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Economic policy and situation

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Economic Research

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Economic policy and situation

THE PORTUGUESE ECONOMY IN 2003

1. INTRODUCTION

According to the estimates of the Banco de Portugal published in this *Economic Bulletin*, the Portuguese Gross Domestic Product (GDP) declined, in real terms, by 1.2 per cent in 2003, compared with 0.5 per cent growth in 2002 (Table 1.1). In intraannual terms, the contraction of Portuguese economic activity was particularly strong in the first half of 2003, strengthening the trend observed in the second half of 2002, when a negative year-onyear change in GDP had already been seen (Table 1.2). During the second half of the year, the decline in economic activity was smaller, reflecting a less marked decrease in domestic demand.

In annual average terms, the contribution of domestic demand was more negative than in 2002 (-2.7 percentage points (p.p.), compared with -0.6 p.p. in the previous year) and was only partly offset by the increase in the positive contribution of net external demand (which reached 1.5 p.p., vis-à-vis 1.0 p.p. in 2002). As usual in periods of economic recession, gross fixed capital formation (GFCF) was the component of domestic demand with the sharpest fall (-9.5 per cent). Private consumption expenditure declined also in 2003 (-0.5 per cent). Taken as a whole, final government expenditure (excluding sales of buildings and other produced assets deducted from GFCF) increased by 0.8 per cent in real terms, as a result of a slight reduction in public consumption (-0.4 per cent) and a real growth of 7.3 per cent in GFCF of the general government (also excluding sales of assets). The improved contribution of net external demand reflected the acceleration in exports of goods and services (from 2.4 to 4.1 per cent), since imports registered a reduction similar to the one estimated for 2002 (-0.7 per cent).

In 2003, the higher growth in exports of goods made it possible to obtain a gain in market share above that recorded in 2002, in spite of the context of appreciation of the euro and the resulting increased competition of third countries in export markets. The fall in domestic demand, in contrast with the less unfavourable trend of external demand, seems to be leading some companies to re-direct their sales to external markets, even if for that purpose they have to accept a decline in profit margins. Indeed, the strong decline in export prices in 2003 suggests a contraction in profit margins in the export sector, notwithstanding the decline in import prices and the deceleration in wage costs.

The estimate for the change in GDP in 2003 presented in this article stood slightly below the middle point of the projection range presented in the September and December issues of the *Economic* Bulletin. The major source of revision of the previous estimates consisted in external trade flows (exports and, chiefly, imports), which were higher than previously estimated. The incorporation of this new information led to a downward revision of the contribution of net external demand to the change in GDP. As regards domestic demand, its contribution to the change in GDP is slightly less negative than the estimates presented in this article, mainly reflecting an upward revision of private and public investments. By contrast, a real slight decline in public consumption is now estimated, compared with the nil change previously considered.

In 2003, the Portuguese labour market was characterised by a decline in total employment (-0.8 per cent) and by an increase in the unemployment rate (from 5.1 to 6.4 per cent). The decline in employment was below that of GDP, resulting in a fall in

Table 1.1

MAIN ECONOMIC INDICATORS

Percentage rates of change, unless otherwise stated

	2001	2002	2003
Private consumption ^(a)	1.2	0.5	-0.5
Public consumption ^(a)	3.9	2.2	-0.4
GFCF ^(a)	0.7	-5.5	-9.5
Change in inventories ^{(a) (b)}	0.0	0.1	0.0
Domestic demand ^(a)	1.5	-0.5	-2.5
Contribution of domestic demand to GDP ^(a)	1.7	-0.6	-2.7
Exports ^(a)	1.7	2.4	4.1
Overall demand ^(a)	1.6	0.1	-1.1
Imports ^(a)	1.1	-0.7	-0.7
Contribution of net external demand to GDP ^(a)	0.1	1.0	1.5
GDP ^(a)	1.8	0.5	-1.2
CPI	4.4	3.6	3.3
Total employment.	1.4	0.2	-0.8
Unemployment rate (per cent of labour force)	4.1	5.1	6.4
Compensation per employee (excl. the government transfer to <i>Caixa Geral de Aposentações (CGA)</i>) ^(c)	5.5	5.6	3.0
General government total balance (per cent of GDP)	-4.4	-2.7	-2.8
General government total balance – adjusted for temporary measures (per cent of GDP)	-4.4	-4.1	-5.3
Households disposable income (real) ^{(a) (c)}	2.6	0.2	-0.5
Households saving rate (per cent of disposable income) ^{(a) (c)}	12.2	12.0	12.0
Households gross indebtedness (per cent of disposable income)	97	103	110
Non-financial corporations gross indebtedness (per cent of GDP)	91	93	94
Current account + capital account (per cent of GDP)	-8.5	-5.2	-3.0
3-month Euribor interest rate (per cent)	4.27	3.32	2.33
Nominal effective exchange rate for Portugal (+ means appreciation)	0.6	0.5	2.5
Interest rate of the amount outstanding of loans to non-financial corporations, end-of-period	5.8	5.3	4.4
Interest rate of the amount outstanding of loans to households for house purchase, end-of-period	6.0	5.2	3.8
Interest rate of the amount outstanding of loans to households for consumption and other purposes,	07	01	71
ena-or-penoa	0.7	0.1	7.1

Notes:

(a) Estimates of Banco de Portugal from INE national accounts to the years of 1995 to 2001 (ESA 95).

(b) Contribution to GDP growth in percentage points.

(c) In 2003, adjusted for the effects of the sale of tax credits – see footnote (1) of the text.

Table 1.2

INTRA-ANNUAL EVOLUTION OF ECONOMIC ACTIVITY IN 2002 AND 2003 – EXPENDITURE Year-on-year rates of change – in volume

	2002	2 ^E	2003	E
	1st half	2nd half	1st half	2nd half
GDP	1.6	-0.6	-1.8	-0.7
Private consumption	0.7	0.2	-1.6	0.5
GFCF	-1.5	-9.2	-11.6	-7.4
Domestic demand	0.7	-1.7	-3.7	-1.4
Exports	2.2	2.6	2.9	5.3
of which: goods	1.6	3.0	4.1	7.3
Imports.	-0.4	-1.0	-3.5	2.2
of which: goods	-0.8	-1.4	-3.3	2.1

E: Estimates of Banco de Portugal.

productivity per employed person in 2003, after two years of very modest growth. This recent behaviour of productivity per employed person, however, is associated with a decrease in the average number of hours worked. Productivity per hour worked, although decelerating in 2003, has nonetheless grown by around 2 per cent.

Unit labour costs (for the economy as a whole, excluding government transfers to CGA and the sale of tax and social security credits⁽¹⁾) slowed down significantly (1.7 p.p. less than in 2002, to 3.5 per cent). Gross nominal compensation per employee, also for the economy as a whole, decelerated to 3.0 per cent, compared with 5.6 per cent in the previous year, but the unfavourable development of productivity per person employed prevented a higher deceleration of unit labour costs. Indeed, these costs continued to grow by approximately 1¹/₄ p.p. above the euro area average, an excessive differential under the present situation and with adverse effects in terms of the economy competitiveness. Moreover, it should be noted that this

growth differential is aggravated by approximately 1/2 p.p. if only the private sector of the economy is taken into account, due to the close-to-zero growth in public sector wages.

Annual average inflation, as measured by the Consumer Price Index (CPI), declined from 3.6 per cent in 2002 to 3.3 per cent in 2003. Throughout the year the decline in inflation was much more pronounced, with the year-on-year rate of change of the CPI falling from 4.0 per cent in December 2002 to 2.4 per cent in December 2003. Several factors, both domestic and external, were behind the slowdown in prices in 2003. First, the contraction of economic activity contributed to a decrease in demand pressures on prices. Wages, both in public and private sectors, decelerated significantly, in a context of deteriorating labour market conditions, also contributing to the reduction in Portuguese inflation. In addition, price developments of imported goods also continued to favour a fall in inflation. Finally, the downward trend of inflation in the course of 2003 was amplified by the unwinding of temporary factors that affected price developments in 2002.

The decrease in the Portuguese inflation rate led to a narrowing of the differential vis-à-vis the euro area, to 0.3 p.p. at the end of 2003. It should be noted, however, that despite the significant narrowing of the inflation differential of services, it still reached 1.0 p.p. in December 2003, an excessive value when taking into account the recessive situation and that seems to be partly related to a market structure somewhat sheltered in some sub-sectors.

Net external borrowing requirements of the Portuguese economy, measured by the deficit of the current plus capital account, declined from 5.2 to 3.0 per cent of GDP in 2003. This decline in the external deficit was exclusively due to the private sector⁽²⁾, given that net borrowing requirements of the general government have not improved.

According to the February 2004 Excessive Deficit Procedure (EDP) notification, the general government deficit, on a national accounts basis, stood at 2.8 per cent of GDP in 2003 (2.7 per cent of GDP

⁽¹⁾ In December 2003, the Portuguese government sold to a resident non-monetary financial institution (NMFI), for 1,760 million euros, tax credits with a face value of 11,441.4 million euros, concerning to taxes and social contributions assessed from January 1, 1993 to September 30, 2003.

The Eurostat recognised that this transaction had an impact on the deficit, which implied that, in national accounts, the sale has to be recorded as general government revenue. Therefore, an accounting circuit was established in which resident corporations and households paid to the general government taxes and social contributions to the amount of 1,760 million euros, incurring for the purpose in loans granted by the NMFI acting as "vehicle" of the transaction. The amount of this payment was split between the revenue of the different taxes and social contributions, proportionally to their share in the nominal value of the credit portfolio. The financing of the transaction by the NMFI was obtained from non-residents and was recorded in the balance of payments as portfolio investment from abroad in securities issued by the resident non-monetary financial sector.

Given that the operation represents more than 1.3 per cent of GDP to be entered as payments from households and corporations that have not actually been carried out in 2003, the impact on the trend of aggregates such as wages (including social contributions), operating surplus, disposable income, savings and households and corporations net lending/net borrowing is not negligible. Since it is reasonable to consider that the behaviour of households and corporations in 2003 was not significantly affected by the carrying out of the operation, it was decided to privilege in this article the analysis of these aggregates after adjustment, excluding the accounting effect of this operation, wherefore, unless otherwise indicated, the text refers to adjusted figures.

^{(2) &}quot;Private sector" is defined herein in broad and residual terms vis-à-vis the general government. This means that any resident economic agent that does not belong to the general government is included in the private sector, even in the case of fully state-owned corporations.

in the previous year). As in 2002, compliance with a target for the deficit below the 3 per cent of GDP reference value required the adoption of significant extraordinary measures. Indeed, against the background of economic recession, and in spite of the consolidation efforts, temporary measures increased from 1.4 per cent of GDP in 2002 to 2.5 per cent of GDP in 2003. The most significant temporary measures were three: the sale of tax credits to a non-monetary financial institution⁽³⁾, the transfer of accounting reserves from the Portuguese postal operator (CTT) to the civil servants pension system (CGA) and to the Treasury, associated with the transfer of liabilities linked to the future burden with pensions, and the revenue collected on January 3, 2003, in the framework of the tax arrears settlement programme. The general government deficit adjusted for these temporary measures deteriorated from 4.1 per cent of GDP in 2002 to 5.3 per cent of GDP in 2003. According to estimates of Banco de Portugal, the primary balance adjusted for the cycle and temporary measures, an indicator usually used to measure fiscal consolidation, improved only slightly in 2003 (between 0.0 and 0.2 p.p. of GDP⁽⁴⁾). Indeed, despite the discretionary consolidation measures introduced in 2003 and the lagged effects of the measures implemented in 2002, the increase in the expenditure with pensions as a percentage of GDP did not allow for a more significant improvement of the fiscal position.

Considering figures adjusted for the sale of tax credits, households recorded a slight increase in their net lending capacity from 3.5 to 3.7 per cent of GDP in 2003. This increase reflected chiefly the fall in housing investment, since the saving rate seems to have stabilised vis-à-vis 2002, at 12.0 per cent of disposable income. Taking into account that Portuguese households need to affect a growing share of their savings to the repayment of the debt principal⁽⁵⁾, the maintenance of the saving rate actually represents a decline in savings not allocated to the debt service. Moreover, in 2002, the households' saving rate had been negatively affected by the extraordinary payment of tax debts, within the scope

of the settlement of tax arrears granted in the last months of the year.

The trend of households' savings and net lending capacity in 2003 was influenced by extremely accommodating monetary conditions, with interest rates for loans declining further to historically low levels. In addition, the first half of the year, in particular, continued to witness some aggressive competitiveness among banks in the credit segment for house purchases. The easing of conditions offered by banks in this segment was reflected, in particular, in the widen maturities of new loans and in the availability of contractual modalities that facilitate access to loans of higher amount, transitorily mitigating the charges associated with the debt service. Portuguese banks have thus offset, at least partly, the effects of the end of the subsidised interest rate regime for house purchase, which was in force up to September 2002. It should also be mentioned that, in 2003, there was an increase in the average value of loans for house purchase, well above the change in average house prices. This reflected an increase in the average quality/size of houses purchased by households, but may also indicate the non-full utilisation of capital gains obtained with the sale of previous houses in the acquisition of the new house. Therefore, despite the fall observed in private consumption and housing investment in 2003, the very accommodating monetary and financial conditions have clearly contributed to smooth the trend of these aggregates. Less accommodating conditions would probably have led to a rise in the saving rate and to a stronger increase in the net lending capacity of households, in a context where the sustained increase in the income share allocated to the repayment of the debt principal would not be offset by the decrease in interest payments.

Corporations' net borrowing requirements, in turn, declined from 5.9 to 2.5 per cent of GDP in 2003, revealing a clear strengthening of the adjust-

⁽³⁾ See footnote (1).

⁽⁴⁾ Depending on whether the smoothing parameter used corresponds to 100 or to 30 in the filtering process of the relevant aggregates. See section 4. *Fiscal Policy*.

⁽⁵⁾ In fact, according to the principles of National Accounts, the debt service component, that corresponds to interest paid, is deducted from gross income for assessing disposable income. However, this is not the case for the principal repayment component, which is entered into the accounts as an use of current saving. As a result of the growing household gross indebtedness, the savings share that must be allocated to the repayment of principal has been undergoing a sustainable increase over recent years.

ment process of their financial situation. This reduction would have been higher were it not for the above-mentioned transfer of accounting reserves from the *CTT*, which accounted for 1.0 per cent of GDP. Excluding also this operation, that involves the general government and a fully stateowned corporation, firms net borrowing requirements would decline to 1.5 per cent of GDP and net lending capacity of the private sector as a whole would reach values above 2 per cent of GDP, which had not happened since the mid 1990s.

2. EXTERNAL ENVIRONMENT OF THE PORTUGUESE ECONOMY AND MONETARY POLICY IN THE EURO AREA

2.1. Major international economic developments

World activity strengthened in 2003, against the background of a recovery in investment and world trade and of the maintenance of strong stimulus of macroeconomic policies in major economies. World output increased by 3.8 per cent after a rise of 3.0 per cent in 2002 (Table 2.1). The acceleration of activity was concentrated in the second half of the year, since in the first half uncertainties related to the military intervention in Iraq and to the impact of the SARS epidemic contributed to moderate growth, thus extending the trend observed in late 2002.

Major geographical areas continued to show significant growth differences. The strengthening of activity was particularly expressive in the United States and in the Asian economies, including Japan. The US economy has benefited from a significant recovery of investment and from the maintenance of robust growth of private consumption, in a context where interest rates remained at very low levels and the budget situation deteriorated further. In Asia, activity has benefited from the strong growth of exports, boosted by a favourable competitive position and by the recovery of the IT sector. In the United Kingdom, growth was also stronger in 2003, reaching rates above potential during the second half of the year. The expansion of British activity continued to reflect the robust growth of domestic demand. The euro area, where two thirds of Portuguese trade is concentrated, had the lowest growth among major economic areas and the worst performance since the 1992-93 recession, after the very low growth recorded in 2001/2002. Economic recovery in the second half of the year was much weaker than in the other regions of the world, based chiefly on the strengthening of external demand.

	Weight				Consumer prices			Current account			
	on world	Ra	te of cha	nge	Ra	te of cha	nge	As a pe	rcentage	of GDP	
	GDP ^(a)	2001	2002	2003	2001	2002	2003	2001	2002	2003	
World Economy		2.4	3.0	3.9	-	-	-	-	-	-	
Emerging and developing countries	44.5	4.1	4.6	6.1	6.8	6.0	6.1	-	-	-	
Developing countries in Asia	23.8	5.6	6.4	7.8	2.7	2.0	2.7	1.7	2.8	2.3	
Latin America	7.6	0.4	-0.1	1.7	6.0	8.9	10.6	-2.9	-0.9	0.2	
Community of independent states (CIS)	3.7	6.4	5.1	7.6	20.4	13.8	12.1	7.9	6.9	7.0	
East and Central Europe	3.3	0.3	4.4	4.5	19.6	14.8	9.2	-2.5	-3.3	-3.9	
Africa	3.2	3.8	3.5	4.1	11.8	9.6	10.3	-0.3	-1.7	-0.7	
Middle East	2.8	4.3	4.2	5.4	7.1	7.5	8.6	5.9	4.6	7.3	
Advanced economies	55.5	1.1	1.7	2.1	2.1	1.5	1.8	-0.8	-0.7	-0.8	
USA	21.1	0.5	2.2	3.1	2.8	1.6	2.3	-3.9	-4.6	-4.9	
Japan	7.0	0.4	-0.3	2.7	-0.7	-0.9	-0.3	2.1	2.8	3.2	
Euro area	15.9	1.6	0.9	0.4	2.3	2.3	2.1	-0.2	0.9	0.4	
United Kingdom	3.2	2.1	1.7	2.3	1.2	1.3	1.4	-2.4	-1.7	-2.4	
New Asian industrialised economies ^(b) .	3.3	1.1	5.1	3.0	1.9	0.9	1.4	5.1	5.9	7.6	

GDP, INFLATION AND CURRENT ACCOUNT

Table 2.1

Sources: International Monetary Fund, European Commission and Thomson Financial Datastream. Notes:

(a) Based on GDP evaluated in purchasing power parities.

(b) Korea, Hong-Kong, Taiwan and Singapore.



Commodity prices increased significantly in 2003, in line with the global recovery (Chart 2.1). The average oil price expressed in US dollars increased by approximately 14 per cent, to stand at a level close to 30 dollars per barrel at the end of the year. Non-energy commodity prices recorded similar growth. Nonetheless, inflationary pressures remained contained at world level, reflecting the excess capacity still available in most economies. In the advanced economies as a whole the average inflation rate stood at 1.8 per cent. Japan continued to register a fall in prices, albeit less sharp than in previous years.

The absence of inflationary pressures and the slowdown in economic activity in the first half of the year led the monetary authorities of the major economies to lower further their key interest rates before the Summer (Chart 2.2). In the United States, the target for the Fed Funds rate was lowered by 25 basis points to 1.0 per cent on 25 June. Despite the end of the war in Iraq there were still no signs of sustained growth and since May the Federal Reserve attached a higher probability to an unwarranted decline than to an increase in the inflation rate⁽⁶⁾. In the euro area, the minimum bid rate for the main refinancing operations was lowered from 2.75 to 2.5 per cent in March and, subse-



quently, to 2.0 per cent in June. The Bank of England decided to lower the repo rate by 25 basis points in February and July, setting it at 3.5 per cent. In turn, the Bank of Japan increased, on several occasions, the target for the current accounts of monetary financial institutions with the Central Bank. In the second half of the year, the key interest rates remained unchanged in the United States and in the euro area as signs of recovery of emerged and inflation prospects remained favourable. In the United Kingdom, the improvement of the external environment, the maintenance of a strong pace of growth of household expenditure and housing prices and the depreciation of the pound sterling in the course of the year, led the Bank of England to increase its repo rate by 25 basis points to 3.75 per cent, in early November⁽⁷⁾.

The budget positions of major economies showed a further deterioration in 2003 (Table 2.2.). The deterioration of public accounts was particularly sharp in the United States and in the United Kingdom, where the public deficit increased by approximately 1½ p.p. to 4.9 and 3.0 per cent of GDP

⁽⁶⁾ On 6 May, the Federal Reserve changed its evaluation as to the balance of risks to economic activity and inflation in the United States. While short-term risks to sustained economic growth continued to be seen as balanced, the monetary authority considered that the possibility, albeit small, of a substantial decline in inflation, was higher than the possibility of an increase from its low level.

⁽⁷⁾ On 6 February 2004, the repo rate in the United Kingdom was raised further by 25 basis points.

Table 2.2

GENERAL GOVERNMENT

As a percentage of GDP

	2000	2001	2002	2003	Change 2003-2000 (p.p)
United States ^(a)					
Budget balance	1.6	-0.2	-3.3	-4.9	-6.5
Cyclically-adjusted balance	0.6	0.0	-2.5	-3.9	-4.5
Cyclically-adjusted primary balance	n.a.	n.a.	n.a.	n.a.	n.a.
Gross debt	57.7	55.8	56.8	58.5	0.8
Euro area ^(b)					
Budget balance	0.1	-1.6	-2.3	-2.7	-2.8
Cyclically-adjusted balance	-1.8	-2.3	-2.5	-2.2	-0.4
Cyclically-adjusted primary balance	2.2	1.6	1.2	1.3	-0.9
Gross debt	70.4	69.4	69.2	70.4	0.0
Japan ^(a)					
Budget balance	-7.5	-6.1	-7.9	-8.2	-0.7
Cyclically-adjusted balance	-7.0	-5.3	-6.4	-7.2	-0.2
Cyclically-adjusted primary balance	n.a.	n.a.	n.a.	n.a.	n.a.
Gross debt	139.3	148.9	158.5	166.1	26.8
United Kingdom ^(b)					
Budget balance	3.9	0.7	-1.6	-3.2	-7.1
Cyclically-adjusted balance	0.8	0.4	-1.4	-2.8	-3.6
Cyclically-adjusted primary balance	3.6	2.8	0.6	-0.8	-4.4
Gross debt	42.1	38.9	38.5	39.7	-2.4

Sources: (a) International Monetary Fund and (b) European Commission.

Note: Cyclically-adjusted balance as a percentage of potential GDP.

respectively. This trend is chiefly explained by discretionary measures, as shown by the behaviour of the cyclically-adjusted balance in these economies. In the euro area, the general government deficit stood at 2.7 per cent of GDP, increasing by 0.4. p.p. from the previous year. Contrary to developments in the United States and in the United Kingdom, this deterioration reflects the unfavourable cyclical trend, since the cyclically-adjusted primary balance remained virtually unchanged vis-à-vis 2002. In Japan, the government deficit remained at around 8 per cent of GDP, in spite of some recovery in the Japanese economy.

In the international financial markets, asset prices increased substantially and volatility levels declined (Table 2.3). At the end of the year, the major stock indices showed significant increases from the end of 2002, after three consecutive years of declines. In parallel, the yield differentials between private debt and government debt bonds narrowed significantly. The same downward trend was followed by the interest rate differentials between bonds issued by sovereign debtors of emerging market economies and US Treasury securities. This behaviour reflected the improvement in growth prospects of the world economy and progress attained in the adjustment of corporate balancesheets in the United States and in the euro area. In addition, the expectations that the official interest rates in major economies would stay at low levels for a considerable period of time has boosted demand for profitability, fostering investment in higher risk assets. Notwithstanding the improvement in the economic outlook, government bond yields remained at low levels, particularly in the United States, where prices of US Treasury bonds seem to have been affected by large purchases of these securities by Asian monetary authorities.

In foreign exchange markets, the dollar maintained the depreciating trend, reflecting increased concerns about the sustainability of the US external imbalance. At the end of 2003, the effective exchange rate of the dollar stood approximately 13 per cent below the level observed one year earlier and had depreciated by 20 per cent from the level recorded in March 2002. The counterpart for the dollar depreciation has been an appreciation of the euro and of the Canadian dollar and, to a lesser ex-

Table 2.3

FINANCIAL MARKETS

Daily data

_		Averages			End-of-period			
_	2001	2002	2003	2001	2002	2003		
Stock market indices (rate of change)								
S&P 500	-16	-17	-3	-13	-23	26		
Nasdag	-46	-24	7	-21	-32	50		
Nikkei 225	-30	-16	-8	-24	-19	24		
FTSE 100	-13	-17	-12	-16	-24	14		
Dow Jones Euro Stoxx	-21	-23	-18	-20	-35	18		
10-vear interest rates - public debt (in percentage)								
United States	5.00	4.59	4.24	5.05	3.81	4.25		
Japan	1.34	1.28	1.12	1.37	0.91	1.37		
United Kingdom	4.90	4.87	4.62	5.05	4.37	4.80		
Euro area	5.03	4.92	4.45	5.13	4.26	4.33		
Nominal effective exchange rates (rate of change)								
US dollar	6.8	-1.1	-10.4	7.5	-9.4	-12.8		
JPY	-8.2	-5.2	-0.1	-9.3	1.8	2.2		
Sterling Pound	-1.2	0.5	-4.8	2.4	-2.7	-3.4		
Euro	1.9	3.1	11.4	-1.0	8.8	11.3		
Differentials between private and government bond yields (at 7 to 10 years) (in basis points)								
United States								
AA	86	77	21	66	.54	14		
Relative position compared with the average (1998-2003)	15	5	-51	-6	-17	-57		
BBB	193	224	128	182	209	80		
Relative position compared with the average (1998-2003) \ldots	20	52	-44	9	36	-93		
Furo area								
AA	.54	48	40	44	49	31		
Relative position compared with the average (1998-2003)	7	0	-8	-4	2	-16		
BBB	205	209	132	182	194	92		
Relative position compared with the average (1998-2003)	44	48	-29	21	33	-69		
Differentials between government bond yields issued in dollars by emerging market economies vis-à-vis US Treasury bonds (in basis points)								
IP Morgan EMBI Global	796	728	532	728	725	403		
JP Morgan EMBI Latin America	865	966	698	888	981	518		

Sources: European Central Bank, Bank for International Settlements, Bloomberg and JP Morgan.

tent, of the pound sterling and the yen. In contrast, the dollar has remained virtually unchanged vis-à-vis most currencies in the other Asian economies, which maintain a policy of exchange rate stability vis-à-vis the US dollar.

The pattern of the world economic recovery, as well as the large foreign exchange interventions by Asian monetary authorities with a view to containing the appreciation of their currencies vis-à-vis the dollar have contributed to increase external imbalances. Therefore, notwithstanding the significant depreciation of the dollar over the last two years, the current account deficit is the United States deteriorated further in 2003, reaching 5.0 per cent of GDP. Simultaneously, Asian economies continued to post significant surpluses (Table 2.1).

2.2. Monetary policy in the euro area

As mentioned above, in 2003, the Governing Council of the ECB decided to lower the key interest rates on two occasions, totalling 75 basis points. The minimum bid rate on the main refinancing operations was brought down to 2.0 per cent (Table 2.4). The ECB interest rate decline occurred in the first half of the year, against the background of a gradual improvement of the outlook for price stability in the medium term, particularly associated with the appreciating trend of the euro, and of the deterioration of the outlook for economic growth in the euro area in 2003/2004 (Chart 2.3). Over the second half of 2003, the growing signs of strengthening of external demand, in line with the im-

Table 2.4

EUROPEAN CENTRAL BANK INTEREST RATES

Per cent

Date of the decision	Deposit facility	Main refinancing operations ^(a)	Marginal lending facility
8 Jun. 2000	3.25	4.25	5.25
31 Aug. 2000	3.50	4.50	5.50
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.

(a) Minimum bid rate in variable rate tenders.

provement of financing conditions in the capital market, made it more likely that a scenario of overall recovery of economic activity could occur in the euro area. However, from a medium-term perspective, some doubts persisted as to the sustainability of the world economic recovery, in the context of continuing significant overall macroeconomic imbalances. In parallel, the decline of inflation in the euro area turned out slower and less marked than expected, reflecting the adverse behaviour of prices of foodstuffs and the maintenance of high oil prices. In addition, the planned increases in indirect taxes and administered prices in late 2003 and early 2004 suggested that the inflation rate would remain at around, or slightly above, 2 per cent for some more months. Nonetheless, the outlook for price stability in the euro area in the medium term remained favourable, in the context of moderate economic and continuing appreciation of the euro⁽⁸⁾.

Monetary policy decisions were, in general, in line with market expectations as to the trend of short-term interest rates in the euro area (Chart 2.4 e Table 2.5). Up to mid-year, market participants revised successively downwards expectations regarding short-term interest rates for the following months. In parallel, there was a downward movement in Euribor interest rates and the slope of the euro money market yield curve remained negative. As of July, market expectations pointed to the



maintenance of ECB interest rates up to the end of the year. Simultaneously, the rates expected for

⁽⁸⁾ In 2003, the euro showed an appreciating trend vis-à-vis the currencies of euro area major trade partners. This trend was more marked against the dollar, culminating with an exchange rate of 1.26 USD/EUR on 31 December, its peak since the creation of the single currency. The appreciation of the euro vis-à-vis the US dollar reached approximately 20 per cent, taking into account both the average annual figures and the end-of-period figures. In nominal effective terms, the euro appreciated by approximately 11 per cent, taking also into account annual average and end-of-period data. The appreciation of the euro has reverted its previous depreciation, and has brought the euro close to the levels prevailing in early 1999, and to the average level recorded since the early 1990s.



longer maturities were gradually revised upwards, and the euro money market yield curve resumed a positive slope.

The low interest rate level influenced the behaviour of monetary and credit aggregates in the euro area. The low opportunity cost of holding money may have contributed to the maintenance of high growth rates of the monetary aggregate M3, particularly in its most liquid components (Table 2.5). In parallel, against the background of moderate economic growth, the low levels of the interest rates, both nominal and real, may have contributed to the maintenance of the sustained growth of credit to the private sector in 2003, which has even accelerated somewhat in the course of the year. The sustained growth of credit to the private sector reflects, to a large extent, the trend of loans to households, in particular of loans for house purchase. The year-on-year rate of change of these type of

Table 2.5

EURO AREA - MONETARY AND FINANCIAL INDICATORS

	End-of-period figures						
-	2001	2002		2003			
			I	Π	III	IV	
EUR exchange rates							
NEER	86.9	94.6	98.4	101.4	100.8	105.3	
EUR/USD	0.881	1.049	1.09	1.143	1.165	1.263	
EUR/IPY	115.3	124.4	129.2	137.3	128.8	135.1	
EUR/GBP.	0.609	0.651	0.69	0.693	0.699	0.705	
EUR/CHF	1.483	1.452	1.476	1.554	1.54	1.558	
Euro money market interest rate (per cent)							
Overnight (EONIA)	3.91	3.44	2.66	2.38	2.10	2.32	
1-month Euribor	3.33	2.90	2.57	2.16	2.11	2.10	
3-month Euribor	3.29	2.87	2.52	2.15	2.13	2.12	
6-month Euribor	3.26	2.80	2.44	2.09	2.11	2.17	
12-month Euribor	3.34	2.75	2.39	2.06	2.13	2.31	
12-3 months (basis points)	5	-12	-13	-9	0	19	
Monetary and credit aggregates (year-on-year rate) ^(a)							
M1	5.9	9.7	11.7	11.3	11.2	10.5	
Currency in circulation	-32.4	42.7	39.7	31.9	27.8	25.0	
Overnight deposits	13.5	5.8	8.1	8.5	8.8	8.4	
M2	6.5	6.6	8.1	8.4	8.2	7.5	
Other short-term deposits (M2-M1)	7.1	3.7	4.7	5.7	5.2	4.6	
M3	8.0	6.9	8.0	8.5	7.6	7.0	
Marketable instruments (M3-M2)	17.6	8.7	8.0	8.7	4.5	4.2	
Total credit	5.2	4.1	4.2	4.8	5.5	6.0	
Credit to general government	0.1	1.8	1.7	3.7	5.6	6.6	
Credit to other euro area residents	6.7	4.7	4.8	5.2	5.5	5.8	
Loans to other euro area residents	6.1	4.8	4.7	4.6	4.9	5.5	
Longer-term financial liabilities	4.8	4.9	4.4	5.1	5.4	5.7	
<i>Memo</i> : Sectoral breakdown of loans ^(b)							
Non-financial corporations	6.2	3.4	3.7	3.6	3.6	3.5	
Households ^(c)	5.2	5.8	5.8	5.5	5.8	6.3	
Credit to consumption	3.3	3.9	3.0	3.3	2.3	3.0	
Credit for house purchase	6.6	7.7	7.6	7.3	7.5	7.9	

Source: ECB.

Notes:

(a) Adjusted for seasonal and calendar effects.(b) Not adjusted for seasonal and calendar effects.

(c) Including non-profit institutions serving households.

loans stood at around 7.5 per cent in 2003 (7.9 per cent in the fourth quarter), whereas loans to non-financial companies expanded at rates close to 3.5 per cent (Table 2.5).

3. MONETARY AND FINANCIAL CONDITIONS IN THE PORTUGUESE ECONOMY

3.1. Monetary conditions

In 2003, the maintenance of the interest rates at very low levels contributed to the easing of monetary conditions in the Portuguese economy, which were, however, partly countered by the trend of the effective foreign exchange rate for Portugal (Chart 3.1). Estimates based on the monetary conditions index⁽⁹⁾ indicate that, if monetary conditions in the Portuguese economy had not changed since 2000, GDP growth in 2003 would have been 0.3 percentage points lower, while inflation would have been higher by approximately 0.6 percentage points (Chart 3.2). The estimated effect on GDP growth is dominated by the contribution of declining interest rates, while the prominent effect on inflation results from the effective exchange rate appreciation observed over the last three years.

In real terms, the main money market rates in Portugal recorded an upward profile since March, maintaining nevertheless negative or nearly nil figures at the end of the year⁽¹⁰⁾ (Chart 3.3). This trend of real interest rates was due to the decline in Portuguese inflation, since, as mentioned in the previous section, nominal money market interest rates in the euro area showed a downward trend during the first half of 2003 and a subsequent stabilization in the second half. The effective exchange rate for Portugal recorded, in annual average terms, a nominal appreciation of 2.5 per cent in 2003 (0.5 per cent in 2002). This nominal change and a growth differential in unit labour costs of approximately 1.6 p.p. (3.0 p.p. in 2002) resulted in a further appreciation of the real exchange rate index⁽¹¹⁾ (4.0 per cent vis-à-vis 3.5 per cent in 2002) (Chart 3.4).



In 2003, the trend of short-term money market interest rates seems to have spilled over in a somewhat mixed manner into the interest rates of the different segments of banking activity (Table 3.1). Thus, the average interest rate on outstanding

⁽⁹⁾ On this index, see Esteves, Paulo Soares, "Monetary conditions index for Portugal", published in the June 2003 issue of the *Economic bulletin* of the Banco de Portugal.

⁽¹⁰⁾ Real interest rates are calculated as the actual difference between nominal interest rates and the year-on-year rate of change of the CPI.







Table 3.1

NOMINAL INTEREST RATE^(a)

	3-month Euribor ^(b)	Fixed-rate government bond yields 5 years	Fixed-rate government bond yields 10 years	Interest rate on outstanding amounts of loans (incl. overdrafts) to non-financial corporations(c)	Interest rate on outstanding amounts of loans to households for house purchase ^(c)	Interest rate on outstanding amounts of loans (excl. overdrafts) to households for consumption and other purposes ^(c)	Interest rate on outstanding amounts of time deposits of the non-financial private sector ^(c)	Memorandum: Year-on-year rate of change of CPI
1994	10.5	11.8	11.6	15.8	14.2	19.2	8.6	4.0
1995	8.8	9.7	10.0	14.6	13.4	18.1	8.4	3.4
1996	6.4	6.2	6.9	11.4	11.8	15.9	5.9	3.3
1997	5.0	5.1	5.7	9.2	9.4	13.0	4.3	2.4
1998	3.4	3.5	4.1	7.0	6.4	10.2	3.1	3.2
1999	3.4	4.8	5.5	5.5	5.1	8.6	2.5	2.0
2000	4.9	4.9	5.3	6.7	7.0	9.5	3.6	3.9
2001	3.3	4.3	5.0	5.8	6.0	8.7	3.2	3.7
2002								
I	3.4	4.8	5.4	5.5	5.5	8.3	3.0	3.2
Π	3.5	4.8	5.3	5.4	5.4	8.3	3.0	3.3
III	3.3	4.0	4.6	5.3	5.4	8.2	3.0	3.7
IV	2.9	3.7	4.5	5.3	5.2	8.1	2.9	4.0
2003								
I	2.5	3.2	4.1	4.8	4.7	7.7	2.4	3.9
Π	2.2	2.7	3.8	4.5	4.3	7.5	2.2	3.3
III	2.1	3.3	4.3	4.3	3.9	7.2	2.1	3.1
IV	2.1	3.3	4.4	4.4	3.8	7.1	2.1	2.4

Notes:

(a) Concerning money market interest rates and Government bonds yields, monthly averages at end-of-period. For banks' rates, interest rates on outstanding amounts, at the end-of-period. In the case of the CPI, year-on-year rate of change in the last month of the period.

(b) Up to December 1998, 3 -month Lisbor.

(c) Estimates, up to December 2002. For methodology, see: "New series on bank's interest rates: long series for the average rates on outstanding amounts", Economic bulletin, December, 2003.



amounts of term deposits of the non-financial private sector fell by about ³/₄ p.p., between December 2002 and December 2003, to 2.1 per cent. At the end-2003, the interest margin implicit on the outstanding amounts of term deposits of the non-financial private sector was virtually nil⁽¹²⁾. Concerning lending rates, they also followed a downward trend in all segments of the credit market, although each at a different pace. In the housing credit segment, lending rates on new business fell to a historic low, about 3.5 per cent. Therefore, there was a narrowing in the interest rate differential on new business in 2003 (13 basis points (b.p.))



(Chart 3.5). As a result (reflecting the reduced lag, in Portugal, in the transmission of the rates on new credit operations to the implicit rates on the respective amounts outstanding), the implicit margin on the stock of loans for house purchase narrowed by more than 30 b.p.. In this segment, the differential between the interest rate on the amounts outstanding and the relevant money market rate narrowed, close to the minimum levels recorded in mid-2000 (1.6 p.p.) (Chart 3.6)⁽¹³⁾.

Contrary to developments in the house purchase segment, no significant change was recorded by the implicit margin on outstanding amounts of lending for consumption and other purposes but housing which remained high, around 5 p.p. (Chart 3.6). In the case of credit granted to nonfinancial corporations, there was a slight widening of the implicit average margin (Chart 3.7)⁽¹⁴⁾.

⁽¹¹⁾ The real effective exchange rate index is calculated on the basis of unit labour costs for the economy as a whole, excluding government subsidies for the *Caixa Geral de Aposentações*. In 2003, the amounts were also adjusted for the effects of the sale of tax credits, as indicated in footnote no. 1.

⁽¹²⁾ Up to December 2002, the interest rates on outstanding amounts are estimates using the methodology described in "New series on banks' interest rates: long series for the average rates on outstanding amounts", *Economic bulletin*, December 2003. Since January 2003, statistics on interest rates on outstanding amounts of loans and deposits, at the end of the month, have been used. Specifically in the case of time deposits of the non-financial private sector, a 6-month moving average of the 6-month Euribor was used as reference for the calculation of the implicit interest margin.

⁽¹³⁾Difference between the interest rate on amounts outstanding and a 6-month moving average (ended in the month) of the 6-month Euribor.



terest rate on outstanding amounts and a 3-month moving average of the 3-month Euribor.

This demarcation among the different segments of the credit market corroborates the changes in the profile of supply conditions over the year in each segment of the credit market in Portugal indicated in the results of the Bank Lending Survey (BLS) (Charts 3.8)⁽¹⁵⁾. Competitiveness in the housing credit segment seems to have continued aggressive in the first half of the year. It was reflected in the

⁽¹⁵⁾ The scale considered in the charts corresponds to the arithmetic mean of replies of the five major reporting Portuguese banking groups. Individual replies reflect qualitatively the intensity and the direction of the change, assuming values between 1 and 5, with 3 corresponding to the "basically unchanged" position. The BLS was launched by the Eurosystem, in early 2003, with a view to obtaining detailed information on the euro area credit markets and, therefore, to improving the evaluation of the credit role over the economic cycle and in the monetary policy transmission mechanism, in the euro area as a whole. The survey is quarterly. The first one was carried out in January 2003. The detailed results of the different surveys carried out in Portugal are available in the Banco de Portugal's website (www.bportugal.pt).



criteria and conditions for the approval of loans to households for house purchase (Chart 3.8.A). The easing of conditions offered by banks was reflected, in particular, in a widening in maturities for new loans and in the availability of contractual modalities that facilitate access to higher loans (transitorily mitigating the charges supported by households). In the second half of the year, according to the replies to the BLS, supply conditions in the housing credit market seem to have been

⁽¹⁴⁾ Margins are estimated as the difference between interest rate on outstanding amounts at the end of period, for each type of lending, and a 3-month moving average of the 3-month Euribor.

changed, with some tightening of criteria in this segment, chiefly in the last quarter of the year⁽¹⁶⁾. According to the reporting banks, the tighter conditions in the approval for house purchase credit would tend to be reflected in a slight increase in spreads on new business, a higher level of the guarantees and more demanding ratios between the amount of the loan and the value of the property to be financed.

As regards credit granted to non-financial corporations, surveyed banks reported, in the course of the year, a gradual strengthening in the criteria for approval of loans and credit lines to this sector (Chart 3.8.B). This tightening seems to have been more significant in the case of longer-term loans, resulting in a widening of spreads, higher fees, more demanding collateral and the imposition of restrictive covenants.

3.2. Debt and stock markets

Developments in international capital markets were reflected in the intra-annual evolution of the Portuguese Treasury bond yields (Table 3.1). These have followed a downward trend in the course of the first half of 2003, reaching historical lows in June (2.7 and 3.8 per cent for bonds with residual maturities of 5 and 10 years respectively. This trend was reversed in the second half of the year and, at the end of 2003, the level of the Treasury bond yields had recovered to values close to those recorded one year earlier (respectively 3.3 and 4.4 per cent)⁽¹⁷⁾. In the course of 2003, there was also a decrease in spreads between private and government debt issues.

In the stock market, the general PSI index followed in line with major international indices, showing at the end of 2003 a recovery of 17.4 per cent from the end of the previous year (15.8 per cent in the case of the PSI 20), very close to that recorded by the Dow Jones Euro Stoxx Broad index (18.1 per cent). Average rates of return in investment funds recorded important improvements⁽¹⁸⁾, reflecting the recovery of the equity markets and, to a lesser extent, capital gains in debt portfolios (associated with the marked decrease in government debt yields vis-à-vis the previous year) (Table 3.1).

In 2003, net issues of bonds and other debt securities were virtually negligible, as well as the issues of equities from listed corporations⁽¹⁹⁾, in spite of the more favourable conditions prevailing in these markets (in contrast to the second half of 2002, when the evolution of prices in both markets was particularly unfavourable). In the commercial paper segment, even a decline in outstanding amounts in 2003 was recorded.

3.3. Non-financial private sector indebtedness

In 2003, outstanding credit to households maintained a high growth rate⁽²⁰⁾ (9.6 per cent in December, vis-à-vis 11.6 per cent in the same month of 2002) (Chart 3.9). It should be recalled that household debt slowed from the very high pace of growth attained up to mid-1999, sharply at a first stage (up to mid-2001), initially supported (in 2000) by the upward trend of interest rates. However, in 2002, the moderating trend came to a halt, partly reflecting some anticipation of investment in housing by households, in response to the announced abolition of subsidised credit systems and, also, to the capacity revealed by banks to offer products that permit, in the short-term, to mitigate the effects of the discontinuance of the subsidised credit. Low levels of the interest rates, together with aggressive banks policies in the housing credit segment, have supported a still remarkable pace of growth in household debt. As a result, the indebt-

⁽¹⁶⁾ The effects of this policy change were not visible in 2003, which may be due to some lagging between the approval of credit and its actual granting. Therefore, in the second half of 2003, the growth rate in this segment of market credit remained significant.

⁽¹⁷⁾ In annual average terms, there was a decline from the value recorded in 2002 of approximately 1.2 and 0.8 p.p. respectively in 5 and 10-year residual maturities.

⁽¹⁸⁾ Based on information made available by APFIN, the yield on mutual funds is estimated to have stood, on average, at around 4.3 per cent in 2003 (annualised yield rate, by type of fund, weighted by the amounts under management). In 2002, the annualised average yield on mutual funds had been -0.9 per cent. In the case of real estate investment funds, the APFIN index increased by 4.5 per cent in 2003 (approximately 5.1 per cent in 2002).

⁽¹⁹⁾Only one important equity issue took place in the stock market, in the first half-year, by a financial corporation.

⁽²⁰⁾ Except where otherwise indicated, the annual rates of change of credit correspond to year-on-year rates of change, calculated from indices of outstanding bank loans, adjusted for securitisation operations, reclassifications, exchange rate revaluations and credit write-offs/write-downs.



edness ratio in this sector increased again from 103 per cent of disposable income at the end of 2002, to approximately 110 per cent in December 2003 (Chart 3.10).

In the credit segment for house purchase, the year-on-year rate of change of bank loans stood at 11.7 per cent (16.0 per cent in December 2002). Nevertheless, this trend reflects a decline in the net flow of bank lending from the previous year (-14 per cent, after an increase of 22 per cent in 2002), although lower that initially expected, taking into account the abolition of subsidised credit in October 2002 (Chart 3.11)⁽²¹⁾. The low level of the interest rates in this segment and less tight conditions on the supply side may have led to decisions on house purchase by individuals already house owners. ("exchange" for a larger house and/or for a house with different characteristics/quality). This may have been reflected, on the one hand, in the important growth in the average value of houses financed by bank credit (as a result of their higher quality and/or size). Indeed, the average value of



loans for house purchase increased in 2003 faster than house prices (to 76 thousand euros from approximately 70 thousand euros in 2002) (Chart 3.12)⁽²²⁾. In addition, the nominal holding gains obtained from the sale of the previous house may not have been fully utilized in the acquisition of the

⁽²¹⁾ The total amount of loans agreed in 2003 represented 8.2 per cent of GDP (9.1 per cent in 2002), despite the lower number of contracts carried out in the year (-9.6%, vis-à-vis 2002), reflecting the significant increase in the average value agreed per loan (even when compared with the average value of contracts under the general system carried out in 2002).

⁽²²⁾ According to information provided by the Directorate General of the Treasury on the average value of loans signed in 2003, there was a gradual increase in the latter, particularly significant in the third and fourth quarters (\notin 76.9 and \notin 81.8 thousand, respectively).



new house. Therefore, amount of loans may have exceeded the net amount on the transaction on the real asset, probably to finance the acquisition of durable consumer goods.

In 2003, the household effort rate (in aggregate terms) seems to have remained at levels similar to those observed in the previous year. However, its composition has changed, reflecting the decline in the interest rate in debt outstanding: implicit interest burden decreased by approximately 0.6 p.p. of disposable income (estimated to stand at 5.0 per cent of disposable income), making possible to compensate for the increase in the share of principal repayment (as a result of the gradual increase in household gross indebtedness).

The adjustment process of non-financial companies' savings and investment started later than that observed for households. From 2000 to 2002, the Portuguese corporations had very high net borrowing requirements, above those observed in the other euro area countries. In line with the high level of fixed capital investment in that period, the effort of internationalisation of some Portuguese companies and the strong activity of mergers and acquisitions (in the second half of the 90s), related with the restructuring process of economic groups, were reflected in a significant increase in this sectors' gross indebtedness, which in 2002 was the highest in the euro area, as a percentage of GDP.



In 2003, net borrowing requirements of the non-financial corporations decreased quite significantly, due to both the strong decline in investment and the increase in savings in that sector⁽²³⁾. Therefore, the debt ratio in this sector increased slightly in 2003 to around 94 per cent of GDP (adjusted for the effects of the sale of tax credits as indicated in



footnote 1) (Chart 3.13). Considering only the amounts outstanding of bank loans (adjusted for securitisation operations, reclassifications, exchange rate revaluations and write-offs/ write-downs), credit liabilities of the non-financial corporations increased by 2.7 per cent (in year-on-year terms) at the end of 2003, representing a marked deceleration from the pace of growth recorded in the previous year (which had stood at 8.6 per cent) (Chart 3.14). This trend seems to reflect, on the one hand, some weakening of firms' demand for credit associated with the unfavourable macroeconomic environment and, on the other hand, tighter crite-



ria applied by banks in the approval of loans in this market segment, as mentioned earlier. The decelerating trend of credit to corporations, which was blurred towards the end of the year in the case of bank loans, is reinforced (despite being more irregular) when total debt changes are taken into account, thus including securities (commercial paper and bonds) issued by non-financial corporations (Chart 3.14). In fact, the amount of market debt issued by this sector (bonds and commercial paper) was virtually nil in 2003, in spite of the favourable market conditions, reflecting the reduction in corporate net borrowing requirements (particularly of larger corporations, those with easier access to capital markets). Likewise, the issue of equity by listed corporations was virtually non-existent in 2003, as had happened in 2002.

Analysing the breakdown of bank credit to corporations by branches, a reference should be made to the continuing high pace of credit growth to real-estate activities (15.4 per cent, compared with 19.6 per cent in 2002)⁽²⁴⁾. Also noteworthy is the strong deceleration in loans in services supplied chiefly to companies, including Non-financial Holdings (-5.4 per cent, after 8.5 per cent in 2002).

⁽²³⁾ The decline observed in 2003 in charges with debt interest of non-financial corporations is estimated to have stood at approximately 0.6 percentage points of GDP.

⁽²⁴⁾ Annual rates of change calculated from indexes of stocks of banking loans, corrected of reclassifications and write-offs/ write-downs.



Bank lending to construction and manufacturing industry also decelerated in 2003 (the year-on-year rates in December 2002 and December 2003 were 6.1 and 4.3 per cent in the former sector, and 3.5 and 0.6 per cent in the latter sector respectively).

3.4. Bank deposits of the non-financial private sector

In December 2003, the year-on-year rate of change of deposits held by the non-financial private sector with the resident banking system was 3.1 per cent (-1.3 per cent, at the end of 2002). This path was due to the significant growth of deposits held by non-financial corporations (18.0 per cent, compared with -3.7 per cent in December 2002), partly offset by the slightly negative change (of -0.2 per cent) of deposits held by households (-0.8 per cent in December 2002) (Chart 3.15). Total deposits held by the non-financial private sector (in Portugal and abroad) grew also slowly, standing at 3.4 per cent in December 2003 (0.5 per cent in December 2002) (Chart 3.16). Households' deposits (including emigrants' deposits) increased in December 2003 by 0.1 per cent (year-on-year), while deposits held by non-financial corporations increased by 13.3 per cent. It should be noted that, similarly to developments in 2002, there was a stronger preference by investors for high liquidity assets (with small opportunity cost, given the low level of rates on time and savings deposits), which was reflected



in an important contribution of transferable deposits to the total change of deposits of the nonfinancial private sector with the resident banking sector (Chart 3.17).

The trend of total deposits held by the nonfinancial private sector reflected the historically low levels of bank interest rates applicable in these operations (implying a negative real return of time deposits), the increase in returns of other financial assets and the weak growth of households' disposable income. On the one hand, the increase in the corporate saving rate, against the background of less effort concerning investment in fixed capital, may have made it possible to alleviate liquidity constraints in this sector, leading to the accumulation of liquid assets as deposits, both transferable and time deposits. On the other hand, despite the stabilisation of the households' saving rate in 2003, the growing share of savings generated in the period and allocated to the repayment of debt principal seems to have limited the reinforcement of investment in deposits by this sector. In addition, preliminary data available point to an investment increase in 2003 in other financial assets with potentially more attractive returns than bank deposits. On this subject, it should be mentioned that in 2003 net subscriptions of mutual funds' units (ex-

Table 3.2

MONETARY SURVEY

EUR million

							Ab	solute change	28	
-	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
-	Dec.	Dec.	Dec.	Dec.	Dec.	Dec.	Dec.	Dec.	Dec.	Dec.
Net external assets Banco de Portugal Other monetary financial institutions of which:	8985 18623 -9637	-6788 14985 -21773	-19270 16050 -35321	-27444 15521 -42965	-26924 19627 -46551	-5974 1852 -7827	-15773 -3638 -12136	-12483 1065 -13548	-8174 -529 -7644	520 4106 -3586
Vis-à-vis the head office and branches of the institutions Vis-à-vis other non-resident MFI with controlling interest Vis-à-vis other non-resident MFI with no controlling interest	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	-38758 -10098 -3013	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.	n.a. n.a. n.a.
Credit to general government	8764	8496	9082	8069	7923	-3758	-268	585	-1013	-146
Domestic credit (except general government) Households Non-financial corporations Non-monetary financial institutions	129577 56859 56500 16217	160783 68921 70667 21194	179401 76063 80085 23253	191038 83363 86352 21324	194129 84645 90795 18688	26840 12268 10962 3611	31206 12062 14167 4977	18618 7142 9418 2059	11637 7300 6267 -1929	3091 1283 4443 -2636
Currency in circulation	5620	5392	4451	7025	8197	1059	-228	-941	2575	1172
Deposits and deposit-like instruments - total Non-monetary financial institutions General government Non-financial corporations and households	114507 9661 8872 95974	120125 9843 8181 102100	123236 10360 6329 106547	122667 9641 7866 105161	123786 8833 6568 108384	11480 2038 695 8747	5618 182 -690 6126	3111 517 -1852 4447	-569 -719 1536 -1386	1119 -807 -1297 3224
Securities other than capital	13319	17476	22514	23168	22515	2550	4157	5037	655	-653
Money market fund shares	0	115	166	665	1058	0	115	51	499	393
Capital and reserves	20827	25920	27867	28726	33127	4921	5093	1947	859	4401
Sundry (net)	-6947	-6537	-9021	-10588	-13556	-2903	411	-2484	-1567	-2967
Memo:										
Net foreign assets of other MFI denominated in euro	-10741	-19559	-34518	-39524	-39402	-8377	-8818	-14959	-5006	122
							rear-on-	-year rate of o	inange	
Contribution to the euro area M1 aggregate Contribution to the euro area M3 aggregate	45537 113135	47723 119822	51219 126769	53225 127607	57369 132994	19.3 9.2	4.8 5.9	7.3 5.8	3.9 0.7	7.8 4.2

cluding multi-fund funds) represented 1.3 per cent of GDP, revealing a significant increase from the previous year (in 2002 they had accounted for only 0.5 per cent of GDP).

3.5. Monetary survey

Developments in domestic credit and in deposits and deposit-like instruments of households and non-financial corporations translated into an increase in the net lending position of the monetary sector vis-à-vis the non-financial private sector (from 46.0 per cent of GDP in 2002 to 52.4 per cent of GDP at the end of 2003) (Table 3.1 and Chart 3.18). Although partly mitigated by the significant amount of credit securitisation operations in the last quarter of the year⁽²⁵⁾, the net position of households underwent a particularly significant change and moved to a slight net borrowing position vis-à-vis other monetary financial institutions (other MFI).

Notwithstanding the increase in the net lending position of other MFI vis-à-vis the non-monetary sector, the external indebtedness of the monetary sector seems to have stabilised. It should be noted, however that, at the end of December 2003, the Monetary Survey recorded a net borrowing position of other MFI vis-à-vis non-residents above that registered at the end of the previous year (34.6 per cent, compared with 30.5 per cent in December 2002) (Chart 3.18). This increase was due to an one-off operation - carried out at the end of the year but reversed in the beginning of 2004 -that affected the external position of other MFI and also, by contrast, that of monetary authorities. Adjusted for the effect of this operation, the change in the net external position of these two sectors, as percentage of GDP, was virtually nil in 2003.

(25) Securitisation operations of credit initially granted by other MFI to households in 2003 accounted for approximately 90 per cent of the net flow of credit granted during the year to this sector (calculated as the change in stock, adjusted for securitisations, reclassifications, foreign exchange revaluations and write-offs/write-downs). In 2002, these operations amounted to slightly above 20 per cent of the net flow of loans granted for that purpose.

4. FISCAL POLICY

According to the February 2004 notification of the Excessive Deficit Procedure (EDP), the general government deficit, on a national accounts basis, stood at 2.8 per cent of GDP in 2003 (2.7 per cent of GDP in the previous year) (Table 4.1). As in 2002, compliance with the objective of a deficit below the 3 per cent of GDP reference value required a sizeable set of extraordinary measures. Indeed, in the context of an economic downturn and despite the consolidation efforts, temporary measures increased from approximately 1.4 per cent of GDP in 2002 to 2.5 per cent of GDP in 2003. This latter value includes: revenue collected on January 3, 2003, within the scope of a programme for the settlement of tax arrears (197.3 million euros); the transfer of accounting reserves from the post office to the civil servants pension system (CGA) and to the Treasury (1300 million euros)⁽²⁶⁾; and, finally, the sale of tax credits to a financial institution (1760 million euros)⁽²⁷⁾.

The general government deficit adjusted for temporary measures increased from 4.1 per cent of GDP in 2002 to 5.3 per cent of GDP in 2003. This was largely due to the effect of the decline in economic activity, which implied an increase in the cyclical component of the deficit of approximately 1.4 p.p. of GDP in 2003. Since interest expenditure, as a percentage of GDP, declined slightly, the primary balance adjusted for the cycle and temporary measures, an indicator currently used to measure fiscal consolidation, increased in 2003 by merely 0.0 to 0.2 p.p. of GDP^{(28),(29)}. Actually, in spite of the discretionary consolidation measures introduced in 2003 and of the lagged effects of the measures implemented in 2002, the increase in expenditure with pensions as a percentage of GDP did not allow for a more significant improvement of the fiscal position.

In 2003, total receipts adjusted for the effects of the economic cycle and temporary measures in-

⁽²⁶⁾ In turn, the corporation ceased to be responsible for the payment of pensions to its personnel subscriber to the *CGA*. The post office will deliver monthly to the *CGA* the contributions paid by the personnel at its service, together with the contribution of an amount equivalent to the one that it would have to pay as an employer in the framework of the private sector social security system.

⁽²⁷⁾ See footnote (1).

Table 4.1

GENERAL GOVERNMENT ACCOUNTS

National Accounts

	2001	2002 ^(a)		2003 ^(b)		2002 ^(a)		200	(b)	
		including the effects of tempo- rary	excluding the effects of tempo- rary							
		measures								
		As	a percentage o	f GDP			Grow	h rates		
Total revenue	41.8 40.1	43.3 41.3	42.4 40.4	44.9 41.5	42.4 40.0	9.0 8.7	6.8	4.8 1.6	1.1 0.1	
Taxes on income and wealth	9.9	9.7	9.2	9.2	8.7	3.8	-1.4	-4.7	-5.0	
Taxes on production and imports	14.2	15.0	14.7	15.7	15.0	11.3	9.1	6.1	3.3	
Social contributions.	11.9	12.3	12.1	12.7	12.4	8.1	7.1	4.5	3.2	
Other current revenue	1.7	1.9	1.9	1.5	1.5	18.1	18.1	-19.7	-19.7	
Sales	2.3	2.4	2.4	2.4	2.4	9.8	9.8	1.1	1.1	
Sales excluding hospital-corporations in 2002		2.2	2.2	2.4	2.4			10.6	10.6	
Capital revenue	1.8	2.0	2.0	3.3	2.3	16.3	16.3	72.2	21.0	
Total expenditure	46.2	46.0	46.5	47.7	47.7	4.8	6.0	4.9	3.8	
Current expenditure	40.7	41.4	41.4	42.3	42.3	7.0	7.0	3.5	3.5	
Current transfers	18.2	18.7	18.7	20.8	20.8	8.5	8.5	12.5	12.5	
To households	14.4	14.9	14.9	16.9	16.9	8.4	8.4	15.1	15.1	
not in kind	12.6	13.0	13.0	14.1	14.1	8.3	8.3	10.0	10.0	
_ in kind	1.8	1.9	1.9	2.8	2.8	9.4	9.4	50.2	50.2	
To corporations	1.3	1.4	1.4	1.5	1.5	12.1	12.1	8.4	8.4	
Other transfers	2.5	2.5	2.5	2.5	2.5	7.1	7.1	-0.4	-0.4	
Interest	3.2	3.0	3.0	2.9	2.9	-0.3	-0.3	-1.9	-1.9	
Compensation of employees	15.1	15.4	15.4	14.9	14.9	7.8	7.8	-2.6	-2.6	
Compensation of employees excluding hospital-corporations in 2002		14.7	14.7	14.9	14.9	2 (2 (2.2	2.2	
Intermediate consumption	4.3	4.3	4.3	3.8	3.8	3.6	3.6	-10.9	-10.9	
Intermediate consumption excluding hospital-corporations in 2002		3.7	3.7	3.8	3.8			2.9	2.9	
Capital expenditure	5.5	4.6	5.1	5.3	5.3	-11.6	-1.8	17.9	6.2	
Gross fixed capital formation	4.0	3.4	3.7	3.9	3.9	-10.0	-2.6	16.0	7.1	
Other capital expenditure	1.5	1.2	1.4	1.4	1.4	-15.7	0.2	23.4	3.9	
Overall balance	-4.4	-2.7	-4.1	-2.8	-5.3					
Memo:										
Primary current expenditure	37.6	38.4	38.4	39.4	39.4	7.7	7.7	3.9	3.9	
Primary balance.	-1.2	0.3	-1.1	0.1	-2.4					
Cyclically-adjusted overall balance (smoothing parameter λ =30),	-5.7	-3.1	-4.6	-1.9	-4.4					
Cyclically-adjusted overall balance (smoothing parameter λ =100)	-5.9	-3.2	-4.6	-1.8	-4.3					
Cyclically-adjusted primary balance (smoothing parameter λ =30)	-2.5	-0.2	-1.6	1.0	-1.5					
Cyclically-adjusted primary balance(smoothing parameter λ =100)	-2.8	-0.2	-1.6	1.1	-1.4					
Public debt	55.6	58.0		59.9						

Sources: Instituto Nacional de Estatística, Ministério das Finanças and Banco de Portugal.

Notes:

(a) In 2002, the temporary measures taken into account include the effects of the extraordinary settlement of tax arrears, of the sales of the fixed telecommunications network and the rights of reintroducing tolls in a motorway near Lisbon.

(b) In 2003, the temporary measures taken into account include the effects of the extraordinary settlement of tax arrears collected on January 3, of the sale of tax credits and of the transfer of the accounting reserves from the post office to the general government.



creased by approximately 1.1 p.p. of GDP. This behaviour was largely explained by the increase in the revenue from taxes on production and imports, resulting from the increase in the standard VAT rate from 17 per cent to 19 per cent as of June 2002, and in the average rate of the tax on oil products in 2003, as well as from the revenue from the sale of goods and services by general government. As regards this latter item, it should be noted that, although its weight as a percentage of GDP has remained unchanged from 2002 to 2003, if account is taken of the impact of the corporatisation of public hospitals, the figures available show a positive contribution to the improvement of the fiscal position. In turn, in 2003, revenue from taxes on income and wealth was affected by two discretionary measures of an opposite sign, whose overall impact on tax revenue was probably close to nil. On the one hand, the withholding tables were updated well above inflation in early 2002, implying a decrease in amounts withheld in 2002 and, as a result, an equivalent decline in tax reimbursements in 2003. On the other hand, the decrease in the corporate income tax from 32 to 30 per cent included in the State Budget for 2002 has chiefly affected revenue in 2003.

Primary expenditure adjusted for the cyclical and temporary effects increased by approximately 1.0 p.p. of GDP in 2003, despite the strong deceleration in nominal terms. Its expansion was almost fully explained by the increase in social payments as a percentage of GDP, which resulted, when adjusted for the effect of the corporatisation of public hospitals, from an increase in expenditure with pensions well above the change in nominal GDP (Chart 4.1). As in previous years, the behaviour of expenditure with pensions of the private sector social security system, which increased by approximately 0.4 p.p. of GDP, continued to reflect, to a large extent, the impact of structural factors related with the increase both in the number of pensioners, chiefly associated with population ageing, and in the average pensions resulting from the update of pensions and from a composition effect⁽³⁰⁾. As regards the civil servants pension system, the increase in expenditure with pensions by 0.4 p.p. of GDP in 2003 was affected by two special effects. Firstly, the changes introduced in the retirement status of civil servants in the State Budget for 2003, enacted only in early 2004, despite the beneficial effects on the sustainability of the system in the medium and long term, have led, in the short run, to a significant increase in retirement requests. Secondly, the pensions of former employees of the post office who are subscribers to the CGA are now included in general government expenditure, on a

⁽²⁸⁾ The figure 0.0 p.p. of GDP is obtained using the methodology developed by the European System of Central Banks, which considers a smoothing parameter equal to 30 for the application of the HP filter. The use of a smoothing parameter equal to 100, more conventional in the literature and leading to a less volatile rate of growth of potential output along the economic cycle, would lead to an improvement in the cyclically adjusted primary balance of 0.2 p.p. of GDP in 2003. For a description of the methodology used, see the article by Pedro Duarte Neves and Luís Morais Sarmento, "The use of cyclically adjusted balances at the Banco de Portugal", in the September 2001 issue of the *Economic bulletin* of the Banco de Portugal.

⁽²⁹⁾ The current estimates are based on a corporate income tax elasticity significantly higher than the one considered by the Banco de Portugal until 2003, in the calculation of cyclically adjusted balances according to the methodology developed in the European System of Central Banks. Indeed, this revision reflects the choice of a new tax base and the inclusion of new information in the estimation. The change in the corporate income tax elasticity partially explains the revision of the estimate for the change in the primary balance adjusted for cyclical effects and temporary measures in 2002 (1.0 p.p. of GDP currently, to be compared with 0.3 p.p. in the previous estimate). Additionally, this estimate was affected by the upward revision of the 2001 deficit, on a public accounts basis, from 4.2 to 4.4 per cent of GDP, only included in the EDP notification of February 2004.

⁽³⁰⁾ The composition effect reflects the fact that new pensioners receive, on average, higher pensions than the existing ones.



national accounts basis. The impact of expenditure control measures continued to be felt in the remaining items of primary current expenditure, chiefly in expenditure with personnel and intermediate consumption. Thus, in a year of weak nominal GDP growth, and after the correction of the effects of the corporatisation of some public hospitals, these measures allowed their near stabilisation as a percentage of GDP.

The public debt ratio stood at 59.9 per cent of GDP at the end of 2003, corresponding to an increase of 1.9 p.p. from the value recorded at the end of 2002. This outcome was almost fully due to the effect of the differential between the implicit interest rate on public debt and the growth rate of nominal GDP, since both the primary balance and

Table 5.1

MAIN ECONOMIC INDICATORS

Percentage rates of change - 2003

	EB September 2003	EB March 2004	ı
	-		
Private consumption	-1 1/4 ;-1/4	-0.5	
Public consumption	0.0	-0.4	
GFCF	-11 ;-9	-9.5	
Domestic demand	-3 1/4 ; -21/4	-2.5	
Exports	2 1/2; 31/2	4.1	
Overall demand	-2;-1	-1.1	
Imports	-2 3⁄4 ; -1 3⁄4	-0.7	
GDP	-1 1/2 ; -3/4	-1.2	
Current account + Capital account			
(per cent GDP)	-3 ¼ ; -2 ¼	-3.0	
HICP	3.3 ;31/2	3.3	

the deficit-debt adjustments had a contribution, albeit not significant, to the decline in the debt ratio.

Finally, it should be mentioned that the general government account in 2003 used in the EDP notification was based on still provisional and incomplete data. In particular, the accounts of some autonomous services and funds and of regional and local governments may undergo some significant changes.

5. EXPENDITURE AND OUTPUT

According to the estimates of the Banco de Portugal, GDP decreased by 1.2 per cent in 2003, in real terms, after a moderate increase in 2002 (0.5 per cent) (Table 1.1). In intra-annual terms, the year-on-year negative change in economic activity started in the second half of 2002 was more marked in the first half of 2003, to ease in the second half of the year (Table 1.2).

The contraction of economic activity in 2003 was determined by the negative behaviour of domestic demand (with a contribution of -2.7 p.p. for the change in GDP), reflecting declines in most of its components, chiefly in investment expenditure (Chart 5.1). Conversely, the acceleration of exports, associated with a decrease in imports, has made it possible that net external demand registered a positive contribution to the change in GDP higher



than the one recorded in the previous year (1.5 p.p. in 2003, compared with 1.0 p.p. in 2002).

The present estimate for the change in GDP corresponds to a slight downward revision from the average of the interval (between $-1\frac{1}{2}$ and $-\frac{3}{4}$ per cent) published in the September 2003 issue of the *Economic bulletin* (Table 5.1)⁽³¹⁾. This revision is mainly the result of a less positive contribution of net external demand than previously estimated, since the contribution of domestic demand implicit in the current estimates is slightly less negative than estimated in autumn, even though with changes in composition. In effect, public consumption presents now a slight decline (nil change in the autumn version), while the changes in investment and, to a lesser extent, in private consumption are in the upper half of the intervals then forecast.

Private consumption had a real decrease of 0.5 per cent in 2003, after the growth of 0.5 per cent in 2002. This trend was followed by very low consumer confidence levels, chiefly in the first months of the years (Chart 5.2). In effect, the consumer confidence indicator, that had already presented a strong deterioration in the course of 2002 (with levels well below those observed for the euro area), continued to decrease early in the year, to reach its historical low at the end of the first quarter of 2003. As of the second quarter, this indicator recovered somewhat, although maintaining low historical levels, to stand at the end of the year still below the average values observed in 2002.

The decline in private consumption in 2003 followed a trend similar to that of household disposable income (Table 5.2). In 2003, the nominal growth of this variable attained 2.8 per cent (4.1 per cent in 2002), which reflected a slight fall in real terms. The deceleration of disposable income was chiefly determined by a marked slowdown in compensation (from 6.1 to 2.2 per cent), reflecting the

Table 5.2 HOUSEHOLDS' DISPOSABLE INCOME^(a)

Percentage rates of change

	2001	2002	2003	2003 adjusted ^(b)
Compensation of employees ^(c)	7.1	6.1	2.6	2.2
Corporate and property income	4.9	2.3	-0.1	-0.1
Domestic transfers	9.0	7.7	8.2	8.2
Transfers from abroad	4.0	-24.1	-8.6	-8.6
Direct taxes and social contributions (-)	6.9	5.8	3.4	1.6
Adjustment for the net participation of households in pension funds	-24.8	-2.9	-5.2	-5.2
Disposable income	6.5	4.1	2.6	2.8
Private consumption	5.1	4.4	2.8	2.8
Savings	17.8	1.8	1.0	2.9
Savings rates (as a percentage of disposable income)	12.2	12.0	11.8	12.0

Notes:

(a) Estimates of the Banco de Portugal obtained from the national accounts of the INE for the years from 1995 to 2001 (ESA95).

(b) Figures adjusted for the effects of the sale of tax credits by the general government.

(c) Remuneration received by resident households. Includes social security contributions by employers and general government transfers to *CGA*.





decrease in dependent employment and the deceleration in compensation per employee, against the background of a fall in economic activity and fiscal consolidation requirements of the general government. In addition, corporate and property income had a virtually nil change. In contrast, transfers to households as a whole accelerated from 2.9 to 6.3 per cent in 2003, largely due to the less negative change of net transfers from abroad. It should also be mentioned that domestic transfers have been presenting a growing share in disposable income as a whole (Chart 5.3). This component, not directly associated with the remuneration of household productive factors, already exceeds 25 per cent of disposable income, reaching a growth rate of 8.2 per cent in 2003 (7.7 per cent in 2002). This development is not only due to the cyclical effect associated with the increase in transfers related to unemployment benefits, although these have registered very strong growth for the second consecutive year (26.3 per cent in 2002 and 37.0 per cent in 2003). In effect, transfers relating to pen-

(31) The estimates published in the September 2003 issue of the Economic bulletin were also presented, without changes, in the December 2003 issue of the *Economic bulletin*, which also included projections for 2004 and 2005.

sions continued to evince high growth, clearly above the increase in disposable income and GDP, and are the most important contribution behind growth of total domestic transfers to households.

The nominal deceleration in both disposable income and private consumption resulted in a stabilisation of the savings rate that stood at 12.0 per cent of disposable income in 2003 (Table 5.2). Taking into account that Portuguese households need to allocate a growing share of their savings to their debt repayments, the maintenance of the savings rate represents, in fact, a decline in savings that is not allocated to the debt service. Moreover, in 2002, the household savings rate has been negatively affected by the extraordinary payment of tax debts within the scope of the fiscal "amnesty" granted in the last months of the year.

The deceleration in private consumption was particularly intense in the acquisition of goods, particularly durable goods, and the consumption of services maintained moderate growth, similar to that recorded in the previous year (1.2 and 1.3 per cent in 2002 and 2003, respectively). Consumption of durable goods, which showed the highest volatility and more sensitivity to economic cycle fluctuations, decreased by approximately 11 per cent, a decline more marked in the item acquisition of motor vehicles. The trend of the retail trade turnover index confirms the decrease in private consumption of goods included in this indicator, which does not cover motor vehicles and fuels. In nominal terms, this index decreased by 0.6 per cent in 2003 (1.7 per cent growth in 2002). The share of this index relative to durable goods decreased by 6.8 per cent in nominal terms (1.8 per cent increase in 2002). In turn, sales of passenger cars, including off-road vehicles, declined by 16.1 per cent in 2003, after a fall of 11.4 per cent in 2002. In intra-annual terms, the decline in these sales was particularly marked in the first half of the year (changes of -24.0 and -5.1 per cent in the first and second quarters of 2003 respectively), partly reflecting the intraannual trend observed in 2002, which contributed significantly to the very marked profile of private consumption in the course of 2003. Indeed, the fall in private consumption was most pronounced in the first half of 2003 (-1.6 per cent), followed by a slight increase in the second half (0.5 per cent). Excluding the car component from private consumption, the half-yearly development has a less sharp



contrast, although maintaining the recovery trend (in this case, the year-on-year changes were -0.1 per cent in the first half of the year and 0.8 per cent in the second).

In real terms, public consumption is estimated to have recorded a negative change of 0.4 per cent, after an increase of 2.2 per cent in 2002. The corporatisation of a number of hospitals in December 2002, determining, in terms of national accounts, the shift of these entities from the general government sector to the non-financial corporate sector, has significantly affected the type of registration of the major components of public consumption. In particular, the rates of change of expenditure with personnel, intermediate consumption, transfers in kind to households and sales of goods and services were strongly affected by this reclassification⁽³²⁾. Excluding the effects of the "corporatisation" of hospitals, expenditure with personnel seems to have had a virtually nil change in 2003, in line with the trend of the average number of subscribers to Caixa Geral de Aposentações. Thus, excluding reclassifications, the slight real decrease in public consumption was due to a negative change in volume in intermediate consumption and to a real increase in sales of goods and services (entered with a negative sign in the calculation of the aggregate).

GFCF decreased by 9.5 per cent in 2003, after having declined by 5.5 per cent in 2002. The fall in GFCF in 2003 was the result of a strong reduction in household and corporate investment, since GFCF of the general government, excluding sales of assets, increased by 7.3 per cent in real terms (9.1 per cent in nominal terms)⁽³³⁾. The decrease in investment in fixed capital was broadly based across all its components (construction, transport material, machinery and equipment), but was felt more markedly in the construction component. Besides,

⁽³²⁾ As a result of this reclassification, the costs related with the abovementioned hospitals ceased to be included in expenditure with personnel and intermediate consumption (as well as income from sales of goods and services). The services supplied by them are now entered as transfers (in kind) to households.

⁽³³⁾ According to national accounting regulations, when the general government sells real assets, the value of those sales is deducted from GFCF in that sector. Therefore, the sales of the physical infrastructure of fixed communications and of the concession of the Lisbon outer ring road was deducted from GFCF expenditure of the general government in 2002 and the value of the sales of buildings was considered as negative investment of the general government in 2002 and 2003. Considering these sales, the nominal increase in public GFCF stood at approximately 16 per cent in 2003.



- (a) Real growth of exports of goods *versus* real growth of external demand. An increase means a gain in market share of Portuguese exporters.
- (b) Real growth of imports of goods of major trade partners. The 17 selected countries are responsible for around 90 per cent of total exports. Each country was weighted according to its share as exporting market in the previous year.

construction is the component that contributed to the more marked decrease in GFCF in 2003, since the components machinery and equipment and transport material suggested less sharp falls than in 2002. The contraction of investment in construction was determined by the decrease in investment in housing and in non-residential buildings while the public works component had a less unfavourable development. This different dynamics is illustrated by the balance of respondents on the appreciation of activity in the different sub-sectors (Chart 5.4), the annual averages of which stabilised in the public works sub-component, but were much more negative in 2003 for the buildings sub-components (residential and non-residential buildings). It should be noted, in particular, that household investment in housing seems to have recorded a significant decrease, as suggested by different indicators, such as the decline in the number of new house building permits and in the number of new house buildings concluded. The same indication is supplied by the trend of the net flow of



bank credit to households for house purchase that strongly decreased in 2003⁽³⁴⁾.

Exports of goods and services recorded a real growth of 4.1 per cent in 2003, reflecting an acceleration of 1.7 p.p. from the previous year. Behind this trend was a strong acceleration in the goods component (from 2.3 per cent in 2002 to 5.7 per cent in 2003), given that exports of services decelerated from the previous year. The deceleration of exports of services reflected chiefly the strong slowdown in exports of other services, since real tourism receipts recorded a less sharp fall than in the previous year (change of -2.2 per cent, compared with - 5.3 per cent in 2002).

The higher growth of exports of goods followed the acceleration in external demand relevant for the Portuguese economy, but represented also a gain in market share of approximately 2 per cent, above that recorded in the previous year, despite the appreciation of the euro (Chart 5.5). Against the background of a sharp contraction of domestic demand, the significant growth of exports of goods

⁽³⁴⁾ See section 3.3. Non-financial private sector indebtedness.



seems to have reflected the effort made by Portuguese corporations to place their products abroad, even at the cost of a cut in profit margins. This indication is confirmed by the trend of some indicators of prices and costs. In effect, prices of exports of goods decreased by approximately 3.1 per cent, and the decrease was broadly based across all types of goods. This decline in export prices suggests a significant contraction in profit margins in the exporting sector in 2003, despite the decline in import prices of intermediate goods and the deceleration observed in unit labour costs (Chart 5.6). It should be noted that the prices of exports of goods decreased more than import prices, resulting in a loss in terms of trade of 1.6 per cent, contrary to developments in 2002 (gains in terms of trade of approximately 3 per cent)⁽³⁵⁾.

Imports of goods and services decreased by 0.7 per cent in real terms (identical change in 2002) as a result of a decline in both imports of goods (-0.6 per cent) and imports of services (-1.2 per cent). The decline in imports of goods continued to re-

flect the trend of the different components of overall demand, particularly those with the higher import content, such as consumption of durable goods and investment in equipment and transport material.

By branches of activity, there was an almost broadly based slowdown in activity across all sectors, except electricity, gas and water and the sub-sectors of financial services, insurance and communications. Construction was the sector with a more negative change in gross value added (GVA) in 2003, reflecting a decline in GFCF in construction. There were also decreases in activity in the "industry" and "agriculture, forestry and fishing" sectors, while GVA in the services sector had a virtually nil change in 2003 (0.2 per cent vis-à-vis 1.0 per cent in the previous year). This change in the group of services reflected changes in activity in the "trade and repairs", "hotels and restaurants" and "transports" sub-sectors, offset by relatively high increases in financial services, insurance and communications. The decline in activity in trade was the result of the contraction in domestic demand, particularly in consumption of goods and in investment, while the decrease in real GVA in hotels and restaurants was associated with the behaviour of expenditure by residents and tourists. The decline in economic activity in 2003 is confirmed by the coincident indicator of the Banco de Portugal that synthesises a set of qualitative information on the trade, industry and construction sectors (Chart 5.7). The behaviour of this indicator was more negative in the first half of the year, inverting its downward profile after the third quarter of the year.

6. EMPLOYMENT AND WAGES⁽³⁶⁾

According to data from the *Inquérito ao Emprego* (Labour Force Survey) of *INE* (National Statistical Office), total employment decreased by 0.8 per cent in 2003 (compared with a 0.2 per cent increase in the previous year). In intra-annual terms total employment declined by 1.1 per cent in the first half of the year and by 0.6 per cent in the second half. The reduction in total employment was slightly lower than that of GDP, translating into a fall in productivity per worker in 2003, after two years of very modest growth. It should be noted that the reduction in productivity per worker in 2003, as well

⁽³⁵⁾ Excluding fuel prices, these developments were similar, although changes in terms of trade are slightly less sharp in both years (gain of 2.6 p.p. in 2002 and loss of 1.2 p.p. in 2003).



as the modest growth in 2002, correspond to a trend in this variable, which is in line with the cyclical position of the economy. In fact, the rates of change in employment in the private sector⁽³⁷⁾ in 2002 and 2003 are fully in line with the change in output in the same sector, taking into account the trend of these variables in the past (Chart 6.1).

Stress should be laid on the systematic reduction over the past few years of the average number of hours effectively worked per worker in the Portuguese economy. In 2002 and 2003 they declined by 2.3 and 2.4 per cent respectively. Thus, productivity per hour worked, having increased by 2.8 per cent in 2002 and 2.0 per cent in 2003, has shown a less unfavourable trend than productivity per



worker (Chart 6.2). The reduction in the number of hours worked was influenced at the end of the 90s by legislation that imposed a maximum number of 40 hours of work per week. Another important factor has been the composition of growth; some of the more dynamic sectors in terms of job creation, namely some services (including the general government), have lower weekly working hours than the average of the economy. In 2002 and 2003 the depressed cyclical position of the economy was another important factor behind the reduction in the average effective number of hours worked, due to the reduction in the number of supplementary hours worked beyond the normal working hours.

In 2003, according to the Employment Survey of *INE*, there was a 1.0 per cent reduction in the number of employees and a positive change in self-employment, while the other employment forms declined significantly (Table 6.1). This performance was similar to that seen in 2002, in which the rise in the number of employees had been similar to that of total employment, while self-employment had increased by approximately 2½ per cent. The reduction in the number of employees resulted exclusively from the reduction in the number of

⁽³⁶⁾ In this section, only the rates of change in total employment and unemployment refer to calculations based on a simple sample. All the rates of change in the disaggregation of total employment into components by type of contract or activity sector were obtained from a constant sample. The calculation derived from a constant sample is not taken into account with the rotation of 1/6 of the sample in each quarter, i.e. it only uses the fraction of the sample of the Employment Survey that is maintained in each pair of consecutive quarters. The rates of change derived from constant consecutive samples are less subject to erratic changes and, therefore, they are preferable for the analysis when there is a more detailed disaggregation. Indeed, the impact of erratic changes on the rates of change derived from a simple sample will be smaller, the wider the aggregate in question. Thus, changes in total employment in a simple sample and in a constant sample tend to be very close (as confirmed in Tables 6.1 and 6.2).

⁽³⁷⁾Private sector continues to be broadly defined as the whole economy excluding only the general government.

Table 6.1

TOTAL EMPLOYMENT BY EMPLOYMENT STATUS AND BY TYPE OF CONTRACT

Year-on-year rates of change based on a constant sample^(a)

Per cent

	Rate of change	2002					2003					
	based on a sample	Ι	II	III	IV	Average	Ι	Π	III	IV	Average	
Employees	constant	0.2	0.4	0.3	-0.3	0.1	-1.2	-0.9	-1.3	-0.6	-1.0	
Permanent contract	constant	-0.6	-1.1	-0.5	-1.2	-0.8	-1.9	-1.8	-2.4	-2.2	-2.1	
Other types of contract	constant	3.3	6.1	3.1	2.9	3.8	1.4	2.7	3.4	5.8	3.3	
Other types of employment	constant	1.4	0.4	0.2	-1.3	0.2	-0.9	-0.8	0.4	1.5	0.0	
Self-employed	constant	10.1	1.4	1.2	-1.0	2.9	1.0	1.1	2.4	3.5	2.0	
Self-employed – employer	constant	4.9	2.0	0.2	1.1	2.0	0.3	-0.1	0.3	-2.2	-0.5	
Unpaid workers	constant	-0.5	-14.2	-11.6	-10.7	-9.2	-18.9	-17.5	-13.2	-7.5	-14.3	
Other	constant	-85.9	7.9	16.3	-4.6	-16.6	-14.9	-18.8	-21.0	5.7	-12.2	
Total	constant	0.5	0.4	0.3	-0.6	0.1	-1.1	-0.9	-0.8	-0.1	-0.7	
Total	simple	0.5	0.9	0.5	-1.2	0.2	-0.9	-1.3	-1.1	0.0	-0.8	

Sources: INE and Banco de Portugal.

Nota:

⁽a) The calculation based on a constant sample does not take into account the partial rotation of the sample in each quarter, i.e. it only uses the component of the sample of the Labour Force Survey, which is identical in two consecutive quarters. The rates of change calculated on the basis of consecutive constant samples are less subject to erratic changes and therefore are preferable for analysis purposes. The impact of erratic changes will be the smaller, the broader the aggregate in question. Thus, changes in total employment in a simple sample and in a constant sample tend to be very close. Differences are bigger for more disaggregated sectoral breakdowns or for breakdowns by type of employment.
Table 6.2

TOTAL EMPLOYMENT BY SECTORS

Year-on-year rates of change in a constant and simple sample^(a)

Per cent

	Rate of			2002					2003		
	change based on a sample	Ι	II	III	IV	Average	Ι	II	III	IV	Average
Agriculture and fishing	constant	-1.3	-1.9	-1.5	-3.0	-1.9	-2.0	-1.6	0.2	1.1	-0.6
Industry	constant	-2.1	-2.7	-3.1	-2.6	-2.6	-3.3	-1.5	-2.3	-2.2	-2.3
Construction	constant	3.9	3.8	1.4	-2.1	1.7	-5.2	-4.4	-3.6	-2.2	-3.9
General government, education and health	constant	2.9	2.6	1.1	0.7	1.8	0.2	-0.6	1.0	1.1	0.4
Other Services	constant	0.7	1.0	2.2	1.3	1.3	1.3	0.8	-0.2	0.9	0.7
Total	constant	0.5	0.4	0.3	-0.6	0.1	-1.1	-0.9	-0.8	-0.1	-0.7
Total	simple	0.5	0.9	0.5	-1.2	0.2	-0.9	-1.3	-1.1	0.0	-0.8

Sources: *INE* and Banco de Portugal.

Note: (a) See note to table 6.1.

Table 6.3

LABOUR MARKET INFLOWS AND OUTFLOWS^(a)

As a percentage of the active population

			2002			2003				
	Ι	II	III	IV	Average	Ι	II	III	IV	Average
Flows between employment and inactivity										
Employment – Inactivity	1.33	1.50	1.34	2.62	1.70	1.74	1.57	1.32	1.43	1.51
Inactivity – Employment	1.31	1.40	1.45	2.16	1.58	1.61	1.35	1.35	1.23	1.39
Inflows into unemployment	1.72	1.72	2.17	2.93	2.14	2.61	2.07	2.32	2.54	2.39
Employment => Unemployment	0.84	0.81	0.95	1.46	1.02	1.31	1.00	0.99	1.15	1.11
Permanent (open ended)	0.28	0.27	0.25	0.48	0.32	0.54	0.47	0.36	0.41	0.45
Fixed-term	0.37	0.29	0.43	0.63	0.43	0.53	0.35	0.40	0.52	0.45
Other	0.19	0.26	0.26	0.35	0.27	0.24	0.17	0.23	0.22	0.22
Inactivity => Unemployment	0.88	0.91	1.22	1.47	1.12	1.30	1.07	1.33	1.38	1.27
Outflows from unemployment.	1.66	1.87	1.76	2.31	1.90	2.27	2.45	2.24	2.26	2.31
Unemployment=> Employment	0.97	1.02	0.96	1.17	1.03	1.06	1.47	1.14	1.18	1.22
Permanent (open ended)	0.17	0.14	0.11	0.24	0.16	0.17	0.24	0.11	0.21	0.18
Fixed-term	0.36	0.57	0.52	0.64	0.52	0.60	0.79	0.64	0.60	0.66
Other	0.44	0.31	0.33	0.29	0.34	0.29	0.44	0.40	0.37	0.37
Unemployment=> Inactivity	0.70	0.84	0.80	1.13	0.87	1.21	0.98	1.09	1.08	1.09
Net inflows into unemployment	0.06	-0.14	0.42	0.62	0.24	0.34	-0.38	0.08	0.28	0.08
Other factors ^(b)	-0.20	0.20	0.17	0.43	0.15	0.10	-0.18	-0.02	-0.02	-0.03
Change in the unemployment rate	0.26	0.06	0.59	1.05	0.49	0.24	-0.20	0.10	0.30	0.11
Memo:										
Unemployment rate	4.5	4.5	5.1	6.2	5.06	6.4	6.2	6.3	6.6	6.38

: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.

workers with a permanent labour contract, since the other types of contract continued to show a positive change (3.3 per cent compared with 3.8 per cent in 2002).

In sectoral terms, the qualitative trend in employment was similar to that recorded in 2002 (Table 6.2). Turning only to the most important sectors, the growth of employment was positive in services, albeit decelerating from 2002, and negative in industry and, mainly in construction (a -3.9 per cent reduction in 2003 compared with a 1.7 per cent rise in 2002). In the general government, education and health (which includes private employment in the latter two subsectors) there was a slight growth in employment (0.4 per cent), chiefly in the second half of the year, in line with data on the trend of the average number of subscribers of *Caixa Geral de Aposentações – CGA* (the civil servants pension system).

On an annual average, the unemployment rate reached 6.4 per cent in 2003, rising significantly from 2002 (5.1 per cent). The total number of unemployed, obtained from the Labour Force Survey, increased by 26.5 per cent in 2003 (26.3 per cent in 2002). Conversely to 2002, subsidised unemployment⁽³⁸⁾ increased more than total unemployment (rises of 27.2 per cent in 2003 and 10.8 per cent in 2002). Registered unemployment (which is comprised of the individuals recorded at the Job Centres of the Instituto do Emprego e Formação Profissional (Employment and Professional Training Institute) recorded also a high growth (24.0 per cent against 6.1 per cent in 2002), which was however lower than that of total unemployment registered by the Labour Force Survey.

When analysing the quarterly flows between the different stages of the labour market, it can be perceived which are the main contributors to recent developments in the unemployment rate (Table 6.3). These flows are affected by seasonal changes, but their analysis shows that the moderation seen in the intra-annual rise in the unemployment rate seems to be associated with both a decrease in net flows from inactivity into unemployment, and an increase in net flows from unemployment into employment, and particularly in the latter, with an increase in net flows from unemployment into employee jobs with fixed-term contract. It should also be noted that as a consequence of the maintenance of the positive net flow from employment into inactivity and of the contribution of unemployment flows into inactivity, the participation rate declined by 0.1 p.p. in 2003 as a whole. The contribution of demographic factors to the growth of the labour force, estimated on the assumption of constant participation rates per age group, stood at around +0.3 p.p. in 2003 as a whole. Thus, cyclical factors, which tend to reduce the participation rate during the cyclical downturns and to increase it during the upturns, seem to have contributed around 0.4 p.p. in 2003 to the participation rate.

In 2003 unit labour costs (ULC) of the whole economy, excluding the State subsidy to CGA, increased by 3.5 per cent compared with 5.2 per cent in the previous year. Unfavourable developments in productivity per worker prevented a higher deceleration in ULC in 2003. On the basis of the data available, the differential vis-à-vis the euro area is estimated to have recorded the lowest figure of the past few years, i.e. approximately 1.3 p.p. (1.7 p.p. less than in 2002)⁽³⁹⁾, albeit still clearly too high. This narrowing was chiefly due to the deceleration of nominal wages per worker for the Portuguese economy as a whole, with this differential vis-à-vis the euro area standing at 0.5 p.p. in 2003. Excluding the general government, the growth differential of unit labour costs vis-à-vis the euro area deteriorated by around 1/2 p.p., due to the moderating effect of the low growth of general government wage scales in 2003 on the indicator for the whole economy.

7. INFLATION

In 2003, annual average inflation, as measured by the Consumer Price Index⁽⁴⁰⁾ (CPI), dropped to 3.3 per cent (3.6 per cent in 2002). The same figure for 2003 is obtained for the annual average rate of change in the Harmonised Index of Consumer prices (HICP) (3.7 per cent in 2002). The year-onyear decline in inflation was much more pronounced, with the year-on-year rate of change in the CPI falling from 4.0 per cent in December 2002, to 2.4 per cent in December 2003 (Table 7.1).

⁽³⁸⁾Number of individuals receiving unemployment benefit or social unemployment benefit.

⁽³⁹⁾ The value for the euro area is an estimate based on the first three quarters of 2003.

Table 7.1

CPI – MAIN CATEGORIES AND AGGREGATES

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

	Weights _	ts Annual average rate of change Year-on-year monthly rates of change						ge		
	basis 2002	2000	2001	2002	2003	2002	2002 2003			
						Dec.	Mar.	Jun.	Sep.	Dec.
Total	100	2.9	4.4	3.6	3.3	4.0	3.9	3.3	3.1	2.4
Total excluding unprocessed food and energy	79.6	2.5	3.6	4.4	3.2	4.6	3.8	3.3	2.7	2.4
AGGREGATES										
Goods	65.8	2.2	4.2	2.4	2.7	2.5	3.2	2.9	2.7	1.6
Food	23.1	1.9	6.1	1.9	2.9	1.5	2.3	3.0	4.0	2.6
Unprocessed	12.0	2.5	8.8	0.3	2.6	-0.1	0.7	2.9	5.1	2.5
Processed	11.1	1.4	3.1	3.8	3.1	3.3	4.1	3.1	2.9	2.6
Industrial	42.7	2.4	3.1	2.7	2.6	3.1	3.7	2.8	1.9	1.1
Non-energy	34.2	1.4	2.5	3.1	2.0	2.9	2.3	2.4	1.4	1.1
Energy	8.4	6.1	5.2	1.2	4.9	3.9	9.1	4.4	4.2	1.5
Services	34.2	4.2	4.8	6.0	4.5	6.9	5.0	4.3	3.9	3.8
CATEGORIES										
I - Food and non-alcoholic beverages	20.1	2.1	6.5	1.5	2.6	1.0	1.6	2.8	4.0	2.5
II - Alcoholic beverages and tobacco	3.0	0.8	3.2	4.8	4.6	5.5	7.4	4.7	3.8	3.3
III - Clothing and footwear	7.0	0.8	1.5	2.5	1.3	2.1	0.5	1.7	0.8	1.2
IV - Housing, water, electricity, gas and other fuels	10.0	3.7	3.9	2.9	4.0	3.6	4.1	4.6	3.7	3.4
V - Furnishings, household equipment and routine maintenance of the house	8.1	2.0	3.2	3.1	2.6	3.0	3.0	2.9	2.2	1.9
VI - Health	5.6	3.1	3.6	4.8	1.9	4.6	2.2	1.8	1.4	1.5
VII - Transport	19.1	4.8	4.8	5.0	4.3	6.3	7.2	4.2	3.1	1.5
VIII- Communications	3.4	-4.8	-2.2	0.8	-1.3	1.6	-1.4	-1.2	-1.8	-2.2
IX - Recreation and culture	5.0	0.8	2.2	2.2	1.7	2.1	1.4	0.9	1.9	2.1
X - Education	1.5	5.0	5.2	5.8	5.6	4.8	3.6	3.7	4.1	11.3
XI - Hotels, cafés and restaurants	10.8	3.6	4.2	5.7	5.7	7.3	6.7	5.6	5.3	4.3
XII - Miscellaneous goods and services	6.3	4.3	5.5	5.8	4.0	6.1	4.4	4.2	3.4	2.9
Memo:										
10 per cent trimmed mean		2.8	3.9	3.9	3.2	4.0	3.8	3.2	2.8	2.2

Sources: INE and Banco de Portugal.

Note: Up to December 2002, rates of change were calculated using the CPI basis 1997. From January2003, rates of change are calculated using the new CPI basis 2002.



The fall in the inflation rate in 2003 was explained by domestic factors and by an international environment favourable to price moderation. First, the contraction of the Portuguese economic activity contributed to the decrease in demand pressure on prices. Wages both in public and private sectors, decelerated considerably in 2003, in a context of deteriorating labour market conditions,

also contributing to a reduction in Portuguese inflation. In turn, price developments of imported goods also continued to favour a fall in inflation. In addition, the downward trend of inflation in the course of 2003 was amplified by the unwinding of special effects in the year-on-year rate of change of the CPI.

In intra-annual terms, the year-on-year rate of change had accelerated in 2002, reaching its highest value in February 2003, starting subsequently a trend decline, particularly marked since the beginning of the second half of 2003 (Chart 7.1). This development pattern in the course of 2003 was due to special factors associated with the unwinding of effects which had led to a rise in the inflation rate in the previous year, such as, at the beginning of 2002 the conversion into euro of prices denominated in escudos and, in mid-2002, the rise in the standard VAT rate⁽⁴¹⁾. In contrast, however, there was an acceleration in energy prices in the first quarter of 2003 and a strong rise in the rate of change in unprocessed food prices in the first three quarters of 2003. Thus, and contrasting with the previous year, the downward trend of inflation in the course of 2003 was even more pronounced excluding these more volatile goods' prices (Chart 7.2 and Table 7.1). Indeed, the year-on-year rate of change in the CPI excluding the prices of unprocessed food and energy stood at 4.6 per cent in December 2002, having declined progressively in the course of the year to 2.4 per cent in December 2003.

Price developments of imported goods gave a further contribution to a fall in Portuguese inflation in 2003. According to estimates of the Banco de Portugal, based on information provided by *INE*,

⁽⁴⁰⁾ In January 2003, *INE* started the publication of a new CPI and IHCP series, calculated on the basis of a more recent consumer expenditure structure. See Annex 1 of the January 2003 issue of the *Monthly Economic Indicators* of the Banco de Portugal for an explanation of the main methodological changes. Until December 2002, the rates of change in the CPI comprised in this text were derived using the 1997 based CPI. From January 2003 onwards, the year-on-year rates of change in the CPI were derived consistently with the new 2002 based index. According to estimates of the Banco de Portugal, the application of the structure of the 2002 based CPI to the sub-indices of the 1997 based CPI would reduce by 0.1 p.p. the average and the year-on-year inflation rate in 2002, with a reduction of 0.4 p.p. in the services component, and virtually nil in goods.

⁽⁴¹⁾ The direct impact of the change in the standard VAT rate in June 2002 on the average inflation rate is estimated to have been 0.2 p.p. in 2002 and 0.4 p.p. in 2003.



the prices of imported merchandise declined by 1.6 per cent in 2003 (-2.4 per cent in 2002) while prices of imported consumer goods recorded still a sharper fall (-2.0, after -1.2 per cent in 2002).

The reduction in average inflation reflects a fall in the average rate of change in services prices, which dropped from 6.0 per cent in 2002 to 4.5 per cent in 2003. Abstracting from the change in the structure of the CPI, the year-on-year growth in services prices dropped by 2.7 p.p. since the end of 2002 to 3.8 per cent in December 2003. This deceleration in services prices was common to most items in this aggregate. Developments in education prices, largely associated with the rise in fees, were the main exception. Even though, the rise in services prices remained at high levels, above those expected, given the cyclical position of the Portuguese economy. In December 2003 the year-onyear change in services prices was 2.2 p.p. higher than the one recorded in the goods aggregate, meaning that there were still excessive price rises, namely in sub-sectors more sheltered from competition.

Consumer goods prices recorded an average change of 2.7 per cent in 2003, accounting for an increase of approximately 0.3 p.p. from 2002. The year-on-year rate of change in this aggregate decreased, although not continuously, from 2.5 per

Table 7.2

HICP – SERVICES

Year-on-year growth differential of services prices between Portugal and the euro area as a whole

	Weight in HICP services	2002	2003
	Portugal	Dec.	Dec.
Services	100	3.7	1.0
SUB-INDICES			
Sewage and trash collection	0.25	4.8	14.7
Education	3.66	0.9	8.1
Cultural services	2.08	2.7	2.9
Car maintenance and repairs	5.06	7.3	2.8
Medical services	4.36	1.4	2.3
Restaurants and cafés	28.56	2.3	1.5
Recreational and sports services	1.23	6.4	-3.1
Financial services	2.69	0.8	-2.9
Accommodation services	9.37	-0.2	-2.4
Hospital services	0.70	2.6	-2.0
Telephone equipment and services	8.32	2.2	-1.2

Sources: Eurostat and Banco de Portugal.

cent at the end of 2002 to 1.6 per cent in December 2003. Indeed, the intra-annual developments in the year-on-year rate of change in goods prices were marked by the evolution of their more volatile components. Energy prices recorded very high year-on-year rates of change in the first months of 2003, in line with the rise in international oil prices. From the second quarter onwards there was a correction, with the year-on-year rate of change in these prices standing at 1.5 per cent at the end of 2003. Unprocessed food prices had recorded unusually low price changes in 2002. This base effect, associated with the unfavourable weather conditions in the third quarter of 2003, gave rise to an acceleration in the first three quarters of 2003. This situation was reversed in the last months of the year, with the year-on-year rate of change in this aggregate standing at 2.5 per cent in December 2003.

The fall in the inflation rate in Portugal translated into a reduction of the inflation differential vis-à-vis the euro area countries as a whole. Considering the annual average change in the HICP, the inflation differential narrowed slightly from 1.4 to 1.2 p.p. in 2003. However, considering the yearon-year change in the HICP, the inflation differential between Portugal and the euro area narrowed from 1.7 p.p. at the end of 2002, to 0.3 p.p. in December of 2003. Excluding the prices of unprocessed food and energy, the reduction in the inflation differential was even more marked (from 2.5 to 0.4 p.p.), chiefly reflecting price developments in services (Chart 7.3). Notwithstanding the recent narrowing of the year-on-year growth differential of services prices, this differential still reached 1.0 p.p. in December 2003, an excessive value taking into account the recessive juncture of the Portuguese economy. It should be noted, however, that the inflation differential of services concentrates on some sub-sectors, which are more sheltered from competition, while others show a reduced or even negative differential (Table 7.2).

8. BALANCE OF PAYMENTS

In 2003, net external borrowing requirements of the Portuguese economy, as measured by the combined current plus capital account deficit, declined from 5.2 to 3.0 per cent of GDP (Table 8.1)⁽⁴²⁾. This reduction in the external deficit was solely due to the private sector⁽⁴³⁾, since net general government borrowing requirements did not decline in 2003.

Conversely, they increased sizeably abstracting from the effect of the sale and securitisation of tax arrears, whose registration in national accounts affects, in accounting terms, the net lending capacity of the other resident institutional sectors, but without a real match in 2003. Considering the figures adjusted for this special operation, the net lending capacity of households stood at 3.7 per cent of GDP (3.5 per cent in 2002), while corporations, stepping up their adjustment process, reduced their net borrowing requirements from 5.9 per cent of GDP in 2002, to 2.5 per cent of GDP in 2003. It should be noted that this reduction would have been even higher were it not for the transfer of the accounting reserves of CTT (post office) to the general government, associated with the transfer of liabilities linked to future burden with pensions. Abstracting also from this operation between the general government and an exclusively state-owned enterprise, the net borrowing requirements of the corporations would have declined to 1.5 per cent and the net lending capacity of the private sector as a whole would reach values higher than 2 per cent of GDP, a figure recorded for the last time in the mid-90s.

The fall in the aggregate current and capital account deficit resulted chiefly from the significant reduction in the goods account deficit and also from the favourable performance of the services, income and capital accounts (Charts 8.1 and 8.2). The surplus of the current transfers account remained stable as a percentage of GDP.

In 2003, the goods account deficit declined to 8.4 per cent of GDP (9.7 per cent of GDP in 2002), chiefly due to a favourable volume effect, since exports increased by 5.7 per cent and imports de-



clined by 0.6 per cent in real terms⁽⁴⁴⁾ (Chart 8.3). Contrasting with the past two years, developments in merchandise terms of trade, i.e., the growth differential in merchandise export and import prices, had a negative impact on the merchandise account⁽⁴⁵⁾.

In 2003, the services account surplus attained 2.6 per cent of GDP, 0.2 p.p. higher than in the previous year. This surplus continued to be basically

⁽⁴²⁾ The revision of the estimate of the Banco de Portugal for the combined current and capital account deficit, in 2002, from the figures published in the September 2003 issue of the *Economic Bulletin* (from -5.6 to -5.2 per cent do GDP), reflected the revision of some base information, in particular, the incorporation of the results of the "Questionnaire on Foreign Direct Investment in Portugal" for the year 2002. Amongst others, revisions were made in the income account (from -2.6 to -1.7 per cent of GDP) and in the current transfers account (from 2.7 to 2.3 per cent of GDP).

⁽⁴³⁾ It should be recalled that in this text private sector is defined in broad terms and residually vis-à-vis the general government. In other words, any resident economic agent that does not belong to the general government is included in the private sector, even in the case of enterprises wholly owned by the State.

⁽⁴⁴⁾ See Section 5. Expenditure and Output in this Bulletin.

Table 8.1

BALANCE OF PAYMENTS

EUR million

	2001		2002		2003		Balance as a percentage of GDP			
	Balance	Debit	Credit	Balance	Debit	Credit	Balance	2001	2002	2003
Comment A comment	11 (25.0	F0 212 2	50 (22.0	0 (00 2	FF 400 C		(((1))	0.5		F 1
	-11 035.2	59 515.5	50 623.0	-8 690.3	57 408.6	50 /4/.5	-0 001.3	-9.5	-6.7	-5.1
Goods	-14 866.5	41 574.5	28 992.8	-12 581.7	40 673.4	29 681.2	-10 992.2	-12.1	-9.7	-8.4
Services	2 804.3	7 129.6	10 264.1	3 134.6	7 012.1	10 476.6	3 464.5	2.3	2.4	2.6
Transports	-565.2	2 281.9	1 951.1	-330.8	2 229.8	2 050.7	-179.1	-0.5	-0.3	-0.1
Travel and tourism	3 774.5	2 383.8	6 049.1	3 665.3	2 390.6	6 123.2	3 732.6	3.1	2.8	2.9
Insurance services	-40.8	152.1	78.8	-73.2	150.7	73.9	-76.9	0.0	-0.1	-0.1
Royalties and license fees	-249.9	313.7	30.3	-283.4	250.7	32.0	-218.7	-0.2	-0.2	-0.2
Other services	-55.3	1 832.5	1 985.8	153.3	1 835.4	2 052.7	217.3	0.0	0.1	0.2
Government services	-59.0	165.5	168.9	3.4	154.9	144.2	-10.7	0.0	0.0	0.0
Income	-3 345.6	7 705.9	5 530.0	-2 175.9	7 070.2	4 933.7	-2 136.5	-2.7	-1.7	-1.6
Compensation per employees	-22.6	172.2	135.4	-36.8	143.4	130.4	-13.1	0.0	0.0	0.0
Investment income	-3 323.1	7 533.7	5 394.6	-2 139.1	6 926.7	4 803.3	-2 123.4	-2.7	-1.7	-1.6
Current transfers	3 772.7	2 903.3	5 836.1	2 932.8	2 652.9	5 655.8	3 002.9	3.1	2.3	2.3
Official transfers	170.0	1 631.9	1 910.1	278.2	1 588.0	2 196.6	608.6	0.1	0.2	0.5
Private transfers	3 602.7	1 271.5	3 926.0	2 654.5	1 064.9	3 459.2	2 394.3	2.9	2.1	1.8
Capital Account	1 196.6	208.4	2 216.8	2 008.4	206.1	2 924.0	2 717.8	1.0	1.6	2.1
Capital transfers	1 213.2	184.6	2 188.5	2 003.9	170.1	2 871.2	2 701.2	1.0	1.5	2.1
Official transfers	1 206.0	41.0	2 090.2	2 049.2	23.1	2 807.8	2 784.6	1.0	1.6	2.1
Private transfers	-3.6	143.6	98.3	-45.3	146.9	63.5	-83.5	0.0	0.0	-0.1
Acquisition/disposable of non-produced non-financial assets	-16.8	23.7	28.3	4.5	36.0	52.7	16.7	0.0	0.0	0.0
Financial Account	10 542.0	629 822.5	636 494.8	6 672.3	2 411 523.2	2 416 237.8	4 714.7	8.6	5.2	3.6
Direct investment	-1 868.3	28 766.7	27 232.0	-1 534.7	24 235.5	25 003.1	767.6	-1.5	-1.2	0.6
Portuguese investment abroad	-8 452.8	8 482.8	4 988.3	-3 494.5	3 788.3	3 703.7	-84.6	-6.9	-2.7	-0.1
Foreign investment in Portugal.	6 584.5	20 283.8	22 243.6	1 959.8	20 447.2	21 299.4	852.2	5.4	1.5	0.7
Portfolio investment	2 517.2	186 882.9	189 397.3	2 514.4	291 163.7	285 905.7	-5 257.9	2.0	1.9	-4.0
Assets	-8 379.1	87 058.4	78 983.0	-8 075.3	159 523.7	140 906.5	-18 617.2	-6.8	-6.2	-14.2
Liabilities	10 896.3	99 824.5	110 414.2	10 589.7	131 640.0	144 999.3	13 359.3	8.9	8.2	10.2
Financial derivatives	284.3	3 999.7	3 989.9	-9.8	4 124.9	4 189.0	64.1	0.2	0.0	0.0
Other investment	10 578.6	362 005.3	368 822.6	6 817.3	2 025 986.8	2 029 329.4	3 342.6	8.6	5.3	2.6
Assets	-5 287.6	183 159.8	179 487.5	-3 672.4	705 657.5	696 341.5	-9 316.0	-4.3	-2.8	-7.1
Liabilities	15 866.2	178 845.4	189 335.1	10 489.7	1 320 329.2	1 332 987.9	12 658.6	12.9	8.1	9.7
Reserve assets	-969.8	48 168.0	47 053.1	-1 114.9	66 012.3	71 810.6	5 798.3	-0.8	-0.9	4.4
Errors and omissions	-103.4			9.5			-771.2	-0.1	0.0	-0.6
Мето										
Current Account + Capital Account.	-10 438.6	59 521.6	52 839.8	-6 681.8	57 614.7	53 671.2	-3 943.5	-8.5	-5.2	-3.0



Notes:

- (a) The change in the trade balance can be broken down into:
 - volume effect effect of the change of exported and imported volumes

 $[X_{t-1} \cdot V \mathbf{x}_{t} \cdot (1 + P \mathbf{x}_{t})] - [M_{t-1} \cdot V \mathbf{m}_{t} \cdot (1 + P \mathbf{m}_{t})]$

price effect – effect of the average growth of external trade prices

 $\left(X_{t-1},P_t\right)-\left(M_{t-1},P_t\right)$

 terms of trade effect – effect of the relative change in export and import prices

 $[X_{t-1} \cdot (P\mathbf{x}_t - P_t)] - [M_{t-1} \cdot (P\mathbf{m}_t - P_t)]$ where:

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

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

 $P\mathbf{x}_i \in P\mathbf{m}_i$ – growth of export and import prices, in year t

 P_t – 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.

due to the travel and tourism account, whose balance remained virtually stable as a percentage of GDP (2.9 per cent in 2003 and 2.8 per cent in 2002). Nominal tourism receipts increased by 1.2 per cent, after a 1.2 per cent fall in the previous year. This recovery is in line with the trend of number of nights spent by foreigners in national hotels and similar establishments (change of -0.1 per cent against a 7.2 per cent reduction in 2002). In turn, travel and tourism expenditure abroad by residents decelerated in 2003 (nominal change of 0.3 per cent compared with 1.4 per cent in 2002). Despite the slowdown, these expenditures presented, in real terms, a lower reduction than in the previous year, which must reflect the effects of the euro appreciation in the relative prices of these services and also the expansion of the supply of tourism packages abroad. It should be noted that total expenditure in tourism made by residents households, in national and external markets, decrease in a more pronounced way in 2003 than in 2002.

The income account deficit decreased slightly, in 2003, from 1.7 to 1.6 per cent of GDP. Relatively to investment income, there were slight reductions in the direct investment income deficit, from 0.4 to 0.3 per cent of GDP, and in the portfolio investment deficit, from -0.1 to 0.0 per cent of GDP, while the other investment income deficit recorded a slight increase, from 1.2 to 1.3 per cent of GDP.

The current transfers surplus remained stable as a percentage of GDP (2.3 per cent of GDP). Indeed, the reduction in the private transfers surplus (from 2.1 to 1.8 per cent of GDP), chiefly comprised of emigrants and immigrants remittances, was offset by a rise in the current official transfers surplus (from 0.2 to 0.5 per cent of GDP). Emigrants' remittances, which are registered in the balance of payments as credits, declined by 12.2 per cent, chiefly due to remittances from Switzerland and the United States. On the debit side, there was a sharp drop in immigrants' remittances by -25.7 per cent, chiefly due to a base effect, since these remittances had increased by 43.7 per cent in 2002.

The capital account surplus rose from 1.6 to 2.1 per cent of GDP, due to the sharp rise in official capital transfers from the European Union, which increased by 43.9 per cent in 2003. This figure was largely influenced by the high growth of receipts within the framework of the ERDF (67.6 per cent in 2003). The strong rise in official capital transfers reflected progress still being made in the implementation of the III Community Support Framework⁽⁴⁶⁾.

⁽⁴⁵⁾ According to the Banco de Portugal estimates, based on data provided by the *INE*, the year-on-year rates of change in merchandise export and import prices were -3.1 and -1.6 per cent respectively in 2003 (compared with 0.5 and -2.4 per cent in 2002, respectively).

Table 8.2

FINANCIAL ACCOUNT (a)

As a percentage of GDP

	2001	2002			2003		
	Net change	Change in liabilities	Change in assets	Net change	Change in liabilities	Change in assets	Net change
Financial Account	86	14.7	-9.6	5.2	17.4	-13.8	3.6
Direct investment	-1.5	15	-27	-1.2	07	-0.1	0.6
Portfolio investment	2.0	82	-6.2	1.2	10.2	-14.2	-4.0
Financial derivatives	0.2	-3.1	3.1	0.0	-3.2	3.2	0.0
Other investment	8.6	8.1	-2.8	5.3	9.7	-7.1	2.6
Reserve assets	-0.8	-	-0.9	-0.9	-	4.4	4.4
By institutional sector of the resident investor:							
Monetary Authorities	-0.3	0.8	-0.7	0.1	-4.3	0.8	-3.5
Portfolio investment	0.4	-	0.4	0.4	-	-3.9	-3.9
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment	0.1	0.8	-0.2	0.6	-4.3	0.3	-4.0
Reserve assets	-0.8	-	-0.9	-0.9	-	4.4	4.4
General Government	2.4	2.7	0.4	3.1	3.4	0.3	3.7
Direct investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portfolio investment	2.5	3.1	-0.4	2.8	4.1	-0.2	3.9
Financial derivatives	0.1	-0.6	0.8	0.2	-0.6	0.6	-0.1
Other investment	-0.2	0.2	0.0	0.2	-0.1	0.0	-0.1
Monetary Financial Institutions	13.0	5.4	0.5	5.9	11.6	-8.5	3.2
Direct investment	-0.2	0.1	0.0	0.2	0.1	-0.1	0.0
Portfolio investment	1.2	0.0	-0.9	-1.0	0.0	-4.4	-4.4
Financial derivatives	0.2	-2.0	1.9	-0.1	-1.9	2.0	0.1
Other investment	11.7	7.3	-0.5	6.8	13.4	-5.9	7.5
Non-Monetary Financial Institutions	-5.0	3.0	-3.3	-0.3	7.2	-2.9	4.3
Direct investment	-1.3	0.6	-0.2	0.4	-0.2	0.5	0.3
Portfolio investment	-3.8	2.1	-3.3	-1.2	7.8	-3.6	4.2
Financial derivatives	0.0	-0.2	0.2	0.0	-0.5	0.5	0.0
Other investment	0.1	0.5	0.0	0.5	0.0	-0.3	-0.2
Non-financial Corporations and Private Individuals	-1.6	2.9	-6.5	-3.6	-0.6	-3.6	-4.1
Direct investment	0.0	0.7	-2.6	-1.8	0.7	-0.4	0.3
Portfolio investment	1.7	3.0	-2.1	1.0	-1.8	-2.0	-3.8
Financial derivatives	-0.1	-0.2	0.2	0.0	-0.1	0.1	0.0
Other investment	-3.1	-0.6	-2.1	-2.7	0.6	-1.3	-0.6

Note:

(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 financial account recorded net capital inflows equivalent to 3.6 per cent of GDP compared with 5.2 per cent of GDP in 2002 (Table 8.2). In 2003, conversely to previous years, the nonmonetary financial institutions sector made the highest contribution to net capital inflows in the Portuguese economy, as a result of the strong increase in bank credit securitisation transactions and the subsequent placement of these securities in international markets, as well as the sale of tax arrears⁽⁴⁷⁾. General government transactions continued to give rise to capital inflows into the economy, which was due again to the placement of public debt in external markets.

Like non-financial corporations and private individuals, the monetary authorities gave rise to the highest net capital outflows in the financial account. This resulted from a one-off operation of a high amount (more than 4 per cent of GDP) at the end of the year, which was reversed in the early days of 2004. This operation translated into a significant reduction in external liabilities of "other investment" of the monetary authorities within the framework of the TARGET system⁽⁴⁸⁾, as a counterpart to a negative change in "other investment" assets of monetary financial institutions. Excluding this temporary operation, the contribution of the monetary authorities to net capital inflows in the economy would have been virtually nil, similarly to the previous year, while the monetary financial institutions even contributed to net capital outflows in 2003, conversely to the last few years.

This net capital outflow associated with monetary financial institutions occurred albeit, in 2003, Portuguese banking groups have recovered, in a significant way, the issue of bonds abroad through their subsidiaries⁽⁴⁹⁾. Nevertheless, the corresponding capital inflow registered in the financial account as "other investment" of the monetary financial institutions was more than compensated by portfolio investment of this sub-sector in long-term debt securities issued by non-residents, when adjusted for the temporary operation above mentioned. The process of bank credit securitisation led to a smaller direct participation of monetary financial institutions in the external financing of the economy and to an increase in net liabilities of the item "portfolio investment" of non-monetary financial institutions, which behaved as vehicles of the securitisation operations (securitisation fund management companies and credit securitisation companies)⁽⁵⁰⁾.

Finally, due to its size, reference should be made to a shift in the external assets portfolio of the Banco de Portugal towards the holding of assets denominated in euro, to the detriment of assets denominated in a currency other than the euro and in gold. For purely methodological reasons, this shift, although it did not involve additional placements abroad, led to an accounting reclassification, which implied a transfer of assets of the Banco de Portugal from the item "reserve assets" to "portfolio investment assets".

9. CONCLUSION

The recession of the Portuguese economy, which started in mid-2002, continued into 2003. According to the available estimates, the quarterly year-on-year rate of change in output reached its lowest negative figure in the second quarter of the year, but subsequently started a gradual trend of recovery, with less significant falls in the third and fourth quarters. Like in the two previous recessions - 1984 and 1993 - domestic demand (consumption and investment) made a rather negative contribution to the change in output in 2003, only partially offset by a positive contribution of exports net of imports, partly as a consequence of a contraction of the latter.

Another common characteristic to the two previous recessions was the moderation of final public expenditure (general government consumption

⁽⁴⁶⁾ It should be noted that in the Balance of Payments statistics, financial flows with the European Union are recorded on a cash basis, which is different from the accrual basis adopted in the general government accounts.

⁽⁴⁷⁾ For the latter, see footnote (1).

⁽⁴⁸⁾ According to the indications of the European Central Bank, operations carried out by resident monetary financial institutions within the scope of the TARGET system are registered in the balance of payments as a change in monetary authorities liabilities in the item "other investment ".

⁽⁴⁹⁾ In the second half of 2002, financing obtained by this means had declined significantly, as a result of the deterioration of financing conditions in the international private debt markets.

⁽⁵⁰⁾ Both entities are specialised in the acquisition of credit, placing securities (securitisation units, in the case of funds, and securitised bonds in the case of credit securitisation companies) with investors, whose debt service is ensured by the financial flows of credit acquired.

and GFCF, abstracting from sales of assets) in the year of the recession and in the previous year, contrasting with a clearly excessive growth in the years before. In fact, there has been a cyclical pattern characterised by strong public expenditure growth in periods of economic expansion. This is at the origin of the significant fiscal imbalances that have systematically affected the Portuguese economy in cyclical downturns, when the economy starts to decelerate, normally due to a deterioration of the external environment. Unfortunately, this behaviour of public expenditure implies that fiscal restraint is made in recession periods and that therefore the fiscal policy is systematically an amplifying factor of business cycles, conversely to the stabilisation role that it could play.

The 2003 recession is different from the previous ones chiefly due to the monetary conditions prevailing in each of the periods. In 1984 the annual average inflation rate stood at 29.6 per cent and nominal interest rates were administratively fixed at levels close to or higher than 30 per cent, in conjunction with the setting of administratively fixed credit ceilings on the expansion of bank credit. In 1993 direct credit ceilings had already been abolished, but the nominal interest rates of bank credit stood above 15 per cent, some of them being even higher than 20 per cent, when the annual average inflation rate stood at 6.5 per cent. By contrast, with an annual inflation rate of 3.3 per cent in 2003, the most representative nominal interest rates stood below 5 per cent⁽⁵¹⁾.

After a period of strong growth of credit and indebtedness, there was an endogenous adjustment of the financial situation of households chiefly in 2001 and 2002, while in 2003 there was a virtual interruption of this process, in a context of monetary conditions stimulating the financing of expenditure via additional recourse to indebtedness. By contrast, the adjustment of the financial situation of non-financial companies seems to have been particularly marked in 2003, after less pronounced reductions of their financing needs in the previous years. With respect to the general government, its net borrowing requirement remained high, despite

(51) The interest rate on new operations for house purchase stood below 4 per cent since the middle of the year. Only the interest rates on credit to households for consumption and other purposes stood above 5 per cent, in a range of 6 to 10 per cent. the consolidation efforts pursued. These consolidation efforts were virtually offset by the structural deterioration resulting from the expansion of expenditure with pensions, which continues to grow at a faster pace than nominal GDP. Abstracting from the temporary measures implemented by the Portuguese government to contain the expansion of the general government net borrowing requirement, the public deficit reached 5.3 per cent of GDP and around 4.3-4.4 per cent when cyclically-adjusted, showing the size of the additional fiscal consolidation effort that still has to be pursued.

In this context, fiscal policy should continue to be oriented towards consolidation, and there is no room in the coming years for fiscal stimulus on economic activity. In particular, further tax cuts are unadvisable before the fiscal situation is under control and additional measures should be taken to ensure the sustainability of social security systems.

With respect to the labour market, despite the recent moderation in wages, unit labour costs continued to grow at a higher pace than the euro area average. This positive differential, which has persisted for several years, is not sustainable and needs to be corrected. The sooner its correction starts, the lower the social costs implied, namely in terms of unemployment. Without wage moderation it will be difficult to take full advantage of the external recovery stimulus to the Portuguese economy.

It is essential that Portuguese economic agents are aware that an economic recovery will only be sustainable if it is a response to an external recovery. Due to the excesses of the past, fiscal policy cannot play an active stabilising role. It is neither sustainable to expect that domestic expenditure will continue to be financed, at the same pace of the past years, through the recourse to indebtedness. Further increases in indebtedness will make private agents, and particularly households, more vulnerable to interest rate hikes that will inevitably accompany, to a larger or smaller extent, a recovery of the European economy. Thus, the desirable moderation of indebtedness, in parallel with the also desirable wage moderation mentioned above, will help contain the growth of private domestic demand. Therefore, a scenario in which the Portuguese economy recovers in a gradual and lagged way vis-à-vis the European economy continues to be the most favourable scenario. The time needed for the Portuguese economy to resume sustainable growth, at a higher pace than the euro area average, will depend on the success of several structural reforms, which enable to solve effectively the bottlenecks that currently affect the Portuguese economy and which are in general well identified.

As shown by the Portuguese economic history of the last decades, voluntarism in the management of public finances or unrealism in wage negotiation may stimulate the economy at the very short term, but do not lead to sustainable trends. Indeed, the participation in the euro area has brought important economic benefits to Portugal, namely easier access to credit, but imposes economic rationality rules that cannot be ignored. In the medium term, noncompliance with the rules could imply quite high costs.

Based on information available up to the 22nd of April 2004.

Articles

BANCO DE PORTUGAL CONFERENCE ON "PORTUGUESE ECONOMIC DEVELOPMENT IN THE EUROPEAN UNION": A PERSONAL SUMMARY*

José A. Ferreira Machado**

1. INTRODUCTION

Following a similar initiative in 2002, Banco de Portugal organised a conference this year, held on 11 and 12 March, on the theme "Portuguese Economic Development in the European Union".

This article is a summary of the addresses made in the conference as well as the main guidelines for economic policy that can be drawn from them. This work is highly personal and represents only the opinion of the writer. There is also no claim to do justice to the technical details of the addresses themselves. This article will give more emphasis to those addresses which have a direct bearing on policy.

There were 13 addresses (available on *www. bportugal.pt/events/conferences/IIDEP/default.htm*) and they covered a wide range of themes, as diverse as "rules on public expenditure" and the regulatory framework for professions, minimum state pensions and wage mobility, the lessons to be drawn from the "40 hours law" and the articulation of sector regulators with the country's Competition Authority. Notwithstanding the diversity of themes, it is possible to separate the addresses into two main groups. In one, the major concern relates to control of the level of public expenditure and how quality in expenditure can be assessed, with the latter point understood as the best way to reach the aims at which expenditure was targeted.

In the second group the focus is on how markets function and are regulated, both for labour and for goods and services.

What is the relationship between these two themes and economic development, which was the purpose of the conference? Tiago Cavalcanti ("Business Cycle and Level Accounting: The case of Portugal") showed that the lower level of productivity in Portugal relative to the USA at the end of the 20th century (46 per cent lower) can be put down to two factors: less economic efficiency in the overall use of resources (also known as total factor productivity) and, to a lesser extent, distortions in the labour market. Economic efficiency is usually associated with the diffusion of new technologies, infrastructure quality, market competition, and the legal and institutional systems. Public expenditures provides for goods and services which have a specific value to consumers but use resources which would otherwise be available for consumption and investment. The higher the level of public expenditure, or the less efficient its use, the greater the likelihood that the opportunity cost will be higher than potential benefits. In these circumstances, any increase in expenditure from levels which are already high is often compared to an adverse technological shocks. On the other hand, labour market distortions are linked to income tax and other factors such as protectionist labour laws which make it difficult to match workers with available jobs and hamper the flow of resources between companies and industries.

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

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2. PUBLIC EXPENDITURE: LEVEL AND EFFECTIVENESS

2.1. Expenditure rules

In certain countries in the EU, such as Holland and Sweden, there are formal restrictions on public expenditure (known as "expenditure rules") that are imposed over and above the rules of the Stability and Growth Pact. This situation, which seems to be at the centre of attention at the moment, is somewhat paradoxical, if we look at the macroeconomic policy instruments that have been lost as a result of European monetary union. As António Pinto Barbosa pointed out in the session dedicated to Budget Policy and Social Security, this stemmed fundamentally from an "unromantic" view of governments as economic agents with limited information and their own aims, and these aims are not necessarily consistent with the "general interest" of the community. Democratic regimes have biases in favour of inflation and public expenditure and frequently use budget variables with electoral purposes in mind. The path of the Portuguese budget through the 90s is detailed in the address given by Álvaro Pina ("Fiscal Policy in Portugal: Discipline, Cyclicality and the Scope for Expenditure Rules") and it gives a very clear illustration of these two factors. Portugal recorded the biggest rise in public expenditure in the EU (3.4 pp of GDP) especially marked in primary current expenditure, which grew twice as fast in real terms as GDP. On top of this, expenditure was strikingly pro-cyclical. In the light of this evidence, one should be sceptic of arguments that oppose to "rules" (or the Pact itself) in the name of economic stabilisation. The work of Linda and Francisco Veiga ("Political-Economic Cycles in Portuguese Municipalities") is highly eloquent on this point. It demonstrates how municipal expenditure, above all in terms of investment, (and above all in the item "Other buildings and construction"), rises significantly in an election year and occasionally in the year before. Municipal councils manoeuvre economic policy to illustrate their competence at election time, thus boosting their chances of reelection.

Expenditure rules allow budgetary discipline but preserve room for automatic stabilisers to operate, since these function mainly through tax revenue. (Álvaro Pina's analysis of seven European countries shows that in Portugal tax revenue has the strongest pro-cyclical correlation.) The kind of rule being looked at here is something along the following lines: "For a horizon of T years, public expenditure (D) cannot rise above x per cent per year". This statement, however, raises a considerable number of practical problems regarding the exact definition of T, D and x.

Pina argues that the rule should have the horizon of every government mandate, with each government legitimately empowered to specify new values for the framework. António Pinto Barbosa however, in his comment on the address, argued against this, on the grounds that there should be a "constitutional" view, independent of the political calendar. As for the concept of expenditure, Pina maintains that *D* should be limited to the primary current expenditure of the state sub-sector. Unemployment benefits and public investment should be excluded. It may well be that leaving out debt service payments and subsidies causes no problem, but the same cannot be said for leaving out local and regional authorities and public investment (and here the conclusions of Veiga and Veiga, op. cit. should be borne in mind). While genuine expenditure in terms of capital could well pay for itself, it is in practice very difficult to calculate the return on each slice of the "expenditure cake" and thus pick out what is genuinely capital as opposed to what is current expenditure. If therefore we leave public investment out of the expenditure frame defined by the rule, we are opening Pandora's box: the accounting creativity stemming from this would strip out the idea of discipline that the rule seeks to impose. As for the limit to expenditure growth (x), Pina proposes that growth be set in real terms (as in Holland) and not in nominal terms (as in Sweden). The point of reference should be potential GDP growth (understood as the average of the past decade, if problems involving measurement are to be avoided). This real limit would be converted annually into a nominal figure through application of the GDP deflator, laid down or validated by an independent commission. Arguments here are again divided but it seems clear that a nominal limit is more transparent and more stringent, albeit more difficult to define with all due rigour.

Independent of the specific details contained in a putative rule, what seems to be of real importance is to fix multi-year expenditure objectives. It is also of primordial importance to provide the governing and supervisory institutions with the quality and independence necessary for effective control over budgetary matters. A fundamental aspect of this discipline is also a systematic assessment of public programmes and policies.

2.2. Assessment of public service policies

The efficiency of public expenditure is an issue that can be seen from different viewpoints. We can, for example, take a raft of areas where the state intervenes and where specific policies already exist. We can then study how state intervention can be made with the least possible waste in resources. What we are looking at here is fundamentally an analysis of the frontiers of efficiency. Another view consists in assessing to what point the specific intervention yields the promised social benefits that are a priori its justification. And from this angle, we are also looking at who gains and who loses from the intervention. The two perspectives are of course complementary and are part of an overall cost/benefit appraisal of public sector programmes and policies.

There is at our disposal over 30 years of rigorous and scientifically based empirical assessment of programmes and policies. The large financial burden that many of them require justifies the widespread interest in the topic. The address of Mónica Dias ("The Empirical Evaluation of Social Programmes") focused on the methods available to evaluate public policies. The work of Gouveia and Farinha and Varejão are (methodologically varied) examples covering the assessment of specific interventions such as the minimum state pension and the "40 hours law".

Any method of evaluation requires the recreation of the (counterfactual) behaviour in an alternative economic scenario following "non participation in the programme" or if the programme does not in fact exist. In many areas, such as psychology or medicine, there are routine scientific assessments the causal effects of specific actions. Before any medicine is approved for general use, it must be subject to laboratory experiments in which patients are selected on a random basis and are given the drug, while others in a control group are given an inoffensive substance known as a placebo.

This kind of experimentation is rare in economics and other social sciences. Even if it were possible, it would not provide an assessment of programmes and policies before they are implemented. (Dias has defined this as a "structural approach" requiring the use of economic theories to build "laboratories" which allow for an evaluation of the reaction of the agents and the effects of the interventions.) But even without experimental information, it is possible to carry out assessments of programmes and policies that have in fact been implemented. The counterfactual behaviour mentioned above can be supplied by external and exogenous circumstances and this leads to what could be considered a controlled experiment (natural or quasi-experiments). We can see common examples of this in the regional variations that occur when certain programmes are implemented. Sometimes it is the passage of time ("before and after the intervention") that allows for control groups to be set up as if a controlled experiment was being undertaken. José Varejão's work, ("Reduction in the Working Week and Employment: Lessons of the 40 Hours Law") provides an illustration of a "natural experiment" since the measure in question, the law of 40 hours, can be consider an unforeseen factor; the control group will be the establishments not covered by the obligation to cut the number of hours; and the experimental group is made up of the comparable establishments which fall within the scope of the new law.

Miguel Gouveia and Carlos Farinha ("What Point Minimum Pensions?") gave an address that covers a highly relevant programme. When a pension provided according to the existing social security laws is below the minimum requirement, it is topped up to reach the minimum figure. A big number of pensioners benefit from this topping up, which is financed through the country's state budget and gives rise to considerable public expenditure. A number of governments have adopted policies leading to gradual increases in minimum pensions up to the minimum wage as part of the fight against poverty. Gouveia and Farinha show that minimum pensions are an expensive and inefficient way of reaching this objective. Only 31.25 per cent of people in a family household receiving minimum pensions are in fact below the poverty line (that is, they get an income below 60 per cent of the average income for an equivalent adult in active employment). This situation stems from the fact that pensions are not given on a "means-tested" basis. So an increase of pensions from 60 to 70 per cent of the minimum wage can be expected to lead to very low results in terms of poverty, since 64 per cent of this rise will end up being spent on people who are already above the poverty line.

The fundamental message is that the minimum wage is a poor reference point for social policy and there should be an effective means-testing procedure put in its place. The authors provided a simulation with an alternative programme, where the real situation of beneficiaries was more rigorously controlled. The result was that with half of the outlay it would be possible to achieve more significant advances against poverty. This work therefore gives us a very clear idea of something that is often mentioned but not always identified: wastage in the expenditure of public funds.

Interventions by the government do not always result in public expenditure, but they always have an effect on the way resources are allocated. "Work-share" programmes (reductions in the maximum limit that a working week can last) have been popular in Europe since the end of the 70s, partly in response to high levels of unemployment. The catchphrase has been "working less so that everyone can work". Such measures, however, have little solid basis in economic theory: there is an unequivocal rise in labour costs and this is followed by a fall in the total number of hours worked. The effects on employment are, however, ambiguous and the matter comes down to an empirical issue.

José Varejão's address ("Reduction in the Working Week and Employment: Lessons of the 40 Hours Law") looked at the impact of the law that brought in a standard 40-hour week in 1996. The variables analysed were number of hours worked, overtime, wages and employment. The study shows that the measure had the predicted effect of reducing the number of hours worked per establishment, an increase in overtime and an increase in the hourly wage rate. As for employment, there is a wide-ranging picture: in those companies where the influence of the measure is more heavily felt or where there is a big proportion of workers on the minimum wage, employment clearly falls. In aggregate terms the effect on employment is slight. As the author points out, at a time when Europe is moving towards a 35-hour week, and even if the motives are not strictly economic, it is important to bear in mind the real costs of such a shift.

Pedro Martins and Paulo Guimarães also gave addresses that have potential relevance for policymaking, in spite of the fact that neither of them refers to any specific public initiative.

Direct Foreign Investment is usually seen as having a positive impact on total productivity and thus on potential for growth in economies. Governments compete for it, often at the cost of mean huge public investments. It is therefore important to assess the real benefits provided by direct foreign investment. Pedro Martins ("Wage Differentials and Wage Spillovers of Foreign Firms: Evidence from Different Estimators") assesses this through its effects on salaries. An argument for this perspective could be the sharing of the gains from greater productivity of foreign companies.

Foreign companies pay on average 32 per cent more than domestic companies. However, controlling for features such as the educational level of the work force, the sector and size, those pay differences vanish. Does this mean that direct foreign investment has no impact? Not necessarily. In the first place, wages may not be the best indicator for assessing these benefits. Moreover, the characteristics mentioned above that "explain" the wage differential, are more frequently associated with foreign companies. The advantage of being foreign may therefore not derive from invisible factors associated with "residence", but rather to the facts that these companies are bigger and employ a more highly-educated work force.

Political decision makers are often concerned with the asymmetries in regional distribution of economic activities and are receptive to programmes that involve relocation of these activities. It is therefore of considerable interest to know which of these initiatives are more likely to be successful and which are the economic activities which are most likely to respond to such initiatives. These are the questions that are answered in the work of Paulo Guimarães and Octávio Figueiredo ("Location and Localisation of Portuguese Manufacturing Industries").

This study shows that there is only a small number of sectors which are highly clustered (above what would be expected from the mere endowment of resources in a region or from a random allocation). In some of these sectors, involving traditional industries, this clustering stems from external factors associated with historical specialisation. Some technologically advanced industries (for example, radio and television, cars or pharmaceuticals) are also found in clusters, suggesting the existence of "knowledge externalities". For these industries, public incentives for relocation will only have a modicum of success, or else the success will demand greater spending. In terms of areas of intervention, increased accessibility to the Porto-Lisbon coastal corridor is the most likely measure to succeed in spreading the economic activity throughout the country.

3. MARKETS

3.1. The labour market

The weak dynamics of labour flows both between companies and between employment and unemployment in Portugal brings with it high costs in terms of efficiency (vide Blanchard and Portugal, 2002). The existence of flexible markets is fundamental for workers and companies to find the matchings that make employment more productive. Moreover, in a context where the needs for employment oscillate tremendously, both in localisation (company, industry or region), and in skills, it is crucial to have a labour market which functions efficiently.

The adjustment costs which characterise the Portuguese labour market imply among other things longer average unemployment spells and a higher number of companies which close (as an alternative to reducing manpower). Anabela Carneiro ("The Economic Consequences of Worker Displacement in Portugal") calculates the loss in wages among individuals who spend periods out of work following closures. This provides another measure of the costs associated to unemployment. The loss of wages is substantial and has an effect up to 4 years after the episode concerned: wages are up to 11 per cent less than if the worker had not lost his or her job. A significant part of this loss derives from the loss of seniority in the company, which suggests the destruction of specific human capital. It is interesting to note that this cut in wages begins a year before the job loss. Faced with the risk of closure, workers are prepared to make concessions on wages. This fact in itself is symptomatic of the lack of fluidity in the market and the anticipation of a long period out of work. There are measures that could be taken to rein in these adjustment costs: an extension to the period for notification of redundancy and other measures that increase the possibility of finding new employment (help with job-searching and professional training).

Curiously enough, in spite of the rigidity of the institutions in the labour market, there do seem that some elements of flexibility spring here and there, providing ways of responding to the needs of employers and workers. From this angle, increased mobility becomes especially relevant.

Ana Rute Cardoso ("Wage Mobility in Portugal") compared wage mobility in Portugal and the United Kingdom, two economies with different levels of flexibility. It would be expected that the more restrictive framework in Portugal would lead to less wage mobility, i.e. fewer possibilities to change the relative position in the wage distribution. In other words, less labour flows between companies could stultify salary scales. This in fact does not happen, since Portugal and the United Kingdom are not very different in terms of mobility. There is considerable evidence that wage flexibility is high in Portugal, in spite of the lack of mobility (or perhaps because of it). For example, it is well known that average wages are sensitive to economic cycles (OECD, 1992) and that employers manage to adapt salaries that are based on collective contracts to the specific conditions of the company and the workers (Cardoso (2000) and Cardoso and Portugal (2003)). The mobility visible now reinforces this conclusion, albeit from a different angle.

Francisco Lima ("How much Mobility? Careers, Promotions and Wages") looks at other aspects of mobility, specifically workers transitions between firms and the gains thus made. A significant number of jobs are stable and long-term (40 per cent of workers over 35 have been with their company for over 10 years) but there is also a high proportion of short term links, where on average 39 per cent terminate in under a year (either on the initiative of the worker or the employer). This situation relates mainly to young workers and is very often pejoratively referred to as "precarious". In practice, however, leaving a company tends to increase wages. This is all the more so, the younger and better educated the worker, and for transitions which occur to larger companies. From this point of view, labour mobility may take the place of careers inside an organisation, and they illustrate the gains resulting from a good match between employer and employee.

3.2. Competition

There is a consensus among economists these days on the importance of institutions for economic growth (in this context, see Tavares, 2000). Which of these are important and the reasons for their importance are more open to debate. An exception can clearly be made in the existence of independent regulators who stimulate and defend competition in markets. The two addresses presented to the conference on this theme do not approach the issue in a general and abstract way. They look at specific institutions in Portugal — the Competition Authority and the Professional Associations — and they look at which structure best stimulates competition.

Pedro Barros and Steffen Hoernig ("Sectoral Regulators and the Competition Authority: Which Relationship is best?") come to the conclusion that the overlapping of jurisdiction between entities concerned with specific sectors and the Competition Authority (which covers all sectors) may be beneficial for encouraging social well being, but there should be limits to the cooperation between them. In particular, there should not be a process of joint decision-making that means that a decision is only reached if both authorities are in agreement.

Nuno Garoupa ("Regulation of Professions in Portugal: A Case Study in Rent-Seeking") looks at how good is the regulation by two entities that are in practice the regulators of the sector: the Lawyers and the Physicians Associations. The regulation of professional activities could be based on objectives that are "in the public interest" (as a result of the asymmetry of information, for example). Many of the norms that act as regulatory devices are, however, merely of private interest, that is the wish to increase the income of established professionals. In the first category, there are, for example, the guarantees of adequate specialist training; in the second there are the restrictions on fees or the disciplinary powers that are exclusive to the Associations. The author has built an index of the quality of regulation and found that in the case of the medical profession, Portugal is the EU country where norms motivated by private interest are the most predominant. In the case of lawyers, although belonging to the group with lower regulatory quality, Portugal is not substantially different from Germany or France in this regard.

The study proposes various reforms. In terms of eliminating "restrictions to entry", I would point out the opening of the Portuguese legal market to international groups or, for the medical profession, a reduction in the influence of the Association in the process of academic training and the stimulation of competition between the medical faculties so as to give a significant boost to the number of doctors. Finally, the author proposes that the Associations should be within the jurisdiction of the Competition Authority, where restrictive practices could be detected.

4. CONCLUSIONS

In the 1 Banco de Portugal conference on economic growth in 2002, there were general recommendations regarding policies, focusing on the bases for economic growth, such as, for example, the need for investment in infrastructures, improving the education system, making the labour market more flexible and reforming the legal system and practices.

This, the 2 conference, looked at more specific aspects of growth. In terms of the policy conclusions which can be drawn, they can be summarised as two main ideas:

1. The actions of governments must not be viewed naively. Their intervention is not always motivated by "the idea of common good", or necessarily generates net positive benefits. This is true in macro economic policy and it is enough to look at the evidence presented to the conference on the way public expenditure evolution amplifies the effects of cyclical fluctuations in the economy or on "electoral opportunism" in the investments of local authorities. This is also true for specific programmes and policies: the minimum pensions scheme was shown at the conference to be an ineffective instrument in the fight against poverty. There was also the evidence relating to the cost in working hours and consequently in production stemming from the 40 hours law approved in 1996.

Two consequences flow from this situation: on the one hand, there is the need for formal rules on public expenditure that impose intertemporal discipline on governments. Moreover, there is a need for regular assessment of programmes and policies, both *ex-ante* and *ex-post*, so as to provide checks on the promises of social benefits which give a reason for their existence and identify who gains and who loses from the intervention.

2. Flexible market functioning conducive to competition is fundamental for an efficient allocation of resources. The existence of restrictions to entry into industries or professions is a common form of ensuring economic rents to those who are already established, at the cost of social well being. These restrictions are frequently presented as being in defence of "the public interest". As with our comment on the actions of governments, we should not be naive about this. For these reasons, the activity of regulatory structures (specifically the Competition Authority), with a scope possibly extended to the professional associations, can make an important contribution to economic growth.

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LABOUR MARKET HETEROGENEITY: DISTINGUISHING BETWEEN UNEMPLOYMENT AND INACTIVITY*

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1. INTRODUCTION

In economic analysis, the unemployment rate and the participation rate are two of the most frequently used indicators. Defining the concept of unemployment is therefore an important issue, both for research in economics and for the definition of public policies. Most countries distinguish between the unemployed and the inactive by using a criterion relating to employment search. This definition, however, does not make it possible to highlight the differences existing within each group, above all among those classified as out of the labour force. The purpose of this article is to describe this heterogeneity and its implications in the dynamics of the active population. An attempt will be made, therefore, to give an answer to the following question: is it possible to classify the non-employed in a way that makes it possible to create homogeneous groups in terms of their degree of labour market attachment?

Seen from the angle of how the labour market works, it is important to distinguish between those who are looking for work (the unemployed) and those not looking (the inactive). This is particularly important for analyses based on the flows between the different labour market states (normally between employment, unemployment and inactivity). From this point of view, the idea of looking for a job is very often replaced by the notion of productive "waiting" for new work (see, for example Blanchard and Diamond, 1992). The relevant distinction ceases to be based on the actions that the unemployed undertake in their search for work, but rather on their "productivity" during non-employment periods and assessed by the rate of transition to work.

This view of the labour market and the way it works is sustained by the importance of transition between inactivity and employment. In Portugal, for example, this represents between 1 and 2 percent of the active population for each three-month period. Given this, we could well think that the behaviour of some individuals who are not looking for work but who are prepared to work, should be considered close enough to the concept of "activity" such that they could even be included in the group of the unemployed⁽¹⁾.

If the concept of unemployed is based on the search-for-work criterion, we are assuming that the effort to find work reveals a close connection between individuals and the labour market⁽²⁾. On the other hand, those who are not looking for work, even though they might want to work, are

^{*} The views expressed in this article are those of the authors and not necessarily those of the Banco de Portugal.

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⁽¹⁾ The recent debate on the inclusion of the "discouraged" (those who are not looking for work because they think it is difficult to find work) in the concept of the unemployed (OECD, 1987 and 1995) is an example of this approach.

⁽²⁾ The definition of the International Labour Organisation and Eurostat distinguishes between "active" and "passive" attitudes in the search for work. An example of the first is "contact with employers" and an example of the second is "looking through the job ads."

considered not to be showing an attachment that is sufficiently strong with the "activity" status to justify their classification as unemployed.

The present study uses this definition of the active population as a starting point to look at the homogeneity of the group of individuals classified as inactive, namely to analyse a group that is "marginally attached", consisting of those who would like to work but who are not looking for $work^{(3)}$. In most countries this group is small in terms of the whole active population, but usually it represents more than 30 per cent of the unemployed. In the work of Jones and Riddle (1999) and (2000), the marginally attached account for between 25 per cent and 30 per cent of the unemployed in Canada, but they reach two-thirds in the USA. Portugal stands midway between these figures. Between 1992 and 2003, the marginally attached represented, on average, 30 per cent of male unemployed and 50 per cent of female. However, it is the dynamics of the transition to work that is the most important factor in the context of this article. Our aim therefore is to characterise the level of homogeneity in the different states of the labour market through a comparison of the transition rates for individuals belonging to each state.

This analysis provides a contribution towards the definition of unemployment but it also leads to a better understanding of the cyclical behaviour in particular of Portuguese labour market aggregates. Above all, it helps us to understand the procyclical behaviour of the participation rate and its contribution to the persistence of unemployment through the cycle. The transitions to inactivity imply that in a recession the average unemployment rate increases more slowly than expected compared with the way employment is moving. In the same way, during periods of expansion, unemployment tends not to fall as quickly as expected, given the behaviour of those who are "inactive" and become newly unemployed during these periods.

Methodologically, this work is a development of the approach used by Jones and Riddel (2000) and (2002), in terms of attachment to the labour market. Their work revealed the wide heterogeneity that characterises those who are not in work in Canada and the United States. What this means is that there are wide differences between the unemployed, the inactive and some sub-categories of both when it comes to the actual situation of future transitions between states of the labour market, specifically in the movements towards finding employment.

The analytical model is tested for Portugal using data of the Inquérito ao Emprego (IE) for the period between the second quarter of 1992 and the fourth quarter of 2003. This approach reveals, among other things, the differences in the way the inactive behave in terms of attachment to the labour market. Above all, the "marginally attached" behave very differently from the rest of the "inactive" group and seem in many cases equivalent to the unemployed. These results justify the separation of the state of marginally attachment, given the higher probability of finding work in the future of individuals in this state. Indeed, in the period under review, the rate of transition to employment in this group is similar to the unemployed and clearly higher than the remainder of the inactive group.

Given this evidence, an argument could be put forward for using three aggregates for those out of work: the unemployed, the marginally attached and the inactive. One advantage of this approach would be to make it easier to identify the level of "competition" between those who are not employed when it comes to filling job vacancies. This is not satisfactorily reflected in the unemployment rate. The transition rates of the marginally attached will be enough to justify the above classification, as a group of "non-employed" who compete "productively" for the employment offers (necessarily limited) available in the economy.

The lower the rate of job offers in the economy the grater will be the importance of these results for an understanding of the matching process in the labour market. In fact, the relevance of the criterion of active search for a job should be greater in economies with lower rates of job offers (as is the case in Portugal). In a situation where there is job rationing, the differences in the transition rates between unemployed and inactive individuals are expected to be clearer. However, this behaviour may not surface if there are negative self-selection

⁽³⁾ In the *Inquérito ao Emprego* (IE), the Portuguese labour market survey, as in most of the surveys in OECD countries, "readiness to work" and "in search of work" are collated in relation to the period when the survey is being undertaken.

processes for the state of unemployment. This self-selection may be associated with a deterioration in the overall unemployment situation, which becomes visible either in terms of employability (where the active search for a job is justified by systematic difficulties in finding work) or through inefficiency in the search for work. The latter argument has been extensively used by public authorities to justify the implementation of a wide range of "search support" programmes in European Union countries.

2. DATA

The source of information for our empirical work are the individual records (duly rendered anonymous) in the *IE* relating to the period between the second quarter of 1992 and the fourth quarter of 2003. This covered individuals between the ages of 16 and 64.

The survey is carried out every quarter, with a rotation scheme in the procedure (one-sixth for each quarter). It respects conceptual norms, methodology and quality common to most countries in Europe.

The sample for each quarter is made up of around 40,000 individuals. Generally speaking, there are six records for each individual. The fact that information is available over a long period means that for most individuals it is possible to observe the transition between states for five consecutive quarters. This "short panel" characteristic of the survey means that it is possible to estimate duration models for unemployment and inactivity that will be used to test equality in the rates of transition between the unemployed, the marginally attached and the other inactive individuals.

It is important to make a remark on the data that is used. The estimation of duration models requires the computation of an approximate figure for the duration of inactivity, and this is not supplied directly through the survey. In the case of left-censured observations⁽⁴⁾, the duration of inactivity is deemed to be identical to the duration of the period of non-employment since the end of the previous employment spell, if applicable, or to the estimated period of time since the individual left school (and this depends on the individual' schooling), in the case of individuals who have never worked. In those observations, which are not left-censured, the duration of inactivity is computed using the information over the 6 successive quarters in which each individual remains on file.

3. METHODOLOGY

The methodology used takes advantage of the longitudinal information, and tests whether two (or more) states of non-employment are identical in behavioural terms. It was originally formulated by Flinn and Heckman (1982) and (1983). The idea underlying the Flinn and Heckman test is very simple: with accurate control of the characteristics of the individual, if the transition rate from state x to state z is identical to the transition rate from state y to state z (for all the state of destiny z) then the state of origin (x or y) is irrelevant in terms of determining the transition rate of individuals for (all of) z.

Using a small sample of qualified young North American males (taken from the National Longitudinal Survey of Young Men), Flinn and Heckman rejected the hypothesis that the behaviour of the unemployed and the inactive was identical. Similar results, also for the United States, were obtained by Tano (1991) and Gönül (1992) for wider groups (young people and adults of both genders in one case and young people of both genders in the other).

This application uses a model with four states: employment (E), unemployment (U), and inactivity is divided into two states: marginal attached (M) and other inactivity (N). The marginally attached are distinguished from the other inactive because of their availability to work and from the unemployed because they do not search for work. In this model, the states of unemployment and marginal attachment will be equivalent if:

• The transition rate from *U* to *E* is the same as the transition rate from *M* to *E*.

$$h_{UE} = h_{ME}$$

• The transition rate from *U* to *N* is the same as the transition rate from *M* to *N*.

⁽⁴⁾ Records relating to individuals who are inactive the first time they are observed.

$$h_{UN} = h_{MN}$$

These equalities test whether unemployment (U) and marginal attachment (M) can be considered identical behavioural states (Hypothesis A). In this case, the activity of job-seeking — carried out by the unemployed but not by the marginally attached — is not more productive than the availability to work (common to both states). In other words, the distinction between unemployment and non-participation can be made solely on the basis of the availability to work.

The distinction between marginal attachment and inactivity will be irrelevant if:

• The transition rate from *M* to *E* is the same as the transition rate from *N* to *E*.

$$h_{ME} = h_{NE}$$

• The transition rate from *M* to *U* is the same as the transition rate from *N* to *U*.

$$h_{MU} = h_{NU}$$

These equalities test whether the marginal attachment (*M*) and other inactivity (*N*) can be deemed to be identical behavioural states (Hypothesis B). This situation corresponds to the usual classification of individuals in terms of employed, unemployed and inactive (*E*, *U* or *O* where O = M + N). Here the availability for work does not incorporate any additional information *vis-à-vis* attachment to the labour market.

Of course, if all the distinctions make sense, a model with four states (E, U, M and N) would be a better description of the labour market than the usual one that uses three states (E, U, and O).

Even when these conditions of equivalency between states are put aside, it could still make sense to separate the states in terms of their attachment to "activity". This is what happens if, for example, $h_{UE} > h_{ME} > h_{NE}$; $h_{UU} > h_{MU} > h_{NU}$ and $h_{UN} < h_{MN} < h_{NU}$. In this case, M is an intermediate state, with a level of attachment which is greater than that of the other inactive (N) although less than the unemployed (U).

4. ECONOMETRIC MODEL

The two hypotheses outlined above were tested using two kinds of analysis. Firstly, we compute empirical transition rates between the various states of the labour market; and secondly, we estimate an econometric model in which we condition these transitions on observed individual characteristics and the length of the experiences among the non-employed.

In the second model, a likelihood ratio test was applied. This compares the maximum values of the logarithm of the likelihood function under the null hypothesis of states equivalence $L(H_o)$, and under the alternative hypothesis of the states being differentiated $L(H_a)$. This test is based on the following statistic (Griffiths *et al.* 1993):

$$\lambda_{LR} = 2 \left[L(H_a) - L(H_o) \right] \sim \chi^2_{(R)}$$
(1)

where *R* is the number of restrictions under the null hypothesis.

For the two hypotheses we are looking at (A and B), we estimate (by gender and year) two variants of a duration model: the first is associated to the null hypothesis (the restricted model) where the regression coefficients, referring to the variables among individuals belonging to the two states of origin in the test⁽⁵⁾, were forced to equality; and a second variant, relating to the alternative hypothesis (the non-restricted model) in which the regression coefficients may vary freely between the two origins. Then the respective logarithm values of the likelihood function were used to calculate statistic (1), checking the behavioural identity of the two origins through the comparison of this statistic with the critical values of the χ^2 distribution. The number of degrees of freedom was identical to the number of coefficients, which, in the restricted model, did not vary freely vis-à-vis the non-restricted model.

5. EMPIRICAL RESULTS

Table 1 shows the average transition rates in periods of economic recession and expansion; Charts 1 and 2 show the exit rates into employ-

⁽⁵⁾ *U* and *M* in Hypothesis A; *M* and *N* in Hypothesis B.

Table 1

AVERAGE TRANSITION RATES IN PERIODS OF RECESSION AND EXPANSION

		Per	riod							
	1992-95	1996-97	1998-00	2001-03						
		Ma	ales							
Transition to employme	nt									
<i>h</i> _{UE}	16.14	16.96	22.13	23.27						
h _{ME}	12.90	14.11	16.48	19.78						
h_{NE}	2.76	2.59	1.34	1.43						
Transition to unemployment										
h_{ini}	79.95	79.34	58.68	59.57						
h _{MII}	6.08	6.01	22.74	21.20						
h _{NU}	1.01	0.88	0.48	0.66						
Transition to "other inactivity"										
<i>h</i> _{IIN}	2.37	2.23	12.41	11.09						
h _{MN}	3.39	3.34	25.28	24.62						
$h_{_{NN}}$	95.99	96.29	97.88	97.60						
		Ferr	nales							
Transition to employme	nt									
1	12 20	10.00	10.07	21.25						
и _{UE}	8 17	8 20	13.20	14 30						
$h_{\rm ME}$	1.37	1.39	1.08	14.39						
Transition to unemploy	ment									
1.	01.00	00 11	EE 22							
n _{uu}	61.23 E 07	02.11	16.09	37.77 10 E6						
n _{MU}	0.53	4.56	0.50	0.68						
	0.00	0.00	0.00	0.00						
Transition to "other inac	ctivity"									
h_{UN}	2.50	2.36	15.13	13.17						
h_{MN}	3.25	3.31	27.23	25.27						
$h_{_{NN}}$	97.80	97.82	98.07	97.72						

Source: Inquérito ao Emprego (IE).

ment among the various sub-categories of the population, for males and females respectively^{(6),(7)}.

Some features of these results are worth a special comment. Firstly, in spite of the fact that the transition rates are relatively stable over time, there is a certain tendency for increase in the transitions between *M* and *E*. The stability of the transitions does not completely eliminate their cyclical behaviour, shown, for example, in the fall in transitions to employment in 1995 and 2003. These are the two years in the period covered by the survey when the output gap reaches its minimum values in each of the two economic recession phases.

In addition, the transition rates order remains the same for each of the periods considered $h_{UE} > h_{ME} > h_{NE}$; $h_{UU} > h_{MU} > h_{NU}$ and $h_{UN} < h_{MN} < h_{NN}$. It should be noted that the difference between h_{ME} and h_{NE} is greater than the difference between h_{UE} and h_{ME} for both genders and in every year analysed. These results were obtained without conditioning the transitions in the characteristics of the individuals and they suggest that the state of marginal attached is closer to the state of unemployed than to the state of other inactive.

Finally, the difference between the rates of transition for employment (from M and U) is subject to some cyclical fluctuation (see Charts 1 and 2). Generally speaking, the difference is greater in periods of recession than in expansion. This must stem from both the composition of the two groups (which is reflected in the cyclical behaviour of unemployment) and also from the normal cut back in the number of job vacancies in a recession. This in its turn makes the criterion of looking for work more relevant in determining transition rates.

Overall, these results indicate that category O (M + N) is very heterogeneous. This goes above all for those not looking for work in the period covered by the survey, but who are available to work. Their behaviour is clearly different from those who do not want to work and are not looking for employment.

We then studied to what point the results of the unconditional analysis are affected by consider-

(7) The transition rates in Table 1 were calculated as follows:

$$h_{ij} = \frac{d_{ij}}{r_i}$$

where $d_{ij} \equiv$ Number of individuals in state *i* in the initial period who transfer to state *j* in the subsequent period; i, j = E, U, M, N (with the normal interpretation of the notation).

⁽⁶⁾ The employment survey questionnaire changed in 1998 and this led to a significant change in the intensity of some of the estimated flows (particularly among the non-employed states). The graphs indicate this discontinuity with a separation in the curves for the 1997-1998 point. The analysis in Table 1 takes the change in the economic cycle from the farthest points of the recession (1995) to the top of the boom (2000). Given the break in the survey's questionnaire, the boom period is divided at 1998.



ation of the observable characteristics of the individuals. The previous analysis allows us to answer the question as to whether the existing measurement of unemployment is appropriate. But to answer the more general question as to the appropriateness of this measurement for any group of individuals, it is important to set out the conditions for the results of observable characteristics among the sample used. The results of the equivalence tests on states *U*, *M* and *N* are presented in Table 2⁽⁸⁾.

This Table shows the p-values⁽⁹⁾ associated with each of the likelihood ratio tests of equation (1). By and large, these results confirm what a simple view of Charts 1 and 2 might suggest.

The equivalence between the states of marginally attached and other inactivity is completely rejected, both for males and for females. In every year of the sample under review, the availability for work is important to measure the degree of at-



tachment with the active population and conditions the observed transitions in a significant way. From this point of view, inactivity can be seen as a heterogeneous state.

The tests undertaken with the estimated duration model for the equivalence between U and Mlead to a clear rejection of the null hypothesis in most of the years for females. For males the null hypothesis is accepted in 1995, 1997, 1998 and 2003 (with a level of significance of 10 per cent). The results for males point to a proximity of the U and Mstates that is not evident in the female case, in which the two states seem to have more clearly separate dynamics.

Overall, these results reveal that being marginally attached is a distinctive state in the labour market. It would therefore be desirable its measurement, publication and analysis to be carried out on a more regular basis. In this respect, the study of flows between *M* and the other states would be particularly important.

These results are similar to those obtained in other countries that can serve as a comparison, specifically the USA and Canada. The studies of Jones and Riddel show a greater attachment between unemployment and marginal inactivity in Canada than in the USA, where those who are marginally inactive are distinct from the other inactive. It is not possible, however, to accept the hypothesis of equivalence with the unemployed. In

⁽⁸⁾ The variables used in the restricted model relate to the personal characteristics of the individuals: age, marital status (1 for yes, 0 for no), head of household (1/0), secondary education (as a maximum level of qualifications: 1/0), higher education (idem), of foreign nationality (1/0), in receipt of benefit (subsidy) for unemployment (1/0), duration of last job, end of contract as the reason for losing the last job (1/0), sacked or suspended from the last job (1/0) and the region of residence.

⁽⁹⁾ The p-value is a statistic from the test undertaken and it gives us an indication of the probability of the null hypothesis being rejected

Table 2

RATIO TESTS FOR HYPOTHESES A (*U=M*?) E B (*M=N*?) (1992-2003)

Gender	Gender Hypotheses A (<i>U=M</i> ?)					Hypothese	es B (<i>M</i> = <i>N</i> ?)	
year	Number of observations	χ²	Degrees of freedom	P-value	Number of observations	χ²	Degrees of freedom	P-value
Males								
1992	603	89.12	34	0.00 ***	1.999	52.60	34	0.02 **
1993	996	56.06	34	0.01 **	2.781	136.80	34	0.00 ***
1994	1.211	69.24	34	0.00***	3.069	139.10	34	0.00 ***
1995	1.128	44.15	34	0.11	2.664	109.77	34	0.00 ***
1996	1.145	84.54	34	0.00 ***	2.851	141.00	34	0.00 ***
1997	849	43.02	34	0.14	2.106	88.25	34	0.00 ***
1998	1.768	45.02	34	0.10 *	6.442	150.54	34	0.00 ***
1999	1.438	58.30	34	0.01 **	5.95	146.34	34	0.00 ***
2000	1.213	62.34	34	0.00 ***	5.839	168.37	34	0.00 ***
2001	1.29	51.67	34	0.03 **	5.815	113.70	34	0.00 ***
2002	1.566	53.00	34	0.02 **	5.607	123.86	34	0.00 ***
2003	1.579	39.81	34	0.23	5.165	114.15	34	0.00 ***
Females								
1992	913	108.14	34	0.00 ***	4.277	153.86	34	0.00 ***
1993	1.332	108.03	34	0.00 ***	5.704	192.24	34	0.00 ***
1994	1.524	106.73	34	0.00 ***	5.875	164.21	34	0.00 ***
1995	1.303	81.53	34	0.00 ***	5.054	176.36	34	0.00 ***
1996	1.325	82.44	34	0.00 ***	5.023	164.60	34	0.00 ***
1997	1.056	76.56	34	0.00 ***	3.854	149.94	34	0.00 ***
1998	2.603	38.62	34	0.27	12.35	174.14	34	0.00 ***
1999	2.044	56.63	34	0.01 ***	11.128	140.35	34	0.00 ***
2000	1.777	52.79	34	0.02 **	10.946	192.43	34	0.00 ***
2001	1.871	56.38	34	0.01 ***	10.66	156.24	34	0.00 ***
2002	2.199	72.52	34	0.00 ***	10.092	160.50	34	0.00 ***
2003	1.952	49.91	34	0.07 *	9.015	125.97	34	0.00 ***

Source: Inquérito ao Emprego (IE).

Note: ***, ** and * denote de rejection of the null hypothesis at the 1%, 5% and 10%, levels of significance, respectively.

Canada, this hypothesis can be accepted for some years, but less frequently than for Portugal.

6. FINAL REMARKS

The aim of this work is to question whether it is valid to separate the unemployed from the inactive for statistical purposes. The empirical approach of the present analysis is based on the detailed study of how certain subcategories of the inactive behave, with special reference to the marginally attached, that is, those out of the labour force who are not looking for employment but are prepared to work and available if it should come. Above all, the attempt was made to test whether the state of marginally attached (*M*) is identical to the state of unemployed (*U*), from the behavioural point of view and to the other form of inactivity (not marginal: *N*). To do this, reference was made to the longitudinal data of the Employment Survey covering 1992 to 2003. This took in more than one complete economic cycle.

One of the main results of the analysis is the rejection of the hypothesis of equivalence between the marginally attached and other inactive individuals. The statistical tests lead to the unequivocal rejection of equality between M and N (as between U and N) in all of the twelve years studied. The concept of "non-participation" therefore has behavioural significance, but there is a wide heterogeneity in the group that is normally identified with inactivity. The "availability" to work repre-

sents more than a simple wish: it implies the existence of some attachment to the labour market and means a significant increase in the likelihood of transferring into employment in the future.

The second result of this analysis is that the category of marginally attached is much closer to the state of unemployed than to the other inactive. Mainly for men, but also for women, the hypothesis of equivalence between *U* and *M* cannot be rejected for several years of the analysis. This result points to consideration of the group available for work as an intermediate group, whose behaviour is mid way between the unemployed and other inactive. From this point of view, it would be an advantage to have statistics that reflect the four aggregates of the population and to have a separation between the three groups of non-employed in analyses of labour market flows.

These results are along the lines of the existing evidence from other countries, especially the US and Canada. In these countries, however, the states *U* and *M* do not show the degree of attachment seen in the Portuguese labour market.

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MYTHS AND FACTS REGARDING THE PORTUGUESE LABOUR MARKET THE TRAGIC FATE OF COLLEGE GRADUATES*

Pedro Portugal**

"As with all things that seem to be right and gain common currency, this is simply wrong; if it weren't, they wouldn't have become common currency."

Notas para a Recordação do meu Mestre Caeiro Álvaro de Campos

1. INTRODUCTION

There seems to be a general perception in Portugal that those with higher educational qualifications find it much more difficult to enter a profession. This idea is fed periodically by news of unemployment among graduates and is frequently exaggerated by the associations that represent the professions. Whether either generalisation is extrapolated from a neutral standpoint is open to question. Unemployment among graduates is a relatively unusual situation and the phenomenon tends to attract disproportionate attention in the media (in this case it obeys the law that what makes the news is "man bites dog" and not the opposite). It is also in the interest of graduates represented by corporate organisations to cut back on the numbers of new graduates in order to protect their salary levels.

This article will attempt to show that investment in higher education, counter to the idea spread about by what seems to be common sense, offers an exceptional rate of return in the Portuguese labour market. The aim is to make an accurate assessment of the conditions which govern the decision faced by thousands of families whether to make an investment in human capital by financing (or not) the opportunity to obtain a higher education qualification.

2. HOW MUCH IS A DEGREE WORTH?

It is very simple to present the basic arithmetic of investment in a higher education course. Once secondary education is over, the youngster (and his or her family) will have to balance the cost of doing a higher education course with the hopedfor benefit that will ensue. Put in other words, the young student will have to compare two distinct professional careers: one that can be started with the existing academic training and one that will be ensured by getting a degree.

In money terms, the decisive element in the cost of this investment corresponds to the total salary which will be foregone during the period of training. In addition, there will be the costs (books and other materials), fees and fares for transport

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NET WAGES PER AGE GROUP AND LEVEL OF SCHOOLING

	Primary (4 years)	Up to man- datory minimum schooling (9 years)	Secondary completed (12 years)	College degree (16-18 years)
15-19	368	389	406	
20-29	462	484	554	893
30-39	476	645	778	1187
40-49	511	732	902	1684
50-59	563	809	1100	1915
60-69	543	917	967	1450

Source: "Employment Survey 2003", 2nd quarter. Net wages in euros.

when this is justified by the need to get an academic qualification.

The desired return in financial terms corresponds to the accumulation of earned income provided by higher education over the normal span of a professional working life.

This study is based on a simulation of the conditions underlying a decision made by someone finishing secondary education in the summer of 2003 and thinking of going on to further education. Material for this work was used from the information contained in the individual records of the household employment survey made during the second quarter of 2003.

Table 1 summarises the information from the sample relating to the average value of net salaries per age group and level of schooling for workers in salaried employment interviewed by the National Statistics Institute (around 10,000 workers). This Table illustrates clearly the normal pattern of wage growth over the working life cycle. Economists who specialise in the labour market associate this with the investment in human capital in the workplace (professional experience), along with the return on investment in formal education⁽¹⁾.



It would be useful to hold on to this idea, i.e. that there would seem to be a significant boost to salary if you are a graduate, compared with workers who have only completed their secondary education. The contrast between the earnings of these two classes of worker will be the basis for the calculation of the costs of and the benefits to be gained from getting a degree. It is implicit that graduates if they didn't have a degree would be earning the salaries of workers with only their secondary education and *vice versa*. But it is postulated that the current age profile for salaries can be extrapolated for the future pattern of earnings.

Chart 1 shows the salary profile of the two groups of workers over an active working life cycle that runs from age 20 to age 60. Taken that workers receive 14 salary payments per year and that a graduate course lasts 4 years, the salary loss over that period will be € 26,625. Over and against this, the accumulated value (between age 24 and age 60) deriving from the extra salary they receive (salary differential) is around € 330,300. What matters also to the worker, of course, is whether this income is received in the present or in the future. Calculating the net value of the investment means that we have to find a discount rate for this. For a real discount rate of 2 per cent, the up-dated value of the cost (C) and the benefit (B) from getting a degree can be calculated as follows:

In a regression equation where there is control over the observed characteristics of workers, it is estimated that a graduate receives on average a salary 80.2% higher than a worker with only secondary education.

$$C = \sum_{age=20}^{23} \frac{W_{age}^{S}}{(1+0.02)^{age-20}}$$
$$B = \sum_{age=24}^{60} \frac{\left(W_{age}^{L} - W_{age}^{S}\right)}{(1+0.02)^{age-20}}$$

where W^{S} is the net salary of a worker with secondary education and W^{L} is the net salary of a graduate.

We can thus obtain a present-day value for an investment cost of \in 25,823 and this is a return of \in 201,286, with a net benefit of \in 175,462. Another way of expressing this result is to state that the investment in a degree guarantees a real rate of return of 15%, which is truly exceptional.

3. COULD THIS VALUE BE EXAGGERATED?

There are a number of reasons for thinking that a simple arithmetic exercise could exaggerate the monetary value of a degree out of all proportion. For a start, we have left out of the equation the expenditure related to academic materials and fees. These expenses are a cost, but they are in fact only a small fraction of the investment cost and an even less significant slice of the benefit stemming from the investment. Moreover, no account was made of the accommodation expenses run up by the families of students in higher education. These costs should only be included, however, if workers with no more than secondary education do not generate such costs, which is far from guaranteed. Costs with food and drink should not, logically, be considered unless they are seen as a benefit, given the circumstances of students in higher education benefiting from the lower prices in canteens subsidised by the state. There are also the psychological effects incurred by getting a degree. These costs, nevertheless, would have to be contrasted with the psychological wear and tear on workers who enter the labour market earlier.

There are in fact three lines of arguments that tend to counter the validity of the exercise. In the first case there is the fact that part of the differential in wages can be attributed to the individual's inherent skills (or those acquired outside of the school environment) and these are associated with a higher academic attainment (ease in learning, self-discipline, motivation etc.). Research based on monitoring siblings and twins (even perfectly alike) who have different schooling have not validated this hypothesis⁽²⁾.

In the second case, the conjecture is that getting a higher education diploma does not add anything to the productive skills of the students. The education system simply indicates for employers those workers who have greater skills, those that learn more easily and that therefore will be more productive. In this case it will still be worth while from a private viewpoint to invest in acquiring signs ("sheepskin") that will be recognised in the labour market.

In the third case, maybe it is not legitimate to presume that workers with a degree would get the salaries associated with non-graduates, should they have started their working lives earlier. It is not clear, however, what exact bias would be visible since there is not enough comparable information. Would a skilled worker become successful if he or she was a lawyer? Would a surgeon do an administrative assistant's job competently? Maybe workers determine their professional options (if they choose for themselves) as a function of the performance expected in their profession⁽³⁾. Luckily, those empirical studies that have sought to determine the impact of auto-selection in the choice of profession have concluded that this effect is very slight.

4. IS THE VALUE TOO LOW?

It is also possible to postulate that the estimate of monetary benefits from getting a degree is too low. In the first place, we have only considered the income difference up to age 60. Graduates, however, are likely to benefit from earnings above those of workers with secondary education beyond the age of 60 (both in terms of income and pension)⁽⁴⁾. In the second place, the calculations

⁽²⁾ An identical conclusion has been reached on the basis of study of the changes exogenous to levels of schooling (for example, in compulsory schooling) and also from estimates using instrumental variables (Card, 1999).

⁽³⁾ It might even be that the earnings profile of graduates reflects in part the greater investment in human capital over the span of a professional career. There is, in fact, some empirical evidence to support the notion of a greater mesh between schooling and in-company professional training. This possibility change the view of what makes up the investment in human capital but it does not run counter to the overall idea of benefit to be gained from an investment in academic training.

did not include other forms of income, only salary. It is also likely that graduates will keep a greater income differential through other ways of being paid. In the third place, we must bear in mind that the comparison was only made with between salaried workers. The self-employed did not come into the frame, through lack of information about their income. It could well be that graduates who are self-employed earn more than those who are salaried.

Looking at the possibility of there being an under-estimate or an over-estimate of the return on the investment in higher education, it seems clear that the figure put forward is closer to the lower end of the variation interval than the higher.

5. OTHER ADVANTAGES

Other advantages from getting a degree could be mentioned here. The workplace for graduates is usually more pleasant and amenable and graduates are less likely to be subject to changes in work-flow stemming from production technology. Apart from this, they can be more flexible in terms of their working day.

Better academic training also increases the productivity associated with the household. In particular, there is the effect of human capital quality on the investment in children. There is no shortage of information on the importance of knowledge transfer between generations in the accumulation of human capital.

Graduates are also favoured by more job security. This observation is clear from looking at Table 2, which shows that it is unlikely to find a graduate out of work.

It is in fact 1.74 times more frequent to see a worker with secondary schooling out of work than a worker with further education. When the comparison is made with young people who go out to work at the minimum school leaving age, they are three times as likely to be out of the labour force [at some time in their working life] as the graduate.

In terms of fixed-term contracts and part-time work, the differences between graduates and those who only have secondary education are not significant. For both groups, the incidence is clearly

Table 2

EMPLOYMENT STABILITY

Table of relative risks

	Primary (4 years)	Up to manda- tory minimum schooling (9 years)	Secondary completed (12 years)	College degree (16-18 years)
Unemployment Fixed-term contract Part-time	3.02	3.00	1.74	1.00
	2.24	1.43	0.98	1.00
	3.76	1.30	1.05	1.00

Source: "Employment Survey 2003", 2nd quarter.

Note: Values were obtained on the basis of a logit regression which also includes binary variables for age, nationality, professional training and gender. A total of 15470 variations was used.

lower than for those workers with even fewer academic qualifications.

Once formal education is considered as an investment in human capital, it is not surprising that there are considerably more offers of work for graduates than for non-graduates. Being inactive is clearly less frequent among graduates and it is much more common to find a graduate with a second income (see Table 3). There is a high level of graduates in public administration and this helps to explain the lower job rotation and the fewer number of hours worked among those with further education (Table 4).

6. HIGHER EDUCATION COURSE ARE NOT HOMOGENEOUS

The Portuguese education system offers a wide range of training at higher education level. The labour market, of course, does not give equal value to different educational areas. Table 5 shows the average (gross) earnings of 100,000 workers, divided according to type of further education, based on the individual records of the October 1999 Staffing Levels.

The technology areas account for 7 out of the 10 best paid groups, and graduates from these groups get a better reception in the private sector. They outperform the courses in humanities and

⁽⁴⁾ There is also the point that graduates can expect to live longer.
Table 3

LABOUR SUPPLY

Table of relative risks

	Primary (4 years)	Up to manda- tory mini- mum schooliną (9 years)	Second- ary com- pleted (12 years)	College degree (16-18 years)
Inactivity	5.71	4.07	3.67	1.00
Second job	0.66	0.30	0.32	1.00
Public Administration	0.07	0.16	0.21	1.00

Source: "Employment Survey 2003", 2nd quarter.

social sciences (with the exception of economics and the law)⁽⁵⁾.

It is important, however, to underline the fact that this list does not cover workers in public administration. This area takes in a significant number of graduates, amounting to nearly 50%.

There is also no distinction which can be drawn between along the lines of state and private education establishments. There is, however, a well-known link between the growth of graduates from private institutions and an increase in the variation in earnings.

In 2001, INOFOR (The Institute for Training Innovation) carried out a survey of the graduate employment situation for 1994/95, five years after they graduated. The information fits well with what comes from the Staffing Levels (see Table 6). Above all, there is confirmation of a significantly larger salary for those in technology (especially those with a degree in Computer Studies). When assessing salaries, it is interesting to note that there is an increase according to the final grades awarded (almost 3.8% for each additional point). This indicates a greater investment in human capital (or a clear indication that employers see greater potential productivity) and there is a beneficial ef-

Table 4

JOB TURNOVER AND HOURS OF WORK

	Primary (4 years)	Up to manda- tory mini- mum schooling (9 years)	Second- ary com- pleted (12 years)	College degree (16-18 years)
Jobs	3.17	2.85	2.64	2.35
Hours worked (weekly)	40.17	40.38	39.53	37.19
Hours spent in second job (weekly)	13.70	13.80	15.70	10.60

Source: "Employment Survey 2003", 2nd quarter. Net wages in euros.

fect stemming from the academic level of the parents on the salaries of their children, suggesting the transmission of human capital through the generations⁽⁶⁾.

7. THE COLLEGE WAGE PREMIUM IN AN INTERNATIONAL CONTEXT

Technological changes over the past 20 years have led to an increasing demand for skilled workers. This caught the Portuguese labour market by surprise and there has been a shortage of available skilled manpower. It was probably this shortage that led to a significant increase in the extra income for workers with a higher education course up to the mid-90s (Cardoso, 1998 and Machado and Mata, 2001). There would seem to have been a persistently wide gap during that period between workers with and without a degree.

A number of studies have established comparisons between salary differentials at international level. They are not substantially different from the conclusion that the Portuguese market unusually

Note: Values were obtained on the basis of a logit regression which also includes binary variables for age, nationality, professional training and gender. A total of 15470 variations was used.

⁽⁵⁾ Looking only at young workers does not invalidate the findings presented in the list.

⁽⁶⁾ There is a penalty attached to course supplied by Polytechnics over Universities (almost 23% in salary terms), though this may be partially explained by the fact that Polytechnic courses tend to be shorter.

⁽⁷⁾ See OECD, 2003 and Martins and Pereira, 2003.

Table 5

AVERAGE EARNINGS BY TYPE OF DEGREE

Subject	Numbers	Income average (escudos	Numbers	Income average (escudos
	Tota	l sample	Under 35	5 years of age
Engineering (energy); power systems; energy; production technology and energy	4 042	529 386	1 515	395 265
Electronic engineering and telecommunications; aeronautics; aerospace	1 913	518 926	982	411 980
Dentistry/medicine	1 108	505 903	172	404 481
transport engineering, naval engineering Chemical engineering; physics; applied physics (technology); biotechnology; biophysics;	4 007	473 143	1 649	334 340
polymer biology; engineering for ceramics and glass; biophysical planning Civil engineering; project engineering and project management;	2 234	452 786	1 082	326 073
geological engineering; materials engineering; natural resources engineering	5 352	446 707	2 437	312 073
Economics, finance, economics for business and applied	10 426	437 734	5 833	319 210
Mine anginooring: metallurgy and metale mechanics	251	420 751	176	205 050
Less	2 802	429751	170	293 939
Computer technology; systems engineering and IT; automation and control; computation;	3 893	412 929	1755	279 040
information systems Physics: :chemistry: physical chemistry: industrial chemistry:	2 070	401 481	1 734	377 069
Physics and technology; biochemistry	511	386 108	287	284 562
Mathematics and statistics	1 479	383 381	1 067	342 136
Psychology	1 288	380 930	725	253 941
Accountancy, company organisation and management	13 760	366 704	9 790	299 806
Pharmaceutical science.	1 963	366 248	1 111	321 282
Production engineering and industrial maintenance; industrial				
management and engineering	533	354 861	383	301 863
Veterinary science	199	354 598	89	296 689
Biology	402	344 172	245	288 692
Agricultural engineering for food production; agrarian science; nutrition; engineering for foodstuff; horticultural engineering; oenology; animal studies;				
zoology	1 374	340 873	749	264 615
History and philosophy	1 508	339 361	542	256 097
IT of management; technologies for management	1 402	338 912	1 237	324 427
Management of agricultural enterprises; agro-industrial engineering	59	334 508	41	317 077
Art (,painting, ,sculpture, drawing)	98	325 887	52	231 600
Forestry: forest production: tree science	46	325 600	29	234 662
Architecture and town planning	785	324 861	395	235 888
Other non-specific degrees	29 023	323 956	18 845	258 554
Others (namer: 'textiles' garments' geographical engineering)	386	323 676	263	284 019
Geophysics	216	319 440	129	264 378
Public administration; human resource management;	552	312 200	408	273 377
Dramatic arts (dancing, singing, theatre, cinema, photography,	85	211 278	100	236 406
Modern languages and literature/classical languages and literature and Portuguese culture; translation and interpreting; translation techniques	05	511 276	47	250 400
and comparative culture; comparative literature;	0.110	010.000	1.004	
literary sciences	2 112	310 398	1 024	233 725
Sport, physical education/ergonomics	250	299 504	160	253 851
Teaching (languages, science, etc)	451	288 920	267	228 908
Marketing, publicity	677	285 320	601	264 052
Social communication, information, journalism and media studies	1 148	284 881	965	260 518
Social sciences; sociology; anthropology; politics; political science; social service; applied social research religion: theology: humanities	2 230	283 631	1 268	229 978
Urban and regional planning: hotel management	- 200	_00 001	- 200	
and tourism: social management and development	258	267 633	204	232 762
Public relation: secretarial and administrative studies	658	255 912	534	241 313
International relations: cooperation and European studies	879	247 548	800	233 904
Decorative art and design	260	241 196	207	219 949
Special education and rehabilitation	67	180 625	45	162 402

Source: Quadros de Pessoal, 1999. full time dependent workers.

Table 6

WAGE DETERMINANTS

Variables	Coefficient	Deviation from the
		norm
Gender (male=1)	0.166	0.009
Age (in years)	0.010	0.001
Average final mark at graduation	0.037	0.001
Father's education (degree=1)	0.110	0.012
Education system	01110	01012
University	0.117	0.019
Polytechnic	-0.090	0.019
Other		
Category of work (part-time=1)	-0.508	0.029
Type of contract		
With tenure	0.130	0.032
Term contract	0.022	0.033
Free-lance	-0.032	0.044
Occasional	0.125	0.133
Dublic acetor	0.142	0.011
Region	0.142	0.011
North	0.026	0.036
Contro	0.020	0.030
Lishon and Tagua Vallay	-0.014	0.037
Alamtaia	0.119	0.030
Alentejo	0.040	0.041
Algarve	0.020	0.043
Azores	-0.037	0.046
Course area		
Computers	0 187	0.062
Engineering	0.167	0.062
Architecture and construction	0.149	0.059
Mathematic and Statistics	0.092	0.003
Management	0.092	0.001
Health	0.059	0.039
Metanin and the disc	0.031	0.003
Veterinary studies	0.046	0.092
Law	0.045	0.062
	0.039	0.076
	0.023	0.060
Social sciences.	0.021	0.060
Manufacturing industries	0.011	0.067
Physical sciences.	-0.037	0.064
Humanities	-0.077	0.060
Life sciences	-0.095	0.066
Agriculture, forestry and fishing	-0.096	0.065
Media and journalism	-0.102	0.072
Art	-0.111	0.062
Personal services	-0.172	0.062
mansport		
Numbers	80	12
Likelihaad laa 14/01 00		01 38
	-1402	-1.00

Not: Grouped regression model (generalized gamma distribution).

The model also includes 17 sector dummies.

high differentials (see Table 7)⁽⁷⁾. The figure is in fact the highest in the EU. There is a huge imbalance between skills sought after by employers and those available in the labour market. This is because there is such a big difference between the number of graduates in Portugal and the remain-

Table 7

COLLEGE WAGE PREMIUM

Country	As a percentage
Portugal	63.1
Luxemburg	40.6
Austria	31.7
Ireland	31.5
Finland	26.0
Spain	25.4
Belgium	24.5
Greece	24.5
France	24.4
Italy	22.9
The Netherlands	21.7
Germany	20.7
United Kingdom	20.3
Denmark.	19.2

Source: European panel of households (2000).

These estimates were obtained from the regression equation logarithms for salaries for the countries mentioned.

der of the EU and it will take several decades for this skill shortage to be corrected.

8. CONCLUSIONS

An attempt was made in this work to analyse more deeply the private decision-making process that leads to an investment in higher education. The conclusion is that there is an exceptionally high monetary benefit to be expected. An investment of around \in 25,000 can lead to accumulated earning gains of \in 200,000. The estimate of the real rate of return (15%) is clearly greater than any other form of financial investment. Given that it is not possible to use human capital as collateral for the necessary finance, this market is incomplete. This would justify state intervention to create mechanisms allowing for loans to be made available to students on higher education courses.

Investment in education also generates significant social benefits through the positive external effects generated. An economy with a bettertrained workforce is more productive. According to a recent survey carried out by the OECD, the academic qualification deficit in Portugal probably accounts for an annual shortfall amounting to 1.2% of GDP. If there are skilled people at your workplace, the productivity tends to rise (along with your salary) given that there are social benefits to in-company training (Acemoglu and Angrist, 2000; Martins 2003).

All this is not to say that new graduates are not at this point in time facing difficulties in getting work in an economic recession with budget constraints. But this is a temporary phase which does not disprove the structural advantages associated with having a higher education course. The advantages remain even in an unfavourable economic climate. Above all, graduates still have a better chance of getting a suitable job when compared with those young people who detain fewer academic qualifications.

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Chronology of major financial policy measures

January

12 January (Regulation no. 12/2003 of the Stock Market Commission 12/2003, Official Gazette no. 9, Series II)

12 January (Notice of Banco de Portugal no. 14/2003, Official Gazette no. 9, Series I - B)

15 January (Law no. 3/2004, Official Gazette no. 12, Series I - A)

16 January (Regulation no. 13/2003 of the Stock Market Commission, Official Gazette no. 13, Series II)

17 January (Regulation no.14/2003 of the Stock Market Commission, Official Gazette no. 14, Series II)

19 January (Decision no. 2097/2004, Official Gazette no. 25, Series II)

21 January (Regulation no. 15/2003 of the Stock Market Commission, Official Gazette no. 17, Series II)

26 January (Regulation no. 16/2003 of the Stock Market Commission, Official Gazette no. 21, Series II)

27 January (Circular Letter of Banco de Portugal no. 3/2004/DMR)

28 January (Circular Letter of Banco de Portugal no. 4/2004/DMR)

Establishes the rules on the assessment of assets integrating the wealth of risk capital funds, as well as on the data reporting by the latter and risk capital companies to the Stock Market Commission. This regulation enters into force on 1 January 2004.

Defines the new contribution system for the Mutual Agricultural Credit Guarantee Fund by the Central Agricultural Credit Bank and Mutual Agricultural Credit Banks. Revokes Notice no. 4/99, of 5 May.

Approves the outline law for public institutions. Establishes principles and rules governing services and funds with legal personality that integrate the indirect administration of the State and Autonomous Regions. It acknowledges the existence of special regimes, given the specificity of the objectives pursued by certain types of public institutions, including, inter alia, the Banco de Portugal and funds operating with it. This law enters into force on the 1st of the month following its publication.

Establishes, pursuant to the provisions set forth in article 4, 2), (b) of Decree-Law no. 319/2002, of 28 December, the regime governing the accounts of risk capital funds. This regulation enters into force on 1 January 2005.

Defines the contents of the prospectus of issuance and admission to trading of risk capital fund units, in compliance with article 4, 2), (d) of Decree-Law no. 319/2002, of 28 December.

Pursuant to the provisions set forth in article 67, 2) of Law no. 107-B/2003, of 31 December, authorises the Portuguese Government Debt Agency to conduct repos based on securities representing the direct public debt quoted in the special public debt market (MEDIP - mercado especial de dívida pública) up to 2,500,000,000 euros.

Regulates several matters laid down in the legal framework of undertakings for collective investment (UCI) approved by Decree-Law no. 252/2003, of 17 October. It standardises and systematises, in a single law, the set of rules applicable to mutual funds and establishes the legal framework of a new type of UCI - the special investment funds (SIF). It also stipulates a transitional regime applicable to UCI previously set up. This law enters into force on 1 January 2004.

Establishes the regime governing the accounts of undertakings for collective investment (UCI), whose legal framework was approved by Decree Law no. 252/2003, of 17 October. This regulation, apart from the exception envisaged in it, enters into force on 1 January 2004.

Provides information on timetables of reserve maintenance periods and on notification dates for 2004 (monthly reporting), following changes in the operational framework of the Eurosystem monetary policy made by Regulations ECB/2003/9, of 12 September, and ECB/2003/10, of 18 September. Revokes Circular Letter no. 31/DMR, of 20 October 2000.

Informs that the rate of return of the Certificates of Deposit, Series B, to prevail in the quarter started on 4 February 2004, is set at 2.02%.

February

13 February (Circular-Letter of the Banco de Portugal no. 14/04/DSBDR)

Provides information on the understanding of the Banco de Portugal as to the accounting of autonomous warrants, which are equivalent to derivative financial instruments and should be dealt with similarly to option contracts.

16 February (Circular-Letter of the Banco de Portugal no. 2/2004/DMR)	Provides information on the reserve maintenance period calendar, as well as on the dates of notification in 2004 (monthly report). Revokes Circular Letter no. 31/2000/DMR, of 20 October 2000.		
16 February (Instruction of the Banco de Portugal no. 1/2004)	Determines the terms of access to the information relating to cheques users who may offer risk, for the purposes of credit risk evaluation of natural or legal persons.		
16 February (Instruction of the Banco de Portugal no. 2/2004)	Determines the obligations for the collection and/or supply of information to the Banco de Portugal, within the scope of the limitations to credit grant- ing established in Articles 85 and 109 of the Legal Framework of Credit in- stitutions and Financial Companies.		
19 February (Circular-Letter of the Banco de Portugal no. 5/DMR)	Informs of the changes introduced in Instruction no. 1/99 (Money Markets - Intervention Operations Market), which is enclosed in attachment in full version with the changes introduced, and will be effective as of 8 March 2004.		
	March		
5 March (Circular-Letter of the Banco de Portugal no. 18/04/DSBDR)	Informs that the Banco de Portugal will raise no objections that institutions, if they so wish, may recognise beforehand as income of the parent undertaking the dividend to be distributed by their subsidiaries during the fiscal year when the profits are generated, provided that certain requirements are fulfilled, according to the International Accounting Standard "IAS18".		
10 March (Regulation (EC) no. 501/2004 of the European Parliament and of the Council, OJ L No. 81)	Adopts measures on quarterly financial accounts for general government.		
10 March (Decree-Law no. 50/2004, Official Gazette no. 50, Series I, A)	Introduces changes in articles 8 to 11, 53 and 55 of the Organic Law of the Banco de Portugal, approved by Decree-Law no. 5/98, of 31 January.		
24 March (Decree-Law no. 66/2004, Official Gazette no. 71, Series I, A)	Introduces changes in the Stock Market Code, approved by Decree-Law no. 486/99, of 13 November.		
24 March (Circular-Letter of the Banco de Portugal no. 25/2004/DSB)	Recommends that credit institutions and financial corporations shall exam- ine with particular care the operations contracted with natural or legal per- sons, resident or established in certain countries and territories, within the scope of money laundering preventive measures. Revokes Circular-Letter no. 70/2003/DSB, of 28 July 2003.		
25 March (Decree-Law no. 68/2004, Official Gazette no. 72, Series I, A)	Lays down the requirements governing advertising and information to consumers in the context of house purchase.		
25 March (Decree-Law no. 69/2004, Official Gazette no. 72, Series I, A)	Sets forth the rules governing monetary securities known as commercial paper. This Decree-Law enters into force 30 days following its publication.		
25 March (Decree-Law no. 70/2004, Official Gazette no. 72, Series I, A)	Introduces changes in the legal system governing autonomous warrants, laid down in Decree-Law no. 172/99, of 20 May, which is published again, in attachment, with the amendments introduced.		

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