 and 2003:

- expansion of turnover in the OTC market for the first time since the introduction of the euro, with a significant increase in transactions both in the interest rate derivatives and in the traditional foreign exchange market;
- expansion of the amounts outstanding, chiefly of interest rate derivatives;
- increase in activity on equity and equity index derivatives (albeit maintaining a residual share);
- maintenance of the clear predominance of interest rate swaps in interest rate derivatives, in terms of both turnover and amounts outstanding;
- continuation of non-resident financial institutions as major counterparties, as regards transactions and amounts outstanding (in spite of some decline in the share of these counterparties in the interest rate segment);
- maintenance of the clear predominance of the euro, with a strengthening of its relative weight, particularly in the interest rate derivatives segment, with the exception of the traditional foreign exchange market, where the

(1) From a methodological perspective, this survey follows closely the triennial survey coordinated by the BIS.

(2) See the results of the BIS triennial surveys of OTC derivatives market activity.

US dollar and the euro register an identical share;
- correction of the strong increase of activity in exchange — traded instruments in 2002;
- maintenance of a high degree of concentration both in the OTC and organised markets, even with an increase in concentration in spot operations and in foreign exchange derivatives.

2. OTC MARKET

2.1. Turnover[(3)]

The results of the annual survey of the Banco de Portugal to transactions in the foreign exchange and derivatives markets on exchange and interest rates, indicate that activity in the OTC market seems to have increased for the first time since the introduction of the euro. The average daily turnover increased by 25%[(4)] from April 2002 to April 2003 (Chart 1), although that increase, when excluding the impact of exchange rate fluctuations due to the depreciation of the US dollar, was weaker (by approximately 12%).

The increase in turnover was observed across all traditional instruments of the foreign exchange market[(5)] and, in particular, in interest rate derivatives. In contrast to this behaviour, the turnover of non-traditional foreign exchange derivatives[(6)] has narrowed. As a result, the structure by instrument in the OTC market saw an increase in the importance of interest rate derivatives, in contrast to the decrease in the shares of the traditional foreign exchange market and non-traditional foreign exchange derivatives (Table 1). Although the results of these two latest surveys pointed to a strengthening of the trend of expansion of activity in interest rate derivatives, the traditional foreign exchange market continued to be, by far, the most important segment (73%).

Non-traditional foreign exchange derivatives, however, continued to be only traded by a rather

Chart 1
OTC MARKET
Average daily turnover

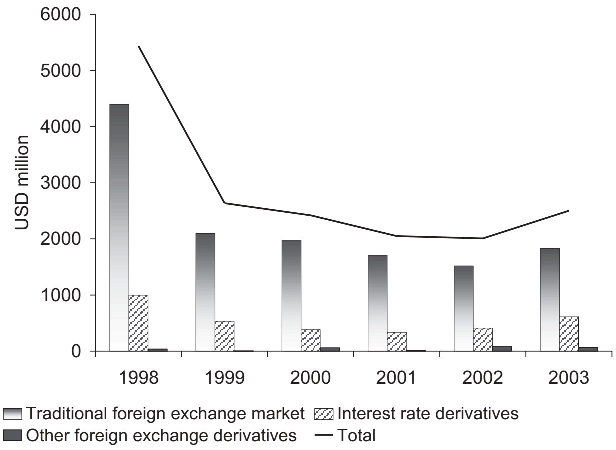


Table 1
OTC MARKET
Average daily turnover

USD million and as a percentage of the total

	Total	Traditional foreign exchange market	%	Other foreign exchange derivatives	%	Interest rate derivatives	%
1998	5 434	4 398	81	38	1	998	18
1999	2 635	2 099	80	3	0	533	20
2000	2 418	1 978	82	59	2	381	16
2001	2 049	1 709	83	12	1	328	16
2002	2 007	1 518	76	78	4	411	20
2003	2 501	1 825	73	65	3	611	24
Change (%):							
2001/2002	-2.0	-11.2		550.0		25.3	
2002/2003	24.6	20.2		-16.7		48.7	

reduced number of institutions, maintaining a negligible importance in the turnover of the OTC market. Business in this segment continued to be almost fully limited to foreign exchange options, mostly concentrated in non-resident financial institutions.

Traditional foreign exchange market

In April 2003, the average daily turnover in the traditional foreign exchange market stood at USD 1,825 million, accounting for an increase of 20% vis-à-vis the figure recorded in the 2002 survey (approximately 11%, excluding exchange rate fluctuations). This rise reflected an increase in turnover in every instrument, which was more marked in forwards (outright forwards and foreign exchange swaps) (Table 2).

Spot operations consolidated the trend of recovery started in 2002, maintaining the growth of turnover at around 11%, while forwards reversed the downward trend seen over the past few years, with an increase of 38% in turnover.

As a result of their stronger increase, the share of forwards in total transactions in the foreign exchange market increased to 38%, while the share of spot operations declined to 62% (Chart 2). Contrary to developments in the Portuguese market since the introduction of the euro, this trend followed the tendency of an increase in the importance of the turnover of forwards detected in international markets since 1992.

It is worth noting that the structure by instrument in the Portuguese market is still much different from the pattern that has characterized international markets since 1995, in which forwards correspond to more than 50% of total activities involving traditional instruments in the foreign exchange market. However, in line with the pattern detected at the international level, the structure of forwards has been stable, with forex swaps continuing to be the predominant instrument, with a share of 87% over the latest triennial period.

Turning to the structure of turnover by ***type of counterparty***, the results of the 2003 survey suggest that there seems to have been an adjustment for the "abnormal" movements recorded in 2002, i.e., the significant fall in the turnover of financial institutions, on the one hand, and the strong increase in the turnover of non-financial customers, on the other hand. It should be recalled that these movements had determined a significant loss in the share of financial counterparties in favour of

Table 2

TRADITIONAL FOREIGN EXCHANGE MARKET

Average daily turnover

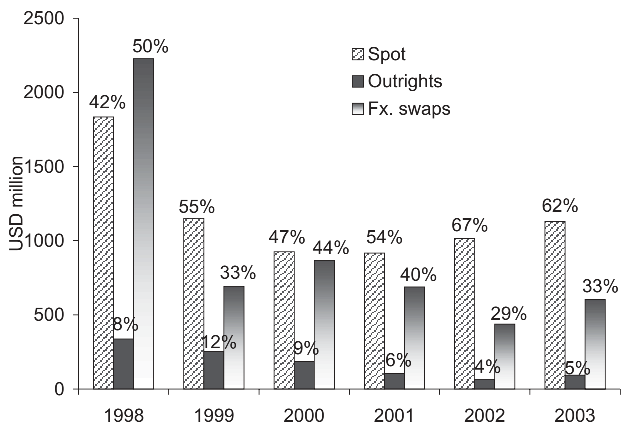
USD million

	Total	Spot	Forwards	Fx. swaps
1998	4 398	1 834	337	2 227
1999	2 099	1 151	255	693
2000	1 978	925	185	868
2001	1 709	917	104	688
2002	1 518	1 014	66	438
2003	1 825	1 128	94	603
Change (%):				
2001/2002	-11.2	10.6	-36.5	-36.3
2002/2003	20.2	11.2	42.4	37.7

Chart 2

TRADITIONAL FOREIGN EXCHANGE MARKET

Breakdown by instrument



(3) Data on transactions are always referred to US dollars, in terms of average daily turnover, adjusted for the double counting resulting from the transactions carried out in the domestic interbank market.

(4) Unless otherwise mentioned, the amounts and percentages refer to April 2003 and inter-temporal comparisons to the period from April 2002 to April 2003, calculated from values expressed in US dollars.

(5) The traditional foreign exchange market comprises spot transactions, outright forwards and foreign exchange swaps.

(6) Other foreign exchange derivatives comprise currency swaps and options.

Table 3

TRADITIONAL FOREIGN EXCHANGE MARKET

Breakdown by type of counterparty

As a percentage of the total

	1998	1999	2000	2001	2002	2003
Financial institutions	80	82	80	77	70	86
Resident	11	10	8	5	5	5
Non -resident	69	72	72	72	65	81
of which: euro area				21	21	31
Non–financial customers	20	18	20	23	30	14
Resident	17	14	19	16	21	12
Non-resident	3	4	1	7	9	2
of which: euro area				3	4	1
	100	100	100	100	100	100
Total – resident	28	24	27	21	26	17
Total – non-resident	72	76	73	79	74	83
of which: euro area				24	25	32

Table 4

TRADITIONAL FOREIGN EXCHANGE MARKET

Breakdown by currency

As a percentage of the total [(a)]

	1999	2000	2001	2002	2003
EUR	79	86	86	84	78
USD	83	79	74	75	79
JPY	9	11	13	14	16
GBP	20	13	13	10	12
CHF	3	3	7	7	9
DKK		2	4	2	1
SEK		1	1	2	1
NOK		1	1	3	1
Other European currencies		2	0	1	0
Other currencies	6	2	1	2	3

Note:

(a) In the foreign exchange market, the breakdown by currency totals 200 per cent of total transactions since the two legs of each transaction are recorded separately.

non-financial counterparties. The reversal of these movements was translated into an increase in the share of financial institutions in total traditional foreign exchange market to 86% (Table 3) and into a decline in the share of non-financial customers to 14%. This structure is very similar to that detected at the international level in the latest BIS triennial survey.

The share of financial counterparties recorded an increase both in institutions belonging to the euro area (from 26% to 36%), and in non-euro area institutions (from 44% to 50%). The decline in the share of non-financial customers was, in turn, sharper among residents, although these continue to be the major counterparty in transactions with non-financial entities.

The share of transactions carried out in the domestic interbank market[(7)] remained unchanged at 5% over the past 3 years, confirming the perspective that the impact of the introduction of the euro, together with the bank merger process, seems to have led to a drop to approximately half the importance of the domestic interbank turnover, in the traditional foreign exchange market as a whole.

Against this background, turnover in the traditional foreign exchange market, overall, recorded a wider openness vis-à-vis abroad, and the share of transactions with non-residents increased from 74% in 2002 to 83% in 2003.

The most relevant change in the structure of the ***breakdown by currency*** was the loss of predominance of the euro, which has now a share similar to that of the US dollar (Table 4). Behind that change was the marked increase in transactions involving the US dollar, when compared with the turnover of transactions involving the euro. The share of the euro decreased to 78% and of the US dollar increased to 79%. The iene and the pound sterling maintained the third and fourth positions, increasing their share to 16% and 12% respectively.

Differently from developments in 2001 and 2002, the share of transactions with the Nordic currencies declined in 2003 (to 3%), which corresponds to a marked and broadly based decrease of their turnover.

The share of the residual group of currencies denominated "other currencies" increased further, due to the rise in turnover involving the US dollar with the Brazilian real and the Canadian dollar. This trend had already been detected in 2002, and continues to correspond to market niches of some institutions.

(7) The share of the domestic interbank market is equivalent to the share of resident financial institutions, since operations carried out with other resident financial institutions, other than banks, are virtually nil.

The euro/US dollar continued to be the most actively traded currency pair, albeit with a decrease of their total share to 57%. Among the other pairs of currencies, stress is laid on the increase in the activity of pairs involving the US dollar, with a rise in the overall share from 14% to 22%. The second position in the ranking by pairs of currencies was shared by the euro/iene and the US dollar/iene, both with 8%. The euro/pound sterling, previously the third most important currency pair, fell to the fourth position, reducing its share to 7%. Transactions with the Swiss franc, in turn, ceased to involve chiefly the US dollar, to be more equitably distributed between the US dollar and the euro.

Developments in the structure of the ***type of business by instrument*** revealed some changes broadly based across all instruments (Table 5):

- increase in transactions with non-resident financial counterparties, reinforcing their predominance in transactions;
- decrease in the share of transactions involving the euro, particularly the euro/US dollar currency pair, in contrast to a significant increase in transactions with other pairs of currencies involving the US dollar;
- reinforcement of transactions in longer maturities in outright forwards and chiefly in forex swaps;
- and smaller recourse to automated dealing systems (of the Reuters dealing type).

Turning to ***spot*** transactions, activity continued to be chiefly focused on the euro/US dollar pair or in currency pairs involving the euro (approximately 80%), but with an increase in the share of the US dollar/iene pair to 7% (the same of the euro/pound sterling pair). In this segment, non-resident financial institutions gained importance both in and outside the euro area. Data also revealed a significant increase in recourse to trading systems of the electronic broker type for the carrying out of this type of operations, accounting for 45% of total turnover.

As regards trading in ***outright forwards***, some changes should be highlighted, in addition to those already mentioned: reinforcement of the preference for financial counterparties outside the euro area; significant increase, both in absolute and relative terms, in turnover involving the US dollar and other currencies that are not usually listed, such as the Brazilian real and the Canadian dollar; and an increasingly smaller concentration of operations up to 7 days, in favour of maturities from 7 days to one year.

Trading in ***forex swaps*** seems to have recorded the most significant structure changes. It is worth

Table 5

TRADITIONAL FOREIGN EXCHANGE MARKET

Characterisation of the type of business by instrument

As a percentage of total turnover by instrument

	Spot		Outright forwards		Fx. swaps	
	2002	2003	2002	2003	2002	2003
Counterparties	**100**	**100**	**100**	**100**	**100**	**100**
Financial institutions	**70**	**81**	**65**	**69**	**71**	**97**
Resident	6	7	2	2	1	1
Non- resident	64	74	63	67	70	96
of which: euro area	15	20	11	7	37	55
Non-financial customers	**30**	**19**	**35**	**31**	**29**	**3**
Resident	28	17	33	29	2	1
Non- resident	2	2	2	2	27	2
of which: euro area	1	1	0	0	12	1
Currency pairs	**100**	**100**	**100**	**100**	**100**	**100**
EUR/USD	53	52	63	54	76	67
EUR/JPY	13	12	5	2	2	1
EUR/GBP	6	7	6	6	11	7
EUR/CHF	3	5	1	1	0	1
EUR/DKK	2	0	0	0	0	1
EUR/SEK	2	1	0	0	0	1
EUR/NOK	3	1	0	0	0	0
EUR/outras	1	1	0	2	0	1
USD/JPY	4	7	2	1	6	11
USD/GBP	3	5	3	0	3	6
USD/CHF	7	8	0	0	0	1
USD/other	2	1	20	34	2	3
Other currency pairs	1	0	0	0	0	0
Maturities	**100**	**100**	**100**	**100**	**100**	**100**
[Up to 7 days]	100	100	50	29	67	0
]7 days- 1 month]			26	38	13	76
]1 month- 1 year]			24	32	20	10
]1 year- 5 year]			0	1	0	14
> 5 year			0	0	0	0
Conduction of transactions	**100**	**100**	**100**	**100**	**100**	**100**
Automatic dealing	31	16	15	14	45	20
Broker	14	14	5	5	13	20
Electronic broker	36	45	0	2	0	1
Other (including telephone system)	19	25	80	79	42	59

mentioning that: the increase in the share of financial counterparties was particularly marked in euro area institutions, which hold approximately 55% of this business; the share of transactions involving the euro and the US dollar continued to decline, in parallel with an increase in the share of the pound sterling and, in particular, of the iene in pairs of currencies involving the US dollar; the downward trend already observed in 2002 in the concentration of these transactions on very short maturities was more marked, with transactions being only traded at maturities over 7 days; the use of electronic brokers systems in this type of transactions continued to be incipient.

OTC interest rate derivatives

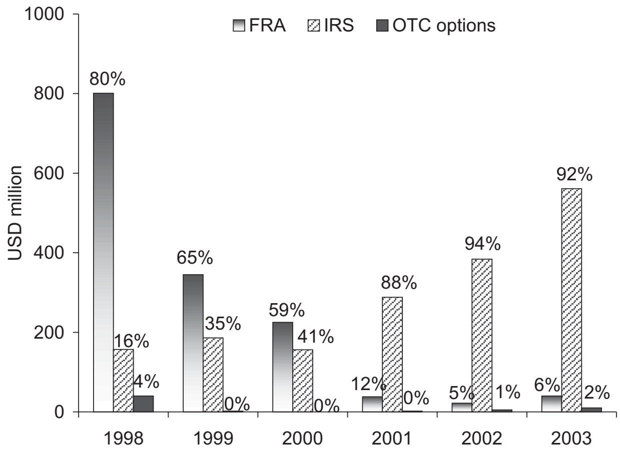
In 2003, the average daily turnover of interest rate derivatives in the OTC market increased to USD 611 million, with the pace of growth going up from 25% between 2001 and 2002, to 49% between 2002 and 2003 (Table 6). However, excluding foreign exchange fluctuations, this growth was lower (23%). Despite the recovery recorded over the last two years, turnover has not yet resumed the levels observed before the introduction of the euro.

Activity increased markedly in all instruments, with IRS (interest rate swaps) transactions maintaining their predominance, with a share above 90% in total interest rate derivative transactions

Chart 3

OTC INTEREST RATE DERIVATIVES

Average daily turnover



(Chart 3). FRA (forward rate agreements) had the first rise in turnover of the last 5 years, slightly increasing their share, while options continued to have a negligible share in the total.

As in previous years, it was decided not to carry out the analysis of the overall structure of interest rate transactions in the OTC market, since their outline is identical to that detected for IRS, due to the high concentration of business in this

Table 6

OTC INTEREST RATES DERIVATIVES

Average daily turnover

USD million

	Total	FRA	IRS	Options
1998	998	801	157	40
1999	533	345	186	2
2000	381	225	156	0
2001	328	38	288	2
2002	411	22	384	5
2003	611	40	561	10
Change(%):				
2001/2002	25.3	-42.1	33.3	150.0
2002/2003	48.7	81.8	46.1	100.0

Table 7

OTC INTEREST RATE DERIVATIVES

Breakdown by counterparty

As a percentage of the total

	1998	1999	2000	2001	2002	2003
Financial institutions	**99**	**99**	**98**	**97**	**91**	**82**
Resident	33	16	7	8	3	4
Non-resident	66	83	91	89	88	78
of which: euro area				30	50	38
Non-financial customers	**1**	**1**	**2**	**3**	**9**	**18**
Resident	0	1	1	3	3	14
Non-resident	0	0	1	0	6	4
of which: euro area				0	6	0
	100	100	100	100	100	100
Total resident	**34**	**17**	**8**	**11**	**6**	**18**
Total non-resident	**66**	**83**	**92**	**89**	**94**	**82**
of which: euro area				**30**	**56**	**38**

Table 8

OTC INTEREST RATES DERIVATIVES

Breakdown by currency

As a percentage of the total

	1999	2000	2001	2002	2003
EUR	65	93	88	89	94
USD	7	4	9	5	5
JPY	1	0	0	0	1
GBP	12	0	3	1	0
Other currencies	15	3	0	5	0

sector. This symmetry is evinced by the comparison between the Tables on total transactions (Tables 7 e 8) and on individual IRS (Table 9).

However, the analysis of the developments in the structure of the ***type of business by instrument*** permits to identify different changes for FRA and IRS, as regards the breakdown of turnover by counterparties, currencies, maturities and the manner how these operations are carried out.

The major characteristics of the structure of ***FRA*** business remained relatively unchanged. FRA continued to be traded by a rather limited number of banks, almost exclusively with non-resident financial institutions, chiefly in the euro interest rate market and with maturities from one month to one year (Table 9). Stress should nonetheless be laid on the most relevant movements:

- decrease in the share of business carried out with financial counterparties in the euro area, in contrast with an increase in the share of business carried out with financial entities outside the euro area;
- increased weight of business involving iene interest rates, with activity ceasing to be exclusively concentrated on the euro;
- smaller diversification in the selection of maturities of the transactions, thus implying an almost total concentration on maturities from 1 month to 1 year, the previously mostly used maturity;
- utilisation of the conventional broker as an exclusive vehicle to carry out this type of operation.

Table 9

OTC INTEREST RATE DERIVATIVES

Characterisation of the type of business by instrument

As a percentage of total turnover by instrument

	FRA		IRS	
	2002	2003	2002	2003
Counterparties	**100**	**100**	**100**	**100**
Financial institutions	**100**	**100**	**91**	**81**
Resident	5	3	3	4
Non- resident	95	97	88	77
of which: euro area	64	50	50	37
Non-financial customers	**0**	**0**	**9**	**19**
Resident	0	0	3	15
Non- resident	0	0	6	4
of which: euro area	0	0	6	0
Currencies	**100**	**100**	**100**	**100**
EUR	100	95	90	94
USD	0	0	4	6
JPY	0	5	0	0
GBP	0	0	1	0
CHF	0	0	0	0
Other	0	0	5	0
Maturities	**100**	**100**	**100**	**100**
[Up to 7 days	36	0	23	46
]7 days- 1 month]	0	5	5	11
]1 month- 1 year]	64	95	27	10
]1 year - 5 year]	0	0	18	24
> 5 years	0	0	27	9
Conductions of transactions	**100**	**100**	**100**	**100**
Automatic dealing	5	0	39	24
Broker	36	100	19	13
Electronic broker	0	0	0	0
Other (including telephone system	59	0	42	63

IRS, although continuing to be chiefly focused on euro interest rates and to be agreed with non-resident financial institutions with maturities up to one year, have also recorded some changes in the structure of their business, but in a different sense as those observed in FRA, inter alia:

- increase in the share of business with non-financial customers (residents), in contrast with a decrease in the share of turnover of business with euro area financial institutions;

- smaller diversification of business by currency, focusing on euro and USD dollar interest rate transactions;
- larger concentration in very short-term maturities, reflecting an increase in the activity of the so-called EONIA swaps (used to cover money market operations);
- and larger utilisation of direct telephone to carry out *IRS transactions*.

2.2. Amounts outstanding

According to the results of the survey conducted in 2003, notional amounts outstanding of OTC derivatives(8) expressed in US dollars increased vis-à-vis 2002 (by 23%)(9). When adjusted for foreign exchange fluctuations, however, notional amounts of OTC derivatives increased only slightly (by 3%), reflecting the depreciating trend of the US dollar between March 2002 and March 2003.

When denominated in US dollars, the growth of notional amounts outstanding of interest rate derivatives (26%) was higher than that of foreign exchange derivatives (9%), thus strengthening the predominance of the first type of instruments (Chart 4). This distribution, in terms of the relative share of both market risk segments, differs from that observed in transactions, but is consistent with the trend observed at the international level. The other derivatives continued to present a residual share. Only the equity and equity indices derivatives segment (with a share of 2%) is worth mentioning.

Chart 4
AMOUNTS OUTSTANDING OF OTC DERIVATIVES

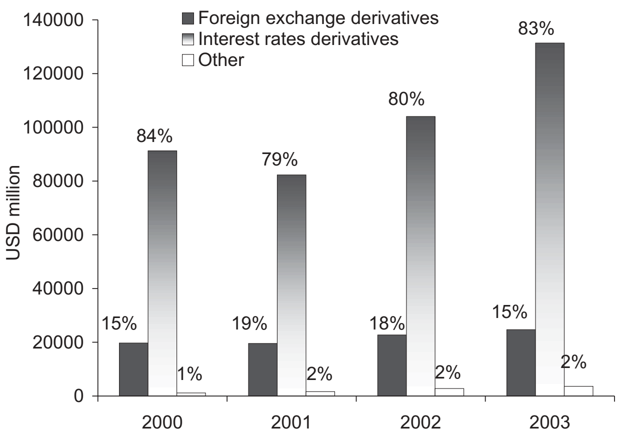


Table 10

AMOUNTS OUTSTANDING OF OTC FOREIGN EXCHANGE DERIVATIVES

USD million

	Total	Forwards	Currency Swaps	OTC options
1998.	25336	18558	5049	1729
1999.	19549	14903	3012	1634
2000.	20954	13357	5684	1913
2001.	19561	13629	5496	436
2002.	22710	15961	6136	613
2003.	24687	19308	4272	1107
Change(%):				
2001 / 2002	16.1	17.1	11.6	40.6
2002 / 2003	8.7	21.0	-30.4	80.6

OTC foreign exchange derivatives

Amounts outstanding of foreign exchange derivatives increased in 2003, for the second consecutive year. When adjusted for the effects of the depreciation of the US dollar between both surveys, however, notional amounts outstanding of foreign exchange derivatives declined by 2%.

Behind the increase in amounts outstanding was chiefly the growth of foreign exchange forwards, which more than offset the fall in currency swaps (Table 10). Is should be mentioned, however, that the decline in outstanding amounts of currency swaps does not represent an overall trend of the institutions dealing in this type of instrument (most of which present an increase in the amounts outstanding of this derivative), but reflects business strategies of only some specific institutions.

The different trend of the several types of foreign exchange derivatives changed the relative share of the different instruments. Forwards have thus significantly reinforced their position as the

(8) Amounts outstanding are adjusted for the double counting resulting from transactions carried out in the domestic interbank market.
(9) Unless otherwise mentioned, amounts outstanding and percentages refer to 31 March 2003 and inter-temporal comparisons to the period from the end of March 2002 to the end of March2003.

Chart 5

AMOUNTS OUTSTANDING OF OTC FOREIGN EXCHANGE DERIVATIVES

Breakdown by instrument

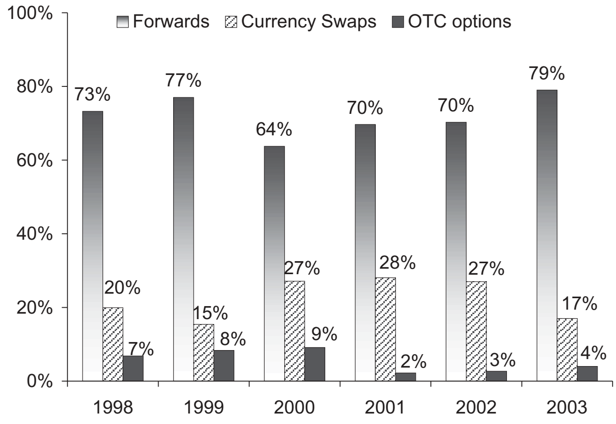


Table 12

AMOUNTS OUTSTANDING OF OTC FOREIGN EXCHANGE DERIVATIVES

Breakdown by counterparty

As a percentage of the total

	1998	1999	2000	2001	2002	2003
Financial institutions	**70**	**55**	**60**	**68**	**74**	**83**
Resident	9	8	7	4	3	2
Non-resident	61	47	53	64	71	81
of which: euro area				17	18	23
Non-financial customers	**30**	**45**	**40**	**32**	**26**	**17**
Resident	28	34	31	22	15	16
Non-resident	2	11	9	11	11	1
of which: euro area				3	3	0
	100	100	100	100	100	100
Total – resident	**37**	**42**	**38**	**26**	**18**	**18**
Total – non-resident	**63**	**58**	**62**	**74**	**82**	**82**
of which: euro area				**19**	**21**	**23**

instrument with a larger share, while currency swaps had a marked decrease of their relative weight. OTC options maintained a relatively low share (Chart 5).

Turning to the **breakdown by currency**, and as regards the relative share of the different currencies, reference should be made to the decrease in the share of the US dollar (partly related to the broad-based depreciation of this currency), in contrast to the growing share of the euro and of the pound sterling (Table 11). The decreasing importance of the North-American currency is chiefly observed in terms of its share and is the result of the increase in absolute terms in most other currencies. It should also be noted that the decline in the amounts outstanding of the Brazilian real determined the fall in its relative share (which continues to reflect business strategies of some specific institutions and does not translate a broad-based pattern). The analysis of the breakdown by pairs of currencies does not reveal any relevant changes from 2002, but the maintenance of a high concentration, with the pairs of currencies EUR/USD, EUR/JPY and EUR/GBP continuing to account for approximately 80%[(10)] of the amounts outstanding.

Table 11

AMOUNTS OUTSTANDING OF OTC FOREIGN EXCHANGE DERIVATIVES

Breakdown by currency

As a percentage of the total[(a)]

	1999	2000	2001	2002	2003
EUR	92	94	93	85	88
USD	69	76	70	73	67
JPY	18	15	17	17	17
GBP	14	9	17	13	16
CHF	2	1	1	1	2
BRL		0	0	8	5
Other European currencies	2	3	0	1	2
Other currencies	3	2	2	2	3

Note:
(a) The breakdown by currency totals 200 per cent of total transactions since the two legs of each transaction are recorded separately.

The analysis of the ***breakdown by counterparty*** of the amounts outstanding points to an increase in the relative share of financial institutions, in contrast with a decrease in non-financial customers. Similarly to developments in transactions, the expansion recorded by financial counterparties is exclusively the result of the increase in the amounts outstanding of non-resident financial institutions, the share of which stood at approximately 81% in March 2003 (while financial institutions maintained a residual share) (Table 12). Offsetting the increase in such counterparties, there was a decrease in the share of non-resident non-financial customers, wherefore the break-

(10) The breakdown by pairs of currencies totals 100%.

Table 13

AMOUNTS OUTSTANDING OF OTC FOREIGN EXCHANGE DERIVATIVES

Breakdown by instrument

As a percentage of amounts outstanding by instrument

	Forwards		Currency Swaps		OTC options	
	2002	2003	2002	2003	2002	2003
Counterparties	**100**	**100**	**100**	**100**	**100**	**100**
Financial institutions	**72**	**88**	**81**	**68**	**74**	**56**
Resident	3	2	2	0	21	2
Non-resident	69	86	79	68	53	54
of which: euro area	20	25	12	18	27	2
Non-financial customers	**28**	**12**	**19**	**32**	**26**	**44**
Resident	13	11	19	32	18	42
Non-resident	15	1	0	0	8	2
of which: euro area	4	0	0	0	0	0
Currencies pairs	**100**	**100**	**100**	**100**	**100**	**100**
EUR/USD	59	57	56	35	43	82
EUR/JPY	9	8	25	42	9	0
EUR/GBP	13	17	8	2	5	10
EUR/CHF	1	2	0	0	4	0
EUR/ other	2	4	0	3	3	7
GBP/USD	2	2	0	0	0	0
USD/JPY	4	4	0	0	4	0
USD/CHF	1	1	0	0	0	0
USD/other	9	5	11	18	32	1
Other	0	0	0	0	0	0
Maturities	**100**	**100**	**100**	**100**	**100**	**100**
[Up to 7 days]	9	5	0	0	5	0
]7 days - 1 month]	18	20	1	2	38	20
]1 month- 1 year]	60	59	13	27	46	74
]1 year- 5 year]	3	6	73	49	11	6
> 5 year	10	10	13	22	0	0

down into resident and non-resident counterparties remained significantly stable.

The ***analysis by instrument*** points to a relative homogeneity in terms of the breakdown by counterparty, despite diverging trends as to the structure by currency and, chiefly, by maturity (Table 13).

Turning to the breakdown by currency, there is a higher concentration in a reduced number of currency pairs in currency swaps and options than in forwards (reflecting the higher liquidity of this latter segment); in the first two instruments, three currency pairs account for 95% of positions. Of particular note is, in currency swaps, the strengthening share of the EUR/JPY pair (which is now the major pair) and of the USD/BRL pair (which continues to reflect strategic options of a very limited number of institutions).

The breakdown by maturity of forwards and options, shows a high concentration in maturities up to 1 year (chiefly between 1 month and 1 year). Turning to currency swaps, maturities between 1 and 5 years continue to prevail (in spite of the increase in maturities between 1 month and 1 year).

OTC interest rate derivatives

In the OTC interest rate derivatives segment, dollar-denominated notional amounts outstanding increased significantly for the second consecutive year (Table 14). However, when adjusted for the effects of foreign exchange fluctuations between March 2002 and 2003, amounts outstanding increased by only 4%.

The increase in the amounts outstanding was almost exclusively due to the rise in interest rate swaps (*IRS*), against a background in which the amounts outstanding of OTC options declined. Therefore, IRS relative share maintained an upward trend and this instrument strengthened its predominant position in institutions' portfolios, reaching a share of 95% (Chart 6). These developments occurred to the detriment of the relative share of OTC options, while FRA maintained their residual share. The relative importance of the different instruments evolved in line with the trend observed in international markets, with the development of the swap market in the euro area contributing significantly to the increase in IRS.

Turning to the ***breakdown by currency***, worthy of mention is the increase in the relative share of

Table14

AMOUNTS OUTSTANDING OF OTC INTEREST RATE DERIVATIVES

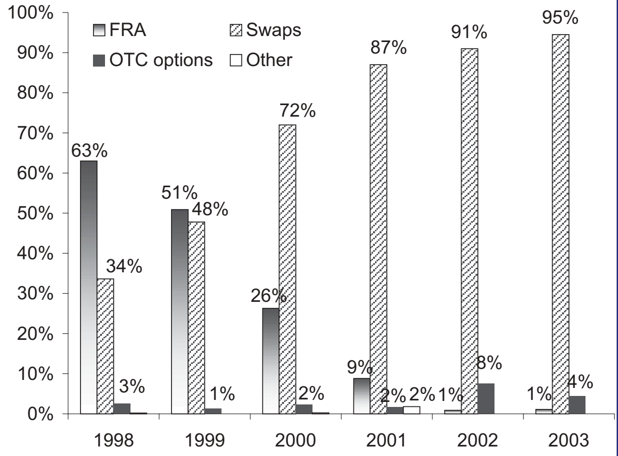
USD million

	Total	FRA	IRS	OTC options	Other OTC
1998	133178	84711	44773	3440	254
1999	130574	66449	62424	1701	0
2000	113297	29788	80558	2656	295
2001	82283	7254	72173	1367	1489
2002	104027	933	95230	7864	0
2003	131376	1438	124156	5780	2
Change (%):					
2001 / 2002	26.4	-87.1	31.9	475.3	-100.0
2002 / 2003	26.3	54.1	30.4	-26.5	-

Chart 6

AMOUNTS OUTSTANDING OF OTC INTEREST RATE DERIVATIVES

Breakdown by instrument



euro interest rate derivatives, to the detriment of the US dollar and the pound sterling. Against this background, the position of clear predominance of the euro was strengthened, accounting for 88% of total amounts outstanding of interest rate derivatives (Table 15).

The ***breakdown by counterparty*** shows an increase in the share of resident counterparties, as a result of the increase in both financial institutions and non-financial customers. It should be noted that the loss of share of non-resident financial institutions is not the result of a fall in the amounts outstanding of these counterparties, but only a lower growth than that of the other counterparties (identical rationale is applicable to amounts outstanding of financial institutions resident in the euro area) (Table 16).

The ***breakdown by instrument*** shows that the lower liquidity and deepness of FRA and OTC options segments imply that the results are often affected by changes in business strategies of some specific institutions, and do not reflect overall trend patterns.

As to counterparties, the breakdown by instrument reveals that the upward trend of the relative share of residents and the downward trend of financial institutions are common to the different instruments, although non-resident financial institutions continue to be the major counterparty of the three types of derivatives. Likewise, the aforementioned increase in the share of the euro is also a pattern observed in all instruments (Table 17). In turn, the maturities of the amounts outstanding continue to reveal a strong concentration in maturities over 1 month. In IRS, the breakdown by segments considered in these longer maturities is relatively equitable, while in options, amounts outstanding are chiefly concentrated on maturities between 1 and 5 years.

Table 15

AMOUNTS OUTSTANDING OF OTC INTEREST RATE DERIVATIVES

Breakdown by currency

As a percentage of the total

	1999	2000	2001	2002	2003
EUR	75	69	80	83	88
USD	7	13	12	11	9
JPY	0	1	0	0	0
GBP	10	9	5	3	1
Other European currencies		6	2	2	1
Other currencies	8	2	1	1	1

Table 16

AMOUNTS OUTSTANDING OF OTC INTEREST RATE DERIVATIVES

Breakdown by counterparty

As a percentage of the total

	1998	1999	2000	2001	2002	2003
Financial institutions	**97**	**91**	**91**	**93**	**92**	**90**
Resident	25	17	10	9	8	11
Non-resident	72	74	81	84	84	79
of which: euro area				22	32	26
Non-financial customers	**3**	**9**	**9**	**7**	**8**	**10**
Resident	2	2	3	4	6	8
Non-resident	1	7	6	3	2	2
of which: euro area				0	1	0
	100	100	100	100	100	100
Total resident	**27**	**19**	**13**	**13**	**14**	**19**
Total non-resident	**73**	**81**	**87**	**87**	**86**	**81**
of which: euro area				**22**	**33**	**26**

Table 17

AMOUNTS OUTSTANDING OF OTC INTEREST RATE DERIVATIVES

Breakdown by instrument

As a percentage of amounts outstanding by instrument

	FRA		IRS		OTC Options	
	2002	2003	2002	2003	2002	2003
Counterparties	**100**	**100**	**100**	**100**	**100**	**100**
Financial institutions	**75**	**58**	**93**	**92**	**83**	**59**
Resident	9	8	8	11	5	9
Non-resident	66	50	85	81	78	50
of which: euro area	30	6	29	26	60	28
Non-financial customers	25	42	7	8	17	41
Resident	24	42	5	6	12	39
Non-resident	1	0	2	2	5	2
of which: euro area	1	0	0	0	5	1
Currency	**100**	**100**	**100**	**100**	**100**	**100**
EUR	85	100	83	87	74	91
USD	0	0	11	10	21	9
GBP	0	0	3	1	5	0
JPY	0	0	0	0	0	0
SEK	0	0	1	1	0	0
Other	15	0	2	1	0	0
Maturities	**100**	**100**	**100**	**100**	**100**	**100**
[Up to 7 days]	0	23	0	1	0	0
]7 days - 1 month]	0	0	3	3	0	0
]1 month - 1 year]	96	73	26	32	49	37
]1 year - 5 year]	4	4	48	37	47	49
> 5 year	0	0	23	27	4	14

Other OTC derivatives

Equity, commodity and credit derivatives maintained a residual share in the 2003 survey (approximately 2% of total OTC). There was, however, some development in equity derivatives and, to a lesser extent, in credit derivatives.

Turning to **equity derivatives**, 2003 saw again a slight increase in the number of participating banks in this segment. However, the number of institutions continued to be small, accounting for little more than a third of the banks participating in the survey. In March 2003, positions in this market segment were broken down nearly equitably into swaps (52%) and options (48%), while euro area non-resident financial institutions continued to be the major counterparties (with 58%). In terms of the nationality of the entity issuing the underlying asset, a strong concentration continues to be observed in euro area equity and equity indices (93%).

Similarly to the international trend, the credit derivative segment has increased slightly, although maintaining a residual share and a very small number of participating institutions. Turning to commodity derivatives, activity continues to be virtually nil.

3. ORGANISED MARKET

The strong growth of activity in organised markets in 2002 has partly been reversed in 2003. In effect, while on the one hand turnover had a sudden fall, notional amounts outstanding, on the other hand, had only a slight increase, almost fully due to foreign exchange fluctuations (Tables 18 and 19). When adjusted for such fluctuations, the decrease in turnover attained 68%, while amounts outstanding stagnated.

The analysis of these results should take into account that exchange-traded derivative transactions reflect the participation of a still small number of banks and, as a result, are rather sensitive to changes in the portfolios management strategies taken by some institutions that are more active in

Table 18

EXCHANGE TRADED DERIVATIVES

Average daily turnover

USD million

	Total	Foreign exchange deriva-tives	%	Interest rate deriva-tives	%
1998	1055	2	0.2	1053	99.8
1999	598	1	0.2	597	99.8
2000	1158	1	0.1	1157	99.9
2001	435	2	0.5	433	99.5
2002	3338	3	0.1	3335	99.9
2003	1291	1	0.1	1290	99.9
Change (%):					
2001/2002	667.4	50.0		670.2	
2002/2003	-61.3	-66.7		-61.3	

Table 19

EXCHANGE TRADED DERIVATIVES

Amounts Outstanding

USD million

	Total	Foreign exchange deriva-tives	%	Interest rate deriva-tives	%	Equity and equity indices derivatives	%
1998	9081	0	0.0	9081	100.0	-	-
1999	9677	1	0.0	9676	100.0	-	-
2000	4827	0	0.0	4766	98.7	61	1.3
2001	23171	19	0.1	21938	94.7	1214	5.2
2002	43387	7	0.0	43181	99.5	199	0.5
2003	48122	52	0.1	47938	99.6	132	0.3
Change(%):							
2001 / 2002	87.2	-63.2		96.8		-83.6	
2002 / 2003	10.9	642.9		11.0		-33.5	

this type of products. Therefore, the extraordinary expansion of activity in interest rate options reported by some banks in 2002 introduced a distortion in the comparative analysis of the results of the 2002 and 2003 surveys, which hides the significant increase recorded in interest rate futures in 2003.

Interest rate futures were the most dynamic segment of organised markets, increasing by 151% in terms of turnover and by 73% in terms of amounts outstanding. It should be stressed that, over the years, the development pattern of interest rate futures transactions has been in line with the pattern detected for OTC interest rate derivatives. The erratic nature of the transactions series in organised markets is exclusively due to the behaviour of interest rate options.

The almost exclusive predominance of the interest rate derivatives segment in the instrument structure of organised markets remained unchanged. Foreign exchange derivatives (options and foreign exchange futures) continued to have a negligible share in the total, while equity and equity indices derivatives, for which only amounts outstanding are reported, maintained the downward trend seen since 2001, becoming even more inexpressive in banks' derivative portfolios.

The adjustment of the extraordinary movement of options in 2002, in line with the strong growth of futures, translated into the resumption by interest rate instruments of the structure pattern observed in 2001, as futures increased their share in total transactions (to 89%) and in total amounts outstanding (to 45%).

The increase in futures occurred chiefly in euro long term interest rate transactions, in line with a decrease in dollar interest rate transactions, (particularly in short-term futures). As a result, long-term interest rate transactions strengthened their share, becoming predominant in total futures transactions (Chart 7), while trading in futures become even more concentrated on the euro.

Chart 7

INTEREST RATE FUTURES

Average daily turnover

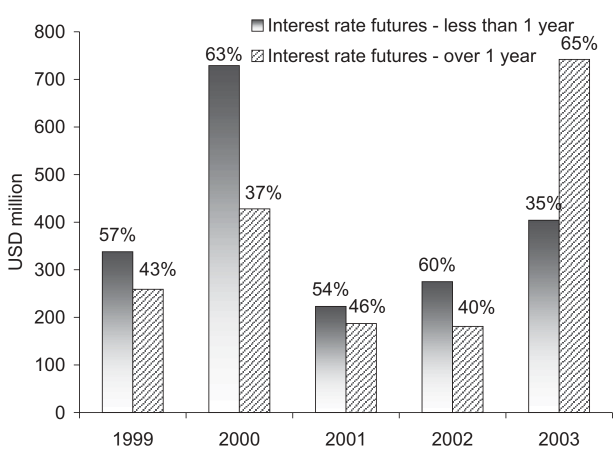


Table 20

INTEREST RATE FUTURES

Transactions

As a percentage of total turnover by instrument

	Interest rate futures - less than 1 year		Interest rate futures -over 1 year	
	2002	2003	2002	2003
Counterparties				
Foreign exchanges	**100**	**100**	**100**	**100**
Euro area	55	57	92	98
Non-euro area	45	43	8	2
Currencies	**100**	**100**	**100**	**100**
EUR	57	86	91	97
USD	30	13	8	3
JPY	0	0	0	0
GBP	7	1	1	0
CHF	0	0	0	0
Other	6	0	0	0

Euro-denominated transactions reached a share close to or above 90%, both in short-term interest rate futures and in long-term interest rate transactions (Table 20).

It should also be noted that futures continued to be preferably traded in euro area exchanges, particularly long-term transaction contracts. Turning to the amounts outstanding, this trend has also been observed in long-term interest rate futures, however, some changes took place in short-term interest rate contracts, which started to be almost fully traded in non-euro area exchanges (Table 21).

4. DEGREE OF CONCENTRATION OF TURNOVER AND AMOUNTS OUTSTANDING IN FOREIGN EXCHANGE AND DERIVATIVES MARKETS

The Portuguese market continues to reveal a high degree of concentration in the different market segments[11]. In terms of both turnover and amounts outstanding, the three and six most active financial institutions[12] continue to jointly hold market shares above 50% and 80% respectively (Tables 22 e 23).

Table 21

INTEREST RATE FUTURES

Amounts outstanding

As a percentage of total turnover by instrument

	Interest rate futures - less than 1 year		Interest rate futures -over 1 year	
	2002	2003	2002	2003
Counterparties				
Foreign exchanges	**100**	**100**	**100**	**100**
Euro area	85	3	98	99
Non-euro area	15	97	2	1
Currencies	**100**	**100**	**100**	**100**
EUR	72	94	98	99
USD	15	6	2	1
JPY	2	0	0	0
GBP	11	0	0	0
CHF	0	0	0	0
Other	0	0	0	0

In the ***spot* operations** segment, there was an increase in the degree of concentration and the Hirshman-Herfindhal index[13] moved from 0.18 in 2002 to 0.23 in 2003. Behind this trend was the increasing importance of major financial institutions operating on the market, with the share of the three largest institutions reaching their peak since 1998.

Turning to the **foreign exchange derivatives** segment, the degree of concentration increased also in transactions (with the Hirshman-Herfindhal index moving from 0.14 to 0.21), but remained stable in amounts outstanding. Foreign exchange swaps continued to be central for the trend of the degree of concentration observed,

(11) The calculation of market shares was based on all reported operations, either relating to OTC market or to the organized market.

(12) In terms of the financial institutions operating in the Portuguese market, two different situations should be considered: i) that of banks belonging to Portuguese financial groups; and ii) that of banks operating individually in the Portuguese market. Given the combined strategy generally adopted by each financial group, in the analysis of market shares account was taken of the combined weight of the several institutions belonging to the same group and not their individual weight.

(13) Hirschman-Herfindhal Index= $\sum Pi^2$ i=1,...n, where n is the number of banks and Pi is the market share of bank i. This indicator is used as a concentration measure.

Table 22

TURNOVER
Concentration indicators

	n	Q 3	Q 6
Spot			
1998	28	56.3	82.4
1999	28	67.1	85.2
2000	27	70.0	87.1
2001	25	70.5	88.8
2002	26	64.4	92.4
2003	25	73.5	89.6
Foreign exchange derivatives			
1998	26	61.6	87.6
1999	26	75.3	86.3
2000	21	82.7	94.6
2001	22	75.9	88.8
2002	20	54.3	84.8
2003	23	64.5	82.9
Interest rate derivatives			
1998	15	71.6	96.1
1999	13	68.6	92.4
2000	10	85.0	99.2
2001	11	75.6	97.0
2002	13	94.2	99.4
2003	13	77.5	99.8

n - number of financial institutions participating in each segment.

Table 23

AMOUNTS OUTSTANDING
Concentration indicators

	n	Q 3	Q 6
Foreign exchange derivatives			
1998	28	53.3	64.6
1999	28	38.6	50.0
2000	28	69.8	88.8
2001	26	70.8	88.5
2002	27	55.9	82.2
2003	27	55.4	82.0
Interest rate derivatives			
1998	19	81.2	94.5
1999	19	68.9	89.6
2000	19	84.9	98.6
2001	18	87.7	97.9
2002	22	84.8	96.8
2003	21	83.6	96.2
Equity derivatives			
1998	-	-	-
1999	-	-	-
2000	4	94.0	100.0
2001	8	85.7	99.8
2002	10	82.6	99.2
2003	13	80.8	95.4

n - number of financial institutions participating in each segment.

given the weight of this instrument in foreign exchange derivatives as a whole.

The degree of concentration declined markedly in **interest rate derivatives**, particularly in transactions (with the Hirshman-Herfindhal index moving from 0.67 to 0.24 and the share of the three largest financial institutions decreasing significantly to 77%). The decline in the relative importance of exchange-traded options, where the degree of concentration is very high, was determining for the decline of concentration in interest rate derivatives as a whole.

Finally, the **equity derivatives** segment recorded a further increase in the number of partici-

Chart 8
TURNOVER
Residents *vs* non-residents
Lorenz Curves

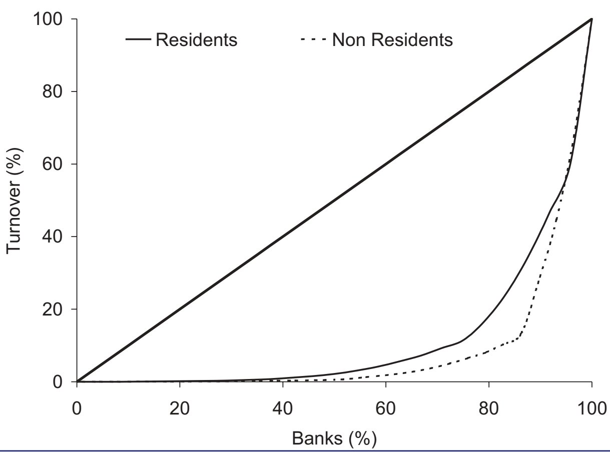
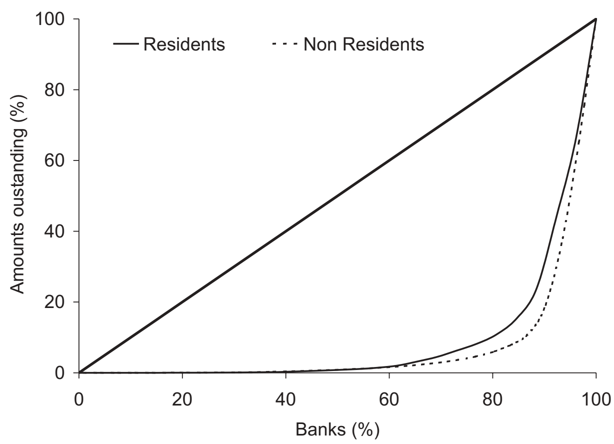


Chart 9
AMOUNTS OUTSTANDING
Residents *vs* non- residents
Lorenz Curves



pating institutions, reflecting the fact that it is still a recent market. There was thus a further decline in the degree of concentration, in terms of amounts outstanding, which is nonetheless still high.

An analysis by type of counterparty, of both turnover and amounts outstanding, reveals a higher degree of concentration in operations carried out with non-resident entities. This can be observed by means of the Lorenz curves (Charts 8 and 9), that represent the percentage of transactions or amounts outstanding carried out or held by a given percentage of banks. The higher convexity of the Lorenz curve relating to non-resident counterparties indicates that the operations carried out with these counterparties are more concentrated in a smaller percentage of banks that those carried out in the domestic market. Finally, at the level of non-resident counterparties, the distinction between counterparties resident in the euro area and non-resident in the euro area is not significant, revealing a similar degree of concentration.

Articles

DOES MONEY GRANGER CAUSE INFLATION IN THE EURO AREA?*

*Carlos Robalo Marques***
*Joaquim Pina***

1.INTRODUCTION

This study aims at establishing whether money is a leading indicator of inflation in the euro area. This is an important issue because it is usually understood that if money is to play a role in a monetary policy strategy then an important request is that current monetary developments help forecasting future inflation.

Previous work on assessing the leading indicator properties of money for future inflation in the euro area have used the formal testing on whether money helps to predict future inflation, i.e. the Granger-causality approach, or have used alternative approaches that evaluate the information content of money for forecasting prices. Their conclusions are mixed, in the sense that it is not fully clear whether money provides useful information for future price developments.

This study adds to the existing literature by re-evaluating the empirical evidence on money-inflation causality with a new dataset, as well as some new modelling choices, and by identifying the relevant transmission lags.

Methodologically the article does not significantly depart from Trecroci and Vega (2000) (henceforth TV (2000)), but uses a different data set. Our dataset is an update up to 2000 of that in the money demand paper of Brand and Cassola (2000) (henceforth BC (2000)), whose data set has become of widespread use in empirical studies for the euro area.

The main conclusion of this study is that for the sample period analysed (1980-2000) money does help to predict future price developments in the euro area for most of the alternative estimated VAR (*Vector AutoRegressive*) models. The study also concludes that it takes about one year and a half for changes in money growth to start passing on to inflation and that the adjustment is completed by the end of the fifth year.

Despite this new empirical evidence supporting the role of money as a leading indicator of inflation one should be cautious in claiming that past evidence on money-inflation causality would stand in the future under a very different inflation regime. In particular, in an environment of low and stable inflation the leading indicator property of money is expected to become considerably weakened.

The remaining part of this article is organised as follows: section 2 describes the data used and the econometric models chosen along with the discussion of the results on money-inflation causality tests for the euro area; section 3 identifies the relevant transmission lags in simple money-prices dynamic models defined in the year-on-year growth rates, and section 4 concludes.

2. EVIDENCE ON MONEY-INFLATION CAUSALITY IN THE EURO AREA

Previous studies, namely TV (2000), carried out the causality analysis with the data set of Coenen and Vega (1999) (henceforth CV (1999)), which differs from the dataset used later in BC (2000). For our study we updated the BC (2000) data set, as it has become of widespread use in empirical studies

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* The views expressed in this article are those of the authors and not necessarily those of the Banco de Portugal. This paper is an abridged version of Marques and Pina (2002).

** Research Department, Banco de Portugal

Table 1

SUMMARY OF MONEY-PRICES CAUSALITY TESTS

Comparison with TV(2000)[(a)]

Our results		Trecroci and Vega (2000)	
ECM approach	LA-VAR approach	ECM approach	LA-VAR approach
$VAR(\Delta m, \Delta p)$			
YES	YES	YES[(b)]	NO[(b)]
$VAR(\Delta m, \Delta p; \Delta y)$			
YES	YES	YES[(b)]	NO[(b)]
$VAR(m-p, \Delta p)$			
—-	YES	—-	NO
$VAR(m-p, \Delta p, y)$			
YES/NO	YES	NO	NO
$VAR(m-p, \Delta p, y, l, s)$			
NO	YES	NO	NO
$VAR(m, p)$			
—-	YES	—-	NO
$VAR(m, p, y)$			
—-	YES	——	NO
$VAR(m, p, y, l, s)$			
—-	NO	—-	NO

Notes

(a) The usable sample period actually taken for the computations is 1980/4-2000/4, except otherwise stated.

(b) Our computations for the period 1980/4-1998/4 using CV(1999) data set.

for the euro area. We restricted the sample to the period 1980:1 to 2000:4 to avoid statistical problems with the entry of Greece and for comparability with TV (2000) analysis.

Let m_t stand for the natural log of the nominal M3 money stock, p_t for the natural log of the GDP deflator, y_t for the natural log of real GDP, l and s for the long and short run interest rates respectively. We denote a VAR model in these variables as VAR (m, p, y, l, s).

We basically estimated two types of VAR models. The first type is composed of VAR models where all the variables are integrated of order one. It includes the $VAR(m = p, \Delta p, y, l, s)$ as the general case and the $VAR(m-p, \Delta p, y)$ and $VAR(m-p, \Delta p)$, as special cases. The second type is composed of VAR models where some variables are assumed as potentially integrated of order two (m and p) and the others as integrated of order one (y, l, s). It includes the $VAR(m, p, y, l, s)$ as the general case and the $VAR(m, p, y)$ and the $VAR(m, p)$, as special cases. Besides these two sets of VAR models we also pay attention to the simpler $VAR(\Delta m, \Delta p)$ and $VAR(\Delta m, \Delta p, \Delta y)$ models. These two models can also be seen as special cases of the $VAR(m, p, y, l, s)$ type of models.

To test for Granger causality in these VAR models we resorted to the different approaches suggested in the literature. These include the different testing procedures suggested in Toda and Phillips (1993, 1994), Toda and Yamamato (1995) and Phillips (1995), which are usually denoted as the ECM-approach, the LA-VAR approach and the FM-VAR approach, respectively.

The main results on money-prices Granger causality tests for all the systems are summarised in the Table 1, where we bring together the findings in TV (2000)[(1)].

First, we notice that the overall picture is now different from the one obtained in TV (2000). In fact, for most of the studied cases we reject the annull of non-causality of m on p or Δm on Δp. Only for the general VAR with interest rates it is not possible to reject non-causality from money to prices. However, the use of a large system raises more problems of statistical weaknesses for estimation and testing.

The difference in the conclusion for money to prices causality between this study and the one by TV (2000) stems basically from the fact that we have worked with a different data set. However, had Trecroci and Vega estimated the VAR models in the growth rates of the variables $(\Delta m, \Delta p)$ and $(\Delta m, \Delta p; \Delta y)$ and their picture on money-prices causality might have been less negative.

As a second point we notice that Δm and Δp are cointegrated but $(m-p)$ and Δp are not. This suggests that the $VAR(\Delta m, \Delta p)$ is more appropriate than the $VAR(m-p, \Delta p)$ to analyse the Granger non-causality hypothesis. The money-prices Granger non-causality hypothesis is strongly rejected in the $VAR(\Delta m, \Delta p)$ and $VAR(\Delta m, \Delta p; \Delta y)$ models. However, the evidence against Granger non-causality clearly weakens as we move to the $VAR(m-p, \Delta p, y, l, s)$ type of models. It may be the

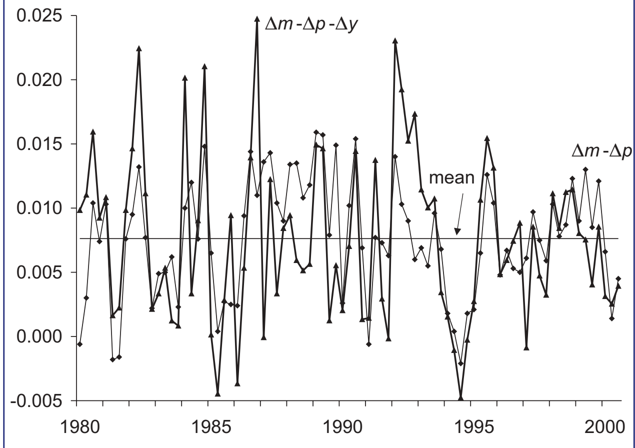
(1) For technical details on the implementation of the causality tests and a full discussion of the results for the estimated VAR models, the interested reader is referred to Marques and Pina (2002).

case that these type of VAR models are imposing important restrictions on the short run dynamics or lacking parsimony or both, with important consequences for the Granger causality tests.

Finally, the null of Granger non-causality from prices to money is basically rejected in the same models in which money to prices non-causality is. We note, however, that it is mainly the long run causality that appears as significant. Essentially, the overall conclusion is that money and prices have a joint long run behaviour.

In order to get an idea on the robustness of the conclusions presented above we repeated the analysis for the 1985-2000 period for the models $VAR(\Delta m, \Delta p)$, $VAR(\Delta m, \Delta p; \Delta y)$ and $VAR(m-p, \Delta p, y)$. For none of the estimated models do the main conclusions change. Money to prices non-causality is strongly rejected according to the ECM approach and rejected (with 90% confidence) according to the LA-VAR approach. Prices to money non-causality is also rejected according to the ECM approach for the three estimated models, and to the LA-VAR approach for the two first models.

Chart 1
$(\Delta m - \Delta p)$ and $(\Delta m - \Delta p - \Delta y)$
(Mean adjusted figures)



3. HOW SHALL WE READ THE MONEY-PRICES CAUSALITY EVIDENCE?

Given the major conclusion from the previous section that money leads inflation, i.e., that money Granger causes inflation in the euro area, the natural question is how to turn this evidence into a useful tool for monetary assessments.

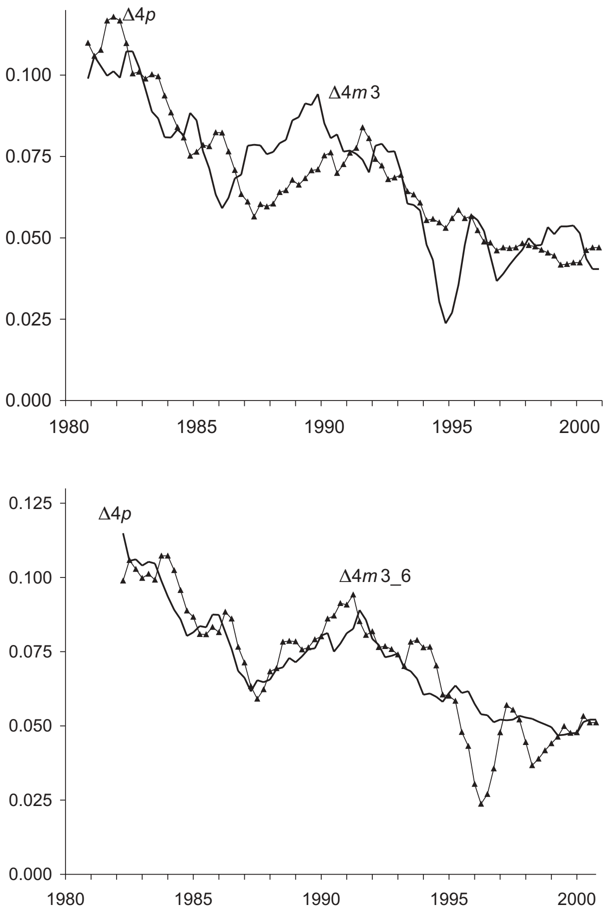
If we look at Chart 1 we readily see that $(\Delta m - \Delta p)$ is a stationary variable. However it is also the case that $(\Delta m - \Delta p)$ may stay above (or below) the mean for quite a large period of time. This was so, especially between 1986/3 and 1990/1 (15 consecutive quarters). If instead we look at the real money growth adjusted for GDP growth, $(\Delta m - \Delta p - \Delta y)$, we realise that the mean reversion increases (specially in the second half of the eighties), but on the other hand the volatility also increases (throughout the whole sample period) due to the volatility of the Δy_t series. This suggests that looking to $(\Delta m - \Delta p)$ or to $(\Delta m - \Delta p - \Delta y)$ is probably not the best way to draw interesting conclusions, in what concerns the money-prices relationship. It may also be argued that probably it is more useful to look at the year-on-year growth rates instead, as economic agents or at least economic analysts in their price and monetary assessments look at these growth rates more, than they do at the monthly or quarterly growth rates.

This section tries to answer the following questions: if we look at the year-on-year money and GDP growth rates, what should we expect the reaction of the inflation rate to be? How many lags, if any, should we expect it to take for money growth to pass on to inflation?

In order to try to answer these questions we start by looking at the static relation between the year-on-year price changes measured as $\Delta_4 p_t$ and the year-on-year money growth rate measured as $\Delta_4 m_t$. After some experimentation it was possible to conclude that the maximum correlation between inflation and money growth occurs at lag six. As can be seen from Chart 2 $\Delta_4 p_t$ and $\Delta_4 m_{t-6}$ (mean adjusted) almost coincide. So, the empirical evidence accords with economic theory, which suggests that the effects from money to prices take time to materialise and are expected to occur with a lag between one year and two years (four to eight quarters). This first result already tells us that in order to identify the relevant lags we must specify a model with a large number of lags[(2)].

(2) This of course does not necessarily call into question the VAR models estimated above to test for causality, as we are now looking at year-on-year and not quarterly growth rates, and this may significantly change the relevant lags in the identified VAR models.

Chart 2
PRICES AND MONEY GROWTH RATES
(Mean adjusted)



Starting with a very general autoregressive distributed lag model for the year-on-year price changes as a function of the year-on-year money and GDP growth rates and following the well-known general-to-specific methodology we end up with a parsimonious error correction model specification, which implies that changes in money growth take six quarters before starting to pass on to inflation (4 lags in case of GDP growth). Table 2 depicts the accumulated effects on $\Delta_4 p_t$ of a change in the money growth rate (permanent increase of 1 p.p. in $\Delta_4 m$), showing that, in fact, it takes six quarters before the effect on inflation of a permanent increase in money growth becomes significant. The accumulated effect after two years (8 quarters) is only 43.53% but it is completed by the end of the fifth year.

It seems useful to note that this outcome on the relevant lags involved, basically accords with the

Table 2
EFFECT ON $\Delta_4 p_t$ OF A 1 P.P. INCREASE IN $\Delta_4 m$

Number of quarters	Accumulated effect Percentage of total effect
6	22.3
8	43.53
12	87.87
16	90.52
20	99.89

empirical evidence obtained for other countries. For instance, thirty years ago, Friedman (1972), even though following a different statistical approach, found that the "the highest correlation for consumer prices was for money leading twenty months for M1, and twenty-three months for M2". More recently Bernanke *et al.*(1999) describe a two-year lag between policy actions and their effect on inflation as a "common estimate"(pp. 315-320).

4. CONCLUSIONS

This study re-evaluates the evidence on money-prices Granger causality for the euro area. Methodologically the study does not significantly depart from Trecroci and Vega (2000), but uses a different dataset, namely an update (up to 2000) of that in Brand and Cassola (2000) as it has become of widespread use in empirical studies for the euro area.

In contrast to TV (2000), who could not reject the money to prices non-causality for any of the estimated VAR models, we were able to reject this hypothesis for most of the estimated VAR specifications. This different new conclusion mainly stems from the fact that we use a different data set and, to some extent, also from the fact that we estimate variant VAR models not considered in Trecroci and Vega (2000), which do not impose restrictions on the short run dynamics and/or correspond to more parsimonious specifications.

It is also seen that it takes about a year and a half for changes in money growth to start passing on to inflation and that the adjustment is completed by the end of the fifth year. This outcome is in line with the empirical evidence for other countries.

Despite this new empirical evidence supporting the role of money as a leading indicator of inflation one should be cautious in claiming that past evidence on money-inflation causality would stand in the future under a very different inflation regime. Indeed, the findings in this study were obtained for a sample period during which inflation and money growth exhibited large sample variation with significant changes on the average levels of both variables. Monetary theory predicts that monetary developments following a monetary shock or brought about by changes in the inflation objective of the monetary authority should be expected to act as leading indicators of inflation. These are likely to be the type of past monetary developments underlying the main findings in this study. However, monetary developments that are mainly brought about by velocity shocks, or that result from the reaction of the monetary authority to other type of shocks hitting the economy (such as technology shocks, preference shocks, real demand shocks) should not be expected to significantly impact on future inflation.

In an environment of low and stable inflation one would expect the first type of shocks to have a diminished role in explaining inflation developments. Thus, it is likely to be case that the more successful the central bank is in delivering low and stable inflation, the more likely it is that money growth will see its property as a leading indicator of inflation considerably weakened.

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THE COINCIDENT INDICATOR OF THE PORTUGUESE ECONOMY: AN HISTORICAL ASSESSMENT AFTER TEN YEARS*

*Francisco C. Dias***

1. INTRODUCTION

The coincident indicator of overall economic activity for Portugal developed by Dias (1993) has played an important role in the conjunctural analysis carried out by the Banco de Portugal. Considering that ten years have elapsed since its development — an unparalleled longevity for an indicator of this type — an assessment of its behaviour during this period is warranted which is the focus of this article.

To provide an assessment of recent conjunctural development, requires the analysis of a large amount of data on a variety of economic series, each of them reflecting developments on specific partial aspects of the economy. Some economic indicators often present mismatching signs, or at least not fully synchronised signals, rendering the identification of the broad trend of economic activity more difficult. Despite the "mixed" developments in some of these series, the majority of them present, however, synchronized evolutions. The development of synthetic indicators capable of summarizing the information contained in the large quantity of data available on the economic performance is thus justified. In this context, coincident or leading synthetic composite indicators started to be presented as instruments of analysis of the development of overall economic activity. These composite indicators attempt to synthesise data contained in several economic variables, capturing their dominant trend.

Mitchell and Burns (1938) were the first ones to develop synthetic indicator for short-term economic analysis for the United States. Since then, this type of indicators have played an important role in tracking and forecasting overall economic activity over the short-term horizons. Auerbach (1982), on this subject wrote: "*if the success of a specific approach can be measured by its longevity and continued popularity under a variety of environments, then the use in business cycle tracking and forecasting of coincident and leading indicators must stand near the top of such success*".

The methodology for the elaboration of these indicators has evolved over time, having become more sophisticated, as new statistical instruments/models were developed. Simultaneously, the background statistical information used for their development became more comprehensive in terms of both the extension of the statistical series and their coverage, comprising new aspects of economic reality, not envisaged previously by national statistical systems. In the late 1980s Stock and Watson (S&W) (1989) developed a new statistical instrument/model for the elaboration of coincident and leading indicators for the economy.

Similarly to other institutions, the Banco de Portugal developed in 1993 (Dias, 1993) a coincident indicator of overall activity for the Portuguese economy, following the methodology proposed by S&W. In the same vein, the Bank also developed a coincident indicator of private consumption for Portugal (Gomes, 1995). The coincident indicator of economic activity, as well as the coincident indicator of private consumption, are important tools used in the assessment of the

* The views expressed in this article are those of the author and not necessarily those of the Banco de Portugal.

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conjunctural situation of the Portuguese economy developed by the Banco de Portugal. Considering that ten years have elapsed since its development, it seemed interesting to assess the long-term behaviour of this instrument of analysis, trying to highlight the most relevant features observed along this period. For practical reasons, the main methodological aspects of the elaboration of the indicator are reviewed in the following section.

2. SOME METHODOLOGICAL ASPECTS

The methodology used for the construction of the coincident indicator proposed by Stock and Watson (1989) is based on an explicit probabilistic model using recent concepts developed in the specialised time series literature. It is mainly a typical signal extraction model of the evolution of the business cycle, which tries to determine the dominant trend pattern of the various series included in the set of input indicators. For a description of the methodology, see the original article by Stock and Watson (1989) or Dias (1993).

Considering that the application of the underlying statistical model of this methodology is limited in terms of the total number of input series that may be used for the elaboration of the coincident indicator[(1)], special attention had to be paid to the degree of coverage of the various sectors of economic activity. As discussed below, the selected series capture quite satisfactorily the broad performance pattern of overall economic activity. However, it is evident that partial aspects of economic activity may be left out and, in that sense, the coincident indicator should not be confounded with gross domestic product (GDP), where every aspects of economic activity are exhaustively covered.

However, this limitation associated with the statistical model of the coincident indicator of S&W constitutes an important operational advantage, since the use of a reduced number of series diminishes the probability of discontinuity in the indicator brought about by possible breaks in the input series. In addition, the option of using predominantly series of a qualitative nature, which are identified below, avoid the introduction of revisions in the coincident indicator resulting from revised input series. Actually, these series are not subject to revisions, unlike most short-term statistical indicators of a quantitative nature. In addition, these qualitative series have the advantage of being published in advance to the reference variable, thus providing further practical usefulness for the coincident indicator.

The statistical series used for the elaboration of the coincident indicator of activity of the Banco de Portugal are the following: balance of respondents on the assessment of volumes of retail sales and balance of respondents on the assessment of wholesale trade volumes (Monthly Trade Survey); balance of respondents on the assessment of contemporaneous production in manufacturing (Monthly Manufacturing Survey); and sales of cement to the domestic market[(2)], the latter bring of a quantitative nature.

The first two series attempt to capture developments in the trade sector. Indeed, the inclusion of indicators of this sector in addition to capturing its direct contribution to the value added to the economy, is also intended to take advantage of its particular characteristic of linking domestic supply and demand in the economy – which comprises demand both by firms and households (a share of private consumption). The third series deals with information on developments in industrial production, which may also partly capture the behaviour of exports of goods. Finally, domestic cement sales, highly correlated with evolution in the construction sector, accommodates information on developments in gross fixed capital formation in construction (which currently accounts for approximately 12 per cent of GDP).

Data from the series of a qualitative nature, when compared with the historical average of the respective series, provide information on the cyclical position of the variable under review. In the case of cement, it was necessary to deal with the data previously, in order to obtain information of a similar nature. For this series year-on-year rates of change was used.

In addition to the methodological aspects of the formal model for the construction of the indicator

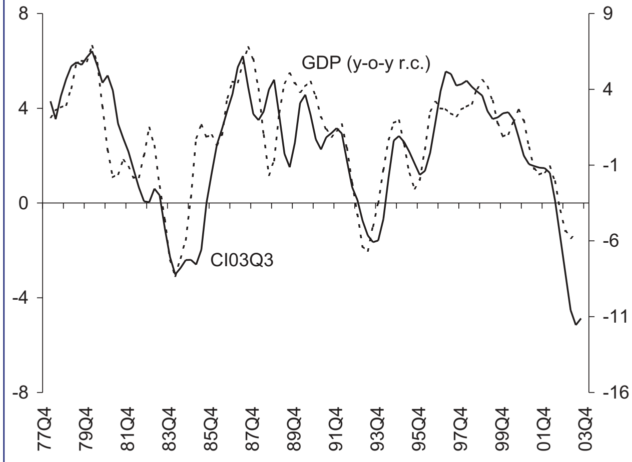
(1) New instruments for the construction of synthetic indicators, which allow for the use of a much wider range of information on economic activity were recently developed in the literature. See Stock and Watson (1998) and Forni *et als*. (2000).

(2) Including cement directly imported by companies that do not produce cement.

— see Dias (1993) — there are some specific technical aspects on its elaboration that should be highlighted in order to ease its interpretation. First, all the series chosen to calculate the coincident indicator proved to be highly volatile in the short run, i.e. they contained a lot of noise, even after being de-seasonalised. This implied an additional smoothing of the series, through the calculation of their trend, so as to provide useful information for the assessment of the economic conjuncture. Second, it was necessary to "homogenise" the volatility of the series, i.e. to standardise them prior to the calculation of the indicator, in order to avoid series with a higher intrinsic volatility from having an artificially important contribution to the synthetic indicators, thus dominating its evolution. Under these circumstances, the series of the synthetic indicator, which derives from the model, presents an average close to zero. In order to "attach" a scale with some meaning to that indicator, it is necessary to rescale the indicator through a linear transformation; for this purpose we used the scale of the year-on-year rates of change series of the trend of quarterly GDP of *INE* (National Statistical Office). This linear transformation does not change the time profile of the synthetic indicator series; it only shifts its position and changes its volatility, matching them with the correspondent values of the year-on-year rates of change of GDP.

Although the overall pattern of development of the coincident indicator is very similar to that of GDP (see Chart 1), due to the high degree of coverage of the different economic sectors envisaged in the set of input series, it should be noted, however, that the coincident indicator is not intended to measure year-on-year rates of change of GDP, "*tout court*" but to provide an assessment of the "state of the economy". Its overall pattern of development seeks to capture chiefly the dominant trend of the economy proxied by the dominant evolution of the set of four series comprised in its elaboration. Thus, even if a scale has been attached to the indicator — of the year-on-year rates of change of GDP — the main information to be retained from its evolution should be limited to the acceleration, deceleration and turning points of the series, and not particularly to its level.

Chart 1
COINCIDENT INDICATOR *VERSUS* GDP (year-on-year rates of change)



3. HISTORICAL ANALYSIS OF THE COINCIDENT INDICATOR

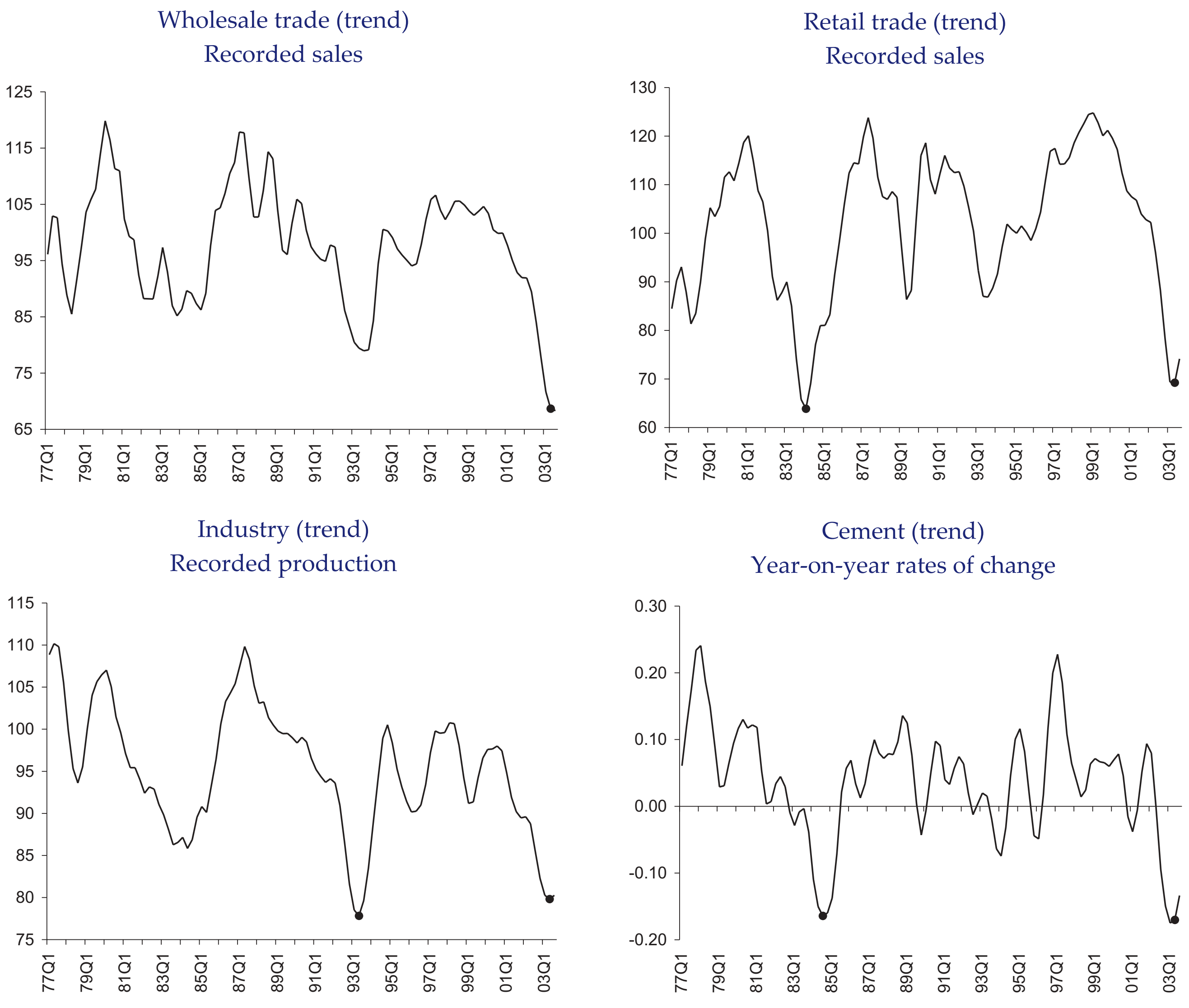
3.1. The main broad features of the behaviour of the indicator over the past ten years

The coincident indicator of economic activity of the Banco de Portugal was developed ten years ago. Given its longevity, it is therefore pertinent to assess its historical behaviour. Overall and regardless of the criteria used in this assessment, the performance of this indicator has been broadly remarkable in tracking developments in general economic conditions. It is possible to illustrate the historical behaviour of this indicator by comparing it with the time-profile of quarterly GDP(3) (Chart 1).

In this chart, the coincident indicator is deliberately presented in its original scale (right-hand side scale), i.e. prior to its rescaling according to the level of the year-on-year changes in quarterly GDP. The aim is to show that the linear transformation of the indicator does not change the pattern of development of the indicator. It only introduces a pre-defined scale for the indicator. From the chart, one can conclude that, overall, the synthetic coincident indicator has monitored rather robustly developments in overall activity of the

(3) The charts in this text use the following general notation: "CI98Q2" to represent the version of the coincident indicator calculated in the second quarter of 1998.

Chart 2
VARIABLES THAT ARE PART OF THE CONSTRUCTION OF THE COINCIDENT INDICATOR



Portuguese economy over the past ten years, and that therefore the set of series included in its elaboration, covers quite reasonably a significant share of total economic activity.

However, in the most recent period there has been a "discontinuity" in the magnitude of the change in the coincident indicator compared with developments in GDP, presenting a far more negative fall than that estimated for overall activity. This perceivable discrepancy is due to the markedly negative behaviour recorded during this period by all input series (Chart 2). Looking at this group of charts, it is possible to conclude that, in the second quarter of 2003, all four series comprised in the coincident indicator recorded simultaneously, for the first time, historical low levels, which obviously translated into the historical low of the synthetic indicator, recorded in the second quarter of 2003.

3.2. Long-term historical revisions

As mentioned above, all input series are subject to prior treatment — calculation of the trend — prior to the calculation of the synthetic indicator. As new information gets available, the consequent re-estimation of the trend of any series introduces revisions to previous estimates. These revisions are mainly concentrated in the final observations of the sample and, in particular, are more signifi-

Chart 3
COINCIDENT INDICATOR CALCULATED IN 1993Q1 *VERSUS* 2000Q4

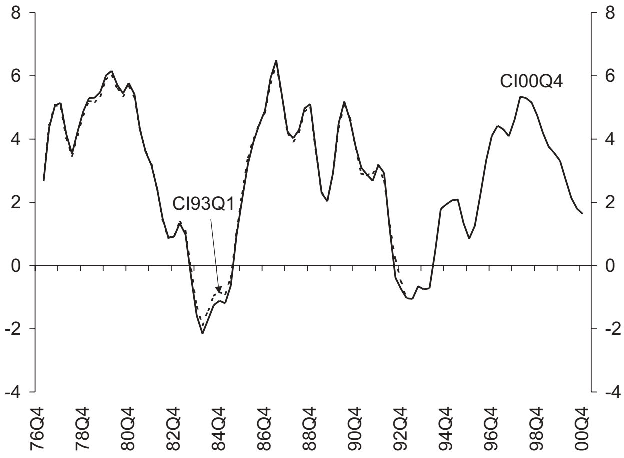


Chart 4
REVISIONS OF THE COINCIDENT INDICATOR RESULTING FROM THE RE-ESTIMATION OF THE MODEL

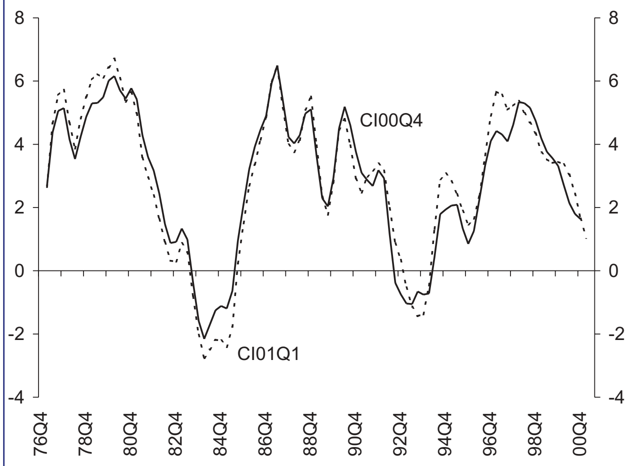
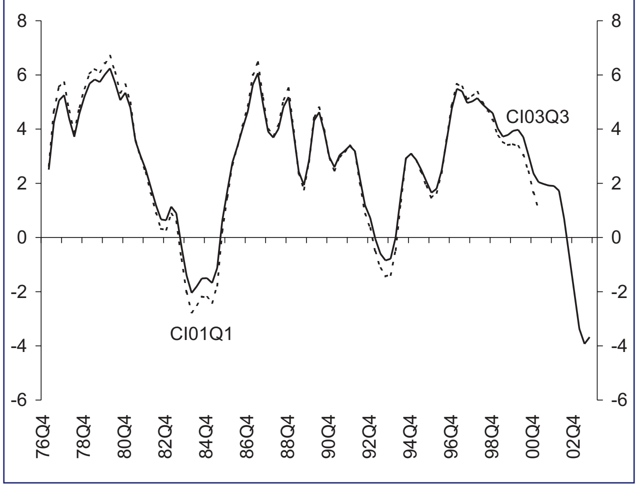


Chart 5
COINCIDENT INDICATOR CALCULATED IN 2001Q1 *VERSUS* 2003Q3



cant when close to a turning point (maximum/minimum). Therefore, the coincident indicator may be subject to revisions, particularly in its latest observations. This is extremely important, given that economic agents pay special attention to the latest information on the coincident indicator. Ignoring this fact can lead to a "less accurate" reading of revisions of the coincident indicator for the most recent period. However, one should stress that, overall, these revisions have not been very significant, from a long-term perspective, as can be seen in Chart 3, which shows the two versions of the indicator originally calculated and published in the first quarter of 1993 (CI93Q1) and in the fourth quarter of 2000 (CI00Q4).

The parameters of the formal model that support the elaboration of the coincident indicator were re-estimated in the first quarter of 2001[(4)], when simultaneously the quarterly series of opinion surveys on wholesale and retail trade were replaced with the corresponding monthly series. This change permitted to antecipate by approximately one month the regular update of the coincident indicator. This operation gave rise to an overall revision the historical series of the coincident indicator, given that the "contribution" of each series that are included in the construction of the indicator were revised after the re-estimation of the model (Chart 4).

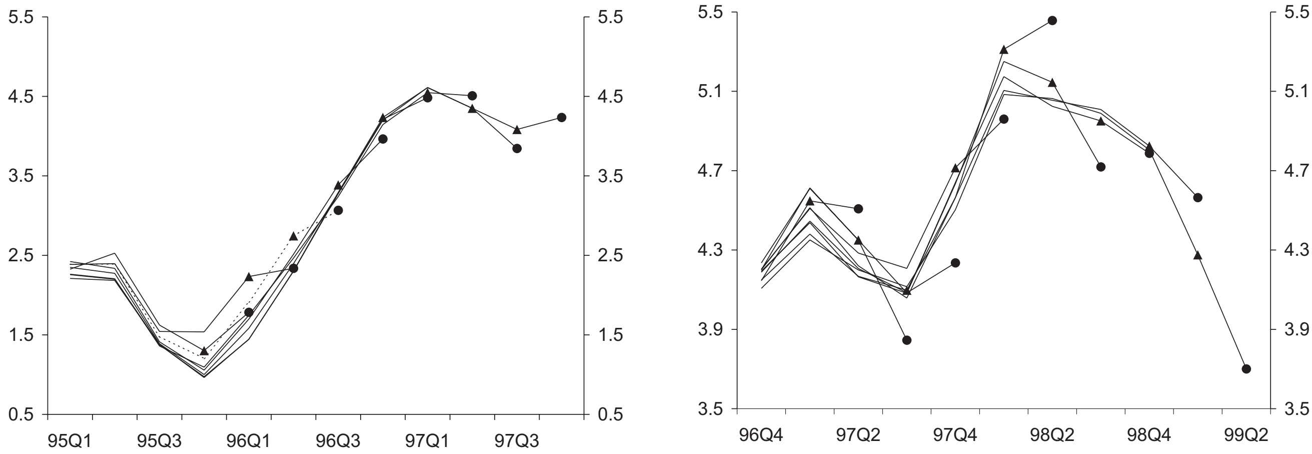
However, it should be mentioned that although these revisions gave rise to some changes in the general level of the synthetic indicator series, they have not brought about significant changes in its overall development pattern, particularly as to indications of acceleration/deceleration and positioning of turning points. This fact is confirmed by the high linear correlation coefficient between these two series (+0.97).

Chart 5 presents the coincident indicator of 2001Q1 and the most recent version available, for

(4) See Annex 2 of the January 2001 issue of the *Monthly Economic Indicators* of Banco de Portugal.

Chart 6

REVISIONS OF THE COINCIDENT INDICATOR IN THE LATEST OBSERVATIONS



2003Q3, in order to show, once again, that the long-term revisions are negligible, indicating the robustness of this indicator from a long-term perspective.

3.3. Historical revisions between two consecutive versions of the coincident indicator

Although the revisions have proved to be negligible in the long-term perspective, revisions between two consecutive versions may not be necessarily so, particularly near turning points. In order to show the magnitude of these revisions in the neighbourhood of turning points, Chart 6 displays the final section of several "versions" of the coincident indicator calculated/published in real time by Banco de Portugal.

The first panel presents the revisions during an upward phase of the indicator, while the second panel contains the revisions observed at two turning points, which were followed by a downward phase. In these charts, the last observation released in each real time are marked with a full circle and the second-last observations are marked with a full triangle. The distance between any circle and triangle situated on the same vertical line illustrates the magnitude of the revisions of the last observations made available in the immediately preceding quarters. This shows that, during the upward phase of the cycle, revisions are dominantly positive, while they are mostly negative during the downward phase of the cycle. It is therefore possible to conclude that the most recent values of the indicator-2003Q3–will likely be revised upwards as soon as the economic recovery resumes.

Chart 7 presents, in a panel of figures, the revisions to the last three observations of each "version" of the coincident indicator occurring in the following update.

Besides the revisions, each of the three panels include the latest version of the coincident indicator (2003Q3). The same right-hand scale was deliberately chosen for the revisions, in order to show

Table 1

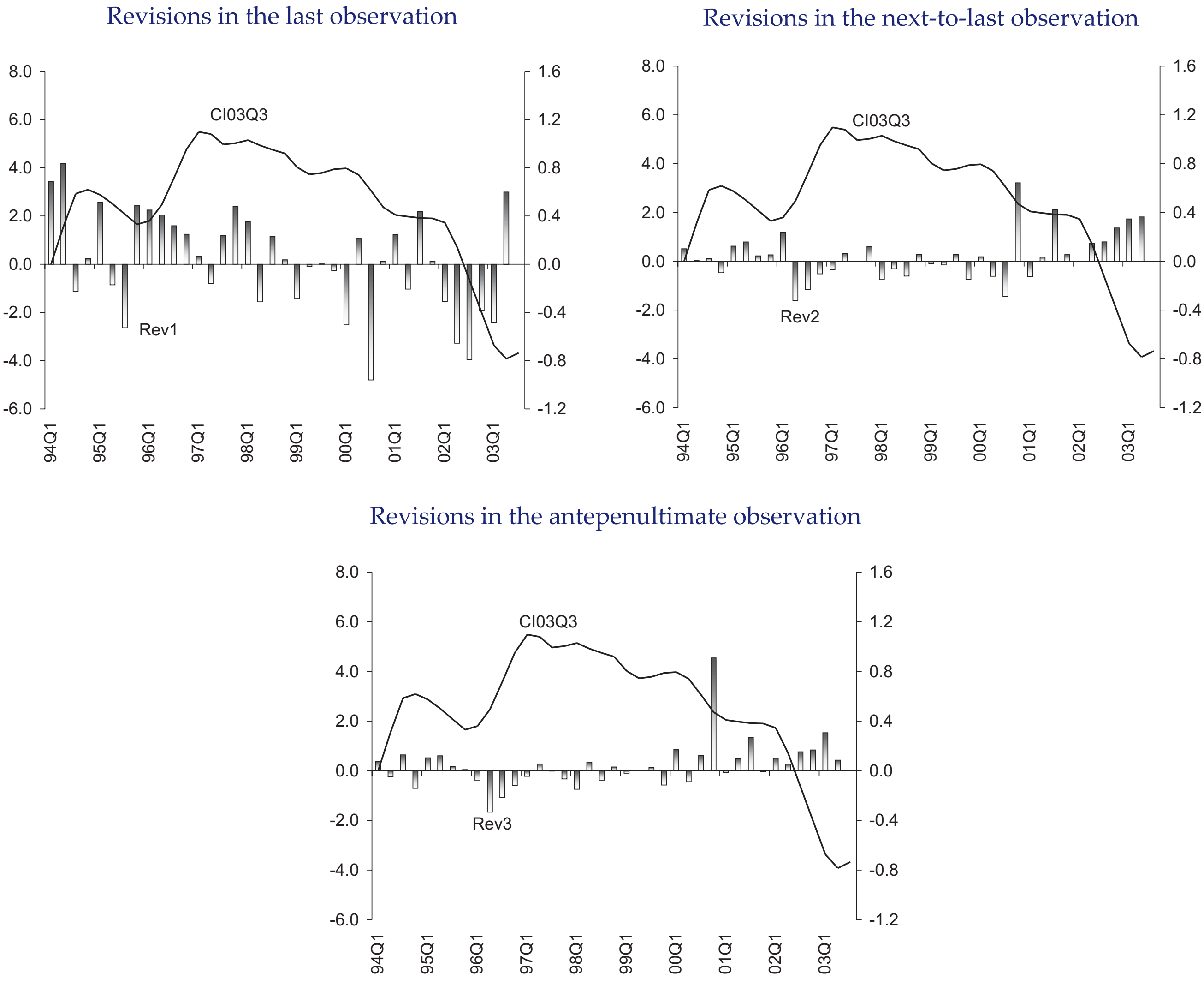
SOME DESCRIPTIVE MEASURES OF REVISIONS[(a)]

	Last observations	Second-last observations	Ante-penultimate observations
Average	0.35	0.13	0.10
1st Quartile . . .	0.21	0.05	0.04
Median	0.31	0.10	0.08
3rd Quartile . .	0.48	0.16	0.13
Maximum	0.84	0.42	0.31
Minimum	-0.96	-0.32	-0.33
Standard deviation	0.24	0.11	0.08

Note:

(a) These statistics were calculated, except for the maximum and the minimum, on the basis of the absolute values of the revisions; the values for 2000Q4 were not considered for this calculation for the reasons mentioned earlier.

Chart 7
RELATIVE MAGNITUDE OF THE REVISIONS IN THE LAST THREE OBSERVATIONS



that the magnitude of revisions decreases over time, being more significant only for the last observations and ceasing to be relevant for the other two. The first panel confirms the fact that revisions are dominantly positive during the upward phase of the cycle, while they are mostly negative during the downward phases. The anomalous revisions presented in the chart for the 2000Q4 period are related to the previously mentioned discontinuity in the coincident indicator, which was caused by the re-estimation of the model, during the first quarter of 2001, in parallel with the simultaneous replacement of the two quarterly trade series with corresponding monthly series.

Table 1 lists some descriptive measures regarding the series of revision.

4. CONCLUSIONS

The coincident indicator of overall economic activity of the Banco de Portugal has been used for the conjunctural analysis since 1993. Although its calculation, for methodological reasons, is based on only four series — three qualitative series and one quantitative series (namely sales of cement to the domestic market) —, its behaviour over the last decade has been remarkable. The overall pattern of the coincident indicator have followed quite satisfactorily developments in production, as measured by the year-on-year rate of change in quarterly GDP, both in terms of acceleration/deceleration and in terms of the identification of turning points. Its “resemblance” to quarterly

GDP obviously derives from the high coverage of economic activity made possible by the set of series used in its elaboration.

It should be noted that three out of the four series that are included in the composition of the coincident indicator are based on data from qualitative business surveys. Thus one may conclude that opinion surveys contain highly relevant information for the assessment of economic developments, if properly treated.

Due to the procedures used in its elaboration, the coincident indicator is subject to revisions over time. Historical analysis allows for the conclusion that these revisions have been relevant only in the short-term prospective, i.e., when the indicator released in one quarter is compared with the one released in the immediately preceding quarter, and particularly when we are in the presence of turning points. Over a longer-term time perspective revisions are virtually negligible, indicating that the information provided by the coincident indicator proves to be quite robust.

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THE USE OF QUALITATIVE DATA FOR SHORT TERM ANALYSIS*

*Raquel Henriques dos Santos***

1. INTRODUCTION

Opinion surveys have an important bearing on the short-term analysis and forecast of economic activity, since they are made available with some lead time compared with most quantitative indicators and include questions of a prospective nature. In fact, the lagged disclosure of quantitative indicators leads qualitative indicators to play an essential role in the analysis of the economic environment. In addition, it should be noted that these surveys cover activity sectors, such as services, for which quantitative data are generally scarce. Finally, qualitative indicators provide indications on the future behaviour of economic agents for different variables, such as consumption, savings or output.

In general, data collected are shown as balances of respondents, which can be used to proxy rates of change in reference variables, thereby indicating whether they accelerate or decelerate.

Some empirical studies have shown that confidence indicators, in particular, anticipate cyclical developments in major economic aggregates, although they are occasionally coincident or lagging. Even in the latter case, information has an important bearing, given that it permits the validation of the pace of macroeconomic variables. Moreover, qualitative indicators are not revised after being published. Despite their usefulness, it should be taken into account that they are nevertheless based on surveys, and are therefore of a subjective nature.

This study makes a fairly comprehensive assessment of the use of opinion surveys in the analysis of the economic environment, benefiting from the availability of these series in most cases since January 1987. Section 2 shows a basic statistical analysis of the different survey questions and briefly describes the quantitative series for which the information content of confidence indicators will be tested. Section 3 shows the results of the correlation analysis between these reference variables and the qualitative variables considered. Section 4 presents the calculation of a noise/information measure for opinion data. The principal components are analysed in Section 5. Finally, Section 6 draws the conclusions.

2. DATA

2.1. Qualitative surveys

This study builds on the results of economic surveys to consumers, manufacturing industry (since 1987), retail trade and construction (since 1989), disclosed by the European Commission (EC) on a monthly basis. These series are seasonally adjusted (s.a.). In wholesale trade and total trade, the period of analysis is shorter and series correspond to those published by the *Instituto Nacional de Estatística* (*INE*) from 1994 onwards, and they are not seasonally adjusted. The sample pe-

* The views expressed in this article are those of the author and not necessarily those of the Banco de Portugal.

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riod for the purposes of this study ends in June 2003.

The questions included in the opinion surveys are shown in Table 1. Aiming to summarise the information collected, the Commission calculates confidence indicators. These are obtained by a simple arithmetic mean of the balances of respondents[(1)] from a set of questions deemed more relevant in each survey. Thus, the Consumer Confidence Indicator includes the financial situation over next 12 months, the general economic situation over next 12 months, savings and unemployment expectations over next 12 months (with negative sign); the Manufacturing Industry Confidence Indicator considers production trend observed in recent months, assessment of order-book levels and of stocks of finished products (with negative sign); the Construction Confidence Indicator aggregates the assessment of order books and employment expectations for the months ahead; Trade Confidence Indicators include questions on business activity over recent months, expected business activity and assessment of stocks (with negative sign). The EC also discloses the Economic Sentiment Indicator, intended to aggregate and summarise the perception of the various economic agents, and hence reflect global activity. This composite indicator is no more than the weighted average of confidence indicators in manufacturing industry (with a weight of 40 per cent), consumption, construction and retail trade (each with 20 per cent)[(2)].

(1) It should be noted that surveys usually have three standard responses: "above normal" (+), "normal" (=) and "below normal" (-). The balance of respondents, i.e. the difference between optimistic and pessimistic responses, summarises and quantifies the information collected, although its interpretation is not immediate. In addition, responses indicating a stable situation are ignored, and the weight given to "increase" and "decrease" responses is identical. Occasionally, there are also five possible responses, considering two "increase" and "decrease" levels; in this case the balance of respondents is calculated as follows: {[(++) + (+)] – [(- -) + (-)]}.

(2) This type of calculation started to be used from September 2001 onwards. Up to this date, the indicator was based on a weighted average of consumer, industrial and construction confidence indicators, and of a measure of developments in stock prices. However, the latter indicator was subject to periodical revisions, eventually reflected in the actual Economic Sentiment Indicator. It was then excluded and replaced by the retail trade series, a rather significant sector in economic activity. See also *Monthly Economic Indicators* (September 2001), Banco de Portugal.

The calculation of the descriptive statistics shown in Table 1 was based on monthly data, although manufacturing industry and consumer surveys also include questions made with a quarterly frequency. The first set of charts (Charts 1) shows developments in confidence indicators in Portugal for the period mentioned. In general, the share of "below normal" responses is higher than the share of "above normal" responses. This clearly illustrates that the level of balances of respondents does not have an accurate meaning. The analysis must therefore be based on changes in these balances, which are particularly useful in identifying accelerations or decelerations in the associated quantitative variable. Balances obtained in the construction survey show the highest degree of volatility. The series under analysis are also highly resilient[(3)].

2.2. Reference variables

In order to assess the usefulness of opinion surveys in Portugal for the monitoring of the economic situation, qualitative data were compared with 15 quantitative series: Gross Domestic Product (GDP), total private consumption, of durables and non-durables, nominal and real exports, consumption and GDP deflators, Consumer Price Index (CPI), savings (as a percentage of disposable income), employment and unemployment rate, gross fixed capital formation (GFCF), GVA in manufacturing industry and Industrial Production Index (IPI). Use was made of quarterly data from the INE and the Banco de Portugal, for the 1987-2002 period. Both the IPI and the CPI were calculated on a quarterly basis, although the original series are published on a monthly basis.

3. QUALITATIVE VARIABLES AND REFERENCE AGGREGATES: STATISTICAL ASSOCIATION

Initially, survey responses and EC confidence indicators were compared with the year-on-year rate of change of the quantitative variables mentioned above[(4)]. Carnazza and Parigi (2001) make a

(3) With the exception of total trade and wholesale trade series, which are not seasonally adjusted.

(4) With the exception of the unemployment rate and savings, which are expressed as a percentage.

Table 1

QUALITATIVE SURVEYS

Questions and descriptive statistics

Period	Freq.	Source	Units		Variable	Average	Standard deviation	Autocorrelation[(a)]			
								t-3	t-6	t-9	t-12
1987:01/2003:06	m	EC	b.r.	s.a.	**Consumer Confidence Indicator**	-18	11.2	0.92	0.80	0.69	0.57
1987:01/2003:06	m	EC	b.r.	s.a.	Financial situation over last 12 months	-10	7.3	0.92	0.85	0.74	0.60
1987:01/2003:06	m	EC	b.r.	s.a.	Financial situation over next 12 months	-5	7.9	0.89	0.79	0.70	0.59
1987:01/2003:06	m	EC	b.r.	s.a.	General economic situation over last 12 months	-18	17.9	0.95	0.88	0.79	0.69
1987:01/2003:06	m	EC	b.r.	s.a.	General economic situation over next 12 months	-12	14.2	0.90	0.80	0.72	0.62
1987:01/2003:06	m	EC	b.r.	s.a.	Major purchases at present	-27	13.4	0.86	0.72	0.57	0.46
1987:01/2003:06	m	EC	b.r.	s.a.	Major purchases over next 12 months	-5	8.7	0.81	0.74	0.63	0.58
1987:01/2003:06	m	EC	b.r.	s.a.	Unemployment expectations over next 12 months	26	21.2	0.92	0.82	0.69	0.57
1987:01/2003:06	m	EC	b.r.	s.a.	Savings at present	-36	10.3	0.85	0.72	0.61	0.49
1987:01/2003:06	m	EC	b.r.	s.a.	Savings over next 12 months	-31	7.0	0.76	0.58	0.42	0.25
1987:01/2003:06	m	EC	b.r.	s.a.	Statement on financial situation of households	-3	5.4	0.79	0.64	0.56	0.50
1987:01/2003:06	m	EC	b.r.	s.a.	Price trends over last 12 months	37	14.3	0.88	0.76	0.68	0.65
1987:01/2003:06	m	EC	b.r.	s.a.	Price trends over next 12 months	30	11.8	0.78	0.62	0.47	0.40
1990:1/2003:2	q	EC	b.r.	s.a.	Intention to buy a car within the next 12 months	-65	4.5	0.72	0.59	0.43	0.29
1990:1/2003:2	q	EC	b.r.	s.a.	Purchase or build a home within the next 12 months	-76	3.1	0.64	0.39	0.25	0.19
1990:1/2003:2	q	EC	b.r.	s.a.	Home improvements over the next 12 months	-58	23.7	0.55	0.08	-0.06	-0.18
1987:01/2003:06	m	EC	b.r.	s.a.	**Manufacturing Industry Confidence Indicator**	-5	8.5	0.90	0.74	0.52	0.29
1987:01/2003:06	m	EC	b.r.	s.a.	Production trend observed in recent months	1	8.2	0.82	0.66	0.50	0.32
1987:01/2003:06	m	EC	b.r.	s.a.	Production expectations for the months ahead	7	8.0	0.81	0.65	0.48	0.32
1987:01/2003:06	m	EC	b.r.	s.a.	Assessment of order-book levels	-15	13.3	0.91	0.77	0.60	0.39
1987:01/2003:06	m	EC	b.r.	s.a.	Assessment of export order-book levels	-13	15.1	0.86	0.65	0.39	0.15
1987:01/2003:06	m	EC	b.r.	s.a.	Assessment of stocks of finished products	7	6.2	0.79	0.59	0.34	0.05
1987:01/2003:06	m	EC	b.r.	s.a.	Employment expectations for the months ahead	-12	8.6	0.92	0.82	0.65	0.48
1987:01/2003:06	m	EC	b.r.	s.a.	Selling price expectations for the months ahead	12	9.0	0.82	0.71	0.58	0.44
1987:1/2003:2	q	EC	b.r.	s.a.	Current level of capacity utilisation (as a percentage)	80	2.3	0.81	0.75	0.61	0.51
1987:1/2003:2	q	EC	b.r.	s.a.	Assessment of current production capacity	11	9.2	0.90	0.74	0.52	0.28
1987:1/2003:2	q	EC	b.r.	s.a.	Duration of production (months) assured by current order books	4	0.4	0.48	0.39	0.34	0.33
1987:1/2003:2	q	EC	b.r.	s.a.	New order in recent months	-3	14.9	0.89	0.71	0.50	0.26
1987:1/2003:2	q	EC	b.r.	s.a.	Export expectations for the months ahead	9	12.2	0.81	0.64	0.41	0.23

(*to be continued*)

Table 1

QUALITATIVE SURVEYS

Questions and descriptive statistics

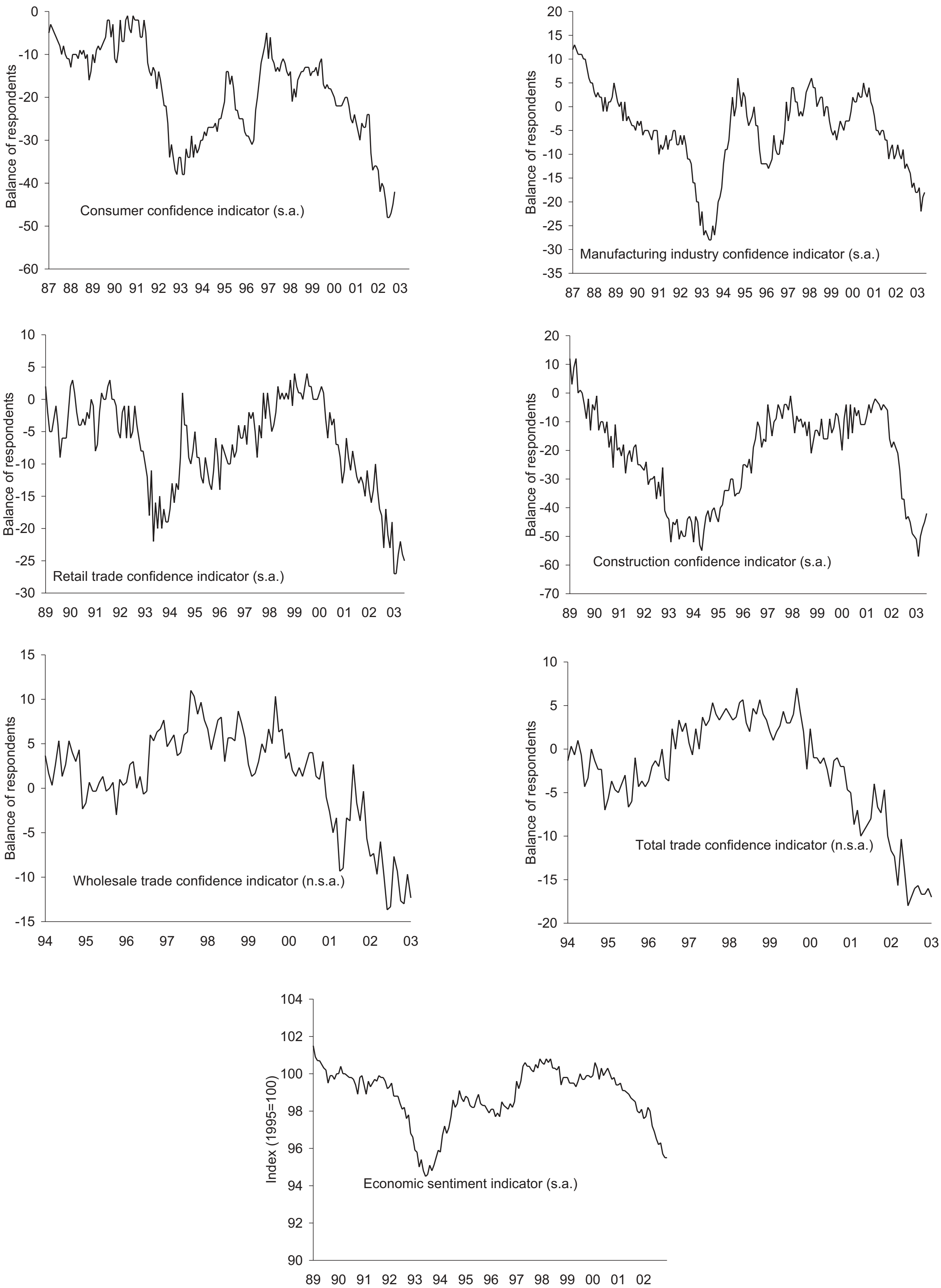
Period	Freq.	Source	Units		Variable	Average	Standard deviation	Autocorrelation(a)			
								t-3	t-6	t-9	t-12
1989:01/2003:06	m	EC	b.r.	s.a.	**Construction Confidence Indicator**	-22	16.3	0.91	0.84	0.72	0.57
1989:01/2003:06	m	EC	b.r.	s.a.	Assessment of order books	40	18.7	0.89	0.84	0.74	0.61
1989:01/2003:06	m	EC	b.r.	s.a.	Employment expectations for the months ahead	4	16.1	0.87	0.77	0.65	0.47
1989:01/2003:06	m	EC	b.r.	s.a.	Trend of activity over recent months	5	12.9	0.80	0.68	0.52	0.35
1989:01/2003:06	m	EC	b.r.	s.a.	Price expectations for the months ahead	-7	21.2	0.89	0.83	0.74	0.65
1989:01/2003:06	m	EC	b.r.	s.a.	**Retail Trade Confidence Indicator**	-7	7.1	0.81	0.73	0.59	0.46
1989:01/2003:06	m	EC	b.r.	s.a.	Business activity over recent months	19	11.8	0.83	0.75	0.62	0.51
1989:01/2003:06	m	EC	b.r.	s.a.	Assessment of Stocks	-10	5.1	0.51	0.31	0.23	0.18
1989:01/2003:06	m	EC	b.r.	s.a.	Expected business activity	-8	11.4	0.76	0.64	0.54	0.40
1989:01/2003:06	m	EC	b.r.	s.a.	Orders placed with suppliers	13	12.2	0.79	0.67	0.56	0.46
1989:01/2003:06	m	EC	b.r.	s.a.	Employment expectations	3	7.1	0.75	0.62	0.51	0.37
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	**Wholesale Trade Confidence Indicator**(b)	1	5.7	0.81	0.69	0.69	0.64
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Turnover	0	11.9	0.53	0.47	0.33	0.55
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Level of inventories	2	3.8	0.15	0.21	0.02	-0.10
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Order books	-2	10.1	0.51	0.50	0.39	0.60
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Selling price	6	6.5	0.14	-0.26	0.05	0.32
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Current activity	-8	9.6	0.87	0.80	0.72	0.62
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Future activity	14	8.8	0.73	0.49	0.53	0.71
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Employment expectations	-5	8.6	0.63	0.53	0.44	0.32
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	**Total Trade Confidence Indicator(b)**	-2	6.1	0.93	0.86	0.80	0.70
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Turnover	-4	11.8	0.66	0.66	0.46	0.61
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Level of inventories	4	3.0	-0.03	0.17	-0.14	0.12
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Order books	-7	10.7	0.65	0.77	0.52	0.69
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Selling price	7	6.8	0.16	-0.14	0.09	0.46
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Current activity	-14	10.3	0.91	0.85	0.77	0.67
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Future activity	10	9.5	0.82	0.70	0.67	0.69
1994:06/2003:06	m	*INE*	b.r.	n.s.a.	Employment expectations	-4	8.1	0.76	0.63	0.47	0.40
1989:01/2003:06	m	EC	1995=100	s.a.	**Economic Sentiment Indicator**	98.7	1.7	0.93	0.81	0.64	0.45

Note:

(a) Account is taken of monthly lags, with the exception of the quarterly data, for which the calculation refers to the four lagging quarters.

(b) The methodology used on the construction of the retail trade confidence indicator was applied to the calculation of the wholesale trade confidence indicator and the total trade confidence indicator.

Charts 1
CONFIDENCE INDICATORS (b.r.)



similar analysis, drawing conclusions on the importance of qualitative data to the current and future macroeconomic assessment.

The results are shown in Table 2 and Charts 2. The lag with the highest correlation coefficient is used to classify the qualitative indicator as lagging, coincident or leading.

The main conclusions are the following:

(a) The Consumer Confidence Indicator leads by around two quarters vis-à-vis private consumption. The questions with the highest correlations (around 0.80) refer to the general economic and financial situations over the last and the next 12 months, with coincident and leading indications in one quarter, respectively;

(b) Similarly, the balances of respondents calculated on the basis of consumers' responses provide very useful indications on the breakdown of consumption into durable and non-durable goods. Correlations are high, ranging from 0.70 to 0.80;

(c) In the retail trade survey, correlations with the series considered are lower. Business activity over recent months seems to be somewhat lagging compared with private consumption;

(d) As regards total trade, survey responses show high correlations when compared with the reference series for consumption, GFCF or even GDP. Questions on the company's turnover and current activity are very informative, despite their coincident or lagging nature in the first and second cases, respectively. The total trade confidence indicator also exhibited strong statistical associations. However, the short size of the sample used and the fact that it was not seasonally adjusted may be hindering a more robust analysis. The same can be said for the wholesale trade;

(e) Manufacturing industry survey results seem to be less significant, with correlation coefficients of around 0.50 for GVA and 0.60 for IPI. This may indicate that the effect of the launch of large projects (such as those in the car industry) on industrial production is significantly stronger than the corresponding effect on qualitative indicators. The correspondent chart stresses the importance of this aspect to the 95-97 period[5]. Higher correlations are obtained when comparing manufacturing industry survey questions with GDP or GFCF rather than IPI or industrial GVA.

(f) The Economic Sentiment Indicator provides contemporaneous indications on activity developments, with a correlation coefficient of 0.70. Stress should be laid on the strong correlation with GFCF (0.75 in the coincident period) and the significant leading indication in one quarter of developments in employment (0.88).

Some specific questions included in these surveys also made it possible to draw interesting conclusions within the scope of the study of additional variables: total employment, unemployment rate, savings, exports and prices. Table 3 and Charts 3 summarise the results.

It can be seen that:

(a) In general, there is a significant correlation between survey questions and the additional variables under analysis. Stress should be laid on the role played by qualitative data in the monitoring of labour market situation: expectations of developments in sectoral employment – manufacturing industry, retail trade and wholesale trade – show a high statistical association with the pace of total employment. In turn, the question regarding consumer unemployment expectations over next 12 months is strongly correlated with the rate effectively observed;

(b) Questions on savings included in the consumer survey are slightly correlated (around 0.55) with the savings rate, expressed as a percentage of disposable income;

(c) Questions included in the manufacturing industry survey regarding the order-book levels and export expectations for the months ahead, show a statistical association

(5) Stronger statistical associations were found in studies carried out for other countries (e.g. Goldrian *et al* (2001) and Santero and Westerlund (1996)).

Table 2

CORRELATION ANALYSIS – QUALITATIVE VARIABLES AND REFERENCE SERIES

Consumer Survey	Reference variables	Correlation coefficient of x(t) with the reference variable (t+i)								
		i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Consumer Confidence Indicator	Private consumption	0.54	0.64	0.70	0.73	0.76	0.77	0.78	0.77	0.71
	Consumption of durables	0.52	0.59	0.64	0.65	0.66	0.66	0.62	0.59	0.52
	Consumption of non-durables	0.42	0.51	0.57	0.61	0.66	0.70	0.76	0.77	0.75
Financial situation over last 12 months	Private consumption	0.58	0.67	0.74	0.79	0.82	0.80	0.76	0.69	0.58
	Consumption of durables	0.53	0.59	0.64	0.69	0.70	0.66	0.60	0.51	0.39
	Consumption of non-durables	0.48	0.57	0.65	0.70	0.74	0.75	0.76	0.72	0.66
Financial situation over next 12 months	Private consumption	0.52	0.63	0.70	0.74	0.79	0.81	0.81	0.79	0.71
	Consumption of durables	0.42	0.52	0.59	0.62	0.66	0.68	0.66	0.64	0.55
	Consumption of non-durables	0.45	0.54	0.60	0.64	0.69	0.73	0.77	0.77	0.73
General economic situation over last 12 months	Private consumption	0.62	0.70	0.77	0.81	0.84	0.84	0.80	0.74	0.66
	Consumption of durables	0.54	0.61	0.68	0.73	0.75	0.74	0.68	0.61	0.51
	Consumption of non-durables	0.52	0.60	0.67	0.71	0.74	0.75	0.76	0.73	0.68
	GDP	0.70	0.72	0.71	0.68	0.68	0.62	0.53	0.43	0.32
General economic situation over next 12 months	Private consumption	0.52	0.61	0.69	0.73	0.77	0.80	0.80	0.78	0.74
	Consumption of durables	0.46	0.54	0.62	0.66	0.69	0.73	0.70	0.68	0.62
	Consumption of non-durables	0.42	0.51	0.57	0.60	0.65	0.68	0.73	0.73	0.71
	GDP	0.61	0.65	0.66	0.66	0.69	0.64	0.60	0.52	0.43

Retail Trade Survey	Reference variables	Correlation coefficient of x(t) with the reference variable (t+i)								
		i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Retail Trade Confidence Indicator	Private consumption	0.38	0.44	0.54	0.58	0.64	0.66	0.60	0.56	0.46
	Consumption of durables	0.42	0.46	0.59	0.68	0.73	0.73	0.59	0.46	0.31
	Consumption of non-durables	0.27	0.33	0.40	0.40	0.46	0.49	0.51	0.53	0.49
Business activity over recent months	Private consumption	0.57	0.62	0.68	0.68	0.66	0.61	0.54	0.50	0.44
	Consumption of durables	0.60	0.66	0.74	0.76	0.73	0.59	0.43	0.30	0.19
	Consumption of non-durables	0.43	0.47	0.51	0.49	0.50	0.52	0.53	0.56	0.54
Expected business activity	Private consumption	0.29	0.33	0.45	0.54	0.67	0.74	0.73	0.71	0.61
	Consumption of durables	0.31	0.27	0.38	0.50	0.61	0.72	0.65	0.56	0.46
	Consumption of non-durables	0.22	0.30	0.39	0.45	0.56	0.59	0.63	0.66	0.60

Table 2

CORRELATION ANALYSIS – QUALITATIVE VARIABLES AND REFERENCE SERIES

Total Trade Survey	Reference variables	Correlation coefficient of x(t) with the reference variable(t+i)								
		i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Total Trade Confidence Indicator	Private consumption	0.60	0.63	0.71	0.72	0.75	0.78	0.73	0.63	0.51
	Consumption of durables	0.64	0.66	0.73	0.74	0.73	0.72	0.62	0.49	0.39
	Consumption of non-durables	0.37	0.46	0.55	0.55	0.63	0.68	0.71	0.65	0.53
	GFCF	0.47	0.50	0.63	0.70	0.74	0.67	0.53	0.38	0.26
	GDP	0.54	0.61	0.68	0.68	0.80	0.71	0.62	0.58	0.44
Turnover	Private consumption	0.48	0.56	0.68	0.70	0.77	0.70	0.56	0.55	0.34
	Consumption of durables	0.54	0.62	0.71	0.68	0.73	0.66	0.48	0.47	0.25
	Consumption of non-durables	0.26	0.38	0.53	0.58	0.65	0.61	0.56	0.54	0.38
	GFCF	0.37	0.44	0.61	0.71	0.79	0.66	0.46	0.32	0.10
Order books	Private consumption	0.49	0.59	0.66	0.72	0.78	0.78	0.77	0.66	0.57
	Consumption of durables	0.56	0.65	0.70	0.72	0.77	0.73	0.68	0.57	0.48
	Consumption of non-durables	0.24	0.37	0.49	0.56	0.63	0.67	0.72	0.63	0.57
	GFCF	0.45	0.50	0.62	0.75	0.79	0.70	0.59	0.41	0.33
Current activity	Private consumption	0.72	0.80	0.85	0.84	0.81	0.75	0.66	0.55	0.42
	Consumption of durables	0.76	0.80	0.83	0.80	0.75	0.66	0.54	0.40	0.26
	Consumption of non-durables	0.47	0.63	0.72	0.72	0.73	0.72	0.70	0.65	0.54
	GFCF	0.61	0.63	0.68	0.69	0.65	0.53	0.38	0.23	0.09
	GDP	0.71	0.74	0.76	0.74	0.77	0.66	0.56	0.45	0.31
Future activity	Private consumption	0.48	0.47	0.57	0.58	0.65	0.68	0.61	0.56	0.43
	Consumption of durables	0.51	0.51	0.61	0.63	0.65	0.68	0.50	0.46	0.38
	Consumption of non-durables	0.29	0.32	0.40	0.40	0.50	0.50	0.56	0.52	0.35
	GFCF	0.29	0.31	0.54	0.62	0.73	0.72	0.53	0.38	0.31
	GDP	0.36	0.47	0.56	0.55	0.74	0.61	0.55	0.53	0.45

Table 2

CORRELATION ANALYSIS – QUALITATIVE VARIABLES AND REFERENCE SERIES

Wholesale Trade Survey	Reference variables	Correlation coefficient of x(t) with the reference variable (t+i)								
		i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Wholesale Trade Confidence Indicator	Private consumption	0.47	0.52	0.61	0.62	0.68	0.74	0.70	0.64	0.58
	Consumption of durables	0.55	0.58	0.65	0.66	0.67	0.69	0.61	0.52	0.47
	Consumption of non-durables	0.25	0.33	0.44	0.43	0.54	0.63	0.64	0.63	0.58
	GFCF	0.42	0.49	0.64	0.74	0.78	0.64	0.53	0.39	0.31
Turnover	Private consumption	0.34	0.42	0.56	0.59	0.66	0.63	0.48	0.50	0.37
	Consumption of durables	0.42	0.53	0.61	0.63	0.65	0.59	0.42	0.44	0.31
	Consumption of non-durables	0.15	0.20	0.40	0.42	0.49	0.48	0.41	0.45	0.36
	GFCF	0.25	0.35	0.56	0.73	0.79	0.64	0.44	0.31	0.18
Current activity	Private consumption	0.69	0.78	0.81	0.80	0.77	0.76	0.70	0.62	0.53
	Consumption of durables	0.74	0.80	0.81	0.78	0.72	0.67	0.59	0.48	0.36
	Consumption of non-durables	0.44	0.59	0.67	0.67	0.67	0.73	0.73	0.71	0.64
	GFCF	0.64	0.69	0.72	0.72	0.67	0.51	0.38	0.27	0.15
Future activity	Private consumption	0.33	0.36	0.45	0.46	0.56	0.57	0.50	0.47	0.42
	Consumption of durables	0.39	0.42	0.52	0.54	0.58	0.58	0.43	0.39	0.38
	Consumption of non-durables	0.15	0.18	0.27	0.25	0.37	0.37	0.42	0.41	0.35
	GFCF	0.19	0.27	0.49	0.62	0.71	0.62	0.49	0.38	0.37

Construction Survey	Reference variables	Correlation coefficient of x(t) with the reference variable (t+i)								
		i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Confidence Indicator in Construction	Consumption of durables	0.38	0.37	0.40	0.36	0.32	0.26	0.23	0.24	0.28
Activity trend vs. activity in previous months	Consumption of durables	0.36	0.40	0.47	0.43	0.34	0.26	0.24	0.29	0.39
Order books	Consumption of durables	0.38	0.36	0.37	0.32	0.27	0.21	0.17	0.18	0.20

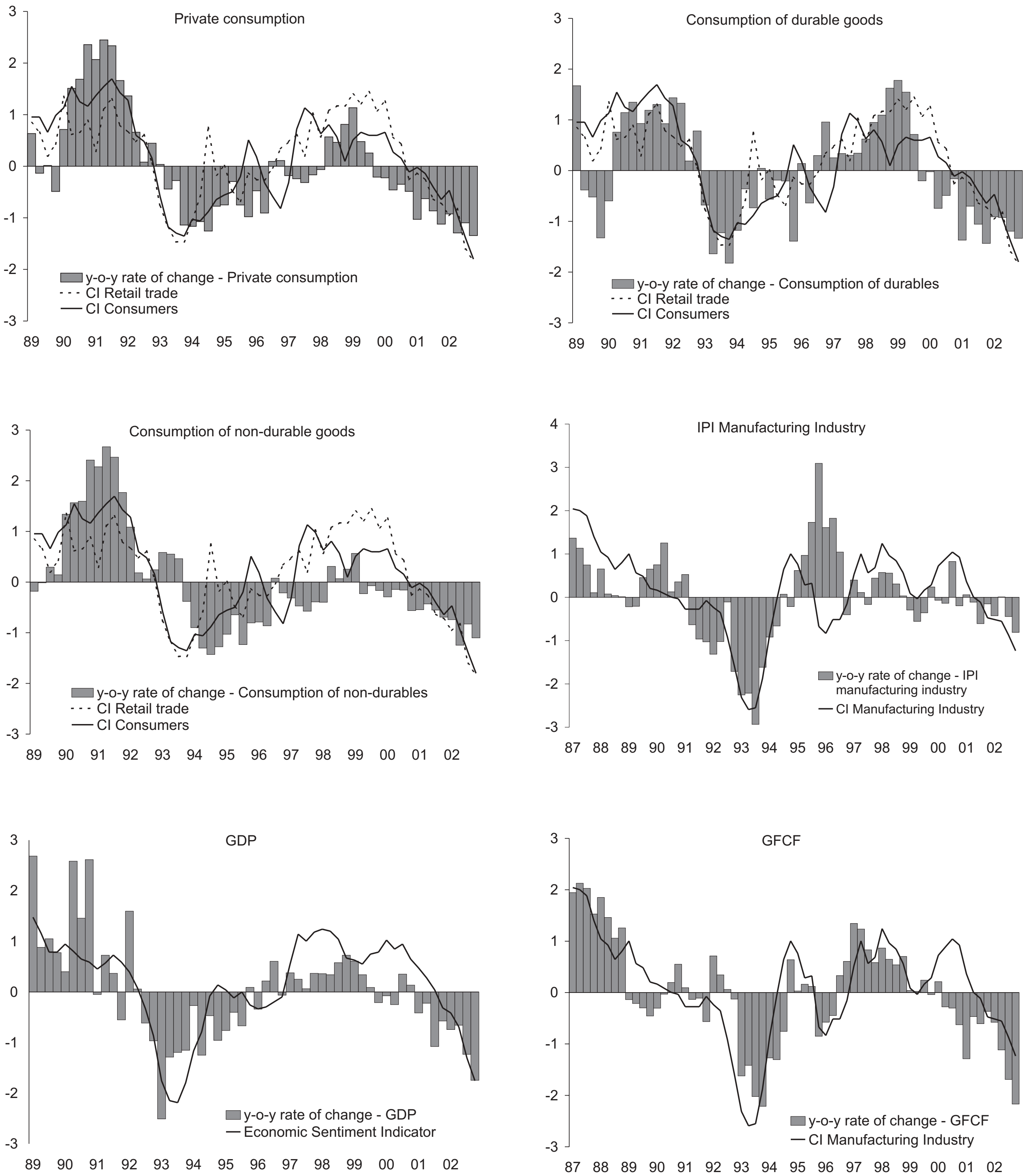
Table 2

CORRELATION ANALYSIS – QUALITATIVE VARIABLES AND REFERENCE SERIES

Manufacturing Industry Survey	Reference variables	Correlation coefficient of x(t) with the reference variable (t+i)								
		i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Manufacturing industry Confidence Indicator	GDP	0.23	0.33	0.45	0.54	0.60	0.59	0.53	0.49	0.46
	GVA in manufacturing industry	0.37	0.39	0.39	0.39	0.39	0.34	0.27	0.23	0.18
	IPI in manufacturing industry	0.26	0.32	0.39	0.48	0.56	0.57	0.51	0.45	0.36
	GFCF	0.22	0.37	0.51	0.67	0.76	0.73	0.66	0.54	0.39
Production trend observed in recent months	GDP	0.33	0.42	0.56	0.63	0.67	0.68	0.61	0.61	0.57
	GVA in manufacturing industry	0.43	0.41	0.41	0.41	0.38	0.33	0.23	0.20	0.17
	IPI in manufacturing industry	0.26	0.31	0.40	0.50	0.57	0.56	0.49	0.43	0.31
	GFCF	0.26	0.38	0.53	0.68	0.78	0.76	0.70	0.61	0.47
Production expectations for the months ahead	GDP	0.36	0.45	0.57	0.63	0.68	0.70	0.61	0.61	0.52
	GVA in manufacturing industry	0.39	0.43	0.40	0.38	0.42	0.33	0.25	0.21	0.13
	IPI in manufacturing industry	0.27	0.34	0.40	0.48	0.55	0.51	0.46	0.41	0.32
	GFCF	0.20	0.33	0.49	0.66	0.76	0.76	0.69	0.60	0.48
Order books	GVA in manufacturing industry	0.44	0.45	0.44	0.45	0.42	0.37	0.29	0.24	0.19
	IPI in manufacturing industry	0.30	0.37	0.45	0.55	0.61	0.61	0.54	0.47	0.35
	GFCF	0.27	0.40	0.52	0.65	0.71	0.68	0.61	0.51	0.38
New orders in recent months	GVA in manufacturing industry	0.28	0.37	0.39	0.41	0.47	0.42	0.39	0.36	0.32
	IPI in manufacturing industry	0.09	0.24	0.33	0.49	0.63	0.65	0.63	0.59	0.48
	GFCF	0.12	0.29	0.44	0.62	0.71	0.67	0.61	0.51	0.42

Composite indicators	Reference variables	Correlation coefficient of x(t) with the reference variable (t+i)								
		i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Economic Sentiment Indicator	GDP	0.48	0.56	0.63	0.67	0.70	0.64	0.58	0.50	0.40
	Private consumption	0.19	0.27	0.35	0.39	0.43	0.46	0.49	0.51	0.53
	GVA in manufacturing industry	0.49	0.49	0.44	0.42	0.37	0.26	0.13	-0.05	-0.19
	GFCF	0.40	0.49	0.61	0.70	0.75	0.69	0.57	0.42	0.23
	Total employment	0.47	0.56	0.66	0.77	0.85	0.88	0.83	0.71	0.53
	Unemployment rate	0.36	0.24	0.09	-0.08	-0.25	-0.38	-0.49	-0.59	-0.67
	Savings	-0.04	-0.03	-0.01	0.05	0.10	0.13	0.14	0.15	0.13

Charts 2
QUALITATIVE INDICATORS AND YEAR-ON-YEAR RATES OF CHANGE OF REFERENCE VARIABLES



Note:
(a) The scale of the variables was changed in order to obtain average equal to zero and standard deviation equal to one.

that, albeit moderate, is more significant to nominal exports than to real exports (with correlation coefficients of 0.64 and 0.56 respectively)[(6)].

Questions results regarding price developments are of particular importance. On the one hand, the qualitative assessment of the price trends over the last 12 months is highly correlated with contemporaneous inflation; the price trends over the next 12 months, in turn, has a virtually nil correlation with actual inflation. Thus, there is no useful prospective indication in this survey. By contrast, selling price expectations for the months ahead, available in the manufacturing industry survey, show leading indications (in approximately two quarters) on developments in the CPI or in the GDP deflator itself. Finally, assessments of entrepreneurs in the trade sector regarding future developments in selling price show a positive, albeit low, correlation with developments in the CPI and in private consumption and GDP deflators.

4. NOISE/INFORMATION ANALYSIS

Opinion surveys will only be effectively usefull in the economic analysis if they make it possible to appropriately capture the trend of the macroeconomic variables. Within this scope, the fact that the latest observations of the series might reflect irregular fluctuations causes a problem, given that it can induce wrong conclusions for the assessment of the economic situation in the short term. In such cases, the higher the erratic component of the series, the greater caution should be taken in their interpretation. In particular, a higher number of recent balances of respondents will be necessary for their indications to be truly credible and capable of signalling turning points in the activity.

In order to quantify this information, use was made of the "*Months of Cyclical Dominance*" (*MCD*) measure which, in essence, consists in weighing the erratic part in the original series minus that same component. Thus, for a given Y series, the *MCD* corresponds to the ratio between the average change in the irregular component throughout n months and the average change for the same time frame of the initial series minus that irregular component[(7)]. Considering a sample of T elements we have:

$$MCD_n(Y)=\frac{\sum_{k=1}^{T-n}\left|I_{k+n}^y-I_k^y\right|}{\sum_{k=1}^{T-n}\left|\left(Y_{k+n}^y-I_{k+n}^y\right)-\left(Y_k^y-I_k^y\right)\right|}$$

where Y is the original series and I its irregular component. The ratio compares the differences between the $k+n$ and k periods, in absolute terms, of the erratic component of the series with the corresponding changes in the trend-cycle (i.e. of the total series minus the irregular component).

When n is increasing, the MCD_n (Y) tends to be progressively lower. When the ratios are higher than 1, the erratic component has a more important bearing on the behaviour of the series, and the n months considered will not be enough to assign confidence to the information contained therein.

For the extraction of the irregular component, use was made of the band-pass filter developed by Baxter and King (1995), where fluctuations with a frequency below 12 months[(8)] were considered to be that erratic part and where k=36, normally used for monthly data. This analysis focused on the Commission's confidence indicators and on the series of balances of respondents related to total employment, unemployment rate, savings, nominal exports and prices. Table 4 summarises the calculations made, emphasising the number of months required for the ratio to become lower than 1. Charts 4 show the irregular component and the trend-cycle of the confidence indicator series.

The following conclusions can be drawn:

(a) The consumer and manufacturing industry confidence indicators and the Economic Sentiment Indicator are less noisy, and only three months of balances of respondents are required for the *MCD* ratio to become lower than 1. This observation suggests the use of

(6) Esteves (1988) notes that the question on the export order book is a better proxy for the year-on-year rate of change in external demand than in real exports.

(7) For this purpose, account was taken of the additive model, with a breakdown of the original series into trend, cyclical component and irregular component.

(8) Other bands were tested, such as 6 and 9-months, but the relative analysis required does not change the conclusions expressed in this article.

Table 3

CORRELATION ANALYSIS – EXPLORING ADDITIONAL VARIABLES OF QUALITATIVE SURVEYS

Year-on-year change in total employment	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Manufacturing Industry Survey									
Employment expectations for the months ahead	0.42	0.54	0.68	0.79	0.85	0.84	0.77	0.68	0.60
Retail Trade Survey									
Employment expectations for the months ahead	0.64	0.61	0.58	0.57	0.59	0.59	0.54	0.43	0.26
Wholesale Trade Survey									
Employment expectations for the months ahead	0.15	0.07	0.11	0.36	0.59	0.68	0.70	0.69	0.60
Total Trade Survey									
Employment expectations for the months ahead	0.32	0.22	0.22	0.41	0.60	0.67	0.67	0.63	0.52

Unemployment rate	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Consumer Survey									
Unemployment expectations over next months	0.00	0.13	0.26	0.41	0.55	0.67	0.76	0.83	0.87

Saving (as a % of disposable income)	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Consumer Survey									
Savings at present	0.49	0.52	0.55	0.57	0.52	0.47	0.39	0.30	0.26
Savings over next 12 months	0.47	0.51	0.53	0.54	0.48	0.42	0.35	0.29	0.27
Major purchases at present	0.51	0.53	0.57	0.58	0.56	0.53	0.48	0.43	0.42
Major purchases over next 12 months	0.68	0.70	0.71	0.74	0.74	0.75	0.73	0.72	0.70

Year-on-year change in nominal exports	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Manufacturing Industry Survey									
Export order book	0.16	0.34	0.53	0.62	0.64	0.53	0.38	0.21	0.04
Export expectations for the months ahead	0.24	0.47	0.54	0.62	0.64	0.55	0.44	0.28	0.15

Year-on-year change in real exports	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Manufacturing Industry Survey									
Export order book	0.05	0.23	0.42	0.52	0.55	0.45	0.31	0.16	0.02
Export expectations for the months ahead	0.11	0.37	0.44	0.52	0.56	0.46	0.38	0.23	0.11

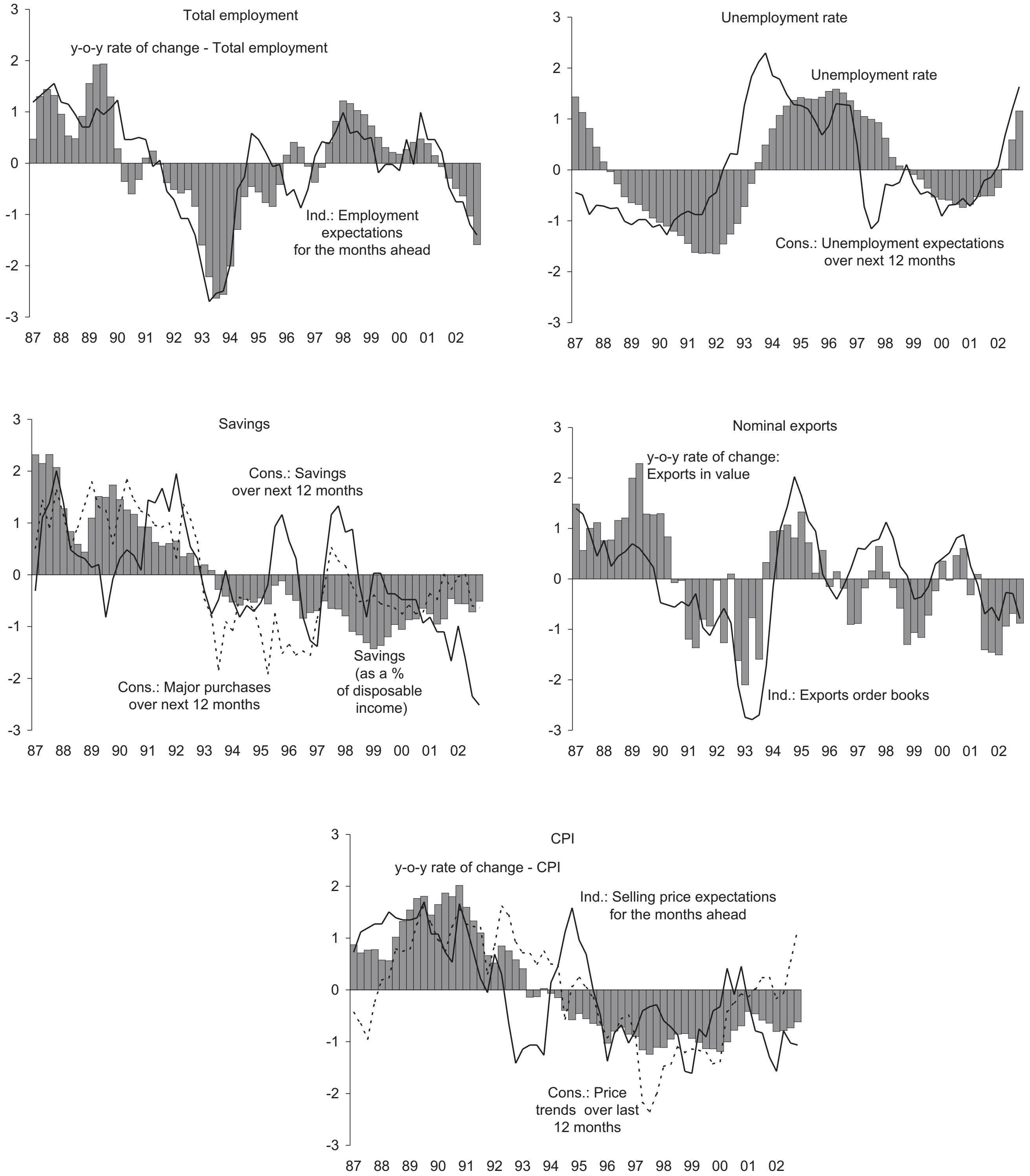
Year-on-year change in CPI	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Consumer Survey									
Price trends over last 12 months	0.78	0.77	0.77	0.77	0.77	0.76	0.72	0.68	0.62
Price trends over next 12 months	0.17	0.14	0.14	0.15	0.15	0.17	0.15	0.14	0.11
Manufacturing Industry Survey									
Selling price expectations for the months ahead	0.54	0.57	0.61	0.63	0.67	0.70	0.72	0.73	0.73
Wholesale Trade Survey									
Selling price	0.00	-0.03	0.02	0.05	0.17	0.31	0.39	0.42	0.24
Total Trade Survey									
Selling price	-0.06	-0.05	0.00	0.05	0.17	0.33	0.41	0.45	0.27

Year-on-year change in the private consumption deflator	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Consumer Survey									
Price trends over last 12 months	0.75	0.73	0.70	0.68	0.65	0.65	0.61	0.57	0.52
Price trends over next 12 months	0.07	0.06	0.03	0.03	0.01	0.03	0.02	0.01	-0.01
Manufacturing Industry Survey									
Selling price expectations for the months ahead	0.62	0.69	0.74	0.78	0.79	0.79	0.77	0.74	0.70
Wholesale Trade Survey									
Selling price	-0.07	0.02	0.07	0.10	0.18	0.32	0.37	0.36	0.26
Total Trade Survey									
Selling price	-0.10	-0.02	0.02	0.05	0.15	0.30	0.34	0.34	0.25

Year-on-year change in the GDP deflator	Correlation coefficient of x(t) with the reference variable (t+i)								
	i=-4	i=-3	i=-2	i=-1	i=0	i=1	i=2	i=3	i=4
Consumer Survey									
Price trends over last 12 months	0.75	0.74	0.69	0.66	0.65	0.69	0.64	0.58	0.52
Price trends over next 12 months	0.16	0.16	0.10	0.06	0.03	0.08	0.05	0.02	-0.02
Manufacturing Industry Survey									
Selling price expectations for the months ahead	0.48	0.54	0.63	0.68	0.73	0.78	0.79	0.79	0.75
Wholesale Trade Survey									
Selling price	-0.25	-0.18	-0.08	0.04	0.19	0.32	0.40	0.44	0.32
Total Trade Survey									
Selling price	-0.26	-0.17	-0.09	0.04	0.15	0.26	0.31	0.39	0.28

Charts 3

QUALITATIVE INDICATORS AND YEAR-ON-YEAR RATES OF CHANGE OF THE ADDITIONAL VARIABLES



Note:

(a) The scale of the variables was changed in order to obtain average equal to zero and standard deviation equal to one.

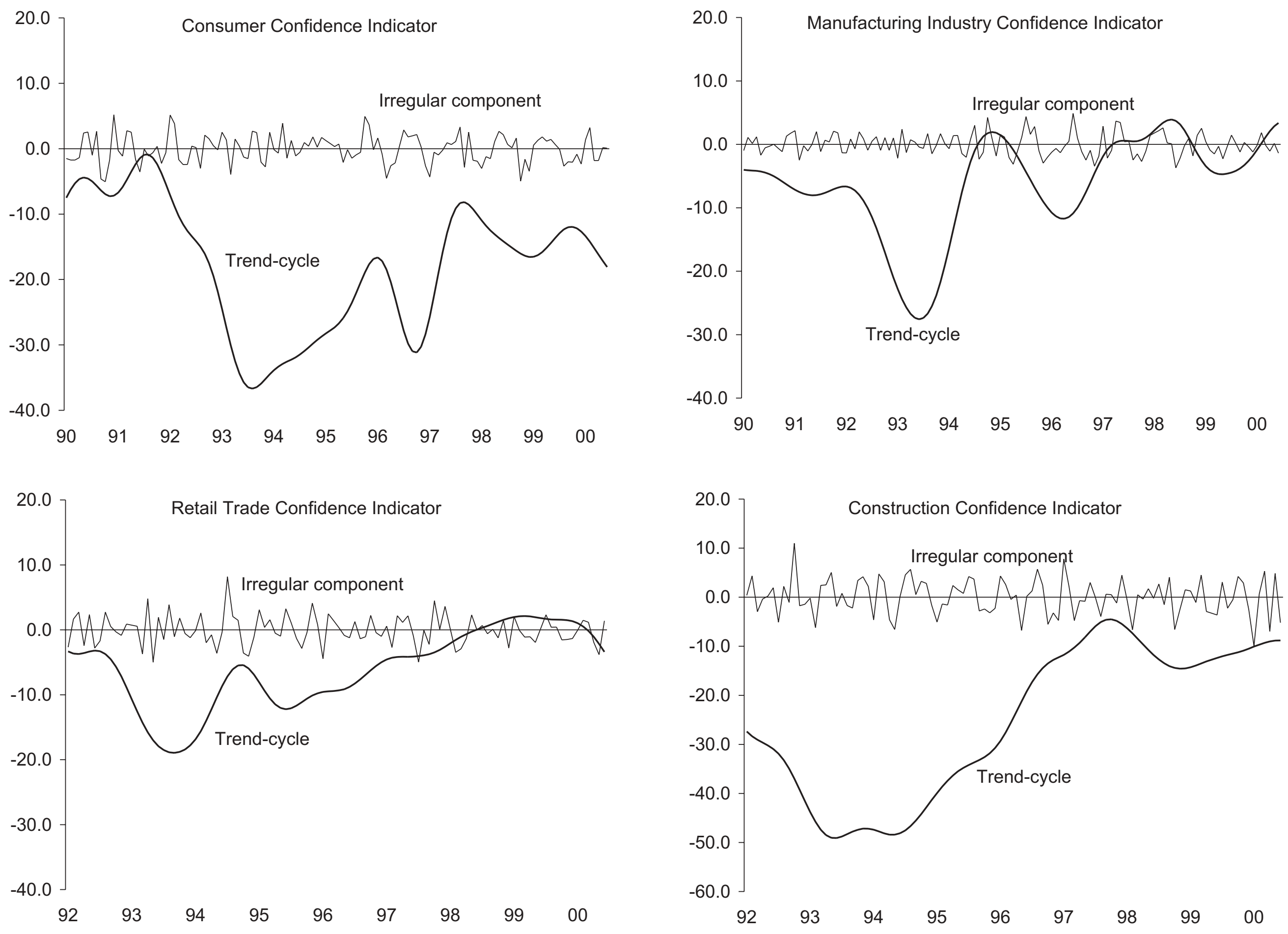
Table 4

IRREGULAR COMPONENT AND TREND-CYCLE

Summary of qualitative indicators note: Trend-cycle= [12 months; + ∞ [	Number of months (n) 1	2	3	4	5	6
Consumer Confidence Indicator	2.06	1.30	0.88	0.72	0.64	0.53
Manufacturing Industry Confidence Indicator	2.23	1.26	0.82	0.65	0.57	0.45
Economic Sentiment Indicator	2.18	1.16	0.71	0.54	0.50	0.37
Retail Trade Confidence Indicator	4.86	2.35	1.80	1.26	0.90	0.78
Construction Confidence Indicator	5.06	2.70	1.80	1.33	1.03	0.84
Total Employment						
Manufacturing Industry Survey	1.68	1.20	0.91	0.68	0.52	0.39
Retail Trade Survey	3.62	2.59	1.78	1.52	1.30	1.05
Unemployment rate (Consumer Survey)	2.37	1.15	0.92	0.67	0.58	0.48
Exports (Manufacturing Industry Survey)	2.22	1.19	0.80	0.61	0.48	0.43
Savings (as a % of disposable income)						
Savings over next 12 months (Consumer Survey)	4.37	2.42	1.52	1.24	1.03	0.84
Major purchases over next 12 months (Consumer Survey)	4.61	2.63	1.68	1.42	0.97	0.85
Consumer Price Index (CPI) - Price trend over next 12 months						
Consumer Survey	2.79	1.60	1.10	0.80	0.69	0.57
Manufacturing Industry Survey	2.62	1.55	1.19	0.85	0.69	0.54

Charts 4

CONFIDENCE INDICATORS: RESIDUAL AND TREND-CYCLE



3-month moving averages in the analysis of these series;

(b) In turn, retail trade and construction confidence indicators are much affected by erratic fluctuations, wherefore the latest monthly observations of the series must be used with great caution within the scope of short term analysis. This result suggests a further exception in the use of the retail trade survey, since the correlation with the macro variables is generally quite high;

(c) Labour market series, nominal exports and manufacturing industry expectations for prices have a low irregular component. Less positive results were obtained for savings, employment in retail trade and the price level trend, when assessed by consumers.

5. PRINCIPAL COMPONENTS

The analysis of principal components makes it possible to assess to what extent responses to the various survey questions follow a common trend or if, by contrast, they contain some specific information. The degree of proximity among results can be measured by the proportion of the variance of the considered questions, which is explained by the first component.

Table 5 shows the values for the six surveys, use being initially made of the questions included in the calculation of the respective confidence indicator and, subsequently, of the whole survey.

It can be concluded that, especially for consumer, manufacturing industry and construction surveys, the proportion of variance explained by the first principal component is rather strong. This can mean that, in such cases, agents tend to respond on the basis of a general feeling of optimism or pessimism vis-à-vis the economic situation. For trade surveys, the values obtained are lower, with no significant changes when all the questions are considered. This is not the case for the first set of surveys, which explore different variables, such as employment, savings or prices.

Correlations between the principal components of the surveys and the reference variables are high, as shown in Charts 5 for private consumption and GDP, even exceeding the coefficients calculated for the Consumer Confidence Indicator (from 0.78 to 0.82) and the Economic Sentiment Indicator (from 0.72 to 0.77). These results suggest that the current definition of confidence indicators – based on the calculation of simple arithmetic means – may not be the most appropriate to establish direct relationships with the reference macroeconomic aggregates.

6. CONCLUSIONS

The analysis carried out throughout this study showed that:

(a) Information contained in qualitative opinion surveys is extremely useful to monitor the short term economic analysis;

(b) Reference should be made, in particular, to the strong statistical association – coincident or leading (generally in one quarter) – between balances of respondents of the consumer survey and the various components of private consumption (with values close to 0.80);

(c) With regard to activity, qualitative indicators, in general, do not provide leading indications. However, since they are made available with some lead on quantitative indicators, developments in these series eventually provide more timely indications on output behaviour. The most useful information is taken from the manufacturing industry survey from the question on production expectations for the months ahead and from the Economic Sentiment Indicator, which summarises the general economic situation;

(d) Opinion surveys also make it possible to explore additional variables. For example, the manufacturing industry survey provides information with a relative lead on short-term price developments;

(e) Most surveys also show leading indications on developments in employment. In addition, consumers anticipate in a fairly accurate manner future developments in the unemployment rate;

(f) Questions on the exports order books and on exports expectations for the months

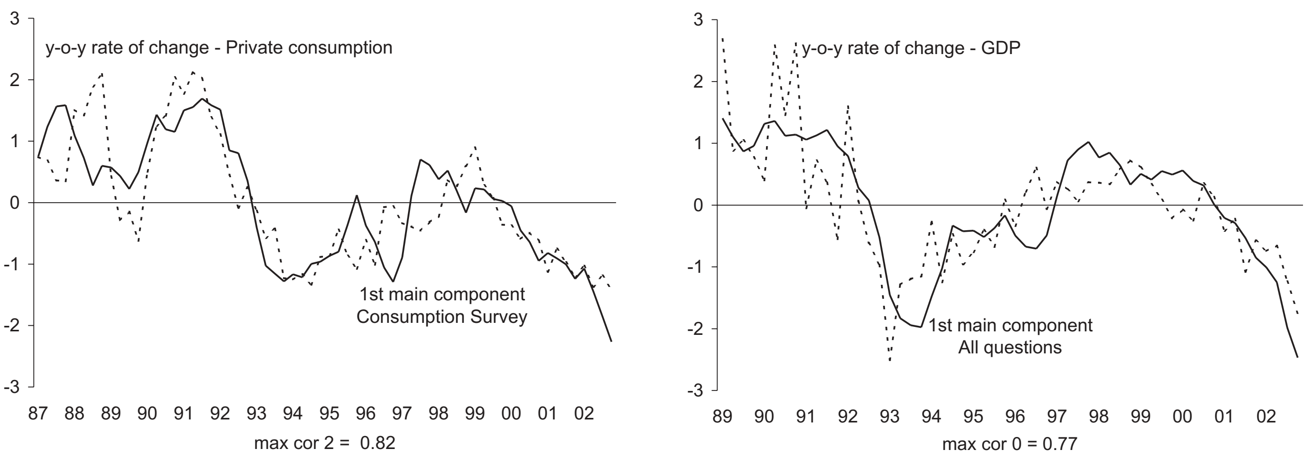
Table 5

PROPORTION OF THE VARIANCE OF THE SET OF QUESTIONS EXPLAINED BY THE FIRST MAIN COMPONENT

Period	Survey	Questions included in the calculation of the Confidence Indicator	All the survey questions
1987:01 a 2003:06	Consumption	0.81	0.63
1987:01 a 2003:06	Manufacturing Industry	0.83	0.76
1989:01 a 2003:06	Construction	0.87	0.73
1989:01 a 2003:06	Retail Trade	0.62	0.67
1994:06 a 2003:06	Wholesale Trade	0.58	0.54
1994:06 a 2003:06	Total Trade	0.64	0.59

Charts 5

FIRST MAIN COMPONENT AND QUANTITATIVE SERIES



ahead show some statistical association with the growth rate of exports, especially when expressed in nominal terms;

(g) With a view to assessing the quality of survey responses, a noise/information ratio was calculated. Results show that consumer and manufacturing industry confidence indicators and the Economic Sentiment Indicator have a less important irregular component, thereby providing overall adequate indications for the analysis of the short-term behaviour of the associated variables. In such cases, only three months of responses are required in order to have an effectively informative interpretation of the indicators;

(h) Retail trade and construction surveys have a weaker performance compared with other surveys, not only because statistical associations are lower, but also because the irregular component of the series is quite high;

(i) The analysis of principal components suggests that survey responses develop more or less in parallel. Thus, in all questions, economic agents tend to express their general sentiment vis-à-vis the current economic environment;

(j) Confidence indicators constructed on the basis of the simple arithmetic mean methodology are not always the best proxies for the variables under analysis in the Portuguese case. In fact, the preliminary results shown in Section 5 suggest that individual survey questions, if more efficiently combined, might show a stronger statistical association with the macroeconomic variables of interest.

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Chronology of major financial policy measures

January*

15 January (Notice of Banco de Portugal no. 1/2003, Official Gazette no. 12, Series I - B)	Pursuant to the provisions set forth in Article 42 - A and in Article 199-G of the Legal Framework of Credit Institutions and Financial Companies, provides for the regime to be complied with in the establishment of subsidiaries of credit institutions and financial companies in non-EC member countries.
15 January(Notice of Banco de Portugal no. 2/2003, Official Gazette no. 12, Series I - B)	Pursuant to the provisions set forth in Article 43 - A and in paragraph 4 of Article 117 of the Legal Framework of Credit Institutions and Financial Companies, provides for the regime to be complied with in the acquisition by credit institutions of certain types of participations in other credit institutions having their head office abroad or in financial institutions.
15 January (Notice of Banco de Portugal no. 3/2003, Official Gazette no. 12, Series I - B)	Redefines the information particulars that must be submitted together with the communications on qualifying holdings. Rewords the preamble and paragraph 1 and adds paragraph 2 - A to Notice no. 3/94, of 22 June.
15 January (Notice of Banco de Portugal no. 4/2003, Official Gazette no. 12, Series I - B)	Taking into account the changes introduced in the Legal Framework of Credit Institutions and Financial Companies by Decree-Law no. 201/2002, of 26 September, rewords Notice no. 10/94, of 18 November (limits to "large exposures"), redefining the types of credit institutions and financial companies subject to its discipline.
15 January (Notice of Banco de Portugal no. 5/2003, Official Gazette no. 12, Series I - B)	Pursuant to the provisions set forth in Article 113 of the Legal Framework of Credit Institutions and Financial Companies, as amended by Decree-Law no. 201/2002, of 26 September, redefines the limits on the net value of the fixed assets of credit institutions, as well as on the total value of shares or other equity capital that credit institutions may hold.
15 January (Notice of Banco de Portugal no. 6/2003, Official Gazette no. 12, Series I - B)	Pursuant to the provisions set forth in paragraph 3 of Article 115 of the Legal Framework of Credit Institutions and Financial Companies, as amended by Decree-Law no. 201/2002, of 26 September, lays down the terms and conditions and the periodicity of the publication of accounts by institutions subject to the supervision by Banco de Portugal. This Notice shall be applicable to the publication of the 2002 fiscal year accounts.
15 January (Notice of Banco de Portugal no. 7/2003, Official Gazette no. 12, Series I - B)	In accordance with the provisions set forth in paragraph 2 of Article 75 and in Article 195, both of the Legal Framework of Credit Institutions and Financial Companies, amends Notice no. 1/95, of 17 February, adding paragraph 4 - A, on the establishment of value dates related to debit and credit entries in demand deposit accounts, namely for the purpose of interest calculation and withdrawal of credited amounts. This Notice takes effect within 60 days as of the date of its publication.
23 January (Regulation no. 1/2003 of the Stock Market Commission, Official Gazette no. 19, Series II)	Sets the annual rate to be paid by issuing entities to the Stock Market Commission, on account of the supervision of the periodic reporting of financial information. Adds Article 12 - A and revokes subparagraph c) of paragraph 1 of Article 10 of Regulation no. 8/2001 of the Stock Market Commission, of 28 December.
29 January (Circular Letter of Banco de Portugal no. 7/03/DSBDR)	Makes known that the biannual report to be prepared by the institutions' external auditors, referred to in Circular Letter no. 17/2002/DSB, of 14 February, shall be submitted to the Banco de Portugal until the end of the quarter after the reference date of the report. The adoption of this procedure shall start with the information relating to 31 December 2002.
30 January (Decision of the Ministry of Finance no. 1825/2003, Official Gazette no. 25, Series II)	Pursuant to the provisions set forth in paragraph 2 of Article 66 of Law no. 32-B/2002, of 30 December, authorizes the Public Credit Management Institute to intervene in the secondary public debt market as a party to repur-

* The chronology for monetary measures of the Eurosystem can be found in the Monthly Bulletin of the European Central Bank.

chase operations on securities representing the direct public debt quoted in the special public debt market (MEDIP - *mercado especial de dívida pública*).

30 January (Circular Letter of Banco de Portugal no. 1/DMR)

Following Circular Letter no. 347/DMR, of 27 October 1999, fixes at 2.87% the rate of return of Deposit Securities, Series B, for the quarterly interest calculation period to start on 4 February 2003.

31 January (Circular Letter of Banco de Portugal no. 8/03/DSBDR)

Taking into account the provisions set forth in paragraphs 1.2 and 1.3 of the Annex to Notice no. 4/2002, makes known that the Banco de Portugal accepts that in the calculation of capital losses inherent in participations in *Sociedade Interbancária de Serviços*, SA (SIBS, Interbank Services Company), the 'presumable transaction value" shall be based on the price set by SIBS in the last outright sale of shares.

31 January (Circular Letter of Banco de Portugal no. 9/03/DSBDR)

Gives some explanations on Banco de Portugal's interpretation of certain precepts contained in the Legal Framework of Credit Institutions and Financial Companies, as worded by Decree-Law no. 201/2002, of 26 September, related to the registration of the accumulation of posts (Article 33), the registration of the members of the management and auditing boards (Article 69), as well as time limits, supplementary information and certificates (Article 71).

February

8 February (Notice of Banco de Portugal no. 8/2003, Official Gazette no. 33, Series I - B)

Revises the provisioning regime of credit fallen due (according to the type of guarantee and the progressivity principle of minimum provisioning levels), rewords the concept of bad debt (according to the initial maturity of the operations, the likelihood of future default, and from a portfolio perspective) and differentiates among provisions for general credit risks, lending secured by mortgages on owner-occupied housing. Amends paragraphs 3, 4, 5 and 7 of Notice no. 3/95, of 30 June. This Notice takes effect on the last working day of the month in which it is published, save for the alterations introduced in no. 1 of paragraph 4 of the above-mentioned Notice, which takes effect six months after this date.

11 February (Directive 2002/87/EC of the European Parliament and of the Council, Official Journal of the European Union L03000005)

Lays down provisions on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC, 92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 11 August 2004. They shall forthwith inform the Commission thereof.

17 February (Instruction of the Banco de Portugal no. 3/2003)

Lays down the conditions under which excess metal coins can be deposited with the Banco de Portugal.

19 February (Executive Order no. 160/2003,Official Gazette no. 42, Series I - B)

Under the provisions of paragraph 4, of Article 295 of the Commercial Companies Code, lays down that companies issuing shares listed in regulated markets under the supervision of the Stock Exchange Commission shall not be subject to the provisions set forth in paragraph 2, of article 259 of the Commercial Companies Code as regards reserves set up to the amounts mentioned in subparagraph a) of the afore-mentioned paragraph, when they are intended for the coverage of losses or negative results carried forward.

March

1 March (Regulation of the Instituto de Seguros de Portugal (Portuguese Insurance Institute) no. 12/2003,Official Gazette no. 51, Series II

Pursuant to the provisions set forth in paragraph 2, of Article 10, of Decree-Law no. 158/2002, of 2 July, lays down a set of rules related to the legal framework of savings funds set up as pension funds. Revokes paragraphs 50 to 58 of Rule no. 298/91, of 13 November.

12 March (Circular Letter of the Banco de Portugal no. 21/2003/DSB)	Within the scope of the measures preventing money laundering, recommends that credit institutions and financial companies must examine with particular care the operations negotiated with natural or legal persons residing in some territories. Revokes Circular Letter no. 91/2002/DSB of 6 November and Circular Letter no. 5/2003/DSB of 16 January.
20 March (Circular Letter of the Banco de Portugal no. 25/03/DSBRE)	Explains the understanding of the Directorate-General of Taxes as regards the transfer, without loss of tax benefits, of balances on housing-savings accounts to other credit institutions.
21 March (Notice of the Banco de Portugal no. 9/2003, Official Gazette no. 68, Series) I - B	Introduces changes in Notice no. 3/95 of 30 June, adding subparagraph n), to paragraph 1.1, of paragraph 1, of paragraph 15, so as to include the Mutual Counter-guarantee Fund in the list of entities whose assets are subject to the compulsory setting of provisions for specific and general credit risks.
22 March (Regulation no. 14/2003 of the Instituto de Seguros de Portugal, Official Gazette no. 69, Series III)	Taking into consideration the rules relating to the composition of the assets of pension funds provided for in Rule no. 21/2002 of 28 November, in Decree-Law no. 158/2002 of 2 July, in Executive order no. 1451/2002 of 11 November, and in Decree-Law no. 204/95 of 5 August, lays down the rules to be complied with by pension fund managing companies as regards the reporting of data on the composition of the assets of pension funds managed by them. Revokes Rule no. 10/99-R of 7 September, although keeping in force the data processing Instruction no. 26 annexed to it. This rule is applied for the first time to the reporting of data on the composition of the assets of pension funds as at 31 December 2002.
25 March (Circular Letter of the Banco de Portugal no. 26/03/DSBDR)	Recommends that income declarations for purposes of housing credit must be examined with particular care, given that the Directorate-General of Taxes has drawn attention to the fact that some of them are not in accordance with those submitted at tax offices.
26 March (Regulation no. 2/2003 of the Stock Market Commission, Official Gazette no. 72, Series II)	Amends Article 68 of Regulation no. 12/2000, so as to guarantee that financial intermediaries make available to their clients the value of operations on securities on the day on which settlement takes place. This Regulation takes effect on 1 April 2003.
27 March (Circular Letter of the Banco de Portugal no. 2/DMR)	Makes known the new prices - effective from 1 April 2003 onwards - of services provided by SITEME, replacing the former price list annexed to Circular Letter no. 6/DMR of 10 February 2000.

April

1 de April (Regulation no. 3/2003 of the Stock Market Commission, Official Gazette no. 77, Series II)	Limits the scope of the compulsory opening of individual accounts with financial intermediaries to transferable securities held by collective investment undertakings and pension funds. Rewords Article 35 of Regulation no. 14/2000 of 23 March. This Regulation takes effect on 1 April 2003.
11 April (Executive Order no. 296/2003, Official Gazette no. 86, Series I - B)	In accordance with the provisions of paragraph 3 of Article 1 of Decree-Law no. 88/94, of 2 April, lays down that transferable securities representing the public debt, issued pursuant to the provisions set forth in the Resolution of the Council of Ministers no. 10/2003, of 28 January, shall be added to the list published through Executive Order no. 377-A/94, of 15 June.
17 April (Circular-Letter of the Banco de Portugal no. 31/03/DSBDR)	Discloses guidelines relating to the accounting treatment of *Agrupamentos Complementares de Empresas* (Complementary Company Groupings) with links to credit institutions.
24 April (Decree-Law no. 83/2003, Official Gazette no. 96, Series I - A)	In the use of the legislative powers granted by Law no. 25/2002, of 2 November, introduces changes in Decree-Law no. 454/91, of 28 December, granting access to all credit institutions to the data disclosed by the Banco de Portugal related to cheque risk users.

26 April (Decree-Law no. 86/2003, Official Gazette no. 97, Series I - A)	Establishes the general rules applicable to the intervention of the State in the definition, design, preparation, competition, award, alteration, surveillance and general monitoring of public and private partnerships. Introduces changes in Articles 1, 12 and 18 and revokes Article 4 of Decree-Law no. 185/2002, of 20 August.
28 April (Circular-Letter of the Banco de Portugal no. 3/2003/DMR)	Informs that the rate of return of the Certificates of Deposit, Series B, to prevail in the quarter started on 4 May 2003 is set at 2.53%.
30 April (Decree-Law no. 91/2003, Official Gazette no. 100, Series I - A)	Introduces changes in the legal framework of Treasury bills. Rewords Articles 2 and 7 of Decree-Law no. 279/98, of 17 September.

May

3 May (Executive Order no. 530/2003, Official Gazette no. 102, Series II)	Under the provisions of paragraph 1 of Article 173 of the Legal Framework of Credit Institutions and Financial Companies, approved by Decree-Law no. 298/92, of 31 December, introduces changes in the Regulation of the Deposit Guarantee Fund. Revokes subparagraph c), of paragraph 1 of Article 3 and rewords Articles 4, 6, 16, 17 and 19 of the said Regulation, approved by Executive Order no. 285-B/95, of 15 September.
12 May (Circular Letter of the Banco de Portugal no. 33/03/DSB)	Clears doubts on the scope of the subjects on which the supervisory body issues its opinions, so as to ensure a higher harmonisation of the content of the Opinions to be sent to the Banco de Portugal on the internal control system.
13 May (Decree-Law no. 99/2003, Official Gazette no. 110, Series I - A)	Introduces changes in the legal system governing emigrants' savings accounts. Rewords articles 7 and 12 and revokes article 3 (1) e) and article 17 of Decree-Law no. 323/95, of 29 November, in compliance with the rewording laid down in Decree-Law no. 65/96, of 31 May.
15 May (Instruction no. 4/2003 of the Public Credit Management Institute, Official Gazette no. 112, Series II)	Establishes, pursuant to article 7 of Decree-Law no. 279/98 of 17 September, the general conditions applicable to Treasury bills, as well as the market operator statutes.
15 May (Instruction of the Banco de Portugal no. 9/2003)	Following the regulatory changes introduced in the credit risk provisioning system, lays down that credit institutions and financial companies shall send a provisions' table, duly filled in, within 30 days as of the end of each quarter. Revokes Instruction no. 91/96, published in BNBP no. 1, of 17 June 1996.
19 May (Circular Letter of the Banco de Portugal no. 34/03/DSB)	Recommends that credit institutions, which from a group perspective have a significant involvement in securitisation operations, shall keep their own funds at an adequate level in order to cover the overall risks arising from such operations; as far as new securitisation operations are concerned, releases of own funds shall not be recognised; capital gains resulting from the sale of assets shall be accrued up to the settlement date of such operations.
28 May (Report and Annual Accounts for 2002 of the Stock Market Commission, Official Gazette no. 123, Series III, 3rd Supplement, Part A)	Publishes the report of the activities undertaken by the Stock Market Commission in 2002.

June

4 June (Decree-Law no.107/2003, Official Gazette no. 129, Series I -A)	Introduces changes in the provisions of the Stock Market Code (inter alia), within the scope of the registration of issues of bonds in public offerings and the requirements related to the audit of special accounts.
11 June (Law no. 18/2003, Official Gazette no. 134, Series I - A)	Approves the legal system governing competition.

14 June (Decision of the European Parliament and of the Council no. 2003/429/EC, OJ no. 147, Series L)	Decision of the European Parliament and of the Council on the adjustment of the financial perspective for enlargement. See also the Decision of the European Parliament and of the Council of 19 May 2003 (2003/430/EC) on the revision of the financial perspective, published in the abovementioned OJ.
16 June (Instructions of the Banco de Portugal nos. 11 and 12/2003, Boletim Oficial (Official Bulletin) no. 6/2003)	Establishes that credit institutions and financial companies shall compulsorily supply financial information broken down by segments (areas of activity and geographical regions).
27 June (Regulation of the Stock Market Commission no. 4/2003, Official Gazette no. 146, Series II)	Sets the value of the rate to be paid for the services supplied by the Stock Market Commission to credit securitisation companies. Adds item i) to article 5 (1) of Regulation no. 8/2001, of 28 December.
28 June (Decree-Law no. 132/2003, Official Gazette no. 147, Series I - A)	Defines the sanctions to be applied in the event of non-compliance with the obligations imposed by Council Regulation (EC) no. 2560/2001, of the European Parliament and of the Council, of 19 December, which enshrines the principle of equal charges between euro denominated cross-border and domestic payments up to EUR 50,000.

July

8 July (Cabinet Resolution no. 89/2003, Official Gazette no. 155, Series I - B)	Amends Cabinet Resolution no. 10/2003, of 28 January, which authorises the Portuguese Government Debt Agency (*Instituto de Gestão do Crédito Público*) to contract, on behalf and representation of the Portuguese Republic, loans intended to the financing of the fiscal deficit, to the assumption and settlement of liabilities and to the refinancing of public debt. These result from the Government decision to resume the issue of Treasury bills as a State's permanent financing instrument and also from the changes introduced by Decree Law no. 91/2003, of 30 April, in the legal framework of this type of transferable securities. This Resolution changes the issue ceiling for government debt represented by Treasury bills to a maximum amount of EUR 5,500 million, and of EUR 2 million for other types of government debt, denominated or not in a legal tender currency in Portugal, with representation forms other than those previously existing.
11 July (Decree-Law no. 148/2003, Official Gazette no. 158, Series I - A)	Transposes into national law Commission Directive no. 2000/52/EC, of 26 July, amending Directive no. 80/723/EEC, of 25 June, on the transparency of financial relations between Member States and public undertakings as well as on financial transparency within certain undertakings. Financial transparency relations regulated by this Decree-Law do not apply to Banco de Portugal.
11 July (Circular Letter of Banco de Portugal no. 54/03/DSBDR)	Discloses the understanding of Banco de Portugal on commissions and other fees paid by borrowers to credit institutions according to the provisions set forth in subparagraph d) of paragraph 1 of Article 4 of Decree Law no. 220/94, of 23 August, regarding the management and keeping of demand deposit accounts associated with housing credit contracts.
17 July (Regulation no. 6/2003 of the Stock Market Commission, Official Gazette no. 163, Series II)	Introduces changes in Regulation no. 4/2002, of 9 February, which establishes the conditions under which investment-fund managing companies may set up exchange traded funds and guaranteed funds, publishing it again in its entirety with the amendments introduced.
17 July (Directive 2003/51/EC of the European Parliament and of the Council, Official Journal of the European Union no. 178, Series L)	Directive of the European Parliament and of the Council amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 1 January 2005 at the latest and they shall forthwith inform the Commission thereof.

21 July (Instruction no. 5/2003 of the Portuguese Government Debt Agency, Official Gazette no. 166, Series II)	Under the provisions laid down in Article 7 of Decree Law no. 279/98, of 17 September, as amended by Decree-Law no. 91/2003, of 30 April, introduces changes in Instruction no. 4/2003, which establishes the general conditions of Treasury bills, as well as the status of market operators.
22 July (Regulation no. 5/2003 of the Stock Market Commission, Official Gazette no. 167, Series II)	Under the provisions laid down in Articles 230 and 242 of the Securities Code, regulates the admission to trading of open-ended undertakings for collective investment in transferable securities (UCITS) of a contractual or corporate type. Rewords Article 52 and amends annex IV to Regulation no. 10/2000, which is published again with the amendments introduced.
28 July (Circular Letter of Banco de Portugal no. 70/2003/DSBDR)	Recommends that credit institutions and financial corporations shall examine with particular care the operations contracted with natural or legal persons, resident or established in the following countries and territories: Cook Islands, Egypt, Philippines, Guatemala, Indonesia, Myanmar, Nauru, Nigeria and Ukraine, within the scope of money laundering preventive measures. With regard to Nauru, supplementary counter-measures continue to be applicable, due to the fact that this jurisdiction has not corrected satisfactorily the serious shortcomings of its system for preventing and combating money laundering. Revokes Circular Letter no. 21/2003/DSB, of 12 March.
31 July (Circular Letter of Banco de Portugal no. 5/DMR)	Following Circular Letter no. 347/DMR, of 27 October 1999, fixes at 2.09% the rate of return of Deposit Securities, Series B, for the quarterly interest calculation period to start on 4 August 2003.

August

4 August (Regulation no. 34/2003 of the Instituto de Seguros de Portugal (Portuguese Insurance Institute) Official Gazette no. 178, Series II)	Establishes, under Article 90 (1) of Decree-Law no. 94-B/98, reworded by Decree-Law no. 8-C/2002 of 11 January, a set of rules applicable to the assets representing technical reserves, to the ceilings on prudential diversification and dissemination and to the general matching principles applicable to those assets, as well as a list of principles to be complied with by insurance undertakings in the definition, implementation and monitoring of investment policies. With the publication of this regulation, the rules governing assets representing technical provisions provided for in Executive Order no. 299/99 of 30 April cease to apply. Referrals to the abovementioned Executive Order are considered to be made to the present rule. Provisions laid down in Chapter II of Rule no. 9/99-R of 7 September are revoked. Insurance undertakings should comply with the provisions applicable to the definition, implementation and monitoring of investment policies, at the latest by 31 December 2003.
8 August (Regulation no. 38/2003 of the Instituto de Seguros de Portugal (Portuguese Insurance Institute) (Rule no. 12/2003-R), Official Gazette no. 182, Series II	In conformity with Article no. 6 (9) of Decree-Law no. 90/2003 of 30 April, introduces changes in the special register of assets representing technical provisions, reflecting the winding-up of insurance undertakings, with a view to protecting the interests of insurance creditors, in compliance with Directive 2001/17/EC of the European Parliament and of the Council of 19 March 2001, transposed into Portuguese law by means of the above Decree-Law, and changes rule no.19/2002-R of 24 July accordingly.
9 August (Regulation no. 39/2003 of the Instituto de Seguros de Portugal (Portuguese Insurance Institute) Official Gazette no. 183, Series II)	Defines a set of principles and rules applicable to the coding of assets that form the investment portfolios of insurance undertakings and the assets of pension funds. The present rule enters into force on the day following its publication. In the information pertaining to the representation of technical provisions and to the composition of pension funds' assets, as at 30 September, the asset code shall be filled in with the base code defined in this rule.
13 August (Circular-Letter of the Banco de Portugal no. 74/03/DSBDR)	Provides information on the understanding of the Banco de Portugal as to the criteria applicable to tranches of notes that do not have the same degree

of subordination and that do not have a rating for the purpose of calculating ratios and other prudential limits.

18 August (Circular-Letter of the Banco de Portugal no. 75/03/DSBDR)	In view of the existence of "substitution clauses" in medium- and long-term credit securitisation operations within the scope of mortgage loans for house purchase, it provides information on the understanding of the Banco de Portugal as to the replacement of securitised asset pool credits resulting from changes in contractual arrangements.
18 August (Instruction of the Banco de Portugal no. 18/2003)	Introduces changes in Instruction no. 27/2000, particularly with a view to adapting the provisioning regime as regards those cases in which institutions selling credits in securitisation operations are holders of clean-up calls.
18 August (Instruction of the Banco de Portugal no. 19/2003)	Introduces changes in Instruction no. 94/96, with a view to clarifying the notion of organised market for the purpose of country-risk provisioning, and to defining methods for the valuation of assets traded on those markets.
18 August (Instruction of the Banco de Portugal no. 20/2003)	Establishes the system for the provision of information on losses of financial shareholdings and respective provisions, and determines when the reporting map completed with this information shall be sent to the Banco de Portugal.
19 August (Decree-Law no. 183/2003, Official Gazette no. 190, Series I-A)	Amends articles 9 and 26 and adds article 25-A to the Statutes of the Stock Market Commission, approved by Decree-Law no. 473/99 of 8 November, and revokes article 211 of the Stock Market Code, approved by Decree-Law no. 486/99 of 13 November, as well as Executive Order no. 1303/2001 of 22 November, reworded by Executive Order no. 323/2002 of 27 March. The present Decree-Law enters into force on 30 August 2003.
22 August (Law nº 38/2003, Official Gazette no. 193, Series 1-A)	Authorises the Government to issue legislation within the scope of the protection of investors in transferable securities.
29 August (Regulation no. 7/2003 of the Stock Market Commission, Official Gazette no. 200, Series II, Supplement)	Establishes the new structure of the supervision rates to be paid to the Stock Market Commission, eliminating some rates and cutting other rates. It will enter into force on 1 September 2003.
30 August (Executive-Order no. 913-I/2003, Official Gazette no. 200, Series I-B, 4th Supplement)	Establishes the new system of supervision rates applicable in the stock market. The present Executive Order enters into force on 1 September 2003.

September

10 September (Decree-Law no. 203/2003, Official Gazette no. 209, Series A)	Lays down a special regime to raise support and incentives to be exclusively applicable to major investment projects falling within the scope of the tasks of *Agência Portuguesa para o Investimento, E.P.E.* (API – Portuguese Investment Agency), pursuant to the provisions set forth in Decree-Law no. 225/2002 of 30 October. Revokes the regime governing the recording of foreign investment operations.
10 September (Notice of the Banco de Portugal no. 10/2003, Official Gazette no. 215, Series I – B)	Defines the regulatory framework regarding the collection through account debit for intrabank deposits, standardizing the process of electronic collection and clarifying the rights and duties of the parties involved, requiring them to apply subsidiarily the rules that regulate the direct debit system. This Notice enters into force on 1 January 2004.
17 September (Notice of the Banco de Portugal no. 11/2003, Official Gazette no. 222, Series I – B)	Introduces changes in Notice no. 11/94 of 21 February, with regard to the base contributory rate for the determination of annual contributions to the Deposit Guarantee Fund, setting it at 0.05% for 2004.
18 September (Instruction of the Banco de Portugal no. 23/2003)	Sets at 50% the limit for the irrevocable payment commitment to be applied in contributions to the Deposit Guarantee Fund for 2004.

24 September (Instruction of the Banco de Portugal no. 24/2003)	Sets forth that the transitional regime provided for in paragraph 9 of Notice no. 10/2001 ceases to be applicable to securitisation operations conducted from 30 September 2003 onwards.

October

2 October (Regulation No. 8/2003 of the Stock Market Commission, Official Gazette No. 239, Series II)	Adapts the current competition framework for the market, as regards reporting requirements to which companies managing non-regulated markets are subject, in relation to companies managing regulated markets. Introduces changes in Articles 5 and 6 and revokes paragraph 4 of Article 5 and paragraph 5 of Article 6 of Regulation No. 5/2000.
2 October (Regulation No. 9/2003 of the Stock Market Commission, Official Gazette No. 241, Series II)	Lays down the terms and conditions for the setting up and operation of special investment funds (fundos especiais de investimento), to which the legal system governing securities investment funds shall be subsidiarily applicable.
7 October (Regulation No. 51/2003 of the ISP (Portuguese Insurance Institute) (Rule No. 18/2003-R), Official Gazette No. 250, Series II)	Lays down a set of rules related to the reporting of data on the representation and collateralisation of insurance technical reserves. The above-mentioned rule applies for the first time to data to be reported on the representation of technical reserves as at 30 September 2003. Revokes regulatory rules Nos. 9/99-R of 7 September and 9/2003-R of 18 February.
7 October (Regulation No. 52/2003 of the ISP (Portuguese Insurance Institute) (Rule No. 19/2003-R), Official Gazette No. 250, Series II)	Lays down a set of rules related to the reporting of data on the composition of pension fund assets. The above-mentioned rule applies for the first time to data to be reported on the composition of pension fund assets as at 31 December 2003. Revokes regulatory rule No. 8/2003-R of 18 February.
8 October (Regulation No. 10/2003 of the Stock Market Commission, Official Gazette No. 245, Series II)	Introduces changes in Article 10 of Regulation No. 12/2000 on financial intermediation, so as to assign to market-managing companies the responsibility for defining the conditions for the persons carrying on duties in a market on behalf of financial intermediaries, namely those responsible for settlement systems and settlement terminal operators.
15 October (Instruction of the Banco de Portugal No. 23/2003)	Sets at 50% the limit for the irrevocable payment commitment to be applied in 2004 contributions.
15 October (Instruction of the Banco de Portugal No. 24/2003)	Sets forth that the transitional regime laid down in paragraph 9 of Notice 10/2001 ceases to apply to securitisation transactions carried out after 30 September 2003.
15 October (Instruction of the Banco de Portugal No. 25/2003)	Regulates the Interbank Clearing System, which covers the sub-systems for the automated clearing of cheques, commercial bills, direct debits, electronic fund transfers (TEI) and operations processed via ATM network. Revokes Instruction No. 125/96, published in the BNBP No. 5 of 15 October 1996.
15 October (Instruction of the Banco de Portugal No. 26/2003)	Standardises the cheque document, by defining the technical features with which all types of cheques must comply, when submitted to clearing in Portugal. Revokes Instruction No. 9/98 published in the BNBP No. 5 of 15 May 1998.
17 October (Decree-Law No. 252/2003, Official Gazette No. 241, Series I-A)	Approves the legal regime governing collective investment undertakings and their managing companies and transposes into the national legal system Directives 2001/107/EC and 2001/108/EC of the European Parliament and of the Council.
24 October Circular Letter of the Banco de Portugal No. 6/DMR)	Makes known, in the wake of Circular Letter No. 347/DMR of 27 October 1999, that the rate of return on Deposit Securities, Series B, to be in force in the quarterly interest calculation period starting on 4 November 2003, is 2.05%.

November

5 November (Circular Letter of the Banco de Portugal No. 99/03/DSBDR)

Informs that, as from 1 January 2004, the Banco de Portugal will start to calculate, on a systematic basis, the defaulting credit/total credit indicator. Announces that credit institutions are required to adopt, as from the same date, a similar methodology when preparing information to be disclosed to the public, whenever this information makes reference to a credit quality indicator. Revokes Circular Letter No. 98/03/DSBDR of 31 October.

7 November (Decision of the ECB No. 2003/797/EC, OJ L No. 297)

Decision of the European Central Bank concerning the administration of the borrowing-and-lending operations concluded by the European Community under the medium-term financial assistance facility (ECB/2003/14). Decisions ECB/1998/NP2 and BCE/1998/NP15 are revoked.

7 November (Notice of the Banco de Portugal No. 12/2003, Official Gazette No. 258, Series I-B)

Pursuant to the provisions of Article 6 of Decree-Law No. 262/2001 of 28 September, lays down the ceiling on financing through borrowed resources of brokers and dealers.

17 November (Instruction of the Banco de Portugal No. 27/2003)

Based on the Commission Recommendation 2001/193/EC, lays down the information elements to be given by lenders offering home loans, namely those elements that should be provided in the Standardised Information Sheet and the expenses underlying the opening of a deposit account and its maintenance during the life of the loan.

17 November (Instruction of the Banco de Portugal No. 28/2003)

Introduces several changes in the Chart of Accounts for the Banking System (Instruction No. 4/96), namely within the scope of operational leasing operations and swaps.

21 November (Decree-Law No. 294/2003, Official Gazette No. 270, Series I-A)

Sets forth the rules governing the process of checking the requirements applied to associations for the defence of investors in securities, referred to in Article 32 of the Securities Code, approved by Decree-Law No. 486/99 of 13 November.

21 November (Decree-Law No. 295/2003, Official Gazette No. 270, Series I-A)

Approves the new legal system governing economic and financial operations with abroad and domestic foreign exchange operations, including dealing in foreign exchange and gold operations. This Decree-Law enters into force 60 days following its publication. Revokes Decree-Laws Nos. 481/80 of 16 October, 13/90 of 8 January, 64/91 of 8 February, 176/91 of 14 May and 170/93 of 11 May, as well as Article 7 of Decree-Law No. 138/98 of 16 May.

21 November (Decree-Law No. 296/2003, Official Gazette No. 270, Series I-A)

Transposes into the national legal system Council Directive 2001/44/EC of 15 June and Commission Directive 2002/94/EC of 9 December, both on mutual assistance for the recovery of claims in European Community Member States. Revokes Decree-Law No. 504-N/85 of 30 December, as well as Decree-Laws No. 186/89 of 3 June and No. 69/94 of 3 March which have amended the former.

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