

## II.7. Financial markets

### II.7.1. Introduction

The behaviour of the Portuguese financial markets in 2002 was strongly influenced by the external environment. The euro area government debt markets, including the Portuguese government debt market, were characterised by a reduction in yields across the entire maturity spectrum. The Portuguese stock exchange, similarly to major European and international markets, experienced a strong adjustment during 2002, after the fall in 2001.

The downward movement in interest rates, together with weak economic growth, was behind capital market developments throughout 2002. In the case of the Portuguese economy, the strong decline in investment translated into the reduction in private sector borrowing requirements. Indeed, with the exception of general government, that had a significant increase in the volume of net issuance to make up for the payment of expenditure relative to previous years, both the financial sector and the non-financial sector reduced the issuance volumes of shares and bonds in the primary market<sup>(1)</sup>.

The Portuguese government bond yield curve moved downwards, and became more flat. The decline in profitability at the longer end of the yield curve coincided with the narrowing of the spread of the Portuguese government debt against the German government debt, which stood at 13 basis points for 10-year maturity by end-2002. This movement common to most euro area countries, with a reduction in the dispersion of spreads against Germany, more marked towards the end of the year. Despite the diversity of budgetary conditions across the different countries, the approx-

imation of the differentials of sovereign debts reflects the German budgetary deterioration in a context of historically low levels of interest rates.

Also with regard to the Portuguese government debt market and similarly to 2001, reference should be made to the secondary negotiation of Portuguese securities in EuroMTS, the European market for wholesale trade of sovereign debt securities<sup>(2)</sup>. By the end of 2002, this market was responsible for around one third of total wholesale value traded of the Portuguese government debt. Note also the importance of trading on the Special Government Debt Market (MEDIP)<sup>(3)</sup>, which accounted for the other two thirds of wholesale transactions. As a whole, the wholesale market of Portuguese debt represented around 64 per cent of total transactions in 2002, with the retail market, mostly over-the-counter, accounting for the remaining 36 per cent.

Stock prices in Portugal fell sharply – by 26 per cent – throughout 2002 in a context of declines in major European markets, as mentioned above. The decrease was also apparent for the volume traded on the stock exchange, which declined by approximately 31 per cent. In the derivatives market, the volume of futures traded dropped by 53 per cent, while the trade in options almost disappeared.

The adjustment perceived in the capital market translated into a fall in yields obtained by institutional investors and fostered shifts in their portfolios. The share of bonds in portfolios of mutual funds stood at 73 per cent by end-2002, which compares with 65 per cent in 2001, while the share of bonds of non-resident

(1) This section presents information on total net and gross issuance of securities in the internal market and on issuance of securities by residents in external markets. The total equals the sum of issuance in the internal market (by residents or non-residents) and in external markets (by residents). The issuance of securities by non-resident branches belonging to Portuguese groups is not included in the values presented in this section.

(2) The Euro-MTS is a pan-European trading platform for sovereign securities denominated in euro. It is managed by a British company having its head-office in London known under the same name. Its sole shareholder is the MTS SpA. The latter also holds part of the MTS Portugal's capital.

(3) The MEDIP is an electronic market for wholesale transactions managed by MTS-Portugal and its shareholders are: the Public Credit Management Institute (IGCP), the MTS SpA and Market makers specialising in government debt. The wholesale public debt transactions in the internal market have been exclusively conducted on the MEDIP since July 2000.

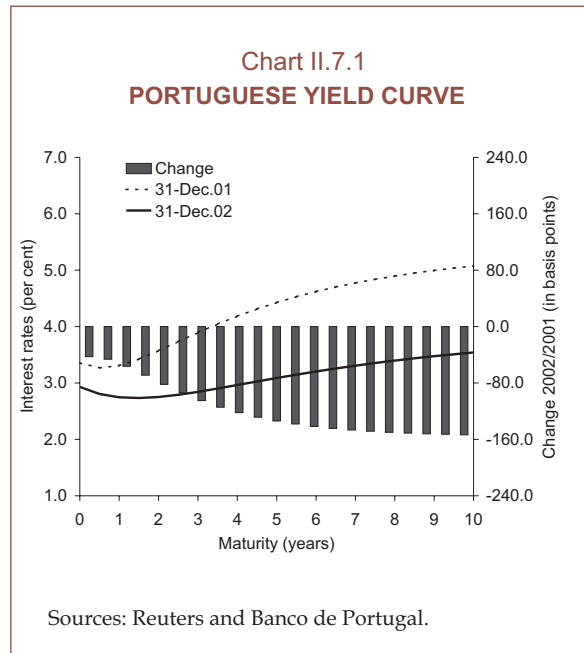
issuers increased to 65 per cent of total portfolios 11 p.p. higher than in 2001.

Within the framework of the Portuguese capital market, reference should be made to the extinction of the Lisbon and Oporto Stock Exchanges, on 6 February 2002, and the effective establishment of the managing company Euronext Lisbon, which was the outcome of the merger process of the Portuguese stock exchange with the stock exchanges Euronext Paris, Euronext Amsterdam and Euronext Brussels. As a result of this integration, 14 Portuguese companies became part of the major benchmark indices of the stock exchange Euronext, namely the Euronext 100 and the Euronext 150<sup>(4)</sup>, which include the 250 companies with the highest stock market capitalisation. These indices include, as from 28 February 2002, 6 and 8 Portuguese companies, respectively. On 2 September 2002, the participating members of Euronext Lisbon were given full access to the trading platform of all the securities traded on the stock exchanges of Amsterdam, Paris and Brussels. In addition, in 2002, a new security started to be traded on the Euronext Lisbon: certificates<sup>(5)</sup>.

Despite the context of stock price adjustment, a new managing company of Portuguese securities markets was set up, the OPEX. This alternative stock exchange was created when the Euronext Lisbon was integrated into the framework of the Euronext, and aims to boost the securities market for the trading of securities of medium-sized companies. Its creation was due to the difficulties faced by these companies in having access to financing in a larger capital market that imposes restrictions to the value of capitalisation and to the level of regulation of the companies listed.

(4) The benchmark indices Euronext 100 and Euronext 150 were created on 2 October 2000.

(5) A certificate is a security with a market price proportional to a given stock exchange index with medium-term maturity. A buy and hold strategy in this security allows for the replication of the portfolio of the index considered.



## II.7.2. Capital market analysis

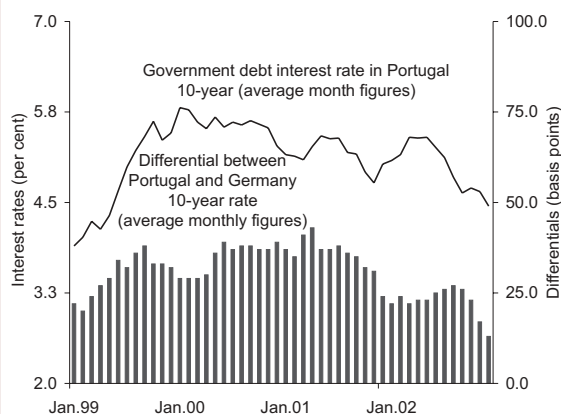
### II.7.2.1. Debt market

Euro area government debt markets in 2002 were characterised by a decline in yields across the entire maturity spectrum, and also by a flattening of the slope of the yield curve. Against this background, the yield curve for Portugal also followed a downward path of profitability across the entire maturity spectrum, becoming more flat at the end of the year when compared with the beginning of the year – Chart II.7.1. For 1-year maturities, for example, the interest rate decreased by 56 basis points from 2001<sup>(6)</sup>. For 10-year maturities, the reduction stood at 153 basis points.

From December 2001 to December 2002, the interest rate differential of the Portuguese long-term government debt against Germany decreased from 24 to 13 basis points – Chart II.7.2. Throughout the year, the differential widened in February and from April to August, a period associated with doubts about the actual Portuguese fiscal position. Subse-

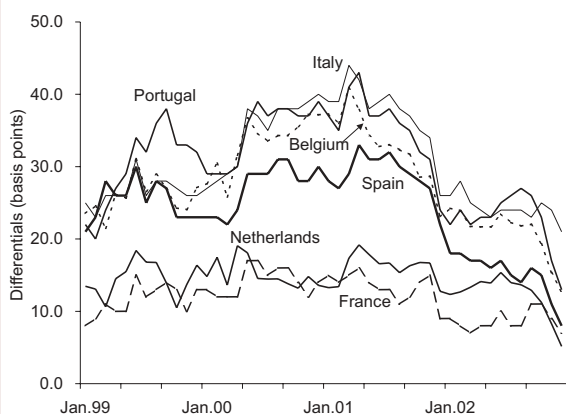
(6) According to the methodology used for the modelling and construction of the yield curve for Portugal, the reference interest rates for securities up to 1 year are the Euribor rates.

**Chart II.7.2**  
**PATTERNS IN GOVERNMENT DEBT INTEREST RATES IN PORTUGAL AND DIFFERENTIAL VIS-À-VIS GERMANY**



Sources: Reuters, ECB and Banco de Portugal.

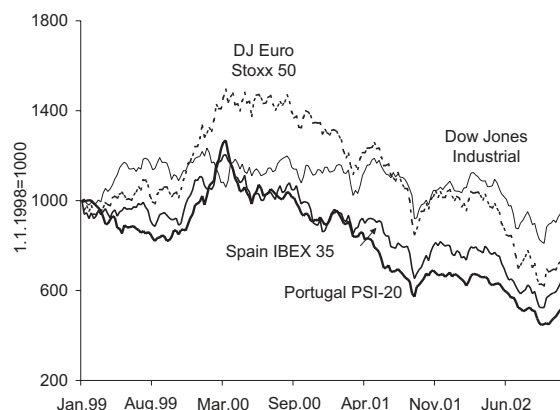
**Chart II.7.3**  
**DIFFERENTIALS OF 10-YEAR GOVERNMENT DEBT YIELD VIS-À-VIS GERMANY**  
Monthly averages



Sources: Bloomberg, Reuters and ECB.

quently, as from August, the reduction was substantial, recovering the broadly-based downward trend of the reference interest rates, which affected countries with higher nominal rates and narrowed their spreads vis-à-vis the German debt. In the Portuguese case, the recovery from the downward trend is related to the measures taken to narrow the fiscal deficit in the second half of the year, which have probably contributed to dissipate doubts about the

**Chart II.7.4**  
**STOCK INDICES**



Sources: Reuters, Bloomberg and Euronext Lisboa.

sustainability of Portuguese public finances. During 2002 the rating of the Portuguese government debt remained unchanged, despite the assessments made by international rating agencies.

By the end of 2002, the 10-year yield spreads of the French, Dutch and Spanish government debt stood below 10 basis points, and the spread of the Belgian and Portuguese debts stood at 13 basis points – Chart II.7.3. With the exception of the French debt, at the start of the year all the other debts had spreads above 10 basis points and, in the case of the Portuguese, Belgian and Italian debts, above 20 basis points. The Italian debt was the most resilient to the narrowing of the spread, despite a downward movement by end-2002.

#### II.7.2.2. Stock market

Similarly to most major European markets, the stock market in Portugal underwent a strong adjustment in 2002 – Chart II.7.4. In terms of annual change during 2002, the PSI-20 index declined by approximately 26 per cent, while the Dow Jones Euro Stoxx 50 index – a measure of developments in stock prices of some major European companies – fell by 37 per cent. The US market, represented by the Dow Jones index, decreased by 18 per cent,

Table II.7.1

**VOLATILITY AND CORRELATION BETWEEN  
STOCK MARKET INDICES**

	1999	2000	2001	2002
Annual volatility (in percentage)				
PSI 20 .....	23	21	21	20
Dow Jones .....	15	23	25	28
Euro Stoxx 50 .....	22	25	29	36
DAX .....	24	27	33	40
IBEX 35 .....	22	25	29	31
Correlations between PSI 20				
Dow Jones .....	0.31	0.16	0.20	0.54
Euro Stoxx 50 .....	0.50	0.71	0.66	0.62
DAX .....	0.36	0.67	0.66	0.62
IBEX 35 .....	0.57	0.70	0.70	0.67

Sources: Bloomberg, Reuters and Banco de Portugal.

Note: For each index, volatility is derived as the standard deviation of annualised weekly profitability, always considering the last trading day in each week, and the correlations are derived using the weekly profitability of each index.

while the Spanish market (IBEX 35 index) declined by 28 per cent.

The fact that adjustments in Portugal and Spain were smaller than those in the euro area as a whole is related to a strong fall in stock prices of some major German and Dutch companies. The German DAX index fell by around 44 per cent; about one fifth of the companies listed in the Euro Stoxx 50 are German. In turn, around one tenth of the securities in the Euro Stoxx 50 index are traded on the Dutch stock exchange, which fell by 36.7 per cent in 2002.

Table II.7.1 shows that, as from 2000, the correlation between the PSI-20 index and some of the European indices considered remained broadly unchanged and above 0.6, unlike developments prior to 1999<sup>(7)</sup>. This considerable integration of the Portuguese market in the European market in 2002 was associated with a

(7) In this respect, see *Annual Report* of the Banco de Portugal 2000, Box II.7.1 *The Portuguese stock market integration*. The correlation is derived using the weakly yields of the indices considered.

sizeable increase in the correlation between the PSI 20 and the US Dow Jones index, which went up from 0.20 to 0.54.

The evolution of risk levels and market uncertainty is shown in Table II.7.1, which presents the volatility in a range of developed markets, measured as the annualised standard deviation of the weekly profitability<sup>(8)</sup>. The annual volatility of the PSI-20 index has remained at approximately 20 per cent. All the other indices have shown an increase in volatility in recent years, which suggests growing uncertainty regarding developments in securities. Among the indices presented in Table II.7.1, the German DAX was the most volatile in 2002, followed by the Euro Stoxx 50.

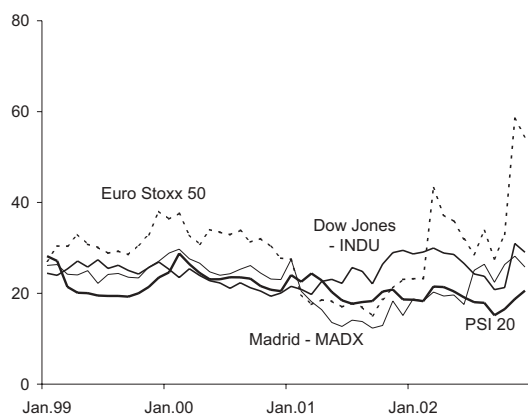
The relationship between the market value of companies and the results of their economic activity is monitored by the analysis of the price-to-earnings ratio (P/E), i.e. the ratio between the market value of the company's equity capital and net income for a certain period<sup>(9)</sup>. A security with a high P/E suggests that it has a higher value than another security with a lower P/E, since, as a percentage of net income, a higher price is paid. The P/E corresponding to the range of securities comprised in the PSI-20 index had a relatively more stable behaviour throughout 2002 (Chart II.7.5), standing at 20.6 by end-2002, still below the 23 average of the 1998-2002 period. Developments in the corresponding indices for other European stock exchanges show marked fluctuations in 2002, particularly apparent in the case of the P/E ratio associated with the Euro Stoxx 50 index.

Chart II.7.6 shows developments in stock indices for some sectors of economic activity. With the exception of the construction sector

(8) The weekly yield is derived as the difference between the base logarithm of the index on the last trade day of the current week and the base logarithm of the index on the last trade day of the previous week. The value obtained is multiplied by the square root of 52, the number of weeks in a year.

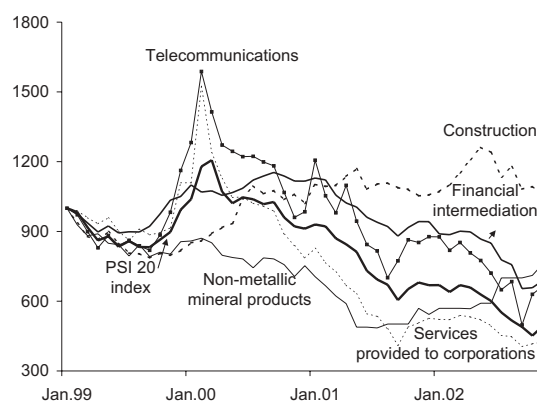
(9) This P/E derives the company income based on the historical series of the past twelve months. As an alternative, a ratio on the basis of future results may be built and, in this sense, it leads to an estimated P/E.

**Chart II.7.5**  
**PRICE EARNING RATIOS**  
**FOR THE PORTUGUESE, EUROPEAN**  
**AND US MARKETS**



Source: Bloomberg.

**Chart II.7.6**  
**STOCK PRICE INDEX FOR THE PORTUGUESE**  
**MARKET BY SECTOR OF ACTIVITY**



Sources: Bloomberg and Datastream.

index which rose by 33 per cent<sup>(10)</sup>, the downward trend of the overall index is supported by the other sectoral indices. The index of the financial intermediation sector, which accounts for around one third of total stock market capitalisation, declined by 22.7 per cent from January to November 2002, and the telecom-

(10) Developments in the construction sector index in 2002 were strongly influenced by the behaviour of Brisa, which recorded 10.9 per cent profitability in that year.

munications index fell by 24 per cent in the same period<sup>(10)</sup>.

### II.7.2.3. Primary market

2002 was marked by a reduction in total securities issued by resident entities in Portugal vis-à-vis 2001, consistent with the cyclical position of the economy, the risk and uncertainty conditions, and the changes in value in the securities market<sup>(12)</sup>.

Table II.7.2 shows the figures of total net issuance of medium and long-term securities<sup>(13)</sup> in 2002. These figures comprise both internal market issuance by resident or non-resident entities in Portugal, and external market issuance by resident entities in Portugal. Total net issuance fell by around 18 per cent from 2001.

Table II.7.3 shows medium and long-term bond issuance by institutional sectors and type of issuance. Although in net terms total bond issuance grew by 29 per cent, this resulted from a strong rise in the volume of general government net issuance. As mentioned above, this rise was related to the need of assuming fiscal liabilities from previous years. However, that issuance has turned out higher than strictly necessary, since revenues deriving from the end-2002 fiscal "amnesty" were higher than expected<sup>(14)</sup>. The strong decrease in net bond issuance by monetary financial institutions, which stood at around 65 per cent, should be seen in the light of a financing strategy, according to which subsidiaries abroad of Portuguese banks also issued bonds, not considered in Tables II.7.2 to II.7.5, since these subsidiaries are not resident entities in Portugal. Gross bond issuance, across the entire maturity spectrum, by non-resident subsidiaries in Portugal of Portu-

(11) The sectoral indices disclosed by Euronext Lisbon were reshaped and, as from May 2002, indices based on international activity codes were adopted, instead of national codes. The sectors illustrated in Chart II.7.6 are defined using the national activity codes system. The respective figures are available only up to November 2002.

(12) See footnote 1.

(13) Both shares and bonds with maturities over 1 year are classified as medium and long-term securities.

(14) See section II.2. *Fiscal Policy*.

Table II.7.2

**TOTAL ISSUANCE OF MEDIUM- AND LONG-TERM SECURITIES NET OF REDEMPTIONS  
IN THE INTERNAL AND EXTERNAL MARKETS**

By institutional sectors

EUR million	1999	2000	2001	2002
General government . . . . .	3 946.2	1 888.8	3 570.6	7 632.6
Monetary financial institutions . . . . .	1 916.6	7 590.3	4 720.3	1 822.6
Non-monetary financial institutions . . . . .	665.0	1 236.6	927.7	1 162.4
Non-financial corporations . . . . .	7 093.0	6 525.3	6 170.7	2 587.2
Non-resident entities (internal market) . . . . .	-425.1	-962.8	-1 191.9	-1 109.2
<b>Total . . . . .</b>	<b>13 195.6</b>	<b>16 278.2</b>	<b>14 197.4</b>	<b>12 095.6</b>

Sources: *Instituto de Gestão do Crédito Público*, Euronext Lisboa, financial intermediaries and major national newspapers (pursuant to the provisions laid down in Decree-Law no. 142-A/91, of 10 April).

guese banking groups amounted to €5,074 million in 2002, corresponding to around 77 per cent of the value of medium and long-term bond issuance in both internal and external

markets by monetary financial institutions resident in Portugal (Table II.7.3)<sup>(15)</sup>.

As in previous years, net bond issuance by non-monetary financial institutions, non-fi-

Table II.7.3

**BOND ISSUANCE IN INTERNAL AND EXTERNAL MARKETS**

By institutional sectors

EUR million	1999	2000	2001	2002
<b>Total gross issuance . . . . .</b>	<b>16 643.5</b>	<b>14 284.4</b>	<b>17 251.0</b>	<b>20 269.4</b>
Gross issuance by public subscription . . . . .	10 794.8	11 384.2	11 213.9	11 385.4
Monetary financial institutions . . . . .	1 862.8	3 681.4	2 542.5	3 055.4
Non-monetary financial institutions . . . . .	0.0	0.0	37.0	0.0
General government . . . . .	8 857.2	7 702.9	8 634.4	8 318.0
Non-financial corporations . . . . .	74.9	0.0	0.0	12.0
Non-residents (in the internal market) . . . . .	0.0	0.0	0.0	0.0
Gross issuance by private subscription . . . . .	5 848.7	2 900.2	6 037.1	8 884.1
Monetary financial institutions . . . . .	1 902.1	2 337.7	4 496.6	3 507.6
Non-monetary financial institutions . . . . .	589.3	214.9	342.5	169.5
General government . . . . .	1 245.9	0.0	133.9	4 835.0
Non-financial corporations . . . . .	1 437.7	123.5	1 064.2	372.0
Non-residents (in the internal market) . . . . .	673.6	224.0	0.0	0.0
<b>Net issuance . . . . .</b>	<b>5 473.1</b>	<b>4 137.0</b>	<b>6 009.9</b>	<b>7 752.4</b>
Monetary financial institutions . . . . .	1 403.3	4 304.6	3 920.7	1 364.1
Non-monetary financial institutions . . . . .	277.4	-68.3	-70.2	-120.5
General government . . . . .	3 946.2	1 888.8	3 570.6	7 632.6
Non-financial corporations . . . . .	271.2	-1 025.3	-219.4	-14.7
Non-residents (in the internal market) . . . . .	-425.1	-962.8	-1 191.9	-1 109.2

Sources: *Instituto de Gestão do Crédito Público*, Euronext Lisboa, financial intermediaries and major national newspapers (pursuant to the provisions laid down in the Decree-Law no. 142-A/91 of 10 April).

Table II.7.4

**BOND ISSUANCE IN THE EXTERNAL MARKET**

By institutional sectors

EUR million	1999	2000	2001	2002
Total gross issuance . . . . .	2 258.4	2 209.1	3 796.5	2 658.8
Gross issuance by public subscription . . . . .	0.0	1 248.4	327.4	998.7
Monetary financial institutions . . . . .	0.0	1 248.4	327.4	998.7
Non-monetary financial institutions . . . . .	0.0	0.0	0.0	0.0
General government . . . . .	0.0	0.0	0.0	0.0
Non-financial corporations . . . . .	0.0	0.0	0.0	0.0
Gross issuance by private subscription . . . . .	2 258.4	960.7	3 469.1	1 660.0
Monetary financial institutions . . . . .	52.5	960.7	2 383.7	1 380.0
Non-monetary financial institutions . . . . .	0.0	0.0	0.0	0.0
General government . . . . .	1 205.9	0.0	91.0	30.0
Non-financial corporations . . . . .	1 000.0	0.0	994.5	250.0
Net issuance . . . . .	-601.9	235.8	1 406.0	65.9
Monetary financial institutions . . . . .	-1 304.7	1 073.7	1 962.1	729.9
Non-monetary financial institutions . . . . .	0.0	0.0	0.0	0.0
General government . . . . .	-297.2	-837.9	-1 550.6	-914.0
Non-financial corporations . . . . .	1 000.0	0.0	994.5	250.0

Sources: *Instituto de Gestão do Crédito Público*, Euronext Lisboa, financial intermediaries and major national newspapers (pursuant to the provisions laid down in the Decree-Law no. 142-A/91, of 10 April).

nancial corporations and non-resident entities was negative.

By type of subscription, gross issuance by public subscription remained broadly unchanged from the previous year, and general government (with 73.1 per cent of the total) and monetary financial institutions (with 26.8 per cent of the total) accounted for almost the entire issuance of this type. Gross issuance by private subscription changed considerably from the previous year, due to syndicated issuance by general government in early 2002. This institutional sector became thus the major issuer of this type. Issuance by private subscription of the other institutional sectors declined in 2002. In the case of monetary financial institutions, it declined by 22 per cent, while in the case of non-monetary financial institutions and non-financial corporations it fell by 51 and 65 per cent, respectively.

General government together with monetary financial institutions continued to account for nearly all gross issuance by Portuguese entities, with 64.8 and 32.6 of the total, respec-

tively. These figures reflect a strong increase in the weight of general government in total gross (and also net) issuance vis-à-vis monetary financial institutions. This had already been seen in the previous year due to the mentioned strategy of strengthening the financing of the latter through subsidiaries abroad. Non-financial corporations accounted for only 1.9 per cent of total gross issuance, against 6.2 per cent in 2001, which reflects a considerable contraction of the already reduced gross issuance volume by this institutional sector.

The breakdown of bond issuance by type of instrument is presented in Table II.7.5. There was a strong increase in fixed rate loans, which stood at 40.4 per cent from the previous year, mainly due to an increase in issuance by general government, which issues almost exclusively at a fixed rate. The other residents (mainly monetary financial institutions) also contributed to this increase, with more than 9.8 per cent of fixed rate issuance from the previous year. In parallel, there was a decrease in the indexed-rate products to only around two thirds of the value in the previous year. This behaviour is likely to be related to the histori-

(15) See section II.8. *Banking System*.

Table II.7.5

**BOND ISSUANCE IN THE EXTERNAL MARKET**

By type of rate

EUR million

	General government				Other residents				Non-residents (internal market)				Total			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
Fixed rate.....	10 063.1	7 702.9	8 634.4	13 123.0	2 153.1	1 418.1	3 264.3	3 584.5	580.9	224.0	0.0	0.0	12 797.1	9 345.0	11 898.7	16 707.5
Indexed-linked rate.....	40.0	0.0	133.9	30.0	3 713.7	4 939.4	5 218.4	3 531.9	92.7	0.0	0.0	0.0	3 846.4	4 939.4	5 352.3	3 561.9
Interest rate.....	25.0	0.0	133.9	30.0	2 432.2	3 314.2	3 936.4	2 475.1	92.7	0.0	0.0	0.0	2 549.9	3 314.2	4 070.3	2 505.1
Euribor.....	25.0	0.0	133.9	30.0	2 191.8	2 612.5	2 082.6	2 317.5	92.7	0.0	0.0	0.0	2 309.5	2 612.5	2 216.5	2 347.5
Lisbor.....	0.0	0.0	0.0	0.0	240.4	284.3	473.9	0.0	0.0	0.0	0.0	0.0	240.4	284.3	473.9	0.0
Other.....	0.0	0.0	0.0	0.0	0.0	417.4	1 379.9	157.6	0.0	0.0	0.0	0.0	0.0	417.4	1 379.9	157.6
Stock price quotations and indices .	0.0	0.0	0.0	0.0	58.8	646.4	1 277.1	1 017.8	0.0	0.0	0.0	0.0	58.8	646.4	1 277.1	1 017.8
Corporate income.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inflation.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other benchmarks.....	15.0	0.0	0.0	0.0	1 222.7	978.9	5.0	39.0	0.0	0.0	0.0	0.0	1 237.7	978.9	5.0	39.0
Total.....	10 103.1	7 702.9	8 768.3	13 153.0	5 866.8	6 357.5	8 482.8	7 116.4	673.6	224.0	0.0	0.0	16 643.5	14 284.4	17 251.0	20 269.4

Sources: *Instituto de Gestão do Crédito Público*, Euronext Lisboa, financial intermediaries and major national newspapers (pursuant to the provisions laid down in Decree-Law no.142-A/91, of 10 April).



Table II.7.6  
**STOCK ISSUANCE**

EUR million	1999	2000	2001	2002
Gross issuance by public subscription . . . . .	1475.4	20.3	992.9	56.6
Monetary financial institutions . . . . .	0.0	0.0	719.5	0.0
Non-monetary institutions . . . . .	90.1	0.0	0.0	56.6
Non-financial corporations . . . . .	1385.3	20.3	273.4	0.0
Gross issuance by private subscription . . . . .	6357.2	15716.1	8316.1	5323.4
Monetary financial institutions . . . . .	513.2	6776.6	663.2	1063.8
Non-monetary financial institutions . . . . .	297.5	1310.8	1019.4	1556.5
Non-financial corporations . . . . .	5546.6	7628.7	6633.5	2703.1
Total . . . . .	7832.7	15736.3	9309.0	5379.9
Incorporation of reserves . . . . .	616.7	1855.8	670.7	417.3

Sources: Euronext Lisboa, financial intermediaries and major national newspapers (pursuant to the provisions laid down in the Decree-Law no. 142-A/91, of 10 April).

cally low levels of the long end of the yield curve, as mentioned in section II.7.2.1 *Debt Market*. Issuance with a Euribor indexed rate by residents other than general government increased by around 11 per cent from 2001, while those indexed to other indices have declined.

The issuance of shares decreased substantially — Table II.7.6. The issuance by private subscription declined by 36 per cent but accounting for nearly all stock issuance, since issuance by public subscription was virtually discontinued (a fall of 94.3 per cent). This behaviour is consistent with the evolution of other indicators regarding the market value of companies, and is associated, namely, with the low potential of fund raising by public subscription. The relative weight of non-financial corporations declined from 74.1 to 50 per cent of total stock issuance, while non-monetary financial institutions went from 11 to 30 per cent of the total. Affected by bad results in the corporate sector, incorporation of reserves fell by 37.8 per cent to EUR 417.3 million, which accounts for less than one fourth of the value in 2000, when total incorporation of reserves reached EUR 1,855.8 million.

#### II.7.2.4. Secondary market

In line with other European markets, stock market capitalisation of securities listed in Euronext Lisbon declined by 20.4 per cent from the previous year — Table II.7.7. This correction in the value of securities translated into a reduction in stock market capitalisation, as a percentage of GDP, from 43 per cent in 2001 to 32 per cent in 2002 (Chart II.7.8), while the turnover decreased by 30.6 per cent. Given that the PSI-20 index fell by around 26 per cent, the decrease in the turnover derives not only from the reduction in the value of each transaction, via the price, but also from the loss of buoyancy, in terms of the number of securities traded on the Portuguese stock market. In 2002 there was no public offering by the State of corporations' equity capital (Chart II.7.9).

The stock market capitalisation of the Euronext Lisbon, as a percentage of GDP and in relative terms, fell less than the same measure for the euro area as a whole — 11 against 25 p.p. respectively (Chart II.7.8). This behaviour reflected mainly the sizeable adjustment in the German stock market: the benchmark index DAX decreased by 46 per cent, and the

Table II.7.7

**TURNOVER OF SHARES**

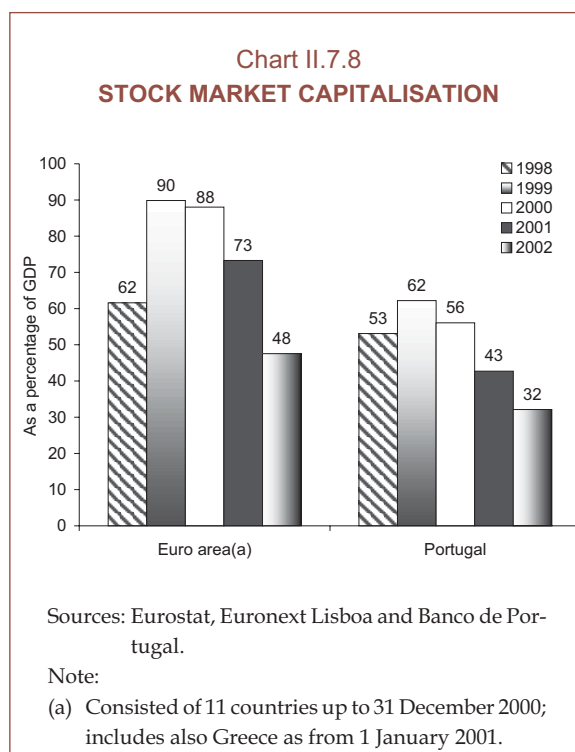
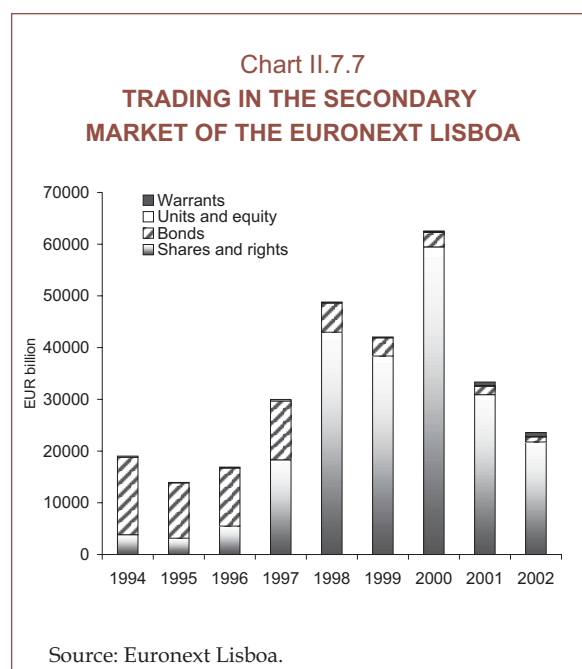
Euronext Lisboa

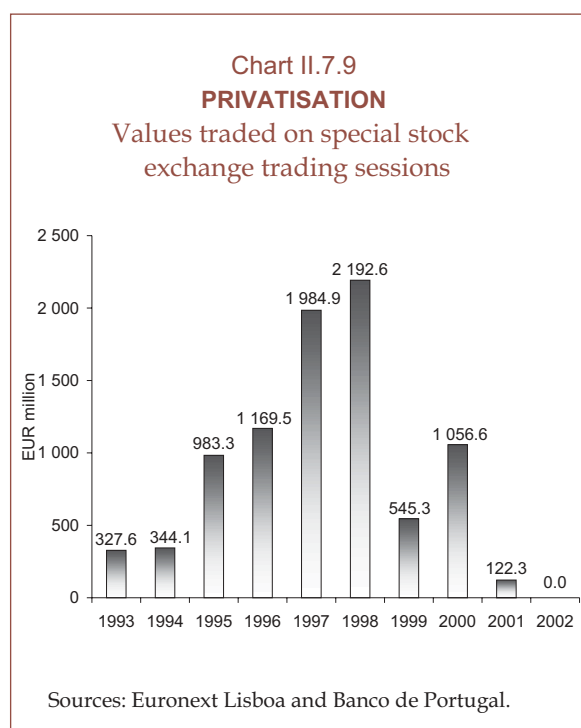
	1998	1999	2000	2001	2002
<b>Issuers</b>					
Number of listed companies .....	135	125	110	101	91
Market with official quotations .....	76	73	62	57	52
Second market .....	12	12	9	8	8
Market without quotations .....	47	40	39	36	31
<b>Stock market capitalisation (EUR million) .....</b>					
Value of listed shares .....	53 612	67 991	64 658	52 940	42 149
Market with official quotations .....	52 522	67 314	63 317	52 367	41 755
Second market .....	266	245	105	111	153
Market without quotations .....	825	433	1 236	462	242
<b>Trading (EUR million)</b>					
Value of traded shares .....	46 618	39 162	59 235	31 393	21 794
Market with official quotation .....	42 667	38 150	59 235	30 688	21 655
Second market .....	14	5	44	2	32
Market without quotations .....	302	176	106	2	5
Special trading sessions .....	3 635	831	8 012	701	102

Source: Euronext Lisboa.

German stock market capitalisation stood at 31 per cent of GDP (Table II.7.8). This has definitely contributed to the approximation of the Portuguese stock market capitalisation to the

average of the euro area in 2002, as a percentage of GDP, with the differential reaching the lowest value since 1998.





Unlike the share segment, the bond segment of the Portuguese stock exchange recorded positive developments in terms of total value of securities traded, which increased by 18.3 per cent from 2001 (Table II.7.9). This behaviour seems to result from a demand effect of debt securities, consistent with the increase in the relative weight of bonds in investors'

portfolios. (See section II.7.3 *Mutual Funds*.) However, the volume of bonds traded on the Portuguese stock exchange fell by 38.4 per cent, which corresponds to a reduction in liquidity in this segment. Reference should be made to the fact that more than two thirds of this fall was due to the reduction in transactions in government debt securities, increasingly traded on the wholesale and over-the-counter markets.

The wholesale trade of the Portuguese government debt, which represents 64 per cent of the total of this type of securities traded in 2002, followed the trend of other European markets and recorded a considerable increase in the values traded. This type of trading is made exclusively on the MEDIP and on the EuroMTS<sup>(16)</sup>. The turnover of the MEDIP increased by 4.4 per cent from 2001. Approximately the double of the amount recorded in 2001 was traded on the European platform EuroMTS, which represents around one third of total wholesale Portuguese government debt. As from May 2002, Treasury bonds are included in the repo facility

(16) The Portuguese government securities traded on the Euronext Lisbon accounted for only 0.3 per cent of the total traded on the government debt secondary market, while the remainder was traded on the MEDIP, EuroMTS and over-the-counter market.

Table II.7.8

**STOCK MARKET CAPITALISATION**  
**AS A PERCENTAGE OF GDP**

By country

	1998	1999	2000	2001	2002
Euro area <sup>(a)</sup> . . . . .	62	90	88	73	48
Germany . . . . .	49	72	67	58	31
Spain . . . . .	65	76	88	81	64
France . . . . .	65	111	110	91	62
Italy . . . . .	45	66	70	49	37
The Netherlands . . . . .	146	185	170	131	86
United kingdom . . . . .	154	214	185	151	107
Portugal . . . . .	53	62	56	43	32
Euronext <sup>(b)</sup> . . . . .	-	-	-	97	67

Sources: Eurostat, Euronext.

Notes:

(a) Consisted of 11 countries up to 31 December 2000; includes also Greece as from 1 January 2001.

(b) Amsterdam, Brussels and Paris Stock Exchange; the previous plus Euronext Lisboa in 2002.

Table II.7.9  
**TURNOVER OF BONDS**

	1998	1999	2000	2001	2002
Issuers on the Euronext Lisboa					
Number of bonds issuing listed .....	352	373	385	364	385
Market with official quotations .....	166	153	203	224	239
Public debt <sup>(a)</sup> .....	75	64	56	43	42
Sundry .....	91	89	147	181	197
Second market .....	185	219	182	140	94
Market without quotations .....	1	1	0	0	0
Stock market capitalisation on the Euronext Lisboa (EUR million)					
Value of listed outstanding bonds .....	42 524	47 461	49 663	55 034	65 102
Market with official quotations .....	37 920	42 311	44 480	51 569	62 793
Public debt <sup>(a)</sup> .....	33 380	37 544	39 682	46 811	57 074
Sundry .....	4 540	4 767	4 798	4 758	5 719
Second market .....	4 604	5 150	5 182	3 465	2 309
Trading on the Euronext, on the MEDIP and on the EuroMTS (EUR million)					
Regular trading sessions .....	5 839	3 569	2 783	1 626	1 002
Market with official quotations .....	4 836	2 884	1 907	1 190	574
Public debt <sup>(a)</sup> .....	4 836	2 552	1 496	742	310
Second market .....	976	638	876	435	428
Market without quotations .....	28	47	0	0	0
Special trading sessions .....	0	42	0	0	0
Special market for wholesale transactions (MEOG) .....	107 829	154 255	38 993	71	-
Public debt <sup>(a)</sup> .....	106 889	153 675	38 783	-	-
Special Government debt market (MEDIP) <sup>(b)</sup> .....	-	-	21 658	106 516	111 163
European debt market (EURO-MTS) <sup>(c)</sup> .....	-	680	6 980	16 968	33 585

Sources: Euronext Lisboa, IGCP.

Notes: All the values concern the Euronext Lisboa unless otherwise stated.

(a) Includes other government and similar funds.

(b) The MEDIP is a market managed by the MTS Portugal for the negotiation of the Portuguese government debt. The Portuguese state is a shareholder of the MTS Portugal through the *Instituto de Gestão do Crédito Público (IGCP)*.

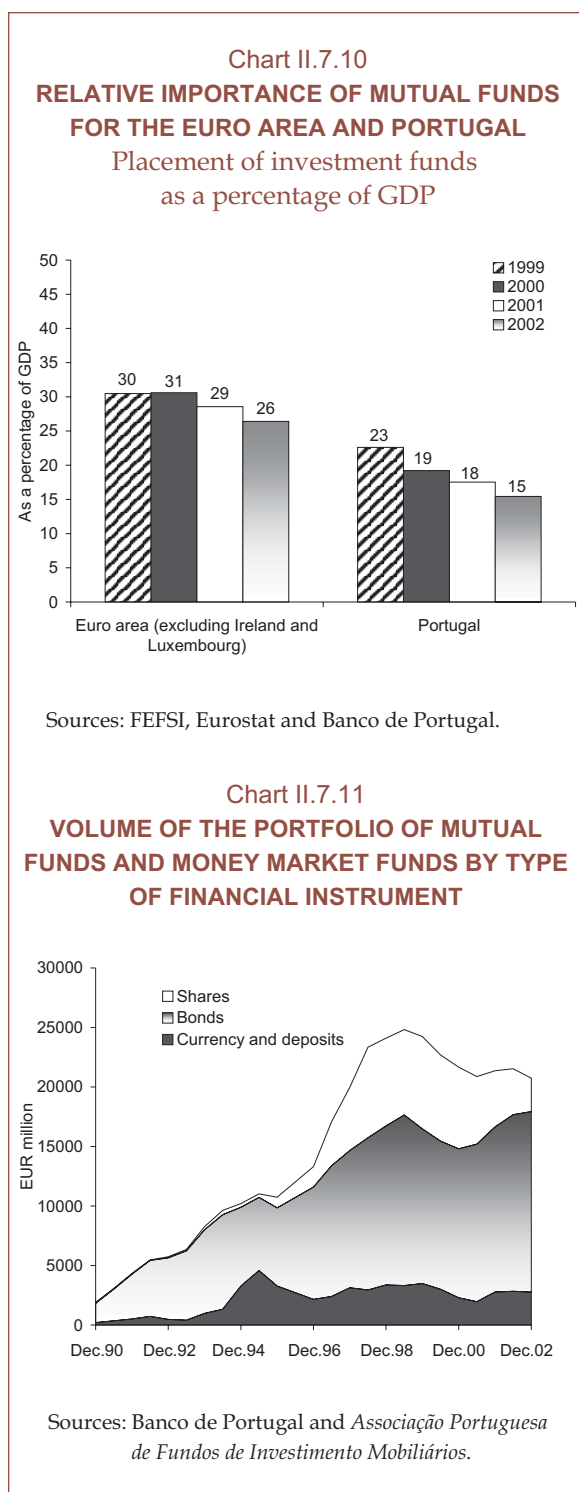
(c) The EuroMTS is a pan-European trading platform for government debt.

of the EuroMTS, which allowed for the considerable development of the repo market on Portuguese securities.

The share segment continued to account for a large part of total securities traded on the Euronext Lisbon (around 92 per cent) – Chart II.7.7. The bond segment was responsible for 4.2 per cent of total transactions, followed by the autonomous warrants segment, with 3.3 per cent. In fact, warrants behaved differently from most securities traded on the stock exchange during 2002, with an increase turnover

of around EUR 104 million from 2001 (15.2 per cent). This increase might have been mainly with the loss of investors in the Portuguese options market.

A new instrument started to be traded in 2002: certificates, i.e., securities with a market price proportional to a given stock exchange index with medium-term maturity. Thus, it is possible to replicate a portfolio representative of the index, without the inherent costs and with considerable liquidity. Despite the medium-term maturity, certificates are often used



as short-term trading instruments. Around 2.6 million securities were traded on the stock exchange, amounting to EUR 111 million.

### II.7.3. Mutual funds

The value of assets in portfolios held by mutual funds by end-2002 stood at EUR 20.7 bil-

**Table II.7.10**  
**COMPOSITION OF THE PORTFOLIO OF MUTUAL FUNDS AND MONEY MARKET FUNDS**

Type of instrument

Type of instrument	EUR million			
	1999	2000	2001	2002
Currency and Deposits . . . . .	3 481	2 284	2 769	2 756
Bonds . . . . .	12 994	12 521	13 864	15 173
Shares . . . . .	7 765	6 860	4 729	2 808
Total . . . . .	24 239	21 665	21 362	20 736

Sources: Banco de Portugal and Associação Portuguesa de Fundos de Investimento Mobiliários.

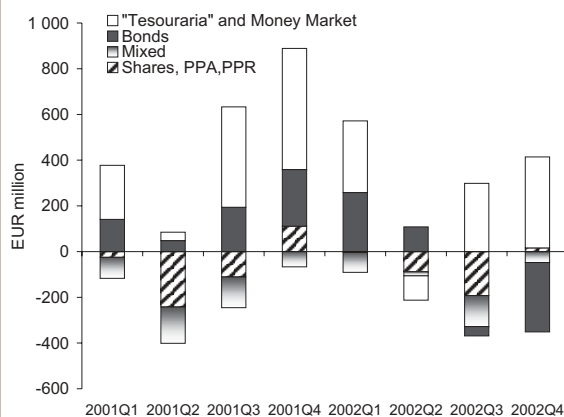
lion, 2.9 per cent down from the previous year – Table II.7.10. As a percentage of GDP (Chart II.7.10), it has been dropping since 1999, to stand at 15 per cent of GDP by end-2002. On the same date, the ratio corresponding to the average of euro area countries stood at 26 per cent.

The decrease in the total value of shares in portfolio, by around 41 per cent, was behind the reduction in the value of mutual funds. The comparison with the change in stock indices<sup>(17)</sup> shows that the reduction in most stock market prices was smaller than the decline in the share portfolio volume. This suggests a shift in the portfolio of funds towards an increasing demand for debt instruments, as in the previous year, but more significant in 2002 – Chart II.7.11. The value of bonds held by mutual funds increased by 9.4 per cent.

The portfolio shift effect is illustrated in Chart II.7.12, which shows subscriptions of net funds. Reference should be made to a reduction in subscriptions of equity funds, as well as a significant increase in subscriptions of “*fundos de tesouraria*” and money market funds since early 2001. In the second half of 2002 the upward trend in the subscription of bond funds was reversed.

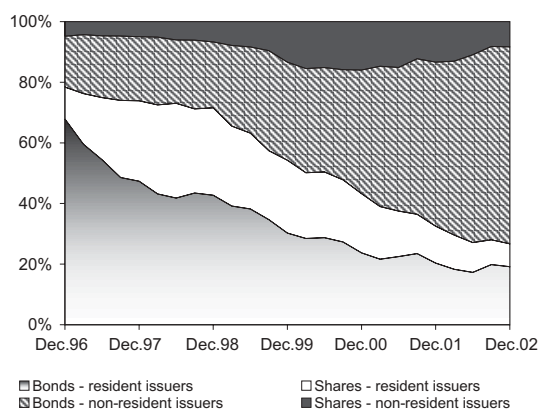
(17) See section II.7.2.2. *Stock Market*.

Chart II.7.12  
**BREAKDOWN OF NET SUBSCRIPTIONS  
 OF MUTUAL FUNDS\*  
 AND MONEY MARKET FUNDS**  
 By class of funds



\* Excluding Funds of Funds.

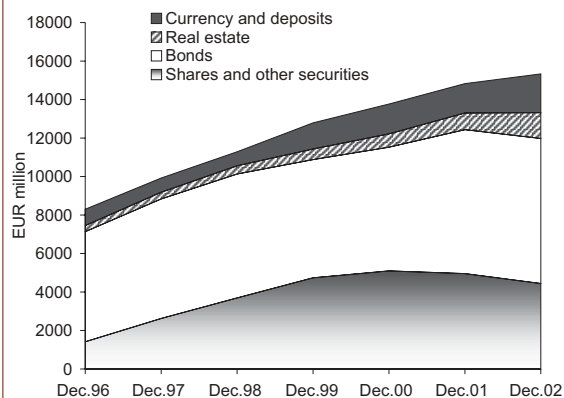
Chart II.7.13  
**COMPOSITION OF THE FUND PORTFOLIO  
 BY DESTINATION OF INVESTMENT  
 AND TYPE OF INSTRUMENT**



Sources: Banco de Portugal and Associação Portuguesa de Fundos de Investimento Mobiliários.

A breakdown by type and origin of the funds' instruments is illustrated in Chart II.7.13. As in 2001, 2002 saw a rise in the relative importance of debt security portfolios by non-resident issuers, which by the end of the year accounted for 65 per cent of the total portfolio of mutual funds, 11 p.p. up from the pre-

Chart II.7.14  
**VOLUME OF THE PORTFOLIO OF PENSION  
 FUNDS BY TYPE  
 OF FINANCIAL INSTRUMENT**



Source: Instituto de Seguros de Portugal.

vious year. This shift was accompanied by a reduction in the percentage of shares, both by resident issuers and non-resident issuers.

Chart II.7.14 shows the volume and portfolio of pension funds. Portuguese pension funds volume fell 3.4 per cent in 2002. By the end of the year, bonds represented 49 per cent of the portfolio, a figure similar to the previous year. Shares and participation bonds constituted 29 per cent of the portfolio, against 32 per cent in 2001, while money, deposits and other assets stood at 13 per cent of the portfolio. Real estate accounted for the remaining 9 per cent of the pension funds portfolio, representing an increase of about 3 p.p. relative to the previous year.

#### II.7.4. Derivatives market

Table II.7.11 shows the number of contracts and the value of options and futures transactions conducted in Portugal from 1999 to 2002. The Portuguese derivatives market in 2002 was characterised by a sharp decline from the previous year in the number of contracts traded, both in futures and in options.

Table II.7.11

**DERIVATIVES STOCK EXCHANGE**

	1999	2000	2001	2002
Contracts traded (thousands)				
Futures.....	2948	5723	4497	3944
PSI 20.....	870	738	565	346
Other.....	2078	4986	3932	3598
Options.....	100	177	400	28
PSI 20.....	27	27	20	1
Other.....	73	150	380	27
Turnover (EUR million)				
Futures.....	10339	12662	7011	3274
PSI 20.....	9163	9007	5029	2374
Other.....	1176	3655	1981	900
Options.....	11489	431	260	14
PSI 20.....	267	311	176	0
Other.....	11221	119	83	14

Source: Euronext Lisboa.

The futures market fell by 53.3 per cent, and the relative importance of futures on the PSI-20 index remained broadly unchanged.

The fall was even sharper in the options market, with almost negligible trade throughout the year. The weight of this segment on the derivatives market was already very small in 2001, around 4 per cent of the total in terms of turnover, becoming merely residual. This behaviour was influenced by a fall in stock prices of all underlying assets and by the reduction in investment corporate assets. In addition, in the options segment, some members holding a considerable market share have left the market.